AREA PLANNING

MILITARY TRAINING ROUTES

NORTH AND SOUTH AMERICA

EFFECTIVE 0001L 16 JUL 2020
TO 0001L 10 SEP 2020

Consult NOTAMS for latest information.

Published by
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
ST. LOUIS, MISSOURI

NGA Aeronautical Navigation Office is an ISO 9001:2015 certified organization.

©Copyright 2020 by the United States Government
No copyright claimed under Title 17 U.S.C.
SPECIAL NOTICES

SPECIAL NOTICES: Special Notices pertaining to AP/1B will be carried in this section for two issues. Unless specific written justification for continuance of the Special Notice is received by NGA STL prior to the cut-off for the third issue, the item will be incorporated with other data, if appropriate, or dropped.

ELECTRONIC ACCESS TO AERONAUTICAL PRODUCTS AND DATA

The Aeronautical Content Exploitation System (ACES) and Consolidated Aeronautical Resources Download Site (CARDS) are enhanced web planning tools on the NIPRNet and World Wide Web that provide access to the full suite of NGA's aeronautical products and data, including DoD FLIP, E-IPL, DAFIF, AAFIF, and the DoD Aeronautical Mobile Application (AMA), as well as NavPlan charts, imagery, and FAA FLIP products.


Don't have internet access? DoD, FAA, and Canadian FLIPs are also available on the FLIP DVD (NSN 7644015335389); DAFIF is available on the DAFIF DVD (NSN 7644014717446); the DoD AMA is available on the AMA DVD (NSN 7644016004225); and AAFIF is available on the AAFIF DVD (NSN 7644015386515).

28-DAY IFR ENROUTE AND AREA CHARTS

Effective 21 May 2020 (cycle 2006), NGA will synchronize production of IFR Enroute and Area charts for all DoD FLIP regions. Updated e-charts for all regions will be available every 28 days on the FLIP DVD, Aero Mobile App, and NGA's aeronautical websites. Printed charts will be distributed by Defense Logistics Agency every 56 days in accordance with the current schedule published in FLIP General Planning, Chapter 11. The change increases availability of charts in the Caribbean and South America (CSA); Pacific, Australasia and Antarctica (PAA); and Eastern Europe and Asia (EEA) FLIP regions. The Europe, North Africa and Middle East (ENAME); and Africa (AFR) regions are already on a 28-day electronic/56-day print cycle and remain unchanged. 23 APRIL 2020.

AERONAUTICAL WEBSITE BETA

The Aeronautical Content Exploitation System (ACES) version 1.5 Beta is available on the NIPRNet for user evaluation at https://aces-edge.dev.east.paas.nga.mil/flip. The new site features a modernized user interface and streamlined search, bundle, and download capabilities. See FLIP General Planning Chapter 3-6 WEB-BASED SERVICES for more information. The legacy ACES and CARDS websites remain the primary sources for NGA aeronautical products and data until further notice. 26 MARCH 2020.
REALIGNMENT OF PAA AIRPORTS TO AFR SERIES DOD FLIPS

Effective 23 April 2020 (cycle 2005), all aeronautical information for Seychelles, Reunion, and Mauritius will be published in Africa (AFR) series FLIPs, per FDAWG item 16-02-04 (TAWG-P 16-01-01P). One new map with two new Area charts (A-1: Mauritius/Reunion; A-2: Seychelles) will be created to cover the geographical area added to the AFR FLIP region. Defense Logistics Agency will automatically distribute the new map (NRN ENRXXAFRCHTA1; NSN 7641016853570) to all DoDAAC holders currently receiving AFR and/or PAA FLIP products. Removal of this information from PAA series FLIPs will be complete 10 September 2020 (cycle 2010). 27 FEBRUARY 2020.

ELECTRONIC INSTRUMENT PROCEDURE LIBRARY

E-IPL graphics are translations of host nation terminal instrument procedures into the DoD FLIP “Volpe” format, and are intended to fill gaps in worldwide DoD FLIP Terminals coverage. E-IPLs are now available on the DoD Aeronautical Mobile Application (“Aero App”), Consolidated Aeronautical Resources Download Site (CARDS), and Aeronautical Source Packaging Service (ASPS). Operational use of the E-IPL is governed by individual Service policy and guidance; review all applicable Service documents. 2 JANUARY 2020.
INTENTIONALLY LEFT BLANK
GENERAL INFORMATION

GENERAL - AP/1B provides textual and graphic descriptions and operating instructions for all IFR, VFR, and Slow Speed Low Altitude Military Training Routes (IR, VR, and SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Order JO 7610.4 series (Special Operations) which is agreed to by DoD and therefore directive for all military flight operations. AP/1B is the official source of route data for military users. Refer to GP Chapter 3 for a more detailed description of FLIP Planning.

A “plus-plus” (++) symbol following Zulu-time hours of operation indicates that during periods of Daylight Saving Time (DT), actual operating hours will be one hour earlier than shown. Consult the applicable Enroute Supplement for areas and dates DT is observed.

POLICY

A. Avoidance Locations. All IR, VR, and SR segments on which flight below 1500 feet AGL is permitted shall be aligned such that the route width is clear of nuclear power plants, listed in Chapter 6.

B. Special Use Airspace. Route users shall obtain permission from the using or controlling agency before entering a MOA or restricted area. Filing a flight plan that penetrates or terminates in special use airspace does not constitute entry clearance.

REVISION CYCLE - AP/1B is revised every 56 days. The schedule, including cutoff and effective dates, is published in GP Chapter 11.

AMENDMENTS - There are no Planning Change Notices (PCNs) for this publication. Unscheduled amendments will be made by Urgent Change Notices (UCNs) as required.

REVISIONS AND QUALITY REPORTS - Contact the appropriate military or civilian agency listed in GP Chapter 11.

NEW OR MODIFIED INFORMATION - A vertical line in the left margin of the applicable column identifies information added or modified since the last issue of this publication (print or electronic).

INTERNET - DAFIF™; IFR Enroute and Area charts, Enroute Supplements, and Enroute Change Notices (ECN); FLIP Planning documents and Planning Change Notices (PCN); Terminal procedures and Terminal Change Notices (TCN); the Aeronautical Mobile Application and associated data downloads; and other aeronautical products and data; are available on NGA’s Aeronautical Content Exploitation System (ACES) at https://aerodata.nga.mil/AeroBrowser/ -or- https://aerodata.leidos.com/index.html and the Consolidated Aeronautical Resources Download Site (CARDS) at https://aerodata.nga.mil/AeroDownload/ -or- https://aerodata.leidos.com/AeroDownload/.

CUSTOMER HELP - For questions concerning NGA aeronautical products or services, contact the NGA Aeronautical Help Desk M-F (except holidays); 0700-1700 CST (UTC -6/-5 DT); at 1-877-817-9134, (314) 676-0684/5439, or DSN 312-846-0684/5439, or e-mail to aerohelp@nga.mil. Outside of scheduled Help Desk hours, contact the NGA Operations Center at 1-877-345-1192 or (571) 557-8000. Refer to DoD FLIP General Planning (GP) Chapter 11 for questions about FLIP requisitioning, missing or late FLIP, or crisis support.
# TABLE OF CONTENTS

SPECIAL NOTICES ................................................................. INSIDE FRONT COVER
GENERAL INFORMATION ......................................................... I
TABLE OF CONTENTS ............................................................. II
CHAPTER 1: GENERAL GUIDANCE ............................................. 1-1
CHAPTER 2: IFR MILITARY TRAINING ROUTES (IR) ....................... 2-1
CHAPTER 3: VFR MILITARY TRAINING ROUTES (VR) ..................... 3-1
CHAPTER 4: SLOWSPEED LOW ALTITUDE TRAINING ROUTES (SR) ....... 4-1
CHAPTER 5: REFUELING TRACKS/ANCHORS/VFR HELICOPTER REFUELING TRACKS/ANCHORS ................................................. 5-1
CHAPTER 6: AVOIDANCE LOCATIONS ....................................... 6-1
Chapter 1

GENERAL GUIDANCE

I. General. FAA Order JO 7610.4 series (Special Operations) provides specific guidance on Military Training Routes and is applicable to all DoD personnel including the Reserve Forces and National Guard. DoD aircrews should be familiar with this Order; contact a Special Operations Point of Contact listed at https://www.faa.gov/air_traffic/publications/spec_ops/ to request access to the document. IR/VR MTRs are cooperatively developed by DoD and FAA to provide for military training and RDT&E requirements that cannot be met under the terms of FAR 91.117 (Aircraft Speed). Accordingly, the FAA has issued a speed authorization to DoD to permit aircraft to exceed 250 knots IAS (below 10,000 feet MSL) within the lateral and vertical confines of published IR/VR MTRs. Each Service component (USAF, USN, USMC, USA, and USCG) issues written guidance, procedures, regulations, or instructions (e.g., Navy’s OPNAV 3710.7 series), which cover MTR flying. Aircrews are expected to comply with FARs, JO 7610.4x, and applicable Service guidance when flying IR/VR MTRs and SRs. FAA Regional Air Traffic Division Managers may authorize deviations from the provisions of JO 7610.4x. These deviations meet an appropriate level of safety and are explained in the Route Description, Special Operating Procedures, or Remarks.

II. Route Development. IR/VR Routes shall be developed using the procedures and criteria specified in JO 7610.4x. IR/VR MTRs that include one or more segments above 1500 feet AGL shall be identified by three-digit characters (e.g., IR-XXX, VR-XXX, etc.). IR/VR MTRs with no segments above 1500 feet AGL shall be identified by four-digit characters (e.g., IR-XXXX, VR-XXXX, etc.). Developers/Route Originators shall ensure all IR/VR MTRs are displayed on VFR Sectionals, VFR Terminal Area Charts, and Area Planning AP/1B Military Training Route Charts. IR routes 1500 feet AGL and above should be charted on Enroute Low and Area Charts. Route Originators shall monitor IR, VR, and SR data published in AP/1B and immediately inform the appropriate authorities when a disparity exists. Route Developers should specify route entry windows in the Special Operating Procedures/Remarks section (e.g., plus or minus five minutes) to ensure aircraft enter on time, and provide maximum route deconfliction. Pilots will make every effort to contact the Originating/Scheduling Activity for routes that conflict with the planned route. If unable to properly plan/deconflict the route, DO NOT FLY THE ROUTE.

III. Scheduling and Coordination.

A. MTRs and SR routes shall not be flown unless properly scheduled through the designated originating/scheduling activity listed for that MTR. Normally, a minimum of 2 hours notice is required to ensure civilian and other military users are notified of MTR activation. When scheduling an IR/VR MTR, Flight Service Stations (FSS) within 100 NM (in some cases more than 100 NM) of the scheduled MTR are notified to provide information to civilian pilots afford the opportunity to avoid the scheduled IR/VR MTR. Military pilots can benefit from this information by contacting the servicing FSS to view routes that have been activated. On a daily basis and to the maximum extent possible, the MTR Scheduler will confirm (via the tie-in FSS) the planned utilization of the route. Route Schedulers will confirm that FAA Order 7110.10x (Flight Services) is complied with.

Route Schedulers will provide an hourly schedule for each MTR (route number, aircraft type and number, proposed entry/exit time, and altitude) and pass changes to the tie-in FSS if a route closes or aircraft cancellations occur. Route Schedulers shall maintain records of IR MTR usage for the preceding calendar year. Schedulers/Originators of the IR/VR MTRs will ensure that users are knowledgeable of route procedures. Pilots are ultimately responsible for compliance with route procedures.

B. Pilots will consult FLIP Area Planning and AP/1B Military Training Route Charts to view route conflicts. This chart is the single source document (IR, VR, SR routes) depicting potential route conflicts. Pilots may consult VFR Sectionals for additional planning information (SR not displayed). Routes displayed on the MTR Chart and Sectionals are “route centerline” only and route widths are not to scale. Enroute low IFR charts do not show 4 digit MTRs or SRs; therefore, do not use enroute IFR charts to deconflict routes. Pilots should be aware of other route users (that pose a hazard) and associated route times to ensure deconfliction. Pilots will make every effort to contact the Originating/Scheduling Activity for routes that conflict with the planned route. If unable to properly plan/deconflict the route, DO NOT FLY THE ROUTE.

IV. Flight Plans.

A. All IR operations shall be conducted on IFR flight plans or an approved altitude reservation (ALTRV) regardless of weather conditions. Operations to and from VRs and SRs should be conducted on IFR flight plans; pilots must have an IFR or VFR flight plan to fly a VR or SR.

B. Unless agreed to by the ARTCC area where the route originates, each IFR flight plan shall include the following specific information.

1. Pilots operating on an IFR flight plan to an IR, VR or SR shall file to the fix/radial/distance (FRD) of the published entry/alternate entry point. Pilots exiting an IR route or transitioning to IFR upon exiting a VR or SR route shall file the FRD of the published exit/alternate exit point.

Example: SAT191036 VR140 STV111017
Example: SAT263043 IR149 LRD040028

2. The remarks portion (item 12, DD Form 175; field 11, FAA Form 7233-1; or item 18, ICAO Flt Plan) of the flight plan shall contain the route designator, the letter E and a four digit group indicating the Zulu entry time, the letter X and a four digit group indicating the Zulu exit time, and remarks (if applicable). Use no spaces on the first group.

Example: VR140E1520X1555 Exiting Echo
GENERAL GUIDANCE

C. When filing IFR flight plans, only place “MARSA” in the remarks section (item 12, DD Form 175; field 11, FAA Form 7233-1; or item 18, ICAO Fld Plan) if proper authorization has been received and aircrews intend to accept reduced separation criteria on the route (pre-planning with another aircraft). Base Operations personnel will not add “MARSA” unless requested by the aircrew.

Example: IR148El6l7Xl705 MARSA

D. Refer to Order JO 7610.4x for additional procedures and examples for complex routes such as Strategic Training Range sites with multiple reentries or flights that cross a center boundary after completion of an IR MTR.

V. In Flight.

A. Entry/Exit.

1. All entries and exits shall be accomplished at published entry/exit points or alternate entry/exit points

2. Pilots shall inform the ATC facility if any action on the part of the controller compromises entry procedures for the route. For example, if unable to enter the route within established time limits, it shall be the responsibility of the pilot to inform the ATC facility of potential impact to other aircraft and advise of intentions. ATC facilities should not deny the use of IR MTRs.

B. Route Adherence.

1. Pilots shall remain within the lateral and vertical confines of the published route at all times. Routes are one-way and course reversals are not authorized (LOWAT ROE in paragraph 6 below).

   CAUTION: Users of mission planning software that automatically depicts route corridors MUST check the electronically produced corridor depiction for accuracy against the textual route description in AP/1B; some route descriptions do not depict accurately.

2. When practicable, avoid flight within 1500 feet AGL or 3 NM of airports. Always comply with Special Operating Procedures or Remarks.

3. Pilots flying a route are responsible for maintaining obstacle clearance, terrain avoidance and compliance with applicable service directions regardless of the route’s published altitudes.

4. Route users must obtain permission from the using or controlling agency before entering a restricted area. Filing a flight plan for a VR MTR that terminates in a restricted area is not, by itself, a clearance.

C. Speed. Flights shall be conducted at the minimum speed compatible with mission requirements. When not established on the published route, comply with FAR 91.117 (Aircraft Speed) or the current exemption granted to DoD (Order JO 7610.4x, Appendix 18).

D. Weather – Refer to appropriate Route procedures section.

E. Communications – Refer to appropriate Route procedures section.

F. Transponder – Refer to appropriate Route procedures section.

VI. Aircraft Separation. ATC traffic advisories on a VRs and SRs are at the discretion of an ATC Controller. They are provided on a controller workload-permitting basis and depend on ATC radio/radar coverage. Since most VRs and SRs are flown on 255.4 MHz, expect radio contact on VHF, secondary UHF or Guard. IFR aircraft operating on IRs that cross other IRs should receive an ATC advisory provided both aircraft are in ATC radar coverage and are squawking appropriately. Separation from military aircraft operating on VRs and SRs is completely discretionary. Many VRs and SRs have minimum altitudes that are not in radar coverage, therefore do not expect to get traffic advisories from VR or SR users. Separation from civilian aircraft operating VFR is completely discretionary and subject to the same limitations. “See and avoid” is paramount and is the pilot’s responsibility at all times while VMC.
Chapter 2

IFR MILITARY TRAINING ROUTES (IR)

I. General. STANDARD

II. Route Development. STANDARD

III. Scheduling and Coordination. STANDARD

IV. Flight Plans. STANDARD

V. In Flight.

A. Entry/Exit - Standard except:
   1. Pilots shall:
      a. Obtain a specific ATC clearance prior to entering the route.
      b. Obtain an ATC exit clearance prior to exiting the route where ATC radio coverage is available. If ATC radio coverage is not available do not exceed the last assigned or expected IFR clearance until contact is available. An IFR exit clearance may be contained in a letter of agreement between the Route Originator and the associated ATC facility.

B. Route Adherence - Standard except:
   1. Unless the route segment is annotated “For use in VMC conditions only,” each route segment shall contain an altitude that is suitable for flight in IMC. This shall be referred to as the IFR altitude and may be contrary to FAR 91.177 (Minimum Altitude for IFR Operations). For example, when specifically authorized by appropriate military authority, altitudes below MEA or standard obstacle clearance may be used. In no case will flight operations be conducted at altitudes less than those specified in FAR 91.119 (Minimum Safe Altitudes; General). In the absence of a specified IFR altitude, it is defined as the top of published block of altitudes.
   2. Altitudes at which “Terrain Following” is authorized MAY NOT guarantee obstacle clearance (regardless of weather conditions) or permit compliance with applicable service guidance. Pilots intending to terrain follow in IMC should consult their command guidance and the route scheduler to determine the lowest permissible altitude at which the flight may be safely conducted.
   3. LOWAT (Low Altitude Air-to Air Training). Do not conduct LOWAT on IR MTRs unless the route is clearly identified as a LOWAT route. LOWAT provisions must be on file in a letter of agreement between the ARTCC/CERAP and the military unit. LOWAT training maneuvers conducted on IRs shall be limited to:
      a. No more than a 90-degree turn will be performed.
      b. LOWAT maneuvers will be terminated as soon as visual and/or radio contact is established.
      c. Weather minimums on IRs at maneuvering altitudes shall be 1500 feet from clouds and 3 miles flight visibility.
      d. Aircraft will only perform LOWAT training if equipped with sophisticated operating airborne radar systems.

C. Speed - Standard.

D. Weather. Routes may be flown in IMC conditions unless otherwise specified in the route description or as required for MARSA/other mission requirements.

E. Communications.
   1. Maintain the frequency assigned by the ATC facility during the IR MTR or as directed in the Remarks/Special Operating Procedures for the MTR.
   2. In the event of communications failure (unless otherwise agreed to in a letter of agreement) the pilot shall:
      a. If VMC and able to maintain VFR cloud clearances after the failure, continue the flight VFR and land as soon as practicable.
      b. If IMC or if paragraph a. cannot be complied with, maintain route to the exit fix, the higher of the following:
         (1) The IFR altitude for each of the remaining route segments.
         (2) The highest altitude assigned in the last ATC clearance.
      c. Depart the filed exit point at the altitude determined above, then climb/descend to the altitude filed in the flight plan for the remainder of the flight.
      d. Squawk Mode 3 Code 7600 until communications are reestablished and comply with the Flight Information Handbook.

F. Transponder. Pilots will squawk the ATC assigned code for IR MTRs.

VI. Aircraft Separation - Standard except:

A. To the maximum extent practicable, IRs should be established for standard ATC services and approved separation applied between individual aircraft. Expect standard IFR separation between two or more aircraft on the same or intersecting IRs within controlled airspace. ATC radio coverage may not always be provided. If flying
IR ROUTES

IRs below or outside radio coverage, aircrews should be aware that there is reduced opportunity to avoid other traffic (VFR/IFR, military or civilian) that may also be operating below ATC radio/radar coverage. Separation from VFR aircraft, VRs or SR users will always be provided on a controller workload-permitting basis. Pilots are always responsible to “see and avoid” when on an IR in VMC.

B. If paragraph A. cannot be complied with, a route may be designated for MARSA operations. These MARSA procedures will be contained in a letter of agreement between the scheduling unit and the appropriate ATC facility and published in the narrative description of the route. ATC does not invoke or deny MARSA and ATC’s sole responsibility is to provide separation between participating MARSA military aircraft and the non-participating (usually civilian) IFR aircraft. When MARSA is provided through route scheduling and circumstances prevent the pilot from entering the route within established time limits, it shall be the responsibility of the pilot to inform the ATC facility and advise of his/her intentions.
IR-002

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C 757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling Hours 0600-1900L (EST)

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from A to H.

ROUTE WIDTH - 5 NM either side of centerline for the entire route.

Special Operating Procedures:

(1) Route reservation and brief required.
(2) Monitor Atlanta ARTCC on 254.3 at B.
(3) Contact Atlanta ARTCC on 379.95 passing F. If no contact, try Asheville APP CON on 351.8 124.65 for further IFR clearance.
(4) CAUTION: Heavy civil IFR traffic crossing on V-16, V-185, V-136 immediately above route altitude block D to H.

NOTE: Knoxville Approach Control has very good radar coverage in this area (frequency 360.8/353.6).


(6) CAUTION:
(a) Tower cluster 250’ AGL (3779’ MSL) N35-54.0 W83-18.2.
(b) Tower 300’ AGL (1500’ MSL) N36-08.8 W83-13.3.
(7) CAUTION: Conflicting routes: IR-743/VR-1743 same direction E-H (Deconflict with Scheduling Activity).
(8) Include route entry/exit times in the remarks section of flight plan.
(9) Make entry times plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200’ AGL and above are listed in this SOP.
(10) Caution: 10 towers at:
(a) 200’AGL N36-16.93 W84-28.28;
(b) 250’AGL N36-24.11 W83-38.40;
(c) 250’AGL N36-12.08 W83-22.12;
(d) 250’AGL N36-26.95 W83-35.98;
(e) 250’AGL N36-32.06 W83-42.79;
(f) 250’AGL N35-50.20 W83-09.30;
(g) 250’AGL N35-46.10 W83-16.70;
(h) 250’AGL N35-46.90 W83-14.80;
(i) 250’AGL N35-48.01 W83-14.70;
(j) 250’AGL N35-59.85 W83-13.17;
(k) 200’AGL N36-29.18 W84-12.53.

FSS Within 100 NM Radius:
AND, BNA, HUA, LOU

IR-012


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from A to H.

ROUTE WIDTH - 5 NM either side of centerline for the entire route.

Special Operating Procedures:

(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
(2) Alternate Entry: Point B.
(3) Alternate Exit: E, E1, FA.

2-3
IR ROUTES

(4) Alternate Exit E will be filed and utilized unless prior clearance has been coordinated to enter R-5314 or R-5306A.

(5) IFR clearance must be received before departing R-5314 (Washington 281.42) or R-5306A (Cherry Point 268.7).

(6) Users must make their scheduled entry time plus or minus 5 min or reschedule.

(7) Avoid towns and populated areas by 1 NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not operate closer then 500' to any person, vessel, vehicle, or structure.

(8) CAUTION: Numerous large towers along route.

(9) A-B:
(a) Monitor Wilmington Approach on 317.425 passing A.
(b) CAUTION: VR-1043 crosses right to left.
(c) CAUTION: IR-062 crosses left to right.
(d) TOWER: 200' AGL at N34-36.5 W078-19.0.

(10) B-C:
(a) Contact Seymour Johnson Approach on 273.6 at B.
(b) CAUTION: IR-062 crosses right to left.
(c) CAUTION: Tower 800' AGL at N35-55.5 W078-04.4.

(11) C-D:
(a) Contact Cherry Point Approach on 377.17 passing D.
(b) CAUTION: VR-084 same direction C to F.
(c) CAUTION: Tower 500' AGL at N35-08.5 W077-30.5.

(12) D-E:
(a) CAUTION: VR-084 same direction C to F.
(b) Avoid: Pamlico River by 2000' AGL for moderate bird hazard.
(c) Avoid: Horse breeding ranch at N35-19.836 W077-07.21 by 1500' AGL or 2 NM.
(d) Avoid: Noise sensitive area at N35-12.8 W077-11.3 by 1000' AGL or 2 NM.
(e) Avoid: Water treatment plant at N35-10.5 W077-13.7 by 2000' AGL or 1 NM for moderate bird hazard.
(f) Avoid: Fish Farms at N35-12.5 W077-20.0 by 2000' AGL or 1 NM for moderate bird hazard.
(g) CAUTION: VR-1046 crosses left to right.

(13) E-F:
(a) VR-084 same direction C to F.

(14) F-G:
(a) Avoid: Overfly coastal regions by 1000' AGL.
(b) Avoid: Pungo River by 2000' AGL for moderate bird hazard.

(15) G-H, E1, FA:
(a) Minimum Exit Altitude for Alternate Exit Route is 1500' AGL.

(16) Crossing Route Information:
(a) VR-1043: Cherry Point MCAS (DSN 582-4040).
(b) VR-1046: Cherry Point MCAS (DSN 582-4040).
(c) IR-062: Oceana NAS (DSN 433-1228).
(d) VR-084: Seymour Johnson AFB (DSN 722-2129).

FSS Within 100 NM Radius:

RDU

IR-016


SCHEDULING ACTIVITY: Same as Originating Activity. Mon-Fri 0830-1700L, except hol.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 20 MSL to A</td>
<td>VAD 353/40</td>
<td>N31°37.52'</td>
<td>W83°20.00'</td>
</tr>
<tr>
<td>03 AGL B 20 MSL to B</td>
<td>VAD 023/21</td>
<td>N31°17.00'</td>
<td>W83°03.50'</td>
</tr>
<tr>
<td>03 AGL B 20 MSL to C</td>
<td>TAY 332/33</td>
<td>N30°59.00'</td>
<td>W82°53.00'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to D</td>
<td>TAY 309/17</td>
<td>N30°40.50'</td>
<td>W82°49.50'</td>
</tr>
<tr>
<td>03 AGL B 20 MSL to E</td>
<td>TAY 243/23</td>
<td>N30°19.00'</td>
<td>W82°56.00'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to F</td>
<td>GNV 302/39</td>
<td>N30°00.00'</td>
<td>W82°56.00'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to G</td>
<td>GNV 306/27</td>
<td>N29°56.00'</td>
<td>W82°43.00'</td>
</tr>
<tr>
<td>40 MSL B 60 MSL to H</td>
<td>GNV 334/17</td>
<td>N29°56.00'</td>
<td>W82°26.00'</td>
</tr>
<tr>
<td>40 MSL B 50 MSL to I</td>
<td>GNV 060/10</td>
<td>N29°47.00'</td>
<td>W82°07.00'</td>
</tr>
<tr>
<td>40 MSL B 60 MSL to J</td>
<td>GNV 096/24</td>
<td>N29°40.50'</td>
<td>W81°49.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from A to G IAW Command directives.

ROUTE WIDTH - 8 NM either side of centerline from A to D; 3 NM right and 4 NM left from D to E; 7 NM right and 12 NM left from E to F; 4 NM either side of centerline from F to J.

Special Operating Procedures:

(1) Tie-in FSS: Macon (MCN).
(2) Cross A at 2000 MSL, maintain 2000 MSL until south of Ocilla, GA.
(3) Alternate Entry: D.
(4) Alternate Exit: D and F.
(5) Route segment from F to J is authorized only for aircraft scheduled to enter R-2903, R-2906 or R-2907.
(6) Contact Valdosta APP CON 285.6 prior to B for clearance into Moody 2 MOA.
(7) Maneuvering between C and D is permitted when approved by Valdosta APP CON.
(8) Climb to 1000 MSL approaching I-75 prior to E. Maintain 1000' AGL minimum until required to climb at G.
(9) Altitudes up to 6000 MSL for maneuvers between E and F are available when approved by Jacksonville Center.
(10) Contact Jacksonville Center 385.6 for clearance to maneuver between E and F.
(11) Cross G at 4000 MSL or as assigned.
(12) CAUTION: IR-023 crosses IR-016 from north to south at H. Call Cherry Point MCAS, DSN 582-4040/4041 to deconflict.
(13) Route entry/exit times must be met plus/minus 5 minutes or route must be rescheduled.
(14) USE EXTREME CAUTION: VR-1066 (23 OSS/OSSOS DSN 582-4040) and VR-1002/1003 (FACSFAC JAX DSN 942-2004/2005) run opposite direction between Points A and D.

FSS Within 100 NM Radius:

GNV, MCN, PIE
IR ROUTES

IR-017


SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710 DSN 742-7840/7847.

HOURS OF OPERATION: 1200-0400Z++

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 4 NM west and 5 NM east of centerline from C to D; 5 NM either side of centerline from D to E; 4 NM north and 3 NM south of centerline from E to G; 5 NM either side of centerline from G to H. (Alternate Exit) 4 NM either side of centerline from D1 to AB.

Special Operating Procedures:

1. Noise sensitive area A-B; maintain 1000’ AGL minimum until 13 NM past A.
2. Avoid Schools/Eufaula N31-52.4 W85-08.0/N31-51.0 W85-09.5.
3. Hazard B-C; high density helio traffic this leg. Remain east of Chattahoochee River to the maximum extent possible. Noise sensitive area B-C; maintain 1000’ AGL minimum from 10 NM north of C to C. Avoid (horse farm) N31-17.0 W85-03.0 by 1500’ AGL or 4 NM. No overflight (Farley Nuclear Plant) N31-13.4 W85-06.7.
4. Hazard D-E; Avoid (Arpt/Altha FL) N30-53.3 W85-04.2 by 1500’ AGL or 3 NM.
5. Hazard E-F; Avoid (crop dusting airstrips) N30-36.1 W85-05.5/N30-36.1 W85-08.4.
7. Alternate Exit AB shall be filed and utilized unless scheduled into R-2914. File A-AB as IR-017A. Alternate Exit lost communications procedure: Pass AB, climb to 10,000’ MSL on MAI 139 left turn on course.
8. Contact Atlanta Large TRACON APP CON 278.5 for entry.
9. Contact Cairns APP CON 234.4 at B.
10. Contact Tallahassee APP CON on 254.3/317.4 at D for exit clearance if utilizing Alternate Exit AB.
11. Contact Tyndall APP CON on 373.0 at E.
12. Contact Eglin Mission Control on 373.0 prior to G for clearance into R-2914A.
13. Concentrated bird activity along the Chattahoochee River. Crop dusting activity is intense during summer and early fall.
14. CAUTION: This route crosses, overlaps or runs parallel with IR-015 and VR-1065.
15. Special Activity hours of operation: 0700-1730 central time Tue-Fri, occasional weekends. To schedule use on Sat, Sun, Mon or Tue AM, coordinate prior to 1600 central time on previous Fri.

FSS Within 100 NM Radius:
ANB, GNV, MCN

IR-018


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2400 local daily

ROUTE DESCRIPTION:

As assigned to A SAV 120/29 N31°57.00’ W80°41.00’
50 MSL B 70 MSL to B CHS 013/20 N33°14.00’ W79°59.00’
50 MSL B 70 MSL to C CHS 356/30 N33°23.00’ W80°08.00’
50 MSL B 70 MSL to D IRQ 148/57 N32°56.00’ W81°30.00’
50 MSL B 70 MSL to E AMG 028/16 N31°46.00’ W82°22.00’
50 MSL B 70 MSL to F SSI 296/44 N31°19.00’ W82°14.00’
50 MSL B 70 MSL to G SSI 003/17 N31°20.00’ W81°27.00’
50 MSL B 70 MSL to H SSI 069/19 N31°11.00’ W81°07.00’
50 MSL B 70 MSL to I CRG 118/24 N30°10.00’ W81°05.00’

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

1. Alternate Entry: F.
2. Alternate Exit: E.
IR ROUTES

(3) Altitudes assigned by ATC.
(4) Radar system navigation (SN).

FSS Within 100 NM Radius:
AND, GNV, MCN, PIE

IR-019


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2400 local daily

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | TAY 163/18 | N30°13.00' W82°26.00'
40 MSL B 70 MSL to | B | GEF 116/14 | N30°27.00' W83°33.00'
40 MSL B 70 MSL to | C | GEF 024/37 | N31°07.00' W83°29.00'
40 MSL B 70 MSL to | D | PZD 061/23 | N31°51.00' W83°55.00'
40 MSL B 70 MSL to | E | PZD 315/10 | N31°46.00' W84°26.00'
40 MSL B 70 MSL to | F | RRS 041/27 | N31°37.00' W85°04.00'
40 MSL B 70 MSL to | G | RRS VORTAC | N31°17.08' W85°25.87'
40 MSL B 70 MSL to | H | SZW 328/24 | N30°54.00' W84°36.00'
40 MSL B 70 MSL to | I | SZW 158/31 | N30°04.00' W84°10.00'
40 MSL B 70 MSL to | J | CTY 101/6 | N29°35.00' W82°56.00'
40 MSL B 70 MSL to | K | GNV 020/14 | N29°55.00' W82°12.00'

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Altitudes assigned by ATC.
(2) Radar vector from K to destination or may continue to R-2903B.
(3) Radar navigation (SN).

FSS Within 100 NM Radius:
ANB, GNV, MIA, PIE

IR-021

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri, occasionally on weekends

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | NSE TACAN | N30°43.44' W87°01.09'
as assigned to | B | CEW 054/21 | N31°01.00' W86°20.00'
as assigned to | C | RSS 193/20 | N30°58.00' W85°32.00'
as assigned to | D | MAI 167/22 | N30°26.00' W85°02.00'
as assigned to | E | SZW 179/35 | N29°58.00' W84°23.00'

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Radar system navigation (SN).

FSS Within 100 NM Radius:
GNV, MIA, PIE

IR-020


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2400 local daily

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | NSE TACAN | N30°43.44' W87°01.09'
90 MSL-100 MSL to | B | CEW 054/21 | N31°01.00' W86°20.00'
50 MSL-110 MSL to | C | RSS 193/20 | N30°58.00' W85°32.00'
50 MSL-110 MSL to | D | MAI 167/22 | N30°26.00' W85°02.00'
50 MSL-110 MSL to | E | SZW 179/35 | N29°58.00' W84°23.00'

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Altitudes assigned by ATC.
(2) Radar vector from K to destination or may continue to R-2903B.
(3) Radar navigation (SN).
ROUTE WIDTH - 10 NM either side of centerline.

**Special Operating Procedures:**
1. Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
2. Request 10,000' MSL from A to F.
3. Advise controller when making a turn in excess of 20 degrees.
4. Radar system navigation (SN).
5. Alternate Entry Point: C
6. Alternate Exit: G and H
7. Conflicts: (Deconflict with the appropriate Scheduling Activity)
   a) Opposite direction to IR-079 between Points E and F. Parallels opposite direction from Points F to G.
   b) Opposite direction to IR-080 between Points E and F. Parallels opposite direction from Points F to G.
   c) Crosses IR-081 between Points D and E.
   d) Crosses IR-082 between Points F and G.
   e) Opposite direction to IR-083 from Points C to D. Crosses between Points F and G and at Point I.
   f) Crosses IR-723 between Points D and E.
   g) Crosses IR-726 between Points D and E.

**Altitude Data Pt Fac/Rad/Dist Lat/Long**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to 90 MSL-100 MSL</td>
<td>A</td>
<td>SDZ VORTAC</td>
<td>N35°12.93' W79°35.28'</td>
</tr>
<tr>
<td>as assigned to 90 MSL B 100 MSL to 100 MSL</td>
<td>B</td>
<td>SDZ 276/26</td>
<td>N35°14.00' W80°07.00'</td>
</tr>
<tr>
<td>as assigned to 90 MSL-100 MSL</td>
<td>C</td>
<td>HMV 132/65</td>
<td>N35°46.00' W81°05.00'</td>
</tr>
<tr>
<td>as assigned to 90 MSL-100 MSL</td>
<td>D</td>
<td>HMV 116/48</td>
<td>N36°08.00' W81°13.00'</td>
</tr>
<tr>
<td>as assigned to 90 MSL-100 MSL</td>
<td>E</td>
<td>HMV 186/6</td>
<td>N36°20.00' W82°08.00'</td>
</tr>
<tr>
<td>as assigned to 90 MSL-100 MSL</td>
<td>F</td>
<td>SOT 037/22</td>
<td>N36°06.00' W82°48.00'</td>
</tr>
<tr>
<td>as assigned to 90 MSL-100 MSL</td>
<td>G</td>
<td>SPA 291/41</td>
<td>N35°15.00' W82°43.00'</td>
</tr>
</tbody>
</table>

**ROUTE DESCRIPTION:**

**Altitude Data Pt Fac/Rad/Dist Lat/Long**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to 40 MSL</td>
<td>A</td>
<td>SAV 300/42</td>
<td>N32°26.00' W81°57.00'</td>
</tr>
<tr>
<td>as assigned to 01 AGL B 30 MSL to 01 AGL B 40 MSL</td>
<td>B</td>
<td>SAV 271/44</td>
<td>N32°05.00' W82°03.00'</td>
</tr>
<tr>
<td>as assigned to 40 MSL to 01 AGL B 40 MSL</td>
<td>C</td>
<td>AMG 048/28</td>
<td>N31°51.00' W82°06.00'</td>
</tr>
<tr>
<td>as assigned to 40 MSL to 01 AGL B 40 MSL</td>
<td>D</td>
<td>AYS 098/29</td>
<td>N31°12.00' W82°00.00'</td>
</tr>
<tr>
<td>as assigned to 40 MSL to 01 AGL B 40 MSL</td>
<td>E</td>
<td>TAY 187/11</td>
<td>N30°19.00' W82°34.00'</td>
</tr>
<tr>
<td>as assigned to 40 MSL to 01 AGL B 40 MSL</td>
<td>F</td>
<td>TAY 197/18</td>
<td>N30°13.00' W82°38.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

40 MSL to G GNV 152/1 N29°41.00' W82°16.00'
40 MSL to H OCF 098/27 N29°07.00' W81°43.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from A to E.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) This route is scheduled through the Range Management Department, Mission coordination/future operations office (MC/FO) between the hours of 0700-1600 Mon-Fri. The route shall be scheduled a minimum of two hours prior to use for same day operations. If scheduling the route on an observed federal holiday (Mon-Fri), schedule with the MC/FO two working days prior.
(2) Alternate Entry: D.
(3) Alternate Exit: B, D and G.
(4) When terrain following avoid Reedsville, GA Arpt N32-04 W82-09 by 5 NM; Jessup, GA Arpt N31-33 W81-53 by 7 NM. Maintain 2000' AGL over Okefenokee National Wildlife Refuge.
(5) Avoid R-2907B.
(6) If not scheduled into R-2910, exit at G.
(7) Minimum alt 100' AGL for terrain following.
(8) Radar systems navigation (SN).
(9) Between C-D Antenna 1032' AGL N31-09.4 W81-58.3.
(10) At B contact ZJX ARTCC 290.4.
(12) Climb to and maintain 4000' MSL approaching TAYLOR (TAY) VORTAC prior to reaching Point E.
(13) CAUTION: Numerous large towers along the route.
(14) CAUTION: Ensure respective mission planning systems and aeronautical charts are updated with the most current vertical obstruction data, which can be downloaded from NGA WEBDVOF (Digital Vertical Obstruction File) predefined queries site at https://DVOF.GEOINTEL.NGA.MIL/DVOFPRE-NUM.CFM.
(15) CAUTION: IR-016 crosses IR-023 from west to east between Points F and G. Call 347 OSS/OKSA, Moody AFB, GA DSN 460-4131, C229-257-4131 to deconflict.

FSS Within 100 NM Radius:
AND, GNV, MCN, PIE

IR-030

ORIGINATING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code 52911GE, NAWS, Point Mugu NAWS, CA 93042-5008 DSN 351-7545, C805-989-7545.


HOURS OF OPERATION: Daylight hours only, daily

ROUTE DESCRIPTION:

Altitude Data  Pt Fac/Rad/Dist Lat/Long
40 MSL B 60 MSL to A CEW 143/38 N30°18.30' W86°16.60'
40 MSL B 60 MSL to A1 CEW 135/29 N30°27.70' W86°17.80'
40 MSL B 60 MSL to A2 CEW 121/23 N30°36.90' W86°19.10'
05 AGL B 60 MSL to B CEW 106/19 N30°43.50' W86°20.00'
05 AGL B 40 MSL to C CEW 073/15 N30°53.00' W86°24.20'
05 AGL B 40 MSL to D CEW 019/18 N31°06.00' W86°33.00'
05 AGL B 40 MSL to E CEW 009/21 N31°10.00' W86°35.70'
05 AGL B 40 MSL to F MVC 091/32 N31°25.00' W86°44.00'
05 AGL B 40 MSL to G MVC 022/31 N31°56.00' W87°05.00'
05 AGL B 40 MSL to H MVC 296/19 N31°37.00' W87°40.00'
05 AGL B 40 MSL to I MVC 248/27 N31°19.22' W87°51.50'
05 AGL B 40 MSL to J MVC 244/28 N31°16.80' W87°51.70'
05 AGL B 40 MSL to K MVC 212/20 N31°11.30' W87°34.80'
05 AGL B 40 MSL to L MVC 131/21 N31°13.00' W87°04.00'
05 AGL B 40 MSL to M CEW 010/18 N31°07.00' W86°36.00'
05 AGL B 40 MSL to N CEW 019/18 N31°06.00' W86°33.00'
05 AGL B 40 MSL to O CEW 073/15 N30°53.00' W86°24.20'
05 AGL B 40 MSL to P CEW 106/19 N30°43.50' W86°20.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from E to M.

ROUTE WIDTH - 5 NM either side of centerline A to B and C to O; 2 NM west side and 5 NM east side of centerline B to C and O to P.

Special Operating Procedures:
(1) For use in VMC only.
(2) Route continuation from M to E authorized.
(3) Alternate Entry/Exit: A, B and P.
(4) Altitude restrictions between D and E 500' AGL-4000' MSL Sat-Sun, or Mon-Fri 1100-1300L, with prior coordination. Otherwise altitude restriction 1500' AGL-4000' MSL.
(5) Alternate Entry/Exit: D and N.

FSS Within 100 NM Radius:
ANB, DRI

IR-031

ORIGINATING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code 52911GE, NAWS, Point Mugu NAWS, CA 93042-5008 DSN 351-7545, C805-989-7545.


HOURS OF OPERATION: Daylight hours only, daily

ROUTE DESCRIPTION:
Altitude Data          Pt         Fac/Rad/Dist   Lat/Long
40 MSL B 60 MSL to A  CEW 143/38  N30°18.30'  W86°16.60'
40 MSL B 60 MSL to A1 CEW 135/29  N30°27.70'  W86°17.80'
40 MSL B 60 MSL to A2 CEW 121/23  N30°36.90'  W86°19.10'
05 AGL B 60 MSL to B  CEW 106/19  N30°43.52'  W86°20.00'
05 AGL B 40 MSL to C  CEW 073/15  N30°53.02'  W86°24.20'
05 AGL B 40 MSL to D  CEW 019/18  N31°06.02'  W86°33.00'
05 AGL B 40 MSL to E  CEW 010/18  N31°07.02'  W86°36.00'
05 AGL B 40 MSL to F  MVC 131/21  N31°13.02'  W87°04.00'
05 AGL B 40 MSL to G  MVC 212/20  N31°11.32'  W87°34.80'
05 AGL B 40 MSL to H  MVC 244/28  N31°16.82'  W87°51.70'
05 AGL B 40 MSL to I  MVC 248/27  N31°19.22'  W87°51.50'
05 AGL B 40 MSL to J  MVC 296/19  N31°37.02'  W87°40.00'
05 AGL B 40 MSL to K  MVC 022/32  N31°56.02'  W87°05.00'
05 AGL B 40 MSL to L  MVC 091/32  N31°25.02'  W86°44.00'
05 AGL B 40 MSL to M  CEW 009/21  N31°10.02'  W86°35.70'
05 AGL B 40 MSL to N  CEW 019/18  N31°06.02'  W86°33.00'
05 AGL B 40 MSL to O  CEW 073/15  N30°53.02'  W86°24.20'
05 AGL B 40 MSL to P  CEW 106/19  N30°43.52'  W86°20.00'
05 AGL B 50 MSL to A  CTY 265/50  N29°30.00'  W84°00.00'
30 MSL B 50 MSL to B  CTY 300/32  N29°51.00'  W83°36.00'
30 MSL B 50 MSL to C  CTY 318/28  N29°56.00'  W83°25.00'
30 MSL B 50 MSL to D  CTY 357/20  N29°56.00'  W83°05.00'
30 MSL B 50 MSL to E  GNV 049/20  N29°56.00'  W82°00.00'
30 MSL B 60 MSL to F  CRG 154/21  N30°02.00'  W81°19.00'
05 AGL B 60 MSL to G  CRG 123/31  N30°05.00'  W81°00.00'

ROUTE WIDTH - 10 NM either side of centerline A to G.

Special Operating Procedures:
(1) Route use restricted to unmanned aerospace vehicle operations and their support aircraft.
(2) Daylight hours 0900-1500 Mon-Thu, 0900-1200 Fri. Daylight savings time 0900-1700 Mon-Thu, 0900-1200 Fri. Flight not authorized from 13 Dec-3 Jan, nor Thanksgiving Day and the following Fri, Sat, and Sun.
(3) Unmanned aerospace vehicles shall avoid all airports by 1500’/3 NM.
IR ROUTES

(4) Route is designated for MARSA operations established by coordinated scheduling.

(5) Maximum use of IR-032/033 shall not exceed total of six flights per year for both routes together.

(6) For use in VMC in accordance with FAAH 7610.4 Section 8.

FSS Within 100 NM Radius:

GNV, PIE

IR-033

ORIGINATING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code 52911GE, NAWS, Point Mugu NAWS, CA 93042-5008 DSN 351-7545, C805-989-7545.


HOURS OF OPERATION: Daylight hours

ROUTE DESCRIPTION:

ROUTE WIDTH - 10 NM either side of centerline A to G and A to F2.

Special Operating Procedures:

(1) Route use restricted to unmanned aerospace vehicle operations and their support aircraft.

(2) Daylight hours 0900-1500 Mon-Thu, 0900-1200 Fri. Daylight savings time 0900-1700 Mon-Thu, 0900-1200 Fri. Flight not authorized from 13 Dec-3 Jan, nor Thanksgiving Day and the following Fri, Sat and Sun.

(3) Unmanned aerospace vehicles shall avoid all airports by 1500'/3 NM.

(4) Route is designated for MARSA operations established by coordinated scheduling.

(5) Maximum use of IR-032/033 shall not exceed total of six flights per year for both routes together.

(6) For use in VMC in accordance with FAAH 7610.4 Section 8.

(7) Alternate Exit F2 to adjoining IR-015.

FSS Within 100 NM Radius:

GNV, PIE

IR-034

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0600-2400 local

ROUTE DESCRIPTION:

ROUTE WIDTH - 8 NM either side of centerline A to J; 6 NM either side of centerline J to K.

Special Operating Procedures:

(1) Visual road reconnaissance (RC) or photo reconnaissance (PR) route.

(2) This route terminates at Avon Park gunnery range (R-2901) and may only be scheduled in conjunction with reserve range time. Route entry times must be made so as not to arrive at range boundary earlier than reserved range times. Route exit time must allow for a minimum of 10 minutes reserved range time remaining for the last aircraft in a flight.

(3) Avoid Immokalee and Clewiston Airports by 3 NM regardless of altitude.

(4) Minimum altitude over Everglades National Park and Big Cypress Preserve is 1000' AGL. Big Cypress Preserve is between D and E, east of centerline entire leg.
(5) Minimum altitude within 3 NM of H is 500' AGL.
(6) Alternate Entry: D and H.
(7) No Alternate Exit points.
(8) All requests for use of this route must be approved by the
347WG, Det 1/ROA Scheduling Activity a minimum of one
day in advance during normal duty hours. Same day changes
or cancellations shall be coordinated through the Scheduling
Activity.
(9) Route clearance valid only plus 30 min from schedule time.
(10) Route segment from F to H is designated a maneuver area.
(11) Avoid overflight of Hendry Correctional Complex N26-19
W81-16 by 1500' AGL or 1 NM.
(12) CAUTION: Uncharted grass airstrip located at N26-20.0
W81-19.2; N26-20.9 W81-26.5.
(13) CAUTION: Uncharted tower 210’ MSL N26-02.5 W81-20.5;
tower 210’ MSL N26-02.5 W81-21.5; tower 200’ MSL
N26-17.3 W81-20.2; Microwave tower 150’ MSL N26-18.4
W81-16.8; tower 250’ MSL N26-27.5 W81-04.5; Microwave
tower 315’ MSL N26-37.7 W80-55.2; tower 300’ MSL
N26-38.6 W80-55.2; water tower 250’ MSL N27-04.8
W81-04.2; tower 300’ MSL N27-07.0 W81-05.0.
(14) Avoid fishing resort/trailer park at the intersection of Route
70 and Kissimmee River, 7 NM west of Okeechobee.
(15) H is a mandatory reporting point.
(16) When the instrument approach at Pahokee/Palm Beach
County Glades Airport is active, aircraft will be directed to
maintain 4000’ MSL from G to I. In addition, when IR-051 is
also active, aircraft will maintain 4000’ MSL until J.

FSS Within 100 NM Radius:
MIA, PIE, WBR

IR-035

ORIGINATING ACTIVITY: 437 OSS/OSO Joint Base
Charleston, SC 29404 DSN 673-5554, C843-963-5554.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC
29152-5000 Duty hours DSN 965-3472, Fax
DSN 965-4804.

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>CRE 077/22</td>
<td>N33°55.00' W78°18.00'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>B</td>
<td>CRE 035/45</td>
<td>N34°27.00' W78°15.00'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>C</td>
<td>FAY 192/32</td>
<td>N34°27.00' W78°58.00'</td>
</tr>
<tr>
<td>03 AGL B 30 MSL to</td>
<td>D</td>
<td>CRE 289/31</td>
<td>N33°57.00' W79°19.00'</td>
</tr>
<tr>
<td>03 AGL B 30 MSL to</td>
<td>E</td>
<td>SSC 100/21</td>
<td>N33°58.00' W80°03.00'</td>
</tr>
<tr>
<td>03 AGL B 30 MSL to</td>
<td>F</td>
<td>VAN 332/9</td>
<td>N33°36.00' W80°33.00'</td>
</tr>
<tr>
<td>03 AGL B 30 MSL to</td>
<td>G</td>
<td>CAE 184/15</td>
<td>N33°36.00' W81°04.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: After crossing
the coast at 2000’ MSL or higher, a descent to 300’ AGL (fighter
aircraft 500') can be initiated once north of ILM 260 degrees
radial. From A to G, 300’ AGL modified contour flying will be
conducted in VMC. IFR/VFR terrain following (TF) to 300’ AGL is
authorized IAW command directives within published altitude
blocks from A to G. When command directives preclude TF
(visual/contour operations), aircrews will maintain the IFR altitude
for each route segment. The top of the block altitude provides
for a minimum of 900’ clearance above the highest obstacle on
that leg (within 5 NM of course centerline).

ROUTE WIDTH - 5 NM either side of centerline from A to E;
5 NM left and 3 NM right of centerline from E to F; 5 NM either
either side of centerline from F to G.

Special Operating Procedures:
(1) Route width excludes North AF, SC class E airspace, and
restricted area R-6002 when active.
(2) For route entry A cross CRE at or below 10,000’ MSL and
contact Myrtle Beach APP CON on 350.3 119.2 to facilitate
route entry/clearance with Wilmington Approach 284.65 or
118.25.
(3) Alternate Entry D: (Contact Myrtle Beach APP CON on
350.3 119.2). Alternate Exit: F.
(4) Lost communications procedures: Maintain 3000’ MSL while
in the route.
(5) Contact Florence APP CON 316.15 135.25 at C with E
estimate.
(6) Contact Myrtle Beach APP CON 350.3 119.2 at D.
(7) Contact Shaw RAPCON 225.4 133.25 prior to E, with F
estimate.
(8) Contact Columbia APP CON 338.2 124.15 passing F.
(9) CAUTION: VR-1040 and VR-1043 route deconfliction, DSN
582-4040/4041.
(10) CAUTION: IR-062 opposite direction at C, deconflict DSN
433-1228.
(11) CAUTION: Crossing/intersecting routes VR-097, VR-1059,
and IR-036 deconflicted by scheduling activity when route is
booked. VR-083, VR-087, and VR-088 deconflicted by 4FW
at DSN 722-2129.
(12) CAUTION: Prior to F - Look for flights of fighter aircraft
holding (VFR) over the Rimini Bridge awaiting entry into
R-6002 (hours of operation 1200-0300Z+).
(13) Approaches to North Field contact North Field LZ/DZ Ops
Facility 235.775 or 120.475. Prior scheduling and approval
required through 437 OSS/OSO DSN 673-5554.
(14) Avoid: Flying along the Lumber River into North Carolina.
Plan turn near C, so as to cross the river only once while in
North Carolina.
(15) Avoid: Marion County Airport N34-10.8 W79-20.1 by 1500’
AGL/3 NM. Note: 3 NM arc extends 1 NM into the route
below 1593’ MSL.
(16) CAUTION: VFR student flying training in the vicinity of
Aynor, SC, N34-00 W79-13 3000-4000’ MSL.
(17) Avoid: Santee National Wildlife Refuge (Lake Marion) just
prior to F, 2200’ AGL.
(18) Avoid nine Noise Sensitive Areas:
(a) Olanta N33-56.2 W79-48.3 by 1000’ AGL/1 NM;
(b) Residence N34-04.4 W79-42.6 by 1500’ AGL/1 NM;
(c) Residence N33-50.0 W80-22.0 by 1500’ AGL/1 NM;
(d) N33-39.1 W80-27.1 by 1000’ AGL/1 NM;
(e) Town of North, SC N33-36.0 W81-06.5 by 1500’ AGL/1 NM;
(f) Congressional noise sensitive area (town/residences at
Galivants Ferry) N34-03.4 W79-14.3, avoid by 2000’
AGL/2 NM;
(g) Hog farm N34-04.4 W79-12.2 by 1500’ AGL/1 NM;
IR ROUTES

(h) Hog farm N34-07.1 W79-09.6 by 1500' AGL/1 NM; (i) Hog farm N34-03.1 W79-09.0 by 1500' AGL/1 NM.

(19) Caution: Towers:
(a) 250' AGL (600' MSL) N34-12.55 W79-11.41;
(b) 250' AGL (750' MSL) N34-19.38 W79-00.24;
(c) 300' AGL (750' MSL) N33-58.17 W79-54.98;
(d) 280' AGL (272' MSL) N34-20.00 W79-20.00;
(e) 200' AGL (300' MSL) N34-24.50 W78-45.50;
(f) 300' AGL N33-12.7 W80-59.7;
(g) 300' AGL N33-09.01 W80-20.4.

(20) Avoid two eagle nest locations, endangered species:
(a) N33-36.9 W80-31.8 by 1500' AGL/1 NM;
(b) N34-00.7 W79-23.5 by 1500' AGL/1 NM.

(21) CAUTION: Vicinity of North Airfield; C-5, C-17, C-130 aircraft conducting tactical training operations into and out of the airfield.

(22) Contact Charleston AFB, Base Operations via 372.2 (DSN 673-3026) or relay through Command Post 349.4 to report any unusual active bird conditions along the route.

(23) Unpublished towers found by route surveys 200' AGL and above are listed in this SOP. Note: A quick reference to the latest Charlotte Sectional Chart (1-500 scale) will show charted towers on this route.

(24) IR-012 entry south of B (deconflict DSN 722-2129).

(25) Make entry times plus or minus 5 minutes or reschedule.

(26) Caution: due to ultralite activity, avoid Lake City N33-52.5 W79-45.5 by 1500' AGL/7 NM.

(27) CAUTION:
(a) Uncharted airport, N34-17.7 W79-03.3, Rwy 8-24 and 15-33;
(b) Uncharted grass strip, N33-59.4 W79-37.8, Rwy 12-28;
(c) Uncharted airstrip, (Matthew’s Airstrip) N33-59.3 W79-45.4;
(d) Uncharted airstrip, (Dannie Rodgers) N33-58.6 W79-39.4;
(e) Uncharted airstrip, (Bernie) N33-57.7 W79-56.2;
(f) Uncharted airstrip, (Tommie and Rick) N33-48.2 W79-31.5;
(g) Uncharted airstrip, (McGee Airstrip) N33-53.4 W79-52.5;
(h) Uncharted landfill, N33-07.54 W80-20.7.

FSS Within 100 NM Radius:
AND, MCN, RDU

IR-036


SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152, DSN 965-4804.

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A CAE 184/15 N33°36.00' W81°04.00'

03 AGL B 30 MSL to B CAE 212/17 N33°37.00' W81°13.00'
03 AGL B 30 MSL to C CAE 194/38 N33°14.00' W81°13.00'
03 AGL B 40 MSL to D VAN 192/26 N33°03.00' W80°30.00'
03 AGL B 40 MSL to E VAN 081/26 N33°35.00' W79°57.00'
03 AGL B 40 MSL to F VAN 036/25 N33°50.00' W80°12.00'
03 AGL B 30 MSL to G VAN 332/9 N33°36.00' W80°33.00'
03 AGL B 30 MSL to H CAE 184/15 N33°36.00' W81°04.00'

TERRAIN FOLLOWING OPERATIONS: 300' AGL modified contour low level operations approved for the entire route VMC. IFR terrain following (TF) to 300' AGL is authorized IAW command directives within published altitude blocks from A to H (round robin). When command directives preclude TF/visual contour operations, aircrews will maintain the IFR altitude for each route segment. The top of the block altitude provides for a minimum of 1000' clearance above the highest obstacle on that leg (within 5 NM of course centerline).

ROUTE WIDTH - 5 NM either side of centerline from A to F; 3 NM right and 5 NM left of centerline from F to G; 5 NM either side of centerline from G to H.

Special Operating Procedures:
(1) Route width excludes North AF, SC class E airspace, and restricted area R-6002 when active.
(2) Contact Columbia APP CON on 338.2 or 124.15 for route entry at A with D estimate.
(3) Alternate Entry authorized at Pt B (contact Columbia APP CON).
(4) Alternate Exit authorized at D.
(5) Monitor Jacksonville ARTCC on 363.2 /132.92 at B.
(6) Monitor Charleston APP CON on 306.925/120.7 prior to D.
(7) Contact Shaw RAPCON on 225.4 or 133.25 prior to F with G estimate.
(8) Contact Columbia APP CON on 338.2 or 124.15 passing G.
(9) Lost Communications Procedures: Maintain 3000' MSL while on the route.
(10) CAUTION: VR-1040 and VR-1043 route deconfliction DSN 582-4040/4041.
(12) CAUTION: Prior to G - Look for flights of fighter aircraft holding (VFR) over the Rimini Bridge awaiting entry into R-6002, (hours of operation 1200-0300Z+).
(13) Approaches to North Field contact North Field LZ/DZ Ops Facility 235.775 or 120.475. Prior scheduling and approval required through 437 OSS/OSO DSN 673-5554.
(14) Avoid three airports:
(a) Bamberg Co Airport N33-18.5 W81-06.9 by 1500' AGL/3 NM;
(b) St. George Airport N33-11.7 W80-30.5 by 1500' AGL/3 NM;
(c) Orangeburg Airport N33-27.7 W80-51.5 by 1500' AGL/3 NM. NOTE: These airports are outside of the route.

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A CAE 184/15 N33°36.00' W81°04.00'

03 AGL B 30 MSL to B CAE 212/17 N33°37.00' W81°13.00'
03 AGL B 30 MSL to C CAE 194/38 N33°14.00' W81°13.00'
03 AGL B 40 MSL to D VAN 192/26 N33°03.00' W80°30.00'
03 AGL B 40 MSL to E VAN 081/26 N33°35.00' W79°57.00'
03 AGL B 40 MSL to F VAN 036/25 N33°50.00' W80°12.00'
03 AGL B 30 MSL to G VAN 332/9 N33°36.00' W80°33.00'
03 AGL B 30 MSL to H CAE 184/15 N33°36.00' W81°04.00'
Avoid: Santee National Wildlife Refuge (Lake Marion) just prior to G, by 2200’ AGL.

Avoid six Noise Sensitive Areas:
(a) Residence N33-50.0 W80-22.0 by 1500’ AGL/1 NM;
(b) N33-39.1 W80-27.1 by 1000’ AGL/1 NM;
(c) N33-29.7 W81-16.8 by 1000’ AGL/1 NM;
(d) Givhans, SC N33-00.8 W80-20.2 by 1000’ AGL/1.5 NM;
(e) N33-15.5 W81-11.5 by 1000’ AGL/1 NM;
(f) N33-40.8 W80-03.5 by 1000’ AGL/1 NM.

Avoid ten Eagle Nest locations, endangered species:
(a) N33-10.8 W80-25.3 by 1500’ AGL/1 NM;
(b) N33-36.9 W80-31.8 by 1500’ AGL/1 NM;
(c) Santee NWR N33-23.5 W80-02.6 min alt: 2000’ AGL;
(d) Santee NWR N33-26.0 W79-55.0 min alt: 2000’ AGL;
(e) Santee NWR N33-18.4 W80-10.6 min alt: 2000’ AGL;
(f) Santee NWR N33-26.1 W80-07.4 min alt: 2000’ AGL;
(g) Santee NWR N33-28.8 W80-09.5 min alt: 2000’ AGL;
(h) Santee NWR N33-24.4 W80-11.6 min alt: 2000’ AGL;
(i) Santee NWR N33-25.4 W80-16.9 min alt: 2000’ AGL;
(j) Santee NWR N33-29.6 W80-10.1 min alt: 2000’ AGL.

CAUTION: Vicinity of North Airfield, C-5, C-17, C-130 aircraft conducting tactical training operations into and out of the airfield.

Contact Charleston AFB Base Operations 372.2 (DSN 673-3026) or relay through Command Post 349.4 to report any unusual active bird conditions along the route.

Unpublished towers found by route surveys 200’ AGL and above are listed in this SOP. NOTE: A quick reference to the latest Charlotte Sectional Chart (1-500 scale) will show charted towers on this route.

Make entry times plus or minus 5 minutes or reschedule.


FSS Within 100 NM Radius: AND, MCN, RDU

The altitude data for each point are as follows:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 60 MSL to or as assigned</td>
<td>A</td>
<td>SJI 099/2</td>
<td>N30°43.00' W88°19.00'</td>
</tr>
<tr>
<td>60 MSL to or as assigned</td>
<td>B</td>
<td>GPT 027/33</td>
<td>N30°53.00' W88°46.00'</td>
</tr>
<tr>
<td>60 MSL to or as assigned</td>
<td>C</td>
<td>LBY 107/43</td>
<td>N31°09.00' W88°34.00'</td>
</tr>
<tr>
<td>60 MSL to or as assigned</td>
<td>D</td>
<td>LBY 026/17</td>
<td>N31°40.00' W89°10.00'</td>
</tr>
<tr>
<td>60 MSL to or as assigned</td>
<td>E</td>
<td>PCU 353/26</td>
<td>N31°00.00' W89°45.00'</td>
</tr>
<tr>
<td>60 MSL to or as assigned</td>
<td>F</td>
<td>PCU 055/9</td>
<td>N30°38.00' W89°35.00'</td>
</tr>
<tr>
<td>60 MSL to or as assigned</td>
<td>G</td>
<td>GPT VORTAC</td>
<td>N30°24.41' W89°04.61'</td>
</tr>
<tr>
<td>60 MSL to or as assigned</td>
<td>H</td>
<td>GPT 068/22</td>
<td>N30°32.00' W88°41.00'</td>
</tr>
</tbody>
</table>

Special Operating Procedures:
1. Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
2. Advise controller when making turns in excess of 20 degrees.
3. Radar system navigation (SN).
4. Conflicts: (deconflict with the appropriate Scheduling Activity)
   (a) Crosses VR-060 at Point C.
   (b) Crosses VR-179 at Points B and C.
   (c) Prior to Point BRAVO aircraft are required to transmit in the blind on 228.850 their intention to transit the DESOTO MOA and deconflict as necessary to remain MARSA with elements in the MOA.

FSS Within 100 NM Radius: DRI, GNV, GWO

IR-038

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: Sunrise-Sunset, Mon-Fri, occasional weekends

ROUTE DESCRIPTION:

As assigned to 80 MSL-100 MSL

IR-038

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: Sunrise-Sunset, Mon-Fri, occasional weekends

ROUTE DESCRIPTION:
IR ROUTES

**ROUTE WIDTH** - 10 NM either side of centerline.

### Special Operating Procedures:
1. Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
2. Advise controller when making turns in excess of 20 degrees.
3. Radar system navigation (SN).
4. Aircraft are required to transmit in the blind on 228.850 their intentions to transit Desoto MOA prior to F.
5. Conflicts: (Deconflict with the appropriate Scheduling Activity)
   a. Crosses VR-060 between Points C and D and F and G.
   b. Crosses VR-179 between Points C and D, F and G, and at Point H.
6. Alternate entry: B. Point B is a compulsory reporting point for alternate entry.

### FSS Within 100 NM Radius:
DRI, GNV, GWO

---

**IR-040**

### ORIGINATING ACTIVITY:
Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

### SCHEDULING ACTIVITY:
NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

### HOURS OF OPERATION:
Sunrise-Sunset

### ROUTE DESCRIPTION:
**ROUTE WIDTH** - 4 NM either side of centerline.

### Special Operating Procedures:

---

**Altitude Data** | **Pt** | **Fac/Rad/Dist** | **Lat/Long**
--- | --- | --- | ---
Cross at 30 MSL to or as assigned | A | NMM 273/31 | N32°37.00' W89°09.00'
24 MSL B 60 MSL to or as assigned | B | NMM 288/32 | N32°45.00' W89°09.00'
24 MSL B 70 MSL to or as assigned | C | NMM 288/42 | N32°48.00' W89°20.00'
24 MSL B 70 MSL to | D | MHZ 046/21 | N32°41.00' W89°48.00'
22 MSL B 70 MSL to | E | MHZ 026/26 | N32°50.00' W89°53.00'
22 MSL B 70 MSL to | F | MHZ 011/29 | N32°55.00' W90°00.00'
22 MSL B 70 MSL to | G | SQS 102/26 | N33°21.00' W89°47.00'
22 MSL B 70 MSL to | H | SQS 106/33 | N33°17.00' W89°40.00'
22 MSL B 70 MSL to | I | SQS 122/42 | N33°04.00' W89°36.00'
28 MSL B 70 MSL to | J | IGB 249/35 | N33°19.00' W89°11.00'
28 MSL B 70 MSL to | K | NMM 322/43 | N33°09.00' W89°04.00'
28 MSL B 50 MSL to | L | NMM 339/33 | N33°06.00' W88°46.00'

---

**ROUTE WIDTH** - 5 NM either side of centerline.

### Special Operating Procedures:
(2) Instructor/Flight Leader must not descend below 3000' MSL to maintain contact with ATC.
(3) Alternate Exit: K.
(4) Alternate Entry: G.

FSS Within 100 NM Radius:
ANB, DRI, GWO, MKL

IR-046

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

ROUTE WIDTH - 4 NM either side of centerline from A to C; 8 NM left and 5 NM right of centerline from C to D; 5 NM either side of centerline from D to I; 6 NM left and 4 NM right of centerline from I to J.

Special Operating Procedures:

(1) When entering the route from the north enter at A. Refer to A as RILEE in all ATC communications and file to RILEE on the DD Form 175. If entering the route at B, refer to B as HILTI and file to HILTI on the DD Form 175.
(2) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.

FSS Within 100 NM Radius:
GNV, MIA, PIE

IR-047

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.
IR ROUTES

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to A  LAL 261/14  N27°57.20'
50 MSL - 90 MSL B  LAL VORTAC  N27°59.17'
50 MSL - 90 MSL C  LAL 082/36  N28°03.50'
50 MSL - 90 MSL D  ORL 181/32  N28°00.00'
50 MSL - 90 MSL E  ORL 181/46  N27°46.00'

ROUTE WIDTH - 3.5 NM either side of centerline from A to D; 6 NM left and 4 NM right of centerline from D to E.

Special Operating Procedures:
(1) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
(2) Alternate Entry: B.
(3) This route is only for aircraft returning to MacDill AFB from R-2901 or Lake Placid MOA. It terminates with a hand-off to Tampa Approach Control.
(4) CAUTION: Numerous light aircraft flying north and south between A and B.

FSS Within 100 NM Radius:
GNV, MIA, PIE

IR-049

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to A  MCF 164/23  N27°30.00'
05 AGL B 30 MSL to B  LBV 314/46  N27°21.72'
05 AGL B 30 MSL to C  LBV 319/37  N27°18.02'
05 AGL B 30 MSL to D  LBV 327/26  N27°11.52'
05 AGL B 60 MSL to E  PHK 325/28  N27°10.02'
05 AGL B 50 MSL to F  PHK 329/37  N27°18.82'

ROUTE WIDTH - 8 NM left and 3 NM right of centerline from A to B; 5 NM either side of centerline for entire route from B to D; 6 NM either side of centerline for entire route from D to E; 3.5 NM left and 7 NM right of centerline from E to F.

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 6 NM either side of centerline from A to B; 5 NM either side of centerline from B to C.
Special Operating Procedures:
(1) All requests for use of this route must be approved by the 347 Rescue Wing, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
(2) Contact 347 Rescue Wing, Det 1/ROA during normal duty hours for hazard briefing prior to flight planning.
(3) Alternate Entry: B (A is only authorized on departure from MacDill AFB, FL)
(4) This route is only used for aircraft scheduled for entry into R-2901 with specified range period. There are no Alternate Exit points.
(5) Entry/exit time windows for deconfliction with IR-034, IR-050, and other IR-049 traffic. For A Entry, flight must enter NET 15 minutes prior to scheduled range start time (RST) and NLT 20 minutes prior to the range end time (RET). For B Entry, enter NET 10 minutes prior to RST and NLT 18 minutes prior to RET. Flight must exit IR-049 NET the RST and NLT 10 minutes prior to RET. Maintain between 360-540 knots ground speed. Route entry outside the time windows is not authorized and requires rescheduling.
(6) Radar navigation, contour flying and terrain following radar flying authorized A to F.
(7) Visual road reconnaissance authorized D to E.
(8) Restrictions: Avoid overflight of Brownsville at N27-18 W81-49; hospital at N27-12 W81-41 (by 1 NM), Brighton at N27-14 W81-06.
(9) This route is deconflicted with IR-034, IR-050, IR-051 and IR-055 by 347th Wing, Det 1/ROA.
(10) CAUTION: IR-049 airspace coincides with: VR-1098 from A to B; 5 NM either side of centerline from B to E; 3.5 NM left and 7 NM right of centerline from E to G.
(11) CAUTION: Be alert for light aircraft north of Arcadia and in the vicinity of Lake Placid. Avoid flight within 1500’ AGL or 3 NM of private airports enroute.
(12) Minimum IMC altitude is 1700’ MSL for entire route.
(13) 15 Oct-15 Mar/Migratory birds. From 1 hour before sunset to 1 hour after sunrise, minimum altitude is IMC altitude for entire route.
(14) Use Caution: Entry Point A is within 2 NM of Class B and C airspace.
(15) Use Caution: Alternate Entry Point B is within 20 NM of Class B and C airspace.

FSS Within 100 NM Radius:
MIA, PIE, WBR

IR-050

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205
DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205
DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>MCF 164/23</td>
<td>N27°30.00' W82°22.00'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>B</td>
<td>LBV 314/46</td>
<td>N27°21.72' W81°59.98'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>C</td>
<td>LBV 319/37</td>
<td>N27°18.02' W81°49.98'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>D</td>
<td>LBV 016/5</td>
<td>N26°54.02' W81°21.98'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>E</td>
<td>PHK 318/19</td>
<td>N27°01.32' W80°55.68'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>F</td>
<td>PHK 325/28</td>
<td>N27°10.02' W80°59.28'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>G</td>
<td>PHK 329/37</td>
<td>N27°18.82' W81°02.98'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM left and 3 NM right of centerline from A to B; 5 NM either side of centerline from B to E; 3.5 NM left and 7 NM right of centerline from E to G.

Special Operating Procedures:
(1) All requests for use of this route must be approved by the 347 Rescue Wing, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
(2) Contact 347 Rescue Wing, Det 1/ROA during normal duty hours for hazard briefing prior to flying route.
(3) Alternate Entry: B (A is only authorized on departure from MacDill AFB, FL)
(4) This route is only used for aircraft scheduled for entry into R-2901 with a specified range period. There are no Alternate Exit points.
(5) Entry/exit time windows for deconfliction with IR-034, IR-049 and other IR-050 traffic. For A Entry, flight must enter NET 17 minutes prior to the scheduled range start time (RST) and NLT 22 minutes prior to the range end time (RET). For B Entry, enter NET 15 minutes prior to RST and NLT 20 minutes prior to RET. Flight must exit IR-050 NET the RST and NLT 10 minutes prior to RET. Maintain between 360-540 knots ground speed. Entry outside time windows is not authorized and requires rescheduling.

As assigned to: A  MCF 164/23  N27°30.00' W82°22.00'
05 AGL B 30 MSL to: B  LBV 314/46  N27°21.72' W81°59.98'
05 AGL B 30 MSL to: C  LBV 319/37  N27°18.02' W81°49.98'
05 AGL B 30 MSL to: D  LBV 016/5  N26°54.02' W81°21.98'
05 AGL B 30 MSL to: E  PHK 318/19  N27°01.32' W80°55.68'
05 AGL B 30 MSL to: F  PHK 325/28  N27°10.02' W80°59.28'
05 AGL B 50 MSL to: G  PHK 329/37  N27°18.82' W81°02.98'

Authorized entire route.

ROUTE WIDTH - 8 NM left and 3 NM right of centerline from A to B; 5 NM either side of centerline from B to E; 3.5 NM left and 7 NM right of centerline from E to G.

Special Operating Procedures:
(1) All requests for use of this route must be approved by the 347 Rescue Wing, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
(2) Contact 347 Rescue Wing, Det 1/ROA during normal duty hours for hazard briefing prior to flight planning.
(3) Alternate Entry: B (A is only authorized on departure from MacDill AFB, FL)
(4) This route is only used for aircraft scheduled for entry into R-2901 with specified range period. There are no Alternate Exit points.
(5) Entry/exit time windows for deconfliction with IR-034, IR-049 and other IR-050 traffic. For A Entry, flight must enter NET 17 minutes prior to the scheduled range start time (RST) and NLT 22 minutes prior to the range end time (RET). For B Entry, enter NET 15 minutes prior to RST and NLT 20 minutes prior to RET. Flight must exit IR-050 NET the RST and NLT 10 minutes prior to RET. Maintain between 360-540 knots ground speed. Entry outside time windows is not authorized and requires rescheduling.

(6) Radar navigation and contour flying authorized A to G.
(7) Restrictions: Avoid overflight of Brownsville N27-18 W81-49; hospital at N27-12 W81-41 (by 1 NM); Arcadia at N27-12.5 W81-50.0; Brighton N27-13.8 W81-05.7.
(8) This route is deconflicted with IR-034, IR-051 and IR-055 by 347th Rescue Wing, Det 1/ROA Scheduling. IR-050 is MARSA with these MTRs.
(9) CAUTION: IR-050 airspace coincides with: VR-1006 from D to F; VR-1087 from E to F, and cross VR-1098 at F. In VMC, See and Avoid.
IR ROUTES

(10) CAUTION: Be alert for light aircraft in vicinity of C and D. Avoid flight within 1500’ or 3 NM of private airports enroute.

(11) Minimum IMC altitude 1700’ MSL for entire route.

(12) 15 Oct-15 Mar/Migratory birds: From 1 hour before sunset to 1 hour after sunrise, minimum altitude is IMC altitude for entire route.

(13) Use Caution: Entry Point A is within 2 NM of Class B and C airspace.

(14) Use Caution: Alternate Entry Point B is within 20 NM of Class B and C airspace.

FSS Within 100 NM Radius:
MIA, PIE, WBR

IR-051

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:
TERRAIN FOLLOWING OPERATIONS: Contour flying and terrain following radar flying authorized from A to D and F to M. Minimum IMC altitude 1700’ MSL from A to D and from F to M. Minimum IMC altitude 3000’ MSL from D to F.

ROUTE WIDTH - 8 NM left and 3 NM right of centerline from A to B; 5 NM either side of centerline from B to F; 4 NM either side of centerline from F to H; 3 NM either side of centerline from H to L; 6 NM left and 4 NM right of centerline from L to M.

Special Operating Procedures:
(1) All requests for use of this route must be approved by the 347 Rescue Wing, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.

(2) Contact 347 Rescue Wing, Det1/RO Originating Activity during normal duty hours for hazard briefing prior to flying route.

(3) Alternate Entry: B and F when flight planned, and between H and I when entering from Marina MOA. (A is only authorized on departure from MacDill AFB, FL)

(4) This route is used for aircraft scheduled for entry into R-2901 with a specified range period. There are no Alternate Exit points.

(5) Entry/exit time windows for deconfliction with IR-046, IR-049, IR-050, IR-056, VR-1089, VR-1098 and other IR-051 traffic. For A/B Entry, enter NET 27 minutes prior to scheduled range start time (RST) and NLT 32 minutes prior to RST and time end time (RET). For F Entry, enters NET 14 minutes prior to RST and NLT 19 minutes prior to RET. Flight must exit IR-051 NET the RST and NLT 10 minutes prior to RET. Maintain between 420-540 kts ground speed. Round entry outside time windows not authorized and requires rescheduling.

(6) Radar navigation authorized A to K.

(7) This route is deconflicted with IR-034, IR-046, IR-049, IR-050, IR-055, and IR-056. IR-051 is MARSA with them.

(8) Restrictions: Avoid overflight of hospital N27-12 W81-41 by 1 NM.

(9) IR-051 airspace coincides with IR-034, IR-046, IR-049, IR-050, IR-056, VR-1089, VR-1098 and other IR-051 traffic. For A/B Entry, enter NET 27 minutes prior to scheduled range start time (RST) and NLT 32 minutes prior to range end time (RET). For F Entry, enter NET 14 minutes prior to RST and NLT 19 minutes prior to RET. Flight must exit IR-051 NET the RST and NLT 10 minutes prior to RET. Maintain between 420-540 kts ground speed. Round entry outside time windows not authorized and requires rescheduling.

(10) CAUTION: Be alert for light aircraft in vicinity of C and D, and along the Florida Turnpike.

(11) Minimum IMC altitude 1700’ MSL except from D to F where 3000’ MSL is mandatory altitude. Numerous MTRs under IR-051 between D to F.

(12) 15 Oct-15 Mar/Migratory birds: From 1 hour before sunset to 1 hour after sunrise, minimum altitude is IMC altitude for entire route.

(13) Possible bird hazard area located approximately N27-20.6 W80-41.4. Avoid this area by 3 NM or above 2000’ AGL.

(14) Use Caution: Entry Point A is within 2 NM of Class B and C airspace.

(15) Use Caution: Alternate Entry Point B is within 20 NM of Class B and C airspace.

FSS Within 100 NM Radius:
GNV, MIA, PIE

IR-053

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.
SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0600-2400 local, daily

ROUTE DESCRIPTION:

ROUTE WIDTH - 5 NM either side of centerline from A to C; 2 NM either side of centerline from C to E; 5 NM either side of centerline E to F.

Special Operating Procedures:
(1) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
(2) Alternate Entry: B (A is only authorized on departure from Homestead ARB).
(3) Contact Navy Key West APP CON not later than 5 minutes prior to exit.
(4) Clearance to fly this route does not include clearance into W-174E, Marquesas/Patricia target area.
(5) Obstruction/hazard/noise sensitive briefing shall be obtained at time of scheduling.
(6) CAUTION: Uncharted airstrips N25-00.0 W80-33.0.
(7) CAUTION: Uncharted 250' MSL concrete tower N25-07.7 W80-24.8; tower with strobe light 300' MSL N27-07.5 W80-24.3; two microwave towers 250' MSL N25-06.7 W80-25.0; tower 350' MSL N25-01.8 W80-30.5; tower 300' MSL N24-55.3 W80-38.0; twin towers 250' MSL N24-54.6 W80-38.8.

FSS Within 100 NM Radius:
MIA

IR-055

ORIGINATING ACTIVITY: 347 WG, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 WG, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0600-2400 local, daily

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A HST 153/18 N25°14.00' W80°13.00' N25°14.00' W80°13.00'
05 AGL B 30 MSL to B HST 202/40 N24°51.00' W80°37.00' N24°51.00' W80°37.00'
05 AGL B 30 MSL to C HST 209/50 N24°44.00' W80°47.00' N24°44.00' W80°47.00'
05 AGL B 30 MSL to D EYW 085/37 N24°38.00' W81°07.00' N24°38.00' W81°07.00'
05 AGL B 30 MSL to E EYW 218/27 N24°14.00' W82°07.00' N24°14.00' W82°07.00'
25 MSL to F EYW 249/23 N24°27.00' W82°12.00' N24°27.00' W82°12.00'

ROUTE WIDTH - 4 NM either side of centerline A to B; 8 NM either side of centerline E to F.

Special Operating Procedures:
(1) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
(2) Route entry from R-2901 required during scheduled range period only. No Alternate Entry points. To maintain separation with preceding flights, start route NET 10 minutes into scheduled range time.
(3) National Park Service operates fixed and rotary wing aircraft over Everglades National Park and Big Cypress Preserve. Exercise caution between D and I.
(4) Minimum altitude over Everglades National Park and Big Cypress Preserve is 1000' AGL. Big Cypress Preserve is between E and F, left of centerline entire leg.
(5) Avoid Immikalee Airport by 3 NM regardless of altitude.
(6) Contact Miami ARTCC 133.55/291.6 prior to entering route.
(7) Alternate Exit: D and H.
(8) Visual road recon (RC) route.
(9) This route is deconflicted with IR-034, IR-049, IR-050, IR-051, and IR-056 by scheduling.
(10) Avoid overflight of Hendry Correctional Complex N26-19 W81-16 by 1 NM or 1500' AGL.
(11) Avoid overflight of horse ranch at N26-52 W81-14 by 2 NM or 1500' AGL.
(13) CAUTION: Uncharted tower 300' MSL N27-07.0 W81-05.0; water tower 250' MSL N27-04.8 W81-04.2; tower 250' MSL N26-59.0 W81-07.8; tower 200' MSL N26-25.9 W81-26.9; microwave tower 150' MSL N26-18.4 W81-16.8; tower 200' MSL N26-17.3 W81-20.2; tower 210' MSL N26-02.5 W81-20.5; tower 210' MSL N26-02.5 W81-21.5.
(14) CAUTION: Uncharted water tower 250' MSL N27-04.8
W81-04.2; tower 250' MSL N26-59.0 W81-07.8; microwave
tower 150' MSL N26-18.4 W81-16.8; tower 200' MSL
N26-17.3 W81-20.2; tower 200' MSL N26-02.5 W81-21.5.
(15) Possible bird hazard area located approximately N27-20.6
W80-41.4. Avoid this area by 3 NM or above 2000' AGL.

FSS Within 100 NM Radius:
MIA, PIE

IR-056

ORIGINATING ACTIVITY: 347 WG, Detachment 1/RO,
8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN
968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 WG, Detachment 1/ROA,
8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN
968-2902/4642, C813-828-2902/4642.

HOURS OF OPERATION: 0600-2400 local

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized
from D to O.

ROUTE WIDTH - 8 NM either side of centerline from A to H;
4 NM either side of centerline from H to K; 3 NM either side of
centerline from K to O.

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A HST 244/46 N25°07.00'
10 AGL B 30 MSL to B HST 266/46 W81°07.00'
10 AGL B 30 MSL to C HST 291/56 N25°46.00'
10 AGL B 30 MSL to D RSW 151/43 W81°21.50'
01 AGL B 30 MSL to E RSW 129/28 N26°15.00'
01 AGL B 30 MSL to F RSW 116/26 W81°21.00'
01 AGL B 30 MSL to G PHK 232/15 N26°37.80'
01 AGL B 30 MSL to H PHK 230/8 W80°54.50'
01 AGL B 30 MSL to I PHK 344/15 N26°42.00'
01 AGL B 30 MSL to J PHK 352/23 W80°48.00'
01 AGL B 20 MSL to K TRV 231/16 N27°29.00'
01 AGL B 20 MSL to L TRV 278/18 W80°42.00'
01 AGL B 20 MSL to M TRV 299/25 N27°40.00'
01 AGL B 30 MSL to N LAL 085/43 W80°50.00'
01 AGL B 30 MSL to O LAL 086/39 N28°02.00'

Special Operating Procedures:
(1) Visual road reconnaissance (RC) or photo reconnaissance
(PR) route.
(2) This route terminates at Avon Park Gunnery Range (R-2901)
and may only be scheduled in conjunction with reserved
range time. Route entry times must be made so as not to
arrive at range boundary earlier than reserved range time.
Route exit time must allow for a minimum of 10 minutes
reserved range time remaining for the last aircraft in a flight.
(3) Avoid Immokalee and Clewiston Airports by 3 NM
regardless of altitude.
(4) Minimum altitude over Everglades National Park and Big
Cypress Preserve is 1000' AGL. Big Cypress Preserve is
between D and E, east of centerline entire leg.
(5) Minimum altitude within 3 NM of H is 500' AGL.
(6) Alternate Entry: D and H.
(7) Alternate Exit L is to be used only for entry into R-2901 via
Marian MOA.
(8) Florida’s turnpike - minimum crossing altitude or paralleling
within 1/2 NM altitude is 500’ AGL.
(9) All requests for use of this route must be approved by the
347 WG, Det 1/ROA Scheduling Activity a minimum of one
day in advance during normal duty hours. Same day changes
or cancellations shall be coordinated through the Scheduling
Activity.
(10) Route clearance valid only plus 30 minutes from scheduling
time.
(11) Route segment from F to H is designated a maneuver area.
(12) Avoid overflight of Hendry Correctional Complex N26-19.0
W81-16.0 by 1 NM or 1500' AGL.
(13) CAUTION: Uncharted grass airstrips N26-20.0 W81-19.2;
N26-20.9 W81-26.5; N27-41.0 W80-48.5.
(14) CAUTION: Uncharted tower 210' MSL N26-02.5 W81-20.5;
tower 210' MSL N26-17.3 W81-20.2; microwave tower 150' MSL N26-18.4
W81-16.8; tower 250' MSL N26-27.5 W81-04.5; microwave
tower 315' MSL N26-37.7 W80-55.2; tower 300' MSL
N26-38.6 W80-55.2; tower 300' MSL N27-52.0 W80-52.8;
grain elevator 200' MSL N27-48.1 W80-48.0.
(15) Tower 516' MSL  N27-14.3 W80-45.2 is N27-14.0 W80-40.5.
(16) H is a mandatory reporting point. In addition to reporting H,
non Homestead AFB based aircraft are required to give ETA
in Zulu time for M.
(17) When the instrument approach to Pahokee/Palm Beach
County Glades Airport is active, aircraft will be directed to
maintain 4000' MSL from G to I.
(18) Possible bird hazard area located approximately N27-20.6
W80-41.4. Avoid this area by 3 NM or above 2000' AGL.

FSS Within 100 NM Radius:
GNV, MIA, PIE

IR-057

ORIGINATING ACTIVITY: 1 SOAOS/DOGR, Hurlburt
Field, FL 32544 DSN 579-7812/7813, C850-884-7812/7813.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous
ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 10 MSL to A CEW VORTAC N30°49.57' W86°40.75'
02 AGL B 10 MSL to B CEW 010/11 N31°00.00' W86°38.00'
02 AGL B 30 MSL to C CEW 002/44 N31°33.40' W86°36.60'
02 AGL B 20 MSL to D MGM 202/10 N32°03.90' W86°24.40'
02 AGL B 13 MSL to E MGM 102/33 N32°04.60' W85°41.20'
02 AGL B 15 MSL to F EUF 016/11 N32°07.90' W85°03.60'
02 AGL B 15 MSL to G EUF 092/22 N31°55.30' W84°42.30'
02 AGL B 30 MSL to H PZD 273/20 N31°39.80' W84°41.20'
02 AGL B 30 MSL to I PZD 199/30 N31°10.20' W84°28.00'
02 AGL B 30 MSL to J SZW 332/13 N30°44.90' W84°29.00'
02 AGL B 30 MSL to K MAI 146/15 N30°34.80' W84°57.70'
02 AGL B 10 MSL to L MAI 253/25 N30°39.80' W85°34.60'
02 AGL B 10 MSL to M CEW 087/33 N30°49.30' W86°01.90'
02 AGL B 10 MSL to N CEW 061/15 N30°56.20' W86°24.80'
02 AGL B 10 MSL to O CEW 282/8 N30°51.70' W86°49.80'
02 AGL B 10 MSL to P CEW 197/12 N30°37.90' W86°45.70'
02 AGL B 10 MSL to (Sontay DZ) N30°56.20' W86°24.80'
02 AGL B 10 MSL to N CEW 061/15 N30°56.20' W86°24.80'
02 AGL B 10 MSL to NA CEW 116/17 N30°41.20' W86°23.60'

ROUTE WIDTH - 2 NM either side of centerline.

TERRAIN FOLLOWING OPERATIONS: Entire route designated for terrain following operations by MC-130 and CV-22 aircraft. Special equipment and procedures enable MC-130's and CV-22's to operate at lower than standard IFR terrain clearance altitudes.

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 10 MSL to A CEW VORTAC N30°49.57' W86°40.75'
02 AGL B 10 MSL to B CEW 061/15 N30°56.20' W86°24.80'
02 AGL B 10 MSL to C CEW 087/33 N30°49.30' W86°01.90'
02 AGL B 10 MSL to D MAI 253/25 N30°39.80' W85°34.60'
02 AGL B 10 MSL to E MAI 146/15 N30°34.80' W84°57.70'
02 AGL B 30 MSL to F PZD 199/30 N31°10.20' W84°28.00'
02 AGL B 30 MSL to G PZD 273/20 N31°39.80' W84°41.20'
02 AGL B 30 MSL to I EUF 092/22 N31°55.30' W84°42.30'
02 AGL B 15 MSL to J EUF 016/11 N32°07.90' W85°03.60'
02 AGL B 15 MSL to K MGM 102/33 N32°04.60' W85°41.20'
02 AGL B 13 MSL to L MGM 202/10 N32°03.90' W86°24.40'

IR ROUTES

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 10 MSL to A CEW VORTAC N30°49.57' W86°40.75'
02 AGL B 10 MSL to B CEW 010/11 N31°00.00' W86°38.00'
02 AGL B 30 MSL to C CEW 002/44 N31°33.40' W86°36.60'
02 AGL B 20 MSL to D MGM 202/10 N32°03.90' W86°24.40'
02 AGL B 13 MSL to E MGM 102/33 N32°04.60' W85°41.20'
02 AGL B 15 MSL to F EUF 016/11 N32°07.90' W85°03.60'
02 AGL B 15 MSL to G EUF 092/22 N31°55.30' W84°42.30'
02 AGL B 30 MSL to H PZD 273/20 N31°39.80' W84°41.20'
02 AGL B 30 MSL to I PZD 199/30 N31°10.20' W84°28.00'
02 AGL B 30 MSL to J SZW 332/13 N30°44.90' W84°29.00'
02 AGL B 30 MSL to K MAI 146/15 N30°34.80' W84°57.70'
02 AGL B 10 MSL to L MAI 253/25 N30°39.80' W85°34.60'
02 AGL B 10 MSL to M CEW 087/33 N30°49.30' W86°01.90'
02 AGL B 10 MSL to N CEW 061/15 N30°56.20' W86°24.80'
02 AGL B 10 MSL to O CEW 282/8 N30°51.70' W86°49.80'
02 AGL B 10 MSL to P CEW 197/12 N30°37.90' W86°45.70'

TERRAIN FOLLOWING OPERATIONS: Entire route designated for terrain following operations by MC-130 and CV-22 aircraft. Special equipment and procedures enable MC-130's and CV-22's to operate at lower than standard IFR terrain clearance altitudes.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

(1) Tie-in FSS: GNV (Gainesville).
(2) Limited to 1 SOW use only.
(3) Primary Entry: A.
(4) Alternate Entry: D, I.
(5) Primary Exit: P or NA.
(6) Alternate Exit: D, F, I.
(7) To file alternate routing from N to NA (Pino DZ), file (entry point), IR-057. CEW061015. IR057A. CEW116017.
(8) Communication requirements: The aircraft shall:
   (a) Contact Jacksonville ARTCC 120.2 346.6 at B;
   (b) Contact Atlanta ARTCC 120.55 270.25 at C;
   (c) Contact Montgomery APP CON 124.0 319.9 at D;
   (d) Contact Atlanta Large TRACON APP CON 126.55 278.5 339.8 at E;
   (e) Contact Jacksonville ARTCC on 125.75 226.8 at G;
   (f) Contact Tallahassee APP CON on 128.7 254.3 at I;
   (g) Contact Eglin APP CON on 124.05 393.0 at M.
(9) Route Floor: CV-22 - 200' AGL; MC-130 - 250' AGL.
(10) Mission number required for entry into R-2914 or R-2915.
(11) Contact Eglin Range Control at N for entry into R-2914 or O for entry into R-2915.
(12) Use caution near Crestview VORTAC due to intensive military and civilian traffic.
(13) Avoid noise sensitive areas:
   (a) N31-01.2 W86-37.0 (Near B);
   (b) N30-56.4 W86-30.0 (Near N) by 1000' AGL or 1 NM;
   (c) N31-01.8 W86-36.5 (Near B) by 1500' AGL or 2 NM;
   (d) Cody Hill Aviary at N32-08.2 W85-18.4 by 1000' AGL or 1/4 NM.
(14) MTR deconfliction. IR-059 runs opposite direction to IR-015 between point E and H. IR-057 parallels IR-015 between point E and H. Call 1 SOSS Current Operations @ DSN 579-7812/2629 and 23 OSS/OSOS @ DSN 460-7831/7839 to deconflict.

FSS Within 100 NM Radius:
ANB, MCN, OZR

IR-059

ORIGINATING ACTIVITY: 1 SOAOS/DOGR, Hurlburt Field, FL 32544 DSN 579-7812/7813, C850-884-7812/7813.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous
IR ROUTES

02 AGL B 20 MSL to M CEW 002/44 N31°33.40' W86°36.60'
02 AGL B 30 MSL to N CEW 010/11 N31°00.00' W86°38.00'
02 AGL B 10 MSL to O CEW 282/8 N30°51.70' W86°49.80'
02 AGL B 10 MSL to P CEW 197/12 N30°37.90' W86°45.70'
(Alternate routing from N)
02 AGL B 30 MSL to N CEW 010/11 N31°00.00' W86°38.00'
02 AGL B 10 MSL to B1 CEW 061/15 N30°56.20' W86°24.80'
(Alternate routing from N)
02 AGL B 10 MSL to BA CEW 116/17 N30°41.20' W86°23.60'

**IR-062**

**ORIGINATING ACTIVITY:** COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

**SCHEDULING ACTIVITY:** FACSFAC VACAPES, Oceana, NAS Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

**Altitude Data**

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>ISO 093/49</td>
<td>N35°24.00'</td>
</tr>
<tr>
<td>B</td>
<td>CVI 241/15</td>
<td>W76°33.00'</td>
</tr>
<tr>
<td>C</td>
<td>TYI 008/30</td>
<td>N36°29.00'</td>
</tr>
<tr>
<td>D</td>
<td>RDU 024/47</td>
<td>W77°40.00'</td>
</tr>
<tr>
<td>E</td>
<td>SBV 228/23</td>
<td>N36°24.00'</td>
</tr>
<tr>
<td>F</td>
<td>LIB 204/5</td>
<td>W79°20.00'</td>
</tr>
<tr>
<td>G</td>
<td>SDZ 199/21</td>
<td>N34°53.00'</td>
</tr>
<tr>
<td>H</td>
<td>FAY 222/34</td>
<td>W79°18.00'</td>
</tr>
<tr>
<td>I</td>
<td>FAY 174/27</td>
<td>N34°32.00'</td>
</tr>
<tr>
<td>J</td>
<td>ILM 354/23</td>
<td>W78°47.00'</td>
</tr>
<tr>
<td>K</td>
<td>ISO 122/5</td>
<td>N34°44.00'</td>
</tr>
<tr>
<td>L</td>
<td>ISO 074/27</td>
<td>W77°59.00'</td>
</tr>
<tr>
<td>M</td>
<td>CVI 161/33</td>
<td>N35°53.00'</td>
</tr>
</tbody>
</table>

**Alternate Exit: L and LA**

**ROUTE WIDTH - 4 NM either side of centerline from A to C; 3 NM left and 4 NM right of centerline from C to E; 4 NM either side of centerline from E to M; 4 NM either side of centerline from L to LA on alternate exit track.**

**Special Operating Procedures:**

1. Route reservations and brief required.
2. Alternate Entry: B.
3. Alternate Exit: L and LA.
(4) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use a stereo flight plan.

(5) Where two altitudes are indicated, the lower published altitude is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.

(6) Mandatory reporting points. UHF radio reports are required when passing:
   (a) A to Cherry Point 377.175;
   (b) B to Washington ARTCC 323.0;
   (c) D to Washington ARTCC 269.4;
   (d) E to Seymour Johnson APP CON 273.6;
   (e) 30 NM North of G to Fayetteville APP CON 340.7;
   (f) 5 NM East of I to Wilmington APP CON 346.35;
   (g) J to Seymour Johnson APP CON 273.6;
   (i) Exit fix on assigned frequency.

(7) Return altitude 15,000' MSL. Lost communications altitude 3000' MSL.

(8) Hazards: At Point M, transit R-5314 below 1000' AGL unless cleared by Range Control 358.8. Numerous MTR's terminate in this area. Military aircraft may be holding VFR over Phelps Lake or at the Alligator River bridge awaiting clearance into the Dare Bombing Range.

(9) Caution: IR-012 crosses left to right at Point A, crosses twice at Points I-K, and crosses left to right at Point L. (Deconflict with Seymour Johnson AFB DSN 488-6565).

(10) Caution: IR-035 (Points A-C) runs opposite direction at Points H-J. (Deconflict with Shaw AFB DSN 965-1118).

(11) Caution: VR-087 coincides same direction at Point H. (Deconflict with Shaw AFB DSN 965-1118).

FSS Within 100 NM Radius:
   EKN, RDU

IR-066

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710 DSN 742-2764, C662-434-2764.

SCHEDULING ACTIVITY: 50 FTS, Columbus AFB, MS 39710 DSN 742-7734/7735, C662-434-7734/7735.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned</td>
<td>A</td>
<td>VUZ 001/16</td>
<td>N33°56.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W86°53.00'</td>
</tr>
<tr>
<td>15 AGL B 50 MSL to</td>
<td>B</td>
<td>MSL 195/37</td>
<td>N34°07.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W87°42.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to</td>
<td>C</td>
<td>MSL 296/36</td>
<td>N34°59.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W88°09.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to</td>
<td>D</td>
<td>BNA 221/65</td>
<td>N35°17.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W87°31.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to</td>
<td>E</td>
<td>DYR 136/55</td>
<td>N35°19.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W88°35.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to</td>
<td>F</td>
<td>HLI 054/41</td>
<td>N35°08.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W88°48.00'</td>
</tr>
</tbody>
</table>

01 AGL B 40 MSL to G HLI 056/21 N34°53.00' W89°06.00'

01 AGL B 40 MSL to H OTB 052/17 N34°23.00' W88°31.00'

01 AGL B 30 MSL to I MSL 229/59 N34°04.00' W88°24.00'

TERRAIN FOLLOWING OPERATIONS: Minimum altitude 1500' AGL A to B. Authorized IAW Command Directives with enroute structure from B to I.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from IFR traffic only. MARSA applies after aircraft have passed the entry/alternate entry point until ATC establishes standard separation after exiting the route.

(2) Alternate Entry: B, C and G.

(3) Alternate Exit: F, G and H.

(4) Aircrews should watch for glider operations out of M40: Monroe County Airport, MS (N33-52.25.49 W88-29.22.84). Glider operations usually take place north of M40 from SFC to 8000'.

(5) Compulsory Reporting Points:
   (a) D, Memphis ARTCC 125.85/379.25;
   (b) F, Memphis ARTCC 135.9/273.55 (compulsory only when F is filed exit);
   (c) G, Memphis ARTCC 135.9/273.55;
   (d) H, Memphis ARTCC 135.9/273.55;
   (e) I, Columbus RAPCON 120.4/239.25 (when Columbus RAPCON closed, contact Memphis Center 128.5/279.55).

(6) Army National Guard units conduct tactical helicopter operations from SFC to 3000' AGL from N33-45.0 W88-56.5 to N34-20.0 W88-30.0.

(7) Tie-in FSS: Anniston (ANB).

(8) When exiting at Point I, aircraft will climb to 3000' MSL at the exit point and proceed to the destination at this altitude until radio contact is made.

(9) For route briefing, email ir66@columbus.af.mil.

(10) Numerous power lines/antennae below 200' AGL may be uncharted.

(11) Aircrews calling to schedule IR-066 will ensure they have checked all applicable Bird Hazard products (examples: http://www.usahas.com/ and http://www.usahas.com/bam/) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.

(12) Crossing Routes:
   (a) IR-067 common route from Point A to D, and E to G (48 FTS, DSN 742-7840 C662-434-7840).
   (b) VR-1014 between Points A and B, between Points B and C, and between Points H and I (37/41 FTS, DSN 742-7666 C662-434-7666).
   (c) VR-1050 common route from Point A to F and from Point H to I, crosses between Points G and H (48 FTS, DSN 742-7840 C662-434-7840).
   (d) VR-1051 common route from Point A to D and from Point E to G (48 FTS, DSN 742-7840 C662-434-7840).

(13) Route Deconfliction:
IR ROUTES

(a) IR-067, VR-1050, VR-1051: Deconflicted by scheduler using time (if unable to enter within + or - 4 minutes, re-coordinate a new entry time).

(b) VR-1014: Aircraft flying IR-066 between Points A to B, until half way between the Points B to C and between Points H and I will fly at or above 1500’ AGL unless the crew has verified that VR-1014 is not being utilized.

(14) To schedule for weekend use, contact Scheduling Activity prior to 2200Z on Friday.

(15) Uncharted towers: N35 03.73 W088 47.44 200’ AGL.

(16) 14 FTW aircraft will fly IR-066 in day VMC only. Prior to encountering IMC, aircraft will accomplish the following (in order of precedence):

(a) Cancel their IFR clearance, exit the MTR, maintain VMC, and return to base VFR or via a separate IFR clearance.

(b) If unable to maintain VMC, climb to the top of the block, continue the route of flight and coordinate a new IFR clearance.

(c) If the pilot is unable to establish two-way radio communication, squawk code 7700 for one minute, then code 7600, and depart the IR route at the exit/alternate exit fix at the highest altitude for that segment of the route. At the exit point, climb to the coordinated lost communication altitude and proceed IAW FLIP guidance.

FSS Within 100 NM Radius:
ANB, BNA, GWO, JBR, MKL

IR-067

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710 DSN 742-2764, C662-434-2764.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri

ROUTE DESCRIPTION:

As assigned to
15 AGL B 50 MSL
01 AGL B 40 MSL to
01 AGL B 40 MSL to
01 AGL B 40 MSL to
01 AGL B 40 MSL to
01 AGL B 40 MSL to
01 AGL B 40 MSL to

Pt Fac/Rad/Dist
A VUZ 001/16
B MSL 195/37
C MSL 296/36
D BNA 221/65
E BNA 277/61
F DYR 082/32
G DYR 136/55
H HLI 054/41
I HLI 068/21

Lat/Long
N33°56.00’
W86°53.00’
N34°07.00’
W87°42.00’
N34°59.00’
W88°09.00’
N35°17.00’
W87°31.00’
N36°13.00’
W87°56.00’
N36°04.00’
W88°40.00’
N35°19.00’
W88°35.00’
N35°08.00’
W88°48.00’
N34°53.00’
W89°06.00’

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from IFR traffic only. MARSA applies after aircraft have passed the entry/alternate entry point until ATC establishes standard separation after exiting the route.

(2) Alternate Entry: B, C and E.

(3) Alternate Exit: E.

(4) Compulsory Reporting Points:

(a) D, Memphis ARTCC 125.85/379.25;
(b) E, Memphis ARTCC 125.85/379.25 (compulsory only when filed as an alternate exit);
(c) F, Memphis ARTCC 134.65/316.15;
(d) I, Memphis ARTCC 135.9/273.55.

(5) Tie-in FSS: Anniston (ANB).

(6) Numerous power lines/antennae below 200’ AGL may be uncharted.

(7) To schedule for weekend use, contact Scheduling Activity prior to 2200Z on Friday.

(8) For route briefing, email IR67@columbus.af.mil.

(9) Aircrews calling to schedule IR-067 will ensure they have checked all applicable Bird Hazard products (examples: http://www.usahas.com/ http://usahas.com/bam/) and are applying appropriate guidance in accordance with their respective instructions/regulations to reduce the risk of bird strikes.

(10) Crossing Routes:

(a) IR-066 common route from Point A to D and from Point G to I (48 FTS, DSN 742-7840 C662-434-7840);
(b) IR-077/078 crosses between Point D and E, and between Point F and G, and already has altitude separation;
(c) VR-1014 between A and B, between B and C (37/41 FTS, DSN 742-7666 C662-434-7666);
(d) VR-1050 common route from Point A to D and from Point H to I crosses between Point G and H (48 FTS, DSN 742-7840 C662-434-7840);
(e) VR-1051 common route from Point A to D, and from Point E to G (48 FTS, DSN 742-7840 C662-434-7840);
(f) SR-221 Common route reciprocal heading near Point E (314 OSS/OSTX, DSN 726-7504 C901-291-7504).

(11) Route Deconfliction:

(a) IR-066, VR-1050, VR-1051: deconflicted by scheduler using time (if unable to enter within +/- 4 minutes re-coordinate a new entry time);
(b) VR-1014: Aircraft flying IR-067 between points A to B and until halfway between points B to C will fly at or above 1500’ AGL unless the crew has verified that VR-1014 is not being utilized.
(c) Contact the scheduling activity for SR-221 to verify if the route is being utilized.


(13) 14 FTW aircraft will fly IR-067 in day VMC only. Prior to encountering IMC, aircraft will accomplish the following (in order of precedence):

(a) Cancel their IFR clearance, exit the MTR, maintain VMC, and return to base VFR or via a separate IFR clearance.

(b) If unable to maintain VMC, climb to the top of the block, continue the route of flight and coordinate a new IFR clearance.

(c) If the pilot is unable to establish two-way radio communication, squawk code 7700 for one minute, then code 7600, and depart the IR route at the exit/alternate exit fix at the highest altitude for that segment of the route.

TERRAIN FOLLOWING OPERATIONS: Minimum altitude 1500’ AGL A to B. Authorized IAW Command Directives with enroute structure from B to I.
route. At the exit point, climb to the coordinated lost communication altitude and proceed IAW FLIP guidance.

FSS Within 100 NM Radius:
ANB, BNA, GWO, JBR, MKL

IR-068

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710 DSN 742-2764, C662-434-2764.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within route structure from A to E.

ROUTE WIDTH - 5 NM either side of centerline from A to D; 8 NM either side of centerline from D to E.

Special Operating Procedures:

(1) Photo reconnaissance (PR) route.

(2) Compulsory reporting points:
   (a) Point C, Memphis ARTCC 135.3 335.8;
   (b) Point E, Memphis ARTCC 128.5 279.55.

(3) Numerous power lines and antenna below 200' AGL may be uncharted.

(4) To schedule for weekend use, contact Scheduling Activity prior to 2200Z on Friday.

(5) For route briefing, email IR68@columbus.af.mil. Or consult MASMS.

(6) Aircraft avoid overflight of Camp McCain, MS, Maintain 1500' within 2 NM of N33-42 W89-43. (Contains laser weaponry range, helicopter operations and controlled firing range).

(7) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSA applies after aircraft have passed the entry and alternate entry point until ATC establishes standard separation after exiting the route. MARSA also applies between aircraft flying IR-068 and other aircraft flying IR-091 by using see and avoid and/or route scheduling.

(8) Aircrews calling to schedule IR-068 will ensure they have checked all applicable Bird Hazard products (examples: http://www.usahas.com/ http://usahas.com/bam/) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.

(9) Crossing routes:
   (a) IR-070 Common route (reciprocal heading) from Point A to B (48 FTS, DSN 742-7840, C662-434-7840);
   (b) IR-091 between Points C and D, and near Point E (50 FTS, DSN 742-7734, C662-434-7734);
   (c) VR-1051 between Points D and E (48 FTS, DSN 742-7840, C662-434-7840);
   (d) SR-137/138 at Exit Point E (37/41 FTS, DSN 742-7666, C662-434-7666);
   (e) SR-238 Entry Point near Point C (314 OSS/OSK, DSN 731-3719, C501-987-3719).

(10) Route deconfliction:
   (a) IR-070 and VR-1051 have the same scheduler and will be able to advise if these routes are scheduled to be flown. Aircraft flying IR-070 will exit at IR-070 Alternate Exit Point H unless the crew has verified that IR-068 is not being utilized. IR-068 and VR-1051 both are nearing their Exit Points when they become a conflict.
   (b) When SR-137 and/or SR-138 are active aircraft must remain above 2000' at exit point (E) to deconflict.
   (c) Contact the different scheduling activities for SR-137, SR-138, SR-238 and IR-091 to verify if they are being utilized. When SR-137 and/or SR-138 are active aircraft must climb above 2000' at exit point (E) to deconflict. IR-091 is normally flown on Mondays, Wednesdays and Fridays while IR-068 is flown on Tuesdays and Thursdays.


(12) 14 FTW aircraft will fly IR-068 in day VMC only. Prior to encountering IMC, aircraft will accomplish the following (in order of precedence):
   (a) Cancel their IFR clearance, exit the MTR, maintain VMC, and return to base VFR or via a separate IFR clearance.
   (b) If unable to maintain VMC, climb to the top of the block, continue the route of flight and coordinate a new IFR clearance.
   (c) If the pilot is unable to establish two-way radio communication, squawk code 7700 for one minute, then code 7600, and depart the IR route at the exit/alternate exit fix at the highest altitude for that segment of the route. At the exit point, climb to the coordinated lost communication altitude and proceed IAW FLIP guidance.

(13) CAUTION: BASH Phase II High bird activity during migratory season Sep-Apr. Potential for large formations of waterfowl SFC-2000' AGL. Closed to 14 FTW use during BASH Phase II.

FSS Within 100 NM Radius:
DRI, GWO, JBR, MKL

IR-070

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-2764, C662-434-2764.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: Sunrise-Sunset daily
ROUTE DESCRIPTION:
Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | MHZ 311/34 | N32°48.00' W90°37.00'
05 AGL B 30 MSL to | B | SQS 245/49 | N33°09.00' W91°11.00'
05 AGL B 30 MSL to | C | MLU 323/27 | N32°53.00' W92°20.00'
05 AGL B 30 MSL to | D | MON 254/32 | N33°27.00' W92°20.00'
05 AGL B 50 MSL to | E | MON 285/33 | N33°44.00' W92°20.00'
at or below 30 MSL | F | MON 289/29 | N33°45.20' W92°15.00'
05 AGL B 30 MSL to | G | GLH 349/29 | N34°00.00' W90°52.00'
05 AGL B 50 MSL to | H | SQS 316/45 | N34°02.00' W90°33.00'
05 AGL B 40 MSL to | I | SQS 333/34 | N33°59.00' W90°23.00'
05 AGL B 40 MSL to | J | SQS 348/12 | N33°40.00' W90°19.00'
cross at 40 MSL or as assigned
(b) VR-1032 starts/ends at Point A, crosses twice between Points B and C, common route between Points C and D (COMTRAWING ONE, NAS Meridian, DSN 637-2487, C601-679-2487).

(9) If aircraft need to delay entry at Point A, aircraft should hold on the MHZ 311 radial between 34 and 42 DME. Altitude will be assigned by ATC (usually 030 MSL or above).

(10) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSA applies after aircraft have passed the entry/alternate exit point until ATC establishes standard separation after exiting the route.

(11) Route Deconfliction:
(a) IR-068 has the same scheduler and will be able to advise if this route is scheduled to be flown. Aircraft flying IR-070 will exit at IR-070 Alternate Exit Point H unless the crew has verified that IR-068 is not being utilized. IR-068 is normally only flown on Tuesdays and Thursdays.

(b) Contact the VR-1032 Scheduling Activity to verify if the route is being utilized.

(12) 14 FTW aircraft will fly IR-070 in day VMC only. Prior to encountering IMC, aircraft will accomplish the following (in order of precedence):
(a) Cancel their IFR clearance, exit the MTR, maintain VMC, and return to base VFR or via a separate IFR clearance.

(b) If unable to maintain VMC, climb to the top of the block, continue the route of flight and coordinate a new IFR clearance.

(c) If the pilot is unable to establish two-way radio communications, squawk code 7700 for one minute, then code 7600, and depart the IR route at the exit/alternate exit fix at the highest altitude for that segment of the route. At the exit point, climb to the coordinated lost communication altitude and proceed IAW FLIP guidance.

(13) CAUTION: BASH Phase II High bird activity during migratory season Sep-Apr. Potential for large formations of waterfowl SFC-2000' AGL. Closed to 14 FTW use during BASH Phase II.

FSS Within 100 NM Radius:
- DRI, GWO, JBR, MKL

IR-077

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ weekdays

ROUTE DESCRIPTION:
Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
Cross at 50 MSL to | A | VUZ 073/22 | N33°46.00' W86°28.00'
50 MSL to | B | GAD 341/14 | N34°12.00' W86°10.00'
50 MSL to | C | GAD 031/34 | N34°27.00' W85°43.00'
50 MSL to | D | GQO 268/28 | N34°57.00' W85°43.00'

2-26
IR ROUTES

ROUTE WIDTH - 4 NM either side of centerline A to E; 10 NM either side of centerline E to K.

Special Operating Procedures:
(1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
(2) Advise controller when making turns in excess of 20 degrees.
(3) Radar system navigation (SN) route.
(4) Mandatory reporting points: C contact Chattanooga ATC on 321.2. D contact Memphis ARTCC 353.5.
(6) Primary Entry - A; Alternate Entry - E; Primary Exit - K; Alternate Exit - E. (Alternate Entry and Exit required due to T-45C fuel limitations.)

FSS Within 100 NM Radius:
ANB, AND, BNA, GWO, JBR, MCN, MKL

IR-078

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ weekdays

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 60 MSL to</td>
<td>A</td>
<td>MKL 127/16</td>
<td>N35°18.00' W86°04.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>B</td>
<td>MKL 088/43</td>
<td>N35°38.00' W88°02.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>C</td>
<td>DCR 087/64</td>
<td>N36°01.00' W88°00.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>D</td>
<td>BNA 243/44</td>
<td>N35°47.00' W87°28.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>E</td>
<td>BNA 189/41</td>
<td>N35°27.00' W86°47.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>F</td>
<td>BNA 189/41</td>
<td>N35°27.00' W86°47.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 10 NM either side of centerline A to G; 4 NM either side of centerline G to K.

Special Operating Procedures:
(1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
(2) Advise controller when making turns in excess of 20 degrees.
(3) Radar system navigation (SN) route.
(4) Mandatory reporting points:
   - H, contact Chattanooga ATC 321.2;
   - I, contact Atlanta ARTCC 353.7;
   - J, contact Birmingham ATC 231.1 338.2.
(5) Primary Entry - A; Alternate Entry - G; Primary Exit - K; Alternate Exit - G. (Alternate Entry and Exit required due to T-45C fuel limitations.)

FSS Within 100 NM Radius:
ANB, AND, BNA, GWO, JBR, MCN, MKL

IR-079

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri; occasional weekends

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to</td>
<td>A</td>
<td>SOT 149/19</td>
<td>N35°32.00' W82°50.00'</td>
</tr>
<tr>
<td>100 MSL to</td>
<td>B</td>
<td>SOT 035/19</td>
<td>N36°04.00' W82°51.00'</td>
</tr>
<tr>
<td>90 MSL to</td>
<td>C</td>
<td>HMV 186/6</td>
<td>N36°20.00' W82°00.00'</td>
</tr>
<tr>
<td>90 MSL to</td>
<td>D</td>
<td>HMV 302/25</td>
<td>N36°38.00' W82°25.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>E</td>
<td>GZG 336/27</td>
<td>N37°14.00' W82°20.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>F</td>
<td>ECB 164/27</td>
<td>N37°44.00' W82°44.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>G</td>
<td>ECB 045/23</td>
<td>N38°26.00' W82°35.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>H</td>
<td>HNN 312/8</td>
<td>N38°50.00' W82°09.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Scheduling Activity operating hours: 1200-2200Z++
   Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++
   on Mon, call prior to 2200Z++ on previous Friday.
(2) Advise controller when making turns in excess of 20
   degrees.
(3) Request 9000' from B to H.
(4) Radar system navigation (SN) route.
(5) Alternate Exit: G.
(6) Conflicts: (De-conflict with appropriate Scheduling Activity)
   (a) Same direction as IR-080 from Points A to C.
   (b) Same direction as IR-081 from Points D to E.
   (c) Opposite direction to IR-022 from Points A to C.
   (d) Opposite direction to IR-608 from Points A to D.
   (e) Opposite direction to IR-723 from Points E to I.

FSS Within 100 NM Radius:
AND, BNA, CLE, DAY, EKN, LOU

IR-080

ORIGINATING ACTIVITY: Training Air Wing Six,
Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL
32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri;
   occasional weekends

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 100 MSL to
A SOT 149/19 N35°32.00'
   W82°50.00'
100 MSL to
B H MV 089/60 N36°04.00'
   W82°51.00'
as assigned to
C H MV 069/30 N36°39.00'
   W81°34.00'
as assigned to
D H MV 069/30 N36°39.00'
   W81°34.00'
as assigned to
E PSK 251/20 N36°57.00'
   W81°05.00'
as assigned to
F PSK 350/15 N37°20.00'
   W80°48.00'
as assigned to
G BK W 134/14 N37°38.00'
   W80°53.00'
as assigned to
H BK W 357/23 N38°10.00'
   W81°12.00'
as assigned to
I H NN 048/14 N38°55.00'
   W81°49.00'

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Scheduling Activity operating hours: 1200-2200Z++
   Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++
   on Mon, call prior to 2200Z++ on previous Friday.
(2) Advise controller when making turns in excess of 20
   degrees.
(3) Request 9000' from B to G.
(4) Radar system navigation (SN) route.
(5) Alternate Exit: H.

FSS Within 100 NM Radius:
AND, BNA, EKN, RDU
IR-082

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-2517 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri; occasional weekends

ROUTE DESCRIPTION:
ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
(2) Advise controller when making turns in excess of 20 degrees.
(3) Request 9000' MSL.
(4) Radar system navigation (SN) route.
(5) Alternate Exit: G.
(6) Conflicts: (De-conflict with the appropriate Scheduling Activity)
   (a) Crosses IR-022 between Points E and F and at J. Opposite direction from Point H to I.
   (b) Same direction as IR-081 from Points H to I.
   (c) Opposite direction to IR-082 from Points A to G.
   (d) Opposite direction to IR-723 from Points G to H.
   (e) Parallels IR-726 opposite direction from Points F to G.

FSS Within 100 NM Radius:
ANB, AND, BNA, MCN, RDU

IR-083

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-2517 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri; occasional weekends

ROUTE DESCRIPTION:
ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
(2) Advise controller when making turns in excess of 20 degrees.
(3) Request 9000' MSL.
(4) Radar system navigation (SN) route.
(5) Alternate Exit: G.
(6) Conflicts: (De-conflict with the appropriate Scheduling Activity)
   (a) Crosses IR-022 between Points E and F and at J. Opposite direction from Point H to I.
   (b) Same direction as IR-081 from Points H to I.
   (c) Opposite direction to IR-082 from Points A to G.
   (d) Opposite direction to IR-723 from Points G to H.
   (e) Parallels IR-726 opposite direction from Points F to G.

FSS Within 100 NM Radius:
ANB, AND, BNA, MCN, RDU

IR-091

ORIGINATING ACTIVITY: 14 OSS/OSOP Columbus AFB, MS 39710-5000 DSN 742-3011/1221 C662-434-3011/1221.

SCHEDULING ACTIVITY: 50 FTS Columbus AFB, MS 39710 DSN 742-7734/7735, C662-434-7734/7735.
IR ROUTES

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>CBM 269/26</td>
<td>N33°38.00'; W88°57.00'</td>
</tr>
<tr>
<td>SFC B 40 MSL to B</td>
<td>SQS 046/22</td>
<td>N33°42.00'; W89°57.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 40 MSL to C</td>
<td>SQS 007/32</td>
<td>N33°59.00'; W90°10.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 40 MSL to D</td>
<td>MEM 182/45</td>
<td>N34°16.00'; W90°02.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 30 MSL to E</td>
<td>MEM 173/30</td>
<td>N34°31.00'; W89°55.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 30 MSL to F</td>
<td>MEM 121/39</td>
<td>N34°40.00'; W89°19.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 40 MSL to G</td>
<td>OTB 226/25</td>
<td>N33°57.00'; W89°11.00'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within entire route structure.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

(1) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSA applies after aircraft have passed the entry/alternate entry point until ATC establishes standard separation after exiting the route. MARSA also applies between aircraft flying IR-068 and other aircraft flying IR-091 by using see and avoid and/or route scheduling.

(2) Alternate Entry: C and D.

(3) Compulsory Reporting Points:
   (a) Point D, Memphis ARTCC 128.5 279.55;
   (b) Point G, Columbus RAPCON 120.4 239.25 (when Columbus RAPCON closed, contact Memphis ARTCC 128.5 279.55).

(4) CAUTION: VFR tactical helicopter operations are conducted from the surface to 3000' AGL along IR-091 from F to G.

(5) Numerous power lines/antenna below 200' AGL may be uncharted.

(6) For route briefing, email IR091@columbus.af.mil.

(7) Aircraft avoid overflight of Camp McCain, MS Maintain 1500' within 2 NM of N33-42 W89-43. (Contains laser weaponry range, helicopter operations, and a controlled firing range).

(8) Aircrews calling to schedule IR-091 will ensure they have checked all applicable Bird Hazard products (examples: http://www.usahas.com/ http://usahas.com/bam/) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.

(9) To schedule for weekend use, contact scheduling activity prior to 2200Z on Friday.

(10) Crossing routes:
   (a) IR-068 Between Point A and B, near Point D (48 FTS, DSN 742-7840, C662-434-7840);
   (b) VR-1051 Between Point A and B, between Point F and G (48 FTS, DSN 742-7840, C662-434-7840);
   (c) SR-074 crosses near Point D, crosses between Points F and G, opposite direction corridor near Point F (48 FTS, DSN 742-7840, C662-434-7840);
   (d) SR-073 crosses near Point E, between Points F and G, opposite direction corridor near Point F (48 FTS, DSN 742-7840, C662-434-7840).

(11) Route Deconfliction: Contact the Scheduling Activity for SR-073, SR-074, VR-1051 and IR-068 (these routes have the same scheduler) to verify if these routes are being utilized: IR-091 is normally only flown on Mondays, Wednesdays and Fridays while IR-068 is flown on Tuesdays and Thursdays.

(12) Route restricted to 14 FTW aircraft, unless otherwise coordinated.

(13) 14 FTW aircraft utilizing IR-091 unable to comply with FAR 91.185 shall maintain the highest altitude for each route segment to the exit fix, depart the exit fix at 4000', proceed direct to CBM, intercept the 13 DME arc, and execute the published approach procedure.

(14) 14 FTW aircraft will fly IR-091 in day VMC only. Prior to encountering IMC, aircraft will accomplish the following (in order of precedence):
   (a) Cancel their IFR clearance, exit the MTR, maintain VMC, and return to base VFR or via a separate IFR clearance.
   (b) If unable to maintain VMC, climb to the top of the block, continue the route of flight and coordinate a new IFR clearance.
   (c) If the pilot is unable to establish two-way radio communication, squawk code 7700 for one minute, then code 7600, and depart the IR route at the exit/alternate exit fix at the highest altitude for that segment of the route. At the exit point, climb to the coordinated lost communication altitude and proceed IAW FLIP guidance.

FSS Within 100 NM Radius:
   DRI, GWO, JBR, MKL

IR-103

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB Fort Worth, TX 76127 DSN 739-6903/6904/6905, CB17-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local; OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>SPS 138/48</td>
<td>N33°18.00'; W98°05.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to B</td>
<td>SPS 176/26</td>
<td>N33°33.00'; W98°38.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 50 MSL to C</td>
<td>SPS 235/31</td>
<td>N33°46.00'; W99°09.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 50 MSL to D</td>
<td>SPS 278/28</td>
<td>N34°08.00'; W99°08.00'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 24 MSL to E</td>
<td>SPS 303/37</td>
<td>N34°24.00'; W99°08.00'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 24 MSL to F</td>
<td>HBR 135/17</td>
<td>N34°38.00'; W98°52.00'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route in VMC.

ROUTE WIDTH - 10 NM either side of course from A to D; 2 NM either side of course from D to F.
Special Operating Procedures:
(1) Route is designated MARSA and MARSA shall also apply between aircraft flying VR-158, VR-159, VR-162, VR-1141, VR-1142, VR-1143 and VR-1144. Call 90 FTS at Sheppard AFB, TX, DSN 736-2675/4995 to deconflict with these routes prior to flying IR-103.
(2) Route will be flown between 300 and 600 KIAS.
(3) Alternate Entry/Exit: C and D.
(4) Aircraft scheduled into R-5601 must contact Falcon Range on 363.7, 342.3.
(5) 1000' AGL minimum from Point F to Falcon Range.
(6) Avoid by 1 NM or 1000' AGL noise sensitive areas; N33-26.3 W98-22.0; N33-33.4 W98-42.7; N34-22.5 W99-08.0.
(7) Avoid by 1500' or 3 NM all charted airfields.
(8) Numerous power lines throughout low level route.
(9) Aircraft will contact and monitor Sheppard APP CON 316.075/308.6 while operating above 3000' MSL.
(10) IR-103 is an approved LOWAT route authorized between A and D.
(11) Units requesting IR-103 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process. This altitude will not comply with the minimum safe altitude for that portion.
(12) Route Conflicts:
(a) IR-103 conflicts with the following VR's at points along the route: VR-148, VR-159, VR-162, VR-1138, VR-1141, VR-1142, VR-1143 and VR-1144. Call the schedulers, 90 FTS, at Sheppard AFB, TX DSN 736-2675/4995, C940-676-2675/4995 to deconflict with these routes before flying IR-103;
(b) From Point D to F on IR-103, the route ceiling, 2400' MSL, will not comply with the minimum safe altitude (2800' MSL) for that portion of the route. If higher altitude is needed (night or IMC) at Point D, pilot should contact Altus Approach Control 257.725.
(13) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

FSS Within 100 NM Radius:
FTW

IR-105

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Ft. Worth, TX 76127 DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2200 local; OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>SPS 138/48</td>
<td>N33°18.00' W98°05.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>B</td>
<td>SPS 176/26</td>
<td>N33°33.00' W98°38.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>C</td>
<td>SPS 235/31</td>
<td>N34°46.00' W99°09.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>D</td>
<td>SPS 267/51</td>
<td>N34°05.00' W99°37.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>E</td>
<td>HBR 264/31</td>
<td>N34°54.00' W99°42.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>F</td>
<td>HBR 349/18</td>
<td>N35°10.00' W99°04.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>G</td>
<td>HBR 029/15</td>
<td>N35°04.00' W98°52.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>H</td>
<td>HBR 086/10</td>
<td>N34°51.00' W98°52.00'</td>
</tr>
<tr>
<td>24 AGL B 70 MSL to</td>
<td>I</td>
<td>HBR 135/17</td>
<td>N34°38.00' W98°52.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from A to H in VMC.

ROUTE WIDTH - 10 NM either side of centerline from A to D; 3 NM either side of centerline from D to I.

Special Operating Procedures:
(1) Aircraft will contact Altus APP CON at D 257.725.
(2) Aircraft will report F to Fort Worth ARTCC 339.8.
(3) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSA applies after aircraft have passed entry/alternate entry point until ATC established standard separation after exiting the route.
(4) Route will be flown between 300 and 600 KIAS.
(5) Alternate Entry: C and E.
(6) Alternate Exit: C, E and H.
(7) Aircraft scheduled into R-5601 must contact Falcon Range for clearance on 363.7, 342.3.
(8) 1000' AGL minimum from I to Falcon Range.
(9) Avoid by 1 NM or 1000' AGL noise sensitive areas: N33-26.3 W98-22.0; N33-33.4 W98-42.7; N34-22.5 W99-08.0.
(10) Avoid by 1500' AGL or 3 NM all charted airfields.
(11) Numerous power lines throughout low level route.
(12) Route segment H to I closed except to aircraft scheduled into R-5601. Aircraft not scheduled into R-5601 must exit by Point H and remain clear of R-5601F.
(13) IR-105 is an approved LOWAT route authorized between Points A and D.
(14) CAUTION: Frequent heavy aircraft using Sooner Drop Zone (N34-34.2 W99-41.3) for airdrops. See and avoid principle airfields. Contact Altus AFB Command Post DSN 866-6313/6314 or C817-782-6903/6905 for times. Aircraft will report point D to Altus Approach Control 257.725. Aircraft will ask if the drop zone is hot. If the drop zone is reported hot, aircraft will climb to 1500' AGL until they have visual/radar contact with the heavy aircraft. Once visual/radar contact is established, aircraft may return to minimum altitudes.
(15) Units requesting IR-105 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
(16) Route confictions:
(a) IR-105 conflicts with the following VR's at points along the route: VR-158, VR-159, VR-162, VR-1138, VR-1141, VR-1142, VR-1143 and VR-1144. Call the schedulers, 90 FTS, at Sheppard AFB, TX DSN 736-2675/4995, C940-676-2675/4995 to deconflict with these routes before flying IR-105;
(b) IR-105 conflicts with the following IR's, VR's and SR's at points along that portion.

IR ROUTES

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>E</td>
<td>HBR 264/31</td>
<td>N34°54.00' W99°42.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>F</td>
<td>HBR 349/18</td>
<td>N35°10.00' W99°04.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>G</td>
<td>HBR 029/15</td>
<td>N35°04.00' W98°52.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>H</td>
<td>HBR 086/10</td>
<td>N34°51.00' W98°52.00'</td>
</tr>
<tr>
<td>24 AGL B 70 MSL to</td>
<td>I</td>
<td>HBR 135/17</td>
<td>N34°38.00' W98°52.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

866-7110/6617, C580-481-7110/6617 to deconflict with these routes;
(c) Aircraft will contact and monitor Sheppard Approach Control 316.075/308.6 while operating above 3000’ MSL.
(17) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

FSS Within 100 NM Radius:
FTW, MLC

IR-107

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S.
Chindit Ave., Building 790, Rm 120 Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521, 27SOAOS.DOAA.AM (at) us.af.mil.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S.
Chindit Ave., Building 790, Rm 111 Cannon AFB, NM 88103 DSN 681-2276/7634, C575-784-2276/7634, 27SOAOS.DOOS (at) us.af.mil.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route IAW Major Commands/MDS guidance.

ROUTE WIDTH - 7.5 NM either side of centerline entire route to include exits, alternate entries and Melrose Night/IMC pattern.

Special Operating Procedures:
(1) Tie-in FSS: Albuquerque (ABQ).
(2) Non-27 SOW aircraft entry times are booked no closer than 15 mins apart. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry to meet booked exit time or do not enter the route.
(3) Alternate Entry: J and M.
(4) Alternate Exit: K and P.
(5) Aircraft must call in-the-blind route entry and exit 255.4. Monitor 255.4 on this route unless operational requirements dictate otherwise.

(6) Albuquerque ARTCC does not provide IFR separation between scheduled MTR users on this route.

(7) Avoid by 2 NM:
(a) Capulin National Monument N36-47-00 W103-58-05;
(b) Black Mesa State Park N35-50.31 W102-53.73 avoid by 1000' AGL;
(c) House, NM N34-38-42 W103-54-12;

(8) Avoid by 1 NM:
(a) Lake Conchas Resorts N35-22.06 W104-12.30;
(b) Ranch N36-32-30 W103-23-06;
(c) Ranch N34-34-42 W103-13-48;
(d) Montoya, NM N35-05-48 W104-03-56;
(e) Bell Ranch HQ N35-31-42 W104-05-42;
(f) Randall N35-02-48 W104-04-42.

(9) The R-5104/5 night/IMC re-entry pattern is closed (VFR use only).

(10) Aircraft not scheduled into R-5104/5 will not enter R-5104/5, exit at or prior to P.

(11) Deconfliction between IR-107, IR-109, IR-111, IR-113, VR-100/125, VR-108 and VR-114 accomplished by scheduling activity. Consult FLIP AP/1B and associated chart for deconfliction details with non-27 SOW conflicting routes (e.g., VR-1107/1195).

(12) Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity.

(13) CAUTION: Increased bird activity, Nov-Feb during dusk and night in areas from I to J, EJ to J, L to N, and EM to M. Recommend flight at 1000' AGL or above during these periods to reduce bird strike hazard. Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: HTTP://www.usahas.com.

(14) Avoid by 1 NM and 1000' AGL uncharted active airport at Canyon, CO./Canadian River N36-04-56 W104-25-00.

(15) CAUTION: Camco Ranch misplotted on TPC’s and Sectional. Avoid Camco Ranch Airstrip N35-34.52 W103-16.88 1000' AGL and 1 NM.

(16) Avoid all charted public use airfields by 1500' AGL or 3 NM.

(17) CAUTION: Wind farm south of MAFR, heights approximately 350' AGL, approximate coordinates:
(a) NW corner: N33-58.43 W103-52.59
(b) NE corner: N33-57.33 W103-46.16
(c) SE corner: N33-55.47 W103-48.14
(d) SW corner: N33-56.60 W103-51.97

(18) CAUTION: Wind farm west of MAFR (line north to south), heights 350' AGL, approximate coordinates: N34-43.55 W104-05.89 to N34-31.67 W104-05.33.

(19) PECOS MOAs may be filed only if scheduled for requested airspace by the scheduling activity. Aircraft must receive clearance from Albuquerque ARTCC prior to entry into PECOS MOAs. Flight plans must specify the required delay in appropriate airspace. Monitor assigned frequency while operating in SUA.

**FSS Within 100 NM Radius:**
ABQ

**IR-109**

**ORIGINATING ACTIVITY:** 27 SOAOS/DOOA, 301 S. Chindit Ave., Building 790, Rm 120 Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521.

**SCHEDULING ACTIVITY:** 27 SOAOS/DOOA, 301 S. Chindit Ave., Building 790, Rm 111 Cannon AFB, NM 88103 DSN 681-2276/7634, C575-784-2276/7634.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 160 MSL</td>
<td>A ABQ 332/65</td>
<td>N36°05.00' W107°10.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL</td>
<td>B ABQ 344/71</td>
<td>N36°14.00' W106°53.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL</td>
<td>C ABQ 346/76</td>
<td>N36°19.00' W106°50.00'</td>
</tr>
<tr>
<td>160 MSL to</td>
<td>D ALS 196/50</td>
<td>N36°37.00' W106°19.00'</td>
</tr>
<tr>
<td>Alternate Entry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 120 MSL</td>
<td>D ALS 190/41</td>
<td>N36°43.00' W106°09.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL</td>
<td>E ALS 150/22</td>
<td>N37°00.00' W105°41.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL</td>
<td>F ALS 134/21</td>
<td>N37°03.50' W105°35.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL</td>
<td>AO ALS 119/26</td>
<td>N37°03.50' W105°24.50'</td>
</tr>
<tr>
<td>01 AGL B 150 MSL</td>
<td>AP ALS 119/37</td>
<td>N36°56.00' W105°15.00'</td>
</tr>
<tr>
<td>01 AGL B 150 MSL</td>
<td>G CIM 295/17</td>
<td>N36°40.00' W105°09.00'</td>
</tr>
<tr>
<td>01 AGL B 150 MSL</td>
<td>H CIM 277/13</td>
<td>N36°34.00' W105°08.00'</td>
</tr>
<tr>
<td>01 AGL B 150 MSL</td>
<td>I CIM 221/18</td>
<td>N36°19.00' W105°10.00'</td>
</tr>
<tr>
<td>01 AGL B 150 MSL</td>
<td>J CIM 204/25</td>
<td>N36°09.00' W105°11.00'</td>
</tr>
<tr>
<td>01 AGL B 150 MSL</td>
<td>K FTI 352/27</td>
<td>N36°06.00' W105°05.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL</td>
<td>L FTI 043/28</td>
<td>N35°55.00' W104°40.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

01 AGL B 120 MSL to M FTI 056/29
N35°50.00' W104°35.00'
(Responsibility of ALBerto ARTCC 246.35)
Proceed direct to
01 AGL B 120 MSL to AO1 ALS 119/26
N37°03.50' W105°24.50'

Special Operating Procedures:

(1) Non-27 SOW aircraft entry times are booked no closer than 15 mins apart. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry to meet booked exit time or do not enter the route.

(2) Aircraft must call in-the-blind route entry, when crossing Point D and AP and when exiting route on 255.4. Monitor 255.4 while on the route.

(3) ZAB ARTCC does not provide IFR separation between scheduled MTR users while on this route.

(4) Avoid all charted public use airfields by 1500’ AGL or 3 NM.

(5) Avoid by 2 NM:
(a) Guadalupita, NM and Coyote Creek SP N36-08.0 W105-14.0;
(b) Monastery of Christ N36-22.4 W106-41.3. (Fighter/heavy A/C avoid by 3NM)

01 AGL B 90 MSL to N FTI 069/26
N35°43.00' W104°36.00'

ROUTE WIDTH - 5 NM either side of centerline from A to E; 3 NM left and 1 NM right of centerline from E to AO; 5 NM left and 3 NM right of centerline from AO to AP; 5 NM either side of centerline from AP to end of route; 5 NM left and 1 NM right of centerline from F to AO; 4 NM either side of centerline from AO to AR. 7.5 NM either side of centerline AF1 to AI, AI1 and AF2. 5 NM each side of centerline for alternate entry D1.

Terrain Following Operations: Authorized entire route IAW Major Commands/MDS guidance.

01 AGL B 80 MSL to O TCC 263/45
N35°15.00' W104°31.00'

01 AGL B 80 MSL to P TCC 245/44
N35°01.00' W104°28.00'

01 AGL B 70 MSL to Q CVS 286/32
N34°35.00' W103°55.00'

Alternate Transition Routing to R-5104 VR-109 South as assigned to
P1 TCC 245/44
N35°01.00' W104°28.00'

01 AGL B 70 MSL to AA CME 341/53
N34°13.00' W104°45.00'

01 AGL B 70 MSL to AB CME 343/47
N34°07.00' W104°50.00'

01 AGL B 70 MSL to AC CME 008/44
N34°10.00' W104°48.00'

01 AGL B 70 MSL to AD CVS 224/42
N34°02.00' W104°19.00'

01 AGL B 70 MSL to AE CVS 221/34
N34°00.00' W104°00.00'

01 AGL B 70 MSL to AF CVS 235/27
N34°10.00' W103°50.00'

01 AGL B 70 MSL to AG CVS 232/43
N34°00.00' W104°04.00'

01 AGL B 70 MSL to AH CVS 288/39
N34°29.00' W104°02.00'

01 AGL B 70 MSL to AI TCC 184/33
N34°39.00' W103°47.00'

01 AGL B 70 MSL to AI1 TCC 184/33
N34°39.00' W103°47.00'

01 AGL B 70 MSL to AH1 CVS 288/39
N34°39.00' W103°50.00'

01 AGL B 70 MSL to AG1 CVS 232/43
N34°39.00' W103°50.00'

01 AGL B 70 MSL to AE1 CVS 221/34
N34°39.00' W103°50.00'

01 AGL B 70 MSL to AG2 CVS 235/27
N34°35.00' W104°38.00'

01 AGL B 70 MSL to to R-5104/R-5105
N36°35.00' W105°17.00'

Alternate Entry: I
160 MSL to AJ CIM 273/21
N36°35.00' W105°17.00'

01 AGL B 150 MSL to Then via IR-109
N36°39.00' W104°02.00'

Alternate Entry: M
170 MSL to AN FTI 035/40
N36°06.00' W104°32.00'

or as assigned
10 I1 CIM 221/18
N36°19.00' W105°10.00'

Descent to cross
170 MSL to
M1 FTI 056/29
N35°50.00' W104°35.00'

01 AGL B 90 MSL to then via IR-109 or IR-109 South
N35°50.00' W104°35.00'

Alternate Exit: J
150 MSL to J1 CIM 204/25
N36°09.00' W105°11.00'

2-34
(6) Avoid by 1NM/1,000' AGL: Ranch (Mr Plante) N36-32.93 W106-29.77.

(7) Aircraft transitioning to south routing to R-5104 will file ‘TCC 245/44 IR109S’ after main routing.

(8) Aircraft may exit at AQ for transition to VR-1195/1107 or Pecos MOAs. If scheduled with Scheduling Agency. Contact ABQ ARTCC at AQ.

(9) The R-5104/5 night/IMC re-entry pattern is closed (VFR use only).

(10) Aircraft not scheduled into R-5104/R-5105 must exit at or prior to P or AE south transition.

(11) Deconfliction between this and other crossing 27 SOW routes will be by 27 SOW Scheduling. See and Avoid applies to non-27 SOW conflicting VR and SR routes.

(12) Route conflicts with:
(a) Pecos and Taiban MOAs, IR-107, IR-111, IR-113, VR-100/125, VR-108, scheduled/deconflicted by scheduling activity.
(b) VR-1107/1195 consult FLIP AP/1B for particulars.
(c) IR-137/308 have high utilization by the 58 SOW Schoolhouse. Aircrew scheduling IR-109 must deconflict with 58 OSS, Kirtland AFB, DSN 263-5979/5888/5701.

(13) Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity.

(14) CAUTION: Wind farm south of MAFR, heights approximately 350' AGL, approximate coordinates:
(a) NW corner: N33-58.43 W103-52.59
(b) NE corner: N33-57.33 W103-46.16
(c) SE corner: N33-55.47 W103-48.14
(d) SW corner: N33-56.60 W103-51.97

(15) CAUTION: Wind farm west of MAFR (line north to south), heights 350' AGL, approximate coordinates: N34-43.55 W104-05.89 to N34-31.67 W104-05.33.

(16) Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: HTTP://www.usahas.com.

(17) PECOS MOAs may be filed only if scheduled for requested airspace by the scheduling activity. Aircraft must receive clearance from Albuquerque ARTCC prior to entry into PECOS MOAs. Flight plans must specify the required delay in appropriate airspace. Monitor assigned frequency while operating in SUA.

(18) Avoid by 3 NM/1500' AGL: San Miguel Private Runway N35-30.1 W104-35.0

FSS Within 100 NM Radius:
ABQ, DEN

IR-111

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S.
Chindit Ave., Building 790, Rm 120 Cannon AFB, NM 88103 DSN 681-2521, 27SOAOS.DOAA.AM (at) us.af.mil.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S.
Chindit Ave., Building 790, Rm 111 Cannon AFB, NM 88103 DSN 681-2276/7634, 27SOAOS.DOOS (at) us.af.mil.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | ACH 222/31 | N34°48.50' W105°33.00'
01 AGL B 90 MSL to | B | FTI 226/24 | N35°27.00' W105°33.00'
01 AGL B 120 MSL to | C | FTI 261/20 | N35°41.00' W105°33.00'
01 AGL B 160 MSL to | D | FTI 275/21 | N35°46.00' W105°33.00'
01 AGL B 160 MSL to | E | FTI 314/37 | N36°11.00' W105°33.00'
01 AGL B 160 MSL to | F | FTI 326/38 | N36°15.00' W105°25.00'
01 AGL B 160 MSL to | G | FTI 332/35 | N36°13.00' W105°19.00'
01 AGL B 160 MSL to | H | FTI 352/27 | N36°06.00' W105°05.00'
01 AGL B 120 MSL to | I | FTI 043/28 | N35°55.00' W104°40.00'
01 AGL B 120 MSL to | J | FTI 056/29 | N35°50.00' W104°35.00'
01 AGL B 90 MSL to | K | FTI 094/26 | N35°32.00' W104°38.00'
01 AGL B 90 MSL to | L | FTI 110/25 | N35°26.00' W104°43.00'
01 AGL B 90 MSL to | M | ACH 291/13 | N35°14.00' W105°16.00'
01 AGL B 90 MSL to | N | ACH 264/13 | N35°08.00' W105°18.00'
01 AGL B 90 MSL to | O | ACH 163/22 | N34°45.00' W105°00.00'
01 AGL B 80 MSL to | P | TCC 151/26 | N34°52.00' W104°53.00'
01 AGL B 70 MSL to | Q | TCC 211/24 | N34°53.00' W103°56.00'
01 AGL B 70 MSL to | R | TCC 190/25 | N34°48.00' W103°47.00'
01 AGL B 70 MSL to | S | TCC 184/33 | N34°39.00' W103°47.00'
01 AGL B 70 MSL to | T | CVS 298/28 | N34°39.00' W103°47.00'
01 AGL B 70 MSL to | U | CVS 235/27 | N34°10.00' W103°48.00'
01 AGL B 70 MSL to | V | CVS 221/34 | N34°00.00' W103°50.00'
01 AGL B 70 MSL to | W | CVS 232/43 | N34°00.00' W104°04.00'
01 AGL B 70 MSL to | S2 | TCC 184/33 | N34°39.00' W104°02.00'
01 AGL B 70 MSL to | S | CVS 288/39 | N34°39.00' W103°47.00'
01 AGL B 70 MSL to | T | CVS 235/27 | N34°10.00' W103°48.00'
01 AGL B 70 MSL to | U | CVS 221/34 | N34°00.00' W103°50.00'
01 AGL B 70 MSL to | V | CVS 232/43 | N34°00.00' W104°04.00'
01 AGL B 70 MSL to | W | CVS 288/39 | N34°39.00' W104°02.00'
01 AGL B 70 MSL to | S2 | TCC 184/33 | N34°39.00' W103°47.00'
Alternate Exit: O
Climb to cross 90 AGL to
Turn right to a heading of 270 to AB

N34°45.00' W105°00.00'
IR ROUTES

90 MSL to (Ctc ZAB ARTCC 284.6 for transition to turn right to a heading of 270 to)
Alternate Entry: J as assigned to Descend to
01 AGL B 90 MSL to J1 FTI 056/29 N35°50.00’ W104°35.00’
01 AGL B 70 MSL to as assigned to TCC 268/18 N35°14.00’ W103°58.00’
01 AGL B 70 MSL to R1 TCC 190/25 N34°48.00’ W103°47.00’
01 AGL B 70 MSL to Q1 TCC 211/24 N34°53.00’ W103°56.00’
120 MSL to AA TCC 147/14 N34°58.00’ W103°30.00’
Contact ZAB ARTCC 285.6
Alternate Transition to Pecos East and West Low MOA
01 AGL B 90 MSL to Q2 ACH 163/22 N34°45.00’ W105°00.00’
01 AGL B 80 MSL to AC ACH 158/34 N34°33.00’ W104°55.00’
Pecos East and West Low MOA to AD
01 AGL B 70 MSL to Thence via IR-111
AD TCC 199/43 N34°34.00’ W104°02.50’
Q2 TCC 211/24 N34°53.00’ W103°56.00’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route IAW Major Commands/MDS guidance.

ROUTE WIDTH - 4 NM either side of centerline from A to K; 6 NM either side centerline from K to S; 7.5 NM either side of centerline S1 to S2; 4 NM either side of centerline on all Alternate Entry/Exits; 4 NM either side of centerline Q2 to AC and AD to O2.

Special Operating Procedures:
(1) Non-27 SOW aircraft entry times are booked no closer than 15 mins apart. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry to meet booked exit time or do not enter the route.
(2) Aircraft must call in-the-blind route entry and exit 255.4. Monitor 255.4 on this route unless operational constraints dictate otherwise.
(3) ZAB ARTCC does not provide IFR separation between scheduled MTR users while on this route.
(4) Avoid by 2 NM: (a) Guadalupita, NM and Coyote Creek SP N36-08.0 W105-14.0; (b) Pecos National Monument N35-33.85 W105-40.10; (c) Ft Sumner Rec Area N34-37.0 W104-24.0
(5) Avoid by 1000’ and 1 NM: (a) House, NM N34-39.0 W101-54.0; (b) Ranch N34-53.0 W104-23.0; (c) Ranch N35-18.0 W105-07.0;
(d) Ranch N35-05.0 W105-09.5; (e) Ranch N34-54.0 W103-50.0; (f) Ranch N34-50.5 W103-59.3; (g) Truck stop N34-59.0 W105-13.5.
(6) Avoid by 1000’ AGL or 2 NM: (a) South San Ysirdo N35-27.0 W105-35.0; (b) Soham, NM N35-26.59 W105-33.5; (c) San Jose, NM N35-23.8 W105-28.49
(7) Avoid by 2000’ AGL or 3.5 NM: Penasco, NM; Picuris Pueblo; Vadito, NM; and Native American Lands N36-10.74 W105-40.9
(8) Avoid by 1500’ AGL or 3 NM: San Miguel Private Runway N35-30.1 W104-35.0
(9) The R-5104/5 night/IMC re-entry pattern is closed (VFR use only).
(10) Deconfliction between this and other crossing 27 SOW routes will be by 27 SOW Scheduling. See and Avoid applies to conflicting non-27 SOW VR and SR routes.
(12) Pecos MOAs may be filed only if scheduled for requested airspace by the scheduling activity. Aircraft must receive clearance from Albuquerque ARTCC prior to entry into Pecos MOAs. Flight plans must specify the required delay in appropriate airspace. Monitor assigned frequency while operating in the SUA.
(13) Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity.
(14) CAUTION: Wind farm south of MAFR, heights approximately 350’ AGL, approximate coordinates: (a) NW corner: N33-58.43 W103-52.59; (b) NE corner: N33-57.33 W103-46.16; (c) SE corner: N33-55.47 W103-48.14; (d) SW corner: N33-56.60 W103-51.97
(15) CAUTION: Wind farm west of MAFR (line north to south), heights 350’ AGL, approximate coordinates: N34-43.55 W103-30.89 to N34-31.67 W104-05.33.
(16) Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: HTTP://www.usahas.com.

FSS Within 100 NM Radius: ABQ

IR-112

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S. Chindit Ave., Building 790, RM 120 Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521, 27SOAOS.DOAA.AM (at) us.af.mil

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S. Chindit Ave., Building 790, RM 111 Cannon AFB, NM 88103 DSN 681-2276/7634, C575-784-2276/7634, 27SOAOS.DOOS (at) us.af.mil

HOURS OF OPERATION: Continuous
ROUTE DESCRIPTION:

ROUTE WIDTH - 5 NM either side of centerline from A to D; 5 NM left and 4 NM right of centerline from D to E; 5 NM either side of centerline from E to TN; 5 NM either side of centerline for Alternate Exit I; 5 NM either side of centerline between TN and XM.

Special Operating Procedures:
(1) Tie-in FSS: Albuquerque (ABQ).
(2) Non-27 SOW aircraft entry times are booked no closer than 15 mins apart. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry to meet booked exit time or do not enter the route.
(3) Aircraft must call in-the-blind route entry and exit on 255.4. Monitor 255.4 on this route unless operational requirements dictate otherwise.
(4) Albuquerque ARTCC does not provide IFR separation between scheduled MTR users while on this route.
(5) Alternate Entry: EH and EK.
(6) Alternate Exit: I and L.
(7) Avoid buildings in Petrified Forest National Park N34-48.9 W109-51.9 by 1000' and 2 NM.
(8) Avoid the following schools by 1/2 NM:
   (a) Ganado N35-45.2 W109-37.7
   (b) Mariano Lake N35-34.6 W108-19.17
   (c) Cross Canyon N35-43.98 W109-25.1
(9) This route conflicts with IR-320. To deconflict, contact IR-320 Scheduling Authority at DSN 461-3665.
(10) CAUTION: Numerous powerlines cross route.
(11) Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity.
(12) Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: HTTP://www.usahas.com.
(13) CAUTION: Wind turbine farm between points AB and AC, heights approximately 350' AGL, coordinates of farm:
   (a) NW corner: N34-40.68 W110-17.30
   (b) SW corner: N34-38.26 W110-18.72
   (c) SE corner: N34-37.97 W110-16.70
   (d) NE corner: N34-30.20 W110-14.87
(14) CAUTION: Wind turbine farm between points AB and AC, Heights approximately 450' AGL, approximate coordinates of farm:
   (a) NW corner: N34-38.81 W110-11.99
IR ROUTES
(b) SW corner: N34-35.94 W110-13.44
(c) SE corner: N34-35.13 W110-10.48
(d) NE corner: N34-36.60 W110-07.00

FSS Within 100 NM Radius:

01 AGL B 70 MSL to

M3

CVS 221/34

N34°00.00'
W103°50.00'

01 AGL B 70 MSL to

M2

CVS 235/27

N34°10.00'
W103°48.00'

01 AGL B 70 MSL to

M1

CVS 298/28

N34°39.00'
W103°47.00'

01 AGL B 70 MSL to

M2

CVS 235/27

N34°10.00'
W103°48.00'

01 AGL B 70 MSL to

M3

CVS 221/34

N34°00.00'
W103°50.00'

01 AGL B 70 MSL to

M4

CVS 232/43

N34°00.00'
W104°04.00'

01 AGL B 70 MSL to

M5

CVS 288/39

N34°39.00'
W104°02.00'

01 AGL B 70 MSL to
Alternate Entry: E

M1

CVS 298/28

N34°39.00'
W103°47.00'

as assigned to
Start descent to be

EE

CNX 052/40

N34°39.20'
W104°56.70'

01 AGL B 90 MSL to
then via IR-113
Alternate Entry: M3

E

CNX 059/20

N34°28.00'
W105°18.00'

as assigned to
Start descent to be

M6

CME 057/41

N33°34.80'
W103°51.40'

M3
01 AGL B 70 MSL to
then via IR-113
Alternate Transition to
Pecos Low MOA

CVS 221/34

N34°00.00'
W103°50.00'

ABQ, CDC, PRC

IR-113
ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S.
Chindit Ave., Building 790, Rm 120 Cannon AFB, NM 88103 DSN
681-2521, C575-784-2521, 27SOAOS.DOAA.AM (at) us.af.mil.
SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S.
Chindit Ave., Building 790, Rm 111 Cannon AFB, NM 88103 DSN
681-2276/7634, C575-784-2276/7634, 27SOAOS.DOOS (at)
us.af.mil.

HOURS OF OPERATION: Continuous
ROUTE DESCRIPTION:
Altitude Data
Pt Fac/Rad/Dist

Lat/Long

As assigned to
Start descent to be

A

TCC 226/24

N34°58.00'
W104°00.90'

01 AGL B 80 MSL to

B

TCC 217/38

N34°46.00'
W104°11.00'

01 AGL B 80 MSL to

C

CNX 074/57

N34°25.00'
W104°32.00'

01 AGL B 80 MSL to

TO

CME 329/46

N34°03.50'
W104°55.50'

01 AGL B 90 MSL to

D

CNX 076/51

N34°23.00'
W104°39.00'

01 AGL B 80 MSL to

P

CVS 234/50

N33°58.00'
W104°12.00'

01 AGL B 90 MSL to
(Alternate Entry)

E

CNX 059/20

N34°28.00'
W105°18.00'

N33°56.50'
W103°59.50'

01 AGL B 90 MSL to
(Alternate Exit)

TF

CNX 354/12

N34°34.00'
W105°39.00'

01 AGL B 90 MSL to

G

CNX 307/21

N34°38.00'
W105°57.00'

01 AGL B 100 MSL to

H

CNX 280/23

N34°31.00'
W106°06.00'

XQ1 CVS 225/42
70 MSL to
or as assigned
(Contact Albuquerque
ARTCC 285.6 or Cannon APP CON 352.1)
Alternate Transition to
RED RIO RANGE on
IR-133.

01 AGL B 100 MSL to

I

CNX 241/16

N34°17.50'
W105°59.50'

01 AGL B 90 MSL to

TF

CNX 354/12

N34°34.00'
W105°39.00'

01 AGL B 115 MSL to

J

CNX 176/35

N33°47.50'
W105°47.50'

01 AGL B 90 MSL to

F1

ONM 080/22

N34°19.00'
W106°23.00'

01 AGL B 115 MSL to
(Alternate Entry)

K

CNX 167/38

N33°43.50'
W105°40.50'

F2

ONM 125/42

N33°49.00'
W106°16.00'

01 AGL B 115 AGL to
Start descent to be

L

CNX 143/44

N33°41.50'
W105°19.50'

01 AGL B 90 MSL to
Alternate Transition to
OSCURA RANGE on
IR-133.

01 AGL B 80 MSL to

M

CME 302/39

N33°47.50'
W105°11.50'

01 AGL B 90 MSL to

TF

CNX 354/12

N34°34.00'
W105°39.00'

01 AGL B 80 MSL to

N

CME 319/46

N34°00.50'
W105°04.50'

01 AGL B 90 MSL to

F3

CNX 304/23

N34°39.00'
W106°00.00'

01 AGL B 80 MSL to

TO

CME 329/46

N34°03.50'
W104°55.50'

01 AGL B 90 MSL to

I

CNX 241/16

N34°17.50'
W105°59.50'

P

CVS 234/50

N33°58.00'
W104°12.00'

01 AGL B 110 MSL to
thence via IR-113
Alternate Entry: K
Exit R-5107 at

TI

CNX 189/42

N33°43.00'
W106°00.00'

110 MSL to

EK

CNX 194/43

N33°44.00'
W106°04.20'

01 AGL B 115 MSL to
then via IR-113.

K1

CNX 167/38

N33°43.50'
W105°40.50'

01 AGL B 80 MSL to
(Alternate Exit)
ALT EXIT P. 70 MSL
OR ASSIGNED TO
XQ. CTC ALBUQUERQUE ARTCC 285.6 OR
CANNON APCH
352.1.
01 AGL B 70 MSL to

XQ

CVS 225/42

N33°56.50'
W103°59.50'

2-38


TERRAIN FOLLOWING OPERATIONS: Authorized entire route IAW Major Commands/MDS guidance.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 4 NM either side of centerline from C to D; 5 NM either side of centerline from D to M2; 5 NM either side of centerline for all Alternate Entries and Exits. Melrose Range Night/IMC pattern 7.5 NM either side of centerline.

Special Operating Procedures:
(1) Tie-in FSS: Albuquerque (ABQ).
(2) Non-27 SOW aircraft entry times are booked no closer than 15 mins apart. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry to meet booked exit time or do not enter the route.
(3) Alternate Entry: E, K, M3.
(4) Alternate Exit: P, TF.
(5) Aircraft must call in-the-blind route Entry and Exit on 255.4. Monitor 255.4 on this route unless operational requirements dictate otherwise.
(6) Albuquerque ARTCC does not provide IFR separation between scheduled MTR users while on this route.
(7) Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity.
(8) Avoid Gran Quivira National Monument N34-15.6 W106-05.5 by 2 NM.
(9) Avoid all charted public use airfields by 1500'/3 NM.
(10) Avoid Double V Ranch Airstrip N34-07.0 W104-25.6 by 1500'/2 NM.
(11) Avoid Canning Ranch Airstrip N33-42.0 W105-23.4 by 1000'/1 NM.
(12) Avoid by 1000'/0.5 NM: Quarry Blasting N34-39.54 W105-36.31 and N34-38.71 and W105-40.06.
(13) Avoid by 1000'/1 NM:
   (a) Uncharted Airstrip N33-41.69 W105-23.12;
   (b) Horrey Ranch/Airstrip N34-20.8 W104-32.5;
   (c) Bojaz Airstrip N34-01.0 W104-07.0;
   (d) White Oaks, NM N33-45.0 W105-44.2;
   (e) Ranch N34-20.8 W104-32.5;
   (f) Ranch N34-16.9 W105-05.2;
   (g) Ranch N34-16.2 W104-42.5;
   (h) Ranch N33-54.0 W104-17.1;
   (i) Lake Sumner Settlement N34-37.2 W104-23.9;
   (j) Ranch N33-42.4 W105-38.4.
(14) CAUTION: Increased bird activity Nov-Feb during dusk and night in areas from B to C, TF to I, and N to P. Recommend flight at 1000' AGL or above during these periods to reduce birdstrike hazard. Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: HTTP://www.usahas.com.
(15) IR-113 users requiring entry into R-5107, contact 49 OSS scheduling at C575-572-3536. Additionally, users will contact Cherokee Control to receive clearance prior to entering R-5107. If unable to contact Cherokee, obtain clearance from Oscura Range Control Officer.
(16) The R-5104/5 night/IMC re-entry pattern is closed (VFR use only).
(17) Pecos MOAs may be filed only if scheduled for requested airspace by scheduling agency. Aircraft must receive clearance from Albuquerque ARTCC into requested Pecos MOA airspace prior to route entry. Flight plans must specify the required delay with the appropriate airspace. Monitor assigned ARTCC frequency in SUA.
(18) Aircraft not scheduled into R-5104/R-5105 Melrose Range Complex must exit prior to XQ.
(19) Deconfliction between IR-113 and Pecos MOAs, IR-109, IR-111, VR-100/125, VR-108, and VR-114 is accomplished by 27 SOW scheduling. Contact applicable scheduling authority for deconfliction with non-27 SOW conflicting routes. (e.g. IR-128, IR-133/142, IR-180, VR-1107/1195, VR-176).
(20) Route is designed for MARSA operations established by coordinated scheduling between 27 SOW and Holloman AFB scheduling.
(21) CAUTION: Wind turbine farm, heights approximately 350' AGL, located linearly between N34-30.0 W105-58.85 and N34-26.03 W105-57.10.

FSS Within 100 NM Radius:
ABQ.

IR-117


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>TIK 142/15</td>
<td>N35°13.00'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>B</td>
<td>PGO 276/90</td>
<td>N34°55.00*</td>
</tr>
<tr>
<td>SFC B 40 MSL to</td>
<td>C</td>
<td>PGO 244/56</td>
<td>N34°20.00*</td>
</tr>
<tr>
<td>SFC B 40 MSL to</td>
<td>D</td>
<td>PGO 288/3</td>
<td>N34°42.00'</td>
</tr>
<tr>
<td>SFC B 40 MSL to</td>
<td>E</td>
<td>PGO 022/10</td>
<td>N34°50.00'</td>
</tr>
<tr>
<td>SFC B 40 MSL to</td>
<td>F</td>
<td>FSM 167/19</td>
<td>N35°04.00'</td>
</tr>
<tr>
<td>SFC B 40 MSL to</td>
<td>G</td>
<td>FSM 141/14</td>
<td>N35°11.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to D; 2 NM either side of centerline from D to E; 2 NM left and 10 NM right of centerline from E to F; 2 NM either side of centerline from F to G (until entering R-2402).

Special Operating Procedures:
(1) Alternate Entry: B, C, D.
(2) Alternate Exit: D, F.
(3) Participating aircraft separation on IR-117, 120, 121, 164, VR-189, 1102, 1103, 1104, 1113, 1130 as well as in the Hog MOA and Arrowhead MOA is MARSA through see and avoid as well as restrictive scheduling. All legs of the route
that enter the Hog MOA (E-G) are prohibited while the Hog MOA (also scheduled by the 188 WG) is active - If the Hog MOA is active, user must exit at Point D.


5. Caution Points E-G, multiple converging MTRs and IP to DZ routes even when the Hog MOA is not active.

6. Point A route entrance restricted to aircraft departing Tinker AFB.

7. Point D is a compulsory reporting point, contact Razorback Approach on 343.75 or 120.9 (this may require climbing to the top of the route block). Clearance to enter R-2402 must be received on 339.7. Flights exiting the MTR requesting activation of the Hog MOA complex must report the MTR exit point to Memphis Center on 269.0 or 126.1 and receive clearance out of the route and into the MOA prior to exiting the route. Otherwise contact Razorback Approach on 343.75 or 120.9 prior to exiting the route.

8. Avoid flight within 1500’ AGL/3 NM all charted airports when practicable.

9. Uncharted obstructions:
   a. Tower (N34 14.15 W093 38.10) estimated altitude 100’ AGL.
   b. Tower (N34 29.27 W095 13.68) estimated altitude 100’ AGL.
   c. Tower (N34 30.00 W095 06.26) estimated altitude 200’ AGL.
   d. Tower (N34 28.50 W095 19.10) estimated altitude 150’ AGL.
   e. Tower (N34 45.00 W094 39.00) estimated altitude 300’ AGL.
   f. Tower (N34 28.94 W095 15.95) estimated altitude 100’ AGL.
   g. Tower (N34 30.40 W095 53.55) estimated altitude 150’ AGL.
   h. Tower (N35 45.00 W096 11.50) estimated altitude 150’ AGL.
   i. Tower (N34 12.50 W097 07.55) estimated altitude 200’ AGL.
   j. Tower (N34 57.15 W096 32.39) estimated altitude 150’ AGL.
   k. Tower (N34 29.28 W095 13.46) estimated altitude 150’ AGL.

10. Make entry time plus or minus 10 minutes or reschedule.

**FSS Within 100 NM Radius:**

FTW, ICT, MLC

**IR-120**

**ORIGINATING ACTIVITY:** 188th Wing-AR ANG, 4850 Leigh Ave., Fort Smith, AR 72903 DSN 778-5502, C479-573-5502.

**SCHEDULING ACTIVITY:** Same as Originating Activity.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>FSM 072/63</td>
<td>N35°35.00’ W93°01.00’</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to B</td>
<td>FSM 086/46</td>
<td>N35°21.00’ W93°20.00’</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 50 MSL to C</td>
<td>FSM 102/44</td>
<td>N35°09.00’ W93°25.50’</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 50 MSL to D</td>
<td>PGO 063/35</td>
<td>N34°54.50’ W93°58.00’</td>
<td></td>
</tr>
<tr>
<td>10 AGL B 40 MSL to E</td>
<td>FSM 134/16</td>
<td>N35°11.00’ W94°04.00’</td>
<td></td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized for entire route.

**ROUTE WIDTH** - 5 NM either side of centerline from A to N35-28 W93-10; 3 NM left and 5 NM right of centerline to B; 5 NM left and 8 NM right of centerline from B to C; 5 NM either side of centerline from C to D; 5 NM left and 3 NM right of centerline from D to E.

**Special Operating Procedures:**

1. Route designated for SN, RR, and PR.

2. Route will be flown 240 to 540 knots.

3. Participating aircraft separation on IR-117, 120, 121, 164, VR-189, 1102, 1103, 1104, 1113, and 1130 as well as in the Hog MOA and Arrowhead MOA is MARSA through see and avoid as well as restrictive scheduling. All legs of the route that enter the Hog MOA (C-E) are prohibited while the Hog MOA (also scheduled by the 188 WG) is activated - If the Hog MOA is active, adjust route times.


5. Caution, Numerous SR routes frequented by flights of multiple C-130s between (Points A-C) and multiple converging MTRs and IP to DZ routes (Points C-E) even when the Hog MOA is not active.

6. Units requesting use of IR-120 will furnish scheduler with entry time, time at D, and exit time.

7. Point D is a compulsory reporting point; contact Razorback Approach on 343.75 or 120.9 (This may require climbing to the top of the block). Clearance to enter R-2402 must be received on 339.7. Flights exiting the MTR requesting activation of the Hog MOA complex must report the MTR exit point to Memphis Center on 269.0 or 126.1 and receive clearance out of the route and into the MOA prior to exiting the route. Otherwise, contact Razorback Approach on 343.75 or 120.9 prior to exiting the route.

8. Avoid flight within 1500’ AGL/3 NM all charted airports when practicable.

9. Uncharted Obstructions:
   a. Tower (N35 28.80 W093 12.40) estimated altitude 150’ AGL.
   b. Tower (N35 28.71 W093 12.57) estimated altitude 100’ AGL.
   c. Tower (N35 23.59 W093 21.88) estimated altitude 200’ AGL.
   d. Tower (N35 28.77 W093 12.44) estimated altitude 200’ AGL.
   e. Tower (N35 26.29 W093 08.57) estimated altitude 250’ AGL.
   f. Tower (N35 08.37 W094 03.57) estimated altitude 200’ AGL.

10. Caution: Be alert for soaring birds and hang gliders in the vicinity of Magazine Mountain (N35 10 W093 39) and Mt Nebo (N35 13 W093 15).

11. Make entry times plus or minus ten minutes or reschedule.


2-40
IR ROUTES

FSS Within 100 NM Radius:
JBR, MLC

IR-121


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  TXK 072/50  N33°40.00' W93°05.00'
01 AGL B 20 MSL to  B  TXK 037/43  N34°02.00' W93°28.00'
01 AGL B 30 MSL to  C  TXK 006/49  N34°19.00' W93°51.00'
01 AGL B 40 MSL to  D  PGO 082/48  N34°44.00' W93°38.00'
01 AGL B 40 MSL to  E  PGO 063/34  N34°54.00' W93°58.00'
01 AGL B 40 MSL to  F  FSM 134/16  N35°11.00' W94°04.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to B; 2 NM widening to 6 NM left and 3 NM right of centerline from B to C; 8 NM either side of centerline from C to E; 5 NM left and 3 NM right of centerline from E to F.

Special Operating Procedures:
(1) Alternate Entry: C.
(2) Alternate Exit: E.
(3) Participating aircraft separation on IR-117, 120, 121, 164, VR-189, 1102, 1103, 1104, 1113, and 1130 as well as in the Hog MOA and Arrowhead MOA is MARSA through see and avoid as well as restrictive scheduling. All legs of the route that enter the Hog MOA (C-F) are prohibited while the Hog MOA (also scheduled by the 188 WG) is active-If Hog MOA is active, adjust route times.
(4) Report Hog MOA entry/exit and applicable MTR points in the blind on the Hog MOA tactical frequency 307.375.
(5) CAUTION, Multiple converging MTRs (Points B-F) and IP to DZ routes (Points D-F) even when the Hog MOA is not active.
(6) Clearance to enter R-2402 must be received on 339.7. Flights exiting the MTR requesting activation of the Hog MOA complex must report the MTR exit point to Memphis Center on 269.0 or 126.1 and receive clearance out of the route and into the MOA prior to exiting the route. Otherwise, contact Razorback Approach on 343.75 or 120.9 prior to exiting the route.
(7) Avoid flight within 1500' AGL/3 NM all charted airports when practicable.
(8) CAUTION, Mining activity at N34 14.15 W093 38.10 and N34 13.15 W093 38.10.
(9) Uncharted Obstructions:
(a) Tower (N35 08.37 W94 03.57) estimated altitude 200' AGL.
(b) Tower (N34 10.18 W093 37.79) estimated altitude 300' AGL-IVO additional tower but not close enough to show as multiple.
(10) Make entry time plus or minus 10 min or reschedule.

FSS Within 100 NM Radius:
JBR

IR-123

ORIGINATING ACTIVITY: 12 OSS/OSAS, Bldg 28 5th Street East, Randolph AFB, TX 78150 DSN 487-5580.

SCHEDULING ACTIVITY: 560 FTS, 1450 5th Street East, Randolph AFB, TX 78150-4333 DSN 487-3518, C210-652-3518.

HOURS OF OPERATION: 0700-2200 local; OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  LLO 135/22  N30°30.00' W98°32.00'
05 AGL B 50 MSL to  B  JCT 191/16  N30°21.00' W99°55.00'
05 AGL B 50 MSL to  C  RSG 290/42  N30°22.00' W101°00.00'
05 AGL B 50 MSL to  D  DLF 305/71  N30°09.00' W101°47.00'
05 AGL B 50 MSL to  E  FST 090/72  N30°43.00' W101°37.00'
05 AGL B 50 MSL to  F  SJT 248/54  N31°11.00' W101°29.00'
05 AGL B 50 MSL to  G  SJT 209/35  N30°55.00' W100°53.00'
05 AGL B 60 MSL to  H  JCT 041/22  N30°50.00' W99°30.00'
05 AGL B 40 MSL to  I  LLO 295/23  N31°00.00' W99°09.52'
05 AGL B 60 MSL to  J  LLO 307/22  N31°03.00' W99°05.00'
05 AGL B 60 MSL to  K  LLO 336/29  N31°00.00' W99°05.00'
05 AGL B 60 MSL to  L  LLO 307/22  N31°03.00' W99°05.00'
05 AGL B 60 MSL to  M  LLO 336/29  N31°00.00' W99°05.00'
05 AGL B 60 MSL to  N  LLO 307/22  N31°03.00' W99°05.00'
05 AGL B 60 MSL to  O  LLO 336/29  N31°00.00' W99°05.00'
110 MSL to  HA  LLO VORTAC  N30°48.60' W99°06.90'
110 MSL to  HB  LLO VORTAC  N30°47.78' W98°47.24'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 13 NM either side of centerline from C to F; 13 NM tapering to 5 NM either side of centerline from F to G; 5 NM either side of centerline from G to J. Alternate Exit H: 5 NM either side of centerline from H1 to HB.

Special Operating Procedures:
(1) Minimum speeds: 300 kt.
IR ROUTES

(2) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSA applies after aircraft have passed the Entry/Alternate Entry Point until ATC establishes standard separation after exiting the route.

(3) Route conflictions:
(a) IR-123 just past Point B to Point G shares the route centerline with IR-169. You must call the schedulers, 87 FTS at Laughlin AFB, TX DSN 732-5824/5484, C830-298-5824 to deconflict and ensure 10 minutes separation between aircraft;
(b) SR-281 and SR-282 conflicts with IR-123 from Point A to Point E in numerous places, and SR-283 and SR-284 conflicts with IR-123 between Point C to Point H. Call the schedulers, 85 FTS at Laughlin AFB, TX DSN 732-5121/5337, C830-298-5429 to deconflict with these routes;
(c) The left corridor of IR-123 between Point A to just past Point B conflicts with the route corridor of VR-140 at Point G. Call the 560 FTS at Randolph AFB, TX DSN 487-3518/3942, C210-652-3518 to deconflict;
(d) IR-123 from Point A to Point B conflicts with SR-130 Point D. To deconflict, call the schedulers, 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri.

(4) Units requesting IR-123 shall furnish 560 FTS with planned entry(exit) points, times, and planned speeds. Accurate times are critical in the deconfliction process.

(5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

(6) All aircraft will monitor FSS (255.4) unless assigned a frequency by ARTCC. The entry and exit and all Alternate Entry/Exit Points are compulsory reporting points. Ft. Worth ARTCC request all aircraft monitor 290.3 from E to G.

(7) Exit procedures:
(a) Aircraft exiting at B will climb to 5000’ MSL and turn right direct JCT. Contact ZHU ARTCC on 346.4.
(b) Aircraft exiting at G will climb to 7000’ MSL, contact ZHU ARTCC on 343.9. Cross the JCT 302 radial at 7000’ MSL and maintain 7000’ MSL until H. After H, proceed direct LLO, and cross the LLO 265/017 at 11,000’ MSL, then direct to LLO 088/029;
(c) Aircraft exiting at H will proceed via the LLO 265 radial direct LLO, climb, maintain 11,000’ MSL. Contact ZHU ARTCC 307.3. Cross the LLO 265/017, 11,000’ MSL.

(8) Sensitive Areas: Avoid the following areas by 1300’ AGL or 1 NM radius: N30-18-00 W100-38-45; N30-32-36 W100-54-24; N30-40-00 W101-42-00; N31-11-00 W101-32-00; N31-12-00 W101-28-30; N31-09-15 W101-20-40; N30-49-30 W100-42-15; N30-53-00 W99-33-00; N30-19-40 W99-54-20. AVOID THE FOLLOWING AREAS by 1.5 NM radius: N30-24-30 W98-43-00; N30-24-30 W100-37-00. AVOID Pave Paws Radar Site N30-58-41 W99-50-00.

(9) Alternate Entry: B and C.
(10) Alternate Exit: B,G and H.
(11) Route Segment I to J closed except for aircraft scheduled into the BRADY MOA. Aircraft not scheduled into the BRADY MOA must exit by Point I and remain clear of the BRADY MOA.
(12) Obstruction: Unlit 500’ AGL tower at (N30-43-50 W098-57-12).

FSS Within 100 NM Radius:
FTW, SJT

IR-124

ORIGINATING ACTIVITY: 301 OG/SUA, NAS Fort Worth, 1425 Carswell Ave., TX 76127 DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local; OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | SJT 106/36 | N31°07.00’ W99°50.00’
05 AGL B 40 MSL to | B | SJT 211/23 | N31°05.00’ W100°45.00’
01 AGL B 40 MSL to | C | SJT 273/33 | N31°30.00’ W101°05.00’
01 AGL B 40 MSL to | D | SJT 318/54 | N32°08.00’ W101°01.00’
05 AGL B 50 MSL to | E | SJT 016/32 | N31°51.00’ W100°11.00’
05 AGL B 50 MSL to | F | LLO 309/45 | N31°21.00’ W99°23.00’
05 AGL B 60 MSL to | G | LLO 312/40 | N31°18.00’ W99°17.00’
05 AGL B 60 MSL to | H | LLO 347/17 | N31°05.00’ W98°49.00’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route (See SOP number 5).

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Minimum speed: 300 kt.
(2) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSA applies after aircraft have passed the Entry/Alternate Entry Point until ATC established standard separation after exiting the route.
(3) Route Conflictions:
(a) IR-124 from Points B to C conflicts with SR-283 Point H and SR-284 Point A. Both are on or near the route centerline. Call the 85 FTS at Laughlin AFB DSN 732-5121, C830-298-5121/5529 to ensure altitude and time separation;
(b) IR-124 conflicts with SR-243 Points C to E with SR-244 Points B to C, and SR-242 at Point F. Call Dyess AFB DSN 461-2792 to deconflict.
(4) Units requesting IR-124 shall furnish 301 OG/SUA with planned entry(exit) points, times and planned speeds. Accurate times are critical in the deconfliction process.
(5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
(6) Monitor FSS 255.4 unless assigned a frequency by ARTCC. The entry and exit and all Alternate Entry/Exit Points are compulsory reporting points. Ft. Worth ARTCC requests all aircraft monitor 290.3 from Point E to G.
(7) Exit procedures:
(a) Aircraft exiting E will climb to be at 5000’ by E and contact Fort Worth 295.0;
(b) Aircraft exiting at H will proceed to LLO via LLO 347 radial, then via flight plan route: climb and maintain 9000' to cross LLO 347/9 at 9000' and contact Houston ARTCC 307.3. (Aircraft requesting Brady MOA will be cleared by Houston Center as soon as possible after radio communication has been established).

(8) Alternate Entry: D.
(9) Alternate Exit: E.
(10) Sensitive Areas: Avoid the following areas by 1300' AGL or 1 NM radius: N31-07.5 W99-49.5; N31-11.0 W100-54.5; N32-03.0 W100-40.5; N31-19.0 W99-14.5; N31-13.5 W99-13.5.

FSS Within 100 NM Radius:
FTW, SJT

IR-126


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL200 to or as assigned descend direct to cross</td>
<td>A</td>
<td>RSK 085/50</td>
<td>N36°37.00' W107°04.00'</td>
</tr>
<tr>
<td>at or below FL180 descend direct to cross</td>
<td>B</td>
<td>RSK 090/46</td>
<td>N36°34.00' W107°11.00'</td>
</tr>
<tr>
<td>100 MSL to direct to</td>
<td>C</td>
<td>RSK 104/37</td>
<td>N36°27.50' W107°26.00'</td>
</tr>
<tr>
<td>06 AGL B 100 MSL to direct to</td>
<td>D</td>
<td>RSK 142/31</td>
<td>N36°16.50' W108°14.00'</td>
</tr>
<tr>
<td>06 AGL B 100 MSL to turn right and climb to</td>
<td>E</td>
<td>RSK 177/34</td>
<td>N36°11.00' W108°19.50'</td>
</tr>
<tr>
<td>06 AGL B 110 MSL to direct to</td>
<td>F</td>
<td>RSK 184/35</td>
<td>N36°11.50' W108°19.50'</td>
</tr>
<tr>
<td>02 AGL B 110 MSL to direct to</td>
<td>G</td>
<td>RSK 211/37</td>
<td>N36°18.50' W108°39.00'</td>
</tr>
<tr>
<td>04 AGL B 110 MSL to direct to</td>
<td>GA</td>
<td>TBC 047/100</td>
<td>N36°53.00' W109°26.00'</td>
</tr>
<tr>
<td>10 AGL B 110 MSL to direct to</td>
<td>GB</td>
<td>DVC 209/57</td>
<td>N37°06.50' W109°45.00'</td>
</tr>
<tr>
<td>02 AGL B 110 MSL to descend and turn left to</td>
<td>H</td>
<td>HVE 139/75</td>
<td>N37°17.50' W110°00.00'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to left turn to</td>
<td>I</td>
<td>HVE 142/71</td>
<td>N37°19.50' W110°06.50'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to turn right to</td>
<td>J</td>
<td>HVE 167/65</td>
<td>N37°20.00' W110°45.00'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to direct to</td>
<td>K</td>
<td>HVE 170/64</td>
<td>N37°21.00' W110°49.50'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to direct to</td>
<td>L</td>
<td>BCE 082/45</td>
<td>N37°36.00' W111°22.00'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to turn left to</td>
<td>M</td>
<td>BCE 086/36</td>
<td>N37°34.00' W112°33.50'</td>
</tr>
<tr>
<td>05 AGL B 90 MSL to (Start Maneuver Area) direct to</td>
<td>N</td>
<td>BCE 126/29</td>
<td>N37°19.00' W111°55.50'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to direct to</td>
<td>O</td>
<td>BCE 172/45</td>
<td>N36°57.00' W112°25.00'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to (End Maneuver Area) direct to</td>
<td>P</td>
<td>UTI 106/32</td>
<td>N36°45.50' W112°55.50'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to descend and turn right to</td>
<td>Q</td>
<td>UTI 145/29</td>
<td>N36°34.50' W113°17.00'</td>
</tr>
<tr>
<td>02 AGL B 80 MSL to direct to</td>
<td>R</td>
<td>UTI 150/28</td>
<td>N36°34.00' W113°20.00'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to climb and turn right to</td>
<td>S</td>
<td>MMM 108/28</td>
<td>N36°30.50' W113°48.50'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to direct to</td>
<td>T</td>
<td>MMM 112/19</td>
<td>N36°34.50' W113°58.50'</td>
</tr>
<tr>
<td>06 AGL B 80 MSL to descend direct to</td>
<td>U</td>
<td>MMM 091/11</td>
<td>N36°43.00' W114°03.50'</td>
</tr>
<tr>
<td>06 AGL B 80 MSL to direct to</td>
<td>V</td>
<td>MMM 075/9</td>
<td>N36°46.00' W114°05.00'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to turn right and climb to</td>
<td>W</td>
<td>MMM 009/11</td>
<td>N36°56.00' W114°11.00'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to turn right and climb to</td>
<td>X</td>
<td>MMM 001/19</td>
<td>N37°04.00' W114°10.00'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to direct to</td>
<td>Y</td>
<td>UTI 317/29</td>
<td>N37°25.50' W113°49.50'</td>
</tr>
<tr>
<td>90 MSL to Re-Entry: cross (End Maneuver Area)</td>
<td>P1</td>
<td>UTI 106/32</td>
<td>N37°36.00' W113°53.00'</td>
</tr>
<tr>
<td>100 MSL to direct to</td>
<td>AA</td>
<td>UTI 112/47</td>
<td>N36°35.00' W112°43.00'</td>
</tr>
<tr>
<td>90 MSL to Then via published route</td>
<td>AC</td>
<td>BCE 128/14</td>
<td>N37°30.00' W112°07.50'</td>
</tr>
<tr>
<td>SFC B 50 MSL to (Start Maneuver Area) turn right and descend to cross</td>
<td>N1</td>
<td>BCE 126/29</td>
<td>N37°19.00' W111°55.50'</td>
</tr>
<tr>
<td>90 MSL to (Contact Los Angeles ARTCC 343.6 prior to AA) Climb and turn left to cross</td>
<td>P2</td>
<td>UTI 106/32</td>
<td>N36°45.50' W112°55.50'</td>
</tr>
<tr>
<td>at or below 120 MSL Climb direct to cross</td>
<td>AA1</td>
<td>UTI 112/47</td>
<td>N36°35.00' W112°43.00'</td>
</tr>
<tr>
<td>140 MSL to or as assigned</td>
<td>AB</td>
<td>BCE 175/42</td>
<td>N37°00.00' W112°27.00'</td>
</tr>
<tr>
<td>Alternate Exit: AB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170 MSL to or as assigned</td>
<td>AD</td>
<td>TBC 041/52</td>
<td>N36°36.00' W110°22.00'</td>
</tr>
<tr>
<td>30 AGL B 130 MSL to direct to</td>
<td>AE</td>
<td>DVC 225/93</td>
<td>N37°00.00' W110°36.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

30 AGL B 130 MSL to AF DVC 237/93 N37°17.50' W110°45.50'
direct to
02 AGL B 90 MSL to K1 HVE 170/64 N37°21.00' W110°49.50'
Descend direct to Thence via published route.

PMSV CONTACTS: Primary home station. Alternate Dyess (DYS 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF), Terrain Avoidance (TA), visual contour (VC) operations are authorized IAW command directives C to Z and AE to K. When command directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each TA/TF route segment. Minimum altitudes, other than surface, provide at least 100’ vertical clearance of known man-made obstructions. Obstructions under 200’ AGL were not considered in route design. Command directives may require additional obstruction clearance for TA/TF/VC operations. The entire route is mountainous. Regulations governing aircraft operations below 500’ AGL must be complied with. Auto TF descent is authorized at C and 11 NM prior to AE on the Alternate Entry for B-1B aircraft.

ROUTE WIDTH - 5 NM either side of centerline from A to H; 4 NM either side of centerline from H to M; 3 NM either side of centerline from M to N; 4 NM left and 2 NM right of centerline from N to O; 3 NM left and 2.5 NM right of centerline from O to Q; 3 NM left and 2.5 NM right of centerline from Q to S; 4 NM either side of centerline from S to T; 4 NM either side of centerline from T to W; 4 NM right from X to Z; Alternate Exit: 4 NM either side of centerline from P to AC; Alternate Entry: 4 NM either side of centerline from AD to K; Re-Entry: 4 NM either side of centerline from P to AA. Centerline between points O and S is 7.5 NM arc: E to F; H to I; J to K; L to M; Q to R; S to T; W to X; Y to Z; and P to AA. Centerline between AC to N is 7.0 NM radius arc.

Special Operating Procedures:
(1) Airspace scheduling is available Monday - Friday 0730L - 1630L central time, through CSE (Central Scheduling Enterprise) or call DSN461-3665, FAX C325-696-4158. After hours scheduling is not available at this time.
(2) Participating Aircraft Separation: Route designated for MARSA operations established by coordinated scheduling. All aircraft must enter route at prescribed scheduled time plus or minus 2 1/2 minutes. Otherwise new entry time must be scheduled with 7BW.
(3) Lost communications altitude after exit at AB is 14,000’ MSL. Lost communications altitude after exit at Z is as required for aircraft participating in operations in the Desert MOA and Nellis Ranges.
(4) Routing from P-Z will only be used by aircraft scheduled into Desert MOA. Contact MOA scheduling operations at DSN 348-4710 or Blackjack at DSN 348-4707.
(5) Aircrews are authorized to turn left and enter the Desert MOA anywhere between X and Z based on their preplanned mission scenario. Must file Z exit (OZN321034).
(6) Method of MARSA between IR-126 and IR-266 will be coordinated scheduling.
(7) Centerline between the following points are depicted as a 7.5 NM arc: E to F; H to I; J to K; L to M; Q to R; S to T; W to X; Y to Z; and P to AA. Centerline between AC to N is 7.0 NM radius arc.
(8) Contact Nellis Control 317.52 prior to entering Desert MOA. If Nellis Control cannot be reached, contact Blackjack 377.8.

(9) Aircraft using Alternate Exit will contact Los Angeles ARTCC 343.6 prior to AA. If unable, Squawk Mode 3 Code 7600. If no contact is made by AB, follow two-way communications failure.
(10) Aircrews entering IR-126 on Alternate Entry AD must file IR-126A.
(11) IR-126 ends at Z, routing within Nellis Ranges is not part of IR-126. Therefore, Z must be filed as IR-126 exit, followed by western most point in Nellis Ranges and Exit Point for Nellis Ranges.
(12) When aircraft are operating in IMC or marginal VMC conditions, report passing Point R (OZN 143/34) to Los Angeles ARTCC 343.6.
(13) Aircrews should be especially vigilant for VFR helicopter traffic from SFC to 500’ AGL between O and S.
(14) Route hazard procedures: Aircrews encountering hazards/hazardous weather along this route will notify 7BW Command Post (DSN 461-1921) or weather (DSN 461-2524) who in turn will determine route status.
(15) Aircrews are restricted to IFR altitude between X and Y due to blasting in the area of N37-22 W113-52 between the following time frames: 1730-1830Z and 2130-2330Z during daylight savings time. 1830-1930Z and 2230-0030Z during daylight standard time.
(16) Noise Sensitive Areas:
(a) Residence N37-11.5 W109-52.0;
(b) Residence N37-16.1 W109-55.6 avoid by 1/2 NM, (NO OVERFLIGHT);
(c) Fly centerline or south of centerline between points O and P to avoid the Pipe Springs National Monument N36-51.7 W112-44.2.
(17) Alternate Entry: AD.
(18) Alternate Exit: AB.

FSS Within 100 NM Radius:
ABQ, CDC, PRC

IR-127

ORIGINATING ACTIVITY: 307 OSS/OSOR, 1333 Twining Dr, Barksdale AFB, LA 71110 DSN 331-3171, C318-529-3171.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1530 CST.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>LOA 075/23</td>
<td>N31°10.00' W95°32.00'</td>
</tr>
<tr>
<td>09 AGL B 40 MSL to</td>
<td>B</td>
<td>DAS 357/22</td>
<td>N30°33.00' W94°38.00'</td>
</tr>
<tr>
<td>07 AGL B 40 MSL to</td>
<td>C</td>
<td>LFK 063/25</td>
<td>N31°19.00' W94°16.00'</td>
</tr>
<tr>
<td>07 AGL B 40 MSL to</td>
<td>D</td>
<td>GGG 125/40</td>
<td>N31°58.00' W94°10.00'</td>
</tr>
<tr>
<td>07 AGL B 40 MSL to</td>
<td>E</td>
<td>GGG 198/30</td>
<td>N31°58.00' W95°00.00'</td>
</tr>
<tr>
<td>07 AGL B 40 MSL to</td>
<td>F</td>
<td>GGG 197/38</td>
<td>N31°50.50' W95°03.20'</td>
</tr>
</tbody>
</table>
07 AGL B 40 MSL to G LOA 054/44 N31°28.00' W95°12.30'
06 AGL B 40 MSL to H LOA 041/25 N31°24.00' W95°36.00'
Alternate Entry: D

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSA applies after aircraft have passed the Entry/Alternate Entry Point until ATC established standard separation after exiting the route.
(2) Route Conflicts: IR-127 and VR-187 share common segments and traffic flow along the entire route. IR-129 conflicts from Point D to Point H. VR-106 conflicts at Point C. Route Deconfliction is assured through coordinated scheduling. (VICTOR) airways and VFR flyways cross all route segments.
(3) All aircraft will monitor FSS 255.4 unless assigned a frequency by ARTCC. All Entry/Alternate Entry points and Exit/Alternate Exit points are compulsory reporting points.
(4) Exit Procedures: Aircraft exit from over H via the LOA 041 radial to LOA, then flight plan route. Climb and maintain 8000', cross LOA 041/11 at 8000'. Contact Houston 269.6.
(5) NORDO Procedures:
(a) In the event of lost communications prior to the entry point and two-way communications are not re-established prior to the entry point, the pilot shall maintain the last assigned altitude until the entry point, then descend and cross the next fix after the entry point at the highest IR route altitude and fly the IR route at the highest published altitude and execute the lost communications procedure at the end of the route. Squawk Code 7600;
(b) In the event of lost communications, and unable to proceed VFR, proceed from H via LOA041 radial to LOA, then flight plan route. Climb and maintain 8000', cross LOA041011 at 8000'.
(6) Sensitive Areas: Avoid Livingston Airfield by 1500/3; Avoid the following areas by 1300' AGL or 1 NM radius: N30-50-00 W95-07-00; N31-09-00 W95-33-00; N30-46-30 W94-27-40; N31-10-00 W94-28-30; N30-49-00 W94-25-45; N31-31-00 W94-09-00; N31-56-30 W94-41-20. Avoid area by 1300' AGL or 2 NM radius: N30-42-30 W94-56-00. Avoid by 1500' AGL or 1 NM radius: N31-56-45 W94-14-35; N31-39-00 W95-04-30; N31-51-00 W94-51-30. Avoid area by 2000' AGL or 1 NM radius: N31-02-00 W94-26-00. Avoid Flight wing areas by 1500' AGL or 1.5 NM radius: N31-47-30 W94-11-00; N31-54-30 W94-23-45; N31-48-10 W95-09-00. Avoid Lake Marvula area by 1000' AGL or 1 NM of the shoreline.
(7) Obstructions: Tower 300' AGL N30-50-00 W95-19-00; tower 200' AGL N32-01-00 W94-24-00; tower 200' AGL N31-43-00 W95-13-00; tower 300' AGL N30-58-00 W95-19-00; Electric Power Plant N32-01-00 W94-37.-.06.
(8) Alternate Entry: D.
(9) Noise sensitive areas: Avoid all noise sensitive areas by 1000' or 1/4 NM unless otherwise noted:
(a) Residence: N30-54.07 W94-28.4 Avoid by 1/2 NM.
(10) The following Public Use Airports, as depicted on Houston Sectional Chart are within 5 NM of IR-127 route corridor:
(a) Point A-B: Livingston Arpt, Houston Co. Arpt, and Trinity Co. Arpt; and Groveton Arpt;
(b) Point B-C: Tyler Co. Arpt; Woodville Arpt; Jasper Arpt and Angelina Arpt;
(c) Point C-D: San Augustine Co. Arpt, and Center Arpt; and Rusk Arpt;
(d) Point D-E: Panola Co. Arpt;
(e) Point E-F: Cherokee Co. Arpt;
(f) Point G-H: Houston Co. Arpt.

FSS Within 100 NM Radius:
CXO, DRI, FTW, SJT

IR-128

ORIGINATING ACTIVITY: 7 OSS/OSR, 966 Ave. D-4, Ste. 10, Dyess AFB, TX 79607 DSN 461-3666/2200,
C325-696-3666/2200.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 100 MSL to or as assigned (TFR Initiation Point) descend direct to cross
06 AGL B 100 MSL to 02 AGL B 100 MSL to
B LBB 142/48 C LBB 153/40
N32°59.50' N33°04.00'
W101°29.00' W101°41.50'
06 AGL B 100 MSL to 06 AGL B 100 MSL to
turn right to DE LBB 171/45
turn right to W101°56.50'
05 AGL B 100 MSL to 05 AGL B 100 MSL to
turn right to E LBB 187/49
turn right to W101°13.00'
02 AGL B 70 MSL to 02 AGL B 70 MSL to
turn right to F LBB 195/50
turn right to W102°21.00'
02 AGL B 70 MSL to 02 AGL B 70 MSL to
g G LBB 224/50
turn right to W102°44.00'
06 AGL B 70 MSL to 06 AGL B 70 MSL to
turn right to H LBB 231/52
turn right to W103°18.00'
02 AGL B 70 MSL to 02 AGL B 70 MSL to
turn right to I LBB 240/56
turn right to W102°57.50'
02 AGL B 70 MSL to 02 AGL B 70 MSL to
turn right to J LBB 250/55
turn right to W103°33.50'
02 AGL B 70 MSL to 02 AGL B 70 MSL to (Alternate Exit) turn right to K LBB 256/49
turn right to W102°53.50'
02 AGL B 70 MSL to 02 AGL B 70 MSL to continue left turn to
L LBB 268/51 M LBB 264/62
N33°50.00' N33°47.50'
W102°55.00' W103°09.00'
02 AGL B 70 MSL to 02 AGL B 70 MSL to
turn right to N LBB 258/65
turn right to W103°13.00'
05 AGL B 70 MSL to 05 AGL B 70 MSL to
turn right to O HOB 328/40
turn right to W103°33.00'
02 AGL B 70 MSL to turn left to
02 AGL B 70 MSL to direct to
12 AGL B 70 MSL to direct to
SFC B 70 MSL to (Contact Fort Worth ARTCC 298.95) direct to
02 AGL B 70 MSL to direct to
02 AGL B 70 MSL to direct to
09 AGL B 70 MSL to direct to
07 AGL B 70 MSL to turn right to
04 AGL B 70 MSL to direct to
02 AGL B 70 MSL to turn left to
02 AGL B 70 MSL to (Contact Midland APP CON 290.4) direct to
08 AGL B 60 MSL to turn left to
02 AGL B 60 MSL to direct to
06 AGL B 60 MSL to (Contact Midland APP CON 290.4) direct to
02 AGL B 60 MSL to (TA/TFR Termination Point) (Contact FT. Worth ARTCC 322.55 or 364.8) 60 MSL B 130 MSL climb direct to cross
130 MSL to or as assigned
04 AGL B 70 MSL to turn left to
04 AGL B 70 MSL to direct to
SFC B 70 MSL to Thence via published route.
Alternate Exit: RG direct to
04 AGL B 60 MSL to direct to
02 AGL B 60 MSL to direct to
P HOB 320/36
Q HOB 314/34
R HOB 291/24
S HOB 264/21
T HOB 250/21
U HOB 230/25
V HOB 218/30
W HOB 193/30
X HOB 164/23
Y HOB 146/29
Z MAF 240/37
AA MAF 232/34
AB MAF 180/28
AC MAF 173/28
AD MAF 160/28
AE MAF 126/39
AF MAF 109/60
O1 HOB 328/40
BA HOB 347/29
J1 LBB 250/55
RA TXO 193/65
RB TXO 203/64
RC TXO 213/65
RD TXO 218/64
RE TXO 220/63
RF TXO 223/60
RG TXO 237/52

IR ROUTES

02 AGL B 70 MSL to turn left to
02 AGL B 70 MSL to direct to
12 AGL B 70 MSL to direct to
SFC B 70 MSL to (Contact Fort Worth ARTCC 298.95) direct to
02 AGL B 70 MSL to direct to
02 AGL B 70 MSL to direct to
09 AGL B 70 MSL to direct to
07 AGL B 70 MSL to turn right to
04 AGL B 70 MSL to direct to
02 AGL B 70 MSL to turn left to
02 AGL B 70 MSL to (Contact Midland APP CON 290.4) direct to
08 AGL B 60 MSL to turn left to
02 AGL B 60 MSL to direct to
06 AGL B 60 MSL to (Contact Midland APP CON 290.4) direct to
02 AGL B 60 MSL to (TA/TFR Termination Point) (Contact FT. Worth ARTCC 322.55 or 364.8) 60 MSL B 130 MSL climb direct to cross
130 MSL to or as assigned
04 AGL B 70 MSL to turn left to
04 AGL B 70 MSL to direct to
SFC B 70 MSL to Thence via published route.
Alternate Exit: RG direct to
04 AGL B 60 MSL to direct to
02 AGL B 60 MSL to direct to

PMSV CONTACTS: Primary Home Station. Alternate Dyess (DYS 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF) visual contour (VC) operations are authorized IAW command directive within the published altitude blocks from A to AE and 01 to J1 on re-entry BA, and RA to RG1 on re-entry R-5104/R-5105. VMC terrain avoidance (TA/VC) operations are authorized within the published altitude blocks from B to AE and 01 to J1 on re-entry BA, and RA to RG1 on re-entry R-5104/R-5105. When command directives preclude TF/TA/VMC operations aircrews will maintain the IFR altitude for each route segment. Maximum altitudes, other than surface, are established to provide 100’ vertical clearance of known man-made obstructions within the route width. Command directives may require additional obstruction clearance for TF/TA/VMC operations. The entire route is designated non-mountainous. Regulations governing operations below 500’ AGL must be complied with. The route corridor provides airspace for 500’ lateral separation from man-made obstacles. Obstructions under 200’ AGL were not considered in route design. Aircrews must be aware of charted airports within or near route corridor limits.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 3 NM left and 2.5 NM right of centerline from C to DE; 3 NM either side of centerline from DE to E; 4 NM either side of centerline from E to K; 5 NM left and 4 NM right of centerline from K to M; 4 NM either side of centerline from M to Q; 4 NM left and 3 NM right of centerline from Q to R; 3 NM left and 4 NM right of centerline from R to U; 4 NM either side of centerline from U to W; 4 NM left and 3 NM right of centerline from W to Y; 3 NM either side of centerline from Y to Z; 4 NM either side of centerline from Z to AF. Re-Entry; 4 NM either side of centerline from O1 to J1. Alternate Exit RG: 4 NM left and 5 NM right of

2-46
centerline from RA to RC; 5 NM either side of centerline from RC to RE; 5 NM left and 3 NM right of centerline from RE to RG. Re-Entry R-S104/R-S105 boundaries from RG to RH; 4 NM either side of centerline from RH to RG1.

**Special Operating Procedures:**

1. Airspace scheduling is available Monday - Friday 0730L - 1630L central standard time, through CSE (Central Scheduling Enterprise) or call DSN 461-3666/2200, C325-696-3666/2200. After hours scheduling is not available at this time.
2. Aircrews should monitor 255.4 approaching G. T-37 and T-1
3. Aircrews are advised of a new 923’ tower N32-54.40
4. Aircrews should be alerted to the increase of migratory
5. Aircrews should be aware of the 5549’ tower at N33-33.2
6. Minimum separation between scheduled entry times is 10
7. Aircrews aborting on Alternate Exit RG will if conditions
8. Unit schedulers using Alternate Exit RG must deconflict
9. The method of MARSA between IR-180 and IR-128 will be
10. Unit schedulers using Alternate Exit RG must deconflict
11. Aircrews aborting on Alternate Exit RG will if conditions
12. Minimum separation between scheduled entry times is 10
13. Aircrews should be aware of airports within or near route
14. Aircraft at TF/TA/VMC altitude may be required to fly at a
15. Aircraft at TF/TA/VMC altitude.
16. Aircrews must be aware of airports within or near route
17. The method of MARSA between IR-180 and IR-128 will be
18. The method of MARSA between IR-180 and IR-128 will be
19. The method of MARSA between IR-180 and IR-128 will be
20. The method of MARSA between IR-180 and IR-128 will be

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>BYP 042/18</td>
<td>N33°44.50’ W95°58.00’</td>
</tr>
<tr>
<td>08 AGL B 60 MSL to</td>
<td>B</td>
<td>SLR 344/37</td>
<td>N33°49.00’ W95°39.00’</td>
</tr>
<tr>
<td>08 AGL B 40 MSL to</td>
<td>C</td>
<td>SLR 008/46</td>
<td>N33°56.00’ W95°17.50’</td>
</tr>
<tr>
<td>06 AGL B 30 MSL to</td>
<td>D</td>
<td>TXK 274/27</td>
<td>N33°36.00’ W94°36.00’</td>
</tr>
<tr>
<td>06 AGL B 30 MSL to (Alternate Entry)</td>
<td>E</td>
<td>GGG 024/23</td>
<td>N32°45.00’ W94°31.00’</td>
</tr>
<tr>
<td>05 AGL B 20 MSL to</td>
<td>F</td>
<td>GGG 060/29</td>
<td>N32°36.50’ W94°13.50’</td>
</tr>
<tr>
<td>07 AGL B 20 MSL to</td>
<td>G</td>
<td>GGG 089/34</td>
<td>N32°21.50’ W94°05.00’</td>
</tr>
<tr>
<td>07 AGL B 20 MSL to</td>
<td>H</td>
<td>GGG 125/40</td>
<td>N31°58.00’ W94°10.00’</td>
</tr>
<tr>
<td>07 AGL B 40 MSL to</td>
<td>I</td>
<td>GGG 198/30</td>
<td>N31°58.00’ W95°00.00’</td>
</tr>
<tr>
<td>07 AGL B 40 MSL to</td>
<td>J</td>
<td>LOA 054/44</td>
<td>N31°28.00’ W95°12.30’</td>
</tr>
<tr>
<td>06 AGL B 40 MSL to</td>
<td>K</td>
<td>LOA 041/25</td>
<td>N31°24.00’ W95°36.00’</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH** - 5 NM either side of centerline from A to E; 2.5 NM either side of centerline from E to G; 5 NM either side of centerline from G to K.

**Special Operating Procedures:**

1. Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSA applies after aircraft have passed the Entry/Alternate Entry Point until ATC established standard separation after exiting the route.
2. Aircrews should be aware of the 5549’ tower at N33-33.2
3. Aircrews should be alerted to the increase of migratory
t2. Aircrews are advised of a new 923’ tower N32-54.40
4. Aircrews are advised to monitor 255.4 approaching G. T-37 and T-1
5. Aircrews should monitor 255.4 approaching G. T-37 and T-1
6. Noise Sensitive Areas: Avoid all Noise Sensitive Areas by 1000’ or 1/4 mile:
   a. Residence at N32-14.4 W103-03.9;
   b. Residence at N32-10.0 W103-33.9;

FSS Within 100 NM Radius:
ABQ, SJT

IR-129

**ORIGINATING ACTIVITY:** 307 OSS/OSOR, 1333 Twining Dr., Barksdale AFB, LA 71110 DSN 331-3171, C318-529-3171.

**SCHEDULING ACTIVITY:** Same as Originating Activity. Scheduling hours 0700-1530 CST.

**HOURS OF OPERATION:** Sunrise-Sunset Mon-Fri
(5) Aircraft exiting at K will proceed to LOA via the LOA 041 radial, then via flight plan route. Cross the LOA 041/11 at 8000'. Maintain 8000' until cleared higher. Contact Houston Center on 269.6.

(6) NORDO procedures: In the event of lost communications, and unable to proceed VFR, proceed from over K via the LOA 041 radial to LOA, then via flight plan route. Climb and maintain 8000'. Cross the LOA 041/11 at 8000' and contact Houston Center on 269.6.

(7) Sensitive Area: Avoid by 1300' AGL or 1 NM radius: N33-49-30 W95-55-30; N33-47-30 W95-31-30; N33-00-00 W94-36-00; N31-56-30 W94-41-20. Avoid areas by 1500' AGL or 1 NM radius: N31-54-30 W94-23-30; N31-57-00 W94-14-30; N31-48-00 W95-09-00; N31-39-00 W95-04-00. Avoid the bounded area by 1300' AGL: N32-54-30 W94-45-00 to N32-55-00 W94-37-30 to N32-45-00 W94-36-30. Avoid Lake Murvaul (Pt H-I) by 1000' or 1 NM of shoreline. Avoid by 1500' or 1 NM of N31-51-0 W094-31-3.


(9) Alternate Entry: E.

(10) The following Class C and Public Use Airports, as depicted on Houston, Memphis and Dallas-Ft Worth Sectional Charts are within 5 NM of IR-129 route corridors:
   (a) Point B-C: Stamper Arpt;
   (b) Point C-D: McCurtain Co. Arpt;
   (c) Point D-E: Lonestar Arpt;
   (d) Point F-G: Harrison Co Arpt and Shreveport Class C Airspace;
   (e) Point G-H: Panola Co Arpt;
   (f) Point H: Center Arpt;
   (g) Point I-J: Cherokee Co Arpt.

FSS Within 100 NM Radius:
CXO, DRI, FTW, MLC, SJT

IR-133

ORIGINATING ACTIVITY: 49 OSS/OSOA, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-2638, C575-572-2638.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: 0700-2300 local

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 120 MSL to or as assigned A CME 256/39 N33°18.50' W105°24.00'
01 AGL B 120 MSL to B CME 282/31 N33°33.00' W105°11.00'
01 AGL B 80 MSL to C CME 301/38 N33°46.00' W105°11.00'
01 AGL B 80 MSL to D CNX 111/27 N34°07.00' W105°14.00'
01 AGL B 90 MSL to E CNX 059/20 N34°28.00' W105°18.00'
01 AGL B 90 MSL to F CNX 354/12 N34°34.00' W105°09.00'
01 AGL B 90 MSL to G CNX 304/23 N34°39.00' W106°00.00'
01 AGL B 90 MSL to H CNX 234/17 N34°15.50' W105°59.50'
01 AGL B 110 MSL to I CNX 189/42 N33°43.00' W106°00.00'
Alternate Exit: Red Rio
01 AGL B 90 MSL to F1 ONM 080/22 N34°34.00' W105°39.00'
01 AGL B 90 MSL to F2 ONM 125/42 N33°49.00' W106°16.00'
Alternate Entry: From Pecos MOA
01 AGL B 90 MSL to E1 CNX 064/30 N34°28.50' W105°05.00'
01 AGL B 80 MSL to D CNX 111/27 N34°07.00' W105°14.00'
01 AGL B 90 MSL to D1 CNX 090/30 N34°15.00' W105°05.00'
120 MSL to A2 PIO 344/24 N32°56.00' W105°20.10'
120 MSL to A1 CME 230/43 N33°00.20' W105°22.10'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route. Do not descend below minimum specified altitude for each leg.

ROUTE WIDTH - Starting at N33-17.2 W105-21.3 to N33-32 W105-08 to N34-06 W104-58 to N34-13 W105-05 to N34-32 W104-58 to N34-42 W105-14 to N34-16 W106-30 to N33-50 W106-30 via the southern boundary of R-5107C to N33-45 W106-04 to N33-39 W105-49 to N34-27 W105-49 to N34-22 W105-30 to N33-35 W105-14 to N33-20 W105-26.2 to beginning. Alternate Entry ELK: 2 NM either side of centerline from A2 to A.

Special Operating Procedures:
(1) Request use through 49 OSS/OSOS 24 hours in advance and between 0730-1630 local Mon-Fri.
(2) Route segments C through I designated as maneuver areas.
(3) Route conflicts with Pecos MOA from Point C to E. Remain clear of Pecos MOA unless deconfliction has been accomplished through 49 OSS/OSOS.
(4) Deconfliction with VR-176 is accomplished by 49 OSS/OSOS. Contact applicable scheduling authority for deconfliction with non-49 WG conflicting routes (e.g. IR-133, VR-100, VR-125, VR-176, VR-1107, VR-1195).
(5) The route conflicts with Sierra Blanca Regional Airport traffic. ATC might request that the pilot delay entrance into the route or maintain a specific altitude until Point C. This will constitute cancellation of IFR flight and initiation of VFR flight until the pilot is established within the vertical and lateral confines of IR-133 at Point C, when the IFR portion of the flight will take effect.
(6) Do not enter R-5107H or R-5107J on segment H-I unless scheduled into this airspace through 49 OSS/OSOS and then only after having received clearance from White Sands RADAR Facility on 269.225 or 336.2.
(7) When exiting Point I contact White Sands RADAR Facility (WSRF) on 269.225 or 336.2 for entry into R-5107 or Beak MOA. If unable to contact WSRF, contact Albuquerque ARTCC as appropriate.
(8) Use of segment F-F2 not authorized if R-5107H is active unless alternate exit Red Rio is scheduled through OOS/OSOS and then only after having received clearance from White Sands RADAR Facility on 269.225 or 336.2.

(9) MARSA applies at entry, along the route and at exit. IR-133 and IR-142 will not be used concurrently.

(10) Alternate Entry Points: A2-A, C, E-E1 (from Pecos Low MOA only), F-F2,(for entrance to Red Rio only).

(11) Alternate Exit Points: D-D1 (to Pecos Low MOA only), F-F2 (to Red Rio Range only), G and H.

(12) Numerous towers, avoidance, and noise sensitive areas exist within the MTR. You must receive the MTR brief and associated products from 49 OSS/OSOA prior to flying the route.

(13) Route is surveyed for operations down to 200' AGL.

FSS Within 100 NM Radius:
ABQ

IR-134

ORIGINATING ACTIVITY: 49 OSS/OSOA, 744 Delaware Ave., Holloman AFB, NM 88440-8014 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Sunrise-0600Z++

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to Point I and from Point K to Point M; Not authorized on any alternate entry or from Point A to Point C and from Point I to Point K.

ROUTE WIDTH - Starting at N32-35 W105-10 to N32-13 W105-15 to N32-10.5 W105-23 to N32-23 to Point of Beginning.

Special Operating Procedures:
(1) Request use through 49 OSS/OSOS 24 hours in advance and between 0730-1630 local Mon-Fri.
(2) From Point C to Point H and Point K to Point M route is designated maneuvering airspace and cleared for LOWAT.
(3) IR-134 is the reverse of IR-195 and is only available on even days. On odd days IR-195 is available. Deconfliction with IR-192 and IR-194 is accomplished by 49 OSS/OSOS.
(4) Do not enter R-5103C or the Centennial Fly Area on Segment K-M unless scheduled into this airspace through 49 OSS/OSOS and then only after having received clearance from White Sands RADAR Facility 336.2. Use alternate exit ZIPE to avoid R-5103C.
(5) If using alternate exit ZIPE contact White Sands RADAR Facility 336.2. All other exits not entering restricted airspace contact Albuquerque ARTCC 292.15.
(6) To scheduled Centennial Range, contact 49 OSS/OSOS. Comply with all procedures listed in current HAFB range supplement which can be obtained from Holloman Range offices.
IR ROUTES

(7) To transition from IR-134 to/from Talon Low MOA, both the MOA and the IR must be scheduled. Request 20 minute block time in MOA starting 15 minutes after IR entry time. Contact Albuquerque ARTCC 292.15 for clearance into MOA, prior to exceeding top of the altitude block on segment G-H, and do not exceed 12,500' MSL until cleared by Albuquerque ARTCC to do so.

(8) Alternate Entries: Point F (El Paso Gap, from IR-194 only); Point H (from Talon Low MOA only).

(9) Alternate Exits: Point F (to El Paso Gap, into IR-194 only); Point G (to Talon Low MOA only); Point I (to ZIPER only); Point J.

(10) MARSA applies at entry, exit and along the route.

(11) Numerous towers, avoidance and noise sensitive areas exist within the MTR. You must receive the MTR brief and associated products from 49 OSS/OSOA prior to flying the route.

(12) Route is surveyed for operations down to 200' AGL.

FSS Within 100 NM Radius:
ABQ

IR-135

ORIGINATING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363 DSN 876-6518/4075, C361-516-6518/4075. 0800-1530 CST Mon-Fri (excluding holidays or field closed by NOTAM).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

Altitude Data       Pt   Fac/Rad/Dist       Lat/Long
30 MSL B 90 MSL to A   NQI 242/19  N27°22.00' W98°08.00'
30 MSL B 90 MSL to B   NQI 202/40  N26°54.00' W98°08.00'
30 MSL B 90 MSL to C   NQI 216/61  N26°43.00' W98°32.00'
30 MSL B 90 MSL to D   NQI 253/46  N26°19.00' W98°39.00'
30 MSL B 90 MSL to E   NQI 262/55  N27°26.00' W98°50.00'
30 MSL B 90 MSL to F   NQI 283/57  N27°47.00' W98°50.00'
30 MSL B 90 MSL to G   NQI 298/51  N27°57.00' W98°37.00'

ROUTE WIDTH - 8 NM either side of centerline from A to D; 5 NM either side of centerline from D to F; 8 NM either side of centerline from F to G.

Special Operating Procedures:

(1) A to C altitude may be assigned by ATC.

(2) Route will be flown at 240-420 kt.

(3) Maneuvering from A to G for road reconnaissance and simulated attacks.

(4) Contact Houston ARTCC 307.2 at D coordination of crossing of airway corridor. If no contact with Houston ARTCC 307.2 cross corridor which is located between E and F between 3000' to 5000' MSL.

(5) Aircraft shall be scheduled with a minimum of 10 minutes longitudinal separation.

(6) The primary method of invoking MARSA shall be by scheduling.

(7) All proposed users of IR-135 or any other approved IR route that is common with IR-135 or any part thereof, shall coordinate that route with COMTRA WING TWO, Kingsville NAS, TX.

(8) MARSA applies after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.

(9) Lost communications route and altitude for TRAWING TWO aircraft shall be: G direct NQI 270/026, maintain 15,000', then a HI-TACAN RWY 13 penetration to the 15 NM arc, then via either a north or south arc, complete remainder of HI-TACAN RWY 13L or 35R approach.

(10) Lost communications route and altitude for all other users shall be as above except maintain 7000'.

(11) All entry and exit points shall be compulsory reporting points.

(12) Aircraft other than Kingsville NAS based shall fly IR-135 from A to B a 5000' to 7000', and from B to G at 3000' to 7000' MSL.

(13) Houston ARTCC frequency from A to B is 291.6 or as assigned; from B to G, 307.2 or as assigned; and after G, 307.2 or SAT FSS.

(14) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRA WING TWO, Houston ARTCC and Kingsville NAS ATCF.

FSS Within 100 NM Radius:
SJT

IR-136

ORIGINATING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363 DSN 876-6518/4075, C361-516-6518/4075. 0800-1530 CST Mon-Fri (excluding holidays or field closed by NOTAM).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

Altitude Data       Pt   Fac/Rad/Dist       Lat/Long
As assigned to A   NGP 043/20  N27°54.00' W97°01.00'
10 AGL B 20 AGL to B   NGP 004/23  N28°04.00' W97°13.00'
10 AGL B 20 AGL to C   THX 140/20  N28°13.00' W97°57.00'
SFC B 20 AGL to D   THX 255/33  N28°26.00' W98°46.00'
SFC B 20 AGL to E   NQI 290/84  N28°04.00' W99°15.00'
SFC B 20 AGL to F   NQI 303/60  N28°06.00' W98°43.00'

ROUTE WIDTH - Authorized for entire route.

TERRAIN FOLLOWING OPERATIONS:
ROUTE WIDTH - 5 NM either side of centerline from A to D; 4 NM either side of centerline from D to E; 5 NM either side of centerline from E to F.

Special Operating Procedures:
(1) Route altitude may be assigned by ATC.
(2) Route will be flown from 300-420 kt.
(3) Minimum IMC altitude is 2000' MSL.
(4) Radar advisories are available from Corpus Christi APP CON from A to B.
(5) Aircraft shall be scheduled with a minimum of 10 minutes longitudinal separation.
(6) The primary method of invoking MARSA shall be by scheduling.
(7) All proposed users of IR-136, or any other IR route that is common with IR-136, or any part thereof, shall coordinate that route with COMTRAWING TWO, Kingsville NAS, TX.
(8) MARSA applies after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.
(9) The lost communications route and altitude for TRAWING applicable after aircraft have passed the entry point.
(10) When contacting the Scheduling Activity, be prepared to provide arrival time at Checkpoint F in addition to entry/exit points.
(11) CAUTION: Frequent tilt-rotor VFR low level traffic transits between E and F.
(12) Aircraft utilizing IR-137 routing cross IR-109 at 02 AGL 130 MSL to C ABQ 005/62 N36°02.00' W106°25.00'.
(13) If aircrews are going to miss their scheduled entry time by more than 10 minutes, they must call the 58 SOW Wing Operations Center (DSN 246-9482) for a new entry time.
(14) ATC frequencies are: A to C, CPR approach 354.8 or as assigned; C to F, TAC frequency or as assigned; after F, Houston ARTCC 307.2 or SAT FSS.
(15) Avoid Canon de San Diego, N35-46.0 W106-41.0 by 3 NM.
(16) CAUTION: Extensive windfarm located east of interstate Highway 37 and NE of Lake Corpus Christi. Approaching point C, multiple windmills to 499' AGL on both sides of route centerline within the lateral boundaries of IR-136.

FSS Within 100 NM Radius:
SJT

IR-137


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A ABQ 347/36 N35°39.00' W106°49.00'.
02 AGL B 100 MSL to B ABQ 349/53 N35°56.00' W106°47.00'.
02 AGL B 120 MSL to D TAS 228/26 N36°24.00' W106°22.00'.
02 AGL B 130 MSL to E TAS 269/28 N36°42.00' W106°28.00'.
02 AGL B 140 MSL to F ALS 202/28 N36°58.00' W106°09.00'.
SFC B 160 MSL to G ALS 112/26 N37°06.00' W105°22.00'.
02 AGL B 130 MSL to H ALS 069/22 N37°24.00' W105°22.00'.
02 AGL B 160 MSL to I ALS 072/46 N37°25.00' W104°52.00'.
02 AGL B 100 MSL to J PUB 178/18 N38°00.00' W104°28.00'.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route. IMC Terrain Following (TF) authorized within major command guidance.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) This route restricted to turboprop, tiltrotor, and rotary wing aircraft only.
(2) This route conflicts with IR-109, IR-409, IR-415-424 and VR-1175. To deconflict with IR-409 or IR-415-424, contact 140th OG, Buckley ANGB, DSN 847-9470/71/72. To deconflict with IR-109, contact 27 OSS, Cannon AFB, DSN 681-2276/7634.
(3) Alternate Exit: Points F, G and I.
(4) Avoid Abiquiu Dam at N36-15.0 W106-26.0 by 1 NM or 1000' AGL.
(5) Avoid Canon de San Diego, N35-46.0 W106-41.0 by 3 NM.
(6) Avoid the following airfields by 2 NM or 2000' AGL:
(a) Ghost Airfield at N36-18.0 W106-29.0;
(b) Cuchara Valley at N37-31.0 W105-01.0;
(c) Johnson at N37-42.0 W104-47.0.
(7) CAUTION: Tower, 275' AGL at N37-23.82 W105-24.35. This route conflicts.
(8) CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at flight altitudes less than 300' AGL. Contact 58 OSS/OSO DSN 263-5701/5797 to obtain a current and complete fax list of unchummed/uncharted obstructions.
(9) Contact 58 OSS/OSOA, DSN 263-5701/5797/5888, C505-853-5979/5888/5701 for a fax or email of the most current Avoid Areas.
(10) When contacting the Scheduling Activity, be prepared to provide arrival time at Checkpoint F in addition to entry/exit points and times.
(11) CAUTION: Aircraft utilizing IR-137 routing cross IR-109 at multiple locations. All aircraft utilizing this routing (VFR and IFR) will report position updates upon reaching IR-137 Point (D) and IR-137 Point (F) on UHF 255.4 to avoid potential IR-109 traffic conflicts.
(12) CAUTION: Frequent tilt-rotor VFR low level traffic transits east to west on the San Pedro cutoff (identified as IR-137 at N36-10.08 W106-23.91 to IR-308 at N36-14.02 W106-53.84) as well as between IR-137 Point (E) to IR-308 Point (G), and IR-137 Point (D) to IR-308 Point (H). VFR traffic will monitor
and transmit position updates on UHF 255.4 when using these cutoffs to avoid potential conflicts with other IR-308 and IR-109 traffic.

**FSS Within 100 NM Radius:**
ABQ, DEN

**IR-139**

**ORIGINATING ACTIVITY:** 301 OG/SUA, NAS JRB Fort Worth, TX 76127 DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 0700-2200 local; OT by NOTAM

**ROUTE DESCRIPTION:**

**TERRAIN FOLLOWING OPERATIONS:** Authorized A to E.

**ROUTE WIDTH -** 5 NM either side of centerline A to D; 10 NM either side of centerline D to E; 5 NM either side of centerline E to F.

**Special Operating Procedures:**
(1) Route is designed MARSA and MARSA shall also apply between aircraft flying VR-158 by utilizing (See and Avoid) and/or route scheduling.
(2) Route will be flown between 300 and 600 KIAS.
(3) Alternate Entry Points: C, D, and E.
(4) Alternate Exit Points: D and E.
(5) Aircraft will report Point D to Fort Worth ARTCC 381.65.
(6) Aircraft will report Point E to Gray RAPCON 244.0.
(7) Aircraft must be received prior to entering the Hood MOA airspace.
(8) Aircraft will not enter R-6302 without clearance from Hood Radio, Shoal Creek Range Officer, or FAC.
(9) Aircraft will remain at or above 1000' AGL from Point E until entering scheduled/assigned R-6302 airspace.
(10) Route is approved LOWAT authorized between Points D and E.
(11) Units requesting IR-139 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
(12) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

**FSS Within 100 NM Radius:**
CXO, FTW, SJT

**IR-142**

**ORIGINATING ACTIVITY:** 49 OSS/OSOA, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-2638, C575-572-2638.

**SCHEDULING ACTIVITY:** 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

**HOURS OF OPERATION:** 0700-2300L

**ROUTE DESCRIPTION:**

**Altitude Data** | **Pt** | **Fac/Rad/Dist** | **Lat/Long**
---|---|---|---
As assigned to A | MQP 260/22 | N32°43.00' | W98°26.30'
05 AGL B 30 MSL to B | MQP 220/2 | N32°42.00' | W98°02.00'
01 AGL B 30 MSL to C | MQP 175/11 | N32°32.50' | W98°00.00'
01 AGL B 60 MSL to D | AGJ 007/49 | N31°58.80' | W97°56.50'
01 AGL B 60 MSL to E | AGJ 017/24 | N31°33.80' | W97°58.00'
10 AGL B 60 MSL to F | AGJ 050/21 | N31°23.00' | W97°48.90'

**TERRAIN FOLLOWING OPERATIONS:** Authorized A to E.

**ROUTE WIDTH -** 5 NM either side of centerline A to D; 10 NM either side of centerline D to E; 5 NM either side of centerline E to F.

**Special Operating Procedures:**
(1) Aircraft must enter R-6302 without clearance from Hood Radio, Shoal Creek Range Officer, or FAC.
(2) Aircraft will remain at or above 1000' AGL from Point E until entering scheduled/assigned R-6302 airspace.
(3) Route is approved LOWAT authorized between Points D and E.
(4) Units requesting IR-139 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
(5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

**FSS Within 100 NM Radius:**
CXO, FTW, SJT

**IR ROUTES**

2-52
Special Operating Procedures:
(1) Request use through 49 OSS/OSOS 24 hours in advance and between 0730-1630 local, Mon-Fri.
(2) Route is only authorized to be flown by GAF Tornado aircraft to provide an alternate entry into IR-192.
(3) The GAF is authorized to fly down to 100’ AGL during daylight/VFR conditions and 200’ AGL at night and in IMC.
(4) Route segments A through H designated as maneuvering area and cleared for LOWAT.
(5) Route width excludes the airspace within R-5107C, R-5107H, and R-5107J when those areas are active.
(6) MARSA applies at entry, along the route and at exit. MARSA is accomplished by scheduling and see and avoid. IR-133 and IR-142 will not be used concurrently.
(7) Route conflicts with Pecos MOA from Point E to G. Ensure deconfliction has been accomplished through 49 OSS/OSOS.
(8) Route conflicts with VR-176 is accomplished by 49 OSS/OSOS. Contact applicable scheduling authority for deconfliction with non-49 WG conflicting routes.
(9) Alternate entry points: None.
(10) Alternate exit points: I - I2 (to IR-192 only).
(11) Delays to clearance might occur due to Sierra Blanca Regional Airport traffic.
(12) Aircraft transitioning from IR-142 into IR-192 must contact the ARTCC (257.6) prior to the exit point I level at 12,000’ MSL. Communications must be maintained with ARTCC and a clearance must be received, prior to entering the second IR route.
(13) In the event of lost communications in the transition corridor between the IR routes, the aircraft is expected to maintain VFR conditions and return to Holloman AFB by the most direct routing; or if in IFR conditions, squawk 7600 for one minute then return to assigned code, climb and maintain 12,000’ MSL, and return to Holloman AFB by the most direct routing.
(14) Numerous towers, avoidance and noise sensitive areas exist within the MTR. You must receive the MTR brief and associated products from 49 OSS/OSOA prior to flying the route.

FSS Within 100 NM Radius:
ABQ

IR-145

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276, C580-213-6276, VANCEAIRSPACE at USAF.MIL.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to A END 219/17 N36°08.00’ W98°10.00’
05 AGL B 50 MSL to B END 224/26 N36°03.50’ W98°19.00’
05 AGL B 30 MSL to C END 228/49 N35°51.00’ W98°44.00’
05 AGL B 40 MSL to D MMB 158/37 N35°44.00’ W99°43.00’
05 AGL B 40 MSL to E MMB 171/17 N36°04.00’ W99°53.00’
05 AGL B 40 MSL to F MMB 114/44 N35°56.00’ W99°08.00’
05 AGL B 36 MSL to G MMB 063/48 N36°34.00’ W98°56.00’
05 AGL B 60 MSL to H END 290/51 N36°42.00’ W98°53.00’

ROUTE WIDTH • 3 NM either side of centerline from A to D; 3 NM east and 6 NM west of centerline D to E; 3 NM south and 6 NM north of centerline from E to F; 5 NM east and 3 NM west of centerline from F to G; 3 NM either side of centerline from G to H.

Special Operating Procedures:
(1) Aircrews may use 265.25 for interplane frequency.
(2) Report Point E to Kansas City Center 379.2.
(3) Cross 3 NM northeast of G at or above 40 MSL, to cross above SR253/235.
(4) Cross Point H at 60 MSL. Contact Vance Approach 346.325 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
(5) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.
(6) Alternate Entry: C and E.
(7) Alternate Exit: E and F.

FSS Within 100 NM Radius:
ICT

IR-146

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276/7820, C580-213-6276/7820.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to A END 219/17 N36°08.00’ W98°10.00’
05 AGL B 50 MSL to B END 224/26 N36°04.00’ W98°19.00’
05 AGL B 33 MSL to C END 232/45 N35°56.00’ W98°41.00’
05 AGL B 32 MSL to D END 270/48 N36°25.00’ W98°54.00’
05 AGL B 30 MSL to E MMB 033/41 N36°51.00’ W99°18.00’
05 AGL B 37 MSL to F MMB 015/46 N37°02.00’ W99°29.00’
05 AGL B 36 MSL to G END 292/48 N36°42.00’ W98°48.00’
IR ROUTES

05 AGL B 36 MSL to H END 252/35 N36°13.00' W98°37.00'
05 AGL B 60 MSL to I END 239/26 N36°09.00' W98°24.00'

ROUTE WIDTH - 3 NM either side of centerline from A to C; 3 NM east and 5 NM west of centerline from C to 12 NM beyond C; 3 NM either side of centerline from 12 NM beyond C to F; 3 NM either side of centerline from 12 NM beyond F to I.

Special Operating Procedures:
(1) Aircrews may use 265.25 for interplane frequency.
(2) Cross 2 NM southeast of Point H at or above 40 MSL.
(3) Cross Point I at 60 MSL. Contact Vance Approach 346.325 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
(4) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.

FSS Within 100 NM Radius:
ICT, MLC

IR-147

ORIGINATING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363 DSN 876-6518/4075, C361-516-6518/4075. 0800-1530 CST Mon-Fri (excluding holidays or field closed by NOTAM).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise to 30 minutes after
Sunset, daily

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A THX 182/15 N28°15.50' W98°12.00'
30 MSL B 90 MSL to B THX 193/25 N28°06.50' W98°19.50'
30 MSL B 90 MSL to C COT 132/44 N27°53.00' W98°36.00'
30 MSL B 90 MSL to D LRD 095/41 N27°18.50' W98°41.00'
30 MSL B 90 MSL to E LRD 081/24 N27°28.50' W98°58.50'
30 MSL B 90 MSL to F LRD 049/28 N27°43.50' W98°58.00'
30 MSL B 90 MSL to G LRD 047/51 N27°57.00' W98°37.00'
Entire route designated a maneuver area.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 4 NM either side of centerline from C to G.

Special Operating Procedures:
(1) Maximum airspeed is 480 KIAS.
(2) MARSA is provided by scheduling and See and Avoid. All users of IR-147, or any part thereof, shall coordinate route usage with the scheduling activity. A minimum of 10 minutes longitudinal separation between flights is required.
(3) The lost communications route and altitude for TRAWING TWO aircraft shall be from G direct to Waade or Rivera (as appropriate), climbing to FL 190. All other users shall file a DD Form 175 and indicate in the remarks the desired lost communications altitude.
(4) All Entry/Exit points are compulsory reporting points.
(5) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.
(6) The route is designed for simulated road reconnaissance training missions and is primarily utilized by multi-plane jet formation.
(7) No practice attacks on simulated targets shall descend below 3000' MSL. Uncontrolled airports and inhabited areas shall be avoided by 3000' vertically and 1 NM horizontally.
(8) All aircraft shall report C to Houston ARTCC 307.2 for restriction to cross the corridor between NG1 MOA and the NLR 3 MOA. If aircraft are unable to contact Houston ARTCC at C, the corridor shall be crossed at an altitude block of 3000' through 5000' between C-D and Pts. E-F.

FSS Within 100 NM Radius:
SJT

IR-148

ORIGINATING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363 DSN 876-6518/4075, C361-516-6518/4075. 0800-1530 CST Mon-Fri (excluding holidays or field closed by NOTAM).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daily 0600-2230 local

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A THX 324/19 N28°47.00' W98°19.00'
05 AGL B 20 MSL to B THX 008/37 N29°06.00' W97°57.00'
05 AGL B 20 MSL to C THX 015/54 N29°20.00' W97°45.00'
05 AGL B 20 MSL to D SAT 080/56 N29°40.00' W97°23.00'
05 AGL B 20 MSL to E CWK 136/40 N29°51.00' W97°03.00'
05 AGL B 20 MSL to F CWK 141/59 N29°33.00' W96°55.00'
05 AGL B 20 MSL to G SAT 091/61 N29°29.00' W97°19.00'
05 AGL B 20 MSL to H THX 053/42 N28°51.00' W97°27.00'

ROUTE WIDTH - 3 NM either side of centerline from A to H.

Special Operating Procedures:
(1) Maximum airspeed is 480 KIAS.
IR ROUTES

IR ROUTES

ROUTE WIDTH - 5 NM either side of centerline from A to B; 3 NM either side of centerline from B to D; 4 NM either side of centerline from D to F; 5 NM either side of centerline from F to H; 4 NM either side of centerline from H to I.

Special Operating Procedures:

(1) Alternate Entry: D.
(2) Alternate Exit: G and H.
(3) MARSAP applies after aircraft have passed the Entry point and until standard ATC separation is established after exiting the route.
(4) Maximum airspeed is 520 KIAS. All entry and exit points are compulsory reporting points.
(5) Contact Houston ARTCC 307.2 at H for flight following to I.
(6) The lost communications route and altitude for TRAWING TWO aircraft shall be: I direct to WAADE or RVERA (as appropriate) climbing to FL 190 and execute the TACAN approach for landing at Kingsville NAS.
(7) When exiting the route at I, avoid R-6312 (SFC B 12,000 AGL) 20 NM northeast.
(8) B-52 aircraft periodically operate VFR from surface to 1000' AGL from C to F. Call sign will be SOPHY 21/22/23, monitor 361.4/259.1.
(9) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.
(10) IR-149 conflicts with RE-170 between Points D and F. Aircrews will deconflict with IR-170 by scheduling a block time with 87FTS/DOS Laughlin AFB at DSN 732-5484, C380-298-5484.
(11) Make the following call on 255.4 approaching IR-199 Point D: Attention all IR-170 aircraft: (Callsign, number, type) approaching IR-170 Point C at (altitude, speed). Example: Attention all IR-170 aircraft: Tiger 01, 2 T-1s approaching IR-170 Point C, 500' AGL, 300 knots.
(12) Climb to cross F at/above 1000' AGL.
(13) CAUTION multiple wind turbines 430' AGL, N29-12.93 W100-08.33, Located east of centerline points E to F.

FSS Within 100 NM Radius:

CXT, SJT

IR-149

ORIGINATING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363 DSN 876-6518/4075, C361-516-6518/4075 0800-1530 CST Mon-Fri (excluding holidays or field closed by NOTAM).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daily 0600-2230 local

ROUTE DESCRIPTION:

Altitude Data
Pt Fac/Rad/Dist Lat/Long

As assigned to A SAT 263/43 N29°39.50' W99°16.50'
05 AGL B 30 MSL to B RSG 084/37 N29°58.00' W99°35.00'
05 AGL B 30 MSL to C RSG 074/31 N30°04.00' W99°42.00'
05 AGL B 50 MSL to D RSG 141/16 N29°47.00' W100°09.00'
05 AGL B 30 MSL to E DLF 082/30 N29°22.00' W100°12.00'
10 AGL B 30 MSL to F DLF 132/39 N28°52.00' W100°17.00'
05 AGL B 50 MSL to G COT 269/54 N28°35.00' W100°08.00'
05 AGL B 50 MSL to H COT 213/34 N28°02.00' W9°33.00'
05 AGL B 30 MSL to I LRD 040/28 N27°47.00' W9°01.00'

SCHEDULING ACTIVITY: Continuous

FSS Within 100 NM Radius:

CXT, SJT

IR-150


HOURS OF OPERATION: Continuous
IR ROUTES

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 130 MSL to or as assigned (TFR Initiation Point)</td>
<td>A</td>
<td>TCC 311/17</td>
<td>N35°24.50' W103°48.50'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to turn right to</td>
<td>B</td>
<td>TCC 011/17</td>
<td>N35°26.50' W103°28.00'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to turn right to get to K1</td>
<td>D</td>
<td>TCC 047/39</td>
<td>N35°31.00' W102°55.00'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to turn right to get to the Re-Entry</td>
<td>DD</td>
<td>DHT 194/28</td>
<td>N35°40.50' W102°47.50'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to turn right to get to the Re-Entry</td>
<td>E</td>
<td>DHT 224/20</td>
<td>N35°54.00' W102°53.50'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to turn right to get to the Re-Entry</td>
<td>EE</td>
<td>DHT 232/19</td>
<td>N35°57.00' W102°54.00'</td>
</tr>
<tr>
<td>0.5 AGL B 60 MSL to turn right to get to the Re-Entry</td>
<td>F</td>
<td>DHT 308/22</td>
<td>N36°22.00' W102°50.00'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to turn left to get to the Re-Entry</td>
<td>G</td>
<td>TBE 091/42</td>
<td>N37°06.00' W102°44.50'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to turn right to get to the Re-Entry</td>
<td>H</td>
<td>TBE 080/34</td>
<td>N37°14.00' W102°53.50'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to turn right to get to the Re-Entry</td>
<td>I</td>
<td>TBE 081/29</td>
<td>N37°13.00' W103°00.00'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to turn right to get to the Re-Entry</td>
<td>J</td>
<td>TBE 082/20</td>
<td>N37°13.00' W103°11.50'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to (Start Maneuver Area) turn right to</td>
<td>K</td>
<td>TBE 054/12</td>
<td>N37°20.50' W103°22.00'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to turn left to</td>
<td>L</td>
<td>TBE 005/36</td>
<td>N37°50.00' W103°22.50'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to turn right to</td>
<td>M</td>
<td>TBE 016/47</td>
<td>N37°56.50' W103°08.00'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to (End Maneuver area) (TA/TFR Termination Point) turn right to</td>
<td>N</td>
<td>TBE 042/52</td>
<td>N37°46.00' W102°43.50'</td>
</tr>
<tr>
<td>67 MSL to turn right to</td>
<td>O</td>
<td>TBE 054/48</td>
<td>N37°35.00' W102°40.50'</td>
</tr>
</tbody>
</table>

67 MSL to S TBE 074/36 N37°18.00' W102°51.50' (TA/TFR Initiation Point) turn right to

(Start Maneuver Area) turn right to

PMSV CONTACTS: Primary home station. Alternate Dyess (DYS 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF)/Visual Contour (VC) Operations are authorized IAW Command Directives within the published altitude blocks from A to N, S to N, on the Re-entry. Terrain avoidance (TA) may begin at D and again at S on the (Re-entry). When command directives preclude TF/TA/VMC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established to provide 200' vertical clearance of known man-made obstructions within the route width. Command directives may require additional obstructions clearance for TF/TA/VMC operations. The route is designated non-mountainous. Regulations governing operations below 500' AGL must be complied with. The route corridor provides airspace for 500' lateral separation from man-made obstacles. Obstructions under 200' AGL were not considered in route design. Aircrews must be aware of charted airports within or near route corridor limits.

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from A to E; 3 NM either side of centerline from E to G; 4 NM either side of centerline from G to J; 3 NM left and 4 NM right of centerline from J to K; 4 NM left and 8 NM right of centerline from K to L; 4 NM either side of centerline from L to SA; Re-Entry; 4 NM either side of centerline from N1 to J1; 3 NM left and 4 NM right of centerline from J1 to K1.

Special Operating Procedures:

(1) If route is not available for use contact Dyess AFB airspace management for additional information.

(2) Aircraft exiting the route or using the ALPHA Re-entry will cross the end maneuver area point at the specified minimum IFR altitude.

(3) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.

(4) Lost communication (LC) procedures: Route LC altitude is 11,000' MSL.

(5) Route is separated from conflicting routes by coordinated scheduling.

(6) Aircrews should be especially vigilant when flying between N36-34.0 W102-49.0 and N36-42.0 W102-48.0 due to possible VFR traffic to include B-1’s and B-52’s on VR-1175 and VR-1176.

(7) Centerline between turn points will be depicted as a 7.5 NM arc unless otherwise specified.

(8) Route will be open 0001Z 24 Apr through 2359Z 8 October. This route will be closed at all other times.

(9) Noise Sensitive Areas: Avoid by 1000' or 1/4 NM unless otherwise noted.

(a) Residence at N37-49.2 W103-14.4;
IR ROUTES

(b) Residence at N37-05.2 W102-44.6;
(c) Residence at N37-20.4 W103-22.9;
(d) Residence at N37-14.2 W103-14.9.

(10) This route effects Two Buttes MOA operations which is controlled by Buckley ANG/120FS down to 300’ AGL. Advise 120FS; DSN 847-9470 or FAX 847-9612, C720-847-9612 on estimated entry and exit times of the Two Buttes MOA.

(11) All aircraft will make an (in-the-blind) call on 370.925 prior to entering the lateral limits of Two Buttes MOA. This call is to alert aircraft operating in the MOA of your presence. This is not intended to be used as a separation tool, only a (heads up call).

(12) Uncharted obstructions and bird attractants:
(a) Uncharted antenna approx. 200’ AGL, N37°20.33’ W103°22.65’; abeam Pt K.
(b) Cattle yard at N36°09.54’ W102°52.32’ (bird attractant).

IR-154

ORIGINATING ACTIVITY: 97 OSS/DOA, 101 South Sixth Street, Bldg 225, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.


HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION:

Altitude Data  Pt Fac/Rad/Dist Lat/Long
As assigned to  A LBB 106/39 N33°24.50’ W101°13.70’
SFC B 100 MSL to  B LBB 109/54 N33°15.00’ W100°58.70’
SFC B 50 MSL to  C DYS 309/44 N32°56.00’ W100°29.30’
SFC B 50 MSL to  D DYS 312/42 N32°56.00’ W100°25.50’
SFC B 50 MSL to  E DYS 316/44 N32°59.00’ W100°24.50’
SFC B 50 MSL to  F DYS 326/82 N33°37.00’ W100°38.50’
SFC B 50 MSL to  G CDS 192/46 N33°39.00’ W100°38.30’
SFC B 50 MSL to  H CDS 197/24 N34°00.30’ W100°30.50’
SFC B 50 MSL to  I CDS 199/23 N34°01.70’ W100°30.70’
SFC B 50 MSL to  J PNH 123/51 N34°40.70’ W100°55.30’
SFC B 50 MSL to  K PNH 123/48 N34°42.50’ W100°58.00’
SFC B 50 MSL to  L PNH 127/48 N34°40.30’ W101°01.00’
SFC B 50 MSL to  M PNH 137/55 N34°29.00’ W101°03.30’
SFC B 50 MSL to  N LBB 039/51 N34°14.50’ W101°07.70’
SFC B 70 MSL to  O LBB 042/48 N34°11.00’ W101°09.00’
70 MSL to  P LBB 042/38 N34°05.00’ W101°18.00’
70 MSL to  Q LBB 043/27 N33°58.00’ W101°29.00’

FSS Within 100 NM Radius: 
ABQ, DEN

IR-155

ORIGINATING ACTIVITY: 97 OSS/DOA, 101 South Sixth Street, Bldg 225, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.


HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION:

Altitude Data  Pt Fac/Rad/Dist Lat/Long
As assigned to  A LBB 098/38 N33°29.70’ W101°12.20’
SFC B 90 MSL to  B LBB 080/43 N33°41.30’ W101°03.80’
IR ROUTES

SFC B 50 MSL to C CDS 197/24 N34°00.30' W100°30.50'
SFC B 50 MSL to D CDS 197/22 N34°02.50' W100°29.50'
SFC B 50 MSL to E PNH 099/48 N34°59.50' W100°46.00'
SFC B 50 MSL to F PNH 097/46 N35°01.50' W100°47.50'
SFC B 50 MSL to G PNH 094/26 N35°08.50' W101°11.30'
SFC B 50 MSL to H PNH 098/23 N35°07.60' W101°14.50'
SFC B 50 MSL to I PNH 105/24 N35°04.50' W101°15.00'
SFC B 50 MSL to J PNH 137/55 N34°29.00' W101°03.30'
SFC B 50 MSL to K LBB 040/51 N34°14.50' W101°07.00'
SFC B 70 MSL to L LBB 042/48 N34°11.00' W101°09.00'
70 MSL to M LBB 042/38 N34°05.00' W101°18.00'
70 MSL to N LBB 043/27 N33°58.00' W101°29.00'

FSS Within 100 NM Radius:
FTW, SJT

IR-164


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A PGO 188/29 N34°12.00' W94°44.00'
01 AGL B 40 MSL to B PGO 116/43 N34°19.00' W93°51.00'
01 AGL C 40 MSL to C PGO 082/48 N34°44.00' W93°38.00'
01 AGL D 40 MSL to D PGO 063/34 N35°40.00' W93°58.00'
01 AGL E 40 MSL to E FSM 134/16 N35°11.00' W94°04.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline from B to D; 5 NM left and 3 NM right of centerline D to E.

Special Operating Procedures:
(1) Alternate Entry: B.
(2) Alternate Exit: D.
(3) Participating aircraft separation on IR-117, 120, 121, 164, VR-189, 1102, 1103, 1104, 1113, and 1130 as well as in the Hog MOA and Arrowhead MOA is MARSA through see and avoid as well as restrictive scheduling. All legs of the route that enter the Hog MOA (B-F) are prohibited while the Hog MOA is active. If the Hog MOA is active, adjust route times.
(4) Report Hog MOA entry/exit and applicable MTR points in the blind on the Hog MOA tactical frequency 307.375.
(5) CAUTION; Multiple converging MTRs (Points B-E) and IP to DZ routes (Points D-E) even when the Hog MOA is not active.
(6) Clearance to enter R-2402 must be received on 339.7.
(7) Avoid flight within 1500'AGL/3 NM all charted airports when practicable.
(8) CAUTION; Point B crossing MTR (IR-121/VR-1103).
(9) Uncharted Obstructions:
(a) Tower (N35 08.37 W094 03.57) estimated altitude 200' AGL.
(b) Tower (N34 12.5 W094 14.00) estimated altitude 200' AGL.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 1.5 NM either side of centerline from A to B; 5 NM either side of centerline from B to K; 2 NM either side of centerline K to N.

Special Operating Procedures:
(1) Route will be flown at or below 400 KIAS.
(2) Route designated MARSA. MARSA between IR-154 and IR-155 is accomplished through restrictive scheduling.
(3) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
(4) Alternate Exit: E. Pilots utilizing E to exit shall contact ZAB ARTCC on 351.7/127.85 prior to the exit point. If unable to contact ZAB ARTCC 351.7/127.85 prior to the exit point, maintain 5000' MSL and contact Amarillo APP CON 307.0/119.5 at PNH078029 (GOONI).
(5) Deconflict with: VR-1141, VR-1142 (Sheppard AFB); and SR-274, SR-275 (Vance AFB) with appropriate route schedulers.
(6) Noise Sensitive Area: Avoid overflight of the town of Goodnight near I below 1000' AGL.
(7) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.
(8) Entire route susceptible to wild fires. Aircrews should check NOTAMs before scheduling.
(9) To report fires, uncharted obstructions or any other operational issues requiring attention on this route, please send an email to: Altus.airspace@altus.af.mil.

TERRAIN FOLLOWING OPERATIONS:

ROUTE WIDTH:

SFC B 50 MSL to C CDS 197/24
SFC B 50 MSL to D CDS 197/22
SFC B 50 MSL to E PNH 099/48
SFC B 50 MSL to F PNH 097/46
SFC B 50 MSL to G PNH 094/26
SFC B 50 MSL to H PNH 098/23
SFC B 50 MSL to I PNH 105/24
SFC B 50 MSL to J PNH 137/55
SFC B 50 MSL to K LBB 040/51
SFC B 70 MSL to L LBB 042/48
70 MSL to M LBB 042/38
70 MSL to N LBB 043/27

IR ROUTES

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A PGO 188/29 N34°12.00' W94°44.00'
01 AGL B 40 MSL to B PGO 116/43 N34°19.00' W93°51.00'
01 AGL C 40 MSL to C PGO 082/48 N34°44.00' W93°38.00'
01 AGL D 40 MSL to D PGO 063/34 N35°40.00' W93°58.00'
01 AGL E 40 MSL to E FSM 134/16 N35°11.00' W94°04.00'

TERRAIN FOLLOWING OPERATIONS: VFR terrain following authorized for the entire route. When IMC, maintain at least MAJCOM directed minimum IFR altitudes for each segment to assure terrain/obstacle clearance.

ROUTE WIDTH - 1.5 NM either side of centerline from A to B; 5 NM either side of centerline from B to K; 2 NM either side of centerline K to N.

Special Operating Procedures:
(1) Route will be flown at or below 400 KIAS.
(2) Route designated MARSA. MARSA between IR-154 and IR-155 is accomplished through restrictive scheduling.
(3) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
(4) Alternate Exit: E. Pilots utilizing E to exit shall contact ZAB ARTCC on 351.7/127.85 prior to the exit point. If unable to contact ZAB ARTCC 351.7/127.85 prior to the exit point, maintain 5000' MSL and contact Amarillo APP CON 307.0/119.5 at PNH078029 (GOONI).
(5) Deconflict with: VR-1141, VR-1142 (Sheppard AFB); and SR-274, SR-275 (Vance AFB) with appropriate route schedulers.
(6) Noise Sensitive Area: Avoid overflight of the town of Goodnight near I below 1000' AGL.
(7) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.
(8) Entire route susceptible to wild fires. Aircrews should check NOTAMs before scheduling.
(9) To report fires, uncharted obstructions or any other operational issues requiring attention on this route, please send an email to: Altus.airspace@altus.af.mil.
The lost communication route and altitude for all TRAWING TWO aircraft shall be: J, climb to 5,000', proceed direct BALTS or BRAMA, complete the TACAN IAP at NQI for the runway in use.

If Kingsville NAS is not the filed destination, all other proposed users shall exit at H, turn left, climb and maintain 7000' MSL and proceed as per the filed flight plan, while climbing, attempt to contact Houston ARTCC 307.2 for further routing. If unable to contact the center, proceed to filed destination via route filed in flight plan or coded recovery route. CAUTION: Do not enter R-6312 without Yankee Target Control approval.

All Entry and Exit points shall be compulsory reporting points.

ATC frequencies: A to H, 307.2 or as assigned; H to J NQI ATCF or as assigned.

Maintain 1500' AGL within 3 NM of Wyatt Ranch Airport located at N27-25.2 W98-36.5 2 NM W of E.

Scheduling of, or amendments to, shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.

Use caution between A-C and H-I for extensive windmill farm activity and construction with obstructions up to 716' AGL.

Use caution between F and G for extensive wind farm on route center-line in vicinity of N27-36.33 W98-48.11 with obstructions to 497' AGL.

Use caution approaching point D. Moored balloons/aerostat up to 2,400' AGL, located approximately 3 NM right of centerline at MFE 002/45.9 or N26-55-30.97 W098-04-18.23.

As assigned to

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>BRO 359/39</td>
<td>N26°33.70'</td>
</tr>
<tr>
<td>B</td>
<td>BRO 332/53</td>
<td>W97°16.50'</td>
</tr>
<tr>
<td>C</td>
<td>NQI 202/41</td>
<td>N26°53.00'</td>
</tr>
<tr>
<td>D</td>
<td>LRD 103/47</td>
<td>W98°08.00'</td>
</tr>
<tr>
<td>E</td>
<td>LRD 156/34</td>
<td>N26°56.00'</td>
</tr>
</tbody>
</table>

The lost communication route and altitude for all TRAWING TWO aircraft shall be: J, climb to 5,000', proceed direct BALTS or BRAMA, complete the TACAN IAP at NQI for the runway in use.

If Kingsville NAS is not the filed destination, all other proposed users shall exit at H, turn left, climb and maintain 7000' MSL and proceed as per the filed flight plan, while climbing, attempt to contact Houston ARTCC 307.2 for further routing. If unable to contact the center, proceed to filed destination via route filed in flight plan or coded recovery route. CAUTION: Do not enter R-6312 without Yankee Target Control approval.

All Entry and Exit points shall be compulsory reporting points.

ATC frequencies: A to H, 307.2 or as assigned; H to J NQI ATCF or as assigned.

Maintain 1500' AGL within 3 NM of Wyatt Ranch Airport located at N27-25.2 W98-36.5 2 NM W of E.

Scheduling of, or amendments to, shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.

Use caution between A-C and H-I for extensive windmill farm activity and construction with obstructions up to 716' AGL.

Use caution between F and G for extensive wind farm on route center-line in vicinity of N27-36.33 W98-48.11 with obstructions to 497' AGL.

Use caution approaching point D. Moored balloons/aerostat up to 2,400' AGL, located approximately 3 NM right of centerline at MFE 002/45.9 or N26-55-30.97 W098-04-18.23.

As assigned to

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>BRO 359/39</td>
<td>N26°33.70'</td>
</tr>
<tr>
<td>B</td>
<td>BRO 332/53</td>
<td>W97°16.50'</td>
</tr>
<tr>
<td>C</td>
<td>NQI 202/41</td>
<td>N26°53.00'</td>
</tr>
<tr>
<td>D</td>
<td>LRD 103/47</td>
<td>W98°08.00'</td>
</tr>
<tr>
<td>E</td>
<td>LRD 156/34</td>
<td>N26°56.00'</td>
</tr>
</tbody>
</table>

The lost communication route and altitude for all TRAWING TWO aircraft shall be: J, climb to 5,000', proceed direct BALTS or BRAMA, complete the TACAN IAP at NQI for the runway in use.

If Kingsville NAS is not the filed destination, all other proposed users shall exit at H, turn left, climb and maintain 7000' MSL and proceed as per the filed flight plan, while climbing, attempt to contact Houston ARTCC 307.2 for further routing. If unable to contact the center, proceed to filed destination via route filed in flight plan or coded recovery route. CAUTION: Do not enter R-6312 without Yankee Target Control approval.

All Entry and Exit points shall be compulsory reporting points.

ATC frequencies: A to H, 307.2 or as assigned; H to J NQI ATCF or as assigned.

Maintain 1500' AGL within 3 NM of Wyatt Ranch Airport located at N27-25.2 W98-36.5 2 NM W of E.

Scheduling of, or amendments to, shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.

Use caution between A-C and H-I for extensive windmill farm activity and construction with obstructions up to 716' AGL.

Use caution between F and G for extensive wind farm on route center-line in vicinity of N27-36.33 W98-48.11 with obstructions to 497' AGL.

Use caution approaching point D. Moored balloons/aerostat up to 2,400' AGL, located approximately 3 NM right of centerline at MFE 002/45.9 or N26-55-30.97 W098-04-18.23.

As assigned to

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>BRO 359/39</td>
<td>N26°33.70'</td>
</tr>
<tr>
<td>B</td>
<td>BRO 332/53</td>
<td>W97°16.50'</td>
</tr>
<tr>
<td>C</td>
<td>NQI 202/41</td>
<td>N26°53.00'</td>
</tr>
<tr>
<td>D</td>
<td>LRD 103/47</td>
<td>W98°08.00'</td>
</tr>
<tr>
<td>E</td>
<td>LRD 156/34</td>
<td>N26°56.00'</td>
</tr>
</tbody>
</table>
Special Operating Procedures:
(1) Route will be flown a 240-420 kt, low level navigation.
(2) Aircraft shall be scheduled with a minimum of 10 minutes longitudinal separation.
(3) The primary method of invoking MARSA shall be by scheduling. All proposed users of IR-167 on any other approved IR route that is common with IR-167 or any part thereof, shall coordinate that route with TRAWING TWO, Kingsville NAS, TX.
(4) MARSA applies after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.
(5) Remain outside of 3 NM of the Johnson Airport located N26-34-00 W97-26-00 between A and B.
(6) The lost communication route and altitude for TRAWING TWO aircraft shall be: E, turn right, climb to 5,000', proceed direct BALTS or BRAMA, complete the TACAN IAP at NQI for the runway in use.
(7) All other proposed users shall file a DD-175 and indicate in remarks the lost communication altitude.
(8) All entry and exit points shall be compulsory reporting points.
(9) ATC frequencies: A to D is 291.6 or as assigned; D to E 307.2.
(10) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.
(11) Use caution between D-E in vicinity of N27-07.31 W98-51.95 for extensive windmill farm right of center-line with obstructions to 497’ AGL.
(12) Use caution approaching Point C. Moored balloon/aerostat up to 2,400’ AGL, located approximately 3 NM right of centerline at MFE 002/45.9 or N26-55-30.97 W098-04-18.23.

FSS Within 100 NM Radius:
SJT

IR-169

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Ste. 6, Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd Street, Laughlin AFB, TX 78843 DSN 732-5484, C830-298-5484.

Scheduling hours 0730-1630 local Mon-Fri (excluding holidays)

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A DLF 305/21 N29°35.70’ W101°04.30’
SFC B 50 MSL to B DLF 314/30 N29°45.00’ W101°08.20’
SFC B 50 MSL to C DLF 324/41 N29°58.00’ W101°09.00’
SFC B 50 MSL to D RSG 281/48 N30°17.62’ W101°09.90’
SFC B 50 MSL to E RSG 283/49 N30°19.50’ W101°10.00’
SFC B 50 MSL to F DLF 305/71 N30°09.00’ W101°47.00’
SFC B 60 MSL to G FST 090/72 N30°43.00’ W101°37.00’
SFC B 50 MSL to H SJT 248/54 N31°11.00’ W101°29.00’
SFC B 50 MSL to I SJT 236/44 N31°04.50’ W101°14.50’
SFC B 70 MSL to J SJT 209/35 N30°55.00’ W100°53.00’

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route and route is VMC only.

ROUTE WIDTH - 4 NM left and 3 NM right side of centerline from A to E; 13 NM either side of centerline from E to H; 13 NM either side of centerline tapering to 10 NM either side of centerline from H to I; 10 NM either side of centerline tapering to 5 NM either side of centerline from I to J.

Special Operating Procedures:
(1) Route:
(a) Consult Laughlin NOTAMs (KDLF) for most current notices.
(b) This route is covered by the following maps and charts: San Antonio Sectional, IFR Enroute Low Altitude - U.S. L-19, TPC H-23B.
(c) Alternate Entry: B and D.

(2) Scheduling:
(a) Request for use shall be with the Scheduling Activity during the above scheduling hours.
(b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.

(3) Restrictions:
(a) For environmental reasons, this route may only be flown by T-1 and T-38 aircraft and T-6 aircraft for Annual Flight Evaluations.
(b) The primary means of invoking MARSA shall be by scheduling and applies after aircraft have passed the entry point until standard ATC separation is established after exiting the route.
(c) Aircraft unable to meet their assigned entry time +/- 3 minutes must not enter the route.
(d) Aircraft shall normally enter the route at point B.
(e) Aircrews planning for a northerly route of flight after exit from IR-169 will file from the exit point to JCT 281/39...SJT 165/29...SJT, and thence desired routing to destination.
(f) Avoid flight within 1,500 feet or 3 NM of airports when practical.
(g) The See and Avoid concept applies at route crossing points. Route use is VMC only. Prior to encountering IMC, aircraft will cancel IFR, discontinue the route, maintain VMC and recover VFR, or obtain a separate IFR clearance. Report the exit time and position to the first ATC facility contacted upon route exit.

(4) Conflicts:
(a) Crosses IR-170 between Points A and D. All aircraft will maintain 4500’ MSL from Point A to N30°05.00’, W101°10.00’.
(b) Is identical to SR-283/284 from A-B, crosses between E-F, overlaps near G (right side of route), crosses between I-J. Call 85 FTS/DOS Laughlin AFB at DSN 732-5121, C830-298-5121 to deconflict.
(c) Crosses IR-170 at C. Call 87 FTS/DOS Laughlin AFB to deconflict IR-170 and VR-1109/1117 at DSN 732-5484 C830-298-5484.

(d) Overlaps and parallels VR-143 from E-J. Call 560 FTS, Randolph AFB, TX to deconflict VR-143 and IR-123 at DSN 487-3518/3942, C210-652-3518.

(e) Is identical to IR-123 from E-J.

(f) Overlaps VR-1109/1117 at F.

(5) Communications:
(a) Del Rio Approach Control shall issue clearance for IR-169. Prior to route entry, pilots shall provide an entry and exit time in Zulu.
(b) Entry and Exit points are compulsory reporting points. Report the exit time to the first ATC facility contacted upon route exit.
(c) At point C, make the following radio call on 270.1 (Ch 9) ‘Ranch (call sign)(number)(type) point Charlie on IR-169.’
(d) Call entry/exit on, and monitor 255.4 while on the route. When approaching point D, make the following radio call on 255.4. All aircraft: (call sign)(number)(type) IR-123 Point Charlie and SR-283 Point Delta at (altitude)(speed).
(e) Aircraft shall contact Houston ARTCC and report exit on 346.4 or 125.75.
(f) Aircraft flying a northerly route of flight after exit shall contact San Angelo Approach on 354.1 or 125.35 upon exit.
(g) Aircraft flying a southerly route of flight after exit shall contact San Angelo Approach on 354.1 or 125.35 upon exit.


(7) Noise Sensitive Areas:
(a) Avoid the town of Pandale by 2,000 feet AGL or 3 NM.
(b) Avoid house at (N30-08.78 W101-34.32) by 2,000 feet or 3 NM.

(8) Laughlin Specific Instructions:
(a) For departures from Laughlin, fly the TAELR transition to 7000’ MSL. Request clearance off the TAELR transition prior to 25 DME.
(b) If flying the route twice, exit the route and proceed direct to the DLF 346/054 at 7000’ MSL, then inbound on the DLF 346 radial. When handed off to Del Rio Approach, coordinate for vectors to point B for the second entry.

(9) Uncharted Obstructions: N31°19.64’ W101°37.44’; N31°11.29’ W101°42.25’

(10) Construction has begun on numerous windmills west of Point F. Windmills may be as high as 433’ MSL.

FSS Within 100 NM Radius:

SJT

IR-170

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd Street, Laughlin AFB, TX 78843 DSN 732-5484, C830-298-5484. Scheduling hours 0730-1630 local Mon-Fri (excluding holidays)

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

Altitude Data     Pt Fac/Rad/Dist     Lat/Long
As assigned to    A DLF 302/39  N29°46.00’
                  W101°21.00’
SFC B 50 MSL to  B DLF 324/44  N30°00.00’
                  W101°10.50’
SFC B 35 MSL to  C DLF 353/33  N29°54.90’
                  W100°46.00’
SFC B 50 MSL to  D RSG 141/16  N29°47.00’
                  W100°09.00’
SFC B 30 MSL to  E RSG 153/24  N29°38.00’
                  W100°10.00’
SFC B 30 MSL to  F DLF 082/30  N29°22.00’
                  W100°12.00’
SFC B 50 MSL to  G DLF 132/39  N28°52.00’
                  W100°17.00’
SFC B 50 MSL to  H DLF 137/57  N28°35.00’
                  W100°08.00’
SFC B 50 MSL to  I LRD 339/34  N28°02.00’
                  W99°33.00’

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route in VMC only.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM tapering to 3 NM either side of centerline from B to D; 3 NM tapering to 4 NM either side of centerline from D to G; 4 NM expanding to 5 NM either side of centerline from G to I.

Special Operating Procedures:
(1) Route:
(a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
(b) This route is covered by the following maps and charts: San Antonio Sectional, Low IFR Enroute L-19, L-20, TPC H-23B.
(c) Alternate Entry: D.
(d) Alternate Exit: G and H.
(2) Scheduling:
(a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
(b) This route is covered by the following maps and charts: San Antonio Sectional, Low IFR Enroute L-19, L-20, TPC H-23B.
(c) Alternate Entry: D.
(d) Alternate Exit: G and H.
(3) Restrictions:
(a) For environmental reasons, this route may only be flown by T-38, T-1A aircraft, and T-6 for Annual Flight Evaluations.
(b) Aircraft unable to meet their assigned entry time within the window three minutes early to three minutes late must not enter the route.
(c) The primary means of invoking MARSA shall be by scheduling.
(d) MARSA applies after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.

(9) Uncharted Obstructions: N31°19.64’ W101°37.44’; N31°11.29’ W101°42.25’

Construction has begun on numerous windmills west of Point F. Windmills may be as high as 433’ MSL.

(10) Construction has begun on numerous windmills west of Point F. Windmills may be as high as 433’ MSL.
IR ROUTES

(e) The See and Avoid concept applies at route crossing points. Route use is VMC only. Prior to encountering IMC, aircrews will cancel IFR, discontinue the route, maintain VMC and recover VFR, or obtain a separate IFR clearance.

(f) IR-170 will be flown no higher than 3,000 MSL from Point F to H without 24 hour prior coordination with 47 OSS/OSA DSN 732-5052, C830-298-5052.

(g) Remain at or below 3500’ MSL between Points B and C.

(4) Conflicts:

(a) Del Rio Approach Control shall issue clearance for IR-170 on a TALON 170G, 170H, and 170I. Clearances are automatically coordinated when cleared for IR-170. Alternate Exit Point as filed or as assigned. This exit constitutes ATC clearance to climb to that altitude. It is the altitude ATC will expect the pilot to climb to at the exit point if the pilot exercises emergency authority after a radio failure has been confirmed.

(b) Laughlin aircraft on TALON 170G, 170H, or TALON 170I stereo flight plans will recover from the Exit Point / Alternate Exit Point as filed or as assigned. This exit clearance is automatically coordinated when cleared for IR-170 on a TALON 170G, 170H, and 170I.

3. In the event of lost communication by any aircraft filed to Laughlin after exiting IR-170, maintain 5000’ or last assigned altitude. Use Laughlin local procedures after established on DLF radials.

4. If filed for the TALON 170G, 170H, or 170I stereo route, fly the route as applicable and land at Laughlin.

6. Aircraft filed to destinations other than Laughlin shall comply with FLIP AP/1B communications failure procedures. The filing of lost communication altitude in the remarks section of the flight plan does not constitute ATC clearance to climb to that altitude. It is the altitude ATC will expect the pilot to climb to at the exit point if the pilot exercises emergency authority after a radio failure has been confirmed.

7. Laughlin Specific Instructions:

(a) When filed on a TALON 170G, 170H, and 170I request to be cleared off the LAEKE TRANSITION prior to 25 DME.

(b) Laughlin aircraft on TALON 170G, 170H, or TALON 170I stereo flight plans will recover from the Exit Point / Alternate Exit Point as filed or as assigned. This exit clearance is automatically coordinated when cleared for IR-170 on a TALON 170G, 170H, and 170I.

FSS Within 100 NM Radius:

SJT

IR-171

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276, C580-213-6276, VANCEAIRSPACE at US.AF.MIL.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A  END 237/23</td>
<td>N36°10.00'</td>
<td>W98°20.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>B  END 230/38</td>
<td>N35°59.00'</td>
<td>W98°33.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>C  IFI 266/36</td>
<td>N35°51.00'</td>
<td>W98°44.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>D  IFI 260/58</td>
<td>N35°47.00'</td>
<td>W99°12.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>E  BFV 322/34</td>
<td>N35°43.00'</td>
<td>W99°35.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>F  MMB 177/27</td>
<td>N35°54.00'</td>
<td>W99°57.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>G  MMB 164/21</td>
<td>N36°00.00'</td>
<td>W99°50.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>H  MMB 124/26</td>
<td>N36°03.00'</td>
<td>W99°30.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>I  MMB 094/27</td>
<td>N36°14.00'</td>
<td>W99°20.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>J  END 269/38</td>
<td>N36°23.00'</td>
<td>W98°42.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>K  END 286/27</td>
<td>N36°30.00'</td>
<td>W98°26.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline from A to C; 4 NM either side of centerline from C to J; 2 NM either side of centerline from J to K.
Special Operating Procedures:
(1) Aircrews may use 265.25 for interplane frequency.
(2) Report Point F to Kansas City Center 379.2.
(3) Cross Point K at 60 MSL. Contact Vance Approach 346.325 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
(4) On route departure all 71 FTW aircraft proceed direct to Vance, or as directed.
(5) Alternate Entry: C and F. Alternate Exit: F and I.

FSS Within 100 NM Radius:
ICT

IR-172

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276/7820, C580-213-6276/7820.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/ Dist | Lat/Long
--- | --- | --- | ---
Cross at 60 MSL to A | PNH 069/27 | N35°20.00' W101°10.00' | W100°10.00' N35°22.00' W100°40.00' | W100°21.00' N35°29.00' W100°'40.00' | W100°12.00' N35°42.00' W05°05.00' | W05°12.00' N35°51.50' W00°05.00' | W00°57.00'
60 MSL to B | PNH 073/51 | N35°34.00' W09°35.00' | N35°43.00' W09°35.00' | N35°44.00' W09°35.00' | N35°45.00' W09°35.00' | N35°46.00' W09°35.00' | N35°47.00' W09°35.00' | N35°48.00' W09°35.00'
60 MSL to C | PNH 069/68 | N35°29.00' W100°21.00' | N35°42.00' W100°21.00' | N35°51.50' W100°05.00' | N35°54.00' W99°57.00' | N35°55.50' W99°57.00' | N35°56.50' W99°57.00' | N35°57.50' W99°57.00'
60 MSL B 60 MSL to D | PNH 061/79 | N35°42.00' W100°12.00' | N35°51.50' W100°05.00' | N35°54.00' W99°57.00' | N35°55.50' W99°57.00' | N35°56.50' W99°57.00' | N35°57.50' W99°57.00' | N35°58.50' W99°57.00'
40 AGL B 60 MSL to E | PNH 056/87 | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00'
05 AGL B 40 MSL to F | MMB 177/27 | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00'
05 AGL B 40 MSL to G | BFV 322/34 | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00'
05 AGL B 40 MSL to H | IFF 260/58 | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00'
05 AGL B 40 MSL to I | IFF 266/36 | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00'
05 AGL B 40 MSL to J | END 230/38 | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00'
05 AGL B 60 MSL to K | END 237/23 | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00' | N35°29.00' W100°40.00'

ROUTE WIDTH - 4 NM either side of centerline A to E; 3 NM either side of centerline E to F; 4 NM either side of centerline F to I; 2 NM either side of centerline J to K.

Special Operating Procedures:
(1) Aircrews may use 265.25 for interplane frequency.
(2) Do not descent out of 60 MSL until 4 NM past Point D.
(3) Report Point F to Kansas City Center 379.2.
(4) Cross Point K at 60 MSL. Contact Vance Approach 346.325 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
(5) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.

FSS Within 100 NM Radius:
ICT

IR-173

IR ROUTES

**SCHEDULING ACTIVITY:** Same as Originating Activity.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

**TERRAIN FOLLOWING OPERATIONS:** Published minimum altitudes may not guarantee terrain following obstruction clearances.

**ROUTE WIDTH -** 4 NM either side of centerline from A to D; 3 NM either side of centerline from D to F; 3 NM right and 4 NM left of centerline from F to G; 2 NM right and 4 NM left of centerline from G to K; 3 NM either side of centerline from K to L; 4 NM right and 3 NM left of centerline from L to N; 4 NM either side of centerline from N to P; 4 NM right and 3 NM left of centerline from P to R; 4 NM either side of centerline from R to X; Re-Entry; 4 NM either side of centerline from U1 to Y; 3 NM either side of centerline from Y to G1.

**Special Operating Procedures:**

1. Participating Aircraft Separation: Route is designated for MARSA operations established by coordinated scheduling.
2. MARSA applies after aircraft enter route until standard separation is provided after exiting route.
3. MARSA applies between IR-174, IR-592, and IR-120.
4. Centerline between turn points is depicted as a 7.5 NM radius arc.
5. Lost communications (LC) procedures: Route LC altitude is 4000’ MSL at exit point X and 5000’ MSL at alternate exit point Q1. Desired deviations from this procedure must be filed IAW FLIP AP-1B, Chapter 1, and verified with Memphis ARTCC prior to route entry.
Aircrews should be alert for C-130’s on numerous SR routes. SR routes cross IR-174 between points A-B, BA-E, N-Q, R-W and U-Y. Aircrew may contact Little Rock Air Force Base DSN 731-7013 C501-987-7013 for active/scheduled SR routes.

Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N36-25.5 W89-54.0; N36-29.0 W90-00.5; N36-22.2 W90-09.5; N36-34.5 W90-37.0; N36-39.0 W92-13.5; N35-44.0 W92-29.0.

Noise Sensitive Areas: (Avoid by 1/4 NM):
(a) School at N36-10.9 W92-51.0.
(b) School at N34-14.15 W093-38.10.
(c) Residence at N36-25.5 W92-13.5.
(d) Farm house at N36-25.5 W92-29.5.

Uncharted Obstructions:
(a) Tower (N36 32.40 W89 38.20) height unknown.
(b) Tower (N36 27.25 W89 57.25) height unknown.

FSS Within 100 NM Radius:
BNA, COU, JBR, MKL, MLC, STL

IR-177

**ORIGINATING ACTIVITY:** 97 OSS/DOA, 101 S Sixth St, Bldg 225, Altus AFB, OK 73521, DSN 866-6098, C580-481-6098.

**SCHEDULING ACTIVITY:** 97 OSS/OSK, 101 S Sixth St, Bldg 225, Altus AFB, OK 73521, DSN 866-7422/1375/7490, C580-481-7110/1375/7490.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A  END 291/32</td>
<td>N36°35.00' W98°31.00'</td>
<td>05 AGL B 40 MSL to H ANY 219/21 N36°55.00' W98°29.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>AA END 280/42</td>
<td>N36°31.50' W98°45.00'</td>
<td>05 AGL B 60 MSL to I ANY 205/21 N36°52.00' W98°24.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>B END 273/52</td>
<td>N36°26.00' W98°59.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>C END 297/63</td>
<td>N36°54.00' W99°02.02'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>D MMB 349/13</td>
<td>N36°34.00' W99°53.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>E MMB 323/25</td>
<td>N36°43.00' W100°07.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>F MMB 006/43</td>
<td>N37°02.00' W99°38.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>G ANY 263/51</td>
<td>N37°09.00' W99°14.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>G1 ANY 246/31</td>
<td>N37°00.50' W98°46.67'</td>
<td></td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 4 NM left and 2 NM right from A to B; 4 NM left and 3 NM right from B to C; 4 NM either side from C to D; 3 NM either side from D to F; 4 NM left and 3 NM right from F to G1; 2 NM left and 3 NM right from G1 to I.

**Special Operating Procedures:**
(1) Aircrews may use 265.25 for interplane frequency.
(2) Use caution for ACC aircraft operating at low level in the airspace immediately Northwest of Points E to F.
(3) Report Point E to Kansas City Center 379.2.
(4) Cross Point I at 60 MSL. Contact Vance Approach 346.325 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
(5) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.
(6) Alternate Entry: C and E.
(7) Alternate Exit: E and G.

**FSS Within 100 NM Radius:** ICT, MLC
IR ROUTES

02 AGL B 59 MSL to
direct to
02 AGL B 57 MSL to
turn left to
02 AGL B 57 MSL to
direct to
02 AGL B 57 MSL to
climb direct to
05 AGL B 70 MSL to
turn left and continue
climb to
04 AGL B 70 MSL to
direct to
02 AGL B 70 MSL to
descend direct to
04.5 AGL B 70 MSL to
turn left to
04.5 AGL B 70 MSL to
climb direct to
02 AGL B 60 MSL to
(Start Maneuver Area)
direct to
02 AGL B 60 MSL to
turn left to
02 AGL B 60 MSL to
turn right to
02 AGL B 60 MSL to
turn right to
02 AGL B 60 MSL to
(End Maneuver Area)
(TA/TFR Termination
Point)
direct to
60 MSL to
60 MSL B 110 MSL
climb direct to cross
at or above 70 MSL
70 MSL B 110 MSL
continue climb to cross
110 MSL to
or as assigned
(Contac Albuquerque
ARTCC 351.7 passing
100 MSL)
Re-Entry: Alpha
60 MSL to
(End Maneuver Area)
(TA/TFR Termination
Point)
turn left to
60 MSL to
direct to
60 MSL to
60 MSL B 70 MSL
climb direct to cross
70 MSL to
direct to
60 MSL B 70 MSL to
60 MSL B 70 MSL
descend to cross
60 MSL to
(TA/TFR Initiation
Point)
continue right turn to

PMSV CONTACTS: Primary Home Station. Alternates
Whiteman (SZL 344.6), Barksdale (Bad 373.1).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR
terrain following (TF)/visual contour (VC) operations are
authorized IAW command directives within published altitude
blocks from E to R, and ZA to J1 (Alternate Entry Z). When
command directives preclude TF/VC operations aircrews will
maintain the IFR altitude for each TF route segment. Minimum
altitudes are established to provide 200' vertical clearance of
known man-made obstructions within the route corridor.
Command directives may require additional obstruction
clearance for TF/VC operations. Aircrews flying command
directed TF/VC altitudes may be required to fly at a higher
minimum tracking altitude (MTA), as listed in 99 ECRG 50-3, for
STR scored activity. In no case will aircraft fly below command
directed TF/VC altitudes. The entire route is designated
non-mountainous. Regulations governing aircraft operations
below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to E;
3 NM either side of centerline from E to F; 4 NM either side of
centerline from F to N; 3 NM left and 4 NM right of centerline N
to O; 3 NM either side of centerline from O to P; 6 NM left and 3
NM right of centerline from P to Q; 6 NM left and 5 NM right of
centerline from Q to R; 4 NM either side of centerline from R to T.
Re-Entry: 4 NM left and 3 NM right of centerline from R1 to U; 4
NM either side of centerline from U to W; 4 NM left and 2 NM
right of centerline from W to X; 4 NM either side of centerline from
X to M1. ALTERNATE ENTRY Z: 4 NM either side of
centerline from Z to J1.

Special Operating Procedures:
(1) This route is closed until further notice. Route has not been
surveyed or reviewed are is considered inactive. Contact the
originating activity for more information.
(2) Aircraft exiting the route or using the Alpha Re-Entry will
cross the End Maneuver Area point at the specified
minimum IFR altitude.
(3) Participating aircraft separation: Route is designated for
MARS operations established by coordinated scheduling.
(4) Lost communications (LC) procedures: Route LC altitude is
11,000’ MSL. Desired deviation from this procedure must be
filed IAW FLIP AP/1B, Chapter 1 and verified with
Albuquerque ARTCC prior to route entry.
(5) This route effects Cheyenne MOA and Two Buttes MOA
operations which is controlled by Buckley ANG/120FS down
300’ AGL. Advise 120FS; DSN 847-9470 or FAX
847-9612, C720-847-9470, FAX C720-847-9612, on
estimated entry and exit times of the MOA’s. In addition,
provide estimated times to 120FS at Points J and M.
(6) All aircraft will make an (in-the-blind) call on 370.925 prior to entering the lateral limits of Two Buttes and Cheyenne MOA’s. This call is to alert aircraft operating in the MOA of your presence. This is not intended to be used as a separation tool, only a (heads up call).

(7) Route is separated from conflicting routes by coordinated scheduling.

(8) Aircrews entering IR-177 on Alternate Entry Z must file IR-177A.

(9) Aircrews entering IR-177 using Alternate Entry Z should use the Garden City altimeter for descent into the route.

(10) Aircrews should be especially vigilant when flying between N36-34-00 W102-50-00 and N36-42-00 W102-49-00 due to possible VFR traffic to include B-1’s and B-52’s on VR-1175 and VR-1176.

(11) Ducks and geese will pose a significant hazard 1 Oct-15 Jan between points E and F and N and R during the evening and dark/dusk (plus/minus one hour). Sandhill cranes, pelicans and gulls will pose a significant hazard 15 Sep-15 Nov and a hazard from 1 Mar-30 Apr between points N and R. They will fly from several refuges found around the entire maneuver area to local feeding areas.

(12) Centerline between turn points will be depicted as a 7.5 NM arc unless otherwise specified.

(13) Route is open all year long.

(14) Aircraft aborting the route shall contact the appropriate ARTCC as follows: Points A-G, Albuquerque ARTCC 351.7, Points H-I, Kansas City ARTCC 290.8, Points J-O, Denver ARTCC 377.175, Points P-S, Denver ARTCC 379.95.

(15) Noise Sensitive Areas: Avoid by 1000’ or 1/4 NM unless otherwise noted.
   a. Residence at N38-03.8 W103-19.1;
   b. Residence at N37-49.2 W102-13.4;
   c. Residence at N37-05.2 W102-44.6;
   d. Residence at N37-06.4 W102-51.1;
   e. Residence at N37-12.5 W102-37.0;
   f. Residence at N37-49.3 W102-07.3;
   g. Residence at N38-49.6 W103-00.7;
   h. Residence at N38-03.3 W103-20.8;
   i. Residence at N38-04.3 W103-21.8;
   j. Farm at N37-57.0 W103-21.6;
   k. Residence at N38-49.8 W102-49.5.

(16) Uncharted obstructions and bird attractants:
   a. Silos at N37°22.14' W102°51.43';
   b. Uncharted antenna approx. 250’ AGL, N38°11.0’ W103°09.0’;
   c. Cattle yards: N36°33.98’ W102°46.82’; N36°36.19’ W102°46.85’; N37°25.05’ W101°58.06’; N36°17.65’ W102°58.19’.

FSS Within 100 NM Radius: DEN

IR-178


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous
IR ROUTES

07 AGL B 50 MSL to S PEQ 178/24
turn right direct to
04 AGL B 70 MSL to T PEQ 203/25
direct to
05 AGL B 70 MSL to U PEQ 281/34
turn right to
09 AGL B 70 MSL to V PEQ 297/37
direct to
09 AGL B 70 MSL to W PEQ 306/36
climb direct to
05 AGL B 90 MSL to X INK 273/32 if not exiting at Point Z
turn right and climb to
90 MSL B 110 MSL to Y INK 292/25 if not exiting at Point Z
descend direct to
110 MSL to Z INK 348/17 if not exiting at Point Z
direct to
05 AGL B 70 MSL to AA INK 001/19
direct to
12 AGL B 70 MSL to AB INK 030/18
direct to
12 AGL B 70 MSL to AC MAF 240/37
direct to
08 AGL B 70 MSL to AD MAF 232/34
descend direct to
08 AGL B 60 MSL to AE MAF 180/28
turn left to
08 AGL B 60 MSL to AF MAF 174/28
direct to
08 AGL B 60 MSL to AG MAF 160/28
direct to
start climb to cross AH at or above 20 AGL
08 AGL B 60 MSL to Alternate exit AI: Climb to cross AH at or above 20 AGL
climb to cross AI at or above 70 MSL
climb and maintain 90 MSL
20 AGL B 90 MSL to (Contact Fort Worth ARTCC 298.95 for clearance)
AI MAF 113/47

06 AGL B 60 MSL to O1 FST 067/28

direct to
06 AGL B 60 MSL to OA MAF 194/42
turn right to
06 AGL B 60 MSL to AE1 MAF 180/28

Alternate Exit M:
climb direct to
03 AGL B 76 MSL to K1 FST 167/37

(Contact Albuquerque ARTCC 292.15 for exit instructions)
06 AGL B 170 MSL
direct to cross
170 MSL to M1 FST 110/30

Alternate Exit Z:
climb direct to cross
05 AGL B 90 MSL to (Contact Fort Worth ARTCC 298.95 for instructions)
continue climb to cross
90 MSL B 110 MSL to Y1 INK 292/25
110 MSL to Z1 INK 348/17 N32°10.00' W103°15.00' or as assigned direct to Alternate Entry F:
150 MSL to F1 MRF 235/30 N30°05.50' W104°28.50' or as assigned by ARTCC
descend direct to 04 AGL B 90 MSL to thence via published route.

PMSV CONTACTS: Primary Home Station. Alternates Whiteman (SZL 344.6), Barksdale (BAD 373.1).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC
Terrain Following (TF)/Terrain Avoidance (TA)/Visual Contour (VC) operations are authorized IAW command directives within published altitude blocks from Point A to AH and Point O1 to AF1 on alternate route O1. When command directives preclude TF/TA/VC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes other than surface are established to provide 200’ vertical clearance from known manmade obstructions within route corridor. Command directives may require additional obstruction clearance for TF/TA/VC operations. The route is designated mountainous from Point A to M and Point R to X. The remainder of route is non-mountainous. Regulations governing operations below 500’ AGL must be complied with. ACC Aircrews should reference their appropriate AFI series Vol.3 for low altitude minimum altitude, and 7 BW Clearance Plane Letter for current clearance plane setting information.

ROUTE WIDTH - 6 NM either side of centerline from A to F; 5 NM left and 9 NM right of centerline from F to I; 8 NM left and 6 NM right of centerline from I to P; 10 NM left and 4 NM right of centerline from P to S; 4 NM left and 10 NM right of centerline from S to V; 4 NM either side of centerline from V to Z; 4 NM left and 2 NM right of centerline from Z to AB; 3 NM left and 4 NM right of centerline from AB to AC; 4 NM either side of centerline from AC to AL; Re-entry V1: 4 NM either side of centerline from V1 to VA; 4 NM left and 2 NM right of centerline from VA to VB; 4 NM either side of centerline from VB to R1; Alternate Route O1: 4 NM left and 6 NM right of centerline from O1 to OA; 4 NM either side of centerline from OA to AF.

Special Operating Procedures:
(1) Airspace scheduling is available Monday - Friday 0730L - 1630L central standard time, through CSE (Central Scheduling Enterprise) or call DSN 461-3666/2200, C325-696-3666/2200. After hours scheduling is not available at this time.
(2) Scheduling Dyess owned airspace is done via the Centralized Scheduling Enterprise (CSE). Log on to CES via their website (HTTP://CSEAF.Eglin.AF.MIL/CSE/Home.aspx) and request permission to become a member at Dyess AFB. Once membership is approved you will be able to log-in and submit schedules via the internet. Phone calls are still accepted if you are having difficulty via the web.
(3) All aircraft must enter the route at their scheduled time +/- 2.5 minutes. If unable to make that time, aircrews must reschedule with Dyess scheduling office, DSN 461-3665 or Comm.: 325-696-3665 or via the CSE.

(4) All B-1B aircraft are restricted to 500’ AGL or higher throughout the route even if the route is assessed for a lower altitude. All aircraft must conform to route segment altitudes in the route description annotated in this publication.

(5) Lost communications (LC) procedures: LC altitude will be published IFR altitude on the route. NOTE: aircraft going to Dyess AFB, proceed to the ABI 161/20 FIX/DME, IAF (PAGGY) and execute the HI-ILS or LOC/DME RWY 34 (circle as required).

(6) NORDO procedures in the event of lost communications between the entry and exit point and unable to proceed VFR, maintain to the exit/alternate exit point the higher of the following:
(a) The minimum IFR altitude for each of the remaining route segments;
(b) The highest altitude assigned in the last ATC clearance.

(7) Centerline between turn points is depicted as a 7.5 NM arc.
(8) Aircrews should be aware of airports within or near route corridor limits. Avoid flight within 1500’ vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N32-09.5 W103-05.9, N29-36.2 W103-14.0, and N29-42.1 W103-08.5.

(9) Aircrews should be alerted to the increase of migratory waterfowl throughout the entire route during the spring and fall migration season.
(10) PMSV contact for IR-178 is DYS (344.6).
(11) Aircrews will indicate the altitude required after exiting IR-178 in the remarks section immediately after the route exit time.
(12) Aircrews are responsible for verifying both the exit time and the exit fix prior to entry.
(13) Noise Sensitive Areas: Avoid all noise sensitive areas by 1000’ or 1/4 NM unless otherwise stated:
(a) Residence at N32-14.4 W103-03.9; Clair Holland;
(b) Residence at N30-07.3 W103-07.1: Avoid by 1/2 mile or 1000’; Claire Holland;
(c) Residence at N29-34.0 W103-27.6; Karen Reimers;
(d) Residence at N29-59.1 W103-07.8; Jack Brown;
(e) Residence at N31-05.9 W103-35.6; Charlotte Evans;
(f) Residence at N29-52.1 W104-07.2: Avoid by 1/4 mile and NO OVERFLIGHT; Tim Leary.
(15) Aircrews must enter the route at their scheduled time +/- 2.5 minutes. If unable to make that time, aircrews must reschedule with Dyess scheduling office, DSN 461-3665 or Comm.: 325-696-3665 or via the CSE.

(16) All VHF equipped aircraft use the following procedures: Transmit in the blind on 122.8 at Imperial Reservoir (8 NAP Point Q), (CALLSIGN, PASSING IMPERIAL RESERVOIR ON
IR ROUTES

IR-178. At Red Bluff Reservoir (18 NAP Point V), CALLSIGN, PASSING RED BLUFF RESERVOIR ON IR-178. Monitor VHF 122.8 from Point P to Point W. Single engine Cessna aircraft operating between Point S to Point W within corridor 1000' AGL and below, callsign N6486T. Color of aircraft is Silver and Blue.

(18) Alternate Exits:
(a) Point Z (must follow Alternate Exit Z procedures);
(b) Point M;
(19) To file IR-178, please use the following formats exactly:
(a) IR-178 exiting at Point M (FST110030). Computer format: HUP194020.IR178.FST110030..(Flight Plan Route). Note: No re-entries are permitted.
(b) IR-178 (Z procedure) exiting at Point Z (INK348017).
(c) IR-178 (Racetrack filing procedures) HUP194020.IR178+R1..(Flight Plan Route). The (+R1) value represents the number of racetrack circuits requested. Enter a numerical value after (R) for racetrack’s requested.
(20) Alternate Entry: Point F1; filing procedures:
MRF235030.IR178.(follow filing procedures for Alternate Exits M, Z, AL).
(a) IR-178 (Alternate Entry Procedures at F1) MRF235030.IR178.INK348017..(Flight Plan Route).
(21) Alternate Exit: Point AL filing procedures: HUP194020.IR178.BGS039019..(Flight Plan Route). The (+R) value represents the number of racetrack circuits requested. Enter a numerical value after (R) for racetrack’s requested.
(22) Alternate Route: O1; filing procedures:
HUP194020.IR178.FST067028.IR17801.BGS039019..(Flight Plan Route).
(23) CAUTION: IR-178Z. This route has a ROUTE CORRIDOR conflict with VR-196 and VR-197 from Point T to U. These VR routes are not on MAMS and you are not deconflicted with them. VR routes are See and Avoid. Conflict potential is during daytime only. Be especially vigilant for same direction traffic from VR-196 and opposite direction traffic from VR-197 in this area. IR-178Z users should contact B6 FTS (DSN 732-5584) with your times from Point T to U and make a broadcast in the blind on 255.4 approaching Point T.
(24) Restricted use of IR-178 Zulu exit (only) due to explosive testing between points R-S at Old Goodyear Test Track. Prior coordination required prior to use from 70SS Scheduling or Airspace Management Office.
(25) Alternate exit AI; Filing procedures:
HUP194020.IR178.FST067028.IR801.MAF113047..(Flight plan route).

FSS Within 100 NM Radius:
ABQ, SJT

IR-180


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous
02 AGL B 70 MSL to Y LBB 231/52 N33°18.00' W102°49.50' direct to
06 AGL B 70 MSL to Z LBB 224/50 N33°13.50' W102°44.00' direct to
02 AGL B 70 MSL to A LBB 195/50 N32°57.50' W102°21.00' turn left to
02 AGL B 70 MSL to B LBB 187/49 N32°56.00' W102°13.00' direct to
05 AGL B 70 MSL to C LBB 171/45 N32°57.50' W101°56.50' turn left to
02 AGL B 70 MSL to D LBB 167/44 N32°58.50' W101°53.00' direct to
06 AGL B 70 MSL to E LBB 153/40 N33°04.00' W101°41.50' turn right to
02 AGL B 70 MSL to F LBB 142/48 N32°59.50' W101°29.00' direct to
02 AGL B 70 MSL to G LBB 137/45 N32°55.50' direct to
02 AGL B 70 MSL to H LBB 130/46 N32°54.50' turn right to
02 AGL B 70 MSL to I LBB 123/47 N32°53.50' direct to
02 AGL B 70 MSL to J LBB 116/49 N32°52.50' direct to
02 AGL B 70 MSL to K LBB 109/50 N32°51.50' direct to
02 AGL B 70 MSL to L LBB 102/51 N32°50.50' direct to
02 AGL B 70 MSL to M LBB 95/52 N32°49.50' direct to
02 AGL B 70 MSL to N LBB 88/53 N32°48.50' direct to
02 AGL B 70 MSL to O LBB 81/54 N32°47.50' direct to
02 AGL B 70 MSL to P LBB 74/55 N32°46.50' direct to
02 AGL B 70 MSL to Q LBB 67/56 N32°45.50' direct to
02 AGL B 70 MSL to R LBB 60/57 N32°44.50' direct to
02 AGL B 70 MSL to S LBB 53/58 N32°43.50' direct to
02 AGL B 70 MSL to T LBB 46/59 N32°42.50' direct to
02 AGL B 70 MSL to U LBB 39/60 N32°41.50' direct to
02 AGL B 70 MSL to V LBB 32/61 N32°40.50' direct to
02 AGL B 70 MSL to W LBB 25/62 N32°39.50' direct to
02 AGL B 70 MSL to X LBB 18/63 N32°38.50' direct to
02 AGL B 70 MSL to Y LBB 11/64 N32°37.50' direct to
02 AGL B 70 MSL to Z LBB 4/65 N32°36.50' direct to
05 AGL B 70 MSL to A LBB 224/50 N33°13.50' W102°44.00' Re-Entry: RG to R-5104/R-5105 Exit PMSV CONTACTS: Primary Home Station. Alternates Whiteman (SZL 344.6), Barksdale (BAD 373.1).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF) visual contour (VC) operations are authorized IAW command directives within the published altitude blocks from A to AF and W1 to R1 on re-entry BA and RA to RG1 on re-entry R-5104/R-5105. VMC terrain voidance (TA) Visual Contour (VC) authorized within the published altitude blocks from B to AF, W1 to R1 on re-entry BA, RA to RG1 on re-entry R-5104/R-5105. When command directives preclude TF/TA/VMC operations aircrews will maintain the IFR altitude for each route segment. Minimum altitudes, other than surface, are established to provide 100' vertical clearance of unknown man-made obstructions within the route width. Command directives may require additional obstruction clearance for TF/TA/VMC operations. The entire route is designated nonmountainous. Regulations governing operations below 500' AGL must be complied with. The route corridor provides airspace for 500' lateral separation from man-made obstacles. Obstructions under 200' AGL were not considered in route design. Aircrews must be aware of charted airports within or near route corridor limits.

ROUTE WIDTH - 4 NM either side of centerline from A to G; 3 NM either side of centerline from G to H; 3 NM left and 4 NM right of centerline from H to J; 4 NM either side of centerline from J to L; 4 NM left and 3 NM right of centerline from L to O; 3 NM left and 4 NM right of centerline from O to P; 4 NM either side of centerline from P to T; 4 NM left and 5 NM right of centerline from T to V; 4 NM either side of centerline from V to AB; 3 NM either side of centerline from AB to AC; 2.5 NM left and 3 NM right of centerline from AC to AE; 4 NM either side of centerline from AE to AG. Re-Entry; 4 NM either side of centerline from W1 to R1. Alternate Exit RG: 4 NM left and 5 NM right of centerline from RA to RC; 5 NM either side of centerline from RG1 CVS 221/34

05 AGL B 70 MSL to RK CVS 221/34 N34°00.00' W103°50.00' direct to
02 AGL B 70 MSL to RG1 CVS 235/27 N34°10.00' W103°48.00' To R-5104/R-5105 (Contact Albuquerque ARTCC 319.2 for exit instructions)

Special Operating Procedures:
(1) Airspace scheduling is available Monday - Friday 0730L - 1630L central standard time, through CSE (Central Scheduling Enterprise) or call DSN 461-3666/2200, C325-696-2200. After hours scheduling is not available at this time.

(2) Lost communications (LC) procedures: LC altitude will be the published IFR altitude on the route. On exit aircrews will climb at AF to cross exit AG at 110 MSL and use 110 MSL as LC altitude from this point. Note: Aircraft going to Dyess AFB, TX will proceed at 110 MSL to the ABI 161/30 DME, IAF (Jessa) and execute the HI-ILS or LOC/DME RWY 34 (circle as required).

(3) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.

(4) Centerline between turn points is depicted as a 7.5 NM arc except between RH, RI, RJ, and RK which are 6 NM arcs.
IR ROUTES

(5) Aircraft at TF/TA/VMC altitude may be required to fly at a higher minimum tracking altitude as listed in 99 ECRGR 50-3 for scored activity. In no case will aircraft fly below command directed TF/TA/VMC altitudes.

(6) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500’ vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N33-02.0 W101-55.7; N34-00.8 W102-59.6; N32-08.5 W103-09.5; N33-16.1 W103-11.4; N32-56.0 W102-18.0; N32-55.0 W102-21.0.

(7) TF capable aircraft can make an AUTO-TF descent beginning at point A from 170 MSL.

(8) Additional tactical descent procedures: TF capable aircraft, when specifically cleared by ARTCC, will cross point A at FL 220 or as assigned and begin descent to cross point B at or below 50 MSL, then via published route.

(9) The method of MARSA between IR-180 and IR-128 will be scheduling.

(10) Unit schedulers using Alternate Exit RG must deconflict IR-113 and R-5104/R-5105 and must comply with range orders.

(11) Aircrews aborting an Alternate Exit RG will if conditions permit, abort to the southwest to avoid turning into Cannon Approach Airspace.

(12) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSA applies after aircraft have passed the Entry/Alternate Entry point until ATC establishes standard separation after exiting the route.

(13) Aircrews should be aware of the 5549’ tower at N33-33.2 W103-39.1 which is 451’ below the IFR altitude on Alternate Exit RG, but outside the corridor.

(14) Aircrews should be alerted to the increase of migratory waterfowl throughout the entire route, (especially between points S and W) during the spring and fall migration season.


(16) Aircrews should monitor 255.4 approaching point Z. T-37 and T-1 aircraft flying SR 275/277 cross at point Z at 1000’ AGL.

(17) Noise Sensitive Areas: Avoid all Noise Sensitive areas by 1000’ or 1/4 mile:
(a) Residence at N32-14.4 W103-03.9.
(b) Residence at N32-10.0 W103-33.9.
(c) School at N32-47.9 W101-26.8.

FSS Within 100 NM Radius:
ABQ, SJT

IR-181

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276, 350-213-6276, VANCEAIRSPACE at US.AF.MIL.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>END 237/23</td>
<td>N36°10.00' W98°20.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>B</td>
<td>END 230/38</td>
<td>N35°59.00' W98°33.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 2 NM either side of centerline from A to B; 4 NM either side of centerline from B to I; 3 NM either side of centerline from I to K.

Special Operating Procedures:
(1) Aircrews may use 265.25 for interplane frequency.
(2) Report Point F to Kansas City Center 379.2.
(3) Cross Point K at 60 MSL. Contact Vance Approach 346.325 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
(4) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.
(5) IR-181 and IR-183 have same geographical Points A-F.
(6) Alternate Entry: C and F.
(7) Alternate Exit: F and H.

FSS Within 100 NM Radius:
ICT

IR-182

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276/7820, C580-213-6276/7820.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>END 237/23</td>
<td>N36°10.00' W98°20.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>B</td>
<td>END 230/38</td>
<td>N35°59.00' W98°33.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

2-73

ROUTE WIDTH - 3 NM either side of centerline from A to C; 4 NM either side of centerline from C to F; 3 NM either side of centerline from F to G; 4 NM either side of centerline from G to K.

Special Operating Procedures:
(1) Aircrews may use 265.25 for interplane frequency.
(2) Climb to be at 60 MSL 4 NM prior to Point H.
(3) Report Point F to Kansas City Center 379.2.
(4) On route departure, maintain 60 MSL (or as directed) and contact Amarillo Approach 319.15.
(5) IR-171 and IR-182 have same geographical Points A-F.

FSS Within 100 NM Radius:
ICT

IR-183

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276, C580-213-6276, VANCEAIRSPACE at US.AF.MIL.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>END 286/27</td>
<td>N36°30.00' W98°26.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>B</td>
<td>END 269/38</td>
<td>N36°23.00' W98°42.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>C</td>
<td>MMB 094/27</td>
<td>N36°14.00' W99°20.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>D</td>
<td>MMB 124/26</td>
<td>N36°03.00' W99°30.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>E</td>
<td>MMB 164/21</td>
<td>N36°00.00' W99°50.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>F</td>
<td>MMB 177/27</td>
<td>N35°54.00' W99°57.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>G</td>
<td>MMB 189/31</td>
<td>N35°51.50' W100°05.00'</td>
</tr>
<tr>
<td>40 MSL B 60 MSL to</td>
<td>H</td>
<td>PNH 061/79</td>
<td>N35°42.00' W100°12.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>I</td>
<td>PNH 069/68</td>
<td>N35°29.00' W100°21.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>J</td>
<td>PNH 073/51</td>
<td>N35°22.00' W100°40.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>K</td>
<td>PNH 069/27</td>
<td>N35°20.00' W101°10.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 2 NM either side of centerline from A to B; 4 NM either side of centerline from B to F; 3 NM either side of centerline from F to G; 4 NM either side of centerline from G to K.

Special Operating Procedures:
(1) Aircrews may use 265.25 for interplane frequency.
(2) Climb to be at 60 MSL 4 NM prior to Point H.
(3) Report Point F to Kansas City Center 379.2.
(4) On route departure, maintain 60 MSL (or as directed) and contact Amarillo Approach 319.15.
(5) IR-181 and IR-183 have same geographical Points A-F.

FSS Within 100 NM Radius:
ICT

IR-185

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276, C580-213-6276, VANCEAIRSPACE at US.AF.MIL.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>ANY 205/21</td>
<td>N36°52.00' W98°24.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>B</td>
<td>ANY 219/21</td>
<td>N36°55.00' W98°29.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>C</td>
<td>ANY 246/31</td>
<td>N37°00.50' W98°46.67'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>D</td>
<td>ANY 263/51</td>
<td>N37°09.00* W99°14.00*</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>E</td>
<td>MMB 006/43</td>
<td>N37°02.00* W99°38.00*</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>F</td>
<td>MMB 323/25</td>
<td>N36°43.00* W100°07.00*</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>G</td>
<td>MMB 349/13</td>
<td>N36°34.00' W99°53.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>H</td>
<td>END 297/63</td>
<td>N36°54.00* W99°02.00*</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>I</td>
<td>END 273/52</td>
<td>N36°28.00' W98°59.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>J</td>
<td>END 280/42</td>
<td>N36°31.50' W98°45.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>K</td>
<td>END 291/32</td>
<td>N36°35.00' W98°31.00'</td>
</tr>
</tbody>
</table>
**IR ROUTES**

**ROUTE WIDTH** - 3 NM left and 2 NM right of centerline from A to C; 3 NM left and 4 NM right of centerline from C to E; 3 NM either side of centerline from E to G; 4 NM either side of centerline from G to H; 3 NM left and 4 NM right of centerline from H to I; 2 NM left and 4 NM right of centerline from I to K.

**Special Operating Procedures:**
1. Aircrews may use 265.25 for interplane frequency.
2. Use caution for ACC aircraft operating at low level in the airspace immediately Northwest of Points C to E.
3. Cross Point K at 60 MSL. Contact Vance Approach 346.325 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
4. On route departure, all 71 FTW aircraft proceed to Vance, or as directed.
5. Alternate Entry: D and F.
6. Alternate Exit: F and H.

**FSS Within 100 NM Radius:**
ICT, MLC

**IR-192**

**ORIGINATING ACTIVITY:** 49 OSS/OSOA, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

**SCHEDULING ACTIVITY:** 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

**HOURS OF OPERATION:** Sunrise-0600Z+

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 120 MSL to or as assigned</td>
<td>A</td>
<td>PIO 344/24</td>
<td>N32°56.00' W105°20.10'</td>
</tr>
<tr>
<td>10 AGL B 120 MSL to</td>
<td>B</td>
<td>PIO 357/16</td>
<td>N32°47.80' W105°15.40'</td>
</tr>
<tr>
<td>10 AGL B 110 MSL to</td>
<td>C</td>
<td>PIO 007/16</td>
<td>N32°46.60' W105°12.20'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>D</td>
<td>PIO 041/18</td>
<td>N32°42.50' W105°01.30'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>E</td>
<td>CNM 294/42</td>
<td>N32°40.00' W104°54.50'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>F</td>
<td>CNM 307/33</td>
<td>N32°40.10' W104°39.00'</td>
</tr>
<tr>
<td>01 AGL B 48 MSL to</td>
<td>G</td>
<td>CNM 341/26</td>
<td>N32°40.80' W104°17.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>H</td>
<td>CNM 021/24</td>
<td>N32°36.00' W103°58.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>I</td>
<td>CNM 074/19</td>
<td>N32°16.80' W103°51.50'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>J</td>
<td>CNM 126/15</td>
<td>N32°04.50' W104°02.10'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>K</td>
<td>SFL 058/41</td>
<td>N31°58.50' W104°20.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/32</td>
<td>N31°55.80' W104°30.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>M</td>
<td>SFL 065/28</td>
<td>N31°51.00' W104°33.30'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>N</td>
<td>SFL 111/43</td>
<td>N31°21.50' W104°23.50'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>O</td>
<td>SFL 128/26</td>
<td>N31°25.00' W104°45.60'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>P</td>
<td>SFL 123/17</td>
<td>N31°32.70' W104°51.00'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to</td>
<td>Q</td>
<td>SFL 199/9</td>
<td>N31°37.20' W105°10.50'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to</td>
<td>R</td>
<td>SFL 223/27</td>
<td>N31°29.30' W105°31.20'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to</td>
<td>S</td>
<td>SFL 278/35</td>
<td>N31°56.80' W105°43.50'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>T</td>
<td>PIO 202/24</td>
<td>N32°11.50' W105°34.50'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>U</td>
<td>PIO 225/17</td>
<td>N32°22.50' W105°35.00'</td>
</tr>
<tr>
<td>01 AGL B 125 MSL to</td>
<td>V</td>
<td>PIO 246/19</td>
<td>N32°27.90' W105°39.80'</td>
</tr>
<tr>
<td>01 AGL B 125 MSL to</td>
<td>W</td>
<td>PIO 256/32</td>
<td>N32°30.40' W105°56.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/32</td>
<td>N31°55.80' W104°30.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/28</td>
<td>N31°51.00' W104°33.30'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/32</td>
<td>N31°55.80' W104°30.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/28</td>
<td>N31°51.00' W104°33.30'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/32</td>
<td>N31°55.80' W104°30.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/28</td>
<td>N31°51.00' W104°33.30'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/32</td>
<td>N31°55.80' W104°30.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/28</td>
<td>N31°51.00' W104°33.30'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/32</td>
<td>N31°55.80' W104°30.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from Point D to V.

**ROUTE WIDTH** - 10 NM left and 7 NM right of centerline from A to B; 8 NM left and 7 NM right of centerline from B to E; 2 NM left and 8 NM right of centerline from E to G; 4 NM left and 7 NM right of centerline from G to H; 3 NM left and 7 NM right of centerline from H to I; 3 NM left and 4 NM right of centerline from I to K.
from I to J; 3 NM either side of centerline from J to K; 3 NM left and 4 NM right of centerline from K to L; 8 NM left and 10 NM right of centerline from L to N; 5 NM left and 10 NM right of centerline from N to Q; 4 NM left and 13 NM right of centerline from Q to R; 5 NM left and 8 NM right of centerline from R to S; 7 NM left and 6 NM right of centerline from S to T; 7 NM left and 13 NM right of centerline from T to U; 10 NM either side of centerline from U to V; 10 NM left and 9 NM right of centerline from V to W. Alternate Entry ELK: 2 NM either side of centerline from A2 to A.

Special Operating Procedures:
(1) Request use through 49 OSS/OSOS 24 hours in advance and between 0730-1630 local Mon-Fri.
(2) From Point D to F and from Point G to W route is designated maneuvering airspace and cleared for LOWAT.
(3) IR-192 is the reverse of IR-194 and is only available on odd days. On even days, IR-194 is available. Deconfliction with IR-193 and IR-195 is accomplished by 49 OSS/OSOS. Contact the applicable scheduling agency to deconfliction with VR-196.
(4) Do not enter R-5103C or the Centennial Fly Area on segment U-W unless scheduled into this airspace through 49 OSS/OSOS and then only after having received clearance from White Sands RADAR Facility 336.2. Use alternate exit ZIPER to avoid R-5103C.
(5) If using alternate exit ZIPER contact White Sands RADAR Facility 336.2. All other exits not entering restricted airspace contact Albuquerque ARTCC 292.15.
(6) To schedule Centennial Range, contact 49 OSS/OSOS and then only after having received clearance from Holloman Range offices.
(7) To transition from IR-192 to/from Talon Low MOA, both the MOA and the IR must be scheduled and procedural briefing received from 49 OSS/OSOS. Request 20 minute block time in Talon MOA, starting 5 minutes after IR entry. Prior to exceeding top of altitude block on route segment D-F, contact Albuquerque ARTCC 292.15 for clearance into MOA, and do not exceed 12,500’ MSL until cleared to do so by Albuquerque ARTCC.
(8) For re-entry into IR-192 from Talon Low MOA, contact Albuquerque ARTCC and request clearance to depart MOA and re-enter IR-192 at Point F.
(9) Alternate entries are: A1-A (Elk from IR-142 only) F (from Talon Low MOA only); L2-M1 (from IR-195 via El Paso Gap only).
(10) Alternate exits are: D (to Talon Low MOA only); L-L2 (to IR-134, El Paso Gap only); T-T2 (to ZIPER only).
(11) MARSA applies at entry, along the route and at exit.
(12) Numerous towers, avoidance and noise sensitive areas exist within the MTR. You must receive the MTR briefing and associated products from 49 OSS/OSOA prior to flying the route.
(13) Route is surveyed for operations down to 200’ AGL.

FSS Within 100 NM Radius: ABQ

IR-193

ORIGINATING ACTIVITY: 97 OSS/DOA, 101 South Sixth Street, Bldg 225, Altus AFB, OK 73521 DSN 866-6098, CS80-481-6098.


HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
03 AGL B 40 MSL to A LTS 250/22 N34°34.20’ W99°42.00’
03 AGL B 40 MSL to B CDS 022/17 N34°36.70’ W100°06.50’
03 AGL B 50 MSL to C CDS 334/22 N34°43.70’ W100°25.00’
03 AGL B 50 MSL to D BFV 260/69 N35°07.50’ W100°36.60’
03 AGL B 50 MSL to E BFV 267/51 N35°16.10’ W100°14.80’
03 AGL B 50 MSL to F BFV 242/26 N35°03.70’ W99°41.70’
03 AGL B 50 MSL to G LTS 250/22 N34°34.20’ W99°42.00’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to B; 5 NM either side of centerline from B to D; 5 NM right widening to 7 NM right and 5 NM left of centerline from D to E; 7 NM right narrowing to 5 NM right and 5 NM left of centerline from E to F; 10 NM either side of centerline from F to G.

Special Operating Procedures:
(1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313, C580-481-6313.
(2) Primary Entry: A; Alternate Entry: B; Primary Exit: G; Alternate Exit: F.
(3) Aircraft accomplishing airdrops at Sooner DZ, report commencement of airdrop run-in not later than 5 minutes prior to Altus Approach Control 257.725, using the phrase (call sign, inbound Sooner DZ, intentions to follow).
(4) At C, when practicable, avoid Memphis Municipal Airport by 1500’ AGL or 3 NM.
(5) From C to D avoid flight over town of Quail, TX, by 2 NM.
(6) From D to E avoid flight over town of Shamrock, OK, and when practicable avoid McLean Gray Airport and Shamrock Municipal Airport by 1500’ AGL or 3 NM.
(7) From E to F, when practicable, avoid Haddock Airport by 1500’ AGL or 3 NM.
(8) Contact Altus Approach Control 125.1/257.725 (CH 6) upon exiting F or G. Monitor 255.4 entire route of flight.
(10) Deconflict with IR-105 (NAS Ft. Worth), VR-159, VR-162, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route schedulers. For day low levels on legs C, D, E, and F, all aircraft will remain east of the McLean-Hedley line (near Point D) and south of I-40 (south of the town of Shamrock, near Point E) in order to avoid the eastern and southern halves of the VR-1141/1142 corridor.

Authorized entire route.
The coordinates for this line are approximately N34-43.08 W100-35.68 straight north to N35-14.42 and straight east to W99-52.10.

(11) PMSV: Altus AFB 239.8.

(12) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.

(13) Use caution for uncharted airfield just beyond Point F, N34-58.5 W99-29.0.

(14) Charted Tower south of Russell OK, approximate location N34-43.00/W099-40.00, has been removed.

(15) Use caution for several uncharted obstructions. Approximate locations: N34-56.00/W100-32.00; N34-36.57/W099-51.11; N35-13.27/100-12.80.

(16) Entire route susceptible to wild fires. Aircrews should check NOTAMs before scheduling.

(17) To report fires, uncharted obstructions or any other operational issues requiring attention on this route, please send an email to: Altus.airspace@altus.af.mil.

(18) CAUTION: Airdrop operations at or below 3500' MSL between points F and G: N34-34.78 W99-41.09, N34-34.78 W99-42.04, N34-33.47 W99-42.04, N34-33.47 W99-41.09.

(19) Aircraft utilizing Alternate Entry point B: Do not descend below 4500' MSL until within 10 NM of point B.

(20) Aircraft exiting Alternate Exit point F: be at or above 4500' MSL prior to crossing south of the line between N34-54.28 W99-25.10 and N34-54.28 W100-00.24.

(21) For noise abatement, from B to C remain right of centerline and avoid overflight of buildings at approximately N34-36 W100-14 by 2 NM.

(22) Maintain at or above 800' AGL when overflying the Red River.

FSS Within 100 NM Radius:
FTW, SJT

IR-194

ORIGINATING ACTIVITY: 49 OSS/OSOA, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Sunrise-0600Z++

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 120 MSL to or as assigned</td>
<td>A</td>
<td>PIO 317/11</td>
<td>N32°41.00' W105°25.00'</td>
</tr>
<tr>
<td>10 AGL B 120 MSL to</td>
<td>B</td>
<td>PIO 329/6</td>
<td>N32°37.00' W105°20.50'</td>
</tr>
<tr>
<td>10 AGL B 80 MSL to</td>
<td>C</td>
<td>PIO 261/4</td>
<td>N32°32.00' W105°23.30'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>D</td>
<td>PIO 202/24</td>
<td>N32°11.50' W105°34.50'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>E</td>
<td>SFL 278/35</td>
<td>N31°56.80' W105°43.50'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to</td>
<td>F</td>
<td>SFL 223/27</td>
<td>N31°29.30' W105°31.20'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>G</td>
<td>SFL 199/9</td>
<td>N31°37.20' W105°10.50'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>H</td>
<td>SFL 123/17</td>
<td>N31°32.70' W104°51.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>I</td>
<td>SFL 128/26</td>
<td>N31°25.00' W104°45.60'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>J</td>
<td>SFL 111/43</td>
<td>N31°21.50' W104°23.50'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>K</td>
<td>SFL 065/28</td>
<td>N31°51.00' W104°33.30'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L</td>
<td>SFL 058/32</td>
<td>N31°55.80' W104°30.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>M</td>
<td>SFL 058/41</td>
<td>N31°58.50' W104°20.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>N</td>
<td>CNM 126/15</td>
<td>N32°04.50' W104°02.20'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>O</td>
<td>CNM 074/19</td>
<td>N32°16.80' W103°51.50'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>P</td>
<td>CNM 021/24</td>
<td>N32°36.00' W103°58.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>Q</td>
<td>CNM 341/26</td>
<td>N32°40.80' W104°17.00'</td>
</tr>
<tr>
<td>01 AGL B 48 MSL to</td>
<td>R</td>
<td>PIO 064/34</td>
<td>N32°40.17' W104°39.00'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>S</td>
<td>CNM 294/42</td>
<td>N32°40.00' W104°54.50'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>T</td>
<td>PIO 041/18</td>
<td>N32°42.50' W105°01.30'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>U</td>
<td>PIO 007/16</td>
<td>N32°46.60' W105°12.20'</td>
</tr>
<tr>
<td>10 AGL B 110 MSL to</td>
<td>V</td>
<td>PIO 357/16</td>
<td>N32°47.80' W105°15.40'</td>
</tr>
<tr>
<td>10 AGL B 120 MSL to</td>
<td>W</td>
<td>PIO 344/24</td>
<td>N32°56.00' W105°20.10'</td>
</tr>
<tr>
<td>10 AGL B 110 MSL to</td>
<td>X</td>
<td>PIO 274/14</td>
<td>N32°35.50' W105°34.20'</td>
</tr>
<tr>
<td>01 AGL B 125 MSL to</td>
<td>Y</td>
<td>PIO 246/19</td>
<td>N32°27.90' W105°39.80'</td>
</tr>
<tr>
<td>01 AGL B 125 MSL to</td>
<td>Z</td>
<td>PIO 256/32</td>
<td>N32°30.40' W105°56.00'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>K</td>
<td>SFL 065/28</td>
<td>N31°55.80' W104°38.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>K1</td>
<td>SFL 048/27</td>
<td>N31°58.50' W104°38.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>K2</td>
<td>PIO 126/36</td>
<td>N32°05.00' W104°50.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>L1</td>
<td>SFL 058/32</td>
<td>N31°56.80' W104°30.00'</td>
</tr>
</tbody>
</table>

Alternate Entry: EL PASO GAP
01 AGL B 90 MSL to K2 PIO 126/36 N32°05.00' W104°50.00'

Alternate Exit: EL PASO GAP
01 AGL B 90 MSL to K1 SFL 048/27 N31°58.50' W104°38.00'

01 AGL B 70 MSL to L1 SFL 058/32 N31°56.80' W104°30.00'

Alternate Exit: ZIPER
TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to Q.

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from A to B; 9 NM left and 6 NM right of centerline from B to D (excludes airspace within R-5103B); 6 NM left and 7 NM right of centerline from D to E; 8 NM left and 5 NM right of centerline from E to F; 13 NM left and 4 NM right of centerline from F to G; 10 NM left and 5 NM right of centerline from G to H; 10 NM left and 8 NM right of centerline from H to J; 10 NM left and 7 NM right of centerline from J to L; 6 NM left and 7 NM right of centerline from L to M; 3 NM either side of centerline from M to N; 4 NM left and 3 NM right of centerline from N to O; 7 NM left and 3 NM right of centerline from O to P; 7 NM left and 6 NM right of centerline from P to Q; 8 NM left and 5 NM right of centerline from Q to S; 10 NM left and 8 NM right of centerline from S to V; 7 NM left and 10 NM right of centerline from V to W; 3 NM left and 4 NM right of centerline from W to Y; 10 NM left and 9 NM right of centerline from Y to Z; Alternate Exit ELK: 2 NM either side of centerline from W to W2.

Alternate Exit: TALON LOW
01 AGL B 48 MSL to R PIO 064/34 N32°40.17' W104°39.00'

Alternate Exit: ELK
10 AGL B 120 MSL to W1 CME 230/43 N33°00.20' W105°22.10'
120 MSL to W2 CME 256/39 N33°18.50' W105°24.00'

Special Operating Procedures:
(1) Request use through 49 OSS/OSOS 24 hours in advance between 0730-1630 local Mon-Fri.
(2) From Point C to Q; from Point R to T and from Point X to Z, route is designated maneuvering airspace and cleared for LOWAT.
(3) IR-194 is the reverse of IR-192 and is only available on even days. On odd days, IR-192 is available. Deconfliction with IR-134 and IR-195 is accomplished by 49 OSS/OSOS. Contact the applicable scheduling agency for deconfliction with VR-196.
(4) Do not enter R-5103C or the Centennial Fly Area on segment X-Z unless scheduled into this airspace by 49 OSS/OSOS and then only after having received clearance from White Sands RADAR Facility 336.2. Use alternate exit ZIPER to avoid R-5103C.
(5) If using alternate exit ZIPER contact White Sands RADAR Facility 336.2. All other exits not entering restricted airspace contact Albuquerque ARTCC 292.15.
(6) To schedule Centennial Range, contact 49 OSS/OSOS. Comply with all procedures listed in current HAFB range supplement which can be obtained from Holloman Ranges office.
(7) To transition from IR-194 to/from Talon Low MOA, both the MOA and the IR must be scheduled and procedural briefing received from 49 OSS/OSOS. Request 20 minute block time in Talon MOA, starting 20 minutes after IR entry. Prior to exceeding top of altitude block on route segment R-S, contact Albuquerque ARTCC 292.15 for clearance into MOA, and then do not exceed 12,500' MSL until cleared to do so by Albuquerque ARTCC.
(8) For re-entry to IR-194 from Talon Low MOA, contact Albuquerque ARTCC and request clearance to depart MOA and re-enter IR-194 at Point T.
(9) Alternate entries are: El Paso Gap (K2-L1) from IR-134 only; T from Talon Low MOA only.
(10) Alternate exits are: El Paso Gap (K2-L1) to IR-195 only; R to Talon Low MOA only;
(11) MARSA applies at entry, along the route and at exit.
(12) Numerous towers, avoidance and noise sensitive areas exist within the MTR. You must receive the MTR brief and associated products from 49 OSS/OSOA prior to flying the route.
(13) Route is surveyed for operations down to 200' AGL.

FSS Within 100 NM Radius:
ABQ

IR-195

ORIGINATING ACTIVITY: 49 OSS/OSOA, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Sunrise-0600Z++

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 120 MSL to or as assigned</td>
<td>A</td>
<td>PIO 344/24</td>
<td>N32°56.00' W105°20.10'</td>
</tr>
<tr>
<td>10 AGL B 120 MSL to</td>
<td>B</td>
<td>PIO 004/14</td>
<td>N32°45.10' W105°13.90'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>C</td>
<td>PIO 061/10</td>
<td>N32°34.50' W105°07.50'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>D</td>
<td>PIO 122/29</td>
<td>N32°11.10' W104°53.50'</td>
</tr>
<tr>
<td>01 AGL B 98 MSL to</td>
<td>E</td>
<td>PIO 126/36</td>
<td>N32°05.00' W104°50.00'</td>
</tr>
<tr>
<td>01 AGL B 98 MSL to</td>
<td>F</td>
<td>PIO 183/23</td>
<td>N32°09.30' W105°25.60'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>G</td>
<td>PIO 202/24</td>
<td>N32°11.50' W105°34.50'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>H</td>
<td>PIO 225/17</td>
<td>N32°22.50' W105°35.00'</td>
</tr>
<tr>
<td>01 AGL B 125 MSL to</td>
<td>I</td>
<td>PIO 246/19</td>
<td>N32°27.90' W105°39.80'</td>
</tr>
<tr>
<td>01 AGL B 125 MSL to</td>
<td>J</td>
<td>PIO 256/32</td>
<td>N32°30.40' W105°56.00'</td>
</tr>
</tbody>
</table>

Alternate Entry: EL PASO GAP
10 AGL B 70 MSL to E1 SFL 048/27 N31°58.50' W104°38.00' |
10 AGL B 98 MSL to E PIO 126/36 N32°05.00' W104°50.00' |

Alternate Entry: TALON LOW
IR ROUTES

10 AGL B 80 MSL to D1 PIO 122/29 N32°11.10' W104°53.50'

Alternate Exit:
EL PASO GAP
01 AGL B 98 MSL to E PIO 126/36 N32°05.00' W104°50.00'
10 AGL B 98 MSL to E1 SFL 048/27 N31°58.50' W104°38.00'
01 AGL B 70 MSL to E2 SFL 065/28 N31°51.00' W104°33.30'

Alternate Exit:
TALON LOW
01 AGL B 98 MSL to C PIO 061/10 N32°34.50' W105°07.50'

Alternate Exit:
Ziper
01 AGL B 80 MSL to G PIO 202/24 N32°11.50' W105°34.50'
10 AGL B 80 MSL to G1 PIO 329/6 N32°37.00' W105°20.50'
10 AGL B 130 MSL to G2 PIO 314/15 N32°44.10' W105°28.00'

TERRAIN FOLLOWING OPERATIONS: Terrain following is authorized from Point B to Point J.

ROUTE WIDTH - Starting at N32-35 W105-10 to N32-13 W105-15 to N32-10.5 W105-00 to N32-35 W105-10 to N32-44 W105-23 to N32-34 W105-30 to N32-36 W105-35.5 to N32-44 W105-59 to N32-28 W106-00 to N32-23 W105-42.5 to N32-06 W105-41 to N32-02 W104-41 to N32-12 W104-41 to N32-52.2 W105-04.5 to N32-49 W105-12 to N32-17.3 to N32-54.8 W105-22.7 to N32-44 W105-23 to point of beginning.

Special Operating Procedures:
(1) Request use through 49 OSS/OSOS 24 hours in advance and between 0730-1630 local Mon-Fri.
(2) From Point C to Point J route is designated maneuvering airspace and cleared for LOWAT.
(3) IR-195 is the reverse of IR-134 and is only available on odd days. On even days, IR-134 is available. Deconfliction with IR-192 and IR-194 is accomplished by 49 OSS/OSOS.
(4) Do not enter R-5103C or the Centennial Fly Area on segment H-J unless scheduled into this airspace through 49 OSS/OSOS and then only after having received clearance from White Sands RADAR Facility 336.2. Use alternate exit ZIPER to avoid R-5103C.
(5) If using alternate exit ZIPER, contact White Sands RADAR Facility 336.2. All other exits not entering restricted airspace contact Albuquerque ARTCC 292.15.
(6) To schedule Centennial Range, contact 49 OSS/OSOS. Comply with all procedures listed in current HAFB Range Supplement which can be obtained from Holloman Ranges Office.
(7) To transition from IR-195 to/from Talon Low MOA, both the MOA and the IR must be scheduled and procedural briefing received from 49 OSS/OSOS. Request 20 minute block time in Talon MOA starting 5 minutes after IR entry time. Contact Albuquerque ARTCC 292.15 for clearance into Talon High MOA, prior to exceeding top of the altitude block on segment C-D, and do not exceed 12,500' MSL until cleared by Albuquerque ARTCC to do so.
(8) Alternate Entries: Point D (from Talon Low MOA only); Point E (from IR-192, El Paso Gap only).
TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to R; 7 NM left and 4 NM right of centerline R to S; 7 NM either side of centerline from S to T; 4 NM either side of centerline from T to AF; 7 NM left and 4 NM right of centerline AF to AG; 7 NM left and 10 NM right of centerline AG to AI; 4 NM either side of centerline from AI to AM.

Special Operating Procedures:
(1) This route to be used only in direct support of test programs authorized by PMTC or AFFTC.
(3) Remain clear of Sisquoc Condor Sanctuary between D and E by 1 mile laterally or 3000' AGL.
(4) Aircraft shall adhere to the following radio procedures:
   (a) Contact Edward’s Approach Control on 348.7.
   (b) Monitor Oakland ARTCC on 319.8 after S.
   (c) Contact Nellis Control (when operational) on 392.1 at Z, other times monitor Los Angeles ARTCC on 343.6.
   (d) Monitor Salt Lake City ARTCC on 360.8 after AG.
(5) Unmanned aerospace vehicles will avoid charted airports by 1500' vertically or 3 NM laterally.
(6) Route is designated for MARSA operations established by coordinated scheduling.

FSS Within 100 NM Radius:
CDC, HHR, RAL, RNO, SAN

IR-203

ORIGINATING ACTIVITY: Commander Strike Fighter Wing, US. Pacific Fleet, 001 (K) Street, Room 121, NAS Lemoore, CA 93246-5022 DSN 949-1034, C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data   Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A AVE 057/1  N35°39.00' W119°58.00'
05 AGL B 75 MSL to  O NID 012/38  N36°15.00' W117°21.00'
80 MSL B 100 MSL to  B MQO 303/10  N35°23.00' W120°54.00'
05 AGL B 110 MSL to  P NID 013/45  N36°21.10' W117°15.90'
80 MSL B 100 MSL to  C BSR 069/25  N36°13.00' W121°08.00'
05 AGL B 110 MSL to  PA NID 011/47  N36°24.00' W117°16.50'
80 MSL B 100 MSL to  D SNS 287/18  N36°50.00' W121°55.00'
30 AGL B 120 MSL to  Q BTY 269/39  N36°58.10' W117°31.80'
110 MSL B 120 MSL to  E PXN 305/26  N37°03.00' W121°07.00'
05 AGL B 105 MSL to  R BTY 279/38  N37°04.00' W117°28.50'
110 MSL B 120 MSL to  F LIN 009/13  N37°16.00' W120°53.00'
05 AGL B 105 MSL to  S BTY 286/44  N37°11.10' W117°31.20'
110 MSL B 120 MSL to  G CZQ 024/9  N37°26.80' W117°50.50'
05 AGL B 105 MSL to  T BTY 291/65  N37°37.70' W117°41.70'
110 MSL B 120 MSL to  H NLC 051/24  N37°48.00' W117°49.00'
05 AGL B 105 MSL to  U BTY 297/38  N37°54.00' W116°49.50'
150 AGL B 105 MSL to  I BTY 303/40  N38°08.50' W116°25.50'
05 AGL B 105 MSL to  V BTP 210/22  N38°06.00' W116°04.00'
150 AGL B 105 MSL to  W BTP 215/22  N38°06.00' W116°04.00'
05 AGL B 105 MSL to  X TPH 211/13  N38°15.00' W115°36.00'
150 AGL B 105 MSL to  Y TPH 006/00  N38°15.00' W115°36.00'
05 AGL B 105 MSL to  Z TPH 013/45  N38°24.00' W115°36.00'
150 AGL B 105 MSL to  AA TPH 011/47  N38°24.00' W115°36.00'
ROUTE WIDTH - 6 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Exit: Point F and G.
(2) Tie-in FSS: Rancho Murieta (RIU).
(3) Altitude data is a block from which Oakland Center will assign an altitude.
(4) Radar training route. Simulated dive attacks not authorized.
(5) Users of this route shall ensure that Hunter and Foothill MOA’s are scheduled for transit with COMSTRKFIGHTWINGPAC.
**IR ROUTES**

(6) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.

(7) Remain clear of R-2513 between B and C.

(8) Contact Oakland Center on 353.8 prior to H for further IFR clearance.

(9) Be alert for C-5/C-141 aircraft flying 250 KCAS at 1000' AGL on a crossing route

**FSS Within 100 NM Radius:**
HHR, OAK, RNO, RAL, RIU

**IR-206**

**ORIGINATING ACTIVITY:** Commander Naval Air Warfare Center, Weapons Division, Code P3524, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7527, C805-989-7527.

**SCHEDULING ACTIVITY:** Commander Naval Air Warfare Center, Weapons Division, Code P3506, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7545, C805-989-7545.

**HOURS OF OPERATION:** Daylight hours by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 110 MSL to A</td>
<td>TPH 215/22</td>
<td>N37°48.00' W117°24.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 110 MSL to B</td>
<td>TPH 300/29</td>
<td>N38°23.00' W117°27.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 140 MSL to C</td>
<td>MVA 093/11</td>
<td>N38°30.00' W117°48.50'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 140 MSL to D</td>
<td>MVA 012/8</td>
<td>N38°41.00' W117°57.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 85 MSL to E</td>
<td>MVA 329/25</td>
<td>N38°58.00' W118°09.70'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 85 MSL to F</td>
<td>MVA 320/38</td>
<td>N39°09.00' W118°21.50'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 85 MSL to G</td>
<td>MVA 298/49</td>
<td>N39°09.00' W118°46.50'</td>
<td></td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 4 NM either side of centerline A to B; 3 NM either side of centerline B to G.

**Special Operating Procedures:**

(1) Airspeeds are subsonic.

(2) This route to be used only in support of Test missions authorized by PMTC or AAFTC in conjunction with IR-200.

(3) Unmanned aerospace vehicles will avoid charted airports by 1500' vertically or 3 NM laterally.

(4) Alternate Exits: D and F.

(5) Aircraft shall adhere to the following radio procedures:
   (a) Contact Oakland ARTCC on 319.8 MHZ at Point S on IR-200.
   (b) Contact Fallon desert control on 322.35 MHZ at Point D on IR-206.

(6) Prior coordination with NAS Fallon Range Scheduling required by user. (DSN 890-2416/2418, C775-426-2416/2418).

**IR-207**

**ORIGINATING ACTIVITY:** Commander Strike Fighter Wing, US. Pacific Fleet, 001 (K) Street, Room 121, NAS Lemoore, CA 93246-5022 DSN 949-1034, C559-998-7545.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Daylight hours, OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 150 MSL to or as assigned</td>
<td>A</td>
<td>SNS 227/18</td>
<td>N36°32.00' W121°54.00'</td>
</tr>
<tr>
<td>80 MSL B 150 MSL to</td>
<td>B</td>
<td>SNS 270/35</td>
<td>N36°50.00' W122°18.00'</td>
</tr>
<tr>
<td>30 MSL B 80 MSL to</td>
<td>C</td>
<td>OSI 187/26</td>
<td>N37°00.00' W122°30.00'</td>
</tr>
<tr>
<td>30 MSL to</td>
<td>D</td>
<td>OSI 235/28</td>
<td>N37°15.00' W122°50.00'</td>
</tr>
<tr>
<td>30 MSL to</td>
<td>E</td>
<td>OSI 282/38</td>
<td>N37°42.00' W122°59.00'</td>
</tr>
<tr>
<td>30 MSL to</td>
<td>F</td>
<td>PYE 176/14</td>
<td>N37°51.00' W122°56.00'</td>
</tr>
<tr>
<td>30 MSL B 50 MSL to</td>
<td>G</td>
<td>PYE 238/15</td>
<td>N38°01.00' W123°10.00'</td>
</tr>
<tr>
<td>50 MSL to</td>
<td>H</td>
<td>PYE 315/25</td>
<td>N38°27.00' W123°07.00'</td>
</tr>
<tr>
<td>50 MSL B 90 MSL to</td>
<td>I</td>
<td>PYE 331/33</td>
<td>N38°37.00' W123°01.00'</td>
</tr>
<tr>
<td>90 MSL to</td>
<td>J</td>
<td>ENI 077/25</td>
<td>N39°02.00' W122°45.00'</td>
</tr>
<tr>
<td>90 MSL to</td>
<td>K</td>
<td>ENI 064/36</td>
<td>N39°09.00' W122°31.00'</td>
</tr>
<tr>
<td>60 MSL B 90 MSL to</td>
<td>L</td>
<td>ENI 060/44</td>
<td>N39°14.00' W122°21.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>M</td>
<td>RBL 110/42</td>
<td>N39°40.00' W121°31.00'</td>
</tr>
<tr>
<td>05 AGL B 100 MSL to</td>
<td>N</td>
<td>RBL 063/51</td>
<td>N40°14.00' W121°08.00'</td>
</tr>
<tr>
<td>05 AGL B 100 MSL to</td>
<td>O</td>
<td>RBL 049/72</td>
<td>N40°33.00' W120°47.00'</td>
</tr>
<tr>
<td>05 AGL B 130 MSL to</td>
<td>P</td>
<td>LLC 261/45</td>
<td>N40°12.50' W119°32.50'</td>
</tr>
<tr>
<td>02 AGL B 120 MSL to</td>
<td>PA</td>
<td>LLC 251/31</td>
<td>N40°06.60' W119°15.00'</td>
</tr>
<tr>
<td>02 AGL B 120 MSL to</td>
<td>Q</td>
<td>LLC 178/15</td>
<td>N39°53.00' W118°39.50'</td>
</tr>
<tr>
<td>02 AGL B 120 MSL to</td>
<td>R</td>
<td>LLC 096/11</td>
<td>N40°03.50' W118°22.00'</td>
</tr>
<tr>
<td>02 AGL B 120 MSL to</td>
<td>S</td>
<td>LLC 092/21</td>
<td>N40°01.00' W118°09.00'</td>
</tr>
<tr>
<td>02 AGL B 120 MSL to</td>
<td>T</td>
<td>LLC 110/19</td>
<td>N39°56.00' W118°14.50'</td>
</tr>
</tbody>
</table>

(7) Route is designated for MARSA operations established by coordinated scheduling.

**FSS Within 100 NM Radius:**
RIU, RNO
TERRAIN FOLLOWING OPERATIONS: Authorized from M to P. Radar navigation activity from A to M and from P to T.

ROUTE WIDTH - 2.5 NM either side of centerline from A to H; 5 NM either side of centerline from H to P; 2 NM either side of centerline from P to T.

Special Operating Procedures:
(1) Alternate Entry: G and M.
(2) Alternate Exit: Q, R and S.
(3) Monitor assigned Oakland Center frequency for entire route. After O, expect to monitor Oakland Center 285.5/128.8.
(4) Avoid all towns and airports along route by 1500' AGL or 3 NM.
(5) Tie-in FSS: Rancho Murieta (RIU).
(6) Radar training route. Simulated dive attacks not authorized.
(7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset to sunrise.
(8) Reserving this route does not authorize access to the Carson MOA or R-4813 between PA and T. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.
(9) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 322.35/126.6 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
(10) Minimum altitude does not guarantee terrain clearance on all route segments. Pilots flying IMC are responsible for maintaining adequate terrain clearance.
(11) Scheduling this route does not authorize entry into the China MOA between M and N. See the AP/1A for MOA scheduling point of contact.
(12) Remain left of route centerline between N and O to avoid the town of Westwood.
(13) Remain left of route centerline between O and P to avoid the town and airport of Susanville and R-2530.
(14) Remain below 100 MSL between PA and Q to deconflict with V6.
(15) Be alert for C-5/C-141 aircraft flying 250 KCAS at 1000' AGL on a crossing route.

FSS Within 100 NM Radius:
HHR, OAK, RNO, RIU

IR-211


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A LAX 262/54 N34°02.00' W119°31.00'
02 AGL B 30 MSL to B RZS 104/23 N34°20.00' W119°22.00'
10 AGL B 50 MSL to C RZS 049/23 N34°41.00' W119°21.00'
02 AGL B 80 MSL to D GMN 121/4 N34°45.00' W118°48.00'
02 AGL B 80 MSL to E GMN 079/13 N34°47.00' W118°36.00'
02 AGL B 80 MSL to F GMN 040/32 N35°06.00' W118°19.00'
02 AGL B 80 MSL to G GMN 039/52 N35°18.00' W118°00.00'
02 AGL B 80 MSL to H GMN 040/58 N35°20.00' W117°53.00'
02 AGL B 80 MSL to I DAG 294/54 N35°32.00' W117°26.00'

TERRAIN FOLLOWING OPERATIONS: Terrain following operations are not authorized on the route segment from B to C.

ROUTE WIDTH - 2 NM either side of centerline from A to F; 4 NM either side centerline from F to I.

Special Operating Procedures:
(1) Alternate Entry Point C.
(2) Alternate Exit Point F.
(3) Aircraft will remain VMC at all times on this route.
(4) CAUTION: Tower extending to 1545' MSL located 3 NM West of Point A.
(5) Maintain 3000' AGL within 3 NM of Conover Airport on Point C to D segment and White Oaks Lodge Airport Point E to F segment.
(6) Aircraft shall contact High Desert TRACON for traffic advisories at Point E on 348.7.
(7) Aircraft shall contact High Desert TRACON for return clearance to El Toro.
(8) Comply with R-2508 restrictions. Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1 California, Flight Hazards, R-2508.
(9) Aircraft will be VFR. See and Avoid with other R-2508 complex users within the lateral confines of R-2508.
(10) Contact High Desert TRACON on 348.7 for return clearance to El Toro.
(12) Separation Criteria - Scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
(13) Maintain at or above 3000' AGL when within 5 NM of Mojave Airport (between Points F and G).
IR ROUTES

FSS Within 100 NM Radius:
HHR, RAL, SAN

IR-212


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D and F.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 3 NM either side of centerline from C to G.

Special Operating Procedures:
(1) Aircraft will remain VMC at all times on this route.
(2) Comply with R-2501 and R-2502 restrictions.
(3) Cross a point 15 miles south of Pt. B at or below 7000' MSL.
(4) Upon entering R-2508 complex, aircraft will transmit in the blind on 315.9 and continue to monitor while in the complex. Aircrews transiting R-2508 complex are required to see FLIP, Area Planning, AP/1, California, Flight Hazards, R-2508.
(5) Contact Edwards RAPCON on 291.6 for return clearance after exit at F or G.
(6) The Special Coordination Instructions - Route conflicts with VR-1217 between Points A and C, IR-217 between Points A and C, IR-217 between Points A and C, VR-1218 between Points A and B/C and D, VR-1265 between Points B and C, VR-1214 between Points D and E, and VR-1215 between Points E and G.
(7) Separation Criteria-Scheduling coordination by user for IR conflicts and See and Avoid for VR conflicts.

FSS Within 100 NM Radius:
HHR, RAL, RNO, SAN

IR-213


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data       Pt   Fac/Rad/Dist   Lat/Long
As assigned to A   DAG 156/42   N34°16.00'   W116°27.00'
02 AGL B 70 MSL to B DAG 158/12   N34°46.00'   W116°33.00'
02 AGL B 70 MSL to C DAG 083/20   N34°55.00'   W116°11.00'
02 AGL B 70 MSL to D DAG 046/38   N35°16.00'   W115°54.00'
02 AGL B 80 MSL to E DAG 005/43   N35°38.00'   W116°17.00'
02 AGL B 80 MSL to F DAG 339/46   N35°44.00'   W116°41.00'
02 AGL B 80 MSL to G DAG 325/48   N35°43.00'   W116°55.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D and F.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 3 NM either side of centerline from C to G.

Special Operating Procedures:
(1) Aircraft will remain VMC at all times on this route.
(2) Avoid airports along route by 2000' or 3 NM.
(3) Comply with R-2501 restrictions.
(4) Cross a point 15 miles south of B at or below 7000' MSL.
(5) Attempt contact with Los Angeles Center at D on 360.65 .
(6) Do not fly between 1000' AGL within 4 NM of Parker Dam.
(7) Contact Los Angeles Center on 285.6 at K for return clearance.
(8) Special Coordination Instructions - Route conflicts with IR-212 between Point A and C, IR-217 between Point A and F, VR-1217 between Points A and C, VR-1218 between Points A and B/C and D, VR-1265 between Points B and C, VR-1225 between Points C and D, VR-299 between Points F and G/I and J, VR-247 between Points G and H, VR-283 between Points G and H/I and J, VR-1220 at Point H and between Points I and J, VR-1203 between Points H and
I, IR-254 at Point I, VR-1268 at Point H and between I and J, IR-255 between Points I and J, IR-252 between Points I and J, VR-296 at Point J, and IR-214 between Points H and J.

(9) Separation Criteria-scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.

(10) Avoid overflight of Gene Wash Airfield (between Points J and K) by 3NM when below 3000’ AGL.

(11) Critical bald eagle breeding and nesting areas below the Baghdad 1 MOA and to the north toward Mohan Peak (between Points I and J, left of centerline), mid Dec through mid Jun.

(12) CAUTION: 100’ tower located at N35-29-27 W115-33-27W between Points C and D 3.5 NM NW of Point D.

(13) CAUTION: Antenna Farm located at N35-01-58 W114-21-57 between Points G and H approximately 4.5 NM past Point G; 1 NM right of centerline tallest 164’.

FSS Within 100 NM Radius:
HHR, PRC, RAL, RNO, SAN

IR-214


HOURS OF OPERATION: Even numbered days only

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 4 NM either side of centerline A to C; 1 NM left and 4 NM right of centerline C to F; 1 NM either side of centerline F to G; 1 NM left and 3 NM right of centerline G to H; 2 NM left and 4 NM right of centerline H to I.

Special Operating Procedures:
(1) Aircraft shall remain VMC at all times when on this route.

(2) Do not fly below 2000’ AGL within 3NM of Vital Junction and Parker Airports.

(3) Do not fly below 1000’ AGL within 4 NM of Parker Dam.

(4) Cross a Point 9 NM South of G at or below 6000’ MSL

(5) Report at F to Albuquerque on 298.9. if unable, contact Prescott FSS.

(6) Contact Los Angeles Center 285.6 at Parker for return clearance to El Toro.


(8) Avoid Gene Wash Airfield (between Points H and I) by 3 NM when below 3000’ AGL.

(9) Critical bald eagle breeding and nesting areas in the vicinity of the Alamo Lake (N34 16.0 W113 34.0) below the Baghdad 1 MOA and to the north toward Mohan Peak (Point F) mid-Dec thru mid-Jun. recommend 1500’ AGL when crossing Aquarius Mountains (between Points F and G).

FSS Within 100 NM Radius:
HHR, PRC, RAL, RNO, SAN

IR-216


HOURS OF OPERATION: Even numbered days- daylight only

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 3 NM either side of centerline.
IR ROUTES

Special Operating Procedures:
1. R-2507 restrictions to be complied with after Point E.
2. Aircraft shall remain VMC at all times.
3. Contact Yuma Control on 274.0 for return clearance to El Toro after completing operations in R2507.
4. Mandatory reporting Point at E. Contact Los Angeles Center on 285.6.
5. Special Coordination Instructions - Route conflicts with VR-1265 between Points A and B, IR-250 at Point A, VR-289 between Points A and D, IR-248 between Points C and D, VR-296 at Point D, IR-218 between Points D and E, VR-1266 between Points D and E, and IR-217 between Points D and F.
6. Separation Criteria - Scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
7. Cross Point B at or above 7000' MSL.

FSS Within 100 NM Radius:
HHR, RAL, RNO, SAN

IR-217

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-5157, C858-577-5157.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>DAG 156/42</td>
<td>N34°16.00'</td>
<td>W116°27.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to B</td>
<td>DAG 158/12</td>
<td>N34°46.00'</td>
<td>W116°33.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to C</td>
<td>DAG 083/20</td>
<td>N34°55.00'</td>
<td>W116°11.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to D</td>
<td>GFS 307/26</td>
<td>N35°28.00'</td>
<td>W115°30.00'</td>
</tr>
<tr>
<td>15 AGL B 70 MSL to E</td>
<td>GFS 007/14</td>
<td>N35°21.00'</td>
<td>W115°04.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to F</td>
<td>GFS 091/18</td>
<td>N35°03.00'</td>
<td>W114°50.00'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to G</td>
<td>PKE 279/22</td>
<td>N34°15.00'</td>
<td>W115°05.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to H</td>
<td>TNP 113/30</td>
<td>N33°48.00'</td>
<td>W115°18.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to I</td>
<td>TRM 099/23</td>
<td>N33°29.00'</td>
<td>W115°44.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to J</td>
<td>TRM 152/15</td>
<td>N33°23.00'</td>
<td>W116°05.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to K</td>
<td>TRM 154/31</td>
<td>N33°07.00'</td>
<td>W116°01.00'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>TNP 165/33</td>
<td>N33°34.00'</td>
<td>W115°46.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to B</td>
<td>BLH 340/17</td>
<td>N33°53.00'</td>
<td>W114°48.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to C</td>
<td>BLH 069/27</td>
<td>N33°39.00'</td>
<td>W114°13.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D and from E to K.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
1. Alternate Exit: I.
2. Alternate Entry: F and G
3. Aircraft will remain VMC at all times on this route.
4. Avoid airports along route by 2000' or 3 NM.
5. Comply with R-2501 restrictions.
6. Cross a point 15 miles south of B at or below 7000' MSL.
7. Attempt contact with Los Angeles ARTCC at D on 360.65.
8. Contact Los Angeles Center on 285.6 for exit at I or 291.7 for exit at K for return clearance.
11. Separation Criteria - Scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
12. When alternate entry Point G is used, cross a point 15 NM north of H at or below 7000' MSL.
14. Contact Yuma Range Control on 274.0 for clearance into R-2507 if exiting at Point I.
15. CAUTION: 199' Radio Tower located at N33-43-00 W115-24-32 between Points H and I approximately 7 NM past Pt. H 1.5 NM left of centerline.
16. CAUTION: Radio Tower located at N34-08-44 W115-07-15 between Point G and H approximately 8 NM past Pt. G 1 NM left of centerline.
17. CAUTION: 100' Radio Tower located at N35-29-27 W115-33-27 3.5 NM NW of Point D.

FSS Within 100 NM Radius:
HHR, PRC, RAL, RNO, SAN

IR-218

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-5157, C858-577-5157.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>TNP 165/33</td>
<td>N33°34.00'</td>
<td>W115°46.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to B</td>
<td>BLH 340/17</td>
<td>N33°53.00'</td>
<td>W114°48.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to C</td>
<td>BLH 069/27</td>
<td>N33°39.00'</td>
<td>W114°13.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized from A to C and from F to G.

ROUTE WIDTH - 5 NM either side of centerline except, 2 NM either side of centerline between Pts. E and F.

Special Operating Procedures:
(1) Aircraft will remain VMC at all times on this route.
(2) Maintain at or above 2000' AGL within 3 NM of all airports.
(3) Route user must comply with altitudes listed to avoid conflict with users of IR-266 and 500' vertical separation provided at route intersections.
(4) Report D to Prescott FSS, if two-way communications cannot be maintained with Albuquerque ARTCC on 307.3.
(5) Comply with R-2301 restrictions.
(6) Contact Yuma Approach on 314.0 or 374.8 for clearance to El Toro if not operating in R-2301.
(7) Contact Yuma Range Control on 274.0 inside the R-2301 for return clearance to El Toro. Contact prior to exiting R-2301.
(8) Special Coordination Instructions - Route conflicts with IRs 200-235-237-238-286-425, VRs 1253-1259-1260-1406 between A and B, IRs 235-237-238 between B and C, IRs 235-237-238 between C and D, IRs 235-293, VRs 209-1253-1260 between D and E. Scheduling coordination required by user for MOA entry and IR conflicts and See and Avoid for VR conflicts.
(9) Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center Scheduling and follow these procedures.

FSS Within 100 NM Radius:
HHR, PRC, RAL, RNO, SAN

IR-234


SCHEDULING ACTIVITY: Commander AFFTC, 412 OSS/OASR, 300 E Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A TPH 068/46 N38°06.00' W116°04.00'
SFC B 105 Msl to B TPH 052/43 N38°17.00' W116°11.00'
SFC B 115 Msl to C TPH 044/48 N38°25.00' W116°08.00'
SFC B 115 Msl to D TPH 025/78 N39°00.00' W115°55.00'
SFC B 115 Msl to E BQU 137/51 N40°00.00' W115°17.00'
SFC B 115 Msl to F BVL 204/50 N40°03.00' W114°24.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 7 NM either side of centerline from A to B; 10 NM either side of centerline from B to D; 8 NM either side of centerline D to E; 4 NM either side of centerline from E to F.

Special Operating Procedures:
(1) This route authorized in direct support of AFFTC’s test program.
(2) Aircrew entering at A shall schedule the Reveille MOA with the Range Management Office at Nellis AFB, NV (DSN 348-4710). If within 2 days of scheduled operation, contact Blackjack (DSN 682-3537).
(3) Approaching the Reveille MOA, aircrew shall contact Nellis Control 343.0 for clearance into the MOA.
(4) Aircrew exiting at F shall schedule the Gandy MOA with the 388th Ranges Range Control Office at Hill AFB, UT (DSN 777-9385 for future use or 777-9386 for same day operations).
(5) Aircrew shall contact Clover 339.0, 301.7, 118.45, or 134.1 prior to entering the Gandy MOA.
(6) Alternate Entry/Exit: C.
(7) Route is designated for MARSA operations established by coordinated scheduling.
(9) Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center Scheduling and follow these procedures.

FSS Within 100 NM Radius:
CDC, RNO

IR-235

IR ROUTES

SCHEDULING ACTIVITY: Commander AFFTC, 412
OSS/OSR, 300 E Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

Altitude Data  Pt   Fac/Rad/Dist      Lat/Long

As assigned to A BVL 204/50     N40°03.00'  W114°24.00'
SFC B 115 MSL to B BQU 137/51  N40°00.00'  W115°17.00'
SFC B 115 MSL to C TPH 025/78  N39°00.00'  W115°55.00'
SFC B 115 MSL to D TPH 044/48  N38°25.00'  W116°08.00'
SFC B 115 MSL to E TPH 052/43  N38°17.00'  W116°11.00'
SFC B 105 MSL to F TPH 068/46  N38°06.00'  W116°04.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 8 NM either side of centerline from B to C; 10 NM either side of centerline from C to D; 7 NM either side of centerline from E to F.

Special Operating Procedures:

1. Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flight Hazards, R-2508. Users must schedule into complex MOAs/restricted areas when these areas are active.

Altitude Data  Pt   Fac/Rad/Dist      Lat/Long

As assigned to A EDW 024/11  N35°07.50'  W117°36.30'
02 AGL B 50 MSL to B EDW 267/14  N35°01.30'  W118°01.30'
02 AGL B 55 MSL to C EDW 288/23  N35°10.50'  W118°08.50'
02 AGL B 105 MSL to D EHF 072/34  N35°31.30'  W118°23.80'
02 AGL B 100 MSL to E EHF 058/32  N35°38.80'  W118°28.80'
02 AGL B 100 MSL to F EHF 045/35  N35°47.40'  W118°28.80'
02 AGL B 105 MSL to G TTE 049/30  N36°07.60'  W118°27.30'
02 AGL B 145 MSL to H BHI 139/61  N36°28.00'  W117°49.30'
02 AGL B 135 MSL to I BHI 142/29  N36°56.20'  W118°08.00'
02 AGL B 130 MSL to J BHI 144/21  N37°03.00'  W118°12.50'
02 AGL B 130 MSL to K BHI 116/26  N37°05.60'  W117°57.30'
02 AGL B 90 MSL to L BHI 101/34  N37°07.30'  W117°43.40'
02 AGL B 100 MSL to M BTY 247/52  N36°41.80'  W117°48.70'
02 AGL B 100 MSL to N BTY 217/40  N36°24.10'  W117°24.50'
02 AGL B 75 MSL to O NID 031/29  N35°38.50'  W117°04.50'
02 AGL B 80 MSL to P NID 081/30  N35°15.80'  W117°19.80'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to D; 3 NM left and 1 NM right of centerline from D to F; 2 NM either side of centerline from F to I; 1 NM left and 4 NM right of centerline from I to K; 2 NM either side of centerline from K to Q.

Special Operating Procedures:

1. Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flight Hazards, R-2508. Users must schedule into complex MOAs/restricted areas when these areas are active.
IR ROUTES

(a) R-2508 MOAs-Contact CCF at DSN 527-2508.
(b) R-2515 MOAs-Contact AFFTC scheduling DSN 527-4110.
(c) R-2524 MOAs-Contact NAWC Echo Range scheduling DSN 437-9131.

(2) Points B to C: Avoid Mojave Airport Class D airspace. Avoid California City Airport by 3 miles lateral.
(3) In R-2515, prior to Point A, contact Sport (343.7) for route entry.
(4) Point C, Alternate Entry. Contact Joshua Approach 348.7 for IFR clearance if using this as initial entry point.
(5) Point C to D, avoid Kelso Valley Airport by 3 miles lateral or 1500’ vertical.
(6) Point D to F, fly 2 NM left of centerline to avoid the Isabella Dam, surrounding communities and Kernville.
(7) Point G to H, avoid extremely noise sensitive area of Olancha N36-17.34 W118-0.6 and Cartago N36-19.38 W118-01.49.
(9) Point H to I, Avoid both Lone Pine Airport N36-36.22 W118-03.27 and Independence Airport N36-49.46 W118-12.26.
(10) Point L to M, Caution: High migratory bird activity during daylight hours.
(11) Point N, Alternate Exit. If R-2524 not available, start climb on course to arrive at NID 030/29 at 13,000’ MSL. Hold NE inbound on the 030 radial between 40 and 30 DME. Contact Joshua Approach 291.6 for further instructions.
(12) Point O, Alternate exit only when in VFR conditions.
(13) Point Q: Exit Route, Contact Sport 343.7 and proceed to MORRI (EDW 043/15) at 10,000’ MSL. Hold NE to the EDW 043/15 as published.
(15) Route designated for MARSA operations by coordinated scheduling.
(16) Points G and M are mandatory reporting points. Contact Joshua Approach on assigned mission frequency. Mission frequencies will be assigned by the scheduling activity.
(18) Caution: Numerous windmills up to 500’ AGL in the southern part of the Kelso Valley, between Point B and C.

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A TPH 111/13
05 AGL B 115 MSL to B TPH 016/19 N38°17.40’ W16°49.50’
05 AGL B 140 MSL to C TPH 009/54 N38°50.10’ W16°49.20’
05 AGL B 120 MSL to D TPH 015/69 N39°00.00’ W16°32.30’
05 AGL B 120 MSL to E TPH 068/46 N38°06.00’ W16°04.00’

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) This route authorized in direct support of AFFTC’s test program.
(2) Aircrew shall schedule the Reveille MOA with the Range Management Office at Nellis AFB, NV (DSN 348-4710). If within 2 days of scheduled operation, contact Blackjack (DSN 682-3537). If required, schedule R-4809.
(3) Route is designated for MARSA operations established by coordinated scheduling.
(5) Approaching the Reveille MOA, aircrew shall contact Nellis Control 343.0 for clearance into the MOA.
(6) Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center Scheduling and follow these procedures.

FSS Within 100 NM Radius:
CDC, RNO

IR-238


HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A TPH 068/46 N38°06.00’ W16°04.00’
05 AGL B 120 MSL to B TPH 015/69 N39°00.00’ W16°15.00’
IR ROUTES

05 AGL B 120 MSL to C TPH 008/53 N38°50.10' W116°32.60'
05 AGL B 140 MSL to D TPH 016/19 N38°17.40' W116°49.20'
05 AGL B 115 MSL to E TPH 111/13 N37°54.00' W116°49.50'

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) This route authorized in direct support of AFFTC's test program.
(2) Aircrew shall schedule the Reveille MOA with the Range Management Office at Nellis AFB, NV (DSN 348-4710). If within 2 days of scheduled operation, contact Blackjack (DSN 682-3537).
(3) Approaching the Reveille MOA, aircrew shall contact Nellis Control 343.0 for clearance into the MOA.
(4) Route is designated for MARSA operations established by coordinated scheduling.
(6) Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center Scheduling and follow these procedures.

FSS Within 100 NM Radius:
CDC, RNO

IR-250


HOURS OF OPERATION: Daylight hours on odd numbered days

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A TNP 355/26 N34°32.00' W115°41.00'
SFC B 80 MSL to B GFS 284/23 N35°19.00' W115°35.00'
SFC B 80 MSL to C GFS 256/5 N35°08.00' W115°17.00'
SFC B 80 MSL to D GFS 166/19 N34°49.00' W115°11.00'
SFC B 70 MSL to E GFS 181/31 N34°38.00' W115°21.00'
SFC B 70 MSL to F PKE 069/8 N34°07.00' W114°31.00'
SFC B 70 MSL to G PKE 107/12 N34°09.00' W114°29.00'

ROUTE WIDTH - 5 NM either side of centerline, excluding restricted area R-2501E.

Special Operating Procedures:
(1) Remain clear of R-2501E. Airspeed 400-460 KIAS.
IR ROUTES

FSS Within 100 NM Radius:
  HHR, PRC, RAL, RNO, SAN

IR-254

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-4981, C858-577-4981.
  Non-working hours DSN 267-9517/9518, C858-577-9517/9518.


HOURS OF OPERATION: Daylight hours, Mon-Fri

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>DRK 194/37</td>
<td>N34°09.00'  W112°50.00'</td>
</tr>
<tr>
<td>25 AGL B 90 MSL to B</td>
<td>DRK 218/28</td>
<td>N34°25.00'  W112°55.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 90 MSL to C</td>
<td>DRK 223/24</td>
<td>N34°29.00'  W112°53.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 90 MSL to D</td>
<td>DRK 237/34</td>
<td>N34°31.00'  W113°08.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 90 MSL to E</td>
<td>EED 097/48</td>
<td>N34°28.00'  W113°35.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 90 MSL to F</td>
<td>DRK 289/26</td>
<td>N34°56.00'  W112°55.00'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) If Gladden 1 or Gladden 1A MOAs are penetrated, See and Avoid applies.
(2) Coordination must be conducted with Luke AFB prior to scheduling due to conflicting routes IR’s 224, 225 and 240.
(3) Coordination required with El Toro MCAS to resolve conflict with IR-214.
(4) Remain VMC at all times on this route.

FSS Within 100 NM Radius:
  PRC, RAL, RNO

IR-266


SCHEDULING ACTIVITY:

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 90 MSL to or as assigned</td>
<td>A</td>
<td>UTL 321/39</td>
<td>N37°36.00'  W113°53.00'</td>
</tr>
<tr>
<td>04 AGL B 90 MSL to B</td>
<td>UTL 317/29</td>
<td>N37°25.50'  W113°49.50'</td>
<td></td>
</tr>
<tr>
<td>04 AGL B 90 MSL to C</td>
<td>MMM 001/19</td>
<td>N37°04.00'  W114°10.00'</td>
<td></td>
</tr>
<tr>
<td>04 AGL B 90 MSL to D</td>
<td>MMM 009/11</td>
<td>N36°56.00'  W114°11.00'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 80 MSL to E</td>
<td>MMM 075/9</td>
<td>N36°46.00'  W114°05.00'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 90 MSL to F</td>
<td>MMM 091/11</td>
<td>N36°43.00'  W114°03.50'</td>
<td></td>
</tr>
<tr>
<td>04 AGL B 90 MSL to G</td>
<td>MMM 112/19</td>
<td>N36°34.50'  W113°58.50'</td>
<td></td>
</tr>
<tr>
<td>04 AGL B 90 MSL to H</td>
<td>MMM 108/27</td>
<td>N36°30.50'  W113°48.50'</td>
<td></td>
</tr>
<tr>
<td>04 AGL B 80 MSL to I</td>
<td>UTL 150/28</td>
<td>N36°34.00'  W113°20.05'</td>
<td></td>
</tr>
<tr>
<td>04 AGL B 90 MSL to J</td>
<td>UTL 145/29</td>
<td>N36°34.50'  W113°17.05'</td>
<td></td>
</tr>
<tr>
<td>04 AGL B 90 MSL to K</td>
<td>UTL 106/32</td>
<td>N36°45.50'  W112°55.55'</td>
<td></td>
</tr>
<tr>
<td>04 AGL B 90 MSL to L</td>
<td>BCE 172/45</td>
<td>N36°56.90'  W112°25.00'</td>
<td></td>
</tr>
</tbody>
</table>
IR ROUTES

Special Operating Procedures:
(1) Airspace scheduling is available Monday - Friday 0730L - 1630L central standard time, through CSE (Central Scheduling Enterprise) or call DSN 461-3666/2200, C325-696-3666/2200. After hours scheduling is not available at this time.

(2) Participating aircraft separation: Route designated for MARSA operations established by coordinating scheduling.

(3) Centerline between the following Points is depicted as a 7.5 NM arc: C to D, G to H, I to J, N to O, P to Q, R to S, U to V.

(4) Aircrews should be especially vigilant for VFR helicopter traffic from SFC to 500' AGL between Points H and L.

(5) Primary Entry Point A will only be used by aircraft that are scheduled into the Desert MOA. Contact DSN 348-4710.

(6) Alternate Entry Point B1: Aircrews using this entry need not own Desert MOA times.

(7) Aircrews are restricted to IFR altitudes between Points B and C due to blasting in the area of N37-22 W113-52 between the following time frames, 1830Z-1930Z and 2230Z-0030Z.


(9) Fly centerline or south of centerline between points K and L to avoid the Pipe Springs National Monument N36°51.7' W109°44.2'.

FSS Within 100 NM Radius:
ABQ, CDC, PRC, RNO

IR-275

ORIGINATING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-1075, 707-424-1075.

SCHEDULING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-5145, 707-424-5145.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at FL200 to or as assigned descend direct to SFC B 90 MSL to direct to SFC B 90 MSL to direct to SFC B 110 MSL to direct to SFC B 110 MSL to direct to SFC B 90 MSL to direct to

04 AGL B 90 MSL to M BCE 126/29 N37°19.00' W111°55.50'
04 AGL B 90 MSL to N BCE 086/36 N37°34.00' W111°33.50'
04 AGL B 90 MSL to O BCE 082/45 N37°36.00' W111°22.00'
05 AGL B 90 MSL to P HVE 170/64 N37°21.00' W110°49.50'
04 AGL B 90 MSL to Q HVE 167/65 N37°20.00' W110°45.00'
04 AGL B 90 MSL to R HVE 142/71 N37°19.50' W110°06.50'
04 AGL B 110 MSL to S HVE 139/75 N37°17.50' W110°00.00'
10 AGL B 110 MSL to SA DVC 209/57 N37°06.50' W109°45.00'
04 AGL B 110 MSL to SB TBC 047/100 N36°53.00' W109°26.00'
04 AGL B 110 MSL to T RSK 211/37 N36°18.50' W108°39.00'
05 AGL B 110 MSL to U RSK 184/35 N36°11.50' W108°19.50'
06 AGL B 110 MSL to V RSK 177/34 N36°11.00' W108°14.00'
06 AGL B 100 MSL to W RSK 142/31 N36°16.50' W107°50.00'
06 AGL B 100 MSL to (Contact Denver ARTCC 348.7) X RSK 104/37 N36°27.50' W107°26.00'
05 AGL B 110 MSL to Y RSK 085/50 N36°37.00' W107°04.00'

170 MSL to cross Alternate Entry: B1 cross
90 MSL to B1 UTI 317/29 N37°25.50' W113°49.55'

Comments on route:

ROUTE WIDTH - 4 NM either side of centerline from A to H; 2.5 NM left and 3 NM right of centerline from H to J; 4 NM either side of centerline from J to L; 2 NM left and 4 NM right of centerline from L to M; 3 NM either side of centerline from M to N; 4 NM either side of centerline from N to S; 5 NM either side of centerline from S to Y. Alternate Entry: B1 4 NM either side of centerline.
IR ROUTES

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC
Terrain Following (TF)/Visual Contour operations are authorized IAW Command Directives within published altitude blocks from D to L. The route is designed mountainous. When Command Directives preclude terrain following/visual contour operations, aircrews will maintain the IFR altitude for each terrain following route segment. Regulations governing operations below 500’ AGL will be complied with. Aircrews will avoid towns and villages by 1000’ vertically or 2000’ laterally when operating at terrain following altitudes. (REF: FAR 91.79(B)).

ROUTE WIDTH - 4 NM either side of centerline from B to M; 9 NM either side of centerline from M to N; 4 NM either side of centerline from N to T; 4 NM either side of centerline from N to L (Re-Entry); 4 NM either side of centerline from I to K (Alternate Entry).

Special Operating Procedures:
(1) Aircraft will cross the end maneuver area at the specified minimum IFR altitude.
(2) Participating aircraft separation: Route designated for MARSA operations established by coordinated scheduling.
(3) Lost communications (LC) procedures: Route LC altitude is 17,000’ MSL.
(4) IR-275 is designated for SN missions.
(5) Aircrews will contact Oakland ARTCC on 125.75 or 319.8 MHZ passing Point L N38-33-00 W117-12-00 and report (tactical call sign) passing Point L (Number of Re-Entries). No report is required passing L during re-entry.
(6) Aircraft with dual communications capability may stay on Oakland ARTCC frequency to receive flight advisory service.
(7) Centerline between the following Points will be depicted as a 7.5 NM radius arc: C to D, G to H, J to K, N to O, P to Q, R to S, V to L on the re-entry.
(8) Alternate Exit J: Climb to top of block, Contact SALT LAKE CENTER 317.625, expect to maintain own terrain clearance to 140 MSL.

FSS Within 100 NM Radius:
BOI, RNO, RIU

IR-286

ORIGINATING ACTIVITY: 57 OSS/OSM, Nellis AFB, NV 89191 DSN 682-7891, C702-652-7891.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data      Pt  Fac/Rad/Dist  Lat/Long
Cross at 140 MSL to  A   LSV 280/42  N36°30.00'  W115°50.00'
or as assigned             FL230 to
or as assigned             or assigned
140 MSL to I1 TPH 009/76  N39°10.00'  W116°20.00'

SFC B 120 MSL to  J   TPH 018/48  N38°41.00'  W116°27.50'
J1 TPH 018/48             N38°41.00'
130 MSL to K1 TPH 015/39  W116°27.50'
130 MSL to K1 TPH 015/39  N38°34.50'  W116°36.00'

SFC B 130 MSL to  K   TPH 015/39  N38°34.50'  W116°36.00'
Thence via published route.
Alternate Exit: J

2-91
IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Terrain Following authorized - VFR beginning at Point C.

ROUTE WIDTH - 5 NM either side of centerline from A to D; 8 NM either side of centerline (excluding R-4807) from D to E; 5 NM either side of centerline from E to M.

Special Operating Procedures:
(1) For VMC use, MARSA applies and is accomplished by See and Avoid.
(2) Operations within R4807/09, or Desert MOA will be conducted IAW AFR 13-212, Nellis AFB Sup 1.

(3) CAUTION: Avoid Beatty Airport N36-52-00 W116-47-00, and the community and airport of Goldfield N37-33-00 W117-14-00 by 3 NM or 1500' AGL.
(4) CAUTION: Cross B at 10,000' MSL or as assigned by ATC from VFR overflight traffic at 11,000' MSL and traffic exiting VR-222 at 9,500' MSL and below.
(5) Fly north of centerline between Points B and C.
(6) CAUTION: Route parallels VR-222 from B to D and VR-1214 from B to E. Additional numerous other MTRs cross this route from D to L.
(7) During VMC operations monitor 255.4 UHF until entering the MOAs.
(8) Uncharted Obstacles:
(a) Between segments B and C, tower with white strobe N36-32 W116-26; 150' tower N36-34 W116-27; 150' radio tower N36-34.2 W116-27.1; powerlines N36-38 W116-38;
(b) Between segments D and E, multiple towers 100' west side of peak N36-56 W116-49;
(c) Between segments D and E, 300' tower below peak in canyon N38-10.7 W116-24.5
(d) Between segments I and J, 300' tower N37 55.6 W115-53.

(9) Aircraft exiting at B will advise Oakland ARTCC on 319.8 upon exit.

FSS Within 100 NM Radius:
CDC, RNO

IR-293


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 140 MSL to or as assigned 140 MSL B 120 MSL descend to cross</td>
<td>AB</td>
<td>BQU 064/47</td>
<td>N40°53.00' W114°44.00'</td>
</tr>
</tbody>
</table>

2-92
<table>
<thead>
<tr>
<th>IR ROUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>115 MSL to</td>
</tr>
<tr>
<td>(TA/TFR Initiation Point)</td>
</tr>
<tr>
<td>direct to</td>
</tr>
<tr>
<td>01 AGL B 115 MSL to</td>
</tr>
<tr>
<td>turn left to</td>
</tr>
<tr>
<td>01 AGL B 115 MSL to</td>
</tr>
<tr>
<td>turn direct to</td>
</tr>
<tr>
<td>01 AGL B 115 MSL to</td>
</tr>
<tr>
<td>turn right to</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to</td>
</tr>
<tr>
<td>turn direct to</td>
</tr>
<tr>
<td>110 MSL B 130 MSL to</td>
</tr>
<tr>
<td>turn direct to</td>
</tr>
<tr>
<td>130 MSL to</td>
</tr>
<tr>
<td>(Contact Clover Control 363.5)</td>
</tr>
<tr>
<td>direct to</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to</td>
</tr>
<tr>
<td>turn direct to</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to</td>
</tr>
<tr>
<td>turn direct to</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to</td>
</tr>
<tr>
<td>turn direct to</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS: IMC/VMC**

Terrain following (TF) visual contour (VC) operations are authorized IAW command directives within published altitude blocks from A to I and M to T. When command directives preclude TF/VC operations, aircrews will maintain the IFR altitudes for each TF route segment. Minimum altitudes are established to provide at least 100' vertical clearance of known man-made obstructions within the route width. Obstruction under 200' AGL were not considered in route design. Command Directives may require additional obstruction clearance for TF/VC operations. The entire route is mountainous. Aircrews should reference their aircraft tech data and the latest clearance plane settings letter for low altitude minimum altitudes. FAA, DOD, Individual service and Major Command directives and instructions governing aircraft operations below 500' AGL must be complied with.

**ROUTE WIDTH** - 4 NM either side of centerline from AA to D; 4 NM left and 3 NM right of centerline from D to E; 3 NM either side of centerline from E to G; 4 NM left and 3 NM right of centerline from G to H; 4 NM either side of centerline from H to T. Centerline between turn points is depicted as a 7.5 NM arc unless otherwise specified.

**Special Operating Procedures:**

1. Participating aircraft separation: Route designated for MARSA operations established by coordinated scheduling.
2. Lost communications (LC) is as required by mission tasking order.
3. Route designated for SN missions.
4. Centerline between turn points is depicted as a 7.5 NM arc unless otherwise specified.
6. IR-293 will only be used by aircraft scheduled into Utah Test and Terrain Range (UTTR).
7. Scheduling agency for the Sevier A and B MOA’s and UTTR is the 388 RNG SQU, DSN 777-4401.
8. Contact Clover Control on 363.5 prior to entering Sevier B MOA.
9. Between Point L and T aircraft will not deviate outside the route corridor.
10. IR-293 ends at T. Routing within the UTTR is not part of IR-293, therefore T must be filed as IR-293 exit, followed by a delay in the UTTR, then file FFU222023 to exit the UTTR. Additionally, show the fix POISN when filing the UTTR with your delay i.e.: IR293,MLF322066..POISN/D1+00..FFU222023..AS FILED.
11. Aircrews should be aware of rapidly rising terrain on either side of centerline between Points S and T.
12. Alternate Entry: L.
13. Crews coming from East of the ranges and using the alternate entry into IR-293 must fly to Milford VORTAC (MLF) first.
14. Alternate Exit Point: SS.
15. UTTR is not part of IR-293, therefore when using alternate exit file SS as IR-293 exit, follow by a delay in the UTTR then file FFU222023 to exit UTTR.
16. When Alternate Exit is filed aircrews will remain within route corridor from L to SS. Sevier A MOA authorized only.
17. Uncharted obstruction: Tower 300' AGL (N41-05-30 W114-34-00).
18. Information on migratory bird activity along this route may be obtained from the bird avoidance web page on the Air Force Safety Center site: http://safety.kirtland.af.mil/AFSC/Bash/avoid.html
IR ROUTES

FSS Within 100 NM Radius:  
CDC, RNO

IR-300


HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 150 MSL to or as assigned descend direct to A LKV VORTAC N42°29.57' W120°30.43'
100 MSL B 150 MSL to continue descent to cross AA LKV 120/13 N42°20.00' W120°19.07'
100 MSL to B LKV 120/17 N42°17.00' W120°15.57'
(500') (700') (900') (1100')
01 AGL B 100 MSL to direct to C LKV 121/31 N42°06.00' W120°03.57'
01 AGL B 100 MSL to turn left and climb to D SDO 224/58 N40°57.00' W119°09.07'
01 AGL B 110 MSL to direct to E SDO 217/53 N40°54.00' W119°09.07'
01 AGL B 110 MSL to direct to EE SDO 210/29 N41°05.20' W118°30.00'
01 AGL B 110 MSL to turn left to F SDO 092/10 N41°21.00' W117°49.05'
01 AGL B 110 MSL to direct to G SDO 061/14 N41°27.00' W117°44.05'
01 AGL B 110 MSL to descend direct to H SDO 038/11 N41°53.50' W117°39.07'
01 AGL B 110 MSL to direct to GB SDO 145/37 N41°59.50' W117°38.07'
01 AGL B 90 MSL to turn right to H REO 141/32 N42°05.00' W117°37.07'
01 AGL B 90 MSL to direct to I REO 136/30 N42°08.50' W117°35.00'
01 AGL B 90 MSL to turn left to J REO 065/29 N42°38.50' W117°12.57'
01 AGL B 90 MSL to descend direct to K REO 057/32 N42°43.00' W117°10.07'
01 AGL B 90 MSL to (Start Maneuver Area) direct to L REO 040/36 N42°54.00' W117°09.57'
01 AGL B 80 MSL to direct to M BOI 272/44 N43°47.50' W117°09.57'
01 AGL B 80 MSL to (End Maneuver Area) turn left to N BOI 276/46 N43°51.00' W117°09.57'
01 AGL B 80 MSL to (TA/TRF Termination Point) (Contact Salt Lake City ARTCC 387.15 prior to P) turn left to O BOI 280/48 N43°55.00' W117°11.07'
80 MSL to direct to P BOI 278/58 N43°57.00' W117°25.07'
80 MSL to Q BOI 270/70 N43°53.00' W117°43.57'
80 MSL B 150 MSL climb direct to cross R BOI 260/93 N43°44.00' W118°19.07'
or as assigned.

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF) terrain avoidance (TA) and visual contour (VC) operations are authorized IAW command directives within published altitudes from B to O. When command directives preclude TA/TF/VMC operations aircrews will maintain the IFR altitude for each route segment. Minimum altitudes other than surface are established to provide at least 100' vertical separation of known man-made obstructions within the route width. Command Directives may require additional obstructions clearance for TA/TF/VMC operations. The entire route is mountainous. Aircrews must comply with regulations governing operations below 500' AGL. The route corridor provides airspace for 500' lateral separation from obstacles. Obstructions under 200' AGL were not considered in the route design.

ROUTE WIDTH - 4 NM either side of centerline from A to E; 4 NM left and 3 NM right of centerline from E to F; 4 NM either side of centerline from F to G; 3 NM left and 4 NM right of centerline from G to H; 4 NM either side of centerline from H to L; 9 NM left and 4 NM right of centerline from L to M; 9 NM left and 3 NM right of centerline from M to N; 4 NM left and 3 NM right of centerline from N to O; 4 NM either side of centerline from O to R.

Special Operating Procedures:
(1) Participating aircraft separation: Route is designed for MARSA operations established by coordinated scheduling.
(2) Route is designated for SN missions.
(3) Aircrews should be especially vigilant when flying IR-300 between N41-16.5 W117-58.5 and Point G due to possible crossing traffic on IR-304 and between N42-10.0 W117-36.0 and N42-17.0 W117-30.0 due to crossing traffic on IR-304. If VMC exists at the crossing point, See and Avoid is the method of MARSA. In IMC the method of MARSA will be procedural.
(4) Centerline is depicted as a 7.5 NM radius arc between turn points.
(5) Aircrews should be especially vigilant when flying IR-300 between L and P due to a high volume of general aviation traffic crossing the route.
(6) Aircrews will indicate the altitude required after exiting IR-300 in the remarks section immediately after the route exit time.
(7) Aircrews may expect a descent restriction until Point AA by Seattle ARTCC if required for traffic separation. If descent is restricted, aircrews may not be able to make 100 MSL by Point B. Crews are authorized to continue descent into the route altitude structure.
(8) Alternate Entry EE and K: Alternate Entry K may be used only after exiting out of the Owhee and Paradise MOA’s.

(9) Aircrews should be aware of hang gliding activity from Pt. A thru C.

(10) Noise Sensitive Areas:
(a) Residence at N41-25.5 W117-47.5;
(b) Residence at N43-17.5 W117-06.0;
(c) Residence at N43-21.2 W117-06.9;
(d) Residence at N42-00.0 W117-38.5.

(11) CAUTION: Uncharted meteorological tower installed at 42°07'00N/120°06'46W, and is immediately to the right of centerline between turn points B and C. Height of tower is greater than 150’ tall, and possibly up to 190’ in height. Uncharted dirt/turf airstrip at 42°24'23N/117°04'52W.

FSS Within 100 NM Radius:
BOI, CLE, MMV, RNO

IR-301

ORIGINATING ACTIVITY: 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.

SCHEDULING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648 DSN 728-4607/2172, C208-828-4607/2172/4631. Scheduling requests 0730-1630L, Mon-Fri. Must be scheduled minimum 24 hours prior to entry.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM either side of centerline from A to H; 5 NM either side of centerline from H to I; 4 NM either side of centerline from I to L.

Special Operating Procedures:
(1) This route is closed to all non-124 FW and 366 FW operations.
(2) MARSA applies between successive participants and at all route crossings. Technique for applying MARSA is by scheduling and/or See and Avoid.
(3) IR-301 will not be scheduled/flown when IR-307 is in use.
(4) Avoid all airports by 1500’ vertically or 3 NM laterally.
(5) Uncharted heliport (N45-24-00 W114-10-00). Overfly at or above 1500’ AGL or avoid by 3 NM.
(6) Uncharted airport (N45-39-30 W114-18-00). Overfly at or above 1500’ AGL or avoid by 3 NM.
(7) Cypress mine blast area (N44-19.0 W114-32.5). Overfly at or above 1500’ AGL or avoid by 3 NM.
(8) Noise sensitive areas:
(a) Cape Horn (N44-16.5 W115-00.0 to N44-26.0 W115-08.5). Overfly at or above 1000’ AGL or avoid by 3 NM.
(b) Bannock (N45-09-30 W112-59-45). Overfly at or above 1000’ AGL or avoid by 3 NM.
(c) Peterson (N45-32-00 W113-29-00). Overfly at or above 1000’ AGL or avoid by 1 NM.
(d) Shook (N45-35-45 W114-19-00). Overfly at or above 1000’ AGL or avoid by 1 NM.
(e) Salmon river. Overfly at or above 1000’ AGL or avoid river by 2 NM from Slate Creek (N45-38-00 W116-18-00) to 5 NM south of Pollock (N45-13-00 W116-27-00).
(f) Wiggins (N44-41-00 W116-41-45). Overfly at or above 1000’ AGL or avoid by 1 NM.
(g) Grant (N45-02-33, W113-08-30). No overflight, Avoid by 3 NM.
(h) Big Hole National Battlefield (N45-38.4 W113-38.9). Overfly at or above 2000’ AGL or avoid by 1 NM.
(9) Contact Seattle ARTCC on 290.55 to report Pt I.
(10) Contact Salt Lake ARTCC on 387.15 at L for further clearance.
(11) Alternate Entry: D, F, H and I.
(13) Lost Communications (LC) procedures: Route LC altitude is 12,000’ MSL.
(14) Military aircrews must make a position call when in the vicinity of the Deadwood Reservoir (44-18.43’N, 115-39.86’W) on 122.9 MHz.

FSS Within 100 NM Radius:
BOI, GTF

IR-302

ORIGINATING ACTIVITY: 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.


HOURS OF OPERATION: Continuous or by NOTAM
IR ROUTES

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 130 MSL to A</td>
<td>BOI 070/46</td>
<td>N43°35.50' W115°08.30'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 130 MSL to B</td>
<td>BOI 057/98</td>
<td>N43°59.20' W114°00.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 130 MSL to C</td>
<td>PIH 300/65</td>
<td>N43°39.00' W113°40.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 130 MSL to D</td>
<td>PIH 298/50</td>
<td>N43°27.50' W113°28.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 110 MSL to E</td>
<td>PIH 295/40</td>
<td>N43°18.50' W113°19.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 70 MSL to F</td>
<td>PIH 257/26</td>
<td>N42°54.00' W113°14.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 MSL to FA</td>
<td>PIH 250/26</td>
<td>N42°51.00' W113°14.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 60 MSL to FB</td>
<td>PIH 245/26</td>
<td>N42°48.50' W113°13.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 60 MSL to G</td>
<td>PIH 224/28</td>
<td>N42°38.50' W113°12.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 80 MSL to H</td>
<td>PIH 203/42</td>
<td>N42°19.80' W113°15.70'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to I</td>
<td>BYI 120/37</td>
<td>N42°07.00' W113°18.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 110 MSL to J</td>
<td>BYI 153/32</td>
<td>N42°03.00' W113°45.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to JJ</td>
<td>BYI 200/67</td>
<td>N41°42.20' W114°47.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to K</td>
<td>BOI 150/130</td>
<td>N41°26.00' W115°33.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 120 MSL to L</td>
<td>BOI 163/116</td>
<td>N41°36.83' W116°12.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 120 MSL to M</td>
<td>BOI 185/109</td>
<td>N41°52.00' W117°06.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 120 MSL to N</td>
<td>BOI 196/75</td>
<td>N42°30.00' W117°06.00'</td>
<td></td>
</tr>
<tr>
<td>130 MSL to Alternate Exit: Y</td>
<td>BOI 206/59</td>
<td>N42°50.00' W117°06.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to K1</td>
<td>BOI 150/130</td>
<td>N41°26.00' W115°33.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 120 MSL to X</td>
<td>BOI 149/119</td>
<td>N41°37.00' W115°33.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 120 MSL to Y</td>
<td>BOI 146/97</td>
<td>N42°00.00' W115°33.50'</td>
<td></td>
</tr>
</tbody>
</table>

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 8 NM left and 4 NM right of centerline from A to B; 8 NM either side of centerline from B to F; 4 NM either side of centerline from F to I; 5 NM right and 8 NM left of centerline from I to J; 8 NM either side of centerline from J to M; 5 NM either side of centerline from M to O; 4 NM either side of centerline from X to Y. Alternate Exit Y: 8 NM either side of centerline from K1 to X; 4 NM either side of centerline from X to Y.

Special Operating Procedures:
(1) MARSA applies between successive participants by scheduling block time at Point A. See and Avoid primary method of MARSA in VMC.
(2) Route crossing L to N, IR-300 and IR-304. If IMC is anticipated, transition to VMC conditions to the leg segment minimum IFR altitude. Remain at minimum IFR altitude until past conflict point, or standard ATC separation is established after leaving the route.
(3) Noise Sensitive Areas:
   (a) 10,000’ MSL minimum altitude from 5 NM prior to 5 NM past Galena Highway (located between A and B).
   (4) Avoid the following Noise Sensitive Areas by 1500’ AGL or 3 NM:
       (a) City of Rocks (N42-05-00 W113-43-00);
       (b) Mountain City (N41-50-30 W115-57-30);
       (c) Ranch (N41-43-50 W115-58-50);
       (d) Ward Ranch/uncharted airport (N42-03-00 W113-29-07);
       (e) Craters of the Moon National Monument (N43-27-45 W113-33-00);
       (f) Henry area (N41-42-10 W114-49-00).
(5) Due to bird strike potential, minimum altitude from 5 NM prior to 5 NM past point G is 1000’ AGL.
(6) Helicopter ski operations in the Boulder and Pioneer Mountains (east of 114-30W) are conducted in daylight hours from 1 Dec to 30 Apr. Maintain 13,000’ MSL between A and B during this time frame.
(7) Contact Salt Lake ARTCC on 387.15 at Point N for further clearance.
(8) Avoid all airports by overflight of 1500’ AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00, N41-26-00 W115-47-00, N41-39-00 W114-49-50).
(10) Alternate Entry Points: B, E, F, I, J, JJ, K and M.
(12) Lost communications procedures: Fly 12,000’ MSL or top of the block.
(13) For non-fighter type aircraft: Due to the severity of terrain near Alternate Exit Point Y, terrain following will only be flown in VMC conditions from Point X to N41-50-00. During IMC or at night, fly the published IFR altitudes to avoid the 9912’ MSL peak.

FSS Within 100 NM Radius:
BOI, MMV, RNO

IR-303

ORIGINATING ACTIVITY: 366 OSS/OSSOA, 1050 Desert Street, Mountain Home AFB, ID 83648 DSN 728-4722, C208-828-2127/4607.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling requests accepted 0730-1630 local Mon-Fri. Route must be scheduled minimum of 2 hours prior to entry into airspace.

HOURS OF OPERATION: By NOTAM
ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL190 to or as assigned. descend to 120 MSL</td>
<td>A</td>
<td>REO 237/27</td>
<td>W118°27.00'</td>
</tr>
<tr>
<td>at or above 120 MSL</td>
<td>B</td>
<td>REO 208/42</td>
<td>W118°33.00'</td>
</tr>
<tr>
<td>120 MSL to 01 AGL</td>
<td>C</td>
<td>REO 202/50</td>
<td>W118°36.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to 01 AGL</td>
<td>D</td>
<td>REO 198/54</td>
<td>W118°35.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to 01 AGL</td>
<td>E</td>
<td>REO 180/63</td>
<td>W118°20.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to FL180</td>
<td>F</td>
<td>BAM 316/38</td>
<td>W117°21.50'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to 01 AGL</td>
<td>G</td>
<td>BAM 353/41</td>
<td>W116°50.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to 01 AGL</td>
<td>H</td>
<td>BQU 309/50</td>
<td>W116°23.00'</td>
</tr>
<tr>
<td>01 AGL B 140 MSL to 01 AGL</td>
<td>I</td>
<td>BQU 323/50</td>
<td>W116°08.50'</td>
</tr>
<tr>
<td>01 AGL B 140 MSL to 01 AGL</td>
<td>J</td>
<td>BQU 344/57</td>
<td>W115°45.00'</td>
</tr>
<tr>
<td>01 AGL B 140 MSL to Alternate Entry: K</td>
<td>K</td>
<td>MUO 155/64</td>
<td>W115°45.00'</td>
</tr>
<tr>
<td>FL180 to or as assigned. descend to 120 MSL</td>
<td>M</td>
<td>BQU 344/34</td>
<td>W115°45.00'</td>
</tr>
<tr>
<td>120 MSL to 140 MSL</td>
<td>J</td>
<td>BQU 344/57</td>
<td>W115°45.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to climb to 01 AGL</td>
<td>H</td>
<td>BQU 309/50</td>
<td>W116°23.00'</td>
</tr>
<tr>
<td>01 AGL B 140 MSL to cross 140 MSL</td>
<td>I</td>
<td>BQU 323/50</td>
<td>W116°08.50'</td>
</tr>
<tr>
<td>Contact Salt Lake City ARTCC 363.15</td>
<td>A</td>
<td>REO 237/27</td>
<td>W118°27.00'</td>
</tr>
<tr>
<td>or assigned.</td>
<td>C</td>
<td>REO 202/50</td>
<td>W118°33.00'</td>
</tr>
<tr>
<td>to 120 MSL</td>
<td>G</td>
<td>BAM 353/41</td>
<td>W116°50.00'</td>
</tr>
<tr>
<td>to FL180</td>
<td>H</td>
<td>BQU 309/50</td>
<td>W116°23.00'</td>
</tr>
<tr>
<td>to 140 MSL</td>
<td>I</td>
<td>BQU 323/50</td>
<td>W116°08.50'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: IMC/VMC
Terrain Following (TF), Terrain Following Radar (TFR), Visual Contour (VC), and Terrain Avoidance (TA) authorized IAW command directive within published altitudes from Point D to K. Night VC operations are not authorized. Minimum altitudes on TF/TFR/VC/TA legs do not provide vertical clearance from man-made obstructions. Route IFR altitudes provide a minimum of 1000’ AGL clearance above the highest terrain obstruction within the route boundaries and 5 NM either side of the route corridor. Obstructions under 200 feet were not considered in the route design. When command directives preclude TF/TFR/VC/TA operations, aircrews will maintain the IFR altitude for each route. Aircrews will comply with regulations governing low level operations. Aircrews must consider all airports within or near route corridor limits when mission planning route of flight. The entire route is designated mountainous.

ROUTE WIDTH - On centerline from Point A to D; 5 NM either side of centerline from D to F; 8 NM either side of centerline from F to H; 4 NM either side of centerline from H to J; 5 NM left and 15 NM right of centerline from J to K.

Special Operating Procedures:
(1) MARSA applies and is accomplished by timing at route entry based on 480 knots ground speed while on the route. See and Avoid applies during VMC. Other airspeeds may be flown as coordinated with the scheduling agency. Aircraft flying at similar airspeeds may be scheduled with ten minutes separation at entry point. Aircrews unable to make scheduled entry time within plus or minus 2 minutes must coordinate a new entry time with Raymond 27 on 381.3 or 15091/5703 (HF).

(2) Except for IMC terrain following radar operations, aircrews encountering IMC will climb to the minimum IFR altitude prior to IR route crossing.

(3) WARNING: Chart update manual (CHUM) data used to construct navigational charts does not address vertical obstruction data below 200 feet AGL. Locally obtained vertical obstruction data, from aerial estimation, below 200’ AGL may be obtained from the scheduling agency. Aircrews flying this route will report their observations of new developments or cultural changes to the originating agency. This route has been surveyed IAW ACC Sup to AFI 13-201 down to 100’ AGL.

(4) Requesting units will furnish the scheduling agency with the Call sign, number and type of aircraft, planned entry time, entry point, proposed speed, exit point and exit time.

(5) Clearance to fly this route does not include clearance to enter Mountain Home Range Complex (MHRC). MHRC includes Paradise East/West, Owhee, Jarbidge MOA's, Saylor Creek Range (R-3202), Juniper Butte Range (R-3204). Prior coordination required with 366 OSS/OSOS (DSN 728-2172) for scheduling. Aircraft not scheduled for MHRC will exit this route at alternate exit Point I.

(6) Units will not schedule or enter any portion of the MHRC unless they have reviewed governing range and airspace regulations. Regulations are available on the ACC web page at: https://do.acc.af.mil/dor/DORA/Units-MHAFB.html

(7) Information on migratory bird routes along this route may be obtained from the bird avoidance web page on the Air Force Safety Center site: http://safety.kirtland.af.mil/AFSC/Bash/avoid.html

(8) Due to mine blasting operation, avoid by 1000’ AGL, an area formed by N41-06 W117-21, N41-13 W117-18, N41-13 W117-15, N41-05 W117-17 to point of beginning.

(9) Alternate Entry: D, Contact Salt Lake City ARTCC on 363.15, cross Point D at 10,000’ MSL by Point E; F, Contact Salt Lake City ARTCC on 363.15, cross Point F at 10,000’ MSL or as assigned when descend into block 100’ AGL to 10,000’ MSL by Point G.

(10) Uncharted airports; N42-00 W118-38-00 and N41-39-00 W118-30-00 and N41-08 W117-14-00, N41-42 W118-31. Overfly at or above 1500’ AGL or avoid by 3 NM.

(11) Uncharted towers: 65’, N41-53 W118-35 and 65’, N41-24-30 W118-01-30 located next to SDO TACAN. 75’, N41-09 W118-30-00 and N41-08-00 W117-14-18, N41-42 W118-31. Overfly at or above 1500’ AGL or avoid by 1 NM.

(12) Noise Sensitive Areas:
(a) Town of Midas: N41-14-30 W116-47-30, overfly at or above 1500’ AGL or avoid by 1 NM.
(b) Hansen Ranch: N41-43-30 W115-58-30, overfly at or above 1500’ AGL or avoid by 3 NM.
(c) Stowell Ranch: N41-58-00 W115-40-30, overfly at or above 1500’ AGL or avoid by 1 NM.

FSS Within 100 NM Radius:
BOI, MMV, RNO
IR ROUTES

IR-304

ORIGINATING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, Mountain Home AFB, ID 83648 DSN 728-2172/4607, 208-828-2172/4607/4631. Airspace Management information Home AFB, Mountain Home AFB, ID 83648 DSN 728-2172/4607, climb to 01 AGL B 85 MSL to J REO 143/16 N42°20.00’ to I REO 229/12 N42°31.00’ descend to 01 AGL B 90 MSL to FF REO 318/53 N43°24.00’ to F REO 323/68 N43°40.00’ to EE BKE 180/69 N43°46.00’ to E BKE 185/56 N44°00.00’ to DD BKE 203/34 N44°25.00’ to C BKE 219/21 N44°39.00’ to BKE 200/13 N44°54.00’ to BOI 285/71 N45°09.00’ or as assigned.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling requests 0730-1630 local Mon-Fri. Must be scheduled minimum of 2 hours prior to entry into airspace.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 170 MSL to or as assigned.</td>
<td>A</td>
<td>BOI 285/71</td>
<td>N44°10.00’ W117°35.07’</td>
</tr>
<tr>
<td>140 MSL to descend to</td>
<td>B</td>
<td>BKE 200/13</td>
<td>N44°40.50’ W118°00.00’</td>
</tr>
<tr>
<td>140 MSL to descend to</td>
<td>C</td>
<td>BKE 219/21</td>
<td>N44°29.70’ W118°13.70’</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>D</td>
<td>BKE 203/34</td>
<td>N44°25.00’ W118°21.07’</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>DD</td>
<td>BKE 188/49</td>
<td>N44°07.00’ W118°21.07’</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>E</td>
<td>BKE 185/56</td>
<td>N44°00.00’ W118°21.07’</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>EE</td>
<td>BKE 180/69</td>
<td>N43°46.00’ W118°21.07’</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>F</td>
<td>REO 323/68</td>
<td>N43°40.00’ W118°21.07’</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>FF</td>
<td>REO 318/53</td>
<td>N43°24.00’ W118°21.07’</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to descend to</td>
<td>G</td>
<td>REO 299/33</td>
<td>N43°00.00’ W118°22.07’</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to descend to</td>
<td>H</td>
<td>REO 246/15</td>
<td>N42°34.00’ W118°12.07’</td>
</tr>
<tr>
<td>01 AGL B 85 MSL to</td>
<td>I</td>
<td>REO 229/12</td>
<td>N42°31.00’ W118°07.07’</td>
</tr>
<tr>
<td>01 AGL B 85 MSL to</td>
<td>J</td>
<td>REO 143/16</td>
<td>N42°20.00’ W117°45.50’</td>
</tr>
<tr>
<td>01 AGL B 85 MSL to</td>
<td>K</td>
<td>REO 125/30</td>
<td>N42°11.00’ W117°28.07’</td>
</tr>
<tr>
<td>01 AGL B 85 MSL to climb to</td>
<td>L</td>
<td>REO 113/44</td>
<td>N42°06.00’ W117°08.50’</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to Alternate Entry: N</td>
<td>M</td>
<td>REO 108/49</td>
<td>N42°06.00’ W117°00.05’</td>
</tr>
<tr>
<td>170 MSL to or as assigned descend to</td>
<td>N</td>
<td>REO 275/48</td>
<td>N42°55.00’ W118°52.07’</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to</td>
<td>H1</td>
<td>REO 246/15</td>
<td>N42°34.00’ W118°12.07’</td>
</tr>
<tr>
<td>01 AGL B 85 MSL to Thence via published route.</td>
<td>I1</td>
<td>REO 229/12</td>
<td>N42°31.00’ W118°07.07’</td>
</tr>
<tr>
<td>Alternate Exit: J</td>
<td>J1</td>
<td>REO 143/16</td>
<td>N42°20.00’ W117°45.50’</td>
</tr>
<tr>
<td>140 MSL to</td>
<td>O</td>
<td>REO 130/35</td>
<td>N42°05.00’ W117°28.00’</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: IMC/VMC
terrain following (TF), Terrain Following Radar (TFR), Visual Contour (VC) and Terrain Avoidance (TA) authorized IAW command directives within published altitude from Point C to M. Night VC operations are not authorized. Minimum altitudes on TF/TFR/VC/TA legs do not provide vertical clearance from man-made obstructions. Route IFR altitudes provide a minimum of 1000’ AGL clearance above the highest terrain obstruction within the route boundaries and 5 NM either side of the route corridor. Obstructions under 200’ were not considered in the route design. When command directives preclude TF/TFR/VC/TA operations, aircrews will maintain the IFR altitude for each route. Aircrews will comply with regulations governing low level operations. Aircrews must consider all airports within or near route corridor limits when mission planning route of flight. The route is designated mountainous.

ROUTE WIDTH - On centerline from A to D; 8 NM either side of centerline from D to DD; 8 NM right and 6 NM left of centerline from DD to E; 8 NM either side of centerline from E to G; 8 NM left and 5 NM right of centerline from G to H; 8 NM either side of centerline from H to M. Alternate Entry N: On centerline from N to H1; 8 NM either side of centerline from H1 to I1. Alternate Exit J: On centerline J1 to O.

Special Operating Procedures:

1. MARSA applies and is accomplished by timing at route entry based on 480 knot ground speed while on the route. See and Avoid applies during VMC. Other airspeeds may be flown as coordinated with the scheduling agency. Aircraft flying at similar airspeeds may be scheduled with ten minutes of separation at the entry point. Aircrews unable to make scheduled entry time within plus or minus 2 minutes must coordinate a new entry time with Raymond 27 on 381.3 (UHF) or 15091/5703 (HF).

2. Except for IMC terrain following Radar operations, aircrews encountering IMC will climb to the minimum IFR altitude prior to IR route crossing.

3. WARNING: Chart update manual (CHUM) data used to construct navigational charts does not address vertical obstruction data below 200’ AGL. Locally obtained vertical obstruction data, from aerial estimations, below 200’ AGL may be obtained from the scheduling agency. Aircrews flying this route will report their observations of new developments or cultural changes to the originating agency. This route has been surveyed IAW ACC Sup 1 to AFI 13-201 down to 100’ AGL.

4. Requesting units will furnish the scheduling agency with Call Sign, number and type of aircraft, planned entry time, entry point, proposed speed, exit point and exit time.

5. Clearance to fly this route does not include clearance to enter Mountain Home Range Complex (MHRC). MHRC includes Paradise East/West, Owyhee, Jarbidge MOA’s, Saylor Creek Range (R-3202), Juniper Butte Range (R-3204). Prior coordination required with 366 OSS/OSOS (DSN 728-2172) for scheduling. Aircraft not scheduled for MHRC will exit this route at alternate exit Point J.

6. Units will not schedule or enter any portion of the MHRC unless they have reviewed governing range and airspace regulations. Regulations are available on the ACC web page at: https://do.acc.af.mil/dor/DORA/Units-MHAFB.html

7. Alternate Entry: D. Contact Salt Lake City ARTCC on 387.15, cross Point D southbound at 10,000’ MSL or as assigned then descend into the block 100’ AGL to 10,000’ MSL by Point DD. H. Contact Salt Lake City ARTCC on 387.15, cross Point H at 8500’ MSL or as assigned then descend into the block 100’ AGL to 8500’ MSL by Point I.
(8) Uncharted airports: N43-57-30 W118-08-00, N43-45-00 W118-28-00, N43-34-30 W118-33-00, N42-13-00 W117-55-00. Overfly at or above 1500' AGL or avoid by 3 NM.


(10) Information on migratory bird routes along this route may be obtained from the bird avoidance web page on the Air Force Safety Center site: http://safety.kirtland.af.mil/AFSC/Bash/avoid.html

FSS Within 100 NM Radius:
BOI, MMV, RNO

IR ROUTES

IR-305

ORIGINATING ACTIVITY: 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.

SCHEDULING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648, DSN 728-4607/2172, C208-828-4607/2172/4631. Scheduling requests 0730-1630L, Mon-Fri. Must be scheduled minimum 24 hours prior to entry.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 8 NM either side of centerline from C to G; 5 NM left and 8 NM right of centerline from G to H; 4 NM either side of centerline from H to K; 8 NM either side of centerline from K to O; 8 NM right and 4 NM left of centerline from O to P; 4 NM either side of centerline from X to Y.

Special Operating Procedures:

(1) MARSA applies between successive participants by scheduling block of time at Point A. See and Avoid primary method of MARSA in VMC.

(2) Route crossing A to D, IR-300 and IR-304. If IMC is anticipated, transition to VMC conditions to the leg segment minimum IFR altitude. Remain at minimum IFR altitude until past conflict point, or standard ATC separation is established after leaving the route.

(3) Noise Sensitive Areas:
   (a) 10,000' MSL minimum altitude from 5 NM prior to 5 NM past Galena Highway (located between O and P).
   (b) Marys River area (N41-39-00 W115-06-00, N41-33-00 W115-20-00, N41-23-00 W115-14-00, N41-28-00 W114-59-00);
   (c) Mountain City (N41-50-30 W115-57-30);
   (d) Ranch (N41-43-50 W115-58-50);
   (e) Ward Ranch/uncharted airport (N42-03-00 W113-29-07);
   (f) Craters of the Moon Park National Monument (N43-27-45 W113-33-00);
   (g) Henry area (N41-42-10 W114-49-00).
(4) Avoid all airports by overflight of 1500' AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00, N41-26-00 W115-47-00, N41-39-00 W114-49-50).

(5) Due to bird strike potential, minimum altitude from 5 NM prior to 5 NM past Point J is 1000' AGL.

(6) Helicopter ski operations is the Boulder and Pioneer Mountains (east of W114-30-00) are conducted in daylight from 1 Dec to 30 Apr. Maintain 13,000' MSL between O and P during this time frame.

(7) Contact Salt Lake ARTCC on 363.0 at Point O for further clearance.

(8) Avoid all airports by overflight of 1500' AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00, N41-26-00 W115-47-00, N41-39-00 W114-49-50).

(9) Uncharted obstructions:
   (a) Tower 190' AGL (N43-17-30 W113-11-50);
   (b) Tower 100' AGL (N42-35-24 W113-11-50);
   (c) Tower 75' AGL (N42-30-00 W113-10-00) on top of hill.

(10) Alternate Entry Points: C, E, F, G, H, K, L and O.
(11) Alternate Exit Points: Y, BOI 115°33.50'.
(12) Lost communications procedures: Fly 12,000' MSL or top of the block.
(13) For non-fighter type aircraft: Due to the severity of terrain near Alternate Exit Point Y, terrain following will only be flown in VMC conditions from Point X to N41-50-00. During IMC conditions or at night, fly the published IFR altitudes to avoid the 9912' MSL peak.

FSS Within 100 NM Radius:
BOI

IR-307

ORIGINATING ACTIVITY: 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to D; 5 NM either side of centerline from D to E; 8 NM either side of centerline from E to L.

Special Operating Procedures:
(1) This route is closed to all non-124 FW and 366 FW operations.
(2) MARSA applies between successive participants and at all route crossings. Technique for applying MARSA is by scheduling and/or See and Avoid.
(3) IR-307 will not be scheduled/flown when IR-301 is in use.

IR-308


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
**Terrain Following Operations**: Authorized entire route. IMC Terrain Following (TF) authorized within major command guidance.

**Route Width**: 5 NM either side of centerline.

**Special Operating Procedures:**
1. This route restricted to turboprop, tiltrotor, and rotary wing aircraft only.
2. This route conflicts with IR-109, IR-409, IR-415/424, and VR-1175. To deconflict with IR-409 or IR-415/424, contact 140th OG, Buckley ANGB, DSN 847-9470/71/72. To deconflict with IR-109, contact 27 OSS, Cannon AFB, DSN 681-2276/7634.
3. Alternate Entry: Points B, D and E.
4. Avoid the following airfields by 2 NM or 2000' AGL:
   a. N36-50.0 W106-53.0;
   b. Cuchara Valley at N37-31.0 W105-01.0;
   c. Johnson at N37-42.0 W104-47.0.
5. CAUTION: Tower, 275' AGL at N37-23.82 W105-24.35.
6. CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at flight altitudes less than 300' AGL. Contact 58 OSS/OSO DSN 263-5979/5888, C505-853-5979 to obtain a current and complete fax list of uncharted/uncharted obstructions.
7. Contact 58 OSS/DOO for a fax or email of the most current avoid areas.
8. When contacting the scheduling activity, be prepared to provide arrival time at checkpoint E in addition to entry/exit points and times.
9. If aircrews are going to miss their scheduled entry time by more than 10 minutes, they must call the 58 SOW Wing Operations Center (DSN 246-9482) for a new entry time.
10. CAUTION: Aircraft utilizing IR-308 routing cross IR-109 at multiple locations. All aircraft utilizing this routing (VFR and IFR) will report position updates upon reaching IR-308 point (C) and IR-308 point (H) on UHF 255.4 to avoid potential IR-109 traffic conflicts.
11. CAUTION: Frequent tilt-rotor VFR low level traffic transits east to west on the San Pedro cutoff (identified as IR-137 at N36-10.08 W106-23.91 to IR-308 at N36-14.02 W106-53.84) as well as between IR-137 point (E) to IR-308 point (G), and IR-137 point (D) to IR-308 point (H). VFR traffic will monitor and transmit position updates on UHF 255.4 when using these cutoffs to avoid potential conflicts with other IR-308 and IR-109 traffic.

**FSS Within 100 NM Radius:**
ABQ, DEN

**IR-313**


**Scheduling Activity**: 366 OSS/OSSOA, Mountain Home AFB, ID 83648 DSN 728-4607/2172/4631 C208-828-4607/2172/4631.

**Hours of Operation**: By NOTAM

---

**Route Description**:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 AGL B 130 MSL to F</td>
<td>ALS 224/36</td>
<td>N37°01.00' W106°27.00'</td>
</tr>
<tr>
<td>02 AGL B 110 MSL to G</td>
<td>ALS 227/54</td>
<td>N36°54.00' W106°47.00'</td>
</tr>
<tr>
<td>02 AGL B 110 MSL to H</td>
<td>ALS 214/71</td>
<td>N36°32.00' W106°53.00'</td>
</tr>
<tr>
<td>02 AGL B 110 MSL to I</td>
<td>ABQ 341/46</td>
<td>N35°48.00' W106°55.00'</td>
</tr>
<tr>
<td>02 AGL B 100 MSL to J</td>
<td>ABQ 341/46</td>
<td>N35°48.00' W106°55.00'</td>
</tr>
<tr>
<td>02 AGL B 90 MSL to K</td>
<td>REO 065/29</td>
<td>N42°38.50' W117°12.50'</td>
</tr>
<tr>
<td>02 AGL B 80 MSL to L</td>
<td>REO 061/14</td>
<td>N41°27.00' W117°37.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to M</td>
<td>SDO 217/53</td>
<td>N40°54.00' W118°59.00'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to N</td>
<td>SDO 224/57</td>
<td>N40°57.00' W119°09.00'</td>
</tr>
<tr>
<td>02 AGL B 50 MSL to O</td>
<td>SDO 121/31</td>
<td>N42°17.00' W120°15.50'</td>
</tr>
</tbody>
</table>
IR ROUTES

01 AGL B 90 MSL to I1 REO 104/44 N42°11.28' W117°02.45'

ALTERNATE EXIT
01 AGL B 90 MSL to I REO 065/29 N42°38.50' W117°12.50'

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC
terrain following (TF) terrain avoidance (TA) and visual contour (VC) operations are authorized IAW command directives within published altitudes from D to S. When command directives preclude TA/TF/VMC operations aircrews will maintain the IFR altitude for each route segment. Minimum altitudes other than surface are established to provide at least 100' vertical separation of known man-made obstructions within the route width. Command Directives may require additional obstructions clearance for TA/TF/VMC operations. The entire route is mountainous. Aircrews must comply with FAA regulations governing operations below 500' AGL. The route corridor provides airspace for 500' lateral separation from obstacles. Obstructions under 200' AGL were not considered in the route design.

ROUTE WIDTH - 4 NM either side of centerline from A to D; 3 NM left and 4 NM right of centerline from D to E; 3 NM left and 9 NM right of centerline from E to F; 4 NM left and 9 NM right of centerline from F to G; 4 NM either side of centerline from G to K; 4 NM left and 3 NM right of centerline from K to N; 4 NM either side of centerline from N to O; 3 NM left and 4 NM right of centerline from O to Q; 4 NM either side of centerline from Q to V; 4 NM either side of centerline from Alternate Exit I to I1; 4 NM either side of centerline from Alternate Entry I1 to J.

Special Operating Procedures:
(1) Participating aircraft separation: Route is designed for MARSA operations established by coordinated scheduling.
(2) Route is designated for System Strategic Navigation (SN) missions.
(3) Aircrews should be especially vigilant when flying IR-313 between N41-16.5 W117-58.5 and Point N due to possible crossing traffic on IR-303 and between N42-10.0 W117-36.0 and N42-17.0 W117-30.0 due to crossing traffic on IR-304. If VMC exists at the crossing point, See and Avoid is the method of MARSA. In IMC the method of MARSA will be procedural established by scheduling agency.
(4) Centerline is depicted as a 7.5 NM radius arc between turn points.
(5) Aircrews should be especially vigilant when flying IR-313 between C and G due to a high volume of general aviation traffic crossing the route.
(6) Aircrews will indicate the altitude required after exiting IR-313 in the remarks section immediately after the route exit time.
(7) Aircrew may expect a climb restriction by Point T by Seattle ARTCC if required for traffic separation at LKV. Contact Seattle ARTCC on 351.7 at point S for possible Lakeview altitude restrictions and IFR route clearance.
(8) Alternate Exit I to I1 requires prior coordination to schedule the Owyhee MOA.
(9) Alternate Entry I1 to J may be used only after exiting out of the Owyhee and Paradise MOA.
(10) Aircrews should be aware of hang gliding activity from Pt. S thru V.
(11) Noise Sensitive Areas:
(a) Residence at N41-25.5 W117-47.5
(b) Residence at N43-17.5 W117-06.0
(c) Residence at N43-21.2 W117-06.9
(d) Residence at N42-00.0 W117-38.5
(12) Unverified airport at N42-11.0 W116-52.0.
(13) Between turn points S and T recommend initiating climb early to establish communications with Seattle ARTCC (ZSE) on 351.7 prior to T to recieve IFR clearance restrictions by LKV.
(14) Inquire of Mountain Home AFB scheduling as to the status of IR-300 when booking the route. Use caution: IR-300 is the reverse of this routing.
(15) CAUTION: Uncharted meteorological tower installed at 42°07'00N/120°06'46W, and is immediately to the right of centerline between turn points B and C. Height of tower is greater than 150' tall, and possibly up to 190' in height. Uncharted dirt/turf airstrip at 42°24'23N/117°04'52W.

FSS Within 100 NM Radius:
BOI, CLE, MMV, RNO

IR-320

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S Chindit Ave. Bldg 790, Rm 120, Cannon AFB, NM 88103, DSN 681-2521.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S Chindit Ave. Bldg 790, Rm 111, Cannon AFB, NM 88103, DSN 681-2276/7634.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL230 to or as assigned (Start TFR Point)</td>
<td>A</td>
<td>JNC 183/42</td>
<td>N38°24.00' W109°04.00'</td>
</tr>
<tr>
<td>01 AGL B FL230 to (Start TA Point)</td>
<td>B</td>
<td>DVC 251/12</td>
<td>N37°47.50' W109°10.50'</td>
</tr>
<tr>
<td>06 AGL B 95 MSL to turn right to</td>
<td>C</td>
<td>DVC 190/43</td>
<td>N37°09.00' W109°18.00'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to direct to</td>
<td>D</td>
<td>DVC 192/51</td>
<td>N37°03.00' W109°24.00'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to turn left to</td>
<td>E</td>
<td>DVC 202/62</td>
<td>N36°58.00' W109°41.00'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to turn right to</td>
<td>F</td>
<td>TBC 043/84</td>
<td>N36°51.00' W109°47.50'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to direct to</td>
<td>G</td>
<td>TBC 058/75</td>
<td>N36°28.50' W109°47.50'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to descend direct to</td>
<td>H</td>
<td>TBC 063/74</td>
<td>N36°21.50' W109°47.00'</td>
</tr>
<tr>
<td>04 AGL B 95 MSL to direct to</td>
<td>I</td>
<td>TBC 080/75</td>
<td>N36°00.00' W109°43.50'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to direct to</td>
<td>J</td>
<td>TBC 089/79</td>
<td>N35°48.00' W109°42.00'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to direct to</td>
<td>K</td>
<td>SJN 322/50</td>
<td>N35°10.00' W109°35.50'</td>
</tr>
</tbody>
</table>
TERRAIN FOLLOWING OPERATIONS: Terrain Following (TF) Visual Contour (VC) operations are authorized IAW major commands/MDS guidance.

ROUTE WIDTH - 3 NM left and 5 NM right of centerline from A to B; 4 NM either side of centerline from B to X. ALTERNATE ENTRY, F1: 4 NM either side of centerline from F1 to H1. ALTERNATE ENTRY, AD: 4 NM either side of centerline from AD to M1. ALTERNATE EXIT, S: 4 NM either side of centerline from Q1 to S1.

Special Operating Procedures:
(1) If route is not available for use, contact Dyess AFB airspace management for additional information.
(2) Deconfliction will be by coordinated scheduling. Aircraft utilizing this MTR shall meet their scheduled entry, and exit points by plus or minus 2.5 minutes to ensure the mandatory separation time of 10 minutes. If unable, contact the scheduling authority to cancel and or reschedule mission.
(3) Lost Communications (LC) procedures: Route LC altitude is 16,000’ MSL. Desired deviation from this procedure must be filed IAW command directive and verified with Denver ARTCC prior to route entry.
(4) Aircrews are advised of 550’ smokestack located at N34-56-26 W110-17-59.
(5) Aircraft will contact the following ARTCC’s with their call sign, location and route identifier:
(a) Albuquerque ARTCC at Point L on 239.05;
(b) Denver ARTCC at Point U on 256.87.
(6) IR-320 and IR-112 conflict in the area of Point J and between Points R and S. For de-confliction with IR-112, contact Kirtland AFB (DSN 263-5979 or 5888). The method of MARSA in these areas will be coordinated scheduling.
(7) Centerline between designated turn points is depicted as a 7.5 NM radius arc.
(8) Aircrews should be especially vigilant during summer months for increased VFR traffic between Points N and S.
(9) Aircrews are advised of a 300’ smokestack located at the Pulp Mill located at N34-30.3 W110-20.2. Avoid by 1/4 NM.
(10) Noise Sensitive Areas:
(a) Residence at N34-52.0 W110-18.5;
(b) Residence at N34-22.4 W110-25.9;
(c) Residence at N34-23.1 W110-23.0;
(d) Residence at N37-52.4 W109-11.3;
(e) High School at N35-45.3 W109-37.8;
(f) Residence at N34-53.3 W110-16.3;
(g) Residence at N34-54.5 W110-14.9;
(h) Residence at N34-54.8 W110-13.2.
(11) Aircrew requesting to use the Alternate Entry Track AD request to schedule IR-320AD with the scheduling agency.
(12) Alternate Exit: Point S; climb to cross Point S at 9000 MSL, contact Albuquerque ARTCC 306.2, exit at Point S under Albuquerque’s control direct to next filed point.
(13) Due to evolving avoidance areas, obstacles, and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Master CHUM, and Master DRAW files before flying the route. This information can be obtained by request to the scheduling activity.

FSS Within 100 NM Radius:
ABQ, CDC, PRC
IR ROUTES

IR-324


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>EPH 105/21</td>
<td>N47°10.00' W119°00.00'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to B</td>
<td>GEG 205/30</td>
<td>N47°13.00' W118°09.00'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 50 MSL to C</td>
<td>GEG 258/26</td>
<td>N47°38.00' W118°15.70'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 60 MSL to D</td>
<td>GEG 278/32</td>
<td>N47°49.00' W118°19.00'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 60 MSL to E</td>
<td>GEG 270/42</td>
<td>N47°49.00' W118°36.00'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 60 MSL to F</td>
<td>EPH 359/28</td>
<td>N47°49.00' W119°11.00'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 60 MSL to G</td>
<td>EPH 334/23</td>
<td>N47°46.00' W119°28.50'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 60 MSL to H</td>
<td>EPH 297/26</td>
<td>N47°42.00' W119°51.00'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 50 MSL to I</td>
<td>EPH 218/15</td>
<td>N47°15.00' W119°44.00'</td>
<td></td>
</tr>
<tr>
<td>03 AGL B 50 MSL to J</td>
<td>EPH 187/22</td>
<td>N47°03.40' W119°40.50'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300’ AGL can be initiated. From Point A to J, 300’ AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2000’ above highest obstacle within 5 NM of route centerline unless on FAA exemption 4371 between Points H and J. All structures on the route will be avoided by a minimum of 500’ horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) All turns must remain within route width.

(2) Authorized aircraft C-17 and C-130.

(3) Primary Entry: Point A. Alternate Entry: Point B and F.

(4) Primary Exit: Point J. Alternate Exit: Points G and H.

(5) Route Communications:

(a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A for clearance;

(b) Between Points B and C monitor Spokane Approach Control 123.75 or 282.25;

(c) Between Points C and H monitor Seattle Center 126.1 or 291.6. Give progress report at Point E. If exiting at Point G, relay intentions after exit prior to Point F;

(d) Between Points H and J monitor Grant County Approach 126.4 or 385.5. Before Point I, advise of intentions after exit;

(e) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 between Points C and J. Prior to Point I advise Center of intentions after exit. (Tie in FSS: SEA).

(6) Speed:

(a) Maintain 250 KCAS or below until route entry;

(b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling;

(c) Maximum speed on route: 360 KCAS.

(7) Caution:

(a) Deconflict traffic on VR-1350, VR-1351, IR-325, IR-326, IR-327, IR-328, IR-330 and IR-341 with scheduling activity.

(b) Be alert for crop duster activity while over any agricultural area below 1000’ AGL;

(c) Prior to Point A, crews should be alert for light aircraft conducting basic flight training that may not be talking to air traffic control;

(d) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points H to J. Crews should be alert for aircraft and glider aircraft under tow without transponders and not talking to air traffic control. Crews should use extreme caution when exiting;

(e) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;

(f) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.

(g) A wind farm will begin construction in the spring of 2011, this farm is located near Point H, towering heights are 453’ AGL.

(h) Be alert for crop duster aircraft departing a grass strip located at N40-20-28 W119-42-20.

(8) When practicable avoid by 1500’ AGL or 3 NM:

(a) Franz Afld N47-03-01 W118-51-10;

(b) Tree Heart Afld (Pvt) N47-08-30 W118-48-04;

(c) Pru Afld N47-07-30 W118-23-34;

(d) Kramer Afld N47-22-54 W118-17-48;

(e) Hanes Afld (Pvt) N47-22-54 W118-15-04;

(f) Davenport Afld N47-39-15 W118-10-04;

(g) 7 Bays Afld (Pvt) N47-51-04 W119-19-49;

(h) Gollehon Afld (Pvt) N47-49-13 W118-41-13;

(i) Wilbur Afld N47-45-12 W118-44-38;

(j) Sheffels Ranch Afld (Pvt) N47-49-02 W118-48-05;

(k) Grand Coulee Afld N47-55-30 W119-04-15;

(l) Mansfield Afld N47-48-35 W119-38-14;

(m) Quincy Afld N47-12-42 W119-50-23;


(9) Sensitive Areas:

(a) Avoid Spraque Lake NE of Point B;

(b) Maintain 2000’ AGL or above over FDR Lake between Points D and E;

(c) Avoid by 1 NM wildlife areas between Points D and E: N47-49-30 W118-20-48, N47-53-00 W118-27-48;

(d) Avoid sport parachute activity by 3NM at N47-53-00 W118-27-48.

(10) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.
**FSS Within 100 NM Radius:**
SEA

**IR-325**

**ORIGINATING ACTIVITY:** 62 OSS/OSK, 1172 Levitow Blvd., McChord Fld, WA 98438 DSN 382-4057, C253-982-3615.

**SCHEDULING ACTIVITY:** 62 OSS/OSO, 100 Main St., McChord Fld, WA 98438 DSN 382-9925, C253-982-9925. Duty hours 0800-1700 local. Non-duty hours McChord Command Post DSN 382-2635, C253-982-2635.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

**TERRAIN FOLLOWING OPERATIONS:** After crossing Point A descent to 300’ AGL can be initiated. From Point A to H, 300’ AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2,000’ above highest obstacle within 5 NM of route centerline. All structures on the route will be avoided by a minimum of 500’ horizontally.

**ROUTE WIDTH -** 5 NM either side of centerline.

**Special Operating Procedures:**
(1) All turns must remain within route width.
(2) Authorized aircraft C-17 and C-130.
(3) Primary Entry: Point A. Alternate Entry: Points B, C, and D.
(4) Primary Exit: Point H. There are no alternate exit points.
(5) Route Communications:
   (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A for clearance;
   (b) Between Points B and F monitor Seattle Center 126.1 or 291.6;
   (c) Between Points F and G monitor Spokane Approach Control 123.75 or 282.25;
   (d) Before Point H, advise Grant County Approach of intentions after exit on 126.4 or 385.5;
   (e) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and F. Monitor Spokane Approach Control on 123.75 or 282.25 from Point F to G. Then monitor Seattle Center 126.1 or 291.6 from Point G to H.

**ROUTE WIDTH -** 5 NM either side of centerline.

**Special Operating Procedures:**
(6) Speed:
   (a) Maintain 250 KCAS or below until route entry;
   (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling;
   (c) Maximum speed on route: 360 KCAS.

**Caution:**
(1) Deconflict traffic on VR-1350, VR-1351, IR-324, IR-326, IR-327, IR-328, IR-330 and IR-341 with scheduling activity. Entry at Point C will deconflict with VR-1350;
(2) Be alert for crop duster activity while over any agricultural area below 1000’ AGL;
(3) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points E to H. Crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control. Crews should use extreme caution when exiting;
(4) When climbing out of the low level near Point H, be alert for small aircraft conducting basic flight training;
(5) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
(6) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.
(7) A wind farm will begin construction in the spring of 2011, this farm is located near Point B, towering heights are 453’ AGL.
(8) Be alert for crop duster aircraft departing a grass strip located at N47-20-47 W119-42-33.

**FSS Within 100 NM Radius:**
SEA
IR ROUTES

IR-326

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow blvd, McChord Fld, WA 98438 DSN 382-3615, C253-982-3615.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be initiated. From Point A to G, 300' AGL modified contour will be conducted in VMC, unless overflying Columbia National Wildlife Refuge, where minimum altitude will be 2000 feet AGL. If IMC, route leg altitude will be 2000' above the highest obstacle within 5 NM of route centerline unless on FAA exemption 4371C between Points F and G. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) All turns must remain within route width.

(2) Authorized aircraft C-17 and C-130.

(3) Primary Entry: Point A. Alternate Entry: Points B, C and D.

(4) Primary Exit: Point G. There are no alternate exit points.

(5) Route Communications:

(a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A for clearance;

(b) For entry at Point D contact Seattle Center on 123.95 or 282.3 for clearance;

(c) Between Point C and E contact Seattle Center on 123.95 or 290.55. Provide progress report to Seattle Center at Point D;

(d) Monitor Chinook Approach 128.75 or 377.2 between Points E and F;

(e) At Point F, advise Grant County Approach of intentions after exit on 126.4 or 385.5;

(f) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and C. Monitor Seattle on 123.95 or 290.55 from Point C to E, relay progress report at Point D. Then monitor Seattle on 126.1 or 291.6 between Points E and G. At Point F advise of intentions after exit.

(6) Speed:

(a) Maintain 250 KCAS or below until route entry;

(b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling;

(c) Maximum speed on route: 360 KCAS.

(7) Caution:

(a) Deconflict traffic on VR-1351, VR-1354, IR-324, IR-325, IR-329, IR-330 and IR-341 with scheduling activity;

(b) Be alert for small aircraft conducting spin training 6000' MSL and below midway between Point F and G;

(c) Be alert for crop duster activity while over any agricultural area below 1000' AGL;

(d) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township. When exiting the route, crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control;

(e) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;

(f) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.

(g) Numerous wind turbines left and right of centerline near Point E, south of the town of Starbuck. Some of these wind mills may reach 458' AGL.

(8) When practicable avoid by 1500' AGL or 3 NM:

(a) Lind AFLD N46-58-40 W118-35-09;

(b) Franz AFLD N47-03-01 W118-51-10;

(c) Tree Heart Afd (Pvt) N47-08-30 W118-48-04;

(d) Pru AFLD N47-07-30 W118-23-34;


(f) Little Goose AFLD N46-35-00 W118-00-04;

(g) Lower Monumental AFLD N46-33-00 W118-32-12;

(h) Slinkard AFLD (Pvt) N46-36-12 W119-03-46;

(i) Gearhart AFLD (Pvt) N46-47-20 W119-12-30;

(j) Christensen AFLD (Pvt) N46-55-14 W119-35-24;

(k) Hanes AFLD (Pvt) N47-29-30 W118-15-04;


(9) Sensitive Areas:

(a) Avoid Spraque Lake NE of Point C;

(b) Avoid sport parachute activity by 3NM at N47-09-38 W118-17-33.

(10) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.

FSS Within 100 NM Radius:

SEA

IR-327


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>EPH 063/18</td>
<td>N47°24.50’ W118°59.20’</td>
</tr>
<tr>
<td>50 MSL to</td>
<td>B</td>
<td>GEG 250/32</td>
<td>N47°34.20’ W118°25.10’</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>C</td>
<td>GEG 275/37</td>
<td>N47°49.80’ W118°26.40’</td>
</tr>
<tr>
<td>03 AGL B 70 MSL to</td>
<td>D</td>
<td>GEG 291/45</td>
<td>N48°04.20’ W118°27.80’</td>
</tr>
<tr>
<td>03 AGL B 70 MSL to</td>
<td>E</td>
<td>EPH 001/57</td>
<td>N48°15.80’ W119°54.00’</td>
</tr>
<tr>
<td>03 AGL B 70 MSL to</td>
<td>F</td>
<td>EPH 324/37</td>
<td>N47°58.00’ W119°39.20’</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>G</td>
<td>EPH 287/21</td>
<td>N47°35.40’ W119°49.40’</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>H</td>
<td>EPH 218/15</td>
<td>N47°15.00’ W119°44.00’</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>I</td>
<td>EPH 187/22</td>
<td>N47°03.40’ W119°40.50’</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: After crossing Point B descent to 300’ AGL can be initiated. From Point B and I 300’ AGL modified contour will be contected in VMC. If IMC, route leg altitudes will be 2,000’ above highest obstacle within 5 NM of route centerline unless on FAA exemption 4371 between Points H and I. All structures on the route will be avoided by a minimum of 500’ horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Crews wishing to schedule this route must coordinate with 62 OSO at DSN 382-9925, C253-982-9925 early in the planning day to have the route coordinated with NAS Whidbey Island for transit of the Okanogan MOA.

(2) All turns must remain within route width.

(3) Authorized aircraft C-17 and C-130.

(4) Primary Entry: Point A. Alternate Entry: Points B and D.

(5) Primary Exit: Point I. Alternate Exit: Points F and G.

(6) Coordination is required with Whidbey Island NAS, DSN 820-2877, for transition through Roosevelt and Okanogan MOAs.

(7) Route Communications:
(a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A or B for clearance;
(b) For entry at Point D contact Seattle Center on 126.1 or 291.6 for clearance;
(c) Monitor Seattle Center 126.1 or 291.6 between Point B and G. Relay progress report at Point F;
(d) Monitor Grant County Approach Control 126.4 or 385.5 between Point G and I. At Point G report on Freq and advise of intentions after exit;
(e) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and I. Prior to Point H advise of intentions after exit.

(8) Speed:
(a) Maintain 250 KCAS or below until route entry;
(b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling;
(c) Maximum speed on route: 360 KCAS.

(9) Caution:
(a) Deconflict traffic on VR-1350, VR-1351, IR-324, IR-325, IR-328 and IR-330 with scheduling activity. Exit at Point F will avoid VR-1350;
(b) Be alert for crop duster activity while over any agricultural area below 1000’ AGL;
(c) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points H to J. Crews should be alert for glider aircraft under tow without transponders and not talking to air traffic control. Crew should use extreme caution when exiting;
(d) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
(e) Crews should be vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.

(f) A wind farm will begin construction in the spring of 2011, this farm is located near Point G, towering heights are 453’ AGL.

(g) Be alert for crop duster aircraft departing a grass strip located at N47-20-47 W119-42-33.

(10) When practicable avoid by 1500’ AGL or 3 NM:
(a) 7 Bays AFLD (Pvt) N47-51-04 W118-19-49;
(b) Mansfield AFLD N47-54-35 W119-38-14;
(c) Quincy AFLD N47-12-42 W119-50-23;

(11) Sensitive Areas:
(a) Minimize overflight of Lake Creek, right of course centerline between Point A and B during summer months (May-Sep);
(b) Maintain 2000’ AGL or above over FDR Lake between Points B and D.

(12) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.

FSS Within 100 NM Radius:
SEA

IR-328

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow Blvd., McCor Fld, WA 98438 DSN 382-3615, C253-982-3615.


HOURS OF OPERATION: Continuous
IR ROUTES

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to A | EPH 136/25 | N46°59.40' | W119°11.00'
03 AGL B 50 MSL to B | MWH 135/28 | N46°47.70' | W119°00.88'
03 AGL B 50 MSL to C | ALW 295/24 | N46°04.00' | W119°36.10'
03 AGL B 50 MSL to D | ALW 248/20 | N46°04.00' | W119°46.90'
03 AGL B 50 MSL to E | PDT 295/36 | N46°14.20' | W119°45.60'
03 AGL B 50 MSL to F | YKM 101/38 | N46°38.00' | W119°46.60'
03 AGL B 60 MSL to G | YKM 061/28 | N46°14.20' | W119°45.60'

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be initiated. From Point A and H, 300' AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2000' above highest obstacle within 5 NM of route centerline. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Crews wishing to schedule this route must coordinate with 62 OSO at DSN 382-9925, C253-982-9925 early in the planning day to have the route coordinated with NAS Whidbey Island for transit of the Okanogan MOA.

(2) All turns must remain within route width.

(3) Authorized aircraft C-17 and C-130.

(4) Primary Entry: Point A. Alternate Entry: Points B and C.

(5) Primary Exit: Point H. There are no alternate exit points.

(6) Coordination is required with Whidbey Island NAS, DSN 820-2877, for transition through Roosevelt and Okanogan MOAs.

(7) Route Communications:

(a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A;

(b) Maintain 250 KCAS or below until route entry;

(c) Monitor Seattle Center 126.1 or 291.6 between Point B and C. Relay progress report at Point F;

(d) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and H. Prior to Point G advise of intentions after exit.

(8) Speed:

(a) Maintain 250 KCAS or below until route entry;

(b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling;

(c) Maximum speed on route: 360 KCAS.

(9) Caution:

(a) Deconflict traffic on VR-1350, VR-1351, IR-324, IR-325, IR-328 and IR-330 with scheduling activity. Exit at Point F will avoid VR-1350;

(b) Be alert for crop duster activity while over any agricultural area below 1000' AGL;

(c) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points A to B. Enroute to Point A, crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control;

(d) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;

(e) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.

(f) A wind farm will begin construction in the spring of 2011, this farm is located near Point G, towering heights are 453' AGL.

(g) Be alert for crop duster aircraft departing a grass strip located at N47°-20-28 W119°-42-20.

(10) Sensitive Areas:

(a) Maintain 2000' AGL or above over FDR Lake between Pts E and F;

(b) Avoid by 1 NM wildlife area east and northwest of Pt F (N47°-53-00 W118°-27-48, N47°-49-30 W118°-20-48);

(c) Minimize overflight of Lake Creek, left of course centerline between Pts G and H during summer months (May-Sep).

(11) Crews should forward any observed hazard to aviation or concerns to the 62ND AW Airspace Manager at DSN 382-4027 C253-982-4057.

FSS Within 100 NM Radius:

SEA

IR-329


SCHEDULING ACTIVITY: 62 OSS/OSO, 100 Main St., McChord Fld, WA 98438 DSN 382-9925, C253-982-9925. Non-duty hours McChord Command Post DSN382-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to A | EPH 136/25 | N46°59.40' | W119°11.00'
03 AGL B 50 MSL to B | MWH 135/28 | N46°47.70' | W119°00.88'
03 AGL B 50 MSL to C | ALW 295/24 | N46°04.00' | W119°41.80'
03 AGL B 50 MSL to D | ALW 248/20 | N46°04.00' | W119°46.90'
03 AGL B 50 MSL to E | PDT 295/36 | N46°14.20' | W119°36.10'
03 AGL B 50 MSL to F | YKM 101/38 | N46°38.00' | W119°46.60'
03 AGL B 60 MSL to G | YKM 061/28 | N46°38.00' | W119°46.60'
TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be initiated. From Point A to 1,300' AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2,000' above the highest obstacle within 5 NM of route centerline. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

SpecialOperatingProcedures:
(1) All turns must remain within route width.
(2) Authorized aircraft C-17 and C-130.
(3) Primary Entry: Point A. Alternate Entry: Point B.
(4) Primary Exit: Point I. There are no alternate exit points.
(5) Route Communications:
   (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A or B for clearance;
   (b) Contact Chinook Approach Control 128.75 or 377.2 at Point B and report Point G. If operating between 1000' and 1500' AGL provide estimates for Points C and D;
   (c) Contact Grant County Approach Control 126.4 or 385.5 prior to Point H with ETA for Point I and intentions after exit;
   (d) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and C. Then monitor Seattle Center 132.6 or 289.3 between Points C and H. Then on 126.1 or 291.6 between Points H and I. Prior to Point H advise Center of intentions after exit.
(6) Speed:
   (a) Maintain 250 KCAS or below until route entry;
   (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling.
   (c) Maximum speed on route: 360 KCAS.
(7) Caution:
   (a) Deconflict traffic on VR-1350, VR-1351, VR-1354 and IR-326 with scheduling activity;
   (b) Be alert for crop duster activity while over any agricultural area below 1000' AGL;
   (c) Numerous windmills between Point D and E and in the vicinity of Point D. Some mills are 416' AGL;
   (d) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township. When exiting the route, crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control;
   (e) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
   (f) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.
(8) When practicable avoid by 1500' AGL or 3 NM:
   (a) New Warden AFLD N46-58-00 W119-04-04;
   (b) Taggares AFLD (Pvt) N46-51-47 W119-08-19;
   (c) Othello AFLD N46-47-42 W119-04-49;
   (d) Gearhart AFLD (Pvt) N46-47-20 W119-12-30;
   (e) Connell City AFLD (Pvt) N46-39-45 W118-50-00;
   (f) Slinkard AFLD (Pvt) N46-36-12 W119-03-46;
   (g) Compressor Sta AFLD (Pvt) N46-03-04 W118-50-39;
   (h) McWhorter AFLD (Pvt) N46-19-14 W119-37-04;
   (i) Christensen Bro AFLD (Pvt) N46-42-29 W119-48-04;
   (j) Mattawa AFLD (Pvt) N46-43-57 W119-42-08;
(9) Sensitive Areas:
   (a) Maintain 2000' AGL or above Columbia National Wildlife Refuge between Points A and B;
   (b) Maintain 2000' AGL or above over Juniper Dunes Wilderness Area between Points B and C;
   (c) Maintain 3000' AGL or above over Kennewick Tank Farm at N46-09 W119-00 Northwest of Point D;
   (d) Maintain 1800' MSL or above over Hanford Nuclear Reservation between Points F and H;
   (e) Maintain 2000' AGL or above over Saddle Mountain National Wilderness Refuge between Point G and H.
(10) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.

FSS Within 100 NM Radius:
SEA

IR-330


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
As assigned to
03 AGL B 50 MSL to H YKM 038/30     W119°49.80'     N46°49.80'
03 AGL B 50 MSL to I EPH 187/22     W119°40.50'

03 AGL B 50 MSL to I EPH 187/22     W119°40.50'

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be-initiated. From Point A and
IR ROUTES

H, 300' AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2000' above the highest obstacle within 5 NM of route centerline unless on FAA exemption 4371 between Points G and H. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline from A to F; 5 NM left and 2 NM right of centerline from F to H; 5 NM either side of centerline from H to I.

Special Operating Procedures:
(1) All turns must remain within route width.
(2) Authorized aircraft C-17 and C-130.
(3) Primary Entry: Point A. Alternate Entry: Point B.
(4) Primary Exit: Point I. Alternate Exit: Point H.
(5) Route Communications:
   (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A or B for clearance. Then monitor from Point A to I. Provide a progress report at Point D. Prior to Point G advise of intentions after exit. If desire is to exit at Point H, advise controller prior to route entry and give intentions upon exit. Plan to cross Point H at 5000'MSL;
   (b) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and I. Prior to Point G advise of intentions after exit.
(6) Speed:
   (a) Maintain 250 KCAS or below until route entry;
   (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling;
   (c) Maximum speed on route: 360 KCAS.
(7) Caution:
   (a) Deconflict traffic on VR-1351, IR-324, IR-325, IR-326, IR-327, IR-328 and IR-341 with scheduling activity. VR-1351 can be avoided by remaining West of centerline or above 2000' AGL from N47-22 W118-36 until West of Point C;
   (b) Be alert for crop duster activity while over any agricultural area below 1000' AGL;
   (c) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points F to I. Crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control. Crews should use extreme caution when exiting;
   (d) See NOTAMs/Directory for Class E (sfc) effective hours for Ephrata between Points G and I;
   (e) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
   (f) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.
   (g) Be alert for crop duster aircraft departing a grass strip located at N47 20.47 W119 42.33.
(8) When practicable avoid by 1500' AGL or 3 NM:
   (a) Franz AFLD N47-03-01 W118-51-10;
   (b) Tree Heart AFLD (Pvt) N47-08-30 W118-48-04;
   (c) Odessa AFLD (Pvt) N47-21-30 W118-40-24;
   (d) Coulee City AFLD (Pvt) N47-37-00 W119-14-34;
   (e) Quincy AFLD N47-12-42 W119-50-23;
(9) Sensitive Areas:
   (a) Minimize overflight of Lake Creek, West Southwest of Point C during summer months (May-Sep).
   (10) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, 253-982-4057.

FSS Within 100 NM Radius:
SEA

IR-341

ORIGINATING ACTIVITY: Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Report crossing at FL230 or as assigned.

Cross at FL230 to or as assigned

Report crossing

70 MSL to A  YKM VORTAC N46°34.21' W120°26.68'

60 MSL to B  PDT 299/21 N45°58.00’ W119°18.00’

60 MSL to C  PDT 350/22 N46°03.70’ W118°54.00’

05 AGL B 50 MSL to D  PDT 012/41 N46°18.50’ W118°30.00’

05 AGL B 40 MSL to E  GEG 136/35 N47°02.00’ W117°18.07’

05 AGL B 40 MSL to F  GEG 209/40 N47°08.10’ W118°22.40’

15 AGL B 50 MSL to G  EPH 002/15 N47°36.30’ W119°17.00’

15 AGL B 50 MSL to H  EPH 323/23 N47°45.00’ W119°35.00’

TERRAIN FOLLOWING OPERATIONS: Authorized from Point D to I in VFR conditions within published altitude blocks.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Route speed schedules in 60 knot increments. Average route speed may not exceed 540 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.
(2) Monitor Seattle ARTCC frequencies: 269.35 Point A to B, 377.2 Point B to D (Chinook Approach), 282.3 Point D to F, 291.6 Point F to I.

(3) If radio communications cannot be established on ARTCC monitored frequencies, contact the nearest FSS.

(4) CAUTION: Crop dusting activity (seasonal) below 500' AGL between Points D and G.

(5) Avoid airports from Points D to I by 2000' or 3 NM. Remain within route structure while avoiding airports.

(6) Route conflicts with IR-326 between points D and G; IR-327 AND IR-328 between points F and G; IR-324, IR-325 and IR-330 between Points F and I.

(7) Alternate Exit: Point E.

(8) Route crosses VR-1351 between Points D and E; VR-1354 between Points D and F; VR-1350 and VR-1351 between Points H and I.

(9) Avoid TPC uncharted Sheffels Airport located right of centerline at N47-49 W118-47 by 1500' AGL or 3 NM between Points G and H.

(10) CAUTION:Heavy hangliding activity Apr-Oct off Chelan Butte in the vicinity of Point I.

FSS Within 100 NM Radius:
MMV, SEA

IR-342

ORIGINATING ACTIVITY: Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

SCHEDULING ACTIVITY: Same as Originating Activity.

Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to J in VFR conditions from 500' AGL day and 800' AGL night. Aircraft equipped with terrain following equipment may operate on these segments within the published altitude blocks regardless of weather both day and night.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Route speed schedules in 60 knot increments. Average route speed may not exceed 540 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.

(2) Monitor Seattle ARTCC frequencies: 257.75 from Point A to D, 351.7 from Point D to F, 257.75 from Point F to I, 269.35 from Point I to J.

(3) If radio communications cannot be established on ARTCC monitored frequencies, contact the nearest FSS.

(4) Aircraft operating in the vicinity of N44-00 W119-43 shall make an alert call in the blind on 272.15 MHZ to inform aircraft operating in Juniper MOA of their presence. The alert call will consist of call sign, route, speed and estimated time to Juniper MOA.

(5) Avoid airports along the entire route by 2000' or 3 NM. Remain within route structure while avoiding airports.

(6) Route crosses VR-1301, VR-316 and VR-319 between Points C and E.

(7) Extreme Radar Hazard Zone within 5.5 NM of N43-17.3 W120-21.6 (LKV 350/048) between Points D and E. Remain on or south of centerline while within Juniper North MOA.

(8) Avoid town of Summer Lake, or located vicinity of (N42-58.0 W120-46.5) 5 NM N of Point E by 1500' or 2 NM.

(9) Alternate Exit: Point E.

(10) Route conflicts with VR-1353 between Points E and J.

(11) CAUTION: Forest fire suppression air activity left of centerline approximately 8 NM south of Point F at FT.Rock Helibase (N43-26.1 W120-50.6) and Ft.Rock Airstrip (N43-20.4 W120-50.6) during fire season, normally May-Oct.

(12) Alternate Exit: Point H. Commence climb to 16,000' MSL (minimum 3000' per minute rate of climb) passing N45-00. Upon reaching Point H, proceed direct to Klickitat VORTAC, maintain 16,000' MSL. Contact Seattle ARTCC on 257.6 for clearance.

(13) CAUTION: Crop dusting activity (seasonal) below 500' AGL between Points I and J.

(14) IFR exit procedures: Shuttle climb to 10,000' MSL west of the Pendleton VORTAC 254/31, 5 mile legs, left turns within R-5701 contacting Seattle ARTCC or Walla Walla FSS for IFR clearance.

(15) Route conflicts with IR-343, IR-344 and IR-346 between Points H and J.

FSS Within 100 NM Radius:
MMV

IR-343

ORIGINATING ACTIVITY: Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

SCHEDULING ACTIVITY: Same as Originating Activity.

Scheduling hours 0700-1600 local, Mon-Fri only. Same day
IR ROUTES

scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cross at FL230 to or as assigned descend on the Yakima VORTAC 108 deg radial to cross YKM 108/28 at 110 MSL then

70 MSL to B PDT 299/21 N45°34.22' W120°26.68'
60 MSL to C PDT 350/22 N46°03.70' W118°54.00'
50 MSL to D PDT 047/27 N45°54.90' W118°23.00'
40 MSL to E PDT 086/43 N45°34.00' W117°55.50'
30 MSL to F PDT 111/33 N45°23.20' W118°18.50'
05 AGL B 90 MSL to G IMB 008/7 N44°45.10' W119°38.00'
05 AGL B 90 MSL to H IMB 315/43 N45°17.90' W120°08.20'
63 MSL to I LTJ 105/34 N45°23.00' W120°27.00'
50 MSL to J LTJ 183/9 N45°35.00' W121°11.00'
60 MSL to K LTJ 342/17 N45°59.30' W121°04.90'
110 MSL to L YKM 204/30 N46°13.00' W120°57.00'
110 MSL to M YKM 331/25 N46°59.00' W120°32.00'
110 MSL to N EPH 230/27 N47°13.50' W120°03.20'
70 MSL to O EPH 002/15 N47°36.30' W119°17.00'
70 MSL to P EPH 323/23 N47°45.00' W119°35.00'

**TERRAIN FOLLOWING OPERATIONS:** Authorized from Point F to H in VFR conditions within published altitude blocks.

**ROUTE WIDTH -** 4 NM either side of centerline.

**Special Operating Procedures:**

(1) Route speeds schedules in 60 knot increments. Average route speed may not exceed 540 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.

(2) Monitor Seattle ARTCC frequencies: 269.35 from Point A to B, 377.2 from Point B to D (Chinook Approach), 380.2 from Point D to F, 257.75 from Point F to I, 257.6 from Point I to K, 269.35 from Point K to M, 291.6 from Point M to P.

(3) If radio communications cannot be established on ARTCC monitored frequencies, contact the nearest FSS.

(4) Avoid airports from Point F to H by 2000' or 3 NM. Remain within route structure while avoiding airports.

(5) CAUTION: Forest fire suppression helicopter activity left of centerline approximately 18.5 NM past Point F at Frazier Helibase (N45-09.25 W118-38.0) during fire season, normally May-Oct.

(6) Route crosses VR-1352 at Point G.

(7) Cross the Pendleton VORTAC 050 radial at 7000' MSL or above. Report crossing the Baker VORTAC 297 radial to Seattle ARTCC on 288.1 or to McMinnville Radio on 255.4 for relay to ARTCC. Report passing Point N to Seattle ARTCC 343.9. Request clearance to descend after passing Point N maintain 11,000' MSL from Point L to Point P unless clearance to descend has been received from Seattle ARTCC.

(8) CAUTION: Forest fire suppression helicopter activity right of centerline approximately 10 NM past Point L at Ft.Simcoe Helibase (N46-20.45 W120-51.07) during fire season, normally May-Oct.

(9) Route conflicts with IR-341 between Points A and C.

(10) Route conflicts with IR-342, IR-344 and IT-346 between Points H and I.

**FSS Within 100 NM Radius:** BOI, MMV, SEA

**IR-344**

**ORIGINATING ACTIVITY:** Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

**SCHEDULING ACTIVITY:** Same as Originating Activity.

Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 170 MSL to or as assigned descend on the HQM 237 deg radial to cross at or above 120 MSL descend to cross at or below 50 MSL descend to cross at or below 20 MSL descend to cross 02 AGL B 20 MSL to 05 AGL B 40 MSL to 05 AGL B 40 MSL to 05 AGL B 70 MSL to</td>
<td>A</td>
<td>HQM VORTAC</td>
<td>N46°56.82' W124°08.96'</td>
</tr>
</tbody>
</table>
IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized in VFR conditions from 200’ AGL from B to D, and 500’ AGL from D to M. Aircraft equipped with terrain following equipment may operate on these segments between 500’ AGL and the published route ceilings regardless of weather both day and night.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Route speeds schedules in 60 knot increments. Average route speed may not exceed 540 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.
(2) Monitor Seattle ARTCC frequencies: 269.0 from Point A to D; 317.6 from Point D to G; 257.6 from Point G to K; 269.35 from Point K to M.
(3) If radio communications cannot be established on ARTCC-monitored frequencies, contact the nearest FSS.
(4) Alternate Entry: Point D. Aircraft using alternate entry must cross Point D at 5000’ MSL.
(5) Avoid town of Oysterville, WA located vicinity of N46-33 W124-02 (7 NM West-Northwest of Point D) by 1500’ AGL or 2 NM. Noise Sensitive Area.
(6) Avoid the town of Peell, WA at Point E by 1500’ AGL or 2 NM. Noise Sensitive Area.
(7) Communication antenna (360’ AGL) vicinity of Point E N45-13 W120-30’. Avoid area by 500’ AGL or 1 NM.
(8) Intensive North-South VFR traffic vicinity of Interstate 5 between Points E and F.
(9) Alternate Entry: Point F1 for MC-130 aircraft only.
(10) Avoid airports from F to G by 2000’ or 3 NM. Remain within route structure while avoiding airports.
(11) Remain on or south of centerline from N46-31-54 W122-52 to Point F to avoid Mink Farm at N46-33-00 W122-41-48.
(12) CAUTION: Forest fire suppression activity left of centerline approximately 5 NM prior to Point Q1 at Woodruff airstrip (N46-00.2 W121-32.05) during fire season normally May-Oct.
(13) Avoid town of Trout Lake, WA Northeast of Point H.
(14) Extensive East-West VFR traffic in the vicinity of the Columbia River Gorge at Points H-I. Exercise extreme caution.

FSS Within 100 NM Radius:
MMV, SEA

IR-346

ORIGINATING ACTIVITY: Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data Pt Fa/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL290 to or as assigned descendent on the Newport VORTAC 166 deg radial to cross</td>
</tr>
<tr>
<td>at or above 150 MSL descendent to cross</td>
</tr>
<tr>
<td>at or below 50 MSL C OTH 317/24</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to D OTH 340/17</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to EUG 194/28</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to EUG 147/25</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to EUG 074/43</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to H EUG 036/58</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to I LTJ 199/47</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to Q LTJ 175/35</td>
</tr>
<tr>
<td>Cross at ONP VORTAC N44°34.52' W124°03.64'</td>
</tr>
<tr>
<td>N44°00.70' W124°08.10'</td>
</tr>
<tr>
<td>N43°46.50' W124°26.00'</td>
</tr>
<tr>
<td>N43°41.50' W124°12.00'</td>
</tr>
<tr>
<td>N43°42.50' W123°32.50'</td>
</tr>
<tr>
<td>N43°43.50' W123°03.00'</td>
</tr>
<tr>
<td>N43°43.20' W122°25.50'</td>
</tr>
<tr>
<td>N44°07.70' W122°14.30'</td>
</tr>
<tr>
<td>N44°43.00' W122°10.10'</td>
</tr>
<tr>
<td>N45°06.80' W121°48.50'</td>
</tr>
<tr>
<td>N45°09.20' W121°20.00'</td>
</tr>
</tbody>
</table>

2-113
**IR ROUTES**

<table>
<thead>
<tr>
<th>05 AGL B 60 MSL to</th>
<th>J</th>
<th>LTJ 118/39</th>
<th>N45°13.00' W120°30.00'</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 AGL B 53 MSL to</td>
<td>K</td>
<td>LTJ 103/40</td>
<td>N45°20.00' W120°18.50'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to</td>
<td>L</td>
<td>PDT 259/31</td>
<td>N45°43.50' W119°41.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from B to L in VFR conditions from 200' AGL day and 800' AGL night. Aircraft equipped with terrain following equipment may operate on these segments between 500' AGL and published route ceilings regardless of weather both day and night. Special attention is directed to numerous mountain peaks between Points E and J.

**ROUTE WIDTH -** 4 NM either side of centerline.

**Special Operating Procedures:**

1. Route speeds schedules in 60 knot increments. Average route speed may not exceed 540 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.

2. Monitor Seattle ARTCC frequencies: as assigned: Point A to Q1, 257.75 Point F to Q, 257.6 Point Q to K, 269.35 Point K to L.

3. If radio communications cannot be established on ARTCC-monitored frequencies, contact the nearest FSS.

4. Point A to D; CAUTION, USCAG helicopters operate multiple flights daily along coastline 1000' AGL and below. USCAG air-to-air: 345.0.

5. Avoid airports along the entire route by 2000' or 3 NM. Remain within route structure while avoiding airports.

6. Alternate Entry: Point D.

7. Avoid city of Reedsport, Oregon in vicinity of Point D by 1500' or 2 NM.

8. At Point Q1 aircraft shall contact Eugene Approach Control on 298.9. Upon exiting Eugene Approach Control airspace (vicinity N43-43 W122-45) switch to Point F frequency 288.1.

9. CAUTION: 675' power lines in vicinity of Point H.

10. CAUTION: Forest fire suppression helicopter activity left of centerline approximately 8 NM prior to Point I at Ripplebrook Heliport (N45-04.9 W122-03.0) during fire season, normally May-Oct.

11. CAUTION: Heavy crop dusting activity (seasonal) below 500' AGL between Points I and L.

12. CAUTION: Forest fire suppression helicopter activity approximately 11 NM past Point Q at Maupin Helibase (N45-10.0 W121-04.0) during fire season, normally May-Oct.

13. Route crosses VR-1353 between Points K and L. Route conflicts with IR-344 between Points J and L. Route conflicts with IR-342 and IR-343 between Points K and L.

14. Avoid city of Maupin, Oregon in vicinity of Point J by 1500' or 2 NM.

15. Alternate Exit: Point J. Upon reaching J turn right climbing to 16,000' MSL (minimum 3000' per minute rate of climb) direct to Klickitat VORTAC; maintain 16,000' MSL. Contact Seattle ARTCC on 257.6 for further clearance.

16. IFR Exit procedures: Shuttle climb to 10,000' MSL West of Pendleton VORTAC 254/31; 5 mile legs; left turns within R-5701. Contact Seattle ARTCC or Walla Walla FSS for IFR clearance.

**FSS Within 100 NM Radius:**

MMV, SEA

---

**IR-348**

**ORIGINATING ACTIVITY:** Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

**SCHEDULING ACTIVITY:** Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data Pt Fac/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A NUW 061/24 N48°25.78' W122°04.98'</td>
</tr>
<tr>
<td>05 AGL B 130 MSL to B NUW 074/65 N48°18.08' W121°01.87'</td>
</tr>
<tr>
<td>110 MSL to C SEA 043/65 N47°55.50' W120°53.60'</td>
</tr>
<tr>
<td>05 AGL B 100 MSL to D EPH 319/84 N48°42.00' W120°08.00'</td>
</tr>
<tr>
<td>05 AGL B 90 MSL to E EPH 334/90 N48°52.60' W119°37.10'</td>
</tr>
<tr>
<td>15 AGL B 70 MSL to F EPH 343/81 N48°43.70' W119°17.90'</td>
</tr>
<tr>
<td>05 AGL B 70 MSL to G EPH 360/69 N48°27.30' W118°48.00'</td>
</tr>
<tr>
<td>05 AGL B 81 MSL to H GEG 323/69 N48°40.00' W118°06.80'</td>
</tr>
<tr>
<td>05 AGL B 70 MSL to I GEG 346/74 N48°47.00' W117°24.90'</td>
</tr>
<tr>
<td>05 AGL B 80 MSL to J GEG 004/49 N48°17.90' W117°06.80'</td>
</tr>
<tr>
<td>05 AGL B 63 MSL to K GEG 343/34 N48°07.80' W117°34.20'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from A to B and C to I in VFR conditions from 500' AGL. Aircraft equipped with terrain following equipment may operate on these segments between 500' AGL and published route ceilings regardless of weather both day and night.

**ROUTE WIDTH -** 4 NM either side of centerline.

**Special Operating Procedures:**

1. Route speeds schedules in 60 knot increments. Average route speed may not exceed 540 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.

2. Monitor Seattle ARTCC frequencies: 270.3 from Point A to C, 291.6 from Point C to K, 282.3 from Point H to K.

3. If radio communications cannot be established on ARTCC-monitored frequencies, contact the nearest FSS.

4. Avoid airports along the entire route by 2000' or 3 NM. Remain within route structure while avoiding airports.

5. Route crosses VR-1350, VR-1351 and VR-1355 between Points A and D.

6. Avoid Winthrop Resort area by 3000' or 5 NM between Points C and D.

7. Alternate Exit: Points B, C, E, and H.
(8) Alternate Entry: Point D.
(9) Heavy VFR traffic between Point D and E.
(10) CAUTION: Forest fire suppression air active/PBY air tanker water (Scoop) point at Lake Roosevelt between Points G and K during fire season, normally May-Oct.
(11) CAUTION: Crop dusting activity (seasonal) below 500’ AGL between Points E and F.
(12) Remain north of the town of Marcus, WA in vicinity of Point H.
(13) Route conflicts with IR-340 between Points I and K.
(14) Avoid fishing resort Western side of Deer Lake in vicinity of Point K.
(15) IFR exit procedures: Shuttle climb East of GEG 343/34 to 10,000’ MSL, 5 NM legs, left turns. Contact Seattle ARTCC on 291.6 for further IFR clearance.
(16) Avoid Holden mines by 1500’ or 3 NM between Points C and D.

FSS Within 100 NM Radius:
SEA

IR-409

ORIGINATING ACTIVITY: 140th OG/CC Buckley ANGB Aurora, CO 80011-9546 DSN 847-9466, C720-847-9466.


HOURS OF OPERATION: 0800-1600 local, Tue-Sat

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
---             ---     ----------     -------
Cross at 100 MSL to A LAA VOR-DME N38°11.83’ W102°41.26’
or as assigned  W102°41.26’
100 MSL to B LAA 157/13 N37°59.00’ W102°38.00’
or as assigned  W102°38.00’
03 AGL B 77 MSL to C LAA 161/28 N37°43.50’ W102°37.00’
or as assigned  W102°37.00’
03 AGL B 77 MSL to D TBE 092/23 N37°10.00’ W103°08.00’
or as assigned  W103°08.00’
03 AGL B 70 MSL to E TBE 125/24 N36°58.00’ W103°16.00’
or as assigned  W103°16.00’
03 AGL B 80 MSL to F TBE 302/30 N37°36.00’ W104°03.00’
or as assigned  W104°03.00’
10 AGL B 80 MSL to G PUB 194/23 N37°12.00’ W104°37.00’
or as assigned  W104°37.00’
10 AGL B 80 MSL to H PUB 250/27 N38°12.00’ W104°59.00’
or as assigned  W104°59.00’

TErrAIN FOLLOWING OPERATIONS: Request to fly 1000’ AGL for noise abatement on IR-409 Points G to H.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 5 NM either side of centerline from C to E; 4 NM either side of centerline from E to F; 5 NM either side of centerline from F to G; 3 NM either side of centerline from G to H;

Special Operating Procedures:
(1) The 140th Wing shall ensure MARSA through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute interval between aircraft.
(2) Monitor 296.7 enroute. Monitor 255.4 from Point E to F for possible U.S.Army helicopter traffic in the Pinon Canyon MOA up to 500’ AGL.
(3) This route crosses IR-150, IR-500 and IR-501 between Points C and D; IR-110 between Points C and G; IR-107 at Point E; IR-415 and IR-424 at Point G; IR-177 between Points C and D. Deconfliction scheduling applies. (See and be Seen) is method of MARSA.
(4) Deconfliction with IR-107 and IR-110 is accomplished through the 27th FW, Cannon AFB, NM DSN 681-2276/2253.
(5) All aircraft flying IR-409 will contact Pueblo Approach Control prior to Point F for IFF code assignment on 290.5. Approval to fly IR-409 does not constitute clearance into R-2601. Aircraft not entering R-2601 must exit at Point G. Aircraft entering R-2601 can expect frequency change prior to Point H. Aircraft may be required to hold at Point H for range entry.
(6) Aircraft exiting at Point G will contact Pueblo Approach Control on 290.5 and climb to 10,000’ MSL or as assigned be ATC and proceed to Point H until clearance is received.
(7) Alternate Entry: Points C, G and H.
(8) Alternate Exit: Point G.
(9) Avoid the following environmentally sensitive locations by 1500’ AGL from 1 May through 31 July:
(a) N37-39.46 W104-15.22;
(b) N37-58.35 W104-45.09.

FSS Within 100 NM Radius:
DEN

IR-414

ORIGINATING ACTIVITY: 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546 DSN 847-9470/9471, C720-847-9470/9471/9955.

SCHEDULING ACTIVITY: 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546. Duty Hrs 0700-1700 DSN 847-9470/9472, C720-847-9470/9472. Route is clsd to non-140th WG acft.

HOURS OF OPERATION: 0800-1600 local, Tue-Sat; OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
---             ---     ----------     -------
Cross at 80 MSL to A PUB 085/32 N38°16.00’ W103°45.00’
or as assigned  W103°45.00’
03 AGL B 80 MSL to B LAA 354/36 N37°48.00’ W102°36.00’
or as assigned  W102°36.00’
03 AGL B 110 MSL to C GLD 176/18 N39°05.00’ W101°45.00’
or as assigned  W101°45.00’

TErrAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to C.
IR ROUTES

Special Operating Procedures:
(1) The 140th Wing shall ensure MARSA through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute intervals between aircraft. In all instances where separation is less than 10 minutes, the 140th Wing scheduling unit shall ensure MARSA through coordinated scheduling.

(2) Be vigilant for B-52 and B-1 aircraft between A and B. This route crosses IR-177, IR-500 and IR-501 between A and B. If VMC exists at the crossing point, See and Avoid is method of MARSA. If IMC is anticipated, climb in VMC to the top of the block for that particular leg.

(3) Monitor 370.925 entire route.

(4) Clearance to fly IR-414 does not include clearance into Cheyenne MOA. Contact Denver ARTCC at Point A on 377.175 if Cheyenne MOA is to be used.

(5) Avoid Sand Arroya Landing Strip by 3 NM/1500' AGL (N38-27.0 W103-32.0).

FSS Within 100 NM Radius:
DEN

IR-415


SCHEDULING ACTIVITY: 140th OG/CC Buckley AFB Aurora, CO 80011-9546. Duty Hrs 0700-1700 DSN 847-9470/9472, C720-847-9470/9472. Route is clsd to non-140th WG acft.

HOURS OF OPERATION: 0800-1600 local, Tue-Sat; OT by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:
(1) The 140th Wing shall ensure MARSA through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute intervals between aircraft. In all instances where separation is less than 10 minutes, the 140th Wing scheduling unit shall ensure MARSA through coordinated scheduling.

(2) Maintain 500' AGL minimum from A to B. Route crosses IR-416 between A and B.
**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 5 NM either side of centerline from A to H; 3 NM either side of centerline from H to L.

**Special Operating Procedures:**
1. The 140th Wing shall ensure MARSA through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute intervals between aircraft. In all instances where separation is less than 10 minutes, the 140th Wing scheduling unit shall ensure MARSA through coordinated scheduling.
2. Monitor 255.4 entire route.
3. Contact Denver ARTCC on 377.175 prior to exit Point L for further clearance. Aircraft exiting at Point C contact Denver ARTCC on 284.7 for further clearance.
4. 400’ tower within 3 NM of Point C. 300’ tower at N41-09.0 W104-09.0 (12 NM prior to Point G) and N41-00.0 W104-02.0 (3 NM prior to Point G). Another tower between Point F and G near N40-03.0 W104-02.0, 200’ high, approximately 2 NM west of centerline.

**FSS Within 100 NM Radius:**
CPR, DEN

**IR-418**

**ORIGINATING ACTIVITY:** 388 RANS/RST, 6066 Cedar Lane, Hill AFB, UT 84056-5812 DSN 777-9384, C801-777-9384.

**SCHEDULING ACTIVITY:** 388 RANS/RST, 6066 Cedar Lane, Hill AFB, UT 84056-5812 DSN 777-4401, C801-777-4401.

**HOURS OF OPERATION:** 0700-2400 local Mon-Thu, 0700-1800 local Fri, 0800-1700 local Sat

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 80 MSL to</td>
<td>A</td>
<td>TCH 290/24</td>
<td>N41°05.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td></td>
<td></td>
<td>W112°24.00'</td>
</tr>
<tr>
<td>70 MSL B 80 MSL to</td>
<td>B</td>
<td>TCH 300/38</td>
<td>N41°10.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W112°34.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>C</td>
<td>TCH 303/46</td>
<td>N41°26.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W112°39.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>D</td>
<td>TCH 292/64</td>
<td>N41°30.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W113°06.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from Point B to D.

**ROUTE WIDTH -** 2 NM either side of centerline from A to C; 5 NM either side of centerline from C to D.

**Special Operating Procedures:**
1. IR-418 will not be flown unless scheduled in conjunction with the appropriate Lucian MOA by aircraft departing Hill AFB on the IL-418 departure only.

**FSS Within 100 NM Radius:**
CDC

**IR-420**

**ORIGINATING ACTIVITY:** 388 RANS/RST, 6066 Cedar Lane, Hill AFB, UT 84056-5812 DSN 777-9384, C801-777-9384.

**SCHEDULING ACTIVITY:** 388 RANS/RST, 6066 Cedar Lane, Hill AFB, UT 84056-5812 DSN 777-4401, C801-777-4401.

**HOURS OF OPERATION:** 0700-2400 local Mon-Thu, 0700-1800 local Fri, 0800-1700 local Sat

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 80 MSL to</td>
<td>A</td>
<td>TCH 290/24</td>
<td>N41°05.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td></td>
<td></td>
<td>W112°24.00'</td>
</tr>
</tbody>
</table>

**Altitude Data Pt Fac/Rad/Dist Lat/Long**

| A | TCH 290/24 | N41°05.00'  |
| B | TCH 300/38 | N41°10.00'  |
| C | TCH 303/46 | N41°26.00'  |
| D | TCH 292/64 | N41°30.00'  |

**TERRAIN FOLLOWING OPERATIONS**

**ROUTE WIDTH -** 2 NM either side of centerline from A to C; 5 NM either side of centerline from C to D.

**Special Operating Procedures:**
1. IR-420 will not be flown unless scheduled in conjunction with the appropriate Sevier MOA by aircraft departing Hill AFB on the IL-420 departure only.

**FSS Within 100 NM Radius:**
CDC

**IR-424**

**ORIGINATING ACTIVITY:** 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546 DSN 847-9470/9471, C720-847-9470/9471/9955.

**SCHEDULING ACTIVITY:** 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546. Duty Hrs 0700-1700 DSN 847-9470/9472, C720-847-9470/9472.

**HOURS OF OPERATION:** 0800-1600 local, Tue-Sat; OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 110 MSL to</td>
<td>A</td>
<td>GLD 177/18</td>
<td>N39°05.50'</td>
</tr>
<tr>
<td>or as assigned</td>
<td></td>
<td></td>
<td>W101°45.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

03 AGL B 80 MSL to B LAA 354/36 N38°48.00' W102°36.00'
03 AGL B 80 MSL to C LAA 334/31 N38°42.00' W102°51.00'
03 AGL B 80 MSL to D PUB 085/32 N38°16.00' W103°45.00'
03 AGL B 80 MSL to E PUB 194/23 N37°56.00' W104°37.00'
05 AGL B 120 MSL to D ILC 027/32 N38°38.00' W113°55.90'
05 AGL B 120 MSL to E ILC 051/24 N38°24.00' W113°55.90'
05 AGL B 120 MSL to F ILC 061/18 N38°19.00' W114°02.00'
05 AGL B 120 MSL to G ILC 093/21 N38°08.20' W113°58.70'
05 AGL B 120 MSL to H ILC 151/38 N37°38.20' W114°12.90'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to E.

Special Operating Procedures:
(1) The 140th Wing shall ensure MARSA through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute intervals between aircraft. In all instances where separation is less than 10 minutes, the 140th Wing scheduling unit shall ensure MARSA through coordinated scheduling.
(2) Be vigilant for B-52 and B-1 aircraft between Points B and D.
(3) This route crosses IR-177, IR-501 and IR-500 between B and D. If VMC exists at the crossing point, See and Avoid is method of MARSA. If IMC is anticipated, climb in VMC to the top of the block for that particular leg.
(4) This route coincides with IR-415 from D to E.
(5) Monitor 370.925 from A to D. Monitor 290.5 from D to E.
(6) Contact Pueblo Approach Control at Point E on 290.5 for further clearance.
(7) Alternate Entry: Point D.
(8) Avoid Sand Arroya Landing Strip by 3 NM/1500' AGL (N38-27.0 W103-32.0). Maintain 1000' AGL minimum within 4 NM radius of Fowler (N38-05.0 W104-02.0).
(9) Avoid environmentally sensitive location at N37-59.17 W104-29.27 by 1500' AGL from 1 May through 31 July.

FSS Within 100 NM Radius:
DEN

IR-425


HOURS OF OPERATION: Sunrise-Sunset by NOTAM

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A DTA 262/44 N39°24.00' W113°27.00'
05 AGL B 105 MSL to B DTA 250/53 N39°14.40' W113°38.00'
05 AGL B 120 MSL to C ILC 024/56 N38°57.50' W113°38.00'
05 AGL B 110 MSL to I ILC 174/48 N37°27.70' W114°34.20'
05 AGL B 120 MSL to J ILC 213/51 N37°41.20' W115°12.00'
05 AGL B 115 MSL to K ILC 221/49 N37°48.00' W115°15.00'
05 AGL B 115 MSL to L TPH 086/70 N37°45.00' W115°36.00'
05 AGL B 115 MSL to M TPH 083/54 N37°52.00' W115°54.50'
05 AGL B 110 MSL to N TPH 068/46 N38°06.00' W116°04.00'
05 AGL B 110 MSL to O TPH 060/30 N38°08.50' W116°25.50'
05 AGL B 110 MSL to P TPH 111/13 N37°54.00' W116°49.50'
05 AGL B 110 MSL to Q TPH 152/8 N37°54.00' W117°00.00'
05 AGL B 110 MSL to R TPH 215/22 N37°48.00' W117°24.00'
05 AGL B 110 MSL to S TPH 216/40 N37°37.70' W117°41.70'
05 AGL B 110 MSL to T BTY 291/65 N37°26.80' W117°50.50'
05 AGL B 115 MSL to U BTY 286/44 N37°11.10' W117°31.20'
05 AGL B 100 MSL to V BTY 279/38 N37°04.00' W117°28.50'
05 AGL B 105 MSL to W BTY 269/39 N36°58.10' W117°31.90'
30 AGL B 120 MSL to X NID 013/45 N36°21.10' W117°15.90'
05 AGL B 110 MSL to Y NID 012/38 N36°15.00' W117°21.00'
05 AGL B 75 MSL to Z NID 024/30 N36°05.20' W117°18.50'
05 AGL B 95 MSL to AA NID 012/12 N35°52.00' W117°35.00'
05 AGL B 85 MSL to AB NID 103/10 N35°37.00' W117°31.00'
05 AGL B 85 MSL to AC NID 168/17 N35°24.00' W117°42.00'
05 AGL B 85 MSL to AD LHS 028/47 N35°15.00' W117°55.50'
05 AGL B 85 MSL to AE LHS 016/29 N35°05.70' W118°16.50'
05 AGL B 110 MSL to AF LHS 008/23 N35°02.50' W118°23.50'
05 AGL B 100 MSL to AG LHS 011/9 N34°48.70' W118°30.00'
05 AGL B 90 MSL to AH LHS 091/3 N34°40.10' W118°30.90'
30 AGL B 90 MSL to AI LHS 246/5 N34°40.10' W118°41.00'
30 AGL B 100 MSL to AJ GVO 020/10 N34°40.20' W119°58.10'
30 AGL B 100 MSL to AK GVO 338/14 N34°46.30' W120°07.20'
30 AGL B 60 MSL to AL GVO 269/13 N34°35.30' W120°20.60'
30 AGL B 70 MSL to AM GVO 189/19 N34°15.00' W120°15.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to E; 10 NM left and 7 NM right of centerline from E to G; 4 NM left and 7 NM right of centerline from G to H; 4 NM either side of centerline from H to T; 7 NM either side of centerline from T to U; 4 NM left and 7 NM right of centerline from U to V; 4 NM either side of centerline from V to AM.

Special Operating Procedures:
1. Airspeeds are subsonic.
2. This route to be used only in support of test missions authorized by PMTC or AFFTC.
4. California Condors (Endangered Species) nesting in the Sespe Sanctuary in flight between the Sisquac and Sespe Sanctuaries and soaring throughout adjacent mountain areas. Pilots are requested to maintain 1 NM south of centerline or 3000' terrain clearance between Al to AJ.
5. Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center and follow these procedures.
6. Segregation of air carrier operations in the Isabella MOA (below 12,000' MSL) may result in denial of MOA airspace between AB and AF.
7. Aircrew shall adhere to the following radio procedures:
   a. Point A is located in restricted area R6405. Coordinate for airspace prior to entry IAW AP/1A.
   b. Prior to entering the Sevier MOA (points A-D), contact Clover Control on 363.5/134.1.
   c. Contact Nellis Control 317.52/126.65 prior to entering Desert MOA after Point G.
   d. Prior to entering the Reveille MOA (after M) and when advised by Nellis Control contact Salt Lake ARTCC 133.45/397.85.
   e. When advised by Salt Lake ARTCC approximately 5NM west of Q, contact Oakland ARTCC 125.75/319.8.
   f. Contact High Desert TRACON (Joshua Approach) 256.8/291.6/123.95 departing U.
   g. Contact Los Angeles ARTCC 307.1 at AF.
   h. Monitor Los Angeles ARTCC 256.6 after Al.
8. Maintain at or above 5300' MSL when within 5 statute miles of Mojave Airport Class D airspace between AD to AF.
10. Route is designated for MARSA operations established by coordinated scheduling.
11. Aircrews transiting R-2508 Complex airspace are required to see FLIP, Area Planning, AP/1, California, Flight Hazards, R-2508. Upon enter R-2508, complex aircraft shall maintain VFR (see and avoid) and comply with all R-2508 complex procedures. Aircraft departing the R-2508 complex provide ATC with and estimate to the first fix outside the complex airspace.
12. Contact the R-2508 Central Coordinating Facility (DSN 527-2508, C661-277-2508) to schedule airspace and obtain a complex briefing.

FSS Within 100 NM Radius:
CDC, HHR, RAL, RNO, SAN

IR-460

ORIGINATING ACTIVITY: 4-160th SOAR (ABN), Mail Stop 23B, 41st Division Rd., Joint Base Lewis McChord, WA 98433. DSN 347-5601, C253-966-5601.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
12 MSL B 30 MSL to A1 TCM 152/9 N46°59.69' W122°25.31'
03 AGL B 40 MSL to B TCM 135/14 N46°56.81' W122°18.27'
Alternate Entry
03 AGL B 50 MSL to C TCM 128/18 N46°54.61' W122°12.93'
03 AGL B 70 MSL to D TCM 131/24 N46°49.39' W122°09.08'
03 AGL B 80 MSL to E TCM 134/41 N46°33.64' W121°57.53'
03 AGL B 90 MSL to F YKM 231/44 N46°20.01' W121°26.90'
03 AGL B 90 MSL to G YKM 217/27 N46°19.95' W120°59.54'
03 AGL B 72 MSL to H YKM 221/20 N46°25.00' W120°52.04'

TERRAIN FOLLOWING OPERATIONS: Authorized for A1 to H. IMC terrain following/terrain avoidance (TF/TA)
IR ROUTES

operations are authorized IAW command directives within the published altitude blocks from A1 to H. VMC terrain following/terrain avoidance (TF/TA) operations are authorized IAW command directives within the published altitude blocks from A1 to H. 100' CALT is strictly prohibited along this IR route.

ROUTE WIDTH - 3.5 NM left/right of centerline for the entire route.

Special Operating Procedures:
(1) Tie-in FSS: Seattle (SEA), McMinnville (MMV).
(2) Primary entry: A1; alternate entry: B; use when conflict with R-6703.
(3) Primary exit: H.
(4) Route exit: during flight weather planning the aircrew will determine if they will be VMC or IMC at Point G. If VMC at Point G and the aircrew are reasonably assured that they can continue VMC to Point H, exit at H. If IMC at Point G, contact Chinook Approach 123.8 or 263.15 while climbing to 6700' MSL. Expect further clearance to WIKIK (IAF) then ILS Rwy 27.
(5) Route survey for this route will not be accomplished until it is needed. Training routes will be visually reconnoitered within the lateral limits of the route.
(6) Participating aircraft separation: route is designed for MARSA operations established by coordinated scheduling. Primary method of aircraft separation will be based on time; backup method will be air-to-air tactical air navigation (TACAN).
(7) Route will be flown between 80 and 120 KTAS.
(8) CAUTION: VR-1355 route crossing: the route crosses VR-1355 3NM west of Point G. Deconflict with NAS Whidbey Island prior to conducting the route VMC/IMC. Scheduling, ensure a minimum 10 minute separation at crossing points.
(9) Communication requirements: the aircraft shall:
   (a) On departure contact Seattle App Con 126.5 337.15;
   (b) Freq change 121.85 at A1;
   (c) Monitor Seattle Center 126.6 343.6 at D thru G;
   (d) Contact Chinook App Con 123.8 263.15 at G;
   (e) Between 22000L and 0600L contact Seattle Center 126.5 337.15;
   (f) Freq change 121.85 at A1;
   (g) Between 22000L and 0600L contact Seattle Center 126.6 343.6 at D thru G;
   (h) Contact Chinook App Con 123.8 263.15 at G;
   (i) Between 22000L and 0600L contact Seattle Center 126.6 343.6 at D thru G;
   (j) Contact Chinook App Con 123.8 263.15 at G;
   (k) Between 22000L and 0600L contact Seattle Center 126.6 343.6 at D thru G;
   (l) Contact Chinook App Con 123.8 263.15 at G;
   (m) Between 22000L and 0600L contact Seattle Center 126.6 343.6 at D thru G;
   (n) Contact Chinook App Con 123.8 263.15 at G;
   (o) Between 22000L and 0600L contact Seattle Center 126.6 343.6 at D thru G;
   (p) Contact Chinook App Con 123.8 263.15 at G;
   (q) Between 22000L and 0600L contact Seattle Center 126.6 343.6 at D thru G.
(10) Lost communication (LC) VMC: squawk 7600 on transponder, continue to clearance limit (H), then continue IAW FAR 91.185.
(11) Noise sensitive areas (Gifford Pinchot National Forest). The route overflies the National Forest 12NM north of Point E thru Point F. Minimum altitude for these legs is based on aircraft type: MH-47 500' CALT, MH-60 300' CALT.
(12) Include route entry/exit times in the remarks section of flight plan.
(13) Make entry time +/- 5 minutes or reschedule. For real time rescheduling, the military assumes responsibility of coordination with Whidbey Island and ensuring 10 minute time separation with aircraft utilizing VR-1355. Unpublished towers found by route surveys 200' AGL and above listed in this SOP.
(14) Uncharted obstructions: 3 towers at:
   (a) 200' AGL N46°55.96 W122°19.92;
   (b) 200' AGL N26°54.21 W122°19.65;
   (c) 200' AGL N44°44.62 W122°10.05.

IR-461

ORIGINATING ACTIVITY: 4-160th SOAR (ABN), Mail Stop 238, 41st Division Rd., Joint Base Lewis McChord, WA 98433. DSN 347-5601, C253-966-5601

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 MSL B 72 MSL to H</td>
<td>YKM 221/20</td>
<td>N46°25.00'</td>
<td>W120°52.04'</td>
</tr>
<tr>
<td>03 AGL B 72 MSL to G</td>
<td>YKM 217/27</td>
<td>N46°19.95'</td>
<td>W120°59.54'</td>
</tr>
<tr>
<td>03 AGL B 90 MSL to F</td>
<td>YKM 231/44</td>
<td>N46°20.01'</td>
<td>W121°26.90'</td>
</tr>
<tr>
<td>03 AGL B 90 MSL to E</td>
<td>TCM 134/41</td>
<td>N46°33.64'</td>
<td>W121°57.53'</td>
</tr>
<tr>
<td>03 AGL B 80 MSL to D</td>
<td>TCM 131/24</td>
<td>N46°49.39'</td>
<td>W121°09.08'</td>
</tr>
<tr>
<td>03 AGL B 70 MSL to C</td>
<td>TCM 128/18</td>
<td>N46°54.61'</td>
<td>W121°12.93'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to B</td>
<td>TCM 135/14</td>
<td>N46°56.81'</td>
<td>W122°18.27'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized for H to B. IMC/VMC terrain following/terrain avoidance (TF/TA) operations are authorized IAW command directives within the published altitude blocks from H to C. VMC terrain following/terrain avoidance (TF/TA) operations are authorized IAW command directives within the published altitude blocks from H to B. 100' CALT is strictly prohibited along this IR route.

ROUTE WIDTH - 3.5 NM left/right of centerline for the entire route.

Special Operating Procedures:
(1) Tie-in FSS: Seattle (SEA), McMinnville (MMV).
(2) Primary entry: A1; alternate entry: B; use when conflict with R-6703.
(3) Primary exit: H.
(4) Route exit: during flight weather planning the aircrew will determine if they will be VMC or IMC at Point G. If VMC at Point G and the aircrew are reasonably assured that they can continue VMC to Point H, exit at H. If IMC at Point G, contact Chinook Approach 123.8 or 263.15 while climbing to 6700’ MSL. Expect further clearance to WIKIK (IAF) then ILS Rwy 27.
(5) Route survey for this route will not be accomplished until it is needed. Training routes will be visually reconnoitered within the lateral limits of the route.
(6) Participating aircraft separation: route is designed for MARSA operations established by coordinated scheduling. Primary method of aircraft separation will be based on time; backup method will be air-to-air tactical air navigation (TACAN).
(7) Route will be flown between 80 and 120 KTAS.
(8) CAUTION: VR-1355 route crossing: the route crosses VR-1355 3NM west of Point G. Deconflict with NAS Whidbey Island prior to conducting the route VMC/IMC. Scheduling, ensure a minimum 10 minute separation at crossing points.
(9) Communication requirements: the aircraft shall:
(a) On departure contact Chinook App 123.8 263.15 at H;
(b) Between 2200L and 0600L contact Seattle Center 132.6 or 269.35 at H;
(c) Monitor Seattle Center 126.6 343.6 at G thru B;
(d) Contact Seattle App 121.85 at B;
(10) Noise sensitive areas (Gifford Pinchot National Forest). The route overflies the National Forest 12NM north of Point E thru Point F. Minimum altitude for these legs is based on aircraft type: MH-47 500' CALT, MH-60 300' CALT.
(11) Include route entry/exit times in the remarks section of flight plan.
(12) Make entry time +/- 5 minutes or reschedule. For realtime scheduling activity:
    ORIGINATING ACTIVITY: 28 OSS/OSXA, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-1230, C605-385-1230.
    SCHEDULING ACTIVITY: 28 OSS/OSXS, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-4246. After hours RAYMOND 33 DSN 675-3800, C605-385-4246. For realtime scheduling activity:
    HOURS OF OPERATION: Continuous
    ROUTE DESCRIPTION:
    Altitude Data Pt Fac/Rad/Dist Lat/Long
    Cross at FL200 to or as assigned descend direct to
    150 MSL B FL200 to (TFR/TA Initiation Point) descend direct to
    01 AGL B 150 MSL to direct to
    01 AGL B 70 MSL to direct to
    01 AGL B 70 MSL to turn left to
    01 AGL B 70 MSL to climb direct to
    01 AGL B 80 MSL to turn right and continue climb to
    01 AGL B 130 MSL to direct to
    01 AGL B 130 MSL to turn left to
    01 AGL B 130 MSL to direct to
    01 AGL B 130 MSL to direct to
    01 AGL B 130 MSL to direct to
    01 AGL B 130 MSL to turn right to
    01 AGL B 130 MSL to descend direct to
    01 AGL B 80 MSL to direct to
    01 AGL B 80 MSL to turn left to
    01 AGL B 80 MSL to direct to
    01 AGL B 80 MSL to direct to
    01 AGL B 80 MSL to direct to
    01 AGL B 80 MSL to direct to
    01 AGL B 80 MSL to direct to
    01 AGL B 60 MSL to direct to
    01 AGL B 60 MSL to direct to
    01 AGL B 60 MSL to direct to
    01 AGL B 60 MSL to direct to
    01 AGL B 60 MSL to direct to
    01 AGL B 60 MSL to turn right and descend to
    01 AGL B 50 MSL to direct to
    01 AGL B 50 MSL to turn left and climb to
    01 AGL B 60 MSL to direct to
    01 AGL B 60 MSL to turn left to
    01 AGL B 60 MSL to direct to
    01 AGL B 60 MSL to direct to
    01 AGL B 60 MSL to direct to
    01 AGL B 60 MSL to climb direct to
IR ROUTES

01 AGL B 60 MSL to AH GCC 034/45 N44°53.50' W104°50.00' (5) Timing tolerance at each turnpoint is +/- 2 1/2 minutes, excluding B3, B4, and B5.
01 AGL B 60 MSL to Al RAP 296/90 N44°54.00' W104°40.00' (6) See Powder River Training Complex Letter of Agreement.
01 AGL B 60 MSL to IL RAP 313/71 N44°57.50' W103°56.50' (7) Route has the same profile as IR-499 from entry to Point N.
01 AGL B 60 MSL climb direct to cross AK RAP 321/67 N44°58.50' W103°42.50' (8) Monitor Denver ARTCC 363.025 (F-J).
60 MSL to (TFR/TA Termination Point) 60 MSL B 100 MSL turn right and climb to cross 100 MSL to continue right turn to EX RAP 324/56 N44°50.00' W103°31.50' (9) Do not overfly Manderson, Basin, Otto, Emblem, WY; Roundup, MT.
60 MSL B 100 MSL direct to (Contact Denver ARTCC 338.2) 100 MSL to EM RAP 298/56 N44°34.50' W104°00.00' (10) Belle Fourche ESS: 381.1.
100 MSL B 160 MSL continue climb to cross 160 MSL to or as assigned. EN RAP 282/64 N44°25.50' W104°22.00' (11) A delay in the Powder River MOAs is not authorized. Other military activity may be operating above 10,000 MSL within the MOAs from B2 to IL.

ROUTE WIDTH - 5 NM left and 7 NM right of right of centerline from F to JB; 7 NM left and 4 NM right of centerline from JB to JF; 4 NM either side of centerline from JF to O; 8 NM left and 4 NM right of centerline from O to O1; 4 NM either side of centerline from O1 to T; 3 NM left and 4 NM right of centerline from T to U; 4 NM either side of centerline from U to AA; 4 NM left and 8 NM right of centerline from AA to AB; 4 NM either side of centerline from AB to B2; confines of POWDER RIVER MOA from B2 to B6; 6 NM left and 4 NM right of centerline from B6 to AI; 4 NM either side of centerline from AI to EN.

Special Operating Procedures:
(1) USAF bomber route.
(2) MARSA operations approved. Established by coordinated scheduling.
(3) Lost Communications (LC) altitude: 16,000 MSL.
(4) Centerline depicted with a 7.5 NM radius arc, except EX to EL at 6.0 NM.

PMSV CONTACTS: Primary Home Station. Alternate Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following (TF) Visual Contour (VC) and VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within published altitude blocks from JA to W and XX to AK. When Command Directives preclude TA/TF/VMC operations aircrews will maintain the IFR altitude for each segment. Minimum altitudes are established by 28 OSS Clearance Plane Setting Letter and provide 200' vertical clearance of all known man-made obstructions within the route width. Command Directives may require additional obstruction clearance for TA/TF/VMC operations. The route is designated mountainous from F to U. The remaining route segments are designated non-mountainous. Aircrews must comply with regulations governing operations below 500’ AGL. The route corridor provides airspace for 500’ lateral separation from man-made obstructions. Obstructions under 200’ AGL were not considered in route design.

ROUTE WIDTH - 5 NM left and 7 NM right of right of centerline from F to JB; 7 NM left and 4 NM right of centerline from JB to JF; 4 NM either side of centerline from JF to O; 8 NM left and 4 NM right of centerline from O to O1; 4 NM either side of centerline from O1 to T; 3 NM left and 4 NM right of centerline from T to U; 4 NM either side of centerline from U to AA; 4 NM left and 8 NM right of centerline from AA to AB; 4 NM either side of centerline from AB to B2; confines of POWDER RIVER MOA from B2 to B6; 6 NM left and 4 NM right of centerline from B6 to AI; 4 NM either side of centerline from AI to EN.

Special Operating Procedures:
(1) USAF bomber route.
(2) MARSA operations approved. Established by coordinated scheduling.
(3) Lost Communications (LC) altitude: 16,000 MSL.
(4) Centerline depicted with a 7.5 NM radius arc, except EX to EL at 6.0 NM.

FSS Within 100 NM Radius:
CPR, GTF

IR-479

ORIGINATING ACTIVITY: 120 FW/OSAD (ANG) 2800 Airport Ave. B, Great Falls, MT 59404 DSN 791-0192, C406-791-0192.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM
ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long | Note
--- | --- | --- | --- | ---
Cross at 160 MSL to or as assigned (TFR Initiation Point) | A | LWT 077/98 | N46°58.00' W107°14.00' | Direct to SFC B 80 MSL to descend to or as assigned (TA Initiation Point) direct to SFC B 80 MSL to turn left and descend to SFC B 80 MSL to (Start Maneuver Area) direct to SFC B 80 MSL to turn right to (End Maneuver Area) direct to SFC B 80 MSL to turn left and descend to SFC B 80 MSL to (TA/TFR Termination Point) direct to 45 MSL to (Contact Salt Lake City ARTCC 285.4) cross or as assigned (TA/TFR Initiation Point) direct to SFC B 80 MSL to continue descent and turn right to SFC B 80 MSL to direct to SFC B 45 MSL to direct to SFC B 45 MSL to turn left to SFC B 45 MSL to direct to SFC B 45 MSL to turn right to SFC B 45 MSL to direct to SFC B 45 MSL to turn right to SFC B 45 MSL to direct to SFC B 45 MSL to turn right and continue descent to SFC B 90 MSL to (Start Maneuver Area) direct to SFC B 90 MSL to turn right to SFC B 90 MSL to descend direct to SFC B 90 MSL to turn right and continue descent to SFC B 90 MSL to direct to SFC B 90 MSL to (Start Maneuver Area) direct to SFC B 80 MSL to (End Maneuver Area) direct to SFC B 80 MSL to (TA/TFR Termination Point) direct to 45 MSL to (Contact Salt Lake City ARTCC 272.75) cross 120 MSL B 170 MSL to (TA/TFR Termination Point) direct to 170 MSL to (TA/TFR Termination Point) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) direct to

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following operations (TF)/Visual Contour (VC) operations are authorized IAW command directives within the published altitude blocks from A to AH. VMC Terrain Avoidance (TA/VC) operations are authorized IAW command directives within the published altitude blocks from A to AH. The route is designated mountainous from B to E, and from K to V. The remainder of the route is designated non-mountainous. Minimum altitudes other than surface, are established to provide 100’ vertical separation of known man-made obstructions. Obstructions under 200’ AGL were not considered in the route design. The route corridor provides airspace for 500’ lateral separation from man-made obstacles. When Command Directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each leg segment.

ROUTE WIDTH - 4 NM either side of centerline from A to C; Boundaries of Hays MOA from C to D; 4 NM either side of centerline from D to H; 6 NM left and 7 NM right of centerline from H to I; 4 NM either side of centerline from I to J; 3 NM left and 4 NM right of centerline from J to K; 4 NM either side of centerline from K to V; 7 NM either side of centerline from V to W; 4 NM either side of centerline from W to AC; 4 NM left and 3 NM right of centerline from AC to AD; 4 NM either side of centerline from AD to AL.

Special Operating Procedures:

(1) Participating aircraft separation: Route is designated for MARSA operations with aircraft in the Hays MOA through coordinated scheduling by the 120th FW.
IR ROUTES

(2) IR-479 and IR-480 will not be scheduled simultaneously due to their being a reverse route of each other.
(3) Alternate entry points are K and Q. Alternate exit points are W and AC.
(4) Aircrews should be alert for VFR helicopter traffic and aerial crop sprayers from SFC-1500’ AGL.
(5) Report (Callsign, IR-479, Point D) when exiting the Hays MOA westbound to Salt Lake ARTCC on 285.4.
(6) Aircrews are required to receive 120th FW noise abatement procedures briefing prior to scheduling this route.
(7) Use caution due to the wind turbine farm along segment Q through R.

FSS Within 100 NM Radius:
GTF

IR-480

ORIGINATING ACTIVITY: 120 FW/OSAD (ANG) 2800 Airport Ave. B, Great Falls, MT 59404 DSN 791-0192, C406-791-0192.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: IMC/VMC
Terrain Following operations (TF)/Visual Contour (VC) operations are authorized IAW command directives within the published altitude blocks from A to X. VMC Terrain Avoidance (TA/VC) operations are authorized within the published altitude blocks from A to X. The route is designated mountainous from C to N, and from T to W. The remainder of the route is designated non-mountainous. Minimum altitudes other than surface, are established to provide 100’ vertical separation of known man-made obstructions. Obstructions under 200’ AGL were not considered in the route design. The route corridor provides airspace for 500’ lateral separation from man-made obstacles. When Command Directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each leg segment.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 7 NM either side of centerline from B to C; 4 NM left and 3 NM right of centerline from C to O; 4 NM either side of centerline from O to P; 7 NM left and 6 NM right of centerline from P to Q; 4 NM either side of centerline from Q to U; Boundaries of the Hays MOA from U to V; 4 NM either side of centerline from V to X.

Special Operating Procedures:
(1) Participating aircraft separation: Route is designated for MARSA operations with aircraft in the Hays MOA through coordinated scheduling by the 120th FW.
(2) IR-479 and IR-480 will not be scheduled simultaneously due to their being a reverse route of each other.
(3) Alternate entry points are J and N. Alternate exit point is U.
(4) Aircrews should be alert for VFR helicopter traffic and aerial crop sprayers from SFC-1500’ AGL.
(5) Aircrews are required to receive 120th FW noise abatement procedures briefing prior to scheduling this route.
(6) Use caution due to the wind turbine farm along segment G through H.

FSS Within 100 NM Radius:
GTF
IR ROUTES


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

ALITITUDE DATA

Cross at 120 MSL to or as assigned (TFR Initiation Point) descend direct to
01 AGL B 120 MSL to descend direct to
01 AGL B 80 MSL to descend direct to
01 AGL B 50 MSL to turn left to
01 AGL B 50 MSL to direct to
01 AGL B 50 MSL to turn right and climb to
01 AGL B 60 MSL to direct to
01 AGL B 60 MSL to turn right to
01 AGL B 60 MSL to direct to
01 AGL B 60 MSL to direct to
01 AGL B 60 MSL to turn left to
01 AGL B 60 MSL to direct to
01 AGL B 60 MSL to direct to
60 MSL to (TA/TFR Termination Point) 60 MSL B 100 MSL turn right and climb to cross
100 MSL to continue right turn to (Contact Denver ARTCC 338.2) direct to

LAT/LONG

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 120 MSL to or as assigned (TFR Initiation Point) descend direct to</td>
<td>LM</td>
<td>MLS 350/57</td>
<td>N47°19.50'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to descend direct to</td>
<td>LN</td>
<td>MLS 357/45</td>
<td>N47°08.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to descend direct to</td>
<td>KN</td>
<td>MLS 013/33</td>
<td>N46°53.20'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to turn left to</td>
<td>LO</td>
<td>MLS 055/25</td>
<td>N46°34.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to direct to</td>
<td>PQ</td>
<td>MLS 066/26</td>
<td>N46°30.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to turn right and climb to</td>
<td>LB</td>
<td>MLS 088/74</td>
<td>N46°13.00'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to direct to</td>
<td>LC</td>
<td>MLS 095/79</td>
<td>N46°03.00'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to turn right to</td>
<td>LD</td>
<td>MLS 111/79</td>
<td>N45°43.00'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to direct to</td>
<td>LE</td>
<td>MLS 113/80</td>
<td>N45°40.50'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to direct to</td>
<td>LF</td>
<td>MLS 140/85</td>
<td>N45°10.50'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to turn left to</td>
<td>LG</td>
<td>GCC 018/50</td>
<td>N45°05.50'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to direct to</td>
<td>AH</td>
<td>GCC 034/45</td>
<td>N44°53.50'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to direct to</td>
<td>AI</td>
<td>RAP 296/90</td>
<td>N44°54.00'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to direct to</td>
<td>IL</td>
<td>RAP 313/71</td>
<td>N44°57.50'</td>
</tr>
<tr>
<td>60 MSL to (TA/TFR Termination Point) 60 MSL B 100 MSL turn right and climb to cross</td>
<td>AK</td>
<td>RAP 321/67</td>
<td>N44°58.50'</td>
</tr>
<tr>
<td>100 MSL to continue right turn to (Contact Denver ARTCC 338.2) direct to</td>
<td>EX</td>
<td>RAP 324/56</td>
<td>N44°50.00'</td>
</tr>
<tr>
<td>100 MSL to</td>
<td>EL</td>
<td>RAP 318/52</td>
<td>N44°44.00'</td>
</tr>
<tr>
<td>100 MSL B 160 MSL continue climb to cross</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>160 MSL to or as assigned</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF) Visual Contour (VC) and VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within published altitude blocks from LM to AK. When Command Directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established by 28 OSS Clearance Plane Setting Letter and provide 200' vertical clearance of all known man-made obstructions within the route width. Command Directives may require additional obstruction clearance for TA/TF/VC operations. The entire route is designated non-mountainous. Aircrews must comply with regulations governing operations below 500' AGL. The route corridor provides airspace for 500' lateral separation from man-made obstacles. Obstructions under 200' AGL were not considered in route design.

ROUTE WIDTH - 4 NM either side of centerline from LM to LD; confines of POWDER RIVER A MOA from LD to LF; 6 NM left and 4 NM right of centerline from LF to AI; 4 NM either side of centerline from AI to EN.

Special Operating Procedures:

1. USAF bomber route.
2. MARSA operations approved. Established by coordinated scheduling.
3. Lost Communications (LC) altitude: 16,000 MSL.
4. Centerline between turnpoint is depicted as a 7.5 NM radius arc, except EX to EL at 6.0 NM.
5. Timing tolerance at each turnpoint is +/- 2 1/2 minutes.
7. A delay in the Powder River MOAs is not authorized. Other military activity may be operating above 10,000 MSL within the MOAs from LD to IL.
8. IR-485 is the short version of IR-492.
9. Route merges with the IR-492 corridor at LO and the IR-473 corridor at LF and continues to end.
10. Required products available from Airspace Management web page:
    (a) Briefing Guide;
    (b) 28 OSS Clearance Plane Setting Letter;
    (c) 28 OSS Noise Sensitive Area Letter.
11. Hazards:
    (a) Entry (Class G): V254, V465, V545;
    (b) Enroute: MTR; IR-473, IR-492. SUA; Powder River A/B MOAs. Airfields; Baker (Class E), Gardner, Lanning, Belle Creek, Ridge (N45-03 W105-01), Morris, dirt strip (N44-48 W104-37), Alzada, Morgan, Newell, Belle Fourche (Class E), Black Hills (Class E), VFR Airways; V465, V545, V2, V120;
    (c) Exit: J32, J107, J151, J82, V86, AR-678, Black Hills and Gateway ATCAAs;
IR ROUTES

(d) Birds. BAM Severe periods: none. Soaring raptors late morning;
(e) Uncharted towers (less than 200’) N47-03 W105-44, N46-40 W105-30, N46-26 W105-06, N46-14 W104-20, N45-06 W105-01, N44-53 W104-10.

FSS Within 100 NM Radius:
CPR

IR-492


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at FL220 to NH ABR 280/35 N45°35.00’ W99°10.00’ or as assigned descend direct to
FL200 B FL220 to NI ABR 280/46 N45°38.50’ W99°25.00’ FL220 to
FL200 B 50 MSL NJ ABR 278/51 N45°38.00’ W99°32.50’ descend direct to cross
50 MSL to NK DPR 062/69 N45°25.00’ W100°09.50’ direct to
50 MSL to NL DPR 063/53 N45°18.00’ W100°30.00’ (TA/TFR Initiation Point) descend direct to
01 AGL B 50 MSL to NM DPR 067/41 N45°14.00’ W100°46.50’ turn right and descend to
01 AGL B 40 MSL to NN DPR 050/35 N45°22.00’ W101°00.50’ direct to
to 01 AGL B 40 MSL to NO DPR 031/48 N45°41.00’ W100°58.00’ direct to
to 01 AGL B 40 MSL to NP DPR 024/57 N45°52.00’ W100°57.50’ turn left to
to 01 AGL B 40 MSL to NQ DPR 014/61 N46°00.00’ W101°08.00’ direct to
to 01 AGL B 40 MSL to NR DPR 351/56 N46°01.00’ W101°41.00’ turn right and climb to
01 AGL B 50 MSL to NS DPR 348/57 N46°02.00’ W101°46.00’ direct to
01 AGL B 50 MSL to NT DPR 341/63 N46°06.50’ W101°57.50’ direct to
01 AGL B 50 MSL to NU DIK 132/51 N46°09.50’ W102°05.00’ direct to
05 AGL B 50 MSL to AU DIK 199/23 N46°32.00’ W103°05.00’ direct to
01 AGL B 50 MSL to AV DIK 214/25 N46°35.00’ W103°13.00’ turn right to
01 AGL B 50 MSL to AW MLS 073/112 N46°36.50’ W103°16.50’ direct to
01 AGL B 50 MSL to AX MLS 059/96 N46°58.00’ W103°48.00’ turn left to
01 AGL B 50 MSL to AZ MLS 055/82 N46°58.00’ W104°09.00’ direct to
to 01 AGL B 50 MSL to LA MLS 043/35 N46°44.50’ W105°17.50’ turn left to
01 AGL B 50 MSL to PQ MLS 066/27 N46°30.00’ W105°19.00’ direct to
to 01 AGL B 50 MSL to LB MLS 088/74 N46°13.00’ W104°11.00’ turn right and climb to
01 AGL B 60 MSL to LC MLS 095/79 N46°03.00’ W104°06.50’ direct to
01 AGL B 60 MSL to LD MLS 111/79 N45°43.00’ W104°19.00’ turn right to
to 01 AGL B 60 MSL to LE MLS 113/80 N45°40.50’ W104°20.50’ direct to
to 01 AGL B 60 MSL to LF MLS 140/85 N45°10.50’ W104°55.00’ direct to
01 AGL B 60 MSL to LG GCC 018/50 N45°05.50’ W105°00.00’ turn left to
01 AGL B 60 MSL to AH GCC 034/45 N44°53.50’ W104°50.00’ direct to
01 AGL B 60 MSL to AI RAP 296/90 N44°54.00’ W104°40.00’ direct to
01 AGL B 60 MSL to IL RAP 313/71 N44°57.50’ W103°56.50’ climb direct to cross
60 MSL to AK RAP 321/67 N44°58.50’ W103°42.50’ (TFR/TA Termination Point)
60 MSL B 100 MSL EX RAP 324/56 N44°50.00’ W103°31.50’ turn right and climb to
100 MSL to continue right turn to
100 MSL to EL RAP 318/52 N44°44.00’ W103°36.00’ (Contact Denver ARTCC 338.2) direct to
100 MSL to EM RAP 298/56 N44°34.50’ W104°05.00’ continue climb to
100 MSL B 160 MSL continue climb to
160 MSL to EN RAP 282/64 N44°25.50’ W104°22.00’ or as assigned.

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC
Terrain Following (TF) Visual Contour (VC) and VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within published altitude blocks from NL to AK. When Command Directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established by 28 OSS Clearance Plane Setting Letter and provide 200’ vertical clearance of all known man-made obstructions within the route width. Command Directives may
Hazards: Required products available from Airspace Management. IR-492 is closed Oct 0230-1330Z and Nov 0100-1300Z for Route Merges with the IR-473 corridor at LF and continues. A delay in the Powder River MOAs is not authorized. Other Belle Fourche ESS - 381.1. Timing tolerance at each turnpoint is +/- 2 1/2 minutes, Centerline between turnpoint is depicted as a 7.5 NM radius. Lost Communications (LC) altitude: 16,000 MSL. MARSA operations approved. Established by coordinated USAF bomber route. Special Operating Procedures:
(1) USAF bomber route.
(2) MARSA operations approved. Established by coordinated scheduling.
(3) Lost Communications (LC) altitude: 16,000 MSL.
(4) Centerline between turnpoint is depicted as a 7.5 NM radius arc, except EX to EL at 6.0 NM.
(5) Timing tolerance at each turnpoint is +/- 2 1/2 minutes,
(6) Belle Fourche ESS - 381.1.
(7) A delay in the Powder River MOAs is not authorized. Other military activity may be operating above 10,000 MSL within the MOAs from LD to IL.
(8) Route Merges with the IR-473 corridor at LF and continues to end.
(9) IR-492 is closed Oct 0230-1330Z and Nov 0100-1300Z for high bird activity along route.
(a) Briefing Guide;
(b) 28 OSS Clearance Plane Setting Letter;
(c) 28 OSS Avoidance Area Letter.
(11) Hazards:
(a) Entry (Class A): AR106L (ABR to MLS), J90, V561;
(b) Enroute: MTR, IR-473, IR-485, SUA; Powder River A/B MOAs. Airfields; Fielder, Beam, Booth Ranch, Lenling, Timber Lake, Cottonwood, McIntosh, Dietz, uncharted (N46-15 W102-18), Lemmon (Class E), Mott, Erickson, Fordahl, Regent, Horschman, Dowe, Swenson, Logging Camp, (2) Bergquist, Beach, Hollstein, uncharted (N46-51 W104-48), Terry, Baker (Class E), Gardner, Lanning, Belle Creek, ridge (N45-03 W105-01), Morris, dirt strip (N44-48 W104-37), Alzada, Morgan, Newell, Belle Fourche (Class E), Black Hills (Class E), VFR airways; V71, V344, V169, V491, V2, V545, V2, V120;
(c) Exit: J32, J107, J151, J82, V86, AR-678, Black Hills and Gateway ATCAAs;
(d) Birds. BAM Severe periods: Oct and Nov. Soaring raptors late morning;
IR-499
HOURS OF OPERATION: Continuous
ROUTE DESCRIPTION:
<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL200 to or as assigned descend direct to 150 MSL</td>
<td>F</td>
<td>TST 291/55</td>
<td>N43°03.50' W104°21.00'</td>
</tr>
<tr>
<td>01 AGL B FL200 to (TFR/TA Initiation Point) descend direct to</td>
<td>JA</td>
<td>DDY 075/71</td>
<td>N43°09.00' W104°40.00'</td>
</tr>
<tr>
<td>01 AGL B 150 MSL to descend direct to</td>
<td>JB</td>
<td>DDY 039/32</td>
<td>N43°25.50' W105°43.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to descend direct to</td>
<td>JC</td>
<td>DDY 030/31</td>
<td>N43°28.50' W105°48.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to turn left to</td>
<td>JD</td>
<td>DDY 008/38</td>
<td>N43°41.00' W105°59.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to climb direct to</td>
<td>JE</td>
<td>CZI 112/20</td>
<td>N43°44.00' W106°10.50'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to turn right and continue climb to</td>
<td>JF</td>
<td>CZI 126/24</td>
<td>N43°39.00' W106°42.00'</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to descend direct to</td>
<td>J</td>
<td>CZI 211/26</td>
<td>N43°41.00' W106°51.50'</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to left to</td>
<td>K</td>
<td>SHR 184/41</td>
<td>N44°11.00' W107°17.50'</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to direct to</td>
<td>L</td>
<td>SHR 192/39</td>
<td>N44°14.00' W107°24.00'</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to turn left and descend direct to</td>
<td>M1</td>
<td>BOY 354/52</td>
<td>N44°19.25' W108°05.50'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to direct to</td>
<td>SA</td>
<td>BOY 344/44</td>
<td>N44°11.80' W108°17.60'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to turn right to</td>
<td>SB</td>
<td>BOY 344/40</td>
<td>N44°07.50' W108°18.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to climb direct to</td>
<td>SC</td>
<td>BOY 340/35</td>
<td>N44°03.00' W108°21.00'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to direct to</td>
<td>SD</td>
<td>BOY 333/32</td>
<td>N43°59.00' W108°26.00'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to climb to</td>
<td>SE</td>
<td>BOY 309/27</td>
<td>N43°49.50' W108°39.00'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to turn right to</td>
<td>SF</td>
<td>BOY 293/26</td>
<td>N43°44.00' W108°46.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to direct to</td>
<td>SG</td>
<td>BOY 266/30</td>
<td>N43°34.00' W108°59.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to turn right to</td>
<td>SH</td>
<td>BOY 260/35</td>
<td>N43°31.50' W109°06.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

01 AGL B 120 MSL to SI BOY 256/56 N43°29.50’ W109°34.50’
01 AGL B 130 MSL to SJ BOY 255/63 N43°28.50’ W109°45.00’
01 AGL B 130 MSL to SK BOY 253/69 N43°25.50’ W109°52.50’
01 AGL B 130 MSL to SL BOY 241/84 N43°08.00’ W110°09.50’
130 MSL to SM JAC 137/38 N43°04.50’ W110°18.00’
130 MSL to SN JAC 150/34 N43°04.50’ W110°30.00’
130 MSL to SO JAC 188/36 N43°04.00’ W111°01.00’

IR-500

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S Chindit Ave, Bldg 790, RM 120, Cannon AFB, NM 88103 DSN 681-2521.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S Chindit Ave, Bldg 790, RM 111, Cannon AFB, NM 88103 DSN 681-2276/7634.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at FL230 to or as assigned FL230 B 60 MSL descend direct to cross at or above 60 MSL continue descent to cross
50 MSL to (TA/TFR Initiation Point) direct to
02 AGL B 50 MSL to direct to
02 AGL B 50 MSL to turn right and climb to
02 AGL B 60 MSL to (TA/TFR Termination Point) direct to
60 MSL to (TA/TFR Initiation Point) direct to

PMSV CONTACTS: Primary Home Station. Alternate Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following (TF) Visual Contour (VC) and VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within published altitude blocks from JA to SM. When Command Directives preclude TA/TF/VMC operations aircrews will maintain the IFR altitude for each segment. Minimum altitudes are established by 28 OSS Clearance Plane Setting Letter and provide 200’ vertical clearance of all known man-made obstructions within the route width. Command Directives may require additional obstruction clearance for TA/TF/VMC operations. The route is designated mountainous. Aircrews must comply with regulations governing operations below 500’ AGL. The route corridor provides airspace for 500’ lateral separation from man-made obstructions. Obstructions under 200’ AGL were not considered in route design.

ROUTE WIDTH - 5 NM left and 7 NM right of right of centerline from F to JB; 7 NM left and 4 NM right of centerline from JB to JP; 4 NM either side of centerline from JP to SH; 2 NM left and 3 NM right of centerline from SH to SI; 1 NM left and 3 NM right of centerline from SI to SJ; 2 NM left and 3 NM right of centerline from SJ to SL; 3 NM either side of centerline from SL to SO.

Special Operating Procedures:
(1) USAF bomber route.
(2) MARSA operations approved. Established by coordinated scheduling.
(3) Lost Communications (LC) altitude: 15,000 MSL.
(4) Centerline between turnpoint is depicted as a 7.5 NM radius arc.
(5) Timing tolerance at each turnpoint is +/- 2 1/2 minutes.
(6) Route has the same profile as IR-473 from entry to Point M1.
(7) Monitor Denver ARTCC 363.025 (F-J).
(8) Fly right of centerline from Point L to Point M1 for noise abatement.
(9) Recommend CPS 2000’ over the South Big Horn River prior to Point M1 for noise abatement.
(10) Do not overfly Manderson and Basin, WY.
(11) Maintain centerline from Point Sl to SJ, otherwise CPS 2000’ AGL.
(12) Do not plan a right turn after route exit (SO) in order to minimize traffic conflicts with Jackson Hole arrivals.
   (a) Briefing Guide;
   (b) 28 OSS Clearance Plane Setting Letter;
   (c) 28 OSS Sensitive Area Letter.
(14) Hazards:
   (a) Entry (Class A): AR-678, Black Hills ATCAA;
   (c) Exit: Alpine Airport, V465, V328;
   (d) Birds. BAM Severe periods: none. Soaring raptors late morning (especially Point M to SJ).

FSS Within 100 NM Radius:
CPR
IR ROUTES

PMSV CONTACTS: Primary Home Station. Alternates Dyress (DYS 344.6), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: Authorized entire route IAW major commands/MDS guidance.

ROUTE WIDTH - 4 NM either side of centerline from AA to AC; 3 NM either side of centerline from AC to AD; 4 NM either side of centerline from AD to AG; 2 NM left and 4 NM right of centerline from AG to AI; 4 NM left and 8 NM right of centerline from K to L; 4 NM left and 4 NM right of centerline from J to K; 4 NM left and 2 NM right of centerline from AG to AI; 4 NM either side of centerline from L to SA; 4 NM either side of centerline from N1 to K1 (Re-Entry).

Special Operating Procedures:

1. Route is not available for use. Contact Dyess AFB airspace management for additional information.
2. Aircraft exiting the route or using the ALPHA re-entry will cross the end maneuver area point at the specified minimum IFR altitude.
3. Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
4. Lost communication (LC) Procedures: Route LC altitude is 11,000 MSL.
5. Route is separated from conflicting routes by coordinated scheduling.
6. Centerline between turn points will be depicted as a 7.5 NM arc unless otherwise specified.
7. Aircrews should be aware of and avoid the following airfields:
   a. N41-09.5 W101-17.5;
   b. N40-55.5 W101-17.5;
8. Crews will fly at IFR altitude between Points AC and AD during the period Oct through May.
9. Route is open all year long.
10. Aircrew should be especially vigilant when flying IR-500 in the vicinity of point AO due to possible traffic on IR-414. If VMC exists along the above segments, see and avoid is the method of MARSA. If IMC exists along the above segments, aircraft will climb to the IFR altitude prior to encountering the IMC; thereby establishing procedural separation. See and avoid is applicable during the VMC climb.
11. Noise Sensitive Areas: (avoid by 1/4 NM or 1000')

### Route Instructions

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Longitude</th>
<th>Speed</th>
<th>Course</th>
<th>Altitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 AGL B 60 MSL to AG</td>
<td>HCT 236/50</td>
<td>N40°07.50'</td>
<td>W101°55.00'</td>
<td>110 MSL to SA TBE 093/58 N37°00.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>Re-Entry ALPHA:</td>
<td>Cross</td>
<td>67 MSL to N1 TBE 042/52 N37°46.00'</td>
<td></td>
</tr>
<tr>
<td>turn left to</td>
<td></td>
<td></td>
<td>67 MSL to O1 TBE 054/48 N37°35.00'</td>
<td></td>
</tr>
<tr>
<td>55 MSL B 60 MSL to AH</td>
<td>HCT 231/58</td>
<td>N40°00.00'</td>
<td>W102°02.00'</td>
<td></td>
</tr>
<tr>
<td>(Resume TA/TFR Point)</td>
<td></td>
<td></td>
<td>67 MSL to S TBE 074/36 N37°18.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td>turn right to</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 60 MSL to AI</td>
<td>GLD 303/22</td>
<td>N39°39.00'</td>
<td>W102°02.00'</td>
<td>02 AGL B 67 MSL to I1 LAA 183/60 N37°14.00'</td>
</tr>
<tr>
<td>turn right and climb to</td>
<td></td>
<td></td>
<td>turn right to</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 70 MSL to AJ</td>
<td>GLD 278/25</td>
<td>N39°31.50'</td>
<td>W102°11.50'</td>
<td>02 AGL B 67 MSL to J1 LAA 191/63 N37°14.00'</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td>turn right to</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 70 MSL to AK</td>
<td>HGO 035/57</td>
<td>N39°31.00'</td>
<td>W102°47.50'</td>
<td>02 AGL B 67 MSL to K1 LAA 200/61 N37°20.50'</td>
</tr>
<tr>
<td>turn left to</td>
<td></td>
<td></td>
<td>turn right to</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 70 MSL to AL</td>
<td>HGO 035/46</td>
<td>N39°23.50'</td>
<td>W102°57.50'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 70 MSL to AM</td>
<td>HGO 054/33</td>
<td>N39°05.00'</td>
<td>W103°00.00'</td>
<td></td>
</tr>
<tr>
<td>descend and turn left to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 70 MSL to AN</td>
<td>HGO 065/32</td>
<td>N38°59.00'</td>
<td>W102°58.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 AGL B 57 MSL to AO</td>
<td>HGO 087/43</td>
<td>N38°46.00'</td>
<td>W102°43.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>04.5 AGL B 57 MSL to AP</td>
<td>LAA 089/19</td>
<td>N38°08.00'</td>
<td>W102°17.50'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 57 MSL to AQ</td>
<td>LAA 099/23</td>
<td>N38°03.50'</td>
<td>W102°14.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 57 MSL to F</td>
<td>LAA 132/55</td>
<td>N37°27.00'</td>
<td>W102°00.00'</td>
<td></td>
</tr>
<tr>
<td>turn right to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 57 MSL to G</td>
<td>LAA 141/61</td>
<td>N37°17.50'</td>
<td>W102°07.00'</td>
<td></td>
</tr>
<tr>
<td>climb direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 67 MSL to H</td>
<td>LAA 178/59</td>
<td>N37°14.00'</td>
<td>W102°53.50'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 67 MSL to I</td>
<td>LAA 183/60</td>
<td>N37°14.00'</td>
<td>W102°00.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 67 MSL to J</td>
<td>LAA 191/63</td>
<td>N37°14.00'</td>
<td>W102°00.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 67 MSL to K</td>
<td>LAA 200/61</td>
<td>N37°20.50'</td>
<td>W103°22.00'</td>
<td></td>
</tr>
<tr>
<td>(Start Maneuver Area)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 67 MSL to L</td>
<td>LAA 224/39</td>
<td>N37°50.00'</td>
<td>W103°22.50'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 67 MSL to M</td>
<td>LAA 222/26</td>
<td>N37°56.50'</td>
<td>W103°08.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 67 MSL to N</td>
<td>TBE 042/52</td>
<td>N37°46.00'</td>
<td>W102°43.50'</td>
<td></td>
</tr>
<tr>
<td>(End Maneuver Area)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(TA/TFR Termination Point)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>turn right to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 70 MSL to O</td>
<td>TBE 054/48</td>
<td>N37°35.00'</td>
<td>W102°40.50'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>67 MSL to P</td>
<td>TBE 062/41</td>
<td>N37°27.00'</td>
<td>W102°46.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>67 MSL B 100 MSL to Q</td>
<td>TBE 073/41</td>
<td>N37°19.00'</td>
<td>W102°45.00'</td>
<td></td>
</tr>
<tr>
<td>turn left to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80 MSL B 110 MSL to R</td>
<td>TBE 078/43</td>
<td>N37°15.30'</td>
<td>W102°42.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90 MSL B 110 MSL to Contact Albuquerque ARTCC 351.7 passing 100 MSL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90 MSL B 110 MSL direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IR ROUTES

(a) N37-49.2 W103-14.4 Residence;
(b) N37-20.4 W103-22.9 Residence;
(c) N37-14.2 W103-14.9 Residence.

(12) This route effects Cheyenne MOA and Two Buttes MOA operations which is controlled by Buckley ANG/120FS down to 300’ AGL. Advise 120FS; DSN 877-9470 or FAX 877-9612, on estimated entry and exit times of the MOA’s. In addition, provide estimated times to 120FS at Points AM and AP.

(13) All aircraft will make an (in-the-blind) call on 370.925 prior to entering the lateral limits of Two Buttes and Cheyenne MOA’s. This call is to alert aircraft operating in the MOA of your presence. This is not intended to be used as a separation tool, only a (heads up call).

(14) Due to evolving avoidance areas, obstacles, and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdraw files before flying the route. This information can be obtained by request to the scheduling activity.

FSS Within 100 NM Radius:
DEN, HON

IR-501

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S Chindit Ave, Bldg 790, RM 120, Cannon AFB, NM 88103 DSN 681-2521.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S Chindit Ave, Bldg 790, RM 111, Cannon AFB, NM 88103 DSN 681-2276/7634.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
</table>
| Cross at FL230 to
or as assigned | A | BFF 067/99 | N42°10.00' W101°18.50' |
| FL230 B 60 MSL
descend direct to cross |
| at or above 60 MSL
continue descent to cross |
| 50 MSL to
(TA/TFR Initiation Point) |
| direct to |
| 02 AGL B 50 MSL to
direct to |
| 02 AGL B 50 MSL to
turn right and climb to |
| 02 AGL B 60 MSL to
(TA/TFR Termination Point) |
| direct to |
| 60 MSL to
(TA/TFR Initiation Point) |
| direct to |
| 02 AGL B 60 MSL to
(TA/TFR Termination Point) |
| turn left to |
| 55 MSL B 60 MSL to
(Resume TA/TFR Point) |
| direct to |
| 02 AGL B 60 MSL to
turn right and climb to |
| 02 AGL B 70 MSL to
direct to |
| 02 AGL B 70 MSL to
turn left to |
| 02 AGL B 70 MSL to
direct to |
| 02 AGL B 70 MSL to
direct to |
| 04 AGL B 70 MSL to
direct to |
| 02 AGL B 70 MSL to
descend direct to |
| 04.5 AGL B 70 MSL to
turn right to |
| 04.5 AGL B 60 MSL to
(Start Maneuver Area) |
| direct to |
| 02 AGL B 60 MSL to
turn left to |
| 02 AGL B 60 MSL to
direct to |
| 02 AGL B 60 MSL to
(End Maneuver Area) |
| (TA/TFR Termination Point) |
| direct to |
| 60 MSL to
60 MSL B 110 MSL
climb direct to cross |
| at or above 70 MSL |
| 70 MSL B 110 MSL
continue climb to cross |
| 110 MSL to
or as assigned |
| (Contact Albuquerque ARTCC 351.7 passing 100 MSL) |
| Re-Entry ALPHA: |
| Cross |
| 60 MSL to
(TA/TFR Termination Point) |
| turn left to |
| 60 MSL to
direct to |
| 60 MSL B 70 MSL
climb direct to cross |
| 70 MSL to
direct to |
| 60 MSL B 100 MSL
climb direct to cross |
| at or above 100 MSL |
| 100 MSL to
or as assigned |
| (Contact Albuquerque ARTCC 351.7 passing 100 MSL) |
| Re-Entry ALPHA: |
| Cross |
| 50 MSL to
(TA/TFR Initiation Point) |
| direct to |
| 02 AGL B 50 MSL to
direct to |
| 02 AGL B 50 MSL to
turn right and climb to |
| 02 AGL B 60 MSL to
(TA/TFR Termination Point) |
| direct to |
| 60 MSL to
(TA/TFR Initiation Point) |
| direct to |
| 02 AGL B 60 MSL to
(TA/TFR Termination Point) |
| turn left to |
| 55 MSL B 60 MSL to
(Resume TA/TFR Point) |
| direct to |
| 02 AGL B 60 MSL to
turn right and climb to |
| 02 AGL B 70 MSL to
direct to |
| 02 AGL B 70 MSL to
turn left to |
| 02 AGL B 70 MSL to
direct to |
| 02 AGL B 70 MSL to
direct to |
| 04 AGL B 70 MSL to
direct to |
| 02 AGL B 70 MSL to
descend direct to |
| 04.5 AGL B 70 MSL to
turn right to |
| 04.5 AGL B 60 MSL to
(Start Maneuver Area) |
| direct to |
| 02 AGL B 60 MSL to
turn left to |
| 02 AGL B 60 MSL to
direct to |
| 02 AGL B 60 MSL to
(End Maneuver Area) |
| (TA/TFR Termination Point) |
| direct to |
| 60 MSL to
60 MSL B 110 MSL
climb direct to cross |
| at or above 100 MSL |
| 110 MSL to
or as assigned |
| (Contact Albuquerque ARTCC 351.7 passing 100 MSL) |
| Re-Entry ALPHA: |
| Cross |
70 MSL to X LAA 291/37 N38°32.00’ W103°21.00’
60 MSL to Y LAA 306/41 N38°42.50’ W103°16.00’
60 MSL to M1 LAA 313/30 N38°36.50’ W103°03.00’
02 AGL B 60 MSL to Thence via published route.
Alternate Entry: Al Cross FL190 to AI HCT 175/32 N39°55.00’ W101°00.00’
or as assigned descend to
70 MSL B FL190 to AJ GLD 354/35 N39°58.00’ W101°37.00’
or as assigned turn left and descend to
60 MSL B 70 MSL to AK GLD 351/35 N39°58.00’ W101°39.00’
60 MSL B 70 MSL continue descent to cross
60 MSL to AL HCT 224/53 N39°56.50’ W101°52.00’
turn left to
60 MSL to AM GLD 317/31 N39°49.50’ W102°02.00’
Thence via published route.
Alternate Entry: M2 (Transition from IR-415) Cross
02 AGL B 70 MSL to M2 LAA 313/30 N38°36.50’ W103°03.00’
Thence via published route.
Alternate Exit: P1 (Transition to IR-409) Cross
02 AGL B 80 MSL to P1 LAA 243/33 N38°03.00’ W103°21.00’
Thence via published transition to IR-409.

PMSV CONTACTS: Primary Home Station. Alternates Dyess (DYS 344.6), Ellsworth (RCA 375.775).

ROUTE WIDTH - 4 NM either side of centerline from A to B; 3 NM either side of centerline from B to AZ; 4 NM either side of centerline from AZ to E; 4 NM left and 2 NM right of centerline from E to G; 4 NM either side of centerline from G to N; 3 NM left and 4 NM right of centerline from N to O; 3 NM either side of centerline from O to P; 6 NM left and 3 NM right of centerline from P to Q; 6 NM left and 5 NM right of centerline from Q to R; 4 NM either side of centerline from R to T; Re-entry: 4 NM left and 3 NM right of centerline from R1 to U; 4 NM either side of centerline from U to W; 4 NM left and 2 NM right of centerline from W to X; 4 NM either side of centerline from X to M1; 4 NM either side of centerline from AL to AL; 4 NM left and 2 NM right of centerline from AL to AM.

Special Operating Procedures:
(1) Route is not available for use. Contact Dyess AFB airspace management for additional information.
(2) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
(3) Lost communications (LC) procedures: Route LC altitude is 11,000’ MSL. Desired deviation from this procedure must be filed IAW FLIP AP/1B CH 1, and verified by Albuquerque ARTCC prior to route entry.
(4) Route is separated from conflicting routes by coordinated scheduling.
(5) Aircraft flying command directed contour/terrain following altitudes may be required to fly at a higher minimum tracking altitude, as listed in applicable regulations, for STR, scored activity. In no case will aircraft fly below command directed contour/terrain following altitudes.
(6) Aircrews should be aware of and avoid the following airfields:
(a) N34°09.5 W101°17.5;
(b) N34°04.4 W101°22.0;
(c) N34°05.9 W101°26.5;
(d) N34°05.5 W101°17.5;
(e) N34°23.8 W101°11.8;
(f) N34°05.4 W101°34.0;
(g) N34°03.9 W101°32.5;
(h) N38°51.1 W103°06.7;
(i) N38°34.1 W103°25.3;
(j) N38°27.0 W103°31.9;
(k) N39°36.5 W102°32.7.
(7) Aircrews using IR-501 Alternate Entry A1 must file IR-501A.
(8) Centerline between turn points will be depicted as a 7.5 NM arc unless otherwise specified.
(9) Crews will fly at IFR altitude between Point P and AZ during the period Oct through May.
(10) Route is open all year long.
(11) Noise Sensitive Areas: (avoid by 1/4 NM or 1000’)
(a) N38°03.8 W103°19.1 Residence;
(b) N37°49.2 W103°14.4 Residence;
(c) N40°01.2 W102°00.3 Ranch;
(d) N39°45.0 W102°02.5 Ranch;
(e) N38°06.1 W103°14.1 Residence;
(f) N40°09.7 W101°33.2 Residence;
(g) N40°13.1 W101°23.7 Residence;
(h) N40°08.5 W101°33.0 Feedlot;
(i) N38°49.6 W103°00.7 Residence;
(j) N38°03.3 W103°20.8 Residence;
(k) N38°04.3 W103°21.8 Residence;
(l) N37°57.0 W103°21.6 Farm;
(m) N38°15.6 W103°07.8 Farm;
(n) N38°22.2 W102°02.7 Residence.
(12) This route effects Cheyenne MOA and Two Buttes MOA operations which is controlled by Buckley ANG/120FS down to 300’ AGL. Advise 120FS; DSN 877-9470 or FAX 877-9612, on estimated entry and exit times of the MOA’s. In addition, provide estimated times to 120FS at Points J and M.
(13) All aircraft will make an (in-the-blind) call on 370.925 prior to entering e lateral limits of Two Buttes and Cheyenne MOA’s. This call is to alert aircraft operating in the MOA of your presence. This in not intended to be used as a separation tool, only a (heads up call).
(14) Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdraw files before flying the route. This information can be obtained by request to the scheduling activity.
IR ROUTES

FSS Within 100 NM Radius:
DEN, HON

IR-504


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 170 MSL to</td>
<td>A</td>
<td>BUM 169/16</td>
<td>N38°00.00' W94°28.02'</td>
</tr>
<tr>
<td>30 MSL to</td>
<td>B</td>
<td>BUM 228/32</td>
<td>N37°58.00' W95°02.52'</td>
</tr>
<tr>
<td>30 MSL to</td>
<td>C</td>
<td>BUM 240/37</td>
<td>N38°02.00' W95°12.02'</td>
</tr>
<tr>
<td>06 AGL B 30 MSL to</td>
<td>D</td>
<td>BUM 277/48</td>
<td>N38°28.00' W95°28.52'</td>
</tr>
<tr>
<td>06 AGL B 30 MSL to</td>
<td>E</td>
<td>BUM 280/55</td>
<td>N38°32.50' W95°36.02'</td>
</tr>
<tr>
<td>06 AGL B 30 MSL to</td>
<td>F</td>
<td>TOP 217/44</td>
<td>N38°35.50' W96°10.02'</td>
</tr>
<tr>
<td>07 AGL B 30 MSL to</td>
<td>G</td>
<td>TOP 231/43</td>
<td>N38°44.00' W96°18.02'</td>
</tr>
<tr>
<td>07 AGL B 30 MSL to</td>
<td>H</td>
<td>TOP 256/32</td>
<td>N39°03.00' W96°13.02'</td>
</tr>
<tr>
<td>08 AGL B 30 MSL to</td>
<td>I</td>
<td>TOP 282/31</td>
<td>N39°17.00' W96°11.02'</td>
</tr>
<tr>
<td>09 AGL B 30 MSL to</td>
<td>J</td>
<td>TOP 287/32</td>
<td>N39°20.00' W96°11.02'</td>
</tr>
<tr>
<td>07 AGL B 30 MSL to</td>
<td>K</td>
<td>TOP 291/40</td>
<td>N39°25.50' W96°19.00'</td>
</tr>
<tr>
<td>07 AGL B 30 MSL to</td>
<td>L</td>
<td>SLN 029/49</td>
<td>N39°34.70' W97°00.00'</td>
</tr>
<tr>
<td>07 AGL B 31 MSL to</td>
<td>M</td>
<td>SLN 020/42</td>
<td>N39°32.50' W97°12.50'</td>
</tr>
<tr>
<td>07 AGL B 31 MSL to</td>
<td>N</td>
<td>SLN 008/31</td>
<td>N39°25.00' W97°27.00'</td>
</tr>
<tr>
<td>07 AGL B 31 MSL to</td>
<td>O</td>
<td>SLN 319/20</td>
<td>N39°12.00' W97°51.50'</td>
</tr>
<tr>
<td>07 AGL B 31 MSL to</td>
<td>P</td>
<td>SLN 301/18</td>
<td>N39°06.50' W97°55.50'</td>
</tr>
<tr>
<td>07 AGL B 30 MSL to</td>
<td>Q</td>
<td>SLN 262/22</td>
<td>N38°55.00' W98°05.50'</td>
</tr>
<tr>
<td>32 MSL to</td>
<td>R</td>
<td>SLN 247/25</td>
<td>N38°48.33' W98°08.33'</td>
</tr>
<tr>
<td>32 MSL B 120 MSL to</td>
<td>S</td>
<td>SLN 230/29</td>
<td>N38°40.00' W98°08.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to Point O.

ROUTE WIDTH - 3 NM left and 4 NM right of centerline from A to C; 3 NM left and 3 NM right of centerline from C to I; 4 NM left and 3 NM right of centerline from I to J; 4 NM left and 4 NM right of centerline from J to L; 3 NM left and 3 NM right of centerline from L to N; 2 NM left and 4 right of centerline from N to P; 3 NM left and 3 NM right of centerline from P to S.

Special Operating Procedures:
(1) Primary Entry: A; Alternate Entry: B.
(2) Primary Exit: S; Alternate Exits: F, I.
(3) Contact Kansas City Center (KZKC) on 327.0 for route entry.
(4) CAUTION: VR-511/512 parallels track between F and J and crosses between J and K. IR-513/526 crosses at Point R. There are numerous other MTRs near the route exit. Contact scheduling activity of potentially conflicting routes for status.
(5) CAUTION: Be alert for parachute jumping and ultra-light activity in the vicinity of Osage City Airport N38°37.9 W95°28.02', Wamego Airport N39°12.00' W96°15.30', and Ellsworth Airport N38°45.00' W98°14.00'.
(6) Numerous private and public airports in vicinity of route. Avoid flight within 1500 feet or 3 NM of airports when practical.

FSS Within 100 NM Radius:
COU, ICT

IR-505

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/46, C605-988-5745/5746

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, Mon-Sat, OT By NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL</td>
<td>A</td>
<td>LNK 195/51</td>
<td>N40°09.00' W97°12.00'</td>
</tr>
<tr>
<td>40 MSL B 100 MSL to</td>
<td>B</td>
<td>TKO 051/39</td>
<td>N40°07.00' W97°31.00'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to</td>
<td>C</td>
<td>TKO 052/36</td>
<td>N40°05.00' W97°34.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to</td>
<td>D</td>
<td>TKO 062/22</td>
<td>N39°55.00' W97°49.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to</td>
<td>E</td>
<td>TKO 176/18</td>
<td>N39°30.00' W98°18.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to</td>
<td>F</td>
<td>TKO 176/31</td>
<td>N39°18.00' W98°20.00'</td>
</tr>
</tbody>
</table>
2-133

IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to K.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 8 NM either side of centerline from C to G; 8 NM east and 4 NM west of centerline from G to H; 8 NM either side of centerline from H to J; 7 NM either side of centerline from J to K. Alternate Entry: E - On centerline YA to E1.

Special Operating Procedures:
(1) All route reservations and briefings including night and weekend flights must be made during workday (normally Tue-Fri 0700-1730 local).
(2) Route is to be flown only when the user has either a scheduled range period at R-3601, or when R-3601 is inactive. Contact R-3601/Smokey MOA scheduling prior to scheduling IR-505 at DSN 743-7600, C785-827-9611/9612.
(3) MARSA is applicable between IR-505 beyond Pt I and Bison/Smokey MOAs through coordinated scheduling and See and Avoid.
(4) Lost communications procedures; At Pt K climb to 170 MSL while staying within the lateral confines of R-3601. Then via flight plan route.
(5) Kansas City ARTCC low altitude frequencies are: north end 322.4, south end 363.2.
(6) Route is surveyed to 200' AGL but obstacle clearance is not guaranteed.
(7) VR-531 parallels and crosses route from Pt F to K. Numerous VR routes are in the vicinity of R-3601. Route coincides with VR-545 and VR-544.
(8) Avoid all airports by at least 3 NM or 1500' AGL. Be especially concerned around: Beloit Airport N39-29 W98-08, and Rose Airport at N39-38 W98-22. Note that the route boundaries go around the Lucas Airport at N39-04 W98-32.

(12) Migratory bird flyway in the spring and fall.
(13) Low altitude air-to-air training (LOWAT), is approved on these segments of IR-505 which underlies the Bison and Smokey MOAs. The subject airspace lies between Pt I and K along the MTR from the surface to 4000' MSL.
(14) Aircrews filing for Alternate Entry at Pt 3 must file as follows: TKO.IR505A.SLN208019....flight plan route.

FSS Within 100 NM Radius: ICT, OLU

IR-508

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7745, C605-988-5745.

SCHEDULING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5754/5746.

HOURS OF OPERATION: Daylight hours, Mon-Sat, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to as assigned descend to cross at or below 50 MSL</td>
<td>A</td>
<td>LNK 332/108</td>
<td>N42°37.00' W97°32.00'</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to C</td>
<td></td>
<td>ONL 069/32</td>
<td>N42°34.00' W97°59.00'</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to D</td>
<td></td>
<td>ONL 352/32</td>
<td>N43°00.00' W98°40.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to E</td>
<td></td>
<td>ONL 283/38</td>
<td>N42°43.00' W99°29.00'</td>
</tr>
<tr>
<td>01 AGL B 55 MSL to F</td>
<td></td>
<td>ONL 242/63</td>
<td>N42°08.00' W100°01.00'</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to G</td>
<td></td>
<td>ONL 217/29</td>
<td>N42°08.00' W99°10.00'</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to H</td>
<td></td>
<td>OBH 318/45</td>
<td>N41°59.00' W98°56.00'</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to I</td>
<td></td>
<td>OBH 310/24</td>
<td>N41°40.00' W98°43.00'</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to J</td>
<td></td>
<td>OBH VORTAC</td>
<td>N41°22.54' W98°21.22'</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to K</td>
<td></td>
<td>ONL 352/32</td>
<td>N43°00.00' W98°40.00'</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to L</td>
<td></td>
<td>ONL 305/21</td>
<td>N43°00.00' W98°40.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to H.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 8 NM either side of centerline from C to I; 4 NM either side of centerline from I to J.

Special Operating Procedures:
1. Route is surveyed to 100’ AGL. This altitude will not guarantee obstacle clearance throughout the route.
2. Normal operating speed is 480 Kts.
3. Route is common with IR-509 from A to E and VR-1521 from C to I.
4. When entering at Alternate Entry Point D, aircraft shall be established in the route structure (45 MSL) within 8 NM of Point D.
5. When using ONL MOA in conjunction with IR-508, MOA clearance will be attempted prior to entering at Point A.
6. O'Neill MOA overlaps the route between H and I. If IR-508 is not used in conjunction with O'Neill MOA, the user must deconflict O'Neill MOA with the 114 FW when scheduling the route.
7. Exiting the route cross Point I at 10,000’ MSL.
8. Migratory birds along rivers and lakes in spring and fall.
9. Lost communications altitude is 17,000’ MSL.
10. Alternate Exit Point is H.
11. IR-508 is opposite direction of IR-518 from A to E, and VR-1520 from C to E.
12. Route conflicts with VR-510 at Point D, and IR-508, IR-518, VR-1520 and VR-1521 between L to M.
13. Route is surveyed to 500’ AGL from Point A to C. Remain at least 1.5 NM away from either side of a line from N41-58.0 W98-53.0 to N41-46.0 W98-40.0.
14. Avoid Bald Eagle Nesting Area at Karl Mundt National Wildlife Refuge N43-00.9 W98-31.6 by 1 NM or 1500’ AGL.
15. Avoid Bird Nesting Areas by 1500’ or 1 NM March through October: N42-47.0 W99-22.6, N42-43.3 W99-35.7.
16. Avoid flight within 1500’ AGL or 3 NM of the Rock County Airport.
17. Uncharted towers located at N42-06.0 W98-00.0, N42-06.0 W98-05.0, N42-52.0 W98-41.0, N42-34.1 W99-40.1 and N41-48.3 W98-58.0.

FSS Within 100 NM Radius:
FOD, HON, OLU

IR-509

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7745, C605-988-5745.

SCHEDULING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5754/5746.

HOURS OF OPERATION: Daylight hours, Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
Cross at 100 MSL to A ONL 070/52 N42°37.00’ W97°32.00’
or as assigned to cross 50 MSL to B ONL 070/40 N42°35.00’ W97°48.00’
01 AGL B 50 MSL to C ONL 069/32 N42°34.00’ W97°59.00’
01 AGL B 50 MSL to D ONL 352/32 N43°00.00’ W98°40.00’
01 AGL B 50 MSL to E ONL 283/38 N42°43.00’ W99°29.00’
01 AGL B 50 MSL to F ONL 286/47 N42°49.00’ W99°39.00’
01 AGL B 50 MSL to G PIR 181/66 N43°19.00’ W100°29.00’
01 AGL B 50 MSL to H PIR 114/66 N43°54.00’ W99°52.00’
01 AGL B 55 MSL to I PIR 119/42 N43°56.00’ W99°25.00’
01 AGL B 55 MSL to J ONL 330/90 N43°53.00’ W99°24.00’
01 AGL B 55 MSL to K ONL 330/73 N43°37.00’ W99°16.00’
01 AGL B 90 MSL to cross L ONL 344/41 N43°09.00’ W98°47.00’
90 MSL to M ONL 360/36 N43°04.00’ W98°33.00’
90 MSL to N ONL 026/35 N42°57.00’ W98°13.00’
100 MSL to O ONL 030/37 N42°56.00’ W98°09.00’

TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to L.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 8 NM either side of centerline from C to L; 4 NM either side of centerline from L to O.

Special Operating Procedures:
1. Route is common with IR-508 between A to E, VR-510 from I to O, VR-1521 from C to E.
2. Route is opposite direction of IR-518 from A to E, and VR-1520 from C to E.
3. Route conflicts with VR-510 at Point D, and IR-508, IR-518, VR-1520 and VR-1521 between L to M.
4. Route is surveyed to 500’ AGL with sections to 100’ AGL. These altitudes will not guarantee obstacle clearance throughout the route.
5. Migratory birds along the rivers and lakes during spring and fall.
6. Lake Andes MOA overlaps the route between K and N from 6.0 MSL and above. If IR-509 is not used in conjunction with Lake Andes MOA, the user must deconflict with the 114 FW when scheduling the route.
7. Alternate Entry Points are D, F, H and I. Aircraft shall commence descend from 10.0 MSL or as assigned to be established into the route structure within 8 NM of the designated Alternate Entry Point.
8. Alternate Exit Points are D, G, H, I and L.
(9) Points D and L underlie the Lake Andes MOA. Prior ATC clearance must be received in order to operate in the MOA when exiting at D and L.

(10) Aircrews should be aware of 1326' AGL tower, 3385' MSL at N43-49 W99-10; to N43-49 W99-25; to N43-42 W99-25; to N43-44 W99-06.5.

(11) A minimum of 1500' AGL entire route width from Point A to C.

(12) A minimum of 1500' AGL over a rectangle beginning and ending at N43-49 W99-10; to N43-49 W99-25; to N43-42 W99-25; to N43-44 W99-06.5.

(13) Avoid the following noise sensitive areas by a minimum of 1500' AGL or 1 NM: farm N43-00.5 W99-50.5; ranch N43-33.7 W99-14.0.

FSS Within 100 NM Radius:
FOD, HON, OLU

IR ROUTES

ORIGINATING ACTIVITY: DET 1, 184 IW, Smoky Hill ANG Range, 8429 W Farrelly Rd, Salina, KS 67401-9407.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION: TERRAIN FOLLOWING OPERATIONS:
Authorized within published altitude blocks from Pt B to Pt AC, and within the Smoky Hill Racetrack from POINTS AG to AC. When command directives preclude TF/TA operation aircrews will maintain the IFR altitude for each route segment. The minimum IFR altitude for Smokey Hill Racetrack is 3200 MSL. Minimum altitudes are established to provide a minimum of 100' vertical clearance of known man made obstacles. Aircrews are advised that route altitudes provide no buffer outside the route limits. Obstructions below 200' AGL were not considered in route design. Command directives may require additional clearance for TF/TA/VMC operations. The entire route is designated non-mountainous. Regulations governing operations below 500' AGL must be complied with. Aircrews must be aware of charted airports within or near the route corridor limits. Avoid flight within 1500' vertical or 3NM horizontal of these airports when practical.

ROUTE WIDTH - 4NM left/4NM right of centerline from Pt A to PT D; 3NM left/4NM right of centerline Pt D to Pt E; 4NM left/4NM right of centerline Pt E to Pt G; 6NM left/4NM right of centerline from Pt G to Pt J. Points J-M corridor widths must remain within the confines of the Bison MOA. Smoky Hill Racetrack: circular track encompassing all airspace inside an area bounded by 3NM right of centerline from AC to AF, within the confines of Smokey MOA and R-3601A from AF to AH, 2NM right of centerline from AH to AC.

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 170 MSL to or as assigned A LBL 056/40 N37°18.00' W100°12.00'
170 MSL to (START TA/TFR) B LBL 049/42 N37°23.50' W100°13.00'
10 AGL B 170 MSL to C DDC 216/17 N37°38.50' W100°15.50'
10 AGL B 170 MSL to D DDC 248/13 N37°48.00' W100°16.00'
10 AGL B 170 MSL to E GCK 038/23 N38°10.00' W100°21.50'
10 AGL B 40 MSL to F GCK 032/30 N38°17.00' W100°21.50'
05 AGL B 40 MSL to G GCK 033/54 N38°34.00' W99°55.50'
05 AGL B 40 MSL to ALTERNATE ENTRY H GCK 037/61 N38°36.00' W99°45.50'
05 AGL B 40 MSL to J HYS 148/19 N38°33.50' W99°07.80'
05 AGL B 40 MSL to Contact KC Center 322.4 thence via published route.
10 AGL B 40 MSL to (RACETRACK ENTRY) AA SLN 223/38 N38°31.00' W99°11.50'
05 AGL B FL180 to AB SLN 209/17 N38°30.00' W97°53.50'
SFC B FL180 to AC SLN 215/14 N38°45.00' W97°49.50'
10 AGL B FL180 to AD SLN 228/12 N38°48.50' W97°50.50'
32 MSL B FL180 to AE SLN 251/22 N38°51.00' W98°04.50'
32 MSL B FL180 to AF SLN 247/25 N38°48.30' W98°08.50'
32 MSL B FL180 to AG SLN 237/29 N38°42.50' W98°11.00'
10 AGL B FL180 to AH SLN 221/36 N38°31.00' W98°11.50'
10 AGL B FL180 to AI SLN 206/36 N38°25.40' W98°02.00'
10 AGL B FL180 to AA1 SLN 200/28 N38°30.00' W97°53.50'
05 AGL B FL180 to Contact KC Center 363.2 AB1 SLN 209/17 N38°34.00' W97°50.50'
150 MSL to Alternate Entry: H GCK 037/61 N38°36.00' W99°45.50'
05 AGL B 150 MSL to I1 GCK 047/75 N38°34.25' W99°22.50'
05 AGL B 40 MSL to Contact KC Center 322.4 thence via published route.
10 AGL B 40 MSL to (ENTER SMOKY MOA) M SLN 223/38 N38°31.00' W98°14.50'
10 AGL B 40 MSL to (RACETRACK ENTRY) AA SLN 223/38 N38°30.00' W97°53.50'
05 AGL B FL180 to AB SLN 209/17 N38°42.00' W97°50.50'
SFC B FL180 to AC SLN 215/14 N38°45.00' W97°49.50'
10 AGL B FL180 to AD SLN 228/12 N38°48.50' W97°50.50'
32 MSL B FL180 to AE SLN 251/22 N38°51.00' W98°04.50'
32 MSL B FL180 to AF SLN 247/25 N38°48.30' W98°08.50'
32 MSL B FL180 to AG SLN 237/29 N38°42.50' W98°11.00'
10 AGL B FL180 to AH SLN 221/36 N38°31.00' W98°11.50'
10 AGL B FL180 to AI SLN 206/36 N38°25.40' W98°02.00'
10 AGL B FL180 to AA1 SLN 200/28 N38°30.00' W97°53.50'
05 AGL B FL180 to Contact KC Center 363.2 AB1 SLN 209/17 N38°34.00' W97°50.50'
150 MSL to Alternate Entry: H GCK 037/61 N38°36.00' W99°45.50'
05 AGL B 150 MSL to I1 GCK 047/75 N38°34.25' W99°22.50'
05 AGL B 40 MSL to Contact KC Center 322.4 thence via published route.
**Ir Routes**

**Special Operating Procedures:**

1. Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
2. Centerline between turn points is depicted as a 7.5NM Arc.
3. B-1/B-2 aircraft can make an auto TF descent beginning at Point B.
4. Aircrews should file the route number, entry time and exit time in the remarks section of the flight plan IAW FLIP AP/1B Chapter 1. This is particularly important for aircraft delaying in the Smoky Hill Racetrack (E.G. IR5131617X1815).
5. ARTCC low altitude frequencies are: 269.4 Pt A to Pt J; 322.4 Pt J to Pt M; 363.2 Pt M to Pt AI. Smoky Hill Range is 319.9 or 309.9 while in the Smoky MOA.
6. Aircrews should be aware of the following towers located adjacent to the route corridor: 2884 MSL(436'AGL) tower at N38-43.617 W099-53.00 between Pt G and H; 2416 MSL(496'AGL) tower at N38-30.10 W099-10.55 adjacent to Pt J; 2978 MSL(803'AGL) tower at N38-37.067 W098-56.55 left of corridor 3.2NM NE of Pt K; 2234 MSL(496'AGL) towers at N38-21.7 W098-09.33 right of corridor 6.4NM SW of Pt AI. Maintaining aircraft position within the established route widths must be particularly emphasized when flying below IFR altitudes in these areas.
7. Route is to be flown only when the user has a scheduled range period at Bison MOA, Smoky MOA and R-3601 A. Contact R-3601/Smoky MOA/Bison MOA scheduling DSN 743-7600 ext 147 for a confirmed range time prior to scheduling IR-513.
8. Alternate Exit at Point K requires receipt of clearance for operation in Bison MOA prior to MTR entry. Aircrews should plan to exit at or above 1000' AGL to ensure they are within the confines of the MOA and to ensure vertical clearance from towers located left and right of route corridor including multiple towers 2798 MSL(803'AGL) located 3NM NE of Pt K at N38-37.067 W098-56.55 and multiple towers 2884 MSL(1006 AGL) 14NM SE of Pt K at N38-25.9 W098-46.317.
9. Aircrews utilizing alternate Entry H shall schedule and file IR-513H.
10. Lost communications altitude after Point AB is 120 MSL. SQUAWK 7600.
11. Aircrews will contact Smoky Hill on 316.9 primary or 309.9 secondary prior to entering the R-3601 A/B. (If unable to establish contact, crews will circumnavigate R-3601A to the West, remaining within the Smoky MOA and contact Kansas City Center on 363.2 for further clearance).
12. Crews should be aware of moderate civilian/military traffic in the vicinity of the Salina Municipal Airport and Class D airspace located Northeast of R-3601A.
13. Re-Entry Racetrack filing procedures: To utilize the Racetrack file the route entry fix, route-designator (IR-513) followed immediately by a plus sign, the letter ‘R’ and a digit indicating the number of re-entries, then the route exit fix; (E.G.; IR513+R25LN209017).
14. Re-Entry Racetrack Flight Procedures: Once established in the IR-513 Re-Entry Racetrack there is no inside corridor. A proper number of racetrack re-entries must be scheduled to encompass your entire scheduled range delay. Bison MOA, Smoky MOA, and R-3601A must also be scheduled for the entire duration of the delay. Crews must ensure that their scheduled/ filed IR-513 exit timing is met to ensure separation from subsequent route users.
15. Separation between successive missions requires aircrews to maintain scheduled timing plus or minus 2.5 minutes at each route point.

### Altitude Data

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>LBF 016/25</td>
<td>N41°25.00’ W100°30.00’</td>
</tr>
<tr>
<td>B</td>
<td>LBF 335/25</td>
<td>N41°27.00’ W100°53.00’</td>
</tr>
<tr>
<td>C</td>
<td>LBF 309/45</td>
<td>N41°37.00’ W101°23.00’</td>
</tr>
<tr>
<td>D</td>
<td>LBF 328/78</td>
<td>N42°15.00’ W101°23.00’</td>
</tr>
<tr>
<td>E</td>
<td>PHP 158/72</td>
<td>N42°53.00’ W101°23.00’</td>
</tr>
<tr>
<td>F</td>
<td>PHP 154/52</td>
<td>N43°13.00’ W101°23.00’</td>
</tr>
<tr>
<td>G</td>
<td>PHP 154/41</td>
<td>N43°24.00’ W101°26.50’</td>
</tr>
<tr>
<td>H</td>
<td>PHP 154/17</td>
<td>N43°47.00’ W101°34.00’</td>
</tr>
</tbody>
</table>

For crews exiting the route at alternate exit ‘AB1’ file the route entry, route-designator (IR-513), Point ‘AB1’ Radial/DME and then include the amount of delay planned in Smoky Hill MOA/R-3601 as a remark. If planning to depart the range IFR, file a separate IFR Flight Plan from R-3601 to your destination. Contact Kansas City Center on 363.2 and remain within the Smoky Hill MOA/R-3601 until further IFR clearance is received or proceed VFR.

The following are identified route noise sensitive areas. Refer to the Smoky Hill Range Guide for avoidance criteria.

(a) Ellsworth (town) N38-43.9 W98-13.5;
(b) Falun (town) N38-40.1 W97-45.5;
(c) Geneseo (town) N38-31.0 W98-09.4;
(d) Kanapolis (town) N38-42.6 W98-09.2;
(e) Marquette (town) N38-33.3 W97-49.9;
(f) Kanapolis Dam North N38-37.6 W97-58.2;
(g) Kanapolis Dam South N38-36.4 W97-57.9;
(h) Farm House N38-41.0 W97-53.4;
(i) Farm House N38-48.0 W97-47.5;
(j) Feed lot N38-37.7 W97-48.5.

**FSS Within 100 NM Radius:**

**ICT**

**IR-514**

**Originating Activity:** 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/46, C60S-988-5745/5746.

**Scheduling Activity:** Same as Originating Activity

**Hours of Operation:** Daylight hours, Tue-Sat, OT by NOTAM

**Route Description:**

**Altitude Data**

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/ Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>LBF 016/25</td>
<td>N41°25.00’ W100°30.00’</td>
</tr>
<tr>
<td>B</td>
<td>LBF 335/25</td>
<td>N41°27.00’ W100°53.00’</td>
</tr>
<tr>
<td>C</td>
<td>LBF 309/45</td>
<td>N41°37.00’ W101°23.00’</td>
</tr>
<tr>
<td>D</td>
<td>LBF 328/78</td>
<td>N42°15.00’ W101°23.00’</td>
</tr>
<tr>
<td>E</td>
<td>PHP 158/72</td>
<td>N42°53.00’ W101°23.00’</td>
</tr>
<tr>
<td>F</td>
<td>PHP 154/52</td>
<td>N43°13.00’ W101°23.00’</td>
</tr>
<tr>
<td>G</td>
<td>PHP 154/41</td>
<td>N43°24.00’ W101°26.50’</td>
</tr>
<tr>
<td>H</td>
<td>PHP 154/17</td>
<td>N43°47.00’ W101°34.00’</td>
</tr>
</tbody>
</table>
TERRAIN FOLLOWING OPERATIONS: Authorized from B to H.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 15 NM right and 4 NM left of centerline from B to C; 13 NM right and 16 NM left of centerline from C to D; 25 NM right and 16 NM left of centerline from D to E; 25 NM right and 10 NM left of centerline from E to G; 6 NM right and 12 NM left of centerline from G to H; 8 NM either side of centerline from H to I; 4 NM either side of centerline from I to J.

Special Operating Procedures:
(1) Route designed for tactical low level formation, road, reconnaissance, radar low level navigation, ground attack tactics, and aerial defense tactics.
(2) IR-514 is opposite direction traffic of IR-613. 114 FW will not schedule opposite direction and conflicting traffic at the same time.
(3) Route is opposite direction of IR-500 from B to D.
(4) Route is surveyed to 500’ AGL with sections to 100’ AGL. These altitudes will not guarantee obstacle clearance throughout the route. Give special attention to 1029’ AGL tower at N42°40.75 W101°42.75.
(5) Aircraft exiting at Point G to operate in the Lake Andes MOA should get clearance from ATC prior to entering the route.
(6) Alternate Exit Points are F and G.
(7) Alternate Entry Point is C (may be used in conjunction with ONL MOA).
(8) Maintain a minimum of 1500’ AGL from Point H to J. Remain at least 1.5 NM from either side of a line from N41°46.0 W98°40.0 to N41°46.0 W98°40.0.
(9) Maintain a minimum of 1500’ AGL from Point H to J. Remain at least 1.5 NM from either side of a line from N41°58.0 W98°53.0 to N41°46.0 W98°40.0.
(10) Avoid the following noise sensitive areas by a minimum of 1500’ AGL or 3 NM of the Rock County Airport.
(11) Avoid flight within 1500’ AGL or 3 NM of the Rock County Airport.
(12) Uncharted towers at N42°00.0 W98°00.0, N42°00.0 W98°00.0, N42°52.0 W98°41.0, N42°32.1 W99°40.1 and N41°48.3 W98°58.0.
(13) Avoid Bald Eagle Nesting Area at Karl Mundt National Wildlife Refuge N43°00.9 W98°31.6 by 1 NM or 1500’ AGL.
(14) Avoid Bird Nesting Areas by 1500’ or 1 NM March through October: N42°47.0 W99°22.6, N42°43.3 W99°35.7.

FSS Within 100 NM Radius: HON, OLU

IR-518

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7745, C605-988-5745.

SCHEDULING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7745/7746, C605-988-5754/5746.

HOURS OF OPERATION: Daylight hours, Mon-Sat, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to</td>
<td>A</td>
<td>OBH VORTAC</td>
<td>N41°22.54’ W98°21.22’</td>
</tr>
<tr>
<td>100 MSL to</td>
<td>B</td>
<td>OBH 310/24</td>
<td>N41°40.00’ W98°43.00’</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to</td>
<td>C</td>
<td>OBH 318/45</td>
<td>N41°59.00’ W98°56.00’</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to</td>
<td>D</td>
<td>ONL 217/29</td>
<td>N42°08.00’ W99°10.00’</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to</td>
<td>E</td>
<td>ONL 242/63</td>
<td>N42°08.00’ W100°01.00’</td>
</tr>
<tr>
<td>01 AGL B 55 MSL to</td>
<td>F</td>
<td>ONL 283/38</td>
<td>N42°43.00’ W99°29.00’</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>G</td>
<td>ONL 352/32</td>
<td>N43°00.00’ W98°40.00’</td>
</tr>
<tr>
<td>01 AGL B 45 MSL to</td>
<td>H</td>
<td>ONL 069/32</td>
<td>N42°34.00’ W97°59.00’</td>
</tr>
<tr>
<td>100 MSL to</td>
<td>I</td>
<td>ONL 070/40</td>
<td>N42°35.00’ W97°48.00’</td>
</tr>
<tr>
<td>100 MSL to</td>
<td>J</td>
<td>ONL 070/52</td>
<td>N42°37.00’ W97°32.00’</td>
</tr>
</tbody>
</table>

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 100 MSL to A OBH VORTAC N41°22.54’ W98°21.22’
100 MSL to B OBH 310/24 N41°40.00’ W98°43.00’
01 AGL B 45 MSL to C OBH 318/45 N41°59.00’ W98°56.00’
01 AGL B 45 MSL to D ONL 217/29 N42°08.00’ W99°10.00’
01 AGL B 45 MSL to E ONL 242/63 N42°08.00’ W100°01.00’
01 AGL B 55 MSL to F ONL 283/38 N42°43.00’ W99°29.00’
01 AGL B 50 MSL to G ONL 352/32 N43°00.00’ W98°40.00’
01 AGL B 45 MSL to H ONL 069/32 N42°34.00’ W97°59.00’
100 MSL to I ONL 070/40 N42°35.00’ W97°48.00’
100 MSL to J ONL 070/52 N42°37.00’ W97°32.00’
IR ROUTES

IR-526

ORIGINATING ACTIVITY: DET 1, 184 IW, Smoky Hill ANG Range, 8429 W Farrelly Rd, Salina, KS 67401-9407. Phone: C785-827-9611 ext 147, DSN 743-7600 ext 147.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized within published altitude blocks from Point C to Point O, from Point S to U, within Smoky Hill Racetrack from Points AG to AC. When command directives preclude TF/TA operation aircrews will maintain the IFR altitude for each route segment. The minimum IFR altitude for Smoky Hill Racetrack is 3200 MSL. Minimum altitudes are established to provide a minimum of 100' vertical clearance of known man made obstacles. Aircrews are advised that route altitudes provide no buffer outside the route limits. Obstructions below 200' AGL were not considered in route design. Command directives may require additional clearance for TF/TA/VMC operations. The entire route is designated non-mountainous. Regulations governing operations below 500' AGL must be complied with. Aircrews must be aware of charted airports within or near the route corridor limits. Avoid flight within 1500' vertical or 3NM horizontal of these airports when practical.

ROUTE WIDTH - 4NM left/3NM right of centerline from Pt A to Pt B; 4NM left/2NM right of centerline Pt B to Pt E; 4NM left/4NM right of centerline PT E to PT K; 3NM left/6NM right of centerline from Pt K to Pt O; 2NM left/2NM right of centerline from Pt O to Pt S. Points S-U corridor widths must remain within the confines of the Bison and Smoky MOAs. Smoky Hill Racetrack: Circular track encompassing all airspace inside an area bounded by 3NM right of centerline from AC to AF, within the confines of Smoky MOA and R-3601A from AF to AH, 2NM right of centerline from AH to AC.

Special Operating Procedures:

1. Participating aircraft separation: route is designated for MARSA operations established by coordinated scheduling.
2. Centerline between turn points is depicted as a 7.5NM arc.
(3) B-1/B-2 aircraft can make an auto TF descent beginning at Point C.
(4) Do not fly below 800’ AGL from 1 Mar through 30 Sep between Points A through F due to heavy crop dusting activity.

(5) Aircrews should file the route number, entry time and exit time in the remarks section of the flight plan IAW FLIP AP/1B Chapter 1. This is particularly important for aircraft delaying in the Smoky Hill Racetrack (E.G. ES261617X1815).

(6) ARTCC low altitude frequencies are: 269.4 Pt A to Pt H, 344.8 Pt H to K. Smoky Hill Range is 316.9 or 309.9 while in the Smoky MOA.

(7) Aircrews are cautioned about the following towers located adjacent to the route corridor. 3381 MSL (496 AGL) tower at N37-19.75 W100-54.333 right of corridor between Pt C and Pt D; 2744 MSL (999 AGL) tower at N37-55.833 W098-19.067 right corridor between Pt O and Pt P; 2240 MSL (496 AGL) tower at N38-27.033 W098-23.400 within corridor. Maintaining aircraft position within the established route widths/altitudes must be particularly emphasized when flying below IFR altitudes in these areas.

(8) Route is to be flown only when the user has a scheduled range period at Bison MOA, Smoky MOA and R-3601 A. Contact R3601/Smoky MOA/Bison MOA scheduling DSN 743-7600 ext 147 for confirmed range time prior to range period at Bison MOA, Smoky MOA and R-3601 A.

(9) Alternate Exit at Pt T required receipt of clearance for operation in Bison MOA prior to MTR entry. Aircrews should plan to exit at or above 1000’ AGL to ensure they are within the confines of the MOA.

(10) Aircrews utilizing Alternate Entry G shall schedule and file IR-526G.

(11) Lost communications altitude after Point AB is 120 MSL. Squawk 7600.

(12) Aircrews will contact Smoky Hill on 316.9 Primary or 309.9 secondary prior to entering the R-3601 A. (If unable to establish contact, crews will circumnavigate R-3601 A to the west, remaining within the Smoky MOA and contact Kansas City Center on 363.2 for further clearance).

(13) Crews should be aware of moderate civilian/military traffic in the vicinity of the Salina Municipal Airport and Class D airspace located Northeast of R-3601 A.

(14) Re-Entry Racetrack filing procedures: To utilize the Racetrack file the route Entry fix, route designator (IR-526) followed immediately by a plus sign, the letter ‘R’ and a digit indicating the number of re-entries, then the route Exit fix; E.G. IR526+R2 SLN209017.

(15) Aircrews will contact Wichita Approach on 306.2 when passing Pt L and again when passing Pt P.

(16) Re-entry Racetrack flight procedures: Once established in the re-entry Racetrack there is no inside corridor. A proper number of Racetrack Re-entries must be scheduled to encompass your entire scheduled Range delay. Bison MOA, Smoky MOA and R-3601 A/B must also be scheduled for the entire duration of the delay. Crews must ensure that their scheduled/filled IR-526 exit timing is met to ensure separation from subsequent route users.

(17) Separation between successive missions requires aircrews to maintain scheduled timing plus or minus 2.5 minutes at each route point.

(18) For crews exiting the route at Primary Exit AB1, file the route entry, route designator (IR-526), Point ‘AB1’ radial/DME and then include the amount of delay planned in Smoky MOA/R-3601 as a remark. If planning to depart the range IFR, file a separate IFR flight plan from R-3601 to your destination. Contact Kansas City Center on 363.2 and remain within the Smoky MOA/R-3601 until further IFR clearance is received or proceed VFR.

(19) The following are identified route noise sensitive areas. Refer to the Smoky Hill Range Guide for avoidance criteria.
(a) Ellsworth (town) N38-43.9 W98-13.5;
(b) Falun (town) N38-40.1 W97-45.5;
(c) Geneseo (town) N38-31.0 W98-09.4;
(d) Kanapolis (town) N38-42.6 W98-09.2;
(e) Marquette (town) N38-33.3 W97-49.9;
(f) Kanapolis Dam North N38-37.6 W97-58.2;
(g) Kanapolis Dam South N38-36.4 W97-57.9;
(h) Farm House N38-41.0 W97-53.4;
(i) Farm House N38-48.0 W97-47.5;
(j) Feed Lot N38-37.7 W97-48.5

FSS Within 100 NM Radius: ICT

IR-592


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data: Pt Fac/Rad/ Dist Lat/Long

<table>
<thead>
<tr>
<th>Route</th>
<th>Pt</th>
<th>Fac/Rad/ Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to BA</td>
<td>FAM 230/16</td>
<td>N37°30.00' W90°30.00'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 30 MSL to B</td>
<td>FAM 205/38</td>
<td>N37°06.50' W90°35.00'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 25 MSL to C</td>
<td>FAM 210/62</td>
<td>N36°47.00' W90°53.50'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 20 MSL to D</td>
<td>FAM 210/64</td>
<td>N36°45.00' W90°55.00'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 20 MSL to E</td>
<td>ARG 316/17</td>
<td>N36°19.50' W91°10.50'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 20 MSL to F</td>
<td>ARG 308/16</td>
<td>N36°17.50' W91°12.00'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 20 MSL to G</td>
<td>ARG 261/23</td>
<td>N36°04.50' W91°25.50'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 20 MSL to H</td>
<td>ARG 257/31</td>
<td>N36°01.50' W91°35.50'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 25 MSL to I</td>
<td>RZC 090/99</td>
<td>N36°06.00' W92°05.00'</td>
<td></td>
</tr>
<tr>
<td>07 AGL B 30 MSL to J</td>
<td>RZC 093/92</td>
<td>N36°02.50' W92°15.00'</td>
<td></td>
</tr>
<tr>
<td>06 AGL B 40 MSL to K</td>
<td>LIT 335/59</td>
<td>N35°36.50' W92°35.50'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to L</td>
<td>LIT 325/69</td>
<td>N35°40.50' W92°53.50'</td>
<td></td>
</tr>
</tbody>
</table>
IR ROUTES

05 AGL B 40 MSL to descend within
05 AGL B 40 MSL to N RZC 091/62
05 AGL B 30 MSL to (Report passing O to Memphis Center on 281.55)
06 AGL B 30 MSL to P ARG 290/90
06 AGL B 30 MSL to Q ARG 297/78
06 AGL B 30 MSL to R ARG 297/70
06 AGL B 30 MSL to S ARG 295/63
06 AGL B 30 MSL to T ARG 297/55
06 AGL B 30 MSL to U ARG 323/38
06 AGL B 30 MSL to V ARG 333/42
06 AGL B 30 MSL to W ARG 340/52
climb within
06 AGL B 40 MSL to X MAP 137/40
06 AGL B 40 MSL to Y MAP 140/34
30 MSL B 40 MSL to Z MAP 154/17
(Report passing O to Memphis Center on 281.55)
04 AGL B 40 MSL to AA MAP 194/11
04 AGL B 40 MSL to or as assigned AB MAP 222/16
04 AGL B 40 MSL to or as assigned AC DGD 058/37
90 MSL to or as assigned HD ARG 257/31
07 AGL B 30 MSL to I1 RZC 090/99
07 AGL B 30 MSL to J1 RZC 093/92
Thence via published route.
RE-ENTRY
06 AGL B 30 MSL to T1 ARG 297/55
06 AGL B 20 MSL to TA ARG 319/39
01 AGL B 20 MSL to TB ARG 330/30
06 AGL B 20 MSL to E1 ARG 316/17
Thence via published route.
Alternate Exit: Q
05 AGL B 40 MSL to N1 RZC 091/62
05 AGL B 30 MSL to NA RZC 072/64

03 AGL B 50 MSL to continue climb within
(Report passing OA to Memphis Center on 281.55)
05 MSL to P1 ARG 290/90
50 MSL to Q1 ARG 297/78
or as assigned.

TERRAIN FOLLOWING OPERATIONS: Terrain following IAW command directives. Published minimum altitudes may not guarantee terrain following obstruction clearances.

ROUTE WIDTH - 3 NM left and 1 NM right of centerline from A to B; 3 NM either side of centerline from B to D; 4 NM either side of centerline from D to N; 4 NM left and 3 NM right of centerline from N to Q; 3 NM either side of centerline from Q to T; 3 NM left and 4 NM right of centerline from T to W; 4 NM either side of centerline from W to Y; 4 NM either side of centerline from Y to AA; 4 NM left and 3 NM right of centerline from AA to AC; RE-ENTRY T - 3 NM left and 4 NM of centerline from T1 to TA; 3 NM either side of centerline from TB to EI; ALTERNATE EXIT Q - remain within established N to Q route corridor as DEFINED above.

Special Operating Procedures:
(1) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
(2) MARSA applies after aircraft enter route until standard separation is provided after exiting route.
(3) MARSA applies between IR-174, IR-592, and IR-120.
(4) Lost communications (LC) procedures: Route LC altitude is 4000' MSL at exit point AC and 5000' MSL at alternate exit point Q1.
(5) Aircrews should be on the alert for C-130's on numerous SR routes. SR routes cross IR-592 between points D to I and J to M. Aircrews may contact Little Rock Air Force Base DSN 731-7013, C501-987-7013 for active schedule SR routes.
(6) Point H is designated as an alternate entry.
(7) CAUTION: Lookout tower N36-05.0 W92-09.6.
(8) Aircrews utilizing Alternate Exit Q1 must file after point Q1 direct ARG 273/40 (WASUD) then requested route.
(9) Caution VR-1182 crossing traffic vicinity Points M to N and I to J.
(10) Caution VR-1102 and IR-120 entry Points 8 NM SW Point L.
(11) Concurrent scheduling with IR-174 not allowed without prior coordination between users.
(12) Exit frequency at the alternate exit (point Q1) in Memphis Center on 281.55.

FSS Within 100 NM Radius:
COU, JBR

IR-605

ORIGINATING ACTIVITY: 148 FW (ANG), Duluth Intl., MN 55811 DSN 825-7370.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daily 1400-0500Z++, available OT
ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 40 MSL to A GPZ 311/47 N47°44.00' W94°16.02'
02 AGL B 40 MSL to B GPZ 315/43 N47°43.30' W94°10.02'
02 AGL B 40 MSL to C GPZ 339/31 N47°40.00' W93°41.02'
02 AGL B 40 MSL to D HIB 018/26 N47°39.00' W92°06.02'
60 MSL to E HIB 047/32 N47°35.00' W91°45.02'
60 MSL to F HIB 064/42 N47°35.00' W92°06.02'
60 MSL to G DLH 014/19 N47°06.00' W92°03.02'

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D.

ROUTE WIDTH - 5 NM either side of centerline from A to D;
4 NM either side of centerline from D to G.

Special Operating Procedures:
(1) Contact 148 FIG Mon through Sun for scheduling and deconflict with IR-606.
(2) Route designed for tactical low level formation, visual/radar low level NAV/RECON, ground attack tactics, and low altitude air-to-air training.
(3) Segment B to D designated a maneuver area. Low altitude air-to-air training will only be accomplished within the maneuver area.
(4) Participating aircraft shall operate MARSA throughout entire route.
(5) All aircraft contact Duluth APP CON at Pt E on 285.6.
(6) Alternate Exit: Pt F.

FSS Within 100 NM Radius:
GFK, PNM

IR-606

ORIGINATING ACTIVITY: 148 FW (ANG), Duluth Intl., MN 55811 DSN 825-7370.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daily 1400-0500Z++, available OT

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 60 MSL to A DLH 014/19 N47°06.00' W92°03.02'
60 MSL to B HIB 064/42 N47°35.00' W91°45.02'
60 MSL to C HIB 047/32 N47°39.00' W92°06.02'
05 AGL B 60 MSL to D HIB 018/26 N47°43.00' W92°29.02'

ROUTE WIDTH - 10 NM either side of centerline.
Special Operating Procedures:
(1) Scheduling Activity operating hours: 1200-2200Z++
    Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++
    on Mon, call prior to 2200Z++ on previous.
(2) Aircrews shall advise ATC control personnel when beginning
    and ending radar navigation training and whenever a turn in
    excess of 20 degrees is required within the route width.
(3) Scheduling activity shall schedule the use of the IR-MTR to
    preclude ATC conflictions at common points and/or
    common route segments other IR-MTR’s of the origination
    activity.
(4) Conflicts: (De-conflict with the appropriate Scheduling
    Activity)
    (a) Opposite direction to IR-080 from Points G to H.
    (b) Opposite direction to IR-081 from Points G to H.
    (c) Same direction as IR-723 from Points F to G.

FSS Within 100 NM Radius:
AND, AOO, BNA, CLE, DAY, DCA, EKN, RDU

IR-609

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr.,
Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr.,

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 170 MSL to or assigned descend direct to cross</td>
<td>A</td>
<td>GRB 031/44</td>
<td>N45°10.80' W87°38.00'</td>
</tr>
<tr>
<td>140 MSL to</td>
<td>B</td>
<td>GRB 010/37</td>
<td>N45°10.00' W88°02.00'</td>
</tr>
<tr>
<td>140 MSL to turn right and descend to</td>
<td>C</td>
<td>GRB 351/36</td>
<td>N45°09.00' W88°19.00'</td>
</tr>
<tr>
<td>90 MSL B 140 MSL to continue descent to cross</td>
<td>D</td>
<td>IMT 202/40</td>
<td>N45°11.00' W88°26.00'</td>
</tr>
<tr>
<td>90 MSL to continue descent to</td>
<td>E</td>
<td>IMT 210/38</td>
<td>N45°15.00' W88°32.00'</td>
</tr>
<tr>
<td>38 MSL B 90 MSL to turn right and continue descent to cross</td>
<td>F</td>
<td>IMT 230/37</td>
<td>N45°24.00' W88°46.00'</td>
</tr>
<tr>
<td>38 MSL to (TA/TFR Initiation Point) direct to</td>
<td>G</td>
<td>IMT 239/35</td>
<td>N45°30.00' W88°48.50'</td>
</tr>
<tr>
<td>04 AGL B 38 MSL to turn left to</td>
<td>H</td>
<td>IMT 292/27</td>
<td>N45°58.00' W88°43.00'</td>
</tr>
<tr>
<td>04 AGL B 38 MSL to direct to</td>
<td>I</td>
<td>IMT 296/27</td>
<td>N46°00.00' W88°42.50'</td>
</tr>
<tr>
<td>04.5 AGL B 38 MSL to (Point JULIETT) direct to</td>
<td>J</td>
<td>IMT 307/32</td>
<td>N46°07.00' W88°44.00'</td>
</tr>
<tr>
<td>04.5 AGL B 38 MSL to turn right to</td>
<td>K</td>
<td>CMX 194/55</td>
<td>N46°16.50' W88°46.00'</td>
</tr>
<tr>
<td>05 AGL B 38 MSL to direct to</td>
<td>LL</td>
<td>CMX 194/59</td>
<td>N46°17.00' W88°46.00'</td>
</tr>
<tr>
<td>07 AGL B 38 MSL to turn right to</td>
<td>L</td>
<td>CMX 174/29</td>
<td>N46°42.00' W88°23.00'</td>
</tr>
<tr>
<td>07 AGL B 38 MSL to direct to</td>
<td>M</td>
<td>CMX 151/26</td>
<td>N46°48.00' W88°10.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>N</td>
<td>CMX 126/29</td>
<td>N46°54.00' W87°54.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>O</td>
<td>CMX 098/47</td>
<td>N47°05.00' W87°20.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>P</td>
<td>CMX 096/51</td>
<td>N47°06.00' W87°14.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to turn right to</td>
<td>Q</td>
<td>CMX 098/67</td>
<td>N47°02.00' W86°52.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>R</td>
<td>CMX 105/74</td>
<td>N46°53.00' W86°44.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to climb and turn left to</td>
<td>S</td>
<td>ESC 012/55</td>
<td>N46°37.00' W86°49.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>T</td>
<td>ESC 012/52</td>
<td>N46°34.00' W86°49.50'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to turn left and descend to</td>
<td>U</td>
<td>ESC 028/26</td>
<td>N46°06.50' W86°48.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>V</td>
<td>ESC 039/23</td>
<td>N46°01.00' W86°45.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to turn right to</td>
<td>W</td>
<td>ESC 074/26</td>
<td>N45°50.50' W86°30.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>X</td>
<td>ESC 088/27</td>
<td>N45°44.00' W86°27.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to turn right and descend to</td>
<td>Y</td>
<td>ESC 130/30</td>
<td>N45°24.00' W86°33.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>Z</td>
<td>TVC 266/66</td>
<td>N44°32.00' W87°05.00'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to turn left to</td>
<td>AA</td>
<td>TVC 258/54</td>
<td>N44°26.50' W86°45.50'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>AB</td>
<td>ESC 125/45</td>
<td>N45°17.50' W86°13.50'</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to (TA/TFR Termination) turn left and climb to</td>
<td>AC</td>
<td>ESC 121/44</td>
<td>N45°20.83' W86°12.00'</td>
</tr>
<tr>
<td>23 MSL B 170 MSL to continue climb and turn right to cross</td>
<td>AD</td>
<td>ESC 094/38</td>
<td>N45°40.50' W86°11.50'</td>
</tr>
<tr>
<td>80 MSL B 170 MSL to continue climb and turn right to cross</td>
<td>AE</td>
<td>ESC 084/42</td>
<td>N45°47.50' W86°05.00'</td>
</tr>
<tr>
<td>at or above 80 MSL</td>
<td>AF</td>
<td>PLN 292/53</td>
<td>N45°52.50' W85°53.00'</td>
</tr>
<tr>
<td>110 MSL B 170 MSL to continue climb and turn right to</td>
<td>AG</td>
<td>PLN 294/47</td>
<td>N45°52.50' W85°44.00'</td>
</tr>
</tbody>
</table>

2-142
170 MSL to AH PLN 294/37 N45°49.00' W85°30.00'
Re-Entry: direct to
02 AGL B 23 MSL to turn left to Z1 TVC 266/66 N44°32.00' W87°05.00'
02 AGL B 23 MSL to direct to AI TVC 258/54 N44°26.50' W86°45.50'
02 AGL B 23 MSL to turn left to AJ ESC 125/45 N45°17.50' W86°13.50'
02 AGL B 23 MSL to Alternate Exit: direct to Y1 ESC 130/30 N45°24.00' W86°33.00'
02 AGL B 23 MSL to turn left to 23 MSL B 70 MSL to (TA/TF Termination Point)
02 AGL B 23 MSL to direct to 23 MSL B 70 MSL to (TA/TF Termination Point)
Contact Minneapolis ARTCC 385.45
23 MSL B 70 MSL climb direct to cross
70 MSL to AV ESC 090/46 N45°43.00' W86°00.00'
70 MSL B 130 MSL continue climb direct to cross
130 MSL to AW PLN 279/46 N45°49.00' W85°46.00'
or as assigned Alternate Entry: Cross
38 MSL to O1 CMX 098/47 N47°05.00' W87°20.00'
Thence via published route.

PMSV CONTACTS: Primary Home Station. Alternates Minot (MB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR
Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW command directives within published altitude blocks from G to AB, and Z1 to Y1 (re-entry), and from W1 to AU (alternate exit). When command directives preclude TF/VC operations, aircrews will maintain IFR altitudes for each TF route segment. Minimum altitudes above 200' AGL are established to provide at least 100' vertical clearance of known manmade obstructions within the route width. Obstructions under 200' AGL were not considered in the route design. The entire route is designated non-mountainous. Regulations governing operations below 600' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to KK; 3 NM left and 4 NM right of centerline from KK to II; 4 NM either side of centerline from II to M; 3 NM left and 4 NM right of centerline from M to N; 4 NM either side of centerline from N to U; 3 NM left and 4 NM right of centerline from U to X; 4 NM either side of centerline from X to AH; 4 NM either side of centerline from WI to AW.

Special Operating Procedures:
(1) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
(2) Route Lost Communications (LC) altitude is FL 200.
(3) Aircraft will monitor 379.1 from J to M.
(4) Due to an environmentally sensitive area in the vicinity of N46-54.0 W87-53.5, aircrews conducting terrain following/visual contour operations will maintain level flight passing N46-53.0, W87-56.0. Aircrews will not begin descent back to minimum TA/TFR altitudes until after crossing the Lake Superior shoreline.
(5) All turn radii are depicted as a 7.5 NM arc.
(6) Aircrews will advise Minneapolis ARTCC prior to route entry of number of aircraft and estimate to the exit of Big Bear MOA (Point II); i.e. (Call Sign) flight of (number of aircraft), entering IR-609, estimate Point II at ---- Z. In addition, aircrews with planned delays in Big Bear MOA will file entry IR-609 to IMT 307/32 delay ---- minutes, IR-609 to exit fix.
(7) Aircrews should be aware of large geese populations during Aug thru Nov and also Apr near the lakes at N46-36.0 W88-35.0 and N46-16.0 W86-51.0. Overflight of these lakes should be avoided during these migratory seasons.
(8) Aircrews should be aware of fire detection aircraft that could be encountered along the route of flight. Aircraft VFR and normally at 1000' AGL or higher.
(9) Aircrews will avoid overflight of the lake at N45-54.0 W86-39.0. If in doubt of aircraft location in this area climb to IFR altitude.
(10) Alternate Exit A: Aircrews may expect early climb out instructions from Minneapolis ARTCC if no conflicting traffic is on IR-609/610.
(11) Aircrews utilizing the Alternate Exit on IR-609 with or without a planned delay in the Big Bear MOA will file IR-609A.
(12) Prior to each flight the individual unit must contact the Northeast Air Defense Sector, DSN 587-3700, to insure the Big Bear MOA is scheduled/deconflicted.
(13) Alternate Entry: Pt 01.
(14) Aircrew will monitor Minneapolis ARTCC on 322.5 between Pt B and I,
(15) Uncharted obstructions:
   (a) Tower 690' AGL 1480' MSL (N46-52.62 W88-08.81);
   (b) Tower 630' AGL 1280' MSL (N45-48.16 W86-27.40);
   (c) Tower 260' AGL 1000' MSL (N45-12.82 W87-59.69);
   (d) Tower 210' AGL 1810' MSL (N45-23.90 W88-38.80).
(16) Consult sectional chart data prior to flight to determine proximity of Category C, D, and E airspace.

FSS Within 100 NM Radius:
GRB, LAN

IR-610

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2967, C701-723-2967.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL210 to or as assigned direct to FL210 to FL210 B 100 MSL</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>N46°21.95'</td>
<td>N46°43.00'</td>
<td>N46°31.95'</td>
<td>N46°30.00'</td>
</tr>
<tr>
<td>W79°25.38'</td>
<td>W79°20.00'</td>
<td>W79°26.00'</td>
<td>W79°26.00'</td>
</tr>
</tbody>
</table>

2-143
IR ROUTES

100 MSL to C N47°07.00' W79°14.00' at or above 80 MSL
100 MSL B 60 MSL continue climb and 80 MSL B 170 MSL
turn left and descend turn right to cross and
at or above 110 MSL
continue climb
turn right to cross

60 MSL to D N47°15.00' W79°25.00'
direct to
60 MSL to E YSB 058/47
turn right to
60 MSL to F YSB 054/44
descend direct
to 40 MSL B 60 MSL to G YSB 021/45
direct to
40 MSL to GG YSB 001/54
(TA/TFR Initiation
direct to
Point)
04 AGL B 40 MSL to H YTS 230/50
turn left to
02 AGL B 40 MSL to I YTS 236/54
direct to
02 AGL B 40 MSL to J SSM 037/73
turn right to
02 AGL B 40 MSL to K SSM 035/69
direct to
02 AGL B 40 MSL to LL SSM 357/60
(End TA/TFR Point)
40 MSL to L SSM 342/64
(Turn Start TA/TFR Point)
turn left to
02 AGL B 40 MSL to M SSM 337/65
direct to
02 AGL B 40 MSL to N
turn left and descend
to 02 AGL B 40 MSL to T
02 AGL B 30 MSL to U ESC 028/26
turn left and descend
to 02 AGL B 30 MSL to V ESC 039/23
direct to
02 AGL B 23 MSL to W ESC 074/26
turn right to
02 AGL B 23 MSL to X ESC 088/27
direct to
02 AGL B 23 MSL to Y ESC 130/30
(Start Maneuver Area)
turn left and direct
to 02 AGL B 23 MSL to Z TVC 266/66
(End Maneuver Area)
turn left to
02 AGL B 23 MSL to AA TVC 258/54
direct to
02 AGL B 23 MSL to AB ESC 125/45
(TA/TFR Termination
point)
turn left and climb to
23 MSL B 170 MSL to AC ESC 121/44
direct to cross
23 MSL B 170 MSL to AD ESC 094/38
continue climb and
turn right to cross
23 MSL B 170 MSL

PMSV CONTACTS: Primary Home Station. Alternates Minot
(MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR
Terrain Following (TF)/Visual Contour operations are authorized
IAW command directives within published altitude blocks from
GG to LL and from L to AB. When command directives preclude
TF/ Visual Contour Operations, aircrews will maintain IFR
altitudes for each TF route segment. Minimum altitudes above
200’ AGL are established to provide at least 100’ vertical
 clearance of known manmade obstructions within the route
width. Obstructions under 200’ AGL were not considered in the
route design. The entire route is designated non-mountainous.
Regulations governing operations below 500’ AGL must be
complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to U;
3 NM left and 4 NM right of centerline from U to X; 4 NM either
side of centerline from X to AH. Re-Entry; 4 NM either side of
centerline from AB to Y1; 4 NM either side of centerline from WI
to AW.
Special Operating Procedures:
(1) Participating aircraft separation: Route is designed for MARSA operations established by coordinated scheduling.
(2) Route lost communications altitude is FL 200.
(3) Aircrews will contact North Bay Terminal Control on 233.4 or 236.6 MHZ upon handoff from Toronto Center.
(4) Route centerline is depicted as 7.5 NM arc turns.
(5) Aircrews should be aware of large geese populations during Aug thru Nov and Apr near the lakes at N46-16 W86-51. Avoid overflight of these lakes during the migratory season.
(6) Aircrews will avoid overflight of the lake at N45-54 W86-39. If in doubt of aircraft location in this area, climb to the IFR altitude.
(7) Aircrews will notify Toronto ARTCC upon handoff, of any planned delays in Canadian airspace.
(8) Aircrews will inform Toronto ARTCC of planned exit, Canada time (N47-10-30 W85-32-30) prior to IR-610 entry.
(9) Prior to route entry, aircrews will pass estimates for crossing (W81-30) to North Bay TCU and exit Canada time to Toronto Center.
(10) Upon handoff to Toronto Center, aircrews will advise of any planned delays in Canadian airspace.
(11) Alternate Exit A: Aircrews may expect early climb out instructions from Minneapolis ARTCC if no conflicting traffic is on IR-609/610.

FSS Within 100 NM Radius:
GRB, LAN

IR-613

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/46, C605-988-5745/74.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to or a assigned descend to cross</td>
<td>A</td>
<td>PIR 221/47</td>
<td>N43°55.00' W101°01.00'</td>
</tr>
<tr>
<td>70 MSL to direct to</td>
<td>B</td>
<td>PHP 116/20</td>
<td>N43°51.00' W101°18.00'</td>
</tr>
<tr>
<td>70 MSL to direct to</td>
<td>C</td>
<td>PHP 154/17</td>
<td>N43°47.00' W101°34.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>D</td>
<td>PHP 154/41</td>
<td>N43°24.00' W101°26.50'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>E</td>
<td>PHP 154/52</td>
<td>N43°13.00' W101°23.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>F</td>
<td>PHP 158/72</td>
<td>N42°53.00' W101°23.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>G</td>
<td>LBF 328/78</td>
<td>N42°15.00' W101°23.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>H</td>
<td>LBF 309/45</td>
<td>N41°37.50' W101°23.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to climb direct to cross</td>
<td>I</td>
<td>LBF 335/25</td>
<td>N41°27.00' W100°53.00'</td>
</tr>
<tr>
<td>110 MSL to or as assigned (Contact Denver ARTCC 226.675 after passing I) Alternate Entry to Point C Cross</td>
<td>J</td>
<td>LBF 016/25</td>
<td>N41°25.00' W100°30.00'</td>
</tr>
</tbody>
</table>

IR ROUTES

ROUTE FOLLOWING OPERATIONS: Authorized from C to I.

ROUTE WIDTH - 8 NM either side of centerline from A to C; 12 NM right and 6 NM left of centerline from C to D; 10 NM right and 25 NM left of centerline from D to F; 16 NM right and 25 NM left of centerline from F to G; 16 NM right and 13 NM left of centerline from G to H; 4 NM right and 15 NM left of centerline from H to I; 4 NM either side of centerline from I to J. Alternate Entry: 4 NM either side of centerline from K to L; 12 NM right and 6 NM left of centerline from L to C.

Special Operating Procedures:
(1) Route designed for tactical low level formation, road reconnaissance, radar low level navigation, ground attack tactics and aerial defense tactics.
(2) IR-613 is opposite direction traffic of IR-514. 114 FW will not schedule opposite and conflicting traffic at the same time.
(3) Route is same direction as IR-500 from G to I.
(4) Avoid the following noise sensitive areas by a minimum of 1500' AGL or 1 NM; Racetrack N43-15 W100-15; St.Francis N43-08 W100-55; Ranch N42-26 W101-44.
(5) Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance throughout the route. Give special attention to a 1029' AGL tower at N42-40.75 W101-52.75.
(6) All airports and LaCreek National Wildlife Refuge shall be avoided by 1500' AGL or 3 miles.
(7) Contact Denver ARTCC 226.6 after passing I on route climb out.

FSS Within 100 NM Radius:
HON, OLU

IR-618

ORIGINATING ACTIVITY: JFAC-IN/DET 1, Atterbury ANG Range, Bldg 124, Camp Atterbury, IN 46124 DSN 569-2114, C812-526-1114.

SCHEDULING ACTIVITY: Same as Originating Activity
IR ROUTES

HOURS OF OPERATION: Sunrise-Sunset, Tue-Sun, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A TTH 156/14</td>
<td>N39°16.00′ W87°08.00′</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>B OOM 210/27</td>
<td>N38°45.00′ W86°53.00′</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>C OOM 195/36</td>
<td>N38°33.00′ W86°47.00′</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>D OOM 184/54</td>
<td>N38°15.00′ W86°39.00′</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>E OOM 144/34</td>
<td>N38°42.00′ W86°10.00′</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>F OOM 130/25</td>
<td>N38°53.00′ W86°11.00′</td>
</tr>
<tr>
<td>(Contact Indianapolis ARTCC 269.02)</td>
<td>G SHB 208/36</td>
<td>N39°06.00′ W86°12.00′</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>H SHB 208/26</td>
<td>N39°15.00′ W86°06.00′</td>
</tr>
<tr>
<td>(Enter R-3401 only with range control officer clearance)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Contour flying authorized for entire route in VMC.

ROUTE WIDTH - 3 NM left and 4 NM right of centerline from A to B; 8 NM left and 4 NM right of centerline from B to C; 3 NM left and 4 NM right of centerline from C to D; 3 NM left and 7 NM right of centerline from D to E; 5 NM either side of centerline from E to H.

Special Operating Procedures:

1. Clearance to fly the route does not constitute clearance into R-3401; this clearance must be obtained from range control officer.
2. Point G Alternate Exit for aircraft not scheduled into R-3401.
4. Prior to entering R-3401, report to Indianapolis ARTCC at point F on 269.02.
5. Avoid overflight of cities, towns, and villages to extent possible.
6. Upon R-3401 entry, request range control officer that off IR-618 and working VFR on R-3401.
7. Use caution for light aircraft operating in the vicinity of an unmarked private airport at Pt E.
8. Noise Sensitive Area: Avoid overflight of Freetown, IN, and surrounding area, below 1000′ AGL.

FSS Within 100 NM Radius:

BNA, DAY, HUF, IKK, LOU

IR-644

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2639/3527, C701-723-2639/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 150 MSL to</td>
<td>A MLS 059/92</td>
<td>N46°56.00′ W103°53.00′</td>
</tr>
<tr>
<td>or as assigned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150 MSL to</td>
<td>CA MLS 058/101</td>
<td>N47°01.00′ W103°41.50′</td>
</tr>
<tr>
<td>(TFR Initiation Point)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>descend direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 150 MSL to</td>
<td>CB MLS 057/108</td>
<td>N47°05.00′ W103°32.00′</td>
</tr>
<tr>
<td>continue descent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05 AGL B 120 MSL to</td>
<td>B MLS 056/126</td>
<td>N47°14.00′ W103°09.50′</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06 AGL B 40 MSL to</td>
<td>C DIK 330/29</td>
<td>N47°19.00′ W102°58.00′</td>
</tr>
<tr>
<td>climb direct to cross</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 MSL to</td>
<td>CC DIK 340/31</td>
<td>N47°22.50′ W102°51.00′</td>
</tr>
<tr>
<td>(End TFR Point)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 MSL to turn right to</td>
<td>D DIK 345/32</td>
<td>N47°24.00′ W102°47.00′</td>
</tr>
<tr>
<td>40 MSL to</td>
<td>E DIK 352/34</td>
<td>N47°25.00′ W102°41.00′</td>
</tr>
<tr>
<td>(Start TA/TFR Point)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 40 MSL to</td>
<td>F DIK 008/36</td>
<td>N47°25.00′ W102°27.00′</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08 AGL B 40 MSL to</td>
<td>G BIS 309/49</td>
<td>N47°23.50′ W101°25.00′</td>
</tr>
<tr>
<td>(TA/TFR Termination Point)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 MSL to turn left to</td>
<td>H BIS 318/43</td>
<td>N47°23.00′ W101°12.00′</td>
</tr>
<tr>
<td>40 MSL to</td>
<td>I BIS 326/43</td>
<td>N47°25.50′ W101°04.00′</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 MSL to</td>
<td>J BIS 338/47</td>
<td>N47°32.00′ W100°52.50′</td>
</tr>
<tr>
<td>(TA/TFR Initiation Point)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>descend direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07.5 AGL B 40 MSL to</td>
<td>K BIS 342/50</td>
<td>N47°35.00′ W100°48.00′</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07.5 AGL B 30 MSL to</td>
<td>L DVL 259/43</td>
<td>N48°03.50′ W99°59.00′</td>
</tr>
<tr>
<td>turn right to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07.5 AGL B 30 MSL to</td>
<td>M DVL 250/32</td>
<td>N47°59.50′ W99°40.50′</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07.5 AGL B 30 MSL to</td>
<td>N DVL 211/36</td>
<td>N47°38.50′ W99°27.50′</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07.5 AGL B 30 MSL to</td>
<td>O JMS 307/43</td>
<td>N47°24.00′ W99°28.00′</td>
</tr>
<tr>
<td>climb direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07.5 AGL B 34 MSL to</td>
<td>P JMS 301/39</td>
<td>N47°18.00′ W99°27.00′</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07.5 AGL B 34 MSL to</td>
<td>Q JMS 291/34</td>
<td>N47°10.00′ W99°26.00′</td>
</tr>
<tr>
<td>turn right to</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
07.5 AGL B 34 MSL to R JMS 275/39 N47°02.00' W99°37.00' 60 MSL B 130 MSL to W1 BIS 308/45 N47°20.00' W101°22.00'.

(Start Maneuver Area) direct to
07.5 AGL B 34 MSL to S JMS 274/47 N47°02.00' W99°49.00' ARTCC 279.6
(End Maneuver Area) Primary TA/TFR Ter-
nimation Point turn right to U
34 MSL to U BIS 308/25 N47°05.50' W101°03.00'.
34 MSL B 60 MSL to direct to V BIS 308/36 N47°13.00' W101°13.50'.
60 MSL B 130 MSL to direct to W BIS 308/45 N47°20.00' W101°22.00'.
continue climb to cross
07.5 AGL B 34 MSL to X BIS 306/50 N47°22.50' W101°29.00'.
60 MSL B 130 MSL to turn left to Y BIS 303/52 N47°22.50' W101°34.00'.
continue climb direct to Z DIK 012/35 N47°23.00' W102°24.00'.
130 MSL to direct to AA DIK 002/28 N47°18.00' W102°35.00'.
130 MSL B FL240 to direct to AB DIK 003/14 N47°05.00' W102°40.50'.
continue climb direct to AC DIK 183/4 N46°48.00' W102°48.00'.
130 MSL B FL240 to (Contact Minneapolis ARTCC 380.3) FL 180 B FL 240 continue climb direct to cross
130 MSL B FL240 to (Contact Minot Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW Command Directives within the published altitude blocks from CA to CC, E to G, J to T, and Q to T (Re-entry). VMC Terrain Avoidance (TA)/(VC) operations are authorized IAW Command Directives within the published altitude blocks from E to G, J to T, and Q to T (Re-entry). When Command Directives preclude TF/TA/VC operations, aircrews will maintain the IFR altitude for each TF/TA route segment. Minimum altitudes above 200' AGL, are established to provide 100' vertical clearance of known man-made obstructions within the route corridor. Obstructions under 200' AGL were not considered in the route design. Command Directives may require additional obstruction clearance to TF/TA/VC operations. The entire route is nonmountainous.

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from A to CB; 4 NM either side of centerline from CB to T; 3 NM left and 3 NM right of centerline from N to O; 4 NM either side of centerline from T to R; 4 NM left and 6 NM right of centerline from S to T; 4 NM either side of centerline from T to AC; Re-Entry; 4 NM either side of centerline from T to R; 4 NM either side of centerline from U1 to XX.

Special Operating Procedures:
(1) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
(2) Lost communications (LC) procedures: Route LC altitude is FL 240.
(3) Centerline between the following points is depicted as a 7.5 NM radius arc: D to E, H to I, L to M, Q to R, T to U, W to X, Z to AA, Re-Entry; T to U to RA, and RB to Q to R.
(4) Aircrews are advised of VMC helicopter operations from Point O to Point S and Z to AC.
(5) Aircrews should be aware of numerous migration waterfowl along the route. Special precautions should be taken in the area of the Missouri River.
(6) Noise Sensitive Areas: Avoid by 1/4 NM or 1000.'
IR ROUTES

FSS Within 100 NM Radius:
GFK

IR-649

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2639/3527, C701-723-2639/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
---|---|---|---
Cross at 150 MSL to or as assigned direct to | A | MLS 059/92 | N46°36'.00' W103°53'.00'
150 MSL to (TFR Initiation Point) descend direct to | CA | MLS 058/101 | N47°01'.00' W103°41'.50'
02 AGL B 150 MSL to continue descent direct to | CB | MLS 057/108 | N47°05'.00' W103°32'.00'
05 AGL B 120 MSL to direct to | B | MLS 056/126 | N47°14'.00' W103°09'.50'
06 AGL B 40 MSL to climb direct to cross | C | DIK 330/29 | N47°19'.00' W102°58'.00'
40 MSL to (End TFR Point) direct to | CC | DIK 340/31 | N47°22'.50' W102°51'.00'
40 MSL to turn right to | D | DIK 345/32 | N47°24'.00' W102°47'.00'
40 MSL to (Start TA/TFR Point) direct to | E | DIK 352/34 | N47°25'.00' W102°41'.00'
02 AGL B 40 MSL to direct to | F | DIK 008/36 | N47°25'.00' W102°27'.00'
08 AGL B 40 MSL to (TA/TFR Termination Point) direct to | G | BIS 309/49 | N47°23'.50' W101°25'.00'
40 MSL to turn left to | H | BIS 318/43 | N47°23'.00' W101°12'.00'
40 MSL to direct to | I | BIS 326/43 | N47°25'.50' W101°04'.00'
40 MSL to descend direct to | J | BIS 338/47 | N47°32'.00' W100°52'.50'
07.5 AGL B 40 MSL to direct to | K | BIS 342/50 | N47°35'.00' W100°48'.00'
07.5 AGL B 30 MSL to turn left to | BA | MOT 113/45 | N47°49'.00' W100°24'.00'
30 MSL to (Contact Minot APP CON 363.8) climb direct to cross | BB | MOT 101/38 | N48°00'.00' W100°25'.50'
52 MSL to | BC | MOT 096/23 | N48°08'.00' W100°45'.00'

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TELESCOPING OPERATIONS: IMC/VMC
Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW Command Directives within the published altitude blocks from CA to CC, and E to G, J to BA. VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within the published altitude blocks from E to G, J to BA. When Command Directives preclude TF/TA/VC operations, aircrews will maintain the IFR altitude for each TF/TA route segment. Minimum altitudes above 200' AGL are established to provide 100' vertical clearance of known man-made obstructions within the route corridor. Obstructions under 200' AGL were not considered in the route design. Command Directives may require additional obstruction clearance to TF/TA/VC operations. The entire route is nonmountainous.

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from A to CB; 4 NM either side of centerline from CB to BC.

Special Operating Procedures:
(1) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
(2) Lost communications (LC) procedures: Route LC altitude is FL 240.
(3) Aircrews should be aware of numerous migrating waterfowl along the route. Special precautions should be taken in the area of the Missouri River.
(4) Exit procedures: Contact Minot AFB APP CON 363.8. When crossing Point BB and give ETA to KMIB 115 030 with altitude, airspeed and ETA to overhead Minot AFB. Cross Point BC at 250 KIAS.
(5) Uncharted Obstructions:
(a) Crane 260' AGL (N47-21.9 W101-12.6);
(b) Tower 200' AGL (N47-27.3 W101-09.0);
(c) Tower 300' AGL (N47-25.3 W103-01.1);
(d) Smokestack 200' AGL (N47-11.2 W103-06.8);
(e) Smokestack 300' AGL (N47-16.4 W101-17.4);
(f) Tower 265' AGL (N47-08.4 W100-57.1);
(g) Microwave Tower 210' AGL (N46-59.6 W100-07.2);
(h) Microwave Tower 220' AGL (N47-08.6 W100-46.2);
(i) Microwave Tower 200' AGL (N48-01.5 W99-53.4);
(j) Microwave Tower 210' AGL (N47-03.3 W100-41.9);
(k) Radio Tower 200' AGL (N47-21.4 W101-37.7).

FSS Within 100 NM Radius:
HON, GFK

IR-678

ORIGINATING ACTIVITY: 5 OSS/A-3C, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
---|---|---|---
Cross at 90 MSL to or as assigned direct to | A | ISN 006/31 | N48°45'.00' W103°30'.00'

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).
direct to 02 AGL B 40 MSL to
02 AGL B 40 MSL to turn left
to 02 AGL B 40 MSL to
direct to 02 AGL B 40 MSL to
turn left to 02 AGL B 40 MSL to
direct to 02 AGL B 40 MSL to
turn left to 02 AGL B 40 MSL to
direct to 02 AGL B 40 MSL to
turn left to 02 AGL B 40 MSL to
direct to 02 AGL B 40 MSL to
turn left to 02 AGL B 40 MSL to
direct to 02 AGL B 40 MSL to
turn left to 02 AGL B 40 MSL to
direct to 02 AGL B 40 MSL to
turn left to 02 AGL B 40 MSL to
direct to 02 AGL B 40 MSL to
turn left to 02 AGL B 40 MSL to
direct to 02 AGL B 40 MSL to
turn left to

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR
Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW Command Directives within the published altitude blocks from C to AC and N to AC (Alternate Entry) and from C to O (Alternate Exit). When Command Directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment. Minimum altitudes above 200’ AGL are established to provide at least 100’ vertical clearance of known man-made obstructions within the route width. Obstructions under 200’ AGL were not considered in route design. The entire route is designated non-mountainous. Regulations governing operations below 500’ AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 3 NM left and 4 NM right of centerline from B to H; 4 NM left and 2 NM right of centerline from H to I; 4 NM left and 7 NM right of centerline from I to K; 9 NM left and 7 NM right of centerline from K to L; 9 NM left and 6 NM right of centerline from L to M; 4 NM either side of centerline from M to Q; 4 NM left and 3 NM right of centerline from Q to R; 6 NM left and 8 NM right of centerline from R to U; 6 NM left and 2 NM right of centerline from U to X; 4 NM left and 2 NM right of centerline from X to Y; 2 NM either side of centerline from Y to AB; 3 NM left and 2 NM right of centerline from AB to AC; 4 NM either side of centerline from AC to AG.

Special Operating Procedures:

1. Participating aircraft separation: Route is designed for MARSA operations established by coordinated scheduling.
2. Lost communications (LC) procedure: Route LC altitude is 100 MSL.
3. Centerline between turn points is depicted as a 7.5NM radius arc unless otherwise specified.
4. Aircrews should be aware of numerous migrating waterfowl along the route. Special precautions should be taken in the area of Lake Sakakawea.
5. Prior to each flight the individual unit must contact Western Air Defense Sector, DSN 984-4604, to insure the Tiger MOA is scheduled/deconflicted.
6. Contact UND Supervisor of flying 24 hours prior to route use at C701-777-7880.
7. Point N is designated as an Alternate Entry.
8. Aircrews contact Minot APP CON passing AB on 363.8
9. Contact Minneapolis ARTCC at W on 269.6 concerning traffic advisories near Rugby, ND airport. If requested by Minneapolis ARTCC crews will climb and maintain 50 MSL from Y to AC then resume climb-out procedures.
10. When using the Alternate Exit, aircrews will notify Grand Forks APP CON at DSN 362-6544 at least 24 hours prior to use. Crews will pass the following information: aircraft call sign, type aircraft, exit time. Aircrews using the Alternate Exit will end TA/VFR at Point O.
11. Aircrews are advised of many small towns located along this route. Compliance with AFI 11-202 Vol 3 is essential.
IR ROUTES

(12) Aircrews are advised of a 2000’ tower located outside of corridor near Point N (N47-16.5 W97-20.5).

(13) Point S is designated as an Alternate Exit.

(14) Aircrews will contact Grand Forks Approach at point N on 294.7 or 318.1.

(15) Be advised that numerous VFR air operations take place near the route. Review sectional chart data for Category C, D, and E airspace prior to flight.

(16) Do not accelerate to above 250KIAS until established within the confines of the route unless required by aircraft flight manual to maintain safe maneuverability.

(17) Uncharted Obstructions:
   (a) Grain Elevator 250’ AGL (N48-37.5 W099-22.62);
   (b) Tower 411’ AGL (N48-37.7 W098-21.7);
   (c) Tower 250’ AGL (N48-37.82 W097-58.56);
   (d) Multiple Towers 250’ AGL (N48-00.43 W097-55.62);
   (e) Multiple Towers 280’ AGL (N47-49.71 W100-45.6);
   (f) Tower 300’ AGL (N48-27.5 W102-46.6);
   (g) Tower 250’ AGL (N47-47.40 W101-00.4);
   (h) Tower 200’ AGL (N47-46.6 W099-54.4);
   (i) Grain Elevator 250’ AGL (N47-37.8 W098-37.7);
   (j) Grain Elevator 220’ AGL (N47-27.5 W099-07.7);
   (k) Grain Elevator 200’ AGL (N47-10.2 W098-27.4);
   (l) Tower 300’ AGL (N48-25.7 W102-53.4);
   (m) Remove the towers annotations at N48-35.4 W102-52.1 (459’ AGL), N48-29.22 W098-05.82 (350’ AGL), N48-37.7 W098-21.7 (314’ AGL), N48-28.21 W097-58.31 (299’ AGL), N47-41.51 W097-54.56 (372’ AGL).

FSS Within 100 NM Radius:
GFK, HON

IR-714

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT,
Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141,
C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana
NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228.
Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Terrain Following Operations: Authorized from 12 NM SE of G to I.

Route Width - 5 NM either side of centerline from A to D; 5 NM left and 3 NM right of centerline from D to F; 5 NM either side of centerline from F to G; 3 NM left and 5 NM right from G to H; 5 NM either side of centerline from H to J.

Special Operating Procedures:
(1) Route reservations and brief required.
(2) No alternate Entry or Exit authorized.
(3) To fly this route all aircraft must have an operable navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana, NAS must use a stereo flight plan. To conduct terrain following operations under actual IMC or at night, aircraft must be equipped with an operable ground mapping radar or terrain following radar.
(4) Where two altitudes are indicated, the lower published altitude is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.
(5) Mandatory reporting points. UHF or VHF radio reports are required when passing:
(a) Pt A to Norfolk approach on 372.1;
(b) Pt B to Richmond approach on 319.8;
(c) 18 NM SE of Pt. E, Pt. F , Pt. I and Pt. J to Richmond Approach Control on 132.85 or 257.75.
(6) Return altitude 15,000’ MSL. Lost communications altitude 6,000’ MSL.
(7) Hazards:
(a) Extensive civilian fish-spotter aircraft from SFC to 5,000’ AGL over Chesapeake Bay, between Pt A and Pt B from Apr to Nov;
(b) Ultralight activity in the vicinity of Pt B;
(c) Evers MOA is active with continuous daytime operations from 1000’ AGL to FL 180. Contact 113 OSS/OSA, Joint Base Andrews, MD DSN 857-4183/4194/4171, C240-857-4183/4194/4171 for MOA flight information/deconfliction prior to scheduling.
(8) Do Not fly over:
(a) N38-03.5 W77 47.6, remain 2 NM from Nuclear Power Plant;
(b) N37 58.5 W78 54.0, remain 2 NM from Devil’s Knob;
(c) N37 59.0 W77 31.0, remain at least 1 NM South of Lake Caroline.
(9) N38 26.2 W79 50.1, Do not transmit on UHF radio within 15 NM of National Radio Astronomy Observatory. Avoid Observatory by 4 NM.
(10) CAUTION: Severe bird activity along route. Highest concentrations Dec-Mar.
(11) Due to several windmills under construction between Points F and G, this leg shall be flown no lower than 500’ AGL until further notice.

FSS Within 100 NM Radius:
AAO, DCA, EKN, MIV, RDU
IR ROUTES

IR-715

ORIGINATING ACTIVITY: COMSTRKFGTWNGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9521, C757-433-9521.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 30 MSL to</td>
<td>A</td>
<td>CVI 002/19</td>
<td>N36°41.00' W76°55.00'</td>
</tr>
<tr>
<td>30 MSL to</td>
<td>B</td>
<td>LVL 165/4</td>
<td>N36°45.00' W77°52.00'</td>
</tr>
<tr>
<td>Passing B begin climb to be at 70 MSL by 4 NM SE of C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 MSL to C</td>
<td>LVL 310/19</td>
<td>N36°59.00' W78°14.00'</td>
<td></td>
</tr>
<tr>
<td>70 MSL to</td>
<td>D</td>
<td>SBV 259/19</td>
<td>N36°35.00' W79°24.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>E</td>
<td>ROA 125/23</td>
<td>N37°09.00' W79°40.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>F</td>
<td>ROA 061/21</td>
<td>N37°32.00' W79°42.00'</td>
</tr>
<tr>
<td>80 MSL to</td>
<td>G</td>
<td>BKW 094/33</td>
<td>N37°48.00' W80°26.00'</td>
</tr>
<tr>
<td>80 MSL to</td>
<td>H</td>
<td>EKN 216/29</td>
<td>N38°29.00' W80°24.00'</td>
</tr>
<tr>
<td>80 MSL to</td>
<td>I</td>
<td>EKN 164/14</td>
<td>N38°42.00' W79°59.00'</td>
</tr>
<tr>
<td>80 MSL to</td>
<td>J</td>
<td>EKN 187/42</td>
<td>N38°13.00' W80°06.00'</td>
</tr>
<tr>
<td>80 MSL to</td>
<td>K</td>
<td>ROA 020/39</td>
<td>N37°58.00' W79°51.00'</td>
</tr>
<tr>
<td>80 MSL to</td>
<td>L</td>
<td>ROA 053/40</td>
<td>N37°47.00' W79°26.00'</td>
</tr>
<tr>
<td>80 MSL to</td>
<td>M</td>
<td>GVE 237/36</td>
<td>N37°38.00' W78°44.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>B</td>
<td>TYI 217/18</td>
<td>N35°43.00' W77°54.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>C</td>
<td>RDU 235/19</td>
<td>N35°39.00' W79°04.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>D</td>
<td>CLT 094/44</td>
<td>N35°12.00' W80°04.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>E</td>
<td>CLT 127/23</td>
<td>N34°59.00' W80°33.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>F</td>
<td>FLO 295/26</td>
<td>N34°24.00' W80°09.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>G</td>
<td>FLO 195/22</td>
<td>N33°52.00' W79°45.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>H</td>
<td>ILM 040/2</td>
<td>N34°23.00' W77°51.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>I</td>
<td>NCA 318/21</td>
<td>N34°56.00' W77°46.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>J</td>
<td>TYI 109/40</td>
<td>N35°49.00' W76°54.00'</td>
</tr>
</tbody>
</table>

ROUTEN WIDTH - 5 NM either side of centerline from A to L; 3 NM either side of centerline from L to M.

Special Operating Procedures:

1. Route reservation and brief required.
2. No alternate Entry or Exit authorized.
3. To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana, NAS must use a stereo flight plan.
4. Mandatory reporting points. UHF radio reports are required when passing:
   (a) Pt A to Norfolk Approach Control on 249.9;
   (b) Pt M to Washington ARTCC on 380.3.
5. Return altitude 15,000’ MSL. Lost communications altitude 8000’ MSL.
6. Hazards:
   (a) Farmville MOA is active from 0930-1430 local and 1600-1700 local, Mon-Fri, from 300’ AGL to 5000’ MSL.

IR-718

ORIGINATING ACTIVITY: COMSTRKFGTWNGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9521, C757-433-9521.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 70 MSL to</td>
<td>A</td>
<td>CVI 002/19</td>
<td>N36°41.00' W76°55.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>B</td>
<td>TYI 217/18</td>
<td>N35°43.00' W77°54.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>C</td>
<td>RDU 235/19</td>
<td>N35°39.00' W79°04.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>D</td>
<td>CLT 094/44</td>
<td>N35°12.00' W80°04.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>E</td>
<td>CLT 127/23</td>
<td>N34°59.00' W80°33.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>F</td>
<td>FLO 295/26</td>
<td>N34°24.00' W80°09.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>G</td>
<td>FLO 195/22</td>
<td>N33°52.00' W79°45.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>H</td>
<td>ILM 040/2</td>
<td>N34°23.00' W77°51.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>I</td>
<td>NCA 318/21</td>
<td>N34°56.00' W77°46.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>J</td>
<td>TYI 109/40</td>
<td>N35°49.00' W76°54.00'</td>
</tr>
<tr>
<td>80 MSL to</td>
<td>H</td>
<td>ILM 040/2</td>
<td>N34°23.00' W77°51.00'</td>
</tr>
<tr>
<td>80 MSL to</td>
<td>J</td>
<td>TYI 109/40</td>
<td>N35°49.00' W76°54.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline from A to L; 3 NM either side of centerline from L to M.

Special Operating Procedures:

1. Route reservation and brief required.
2. No alternate Entry or Exit authorized.
IR ROUTES

(3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan.

(4) Where two altitudes are indicated, the lower altitude is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.

(5) Return altitude 15,000 MSL. Lost communications altitude 7000’ MSL.

(6) Hazards: Exercise caution in the vicinity of R-5314. Numerous MTRs terminate in this area. Military aircraft may be holding VFR over Phelps Lake or at the Alligator River Bridge awaiting clearance into Dare bombing range.

(7) Caution: IR-719 crosses between Points A and B.

FSS Within 100 NM Radius:
AND, DCA, RDU

IR-719

ORIGINATING ACTIVITY: CSFWL, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9696, C757-433-9696.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 70 MSL to A</td>
<td>HPW 263/7</td>
<td>N37°18.02' W77°15.98'</td>
<td></td>
</tr>
<tr>
<td>70 MSL to B</td>
<td>LYH 091/44</td>
<td>N37°18.00' W78°19.00'</td>
<td></td>
</tr>
<tr>
<td>70 MSL to C</td>
<td>LYH 025/5</td>
<td>N37°20.02' W79°11.98'</td>
<td></td>
</tr>
<tr>
<td>60 MSL B 80 MSL to D</td>
<td>ROA 181/34</td>
<td>N36°47.00' W80°01.98'</td>
<td></td>
</tr>
<tr>
<td>60 MSL B 80 MSL to E</td>
<td>GSO 288/44</td>
<td>N36°14.00' W80°50.98'</td>
<td></td>
</tr>
<tr>
<td>60 MSL B 80 MSL to F</td>
<td>GSO 062/2</td>
<td>N36°04.00' W79°55.98'</td>
<td></td>
</tr>
<tr>
<td>60 MSL B 80 MSL to G</td>
<td>SBV 090/6</td>
<td>N36°41.02' W78°53.98'</td>
<td></td>
</tr>
<tr>
<td>Maintain 70 MSL until 23 NM East of C then 60 MSL-80 MSL to H</td>
<td>LVL 121/18</td>
<td>N36°42.02' W77°33.98'</td>
<td></td>
</tr>
<tr>
<td>50 MSL B 80 MSL to I</td>
<td>TYI 109/32</td>
<td>N35°51.02' W77°03.98'</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 70 MSL to A</td>
<td>RIC VORTAC</td>
<td>N37°30.14' W77°19.22'</td>
<td></td>
</tr>
<tr>
<td>70 MSL to B</td>
<td>GVE 355/7</td>
<td>N38°08.00' W78°11.00'</td>
<td></td>
</tr>
<tr>
<td>70 MSL to C</td>
<td>CSN 220/11</td>
<td>N38°29.00' W78°00.00'</td>
<td></td>
</tr>
<tr>
<td>70 MSL to D</td>
<td>LDN 009/5</td>
<td>N38°56.00' W78°12.00'</td>
<td></td>
</tr>
<tr>
<td>70 MSL to E</td>
<td>EKN 091/12</td>
<td>N38°56.00' W79°51.00'</td>
<td></td>
</tr>
<tr>
<td>70 MSL to F</td>
<td>GVE 287/45</td>
<td>N38°09.00' W79°05.00'</td>
<td></td>
</tr>
<tr>
<td>70 MSL to G</td>
<td>GVE 280/16</td>
<td>N38°02.00' W78°30.00'</td>
<td></td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route reservation and brief required.
(2) No alternate Entry or Exit authorized.
IR ROUTES

2-153

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route reservation and brief required.
(2) No alternate Entry or Exit authorized.
(3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan.
(4) Where two altitudes are indicated, the lower altitude is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.
(5) Return altitude 15,000' MSL. Lost communications altitude 6000' MSL.
(6) Hazards:
   (a) Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 113 OSS/OSA, Joint Base Andrews, MD DSN 857-4183/4194/4171, C240-857-4183/4194/4171 for MOA flight information/deconfliction prior to scheduling route;
   (b) N37-47.2 W77-49.5 - Uncharted airport with Ultralight flight activity in the vicinity.
(7) CAUTION: Severe bird activity along route. Highest concentrations Dec-Mar.

FSS Within 100 NM Radius:
AOO, DCA, EKN, MIV, RDU

IR-721


SCHEDULING ACTIVITY: Same as originating activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 MSL B 80 MSL to or as assigned</td>
<td>A</td>
<td>ROA VOR-DME</td>
<td>N37°20.61' W80°04.23'</td>
</tr>
<tr>
<td>60 MSL B 80 MSL to or as assigned</td>
<td>B</td>
<td>ROA 181/17</td>
<td>N37°03.50' W80°03.00'</td>
</tr>
<tr>
<td>03 AGL B 80 MSL to</td>
<td>C</td>
<td>ROA 195/27</td>
<td>N36°53.80' W80°11.00'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>D</td>
<td>GSO 336/42</td>
<td>N36°40.00' W80°22.00'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>E</td>
<td>GSO 326/34</td>
<td>N36°30.00' W80°24.00'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>F</td>
<td>GSO 297/35</td>
<td>N36°17.00' W80°38.50'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>G</td>
<td>GSO 248/34</td>
<td>N35°48.50' W80°36.67'</td>
</tr>
</tbody>
</table>

| 03 AGL B 30 MSL to | H | GSO 231/27 | N35°44.83' W80°22.83' |
| 03 AGL B 30 MSL to | I | GSO 180/41 | N35°21.60' W79°56.00' |
| 03 AGL B 30 MSL to | J | SSC 024/43 | N34°39.00' W80°11.50' |
| 30 MSL to | K | SSC 024/33 | N34°30.00' W80°15.00' |

| 03 AGL B 30 MSL to | L | H | GSO 231/27 | N35°44.83' W80°22.83' |

| TERRAIN FOLLOWING OPERATIONS: Authorized from B to J. Maintain top of the altitudes between B to J unless Terrain Following Operations are approved with entry clearance from Roanoke approach. |

ROUTE WIDTH - 5 NM either side of centerline from A to I; 1 NM left and 9 NM right of centerline from I to J; on centerline from J to K.

Special Operating Procedures:
(1) Monitor Greensboro Approach 307.0 passing Pt C.
(2) Monitor Charlotte Approach 307.8 passing Pt H and report Pt J level at 3000' MSL.
(3) Contact Shaw RAPCON 318.1 passing Pt J.
(5) CAUTION: VR-087 crosses from right to left, Pt I to Pt J (Deconflict with 4 FW at DSN 722-2129).
(6) Mission permitting, avoid the following environmentally sensitive areas (woodpecker concentrations) by 500' vertically or 1000' horizontally: N32-25.5 W80-01.2 and N35-25.2 W80-02.2.
(7) CAUTION: Glider activity in vicinity of Mount Airy Airport, NC (N36-27.5 W80-33.1).
(9) Noise Sensitive Areas: Avoid each by 1000' AGL and 1 NM
   (a) N36-03 W80-43W; (b) N35-40.0 W80-18W; (c) N35-40.0 W80-20.5W; (d) N35-47.3 W80-26.0; (e) N35-43.0 W80-25.2; (f) Congressional noise sensitive area (cattle farm) N36-28.8 W80-27.5
(10) AVOID: Towers
   (a) 275' AGL (3150' MSL) N36-40.0 W80-23.3; (b) 225' AGL (1000' MSL) N35-23.0 W79-58.6; (c) 225' AGL (810' MSL) N34-59.5 W80-15.9; (d) 300' AGL N35-52.4 W80-33.6; (e) 300' AGL N34-42.2 W80-16.5; (f) 300' AGL N34-59.7 W80-10.6 (just west of a charted tower); (g) 225' AGL N36-42.9 W80-20.1; (h) 200' AGL N36-42.9 W80-19.89; (i) 250' AGL N36-19.38 W80-33.71; (j) 300' AGL N36-16 W80-35; (k) 300' AGL N35-47 W80-21; (l) 200' AGL N35-24.55 W79-57.35; (m) 200' AGL N35-33.4 W80-06; (n) 250' AGL N35-36.49 W80-17.02;
IR ROUTES

(o) 300' AGL N35-14.32 W79-59.69;
(p) 350' AGL N36-20.57 W80-37.77;
(q) 300' AGL N36-58.32 W80-10.43;
(r) 300' AGL N36-20.09 W80-37.20;
(s) 300' AGL N35-58.08 W80-38.19;
(t) 250' AGL N35-31.18 W80-03.61;
(u) 300' AGL N35-22.20 W79-56.70;
(v) 300' AGL N36-31.13 W80-30.50 - 100 yards North of charted antenna 340' AGL;
(w) 200' AGL N37-07.05 W80-01.04;
(x) 300' AGL N36-45.05 W80-19.28;
y) 300' AGL N36-42.78 W80-19.89;
396' AGL N35-19.56 W79-53.10;
200' AGL N35-33.63 W80-09.36;
200' AGL N35-18.08 W80-03.83;
300' AGL N35-48.61 W80-22.63;
200' AGL N35-19.56 W79-53.10;
200' AGL N38-18.19 W80-37.14;
(aa) Tower 200' AGL 1 mile east of N35-30.57 W80-04.64;
(ab) Tower 200' AGL 0.5 mile west of N35-33.97 W80-8.98;
(ac) Cell tower 200' AGL 1 mile east of N35-37.72 W80-13.04;
(ad) Tower 200' AGL 1 mile west of N35-40.50 W80-16.03;
(ae) Tower 200' AGL 0.25 mile north of N36-20.09 W80-22.63;
(11) Avoid uncharted private grass strips by 1000' AGL and 2 NM:
(a) N36-03.51 W80-39.67, possible grass strip 1600' runway;
(12) Include route entry/exit times in the remarks section of the flight plan. Make entry times plus or minus 5 minutes or reschedule.
(13) VR-1721 may be flown, weather permitting, if the controlling agency delays or refuses clearance to fly IR-721. Check FLIP AP/1B guidance for specifics on VR-1721.
(15) Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
FSS Within 100 NM Radius:
AND, CLE, DAY, EKN, RDU
IR-723

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.
SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.
HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
Cross at 90 MSL to or as assigned A HNN 048/14 N38°55.00' W81°49.00'
90 MSL to or as assigned B BKW 357/23 N38°10.00' W81°12.00'
90 MSL to or as assigned C BKW 134/14 N37°38.00' W80°53.00'
90 MSL to or as assigned D PSK 350/15 N37°20.00' W80°48.00'
90 MSL to or as assigned E PSK 251/20 N36°57.00' W81°05.00'
90 MSL to or as assigned F PSK 218/20 N36°48.00' W80°56.00'
90 MSL to or as assigned G HMV 091/31 N36°28.00' W81°29.00'
90 MSL to or as assigned H HMV 118/47 N36°07.00' W81°15.00'
100 MSL to or as assigned I SUG 048/30 N35°45.00' W81°50.00'
100 MSL to or as assigned J SUG 051/6 N35°28.00' W82°11.00'

ROUTE WIDTH - 10 NM either side of centerline.

FSS Within 100 NM Radius:
AND, EKN, RDU

IR-726

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
As assigned to A PSK 263/23 N37°00.00' W81°11.00'
03 AGL B 60 MSL to B PSK VORTAC N37°05.26' W80°42.77'
03 AGL B 60 MSL to C PSK 187/19 N36°46.00' W80°43.00'
IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route except terminate low level to cross Point I at 10,000' MSL.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to C; 5 NM left and 15 NM right of centerline from C to D; 10 NM either side of centerline from D to E; On centerline to 10 NM right of centerline from E to F; 1 NM left and 10 NM right of centerline from F to G; 5 NM left and 10 NM right of centerline from G to H; 5 NM either side of centerline from H to I.

Special Operating Procedures:

(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.

(2) Alternate Entry: G

(3) Users must make their scheduled entry time plus or minus 5 minutes or reschedule.

(4) Avoid towns and populated areas by 1 NM or overfly 1000' AGL; avoid airports by 3 NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle, or structure.

(5) VR-1726 may be flown, weather permitting, if the controlling agency delays or refuses clearance to fly IR-726. Check FLIP AP/1B for specifics on VR-1726.

(6) A-B:
   (a) CAUTION: VR-042 same direction A to C.
   (b) CAUTION: Tower 250' AGL at N37°01.4 W081°03.00'.
   (c) CAUTION: Tower 200' AGL at N37°03.5 W080°58.40'.

(7) B-C:
   (a) CAUTION: VR-042 same direction A to C.
   (b) CAUTION: Tower 250' AGL at N37°05.7 W080°32.6.
   (c) CAUTION: Marked/Lighted tower 207' AGL at N36°48.7 W080°42.3.
   (d) CAUTION: Tower 250' AGL at N36°49.7 W080°34.3.
   (e) CAUTION: Check NOTAMs for model rocket firings; New River Valley Rocketry. Sat/Sun only launches of unmanned Class II rocket(s) in the vicinity of N37°11-54.76 W080°34-31.61, within a 1 NM radius, not to exceed 10,000' AGL or 11,800' MSL. Sunrise to sunset. Approximately Pulaski VORTAC (PSK) 051R009.4NM.
   (f) CAUTION: Tower 250' AGL at N36°42.7 W080°58.7.

(8) C-D:
   (a) CAUTION: Tower 250' AGL at N36°36.8 W081°08.2.
   (f) CAUTION: Tower 200' AGL at N36°31.8 W081°08.4.

(9) D-E:
   (a) CAUTION: VR-042 and VR-093 cross left to right at E.
   (b) CAUTION: IR-723 merges and same direction until H.
   (c) CAUTION: IR-081 opposite direction D to H.
   (d) CAUTION: VR-093 cross left to right at E.
   (e) Tower 200' AGL at N36°29.2 W081°05.8.

(10) E-F:
   (a) Monitor Atlanta Center on 263.0 at F.
   (b) CAUTION: Rapidly rising terrain. MEA and top of route structure can be as little as 1000'.
   (c) CAUTION: IR-723 same direction until H.
   (d) CAUTION: IR-081 opposite direction D to H.
   (e) CAUTION: Tower 250' AGL at N36°29.35 W081°10.6.
   (f) CAUTION: Tower 250' AGL at N36°27.92 W081°13.47.
   (g) CAUTION: Tower 200' AGL at N36°32.43 W081°28.35.

FSS Within 100 NM Radius:
AND, EKN, RDU

IR-743

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C 757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C 757-433-1228. Scheduling Hours 0600-1900L (EST)

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 70 MSL to maintain A HMV 054/49 N36°58.00' W81°21.00'.
01 AGL B 70 MSL to B HMV 023/26 N36°55.00' W81°57.00'.
01 AGL B 70 MSL to C GZG VOR-DME N36°49.51' W82°04.74'.
01 AGL B 60 MSL to D HMV 302/34 N36°42.00' W82°45.00'.
01 AGL B 60 MSL to E HMV 289/34 N36°35.00' W82°49.00'.
03 AGL B 50 MSL to F VXV 071/44 N36°11.00' W83°03.00'.
03 AGL B 60 MSL to G VXV 085/36 N35°59.00' W83°10.00'.
03 AGL B 90 MSL to H VXV 097/32 N35°52.00' W83°14.00'.

(g) CAUTION: Tower 200' AGL at N36-29.2 W081-05.8.
(h) AVOID: Horse training facility at N36-34.6 W081-22.4 by 1000' AGL or 1 NM.
(i) AVOID: Horse training facility at N36-30.3 W081-17.8 by 1000' AGL or 1 NM.
(j) CAUTION: Multiple towers 200' AGL at N36-28.0 W081-12.9.

(11) F-G:
   (a) No restrictions.

(12) G-H:
   (a) Contact Atlanta Center 263.0 primary or 353.62 secondary at H.

(13) H-I:
   (a) Cross I level at 10,000' MSL.

(14) Crossing Route Information:
   (a) VR-042: Seymour Johnson AFB (DSN 722-2129).
   (b) VR-093: Seymour Johnson AFB (DSN 722-2129).
   (c) IR-723: Pensacola NAS (DSN 922-4671).
   (d) IR-081: Pensacola NAS (DSN 922-4671).

2-155
IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized from A to J. Terminate terrain following so as to pass 'J' at 9000’ MSL.

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Special Operating Procedures:
(1) Route reservation and brief required.
(2) Monitor Tri-City Approach Control on 317.5 at C.
(3) Contact Atlanta ARTCC on 379.95 passing H, if no contact try Asheville App cont on 351.8 or 124.65 for further IFR clearance.
(4) CAUTION: Heavy helicopter traffic from Pt A to D. weather permitting helicopter traffic around 4500’ MSL. Hospital helicopter traffic to/from Lebanon, VA (N36-54.1 W82-04.5).
(5) CAUTION: Local weather phenomenon from Pt C to D causes fog bank north of Clinch Mt. Ridge. Helicopters may be just below fog bank.
(6) Towers:
   (a) 250' AGL (3779’ MSL) cluster centered at N35-54.0 W83-18.2;
   (b) 200' AGL (2100’ MSL) N36-26.8 W82-56.6;
   (c) 250' AGL (1400’ MSL) N36-00.25 W083-06.29.
(7) CAUTION: Numerous powerlines above 100’ AGL throughout the route.
(8) CAUTION: Heavy civil IFR traffic crossing on V16, V185 and V136 immediately above route altitude block Pt. D to H.
(9) CAUTION: Hang gliding activity N35-54.5 W83-17.8.
(10) Congressional Noise Sensitive Areas: Glade Spring, VA (N36-47 W81-47). Farm area (N36-13.3 W83-00.8). Avoid by 1000’ AGL and 1 NM.
(11) VR-1743 coincides with entire route, dual scheduling authorized. If dual scheduled, VR-1743 may be flown, weather permitting, if controlling agency delays or refuses clearance to fly IR-743. Check FLIP AP/1B for guidance for specifics on VR-1743.
(12) CAUTION: Conflicting routes: IR-002 same direction F to J, IR-761 same direction points A to B, VR-041 same direction points A to B, VR-093 crosses between points A to B and D to E.
(13) Avoid: Uncharted uncontrolled public airport Hawkins, Co. (N36-27.7 W83-53.2) by 1500’ AGL/3 NM.
(14) Make entry times plus or minus 5 minutes or reschedule. Include route entry/exit times in the remarks section of the flight plan. Unpublished towers 200’ AGL and above are listed in this SOP.

FSS Within 100 NM Radius:
AND, EKN, RDU

IR-760

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFA VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous.

ROUTE DESCRIPTION:
Altitude Data   Pt   Fac/Rad/Dist     Lat/Long
20 MSL B 30 MSL to   A   CCV VORTAC    N37°20.85’  W75°59.86’
20 MSL B 30 MSL to   B   HCM 054/15    N37°37.00’  W76°29.00’
20 MSL B 30 MSL to   C   BRV 230/25    N38°01.00’  W77°42.00’
20 MSL B 30 MSL to   D   GVE 330/22    N38°19.00’  W78°26.00’
50 MSL B 60 MSL to   E   CSN 275/35    N38°38.00’  W78°37.00’
60 MSL to   F   ESL 057/7     N39°18.20’  W78°52.00’
60 MSL to   G   ESL 261/25    N39°07.00’  W79°31.00’
SFC B 60 MSL to   H   EKN 165/47    N38°11.00’  W79°44.00’
SFC B 60 MSL to   I   ROA 031/50    N38°05.00’  W79°36.00’
60 MSL to   J   LYH 352/44    N37°58.00’  W79°27.00’
60 MSL to   K   GVE 236/31    N37°41.00’  W78°39.00’
60 MSL to   L   GVE 196/22    N37°39.00’  W78°14.00’

TERRAIN FOLLOWING OPERATIONS: Authorized from F to J. (IFR lost communications altitude during terrain following is 60 MSL).

ROUTE WIDTH - 3 NM either side of centerline entire route.

Special Operating Procedures:
(1) Route reservation and brief required.
(2) No alternate Entry or Exit authorized.
(3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan. To conduct terrain following operations under actual IMC or at night, aircraft must be equipped with an operable ground mapping radar or terrain following radar.
(4) Where two altitudes are indicated, the lower is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.
(5) Mandatory reporting points: VHF or UHF radio reports are required when passing:
   (a) Pt A to Norfolk Approach Control on 372.1;
   (b) Pt B to Richmond Approach Control on 319.8;
   (c) Pt D, Pt F and Pt K to Richmond Approach Control on 132.85 or 257.8.
(6) Return altitude 15,000’ MSL. Lost communications altitude 6000’ MSL.
(7) Hazards:
(a) Caution: IR-720, IR-761 and IR-762 cross at multiple points;
(b) Extensive civilian fish-spotter aircraft from SFC to 5000' AGL over Chesapeake Bay, between Pt A and Pt B from Apr to Nov;
(c) Ultralight activity in the vicinity of Pt B;
(d) Extensive helicopter operations between Pt D and Pt J;
(e) Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 113 OSS/OAA, Joint Base Andrews, MD DSN 857-4183/4194/4171, C240-857-4183/4194/4171 for MOA flight information/deconfliction prior to scheduling;

(9) N38-26.6 W79-50.1 - Do Not transmit on UHF radio within 15 NM of National Radio Astronomy Observatory. Avoid Observatory by 4 NM.
(10) Do not fly over: N37-59.0 W77-31.0W - Remain at least 1 NM South of Lake Caroline.
(11) Due to several windmills under construction between Points F and G, this leg shall be flown no lower than 500' AGL until further notice.

FSS Within 100 NM Radius:
AOO, DCA, EKN, IPT, MIV, RDU

IR-761

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 70 MSL to</td>
<td>A LYH 026/29</td>
<td>N37º42.00' W79º01.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>B LYH 345/18</td>
<td>N37º32.00' W79º22.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>C ROA 052/22</td>
<td>N37º35.00' W79º44.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>D ROA 334/14</td>
<td>N37º33.00' W80º13.20'</td>
</tr>
<tr>
<td>SFC B 60 MSL to</td>
<td>E BKW 163/17</td>
<td>N37º31.00' W80º59.00'</td>
</tr>
<tr>
<td>SFC B 60 MSL to</td>
<td>F BKW 221/20</td>
<td>N37º30.50' W81º21.00'</td>
</tr>
<tr>
<td>SFC B 60 MSL to</td>
<td>G GZG 060/16</td>
<td>N36º58.00' W81º48.00'</td>
</tr>
<tr>
<td>SFC B 60 MSL to</td>
<td>H GZG 334/28</td>
<td>N37º14.00' W82º21.00'</td>
</tr>
<tr>
<td>SFC B 60 MSL to</td>
<td>I ECB 131/33</td>
<td>N37º49.00' W82º22.50'</td>
</tr>
<tr>
<td>60 MSL to or 70 MSL as assigned</td>
<td>J ECB 093/25</td>
<td>N38º09.00' W82º23.00'</td>
</tr>
</tbody>
</table>

60 MSL to K BKW 359/22 N38º09.00' W81º11.00' or 70 MSL as assigned
60 MSL to L BKW 053/34 N38º10.00' W80º36.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from D to I. (IFR lost communications altitude during terrain following is 60 MSL).

ROUTE WIDTH - 5 NM either side of centerline from A to D; 3 NM either side of centerline from D to F; 3 NM left and 5 NM right of centerline from F to G; 5 NM either side of centerline from G to L.

Special Operating Procedures:
(1) Route reservation and brief required.
(2) No alternate Entry or Exit authorized
(3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan. To conduct terrain following operations under actual IMC or at night, aircraft must be equipped with an operable ground mapping radar or terrain following radar.
(4) Where two altitudes are indicated, the lower published altitude is the primary route altitude. The higher altitude will be assigned by ATC only when required to provide separation from other IFR operations.
(5) Mandatory reporting points. UHF radio reports are required when passing:
(a) Pt A to Washington ARTCC on 263.1;
(b) Pt D, report 'Going Terrain Following' to Washington ARTCC on 353.9;
(c) 10 NM East of Pt. E to Indianapolis ARTCC on 257.85;
(d) Pt G to Atlanta ARTCC on 269.3;
(e) Pt H to Indianapolis ARTCC on 257.85;
(f) Pt. J to Charleston Approach Control (CRW) on 269.125;
(g) Pt. L to Washington ARTCC on 253.9.
(6) Return altitude 15,000' MSL. Lost communications altitude 6000' MSL.
(7) Hazard: There are numerous uncontrolled airports from Pt D to Pt I.
(8) Avoid uncharted tower between Points E and F at N37-06.9 W82-04.1. Height 259' AGL 2432' MSL.

FSS Within 100 NM Radius:
DAY, DCA, EKN, RDU

IR-762

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous
**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>LYH 048/20</td>
<td>N37°30.00' W78°30.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>B</td>
<td>LYH 342/46</td>
<td>N37°58.00' W79°37.00'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>C</td>
<td>EKN 229/21</td>
<td>N38°39.00' W80°24.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>D</td>
<td>MGW 214/16</td>
<td>N39°19.00' W80°02.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>E</td>
<td>MGW 118/11</td>
<td>N39°29.00' W79°38.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>F</td>
<td>ESL 079/22</td>
<td>N39°20.00' W78°32.00'</td>
</tr>
<tr>
<td>SFC B 50 MSL to SFC B 50 MSL to 15 NM NE of H, then climb to 12 NM NE of H at 70 MSL, then climb to cross H at 90 MSL</td>
<td>G</td>
<td>ESL 185/19</td>
<td>N38°55.00' W78°59.00'</td>
</tr>
<tr>
<td>90 MSL to</td>
<td>H</td>
<td>ROA 031/50</td>
<td>N38°05.00' W79°36.00'</td>
</tr>
<tr>
<td>90 MSL to</td>
<td>I</td>
<td>ROA 031/30</td>
<td>N37°47.00' W79°47.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from Pt F to 15 NM NE of Pt H.

**ROUTE WIDTH -** 5 NM either side of centerline from A to C; 5 NM right and 2 NM left of centerline from C to E; 5 NM either side of centerline from E to I.

**Special Operating Procedures:**

1. Route reservation and brief required.
2. No alternate Entry or Exit authorized.
3. To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan. To conduct terrain following operations under actual IMC or at night, aircraft must be equipped with an operable ground mapping radar or terrain following radar.
4. Remain North of route centerline between Pt E and Pt F.
5. Descend to 5000' MSL or below by 5 NM SSW of Pt F.
6. Mandatory reporting points. UHF radio reports are required when passing:
   - (a) Pt A to Washington ARTCC on 263.1;
   - (b) Pt C to Clarkburg Approach Control on 280.1;
   - (c) Pt F to Washington ARTCC on 285.6;
   - (d) Pt H to Washington ARTCC on 317.7.
7. Return altitude 15,000' MSL. Lost communications altitude 9000' MSL.
8. Caution:
   - (a) IR-714, IR-715, IR-720 and IR-761 cross at several points;
   - (b) Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 113 OSS/OSA, Joint Base Andrews, MD DSN 857-4183/4194/4171, 240-857-4183/4194/4171 for MOA flight information/deconfliction prior to scheduling route.

**FSW Within 100 NM Radius:**

<table>
<thead>
<tr>
<th>ORIGINATING ACTIVITY: Eastern Air Defense (EADS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSN 587-6247/6313.</td>
</tr>
</tbody>
</table>

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 170 MSL to or as assigned direct to</td>
<td>A</td>
<td>BGR 142/52</td>
<td>N44°22.00' W67°52.00'</td>
</tr>
<tr>
<td>170 MSL to turn right to</td>
<td>B</td>
<td>BGR 112/40</td>
<td>N44°48.00' W67°56.00'</td>
</tr>
<tr>
<td>170 MSL to Then descend direct to</td>
<td>C</td>
<td>BGR 104/45</td>
<td>N44°54.00' W67°49.00'</td>
</tr>
<tr>
<td>100 MSL B 170 MSL to then turn right and continue descent to cross at or above 100 MSL then continue descent direct to cross</td>
<td>D</td>
<td>BGR 102/52</td>
<td>N44°56.00' W67°40.00'</td>
</tr>
<tr>
<td>30 MSL to (Primary TA/TFR Initiation Point) turn right to</td>
<td>E</td>
<td>BGR 103/57</td>
<td>N44°56.00' W67°32.00'</td>
</tr>
<tr>
<td>30 MSL to turn right to</td>
<td>F</td>
<td>BGR 114/73</td>
<td>N44°44.00' W67°11.00'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to (Start TA/TFR Point, Point Alpha contact Boston ARTCC 290.5 and advise changing to enroute freq passing Point Alpha) direct to</td>
<td>G</td>
<td>BGR 122/74</td>
<td>N44°33.00' W67°12.00'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to direct to</td>
<td>H</td>
<td>BGR 132/60</td>
<td>N44°27.00' W67°35.00'</td>
</tr>
<tr>
<td>30 MSL to turn right to</td>
<td>I</td>
<td>BGR 129/49</td>
<td>N44°33.00' W67°48.00'</td>
</tr>
<tr>
<td>30 MSL to turn right to</td>
<td>J</td>
<td>BGR 117/45</td>
<td>N44°44.00' W67°50.00'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to (Pt Bravo. Start Maneuver Area) direct to</td>
<td>K</td>
<td>BGR 091/44</td>
<td>N45°04.00' W67°54.00'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to direct to</td>
<td>L</td>
<td>MLT 156/36</td>
<td>N45°09.00' W67°54.00'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to turn left to</td>
<td>M</td>
<td>MLT 072/30</td>
<td>N45°53.50' W67°57.50'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to climb direct to</td>
<td>N</td>
<td>MLT 062/31</td>
<td>N45°58.50' W68°01.00'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to turn right to</td>
<td>O</td>
<td>MLT 048/32</td>
<td>N46°03.00' W68°09.50'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to (Pt Bravo. Start Maneuver Area) direct to</td>
<td>P</td>
<td>MLT 042/33</td>
<td>N46°05.50' W68°13.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

IR ROUTES

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR

Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW command directive within published altitude blocks from K to AD and from S to P (re-entry). When command directives preclude TF/VC operations, aircrews will maintain IFR altitude for each TF route segment. Minimum altitudes above 200’ AGL, are established to provide at least 100’ vertical clearance of known manmade obstructions within the route width. Obstructions under 200’ AGL were not considered in the route design. The route is designated mountainous from W to AE and S1 to BJ on the re-entry. The remainder of the route in designated non-mountainous. Regulations governing operations below 500’ AGL must be complied with.
IR ROUTES

ROUTE WIDTH - 4 NM either side of centerline from A to M; 2 NM either side of centerline from M to P; 8 NM left and 4 NM right of centerline from P to N46-43.5 W68-34.0; 8 NM left and 3 NM right of centerline from N46-43.5 W68-34.0 to Q; 4 NM either side of centerline from Q to X; 3 NM left and 4 NM right of centerline from X to Z; 4 NM either side of centerline from Z to AG; 4 NM either side of centerline from T1 to BR; 4 NM either side of centerline from AX to J1; 4 NM either side of centerline from R1 to P1.

Special Operating Procedures:
(1) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
(2) Lost communication (LC) procedures: Route LC altitude is 12,000’ MSL. Desired deviation from this procedure must be filed IAW FLIP AP/1B, and verified with Boston ARTCC prior to route entry.
(3) Route designated for SN missions.
(4) Tactical Descent: (This procedure applies to all aircraft scheduled to conduct auto TF letdown and will require a specific ATC clearance, which specifies that the auto TF letdown is approved. Cross A at 170 MSL or as assigned, then maintain 170 MSL thru E, then within SFC B 170 MSL begin auto TF letdown, cross F within SFC B 30 MSL; thence via published route.
(5) Bangor, ME VORTAC entry: ATC shall advise aircrews upon entry request into IR-800 when Houston/Princeton, ME IFR procedures are in effect. Upon receipt of such an advisory, aircraft shall cross point ALPHABETA (N45-04-00 W67-54-00) at 4000’ MSL and maintain 4000’ MSL until passing point BRAVO (N46-05-30 W68-13-00). After passing point BRAVO then resume normal procedures. IFR/VFR terrain following and visual contour operations between these two points are prohibited.
(6) Re-Entry procedures: Aircraft scheduled for maneuver area re-entry shall, in all cases, advise ATC at the entry point of the number of re-entries at the maneuver area.
(7) Centerline between all turn points is a 7.5 NM radius arc unless specified otherwise.
(8) Aircraft flying command directed contour terrain following altitudes may be required to fly higher minimum tracking altitude as listed in 99 ECRG 50-3 for TTR scored activity. In no case will aircraft fly below command directed contour/terrain following altitude.
(9) ATC shall advise aircrews upon entry request into IR-800 when Machias, ME IFR procedures are in effect. Upon receipt of such an advisory, aircraft shall descend to cross E at or above 100 MSL, cross F at 40 MSL and maintain 40 MSL until K. Descend to cross L at 30 MSL, then resume normal procedures. Auto TF letdown will not be authorized when this procedure is in effect. IFR/VFR terrain following and visual contour operations from A thru K are prohibited.
(10) Alternate Entry: ATC shall advise aircrews upon alternate entry request into IR-800 when Machias, ME, IFR procedures are in effect. Upon receipt of such an advisory, aircraft shall descend to cross point I1 (N44-33-00 W67-48-00) at 4000’ MSL and maintain 4000’ MSL until point K (N45-04-00 W67-54-00): Descend to cross L (N45-09-00 W67-55-00) at 3000’ MSL, then resume normal procedures. IFR/VFR terrain following and visual contour operations from AX through K are prohibited.
(11) Noise Sensitive Areas:
(a) Residence at N46-35.6 W68-26.8;
(b) Residence at N46-36.6 W68-27.1;
(c) Residence at N46-35.0 W68-26.5;
(d) Residence at N45-10.8 W67-53.8;
(e) Residence at N46-25.2 W68-27.5;
(f) Residence at N45-45.0 W67-56.6;
(g) Residence at N46-24.4 W67-56.8.

FSS Within 100 NM Radius:
BGR, BTV

IR-801

ORIGINATING ACTIVITY: Det 1, 174 ATKW, PO Box 320, Antwerp, NY 13608, DSN 772-2835/5990, C315-772-2835/5990.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 80 MSL to or as assigned direct to</td>
<td>A</td>
<td>BTV 116/39</td>
<td>N44°16.00’</td>
</tr>
<tr>
<td>80 MSL to direct to</td>
<td>B</td>
<td>BTV 117/38</td>
<td>N44°16.00’</td>
</tr>
<tr>
<td>80 MSL to direct to</td>
<td>C</td>
<td>BTV 166/31</td>
<td>N43°57.00’</td>
</tr>
<tr>
<td>80 MSL to direct to</td>
<td>D</td>
<td>BTV 187/37</td>
<td>N43°47.00’</td>
</tr>
<tr>
<td>80 MSL to direct to</td>
<td>E</td>
<td>MPV 255/38</td>
<td>N43°45.00’</td>
</tr>
<tr>
<td>70 MSL to direct to</td>
<td>F</td>
<td>MPV 262/41</td>
<td>N43°48.00’</td>
</tr>
<tr>
<td>70 MSL to direct to</td>
<td>G</td>
<td>BTV 264/22</td>
<td>N44°16.00’</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>H</td>
<td>BTV 288/24</td>
<td>N44°25.00’</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>I</td>
<td>BTV 296/27</td>
<td>N44°29.00’</td>
</tr>
<tr>
<td>07 AGL B 60 MSL to</td>
<td>J</td>
<td>BTV 313/37</td>
<td>N44°41.00’</td>
</tr>
<tr>
<td>07 AGL B 60 MSL to</td>
<td>K</td>
<td>MSS 127/28</td>
<td>N44°44.00’</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to</td>
<td>L</td>
<td>MSS 139/24</td>
<td>N44°41.00’</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to</td>
<td>M</td>
<td>MSS 172/21</td>
<td>N44°35.00’</td>
</tr>
<tr>
<td>02 AGL B 35 MSL to (Start Maneuver Area)</td>
<td>N</td>
<td>MSS 192/28</td>
<td>N44°27.00’</td>
</tr>
<tr>
<td>35 MSL to</td>
<td>O</td>
<td>ART 084/45</td>
<td>N44°11.00’</td>
</tr>
<tr>
<td>02 AGL B 35 MSL to</td>
<td>P</td>
<td>ART 098/26</td>
<td>N43°59.00’</td>
</tr>
<tr>
<td>02 AGL B 35 MSL to (End Maneuver Area)</td>
<td>Q</td>
<td>ART 111/20</td>
<td>N43°54.00’</td>
</tr>
<tr>
<td>35 MSL to Cross</td>
<td>R</td>
<td>ART 119/17</td>
<td>N43°52.00’</td>
</tr>
</tbody>
</table>
60 MSL to Point Jerry (Report passing Point Jerry to Wheeler Sack APP Primary 347.7 or Secondary 299.85)  
Enter to 02 AGL B 30 MSL to turn left to  
60 MSL to Cross  
70 MSL to Cross  
60 MSL B 70 MSL Cross  
02 AGL B 30 MSL to direct to  

60 MSL to T ART 232/19  
70 MSL to U ART 255/22  
60 MSL B 70 MSL Cross at or below 140 MSL V ART 278/15  
70 MSL B 140 MSL to Cross W ART 281/9  
170 MSL to X ART 270/5  
170 MSL to Y ART 236/4  
170 MSL to Z ART 170/25  
35 MSL to Re-Entry: A Cross  
35 MSL to R1 ART 119/17  
60 MSL to S1 ART 154/13  
60 MSL to AA ART 196/1  
60 MSL to AB ART 052/14  
60 MSL to AC MSS 240/44  
60 MSL to AD MSS 218/18  
60 MSL to turn right to  
60 MSL to AE MSS 191/18  
35 MSL B 60 MSL turn right and descend to cross  
35 MSL to N1 MSS 192/28  
60 MSL to S2 ART 154/13  
60 MSL to (Point Jerry) turn right to  
60 MSL to BA ART 196/1  
60 MSL to BB ART 036/26  
60 MSL to BC ART 045/33  
30 MSL B 60 MSL to descend direct to cross DB ART 055/33  
02 AGL B 30 MSL to direct to  

02 AGL B 30 MSL to turn left to  
02 AGL B 30 MSL to turn right and climb to cross  
02 AGL B 35 MSL to Thence via the published route.  

PMSV CONTACTS: Primary Home Station. Alternate Minot (MIB 342.5).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR  
Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW command directives with published altitude blocks from G to Q. When command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment. Minimum altitudes above 200' AGL are established to provide 100' vertical clearance of known man-made obstructions within the route width. Obstructions below 200' AGL were not considered in the route design. The route is designated mountainous from B to N and non-mountainous from N to Q. Regulations governing operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to N;  
4 NM left and 3 NM right of centerline from N to O;  
5 NM left and 3 NM right of centerline from O to P;  
4 NM left and 3 NM right of centerline from P to R;  
4 NM either side of centerline from R to Z. Re-Entry A: Entire segment is 4 NM either side of centerline. Re-Entry B: 4 NM either side of centerline from S to BA;  
3 NM left and 4 NM right of centerline from BA to BD;  
2 NM either side of centerline from BD to BE;  
6 NM left and 2 NM right of centerline from BE to BF;  
6 NM left and 3 NM right of centerline from BF to BG;  
4 NM left and 3 NM right of centerline from BD to P.

Special Operating Procedures:

(1) Participating Aircraft Separation: Route is designated for MARSA operations established by coordinated scheduling.
(2) Lost communications (LC) procedures: Route LC altitude is 17,000' MSL. Desired deviation from this procedure must be filed IAW FLIP AP/1B, Chapter 1, and verified with Boston ARTCC prior to route entry.
(3) Route designated for SN missions.
(4) ATC will advise aircrews flying IR-801 of traffic in the Saranac Lake ILS pattern upon request for a Saranac Lake ILS advisory. If unable to obtain a Saranac Lake ILS advisory or when advised by ATC of Saranac Lake ILS traffic, aircrews will maintain 7000' MSL from G to H then descend to cross I at 6000' MSL and maintain 6000' MSL to L.
(5) Crews conducting operations below the minimum IFR altitude in the Fort Drum Maneuver Area should make special note of towers at the following locations: N44-14.0 W75-07.5 (205' AGL), N43-59.5 W75-35.3 (300' AGL), N43-52.2 W75-44.2 (943' AGL), N43-50.5 W75-45.1 (300' AGL), and N43-52.5 W75-43.1 (1000' AGL).
(6) Re-entry procedures: Aircraft scheduled for Maneuver Area Re-entries shall in all cases advise ATC at the entry point of the number of re-entries desired.
(7) Aircrews should be especially vigilant for aircraft transiting to and from R-5201. Aircrews will monitor 255.4 from points A to N, for aircraft call crossing the IR route. Aircrews will also make an 'IP-INBOUND' call on this frequency. Aircraft
with additional activity will again monitor this frequency while on the re-entry to Point S and continue IP call-in procedures.

(8) For Re-entry B: Aircrews will monitor Wheeler Sack Approach on primary 347.7 or secondary 299.85 and will report Point Jerry (S) on every re-entry. If no contact with Wheeler Sack by Point BA, maintain highest IFR altitude until re-establishing contact with Wheeler Sack Approach and when cleared published routing by Wheeler Sack Approach or when the aircrew is established on the published route exit.

(9) For Re-entry B: Following initial pass on weapons range, aircrews will climb to IFR altitudes for subsequent re-entries. Aircrews will maintain IFR altitudes for all subsequent re-entries until Point BD. Provided clearance is received from Wheeler Sack Approach and contact is again made with the range, aircrews are cleared for TA altitudes at Point BD through Point BG.

(10) Aircrews will report their final progress of Point Jerry to Boston ARTCC on primary 377.1 or secondary 323.0.

(11) Aircraft will remain 1.5 NM right of centerline from G to N to avoid environmentally sensitive areas.

(12) Noise Sensitive Areas:
   (a) Village at N43-55.8 W75-35.5;
   (b) Farm at N44-10.6 W75-04.0.

FSS Within 100 NM Radius:
BTV, BUF, IPT

IR-850

ORIGINATING ACTIVITY: Commander, NAWCWD, 1 Administration Circle, Mail Stop 1002, China Lake, CA 93555-6100 DSN 437-2201, C760-939-2201.


HOURS OF OPERATION: Sunrise-Sunset by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 MSL B 60 MSL to</td>
<td>A</td>
<td>BGR 134/52</td>
<td>N44°28.50' W67°47.00'</td>
</tr>
<tr>
<td>40 MSL B 60 MSL to</td>
<td>B</td>
<td>BGR 099/36</td>
<td>N44°56.30' W68°03.00'</td>
</tr>
<tr>
<td>40 MSL B 60 MSL to</td>
<td>C</td>
<td>BGR 078/37</td>
<td>N45°09.30' W68°08.10'</td>
</tr>
<tr>
<td>15 AGL B 50 MSL to</td>
<td>D</td>
<td>MLT 160/21</td>
<td>N45°19.00' W68°12.00'</td>
</tr>
<tr>
<td>15 AGL B 50 MSL to</td>
<td>E</td>
<td>MLT 022/23</td>
<td>N45°58.00' W68°30.00'</td>
</tr>
<tr>
<td>20 AGL B 60 MSL to</td>
<td>F</td>
<td>MLT 014/39</td>
<td>N46°13.50' W68°37.00'</td>
</tr>
<tr>
<td>20 AGL B 60 MSL to</td>
<td>G</td>
<td>MLT 012/44</td>
<td>N46°18.50' W68°39.50'</td>
</tr>
<tr>
<td>20 AGL B 60 MSL to</td>
<td>H</td>
<td>MLT 003/49</td>
<td>N46°22.00' W68°51.00'</td>
</tr>
<tr>
<td>20 AGL B 60 MSL to</td>
<td>I</td>
<td>MLT 357/40</td>
<td>N46°12.00' W68°53.00'</td>
</tr>
<tr>
<td>20 AGL B 60 MSL to</td>
<td>J</td>
<td>MLT 360/36</td>
<td>N46°09.00' W68°49.00'</td>
</tr>
<tr>
<td>20 AGL B 60 MSL to</td>
<td>K</td>
<td>MLT 002/23</td>
<td>N45°57.00' W68°41.00'</td>
</tr>
<tr>
<td>20 AGL B 60 MSL to</td>
<td>L</td>
<td>MLT 305/21</td>
<td>N45°40.50' W69°00.00'</td>
</tr>
<tr>
<td>15 AGL B 60 MSL to</td>
<td>M</td>
<td>MLT 272/34</td>
<td>N45°24.50' W69°16.50'</td>
</tr>
<tr>
<td>15 AGL B 60 MSL to</td>
<td>N</td>
<td>BGR 338/37</td>
<td>N45°18.00' W69°27.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>O</td>
<td>BGR 326/37</td>
<td>N45°12.50' W69°34.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>P</td>
<td>AUG 026/46</td>
<td>N45°05.00' W69°38.50'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>Q</td>
<td>AUG 024/39</td>
<td>N44°58.00' W69°42.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>R</td>
<td>AUG 016/37</td>
<td>N44°56.50' W69°49.50'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>S</td>
<td>AUG 010/35</td>
<td>N44°53.50' W69°54.50'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>T</td>
<td>AUG 005/33</td>
<td>N44°51.50' W69°58.20'</td>
</tr>
<tr>
<td>SFC B 60 MSL to</td>
<td>U</td>
<td>AUG 352/34</td>
<td>N44°50.00' W70°09.00'</td>
</tr>
<tr>
<td>SFC B 60 MSL to</td>
<td>V</td>
<td>AUG 352/41</td>
<td>N44°56.00' W70°13.00'</td>
</tr>
<tr>
<td>SFC B 60 MSL to</td>
<td>W</td>
<td>AUG 345/49</td>
<td>N45°00.00' W70°25.00'</td>
</tr>
<tr>
<td>15 MSL B 60 MSL to</td>
<td>X</td>
<td>AUG 340/53</td>
<td>N45°01.00' W70°33.80'</td>
</tr>
<tr>
<td>15 MSL B 60 MSL to</td>
<td>Y</td>
<td>AUG 332/46</td>
<td>N44°51.00' W70°35.00'</td>
</tr>
<tr>
<td>15 AGL B 60 MSL to</td>
<td>Z</td>
<td>AUG 342/43</td>
<td>N44°53.50' W70°23.00'</td>
</tr>
<tr>
<td>SFC B 60 MSL to</td>
<td>W1</td>
<td>AUG 345/49</td>
<td>N45°00.00' W70°25.00'</td>
</tr>
<tr>
<td>15 AGL B 50 MSL to</td>
<td>A1</td>
<td>MLT 236/28</td>
<td>N45°12.50' W68°54.50'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>A2</td>
<td>MLT 179/23</td>
<td>N45°13.50' W68°19.20'</td>
</tr>
<tr>
<td>15 AGL B 50 MSL to</td>
<td>D1</td>
<td>MLT 160/21</td>
<td>N45°19.00' W68°12.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from Point T to W.

ROUTE WIDTH - 5 NM either side of centerline from A to O; 5 NM left and 4 NM right of centerline from O to Q; 3 NM either side of centerline from Q to U; 5 NM left and 3 NM right of centerline from U to V; 5 NM either side of centerline from V to W1.

Special Operating Procedures:
(1) For use in VMC only.
(2) Route continuation from M to A1 authorized.
(3) Route continuation from A2 to D authorized.
(4) Route continuation from Z to W authorized.
(5) Points A, B, D, M, W, Alternate Entry/Exit.
(6) Remain east of centerline from Points I through L to avoid overflight of Baxter State Park.
(7) Maintain altitude B in W, X, Y, Z pattern until in receipt of IFR clearance.
FSS Within 100 NM Radius:
BGR, BTV

IR-851

ORIGINATING ACTIVITY: Commander, NAWCWD, 1
Administration Circle, Mail Stop 1002, China Lake, CA
93555-6100 DSN 437-2201, C760-939-2201.

SCHEDULING ACTIVITY: Commander, FACS FAC
VACAPES, 601 Oceana Blvd, Virginia Beach, VA 23460-2283 DSN

HOURS OF OPERATION: Daily Sunrise-Sunset

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized
from Point V to Y.

ROUTE WIDTH - 5 NM either side of centerline from A to Q;
5 NM left and 4 NM right of centerline from Q to S; 3 NM either
side of centerline from S to W; 5 NM left and 3 NM right of
centerline from W to X. 5 NM either side of centerline from Y to
Y1.

Special Operating Procedures:
(1) For use in VMC conditions only.
(2) Route continuation from Point O to D authorized.
(3) Route continuation from Point F to P authorized.
(4) Route continuation from Point A2 to Y authorized.
(5) Alternate Entry/Exit Points: A, B, D, F, Y.
(6) Remain east of centerline from Points G through J to avoid
overflight of Baxter State Park.
(7) Maintain altitude block in Y, Z, A1, A2 pattern until in
receipt of IFR clearance.

FSS Within 100 NM Radius:
BGR, BTV

IR-852

ORIGINATING ACTIVITY: Commander, NAWCWD, 1
Administration Circle, Mail Stop 1002, China Lake, CA
93555-6100 DSN 437-2201, C760-939-2201.

SCHEDULING ACTIVITY: Commander, FACS FAC
VACAPES, 601 Oceana Blvd, Virginia Beach, VA 23460-2283 DSN

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
40 MSL B 60 MSL to A | BGR 134/52 | N44°28.50' W67°47.00'
40 MSL B 60 MSL to B | BGR 099/36 | N44°56.30' W68°03.00'
40 MSL B 60 MSL to C | BGR 078/37 | N45°09.30' W68°08.10'
15 AGL B 40 MSL to D | MLT 179/23 | N45°13.50' W68°19.20'
15 AGL B 40 MSL to E | MLT 236/28 | N45°12.50' W68°54.50'
15 AGL B 50 MSL to F | MLT 272/34 | N45°24.50' W69°16.50'
15 AGL B 50 MSL to G | MLT 305/21 | N45°40.50' W69°00.00'
20 AGL B 60 MSL to H | MLT 002/23 | N45°57.00' W68°41.00'
20 AGL B 50 MSL to I | MLT 360/36 | N46°09.00' W68°49.00'
20 AGL B 50 MSL to J | MLT 357/40 | N46°12.00' W68°53.00'
20 AGL B 50 MSL to K | MLT 003/49 | N46°22.00' W68°51.00'
20 AGL B 50 MSL to L | MLT 012/44 | N46°18.50' W69°39.50'
20 AGL B 50 MSL to M | MLT 014/39 | N46°13.50' W68°37.00'
20 AGL B 50 MSL to N | MLT 022/23 | N45°58.00' W68°30.00'
15 AGL B 50 MSL to O | MLT 160/21 | N45°19.00' W68°12.00'
15 AGL B 40 MSL to D1 | MLT 179/23 | N45°13.50' W68°19.20'
15 AGL B 40 MSL to E1 | MLT 236/28 | N45°12.50' W68°54.50'
15 AGL B 50 MSL to F1 | MLT 272/34 | N45°24.50' W69°16.50'
15 AGL B 60 MSL to P | BGR 338/37 | N45°18.00' W69°27.00'
05 AGL B 60 MSL to Q | BGR 326/37 | N45°12.50' W69°34.00'
05 AGL B 60 MSL to R | AUG 026/46 | N45°05.00' W69°38.50'
05 AGL B 60 MSL to S | AUG 024/39 | N44°58.00' W69°42.00'
05 AGL B 60 MSL to T | AUG 016/37 | N44°56.50' W69°49.50'
05 AGL B 60 MSL to U | AUG 010/35 | N44°53.50' W69°54.50'
05 AGL B 60 MSL to V | AUG 005/33 | N44°51.50' W69°58.20'
SFC B 60 MSL to W | AUG 352/34 | N44°50.00' W70°09.00'
SFC B 60 MSL to X | AUG 352/41 | N44°56.00' W70°13.00'
SFC B 60 MSL to Y | AUG 345/49 | N45°00.00' W70°25.00'
15 AGL B 60 MSL to Z | AUG 340/53 | N45°01.00' W70°33.80'
15 AGL B 60 MSL to A1 | AUG 332/46 | N44°51.00' W70°35.00'
15 AGL B 60 MSL to A2 | AUG 342/43 | N44°53.50' W70°23.00'
SFC B 60 MSL to Y1 | AUG 345/49 | N45°00.00' W70°25.00'
IR ROUTES

40 MSL B 60 MSL to B BGR 099/36
40 MSL B 60 MSL to C BGR 078/37
15 AGL B 40 MSL to D MLT 179/23
15 AGL B 40 MSL to E MLT 236/28
15 AGL B 50 MSL to F MLT 272/34
15 AGL B 60 MSL to G BGR 338/37
05 AGL B 60 MSL to H BGR 326/37
05 AGL B 60 MSL to I AUG 026/46
05 AGL B 60 MSL to J AUG 024/39
05 AGL B 60 MSL to K AUG 016/37
05 AGL B 60 MSL to L AUG 010/35
05 AGL B 60 MSL to M AUG 005/33
SFC B 60 MSL to N AUG 352/34
SFC B 60 MSL to O AUG 352/41
SFC B 60 MSL to P AUG 345/49
15 AGL B 60 MSL to Q AUG 340/53
15 AGL B 60 MSL to R AUG 332/46
15 AGL B 60 MSL to S AUG 342/43
SFC B 60 MSL to P1 AUG 345/49


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A TAL 149/56 N64°16.00' W151°44.00'
01 AGL B 76 MSL to B BIG 252/100 N64°05.17' W149°31.27'
01 AGL B 80 MSL to C BIG 254/74 N64°08.12' W148°31.55'
01 AGL B 108 MSL to D BIG 255/39 N64°05.00' W147°10.00'
01 AGL B 83 MSL to E BIG 269/48 N64°17.12' W147°24.97'
Alternate exit track D1-EB
01 AGL B 108 MSL to D1 BIG 255/39 N64°05.00' W147°10.00'
01 AGL B 100 MSL to EA EIL 088/37 N64°28.00' W145°45.00'
Alternate exit track D2-EB
01 AGL B 108 MSL to D2 BIG 255/39 N64°05.00' W147°10.00'
01 AGL B 103 MSL to EB BIG 234/22 N63°55.13' W146°31.40'

SPECIAL OPERATING PROCEDURES:

(1) Route transitions through EIELSON Military Operations Areas (MOA). Primary exit enters RESTRICTED AREA R-2211; EA alternate exit transitions RESTRICTED AREA R-2202, DELTA 2 and YUKON 1 MOA; EB alternate exit enters RESTRICTED AREA R-2202. Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Prior scheduling with Scheduling Activity (SA) of R-2211 or R-2202 is required if entering this restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Primary exit point E will only be utilized if you also have R-2211 scheduled for use, if not utilize alternate exit point D within Eielson MOA. Alternate exit points EA and EB will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202. If the MOAs are scheduled by other users, the SA will require you to contact the scheduled users to coordinate altitude separation.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

TERRAIN FOLLOWING OPERATIONS:

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) For use in VMC only.
(2) Route continuation from S to P authorized.
(3) Utilize alternate exit points A, B, D, F, P.
(4) Maintain altitude B in P, Q, R, S pattern until in receipt of IFR clearance.

FSS Within 100 NM Radius:
BGR, BTV

IR-900

(4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. Eielson MOA and R-2211 are cold/inactive when ERC is closed. A recorded message on 125.3 MHz indicates ERC is closed.

(7) R2202 is subdivided. R2202A can be hot while R2202B and C are cold. If R2202B and C are cold, alternate exits EA and EB may be flown, but stay clear of any hot sub-sections.

(8) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(9) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

(10) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSAP) operations. User must coordinate MARSA operations with the SA prior to use.

(11) Primary Entry: Point A. Alternate Exit: Point B, C and D.

(12) Primary Exit: Point E. Alternate Exit: Points D, EA, and EB.

(13) All route points are collocated with IR-916, VR-1900 and VR-1916.

(14) Use CAUTION for multiple Airways, including low altitude RNAV routes near Points A to C and multiple MTR crossings throughout the entire route.

(15) Use CAUTION for float plane activity at Mucha Lake (N64 13.00 W150 53.00) on segment A to B in the Kantishta River valley.

(16) Use CAUTION on segment B to C. In IMC conditions, maintain 1,000' AGL minimum to avoid multiple isolated cabins, light-aircraft emergency airstrips, and numerous wind turbines within 3NM of route centerline.

(17) Use CAUTION for VFR traffic in the vicinity of the Nenana River on Segment B to C for light aircraft transiting to/from Windy Pass and Denali Park.

(18) Use CAUTION for uncharted Newman Creek Airstrip (N63 58.60 W147 15.60) 6NM southwest of Point D. Avoid by 1 NM below 1,500' AGL.

(19) Remain clear of hunting cabins in vicinity of Golden King Creek Airstrip (N64 11.47 W147 55.57) 4NM south of segment C to D. Remain clear by 1,500' AGL or 3 NM, continuous.

(20) Remain clear of two uncharted airstrips: (N64 07.10 W148 00.00) directly on segment C to D crossing Gold King creek; and (N64 06.50 W147 33.20) 0.5NM north of segment C to D crossing Wood River. Remain clear by 1,500' AGL or 3 NM, continuous.

(21) Remain clear of Shaw Creek Youth Camp and Clear Creek Cabins on Delta River east of alternate exit route segment D1 to EA by 1,500' AGL or 1 NM, continuous.

(22) Remain clear of Birch Lake State Recreation Site on Delta River west of alternate exit route segment D1 to EA by 2,000' AGL or 1 NM from 15 May-30.

(23) ATC contact: Route entry/exit A through E: Anchorage Center (319.2/120.9). Alternate exit points EA and EB: Anchorage Center (322.5/135.3).

(24) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.


FSS Within 100 NM Radius:
FAI, MCG, ORT, TKA

IR-901


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99706 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned</td>
<td>A</td>
<td>SQA 220/38</td>
<td>N60°45.88'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W156°43.17'</td>
</tr>
<tr>
<td>01 AGL B 72 MSL to B</td>
<td>SQA 157/39</td>
<td>N60°27.63'</td>
<td>W155°31.82'</td>
</tr>
<tr>
<td>01 AGL B 72 MSL to C</td>
<td>AKN 360/80</td>
<td>N59°59.85'</td>
<td>W156°01.07'</td>
</tr>
<tr>
<td>01 AGL B 72 MSL to D</td>
<td>AKN 039/54</td>
<td>N59°13.77'</td>
<td>W155°19.55'</td>
</tr>
<tr>
<td>01 AGL B 72 MSL to E</td>
<td>AKN 051/88</td>
<td>N59°16.82'</td>
<td>W154°07.30'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from segments A to D; Segments D to E: 5 NM North to 1 NM South of direct line between D and E.

Special Operating Procedures:

(1) Route transitions through NAKNEK Military Operations Area (MOA). Contact scheduling activity (SA) for de-confliction prior to use.

(2) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSAP) operations, use must coordinate MARSA operations with the SA prior to use. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the special use airspace (SUA). This query is confirming you have coordinated MARSA ops within the MOA with other scheduled users, respond appropriately.
IR ROUTES

(3) Low altitude air-to-air training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR with the SA.

(4) Early contact with Air Traffic Control (ATC) before route entry will increase the mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

(5) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(6) Primary Entry: Point A.

(7) Primary Exit: Point E.

(8) All route points are collocated with IR-911, VR-931, and VR-932.

(9) Use CAUTION for IR-903, IR-913, VR-933, and VR-934 crossing at Point A.

(10) Use CAUTION for multiple airways, including low altitude RNAV routes, on segments C to E.

(11) Remain clear of lodge located on the Mulchatna River (N60-24.00 W155-54.00) southwest of Point B, by 1500’ AGL or 1 NM from 1 May to 30 Sep.

(12) Remain above 2000’ AGL starting from 23 NM past Point C (2 NM north of the Lake Iliamna shoreline) until Point D from 1 Jun to 15 Sep.

(13) Remain clear of the Moraine Creek drainage area immediately south of Point D by 3 NM, from 1 May to 30 Sep. This area is used for bear viewing and fishing from Kukaklek Lake to Spectacle Lake 10 NM east, and resides within Katmai National Park and Preserve. Additionally, remain clear of this area for bear hunting in odd years from 1 to 21 Oct and even years from 10 to 25 May.

(14) ATC Contact: Route Entry: Anchorage Center (379.9/128.5), Primary Exit: Anchorage Center (354.0/124.8).

(15) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

(16) Heavy migratory bird activity on route from 10 Apr - 20 May and 1 Aug - 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com

FSS Within 100 NM Radius:
ENAA, ILI, MCG, HOM, DLG

IR-902


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>MCG 134/44</td>
<td>N62°17.58' W154°54.47'</td>
</tr>
<tr>
<td>01 AGL B 75 MSL to B</td>
<td>MCG 211/20</td>
<td>N62°44.00' W156°10.00'</td>
<td></td>
</tr>
</tbody>
</table>

01 AGL B 75 MSL to C MCG 258/68 N63°04.00' W158°04.00'
01 AGL B 75 MSL to D UNK 085/45 N63°45.00' W159°02.00'
01 AGL B 50 MSL to E UNK 067/67 N64°02.00' W158°11.00'

Alternate exit track D1 to EA
01 AGL B 75 MSL to D1 UNK 085/45 N63°45.00' W159°02.00'
01 AGL B 62 MSL to EA UNK 194/18 N63°37.33' W161°00.90'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through STONY Military Operations Area (MOA). Contact scheduling activity (SA) for de-confliction prior to use.

(2) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSAR) operations. User must coordinate MARSAR operations with the SA prior to use. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the special use airspace (SUA). This query is confirming you have coordinated within the MOA with other scheduled users, respond appropriately.

(3) Low altitude air-to-air training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR with the SA.

(4) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

(5) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(6) Primary Entry: Point A.

(7) Primary Exit: Point E, Alternate Exit: Point EA.

(8) All route points are collocated with IR-912, VR-1902, and VR-1912.

(9) Use CAUTION for IR-905, IR-915, VR-1905, and VR-1915 crossing at Point A.

(10) Use CAUTION for McGrath Airport Class E airspace, north of segment A to B.

(11) Use CAUTION for multiple airways, including low altitude RNAV routes, on segments B to D and on alternate exit route D1 to EA.

(12) During the Iditarod Sled Dog Race (Approx 1-15 March), on odd number years, the minimum altitude on segments B to E is 1500’ AGL and must remain at least 1 NM east of the Yukon River shore on segments C to E.

(13) Remain clear of Peregrine Falcon Nests on segment D to E. Remain 1 NM E of the Yukon River shore or 2000’ AGL, (15 Apr-31 Aug).

(14) Remain above 1500’ AGL on segments C through E during moose hunting season, (27 Aug-30 Sep).

(15) Segments B to E and alternate exit routing are flown over Innoko National Wildlife Refuge and Wilderness Areas. Remain clear of human activity by at least 1/2 NM. (1 May-30 Sep).
(16) Avoid direct overflight of hunting camp located on segment C to D on the Iditarod River at N63-10.90 W158-18.00.
(17) ATC Contact: Route Entry: Anchorage Center (353.8/128.1), Primary Exit:(290.2/127.0), and Alternate Exit (335.5/135.7).
(18) Local Weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

FSS Within 100 NM Radius:
MCG, TKA

IR-903


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through STONY and NAKNEK Military Operations Areas (MOA). Contact scheduling activity (SA) for de-confliction prior to use.
(2) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARS) operations. User must coordinate MARS operations with the SA prior to use. Expect ATC to give route and MOA clearance prior to route entry/intial descent. ATC may ask if you are a participant in the special use airspace (SAU). This query is confirming you have coordinated MARS ops within the MOA with other scheduled users, respond appropriately.

(3) Low altitude air-to-air training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR with the SA.
(4) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.
(5) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield specific CTAF. The Alaska-unique area CTAF is commonly 122.9.
(6) Primary Entry: Point A. Alternate Entry: Point D.
(7) Primary Exit: Point H. Alternate Exit: Point D.
(8) All route points are collocated with IR-913, VR-933, and VR-934.
(9) Use CAUTION for IR-905, IR-915, VR-1905, and VR-1915 crossing at Point A.
(10) Use CAUTION for IR-901, IR-911, VR-931, and VR-932 crossing at Point D.
(11) Use CAUTION for multiple airways, including low altitude RNAV routes, on segments C through D.
(12) Use CAUTION for rapidly rising terrain from segment A to B in the Revelation Mountain Range.
(13) On segment A to B remain clear of Lake Clark National Park approximately 12 NM Southeast of route corridor.
(14) ATC contact: Route Primary Entry: Anchorage Center (273.45/123.9), Primary Exit: (282.35/132.75), Alternate Entry/Exit Point D: (379.9/128.5).
(15) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.
(16) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska bird avoidance model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
ENA, ILI, MCG, HOM, DLG

IR-905


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99706 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A TKA 209/49 N61°44.43’ W151°23.48’
01 AGL B 142 MSL to B TKA 229/58 N61°55.73’ W151°59.55’
01 AGL B 142 MSL to C TKA 224/82 N61°39.53’ W152°40.88’
01 AGL B 148 MSL to D SQA 035/61 N61°42.08’ W153°55.17’
01 AGL B 148 MSL to E MCG 134/44 N62°17.58’ W154°54.47’
01 AGL B 142 MSL to F AKN 323/76 N59°54.00’ W157°38.00’
01 AGL B 142 MSL to G AKN 311/70 N59°42.00’ W158°00.00’
01 AGL B 100 MSL to H AKN 310/60 N59°32.23’ W157°51.17’

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A SQA 035/61 N61°42.08’ W153°55.17’
01 AGL B 142 MSL to B SQA 044/40 N61°24.62’ W154°24.62’
01 AGL B 142 MSL to C SQA 318/7 N61°12.43’ W155°43.97’
01 AGL B 91 MSL to D SQA 220/38 N60°45.88’ W156°43.17’
01 AGL B 65 MSL to E SQA 213/82 N60°13.67’ W157°46.65’
01 AGL B 65 MSL to F AKN 323/76 N59°54.00’ W157°38.00’
01 AGL B 65 MSL to G AKN 311/70 N59°42.00’ W158°00.00’
01 AGL B 100 MSL to H AKN 310/60 N59°32.23’ W157°51.17’

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A TKA 209/49 N61°44.43’ W151°23.48’
01 AGL B 142 MSL to B TKA 229/58 N61°55.73’ W151°59.55’
01 AGL B 142 MSL to C TKA 224/82 N61°39.53’ W152°40.88’
01 AGL B 148 MSL to D SQA 035/61 N61°42.08’ W153°55.17’
01 AGL B 148 MSL to E MCG 134/44 N62°17.58’ W154°54.47’
IR ROUTES

01 AGL B 90 MSL to F  MCG 069/49  N62°58.00’
W153°50.00’

01 AGL B 69 MSL to G  MCG 026/66  N63°42.53’
W153°51.83’

01 AGL B 69 MSL to H  MCG 023/101  N64°10.43’
W153°03.03’

01 AGL B 69 MSL to I  MCG 032/131  N64°16.00’
W151°44.00’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through STONY and GALENA Military Operations Areas (MOAs). Contact scheduling activity (SA) for de-confliction prior to use.

(2) Route approved for military assumes responsibility for separation of aircraft (MARS). User must coordinate with the SA for the use of MOAs and/or RA. This means you have coordinated MARS ops within the MOA with other scheduled users, respond appropriately.

(3) Low altitude air-to-air training (LOWAT) operations are scheduled on segments B to C. During this time, the entry point for IR-905 will be Point B.

(4) Early contact with air traffic control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

(5) Approaching entry/exit points and periodically throughout the route, advise civil traffic with position reports on 122.9.

(6) Primary entry: Point A (Seasonal 1 Jun to 15 Aug entry: Point B, enter at an AS ASSIGNED TO alternate entry altitude.) Alternate entry: Points B, D, and E.

(7) Primary exit: Point I. Alternate exit: Points D or E.

(8) Route segment A to B will be deactivated from 1 Jun - 15 Aug during the fishing season due to numerous light aircraft near rivers/lakes. During this time, the entry point for IR-905 will be Point B.

(9) All route points are collocated with IR-915, VR-1905, and VR-1915.

(10) Use CAUTION for multiple airways, including low altitude RNAV routes, on segments A to G.


(12) Use CAUTION for low VFR traffic especially in the summer between Point McKenzie, Mt Spurr, and approximately 20 NM around Point A.

(13) Use CAUTION for sling load helicopter ops from the surface to 3000’ AGL between Points B to C from 1 Jun to 1 Oct.

(14) Use CAUTION for light aircraft operating in the vicinity of an uncharted airstrip (N61 54.63 W145°45.00’). On schedule overlying MOA in addition to MTR with the SA.

(15) Heavy mining operators with numerous helicopter sling-load and light fixed wing aircraft operating in the vicinity of segments B to C. Remain clear of multiple uncharted airstrips (Whiskey Bravo at N61 57.50 W152 36.00 and unknown at N61 43.00 W152 47.00) within the Whistler Mine mandatory communication area located immediately north of Point C and along segment B to C from June - October. Self-announce position and intentions on 122.9. Whiskey Bravo airstrip may respond with traffic advisories.

(16) Remain clear of Lake Clark National Park approximately 4 NM south of route corridor on segment C to D.

(17) During the Iditarod sled dog race (approximately 1-15 March) maintain minimum altitude of 1500’ AGL over the south fork of the Kuskokwim River on segment E to F. Numerous light aircraft support the race.

(18) ATC contact: Route entry: Anchorage Center (125.55/254.3), primary exit (120.9/319.2), alternate exit (353.8/128.1).

(19) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

(20) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska bird avoidance model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
ENA, PAQ, ILI, MCG, HOM, TKA, FAI

IR-909


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to A  BIG 076/39  N63°54.00’
W144°16.00’

01 AGL B 106 MSL to B  BIG 050/52  N64°15.00’
W143°50.00’

01 AGL B 106 MSL to C  BIG 335/28  N64°28.00’
W145°45.00’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through DELTA 4, BUFFALO, and YUKON 1 Military Operations Areas (MOAs). Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated MARSA operations with the SA prior to use.

(3) Low altitude air-to-air training (LOWAT) operations are scheduled on segments B to C. During this time, the entry point for IR-905 will be Point B.

(4) Primary entry: Point A (Seasonal 1 Jun to 15 Aug entry: Point B, enter at an AS ASSIGNED TO alternate entry altitude.) Alternate entry: Points B, D, and E.

(5) Use CAUTION for multiple airways, including low altitude RNAV routes, on segments A to G.


(7) Use CAUTION for low VFR traffic especially in the summer between Point McKenzie, Mt Spurr, and approximately 20 NM around Point A.

(8) Use CAUTION for sling load helicopter ops from the surface to 3000’ AGL between Points B to C from 1 Jun to 1 Oct.

(9) Use CAUTION for light aircraft operating in the vicinity of an uncharted airstrip (N61 54.63 W144°16.00’). On schedule overlying MOA in addition to MTR with the SA.

(10) Heavy mining operators with numerous helicopter sling-load and light fixed wing aircraft operating in the vicinity of segments B to C. Remain clear of multiple uncharted airstrips (Whiskey Bravo at N61 57.50 W152 36.00 and unknown at N61 43.00 W152 47.00) within the Whistler Mine mandatory communication area located immediately north of Point C and along segment B to C from June - October. Self-announce position and intentions on 122.9. Whiskey Bravo airstrip may respond with traffic advisories.

(11) Remain clear of Lake Clark National Park approximately 4 NM south of route corridor on segment C to D.

(12) During the Iditarod sled dog race (approximately 1-15 March) maintain minimum altitude of 1500’ AGL over the south fork of the Kuskokwim River on segment E to F. Numerous light aircraft support the race.

(13) ATC contact: Route entry: Anchorage Center (125.55/254.3), primary exit (120.9/319.2), alternate exit (353.8/128.1).

(14) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

(15) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska bird avoidance model data is available at http://www.usahas.com.
Special Operating Procedures:

(1) Route transitions through NAKNEK Military Operations Area (MOA), contact Scheduling Agency (SA) for deconfliction prior to use.

(2) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSAR) operations. User must coordinate MARSAR operations with the SA prior to use. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the special use airspace (SUA). This query is confirming you have coordinated MARSAR ops within the MOA with other scheduled users, respond appropriately.

(3) Low altitude air-to-air training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR with the SA.

(4) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

(5) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.

(6) When ERC is open, you are required to contact them on UHF primary 229.4, secondary 244.55, or VHF 125.3 prior to entering active MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA and continue periodic reattempts.

(7) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(8) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(9) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

(10) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSAR) operations. User must coordinate MARSAR operations with the SA prior to use.

(11) Use CAUTION for multiple Airways, including low altitude RNAV routes near Point C and multiple MTR crossings throughout the route.

(12) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at N64 17.00 W144 16.00, south of segment B to C, which uses helicopters for re-supply.

(13) Use CAUTION for Pogo Mine and Pogo Mine Airstrip adjacent to route at Points B and C. Avoid mine center point (N64 27.12 W144 54.19) in Goodpaster River valley by 3NM and 1000’ AGL (15 May-15 Jul). Air strip has high density air activity with helicopters (150’-500’ cable long-lines) and fixed wing activity.

(14) Prior to entry, remain clear of the native village of Healy Lake around N63 59.00 W144 45.00 by 3NM or 6,000’ MSL continuously; and Lake George around N63 47.00 W144 32.00 by 2NM and 1,500’ AGL continuously.

(15) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2,000’ AGL. See local OGV FCIF for details and locations.

(16) ATC contact: Anchorage Center; Route Entry: (322.5/135.3), Primary Exit: (319.2/120.9).

(17) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

(18) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS) See Alaska Supplement.

IR-911


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave, Elmendorf AFB, AK 99706 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data  Pt Fac/Rad/Dist Lat/Long
As assigned to A AKN 051/88 N59°16.82’ W154°07.30’
01 AGL B 72 MSL to B AKN 039/54 N59°13.77’ W155°19.55’
01 AGL B 72 MSL to C AKN 360/80 N59°59.85’ W156°01.07’
01 AGL B 72 MSL to D SQA 157/39 N60°27.63’ W155°31.82’
01 AGL B 72 MSL to E SQA 220/38 N60°45.88’ W156°43.17’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - Segment A to B: 5 NM North and 1 NM South of route centerline, remainder of route B to E: 5 NM either side of route centerline.

Special Operating Procedures:

(1) Route transitions through NAKNEK Military Operations Area (MOA), contact Scheduling Agency (SA) for deconfliction prior to use.

(2) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSAR) operations. User must coordinate MARSAR operations with the SA prior to use. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the special use airspace (SUA). This query is confirming you have coordinated MARSAR ops within the MOA with other scheduled users, respond appropriately.

(3) Low altitude air-to-air training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR with the SA.

(4) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

(5) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.

(6) Primary entry: Point A.

(7) Primary exit: Point E.

(8) All route points are collocated with IR-901, VR-931, and VR-932.

(9) Use CAUTION for multiple airways, including low altitude RNAV routes, on segments A to C.

(10) Use CAUTION for IR-903, VR-933 and VR-934.

(11) Remain clear of the Moraine Creek drainage area immediately south of Point B by 3 NM from 1 May to 30 Sep. This area is used for bear viewing and fishing from Kukaklek Lake to Spectacle Lake 10 NM east, and resides within Katmai National Park and Preserve. Additionally, remain clear of this area for bear hunting in odd years from 1 Oct to 21 Oct and during even years from 10 to 25 May.
IR ROUTES

(12) Remain above 2,000' AGL starting from Point B to 28 NM past Point B (2 NM north of the Lake Iliamna shoreline) from 1 Jun to 15 Sep.
(13) Remain clear of lodge located on the Mulchatna River (N60-24.00 W155-54.00) southwest of Point D, by 1500' AGL or 1 NM from 1 May to 15 Sep.
(14) ATC contact: Route entry: Anchorage Center (354.0/124.8), Primary exit: Anchorage Center (379.9/128.5).
(15) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

FSS Within 100 NM Radius:
ENA, ILI, MCG, HOM, DLG

IR-912

SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.
HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A UNK 067/67 N64°02.00' W158°11.00'
01 AGL B 50 MSL to B UNK 085/45 N63°45.00' W159°02.00'
01 AGL B 75 MSL to C MCG 258/68 N63°04.00' W158°04.00'
01 AGL B 75 MSL to D MCG 211/20 N62°17.58' W156°10.00'
01 AGL B 75 MSL to E MCG 134/44 N62°17.58' W154°54.47'
Alternate entry AA to B1
as assigned to AA UNK 194/18 N63°37.33' W161°00.90'
01 AGL B 62 MSL to B1 UNK 085/45 N63°45.00' W159°02.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through STONY Military Operations Area (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.
(2) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARS) operations. User must coordinate MARS operations with the SA prior to use. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace (SUA). This query is attempting to confirm you have coordinated with the SA for use of the SUA, respond appropriately.
(3) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR with the SA.
(4) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.
(5) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.
(6) Primary Entry: Point A. Alternate Entry: Point AA.
(7) Primary Exit: Point E.
(8) All route points are collocated with IR-902, VR-1902 and VR-1912.
(9) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments B to D and on alternate entry route from AA to B1.
(10) Use CAUTION for McGrath Airport Class E Airspace, north of segment D to E.
(11) Use CAUTION for IR-905, IR-915, VR-1905 and VR-1915 crossing at Point E.
(12) During the Iditarod Sled Dog Race (approximately 1-15 March), on odd number years, the minimum altitude on segments C to D is 1500' AGL and must remain at least 1 NM east of the Yukon River shore on segments A to C.
(13) Remain clear of Peregrine Falcon Nests on segment A to B. Remain 1 NM E of the Yukon River shore or 2000' AGL, (15 Apr-31 Aug).
(14) Remain above 1500' AGL on segments A through C during moose hunting season, (27 Aug-30 Sep).
(15) Segments A to D and alternate entry routing are flown over Innoko National Wildlife Refuge and Wilderness Area. Remain clear of human activity by at least 1/2 NM. (1May-30 Sep).
(16) Avoid direct overflight of hunting camp located on segment B to C on the Iditarod River at (N63 10.90, W158 18.00).
(17) ATC contact: Route Entry: Anchorage Center (290.2/127.0), Alternate Entry: (335.5/135.7), Primary Exit: (353.8/128.1).
(18) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

FSS Within 100 NM Radius:
MCG, TKA

IR-913

SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.
HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local
ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | AKN 310/60 | N59°32.23' W157°51.17'
01 AGL B 100 MSL to | B | AKN 311/70 | N59°42.00' W158°00.00'
01 AGL B 65 MSL to | C | AKN 323/76 | N59°54.00' W157°38.00'
01 AGL B 65 MSL to | D | SQA 213/82 | N60°13.67' W157°46.65'
01 AGL B 65 MSL to | E | SQA 220/38 | N60°45.88' W156°43.17'
01 AGL B 91 MSL to | F | SQA 318/7 | N61°12.43' W155°43.97'
01 AGL B 142 MSL to | G | SQA 044/40 | N61°24.62' W154°24.62'
01 AGL B 142 MSL to | H | SQA 035/61 | N61°42.08' W153°55.17'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

1. Route transitions through STONY and NAKNEK military operations areas (MOA). Contact scheduling activity (SA) for de-confliction prior to use.

2. Route approved for military assumes responsibility for separation of aircraft (MARS) operations. User must coordinate MARS operations with the SA prior to use. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace (SUA). This query is attempting to confirm you have coordinated with the SA for use of the SUA, respond appropriately.

3. Low altitude air-to-air training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR with the SA.

4. Early contact with air traffic control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

5. Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-specific area CTAF is commonly 122.9.

6. Primary Entry: Point A. Alternate Entry: Point E.

7. Primary Exit: Point H. Alternate Exit: Point E.

8. All route points are collocated with IR-903, VR-933, and VR-934.

9. Use CAUTION for IR-901, IR-911, VR-931, and VR-932 crossing at Point E.

10. Use CAUTION for multiple airways, including low altitude RNAV routes, on segments E to F.

11. Use CAUTION for rapidly rising terrain from segment G to H in the Revelation Mountain Range.

12. On segment G to H remain clear of Lake Clark National Park approximately 12 NM southeast of route corridor.

13. Use CAUTION for IR-905, IR-915, VR-1905, and VR-1915 crossing at Point H.

14. ATC Contact: Route Primary Entry: Anchorage Center (282.35/132.75), Primary Exit: (273.45/123.9), Alternate Entry/Exit Point E: (379.9/128.5).

15. Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

16. Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at, http://www.usahas.com

FSS Within 100 NM Radius:
EN, IL, MCG, HOM, DLG

IR-915


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99706 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | MCG 032/131 | N64°16.00' W151°44.00'
01 AGL B 69 MSL to | B | MCG 023/101 | N64°10.43' W153°03.03'
01 AGL B 69 MSL to | C | MCG 026/66 | N63°42.53' W153°51.83'
01 AGL B 69 MSL to | D | MCG 069/49 | N62°58.00' W153°50.00'
01 AGL B 90 MSL to | E | MCG 134/44 | N61°17.58' W154°54.47'
01 AGL B 148 MSL to | F | SQA 035/61 | N61°42.08' W153°55.17'
01 AGL B 148 MSL to | G | TKA 224/82 | N61°39.53' W152°40.88'
01 AGL B 142 MSL to | H | TKA 229/58 | N61°55.73' W151°59.55'
01 AGL B 142 MSL to | I | TKA 209/49 | N61°44.43' W151°23.48'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

1. Route transitions through STONY and GALENA Military Operations Areas (MOAs). Contact Scheduling Activity (SA) for de-confliction prior to use.

2. Route approved for military assumes responsibility for separation of aircraft (MARS) operations. User must coordinate MARS operations with the SA prior to use. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace (SUA). This query is attempting to confirm you have coordinated with the SA for use of the SUA, respond appropriately.

15. Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

16. Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at, http://www.usahas.com
(3) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR with the SA.

(4) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

(5) Approaching entry/exit points and periodically throughout the route, advise civil traffic with position reports on 122.9.

(6) Primary Entry: Point A. Alternate Entry: Points E or F.

(7) Primary Exit: Point I. 1 Jun to 15 Aug point I is closed, seasonal exit: Point H. Alternate Exit: Points E, F, and H.

(8) Route segment H to I will be deactivated from 1 Jun - 15 Aug during the fishing season due to numerous light aircraft near rivers/lakes. During this time, the exit point for IR-915 will be Point H.

(9) All route points are collocated with IR-905, VR-1905 and VR-1915.

(10) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments C to I.

(11) Use Caution for IR-900, IR-916, IR-1900 and VR-916 at Point A as well as IR-901, IR-912, VR-1902, VR-1912 at Point E and IR-903, IR-913, VR-933 and VR-934 at Point F.

(12) Use CAUTION for light aircraft operating in the vicinity of an uncharted airstrip (N61 54.63, W 154 22.19) on segments E to F, approximately 28NM past Point E, just right of route centerline.

(13) Use CAUTION for sling load helicopter ops from the SFC to 3000' AGL between Points G to H from 1 Jun - 1 Oct.

(14) Use CAUTION for low VFR traffic especially in the summer between Point McKenzie, Mt Spurr, and approximately 20 NM around Point I.

(15) During the Iditarod Sled Dog Race (approximately 1-15 March) maintain minimum altitude of 1500' AGL over the South Fork of the Kuskokwim River on segment D to E. Numerous light aircraft support the race.

(16) Remain clear of Lake Clark National Park approximately 4 NM south of route corridor on segment F to G.

(17) Heavy mining operations with numerous helicopter sling-load and light fixed wing aircraft operating in the vicinity of segment G to H. Remain clear of multiple uncharted airstrips (Whiskey Bravo at N61 57.50, W 152 36.00 and unknown at N61 43.00, W 152 47.00) within the Whistler Mine mandatory communication area located immediately north of Point G and along segment G to H (approximately Jun-Oct). Self-announce position and intentions on 122.9. Whiskey Bravo airstrip personnel may respond with traffic advisories.

(18) ATC contact: Route Entry: Anchorage Center (319.2/120.9), Primary Exit: (254.3/125.55), and Alternate Exit (353.8/128.1).

(19) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

(20) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

**FSS Within 100 NM Radius:**
ENA, PAQ, ILI, MCG, HOM, TKA, FAI

**IR ROUTES**

**IR-916**

**ORIGINATING ACTIVITY:** 611 AOC/CODK, 9480 Pease Ave., Ste. 121, Elmendorf AFB, AK 99506 DSN 317-552-5715/4430, C907-552-5715/4430.

**SCHEDULING ACTIVITY:** 354 OSS/OSCR, 354 Broadway St, Eielson AFB, AK 99702 DSN 317-377-9327, C907-377-9327/2842.

**HOURS OF OPERATION:** Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local.

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>BIG 269/48</td>
<td>N64°17.12'</td>
<td>W147°24.97'</td>
</tr>
<tr>
<td>01 AGL B 83 MSL to B</td>
<td>BIG 255/39</td>
<td>N64°05.00'</td>
<td>W147°10.00'</td>
</tr>
<tr>
<td>01 AGL B 108 MSL to C</td>
<td>BIG 254/74</td>
<td>N64°08.12'</td>
<td>W148°31.55'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to D</td>
<td>BIG 252/100</td>
<td>N64°05.17'</td>
<td>W149°31.27'</td>
</tr>
<tr>
<td>01 AGL B 76 MSL to E</td>
<td>TAL 149/56</td>
<td>N64°16.00'</td>
<td>W151°44.00'</td>
</tr>
</tbody>
</table>

Alternate entry track AB-B1
as assigned to AA EIL 088/37 N64°28.00' W145°45.00' |
01 AGL B 100 MSL to B1 BIG 255/39 N64°05.00' W147°10.00' Thence along remainder of route

Alternate entry track AB-B2
as assigned to AB BIG 234/22 N63°55.13' W146°31.40' |
01 AGL B 103 MSL to B2 BIG 255/39 N64°05.00' W147°10.00' Thence along remainder of route

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH** - 5 NM either side of centerline.

**Special Operating Procedures:**

(1) Primary route entry is in RESTRICTED AREA R-2211, remainder of route transitions through EIELSON Military Operations Areas (MOA); AA Alternate Entry transitions through RESTRICTED AREA R-2202, YUKON 1 and DELTA 2 MOA; AB Alternate entry is in RESTRICTED AREA R-2202. Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Prior scheduling with Scheduling Activity (SA) of R-2211 or R-2202 is required if entering this restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Primary entry point A will only be utilized if you also have R-2211 scheduled for use, if not utilize alternate entry point B within Eielson MOA. Alternate entry points AA and AB will only be scheduled when Eielson Range Control is open or if you are working...
directly with the Army within R-2202. If the MOAs are scheduled by other users, the SA will require you to contact the scheduled users to coordinate altitude separation.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. Eielson MOA and R-2211 are cold/inactive when ERC is closed. A recorded message on 125.3 MHz indicates ERC is closed.

(7) R2202 is subdivided. R2202A can be hot while R2202B and C are cold. If R2202A and C are cold, alternate entries AA and AB may be flown, but stay clear of any hot sub-sections.

(8) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(9) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

(10) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSA) operations. User must coordinate MARSA operations with the SA prior to use.

(11) Primary Entry: Point A. Alternate Entry: Points B, AA and AB.

(12) Primary Exit: Point E. Alternate Exit: Point B, C and D.

(13) All route points are collocated with IR-900, VR-1900 and VR-1916.

(14) Use CAUTION for multiple Airways, including low altitude RNAV routes near Points C to E and multiple MTR crossings throughout the entire route.

(15) Use CAUTION for uncharted Newman Creek Airstrip (N64 58.60 W147 15.60) 6NM southwest of Point B. Avoid by 1 NM below 1,500' AGL.

(16) Use CAUTION on segment C to D. In IMC conditions, maintain 1,000' AGL minimum to avoid multiple isolated cabins, light-aircraft emergency airstrips, and numerous wind turbines within 3NM of route centerline.

(17) Use CAUTION for VFR traffic in the vicinity of the Nenana River on Segment C to D for light aircraft transiting to/from Windy Pass and Denali Park.

(18) Use CAUTION for float plane activity at Mucha Lake (N64 13.00 W150 53.00) on segment D to E in the Kantishna River valley.

(19) Remain clear of Birch Lake State Recreation Site on Delta River west of alternate entry route segment AA to B1 by 2,000' AGL or 1 NM from 15 May-30.

(20) Remain clear of Shaw Creek Youth Camp and Clear Creek Cabins on Delta River east of alternate entry route segment AA to B1 by 1,500' AGL or 1 NM, continuous.

(21) Remain clear of hunting cabins in vicinity of Gold King Creek Airstrip (N64 11.47 W147 55.57) 4NM north of segment B to C. Remain clear by 1,500' AGL or 3 NM, continuous.

(22) Remain clear of two uncharted airstrips: (N64 07.10 W148 00.00) directly on segment B to C crossing Gold King creek; and (N64 06.50 W147 33.20) 0.5NM north of segment B to C crossing Wood River. Remain clear by 1,500' AGL or 3 NM, continuous.

(23) ATC contact: Route entry/exit A through E: Anchorage Center (319.2/120.9). Alternate entry points AA and AB: Anchorage Center (322.5/135.3).

(24) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.


FSS Within 100 NM Radius:
FAI, MCG, ORT, TKA

IR-917


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A BIG 033/70 N64°38.00' W143°27.00'
01 AGL B 106 MSL to B BIG 041/112 N64°46.00' W141°47.00'
01 AGL B 106 MSL to C BIG 050/112 N64°29.22' W141°35.65'
01 AGL B 106 MSL to D BIG 055/70 N64°13.00' W143°05.00'
01 AGL B 106 MSL to E BIG 048/54 N64°17.53' W143°45.37'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through YUKON 1 and YUKON 3 Military Operations Areas (MOAs). Contact Scheduling Activity (SA) for de-confliction prior to use.

2-173
IR ROUTES

(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of overlapping MOAs.

(3) When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active MOAs. Radio contact with ERC may be difficult. If no contact, call in the blind, then proceed on route through the MOA and continue periodic reattempts.

(4) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3.

(5) When ERC is closed (generally nights/weekends) the MOAs will be inactive and a recorded message will be broadcast on 125.3.

(6) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(7) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA.

(8) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

(9) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARS) operations. User must coordinate MARS operations with the SA prior to use.

(10) Primary Entry: Point A. Alternate Entry Point: B.

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>BIG 048/54</td>
<td>N64°17.53’</td>
</tr>
<tr>
<td>01 AGL B 106 MSL to B</td>
<td>BIG 055/70</td>
<td>N64°13.00’</td>
<td>W143°05.00’</td>
</tr>
<tr>
<td>01 AGL B 106 MSL to C</td>
<td>BIG 050/112</td>
<td>N64°29.22’</td>
<td>W141°35.65’</td>
</tr>
<tr>
<td>01 AGL B 106 MSL to D</td>
<td>BIG 041/112</td>
<td>N64°46.00’</td>
<td>W141°47.00’</td>
</tr>
<tr>
<td>01 AGL B 106 MSL to E</td>
<td>BIG 033/70</td>
<td>N64°38.00’</td>
<td>W143°27.00’</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through YUKON 1 and YUKON 3 Military Operations Areas (MOAs). Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of overlapping MOAs.

(3) When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active MOAs. Radio contact with ERC may be difficult. If no contact, call in the blind, then proceed on route through the MOA and continue periodic reattempts.

(4) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3.

(5) When ERC is closed (generally nights/weekends) the MOAs will be inactive and a recorded message will be broadcast on 125.3.

(6) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(7) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA.

(8) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

(9) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARS) operations. User must coordinate MARS operations with the SA prior to use.

(10) Primary Entry: Point A. Alternate Entry Point: B.

FSS Within 100 NM Radius:
FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS) See Alaska Supplement

IR-918


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE WIDTH - 5 NM either side of centerline.
(11) Primary Exit: Point E. Alternate Exit Point: D.
(12) All route points are collocated with IR-917, VR-935 and VR-936.
(13) Use CAUTION for overlapping MTR near points A and B.
(14) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
(15) Seasonal Fortymile caribou calving sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2,000' AGL. See local OGV FCIF for details and locations.
(16) Contact agencies: Route Entry/Exit: Anchorage Center (322.5/135.3).
(17) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.
(18) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS)

IR-919


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through FOX 3, FOX 1, and EIELSON Military Operations Areas (MOAs). Primary exit point I borders R-2211 and alternate exit point HA, is within R-2202. Operations are restricted in and around active Restricted Areas (RAs) and MOAs.
(2) Prior scheduling with Scheduling Activity (SA) of R-2211 or R-2202 is required if entering this restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Alternate exit HA will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202. If the MOAs are scheduled by other users, the SA will require you to contact the scheduled users to coordinate altitude separation.
(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.
(4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.
(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 311.6. If cold, RA becomes Class G/E airspace - no clearance required. If hot and 354 OSS Scheduling has not specifically scheduled entry/initial descent. IF cold, RA becomes Class G/E airspace - no clearance required. If hot and 354 OSS Scheduling has not specifically scheduled entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.
(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. Eielson MOA and R-2211 are cold/inactive when ERC is closed. A recorded message on 125.3 MHz indicates ERC is closed.
(7) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. Eielson MOA and R-2211 are cold/inactive when ERC is closed. A recorded message on 125.3 MHz indicates ERC is closed.
(8) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.
Route approved for Military Assumes Responsibility for Separation of Aircraft (MARS) operations. User must coordinate MARS operations with the SA prior to use.

This MTR must be flown in contact with ERC as stated above. When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.

Pass post MTR intentions thru ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

Primary Entry: Point A. Alternate Entry: Points B, C, D, E, and AC.

Primary Exit: Point I. Alternate Exit: Points AC, E, F, G, H, and HA.

All route points collocated with IR-921, VR-937 and VR-938. Route has shared points with multiple MTRs at points G, H, and I.

Use CAUTION for multiple Airways, including low altitude RNAV routes, on alternate entry segment AC to C1.

Use CAUTION near point G. Route corridor overlaps with R-2202. If not cleared into R-2202, remain clear.

Minimum altitude on segments A to E, including alternate entry route AC to C1, is 1000' AGL from 15 May - 30 Sep to comply with the Bald and Golden Eagle Protection Act.

Alternate Entry leg AC to C1 has 5,000' MSL minimum altitude 15 May to 30Sept due to Gulkana National Wild and Scenic River area. Restriction begins 5 NM west of AC and ends 5 NM east of C1.

Remain clear of caribou hunting area by 1,000' AGL from 1 Aug - 30 Sep. Area is bounded by 5 NM either side of the line from (N62 51.00, W147 09.00) to (N62 59.00, W145 54.00) on segments B to C and AC to C1. Additionally, avoid the Delta caribou herd calving area below 2,000' AGL 15 May - 15 Jun from the halfway point between points D and E until point E.

Remain clear of Maclaren Lodge and Airstrip east of segment C to D on the Denali Highway (N63 07.00 W146 32.00) by 2 NM and 1,500' AGL.

Remain above 5,000' AGL over sheep lambing area on segments E thru G from 15 May - 15 Jun and 15 Nov - 15 Dec. Area bounded by (N64 00.00 W148 00.00) to (N63 34.00 W148 00.00) to (N63 34.00 W146 24.00) to (N63 40.00 W146 58.00) to (N63 55.00 W147 15.00) to (N63 58.45 W147 13.20) to (N64 00.00 W147 15.00) to point of beginning.

During September maintain at least 1,000' AGL on all segments within Eielson MOA and R-2202. This is a Mid-Air Collision Avoidance safety issue due to high density General Aviation flight operations during the fall hunting season.

Contact Agencies - Primary Route Entry: Anchorage Center (119.5/317.5), Primary Route Exit: Fairbanks Approach (126.5/381.4), AC Entry: Anchorage Center (119.5/317.5), HA Exit: Anchorage Center (135.3/322.5).

Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

As assigned to A FAI 132/35 N64°17.12' W147°24.97'
01 AGL B 80 MSL to B BIG 255/39 N64°05.00' W147°10.00'
01 AGL B 129 MSL to C BIG 239/34 N63°55.12' W146°58.65'
01 AGL B 147 MSL to D BIG 233/51 N63°47.07' W147°33.32'
01 AGL B 147 MSL to E TKA 022/96 N63°29.87' W147°46.60'
01 AGL B 147 MSL to F TKA 035/108 N63°18.82' W146°51.22'
01 AGL B 135 MSL to G TKA 047/107 N62°58.37' W146°31.83'
01 AGL B 111 MSL to H TKA 049/78 N62°45.57' W147°29.82'
01 AGL B 110 MSL to I TKA 072/89 N62°13.77' W146°55.48'

Alternate entry track AC to C1 as assigned to AC BIG 234/22 N63°55.13' W146°31.40'
01 AGL B 129 MSL to C1 BIG 239/34 N63°55.12' W146°58.65'

Alternate exit track G1 to HA
01 AGL B 135 MSL to G1 TKA 047/107 N62°58.37' W146°31.83'
01 AGL B 110 MSL to HA BIG 144/69 N62°53.23' W145°09.07'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through EIELSON, FOX 1 and FOX 3 Military Operations Areas (MOAs). Primary entry point A borders R-2211 and alternate entry point AC is within R-2202. Operations are restricted in and around active Restricted Areas (RAs) and MOAs.
(2) Prior scheduling with Scheduling Activity (SA) of R-2211 or R-2202 is required if entering this restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Alternate Entry AC will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202. If the MOAs are scheduled by other users, the SA will require you to contact the scheduled users to coordinate altitude separation.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for YOU, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. Eielson MOA and R-2211 are cold/inactive when ERC is closed. A recorded message on 125.3 MHz indicates ERC is closed.

(7) R2202 is subdivided. R2202A can be hot while R2202B and C are cold. If R2202B and C are cold, alternate entry AC to C1 may be flown, but stay clear of any hot sub-sections.

(8) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

(9) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSAs) operations. User must coordinate MARSAs operations with the SA prior to use.

(10) This MTR must be flown in contact with ERC as stated above. When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.

(11) Pass post MTR intentions thru ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(12) Primary Entry: Point A. Alternate Entry: Points B, C, D, E, and AC.

(13) Primary Exit: Point I. Alternate Exit: Points E, F, G, H, and HA.

(14) All route points collocated with IR-919, VR-937 and VR-938. Route has shared points with multiple MTRs at points A, B, and C.

(15) Use CAUTION for multiple Airways, including low altitude RNAV routes, on alternate exit segment G1 to HA.

(16) Use CAUTION near point C. Route corridor overlaps with R-2202. If not cleared into R-2202, remain clear.

(17) Use CAUTION for uncharted Newman Creek Airstrip (N63 58.60 W147 15.60) west of segments B to C. Avoid by 1 NM below 1,500’ AGL.

(18) During September maintain at least 1,000’ AGL on all segments within Eielson MOA and R-2202. This is a Mid-Air Collision Avoidance safety issue due to high density General Aviation flight operations during the fall hunting season.

(19) Remain above 5,000’ AGL over sheep lambing area on segments C thru E from 15 May - 15 Jun and 15 Nov - 15 Dec. Area bounded by (N64 00.00 W148 00.00) to (N63 34.00 W148 00.00) to (N63 34.00 W146 24.00) to (N63 40.00 W146 58.00) to (N63 55.00 W147 15.00) to (N63 58.45 W147 13.20) to (N64 00.00 W147 15.00) to point of beginning.

(20) Minimum altitude on segments E to I, including alternate exit route G1 to HA, is 1000’ AGL from 15 Mar to 30 Sep to comply with the Bald and Golden Eagle Protection Act.

(21) Remain clear of Maclaren Lodge and Airstrip east of segment F to G on the Denali Highway (N63 07.00 W146 32.00) by 2 NM and 1,500’ AGL.

(22) Remain clear of caribou hunting area by 1,000’ AGL from 1 Aug - 30 Sep. Area is bounded by 5 NM either side of the line from (N62 51.00, W147 09.00) to (N62 59.00, W145 54.00) on segments G to H and G1 to HA. Additionally, avoid the Delta caribou herd calving area below 2,000’ AGL 15 May - 15 Jun from point E to the halfway point between E and F.

(23) Alternate Exit leg G1 to HA has 5,000’ MSL minimum altitude 15 May to 30 Sept due to Gulkana National Wild and Scenic River area. Restriction begins 5 NM east of G1 and ends 5 NM west of HA.

(24) Contact Agencies - Primary Route Entry: Fairbanks Approach (126.5/381.4), Primary Route Exit: Anchorage Center (119.5/317.5), AC Entry: Anchorage Center (135.3/322.5), HA Exit: Anchorage Center (119.5/317.5).

(25) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

(26) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
FAI, ORT, ENA, PAQ, TKA

IR-922


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri. Not available 2200-0700 local.

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to A BIG 144/69 | N62°53.23' | W145°09.07'
01 AGL B 143 MSL to B BIG 135/46 | N63°17.35' | W145°05.09'

IR ROUTES

01 MSL to C BIG 097/59 N63°29.65′ W143°48.32′
01 AGL to D BIG 079/68 N63°44.28′ W143°13.18′
01 AGL to E BIG 055/70 N64°13.00′ W143°05.00′
01 AGL to F BIG 095/29 N63°46.30′ W144°45.00′
01 AGL to G BIG 137/26 N63°35.92′ W145°22.82′
01 AGL to H BIG 154/24 N63°36.23′ W145°40.07′
01 AGL to I BIG 210/28 N63°43.23′ W146°34.23′
01 AGL to J BIG 239/34 N63°55.12′ W146°58.65′

Alternate exit track
I1-JA
01 AGL to I1 BIG 210/28 N63°43.23′ W146°34.23′
01 AGL to JA BIG 223/21 N63°51.55′ W146°27.10′

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of the route on segments A-H, 5 NM south of route and 1 NM north of route on segments H-J. 5 NM either side of alternate exit I1-JA if R-2202 is utilized.

Special Operating Procedures:

1) Route transitions through PAXON, BUFFALO, YUKON 3, FOX 2, FOX 1, and EIELSON Military Operations Areas (MOAs) and through DELTA 4 MOA during Major Flying Exercises. Route transitions immediately south of R-2202 on segments H to J. Alternate exit JA enters R-2202. Contact Scheduling Activity (SA) for MOA de-confliction prior to use.

2) Prior scheduling with SA of R-2202 is required if entering restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Alternate exit JA will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202.

3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA but NOT into active/hot RA and continue periodic reattempts.

5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

6) When ERC is closed (nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for YOU, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. A recorded message on 125.3 MHz indicates ERC is closed.

7) R-2202 is subdivided. R-2202A can be hot while R-2202B and C are cold. If R-2202B and C are cold, alternate exit JA may be flown, but stay clear of any hot sub-sections.

8) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

9) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSA) operations. User must coordinate MARSA operations with the SA prior to use.

10) This MTR must be flown in contact with ERC as stated above. When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

11) Pass post-MTR intentions thru ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

12) Primary entry: Point A. Alternate entry: Point B, E and G.

13) Primary exit: Point J. Alternate exit: Point E, G and JA (within R-2202).

14) All route points are collocated with IR-923, VR-940 and VR-941.

15) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments A to H.

16) Use CAUTION for IR-919, IR-921, VR-937 and VR-938 alt entry/exit crossings at points A, J and JA; as well as IR-917, IR-918, VR-935 and VR-936 overlapping segments E to F; and IR-909, IR-939, VR-1909, and VR-1939 at Point F.

17) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150-500′ cables strung below for carrying cargo.

18) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles will be avoided by 2,000′ AGL. See local OGV FCIF for details and locations.

19) Minimum altitude on segments A to 12 NM prior to C and 2 NM prior to G to H is 1,000′ AGL from 15 Mar to 30 Sep to comply with the Bald and Golden Eagle Protection Act. Additionally, minimum altitude on segments 5 NM prior to B to C and F to I is 10,000′ MSL from 15 May to 15 Jun to avoid sheep lambing areas.

20) Remain clear of sheep lambing area under entire segment B to C by 1,000′ AGL from 1 May to 30 June. Area bounded by (N63 21.00, W145 05.00) to (N63 33.00, W144 05.00) to (N63 22.00, W144 05.00) to (N63 10.00, W145 05.00) to point of beginning.

21) Maintain 1,500′ AGL minimum when within 10 NM of Point C for annual moose hunting season (approximately 1 to 20 Sep).

22) Remain clear of numerous cabins and fishing camps in the vicinity of Point C on the Alaska Highway.

23) Numerous noise sensitive areas near Alaska and Richardson Hwy VFR corridors within BUFFALO MOA on segment F to G, remain at/above 4,000′ MSL, reference local PPSS draw files and IFR Enroute Low Altitude Chart L3 for exact dimensions.

24) Remain clear of the Native village of Healy Lake (N63 59.00, W144 45.00), 10 NM west of Point F, by 3 NM radius or 6,000 MSL continuously.
(25) Remain clear of Lake George (N63 47.00, W144 32.00) on segment F to G by 2 NM and 1,500 AGL continuously.
(26) Remain clear of Gulkana and Delta National Wild and Scenic River areas by 5,000 MSL from 15 May to 30 Sep. The restriction runs from point H to the mid-point of FOX 2 MOA, over the Delta River.
(27) Remain clear of Donnelly Creek State Recreation Site (N63 39.40, W145 53.00) on segment H to I by 1 NM radius and 2000’ AGL from 15 May to 30 Sep.
(28) Remain clear of Black Rapids Airport (N63 32.10, W145 51.65), 5NM southwest of Point H, by 3 NM radius and 1500’ AGL continuously.
(29) ATC contact: Anchorage Center primary and alternate entry: (317.5/119.5); primary and alternate exit: (322.5/135.3).
(30) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.
(31) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement

IR-923


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:
As assigned to A BIG 239/34 N63°55.12’ W146°58.65’
01 AGL B 154 MSL to B BIG 210/28 N63°43.23’ W146°34.23’
01 AGL B 162 MSL to C BIG 154/24 N63°36.23’ W145°40.07’
01 AGL B 154 MSL to D BIG 137/26 N63°35.92’ W145°22.82’
01 AGL B 140 MSL to E BIG 095/29 N63°46.30’ W144°45.00’
01 AGL B 135 MSL to F BIG 055/70 N64°13.00’ W143°05.00’
01 AGL B 97 MSL to G BIG 079/68 N64°44.28’ W143°13.18’
01 AGL B 143 MSL to H BIG 097/59 N63°29.65’ W143°48.32’
01 AGL B 143 MSL to I BIG 135/46 N63°17.35’ W145°05.05’
01 AGL B 143 MSL to J BIG 144/69 N62°53.23’ W145°09.07’
Alternate entry AB to B1

ROUTE WIDTH - 5 NM south of route and 1 NM north of route on segments A-C. 5 NM either side on route segments C-J. 5 NM either side of alternate entry AB-B1 if R-2202 is utilized.

Special Operating Procedures:
(1) Route transitions through EIELSON, FOX 1, FOX 2, BUFFALO, YUKON 3, and PAXON Military Operations Areas (MOAs) and through DELTA 4 MOA during Major Flying Exercises. Route transitions immediately south of R-2202 on segments A to C. Alternate exit AB enters R-2202. Contact Scheduling Activity (SA) for MOA de-confliction prior to use.
(2) Prior scheduling with SA of R-2202 is required if entering restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Alternate entry AB will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202.
(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.
(4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA but NOT into active/hot RA and continue periodic reattempts.
(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.
(6) When ERC is closed (nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for YOU, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. A recorded message on 125.3 MHz indicates ERC is closed.
(7) R-2202 is subdivided. R-2202A can be hot while R-2202B and C are cold. If R-2202B and C are cold, alternate entry AB may be flown, but stay clear of any hot sub-sections.
(8) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.
(9) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARS) operations. User must coordinate MARS operations with the SA prior to use.
(10) This MTR must be flown in contact with ERC as stated above. When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic
IR ROUTES

with geographic position reports on area-specific and/or airfield-specific CTA.F. The Alaska-unique area CTA.F is commonly 122.9.

(11) Pass post-MTR intentions thru ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(12) Primary entry: Point A. Alternate entry: Point AB (within R-2202), D and F.

(13) Primary exit: Point J. Alternate exit: D, F and I.

(14) All route points are collocated with IR-922, VR-940 and VR-941.

(15) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments C to J.

(16) Use CAUTION for IR-919, IR-921, VR-937, and VR-938 crossing at points A, AB, and J; as well as IR-909, IR-939, VR-1909, and VR-1939 at Point E; and IR-917, IR-918, VR-935 and VR-936 overlapping segments E to F.

(17) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.

(18) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles will be avoided by 2,000' AGL. See local OGV FCIF for details and locations.

(19) Remain clear of Donnelly Creek State Recreation Site (N63 39.40, W145 53.00) on segment B to C by 1 NM radius and 2000' AGL from 15 May to 30 Sep.

(20) Remain clear of Black Rapids Airport (N63 32.10, W145 51.65), SNM southwest of Point C, by 3 NM radius and 1500' AGL continuously.

(21) Remain clear of Gulkana and Delta National Wild and Scenic River areas by 5,000' MSL from 15 May to 30 Sep. The restriction runs from the mid-point of FOX 2 MOA to point C, over the Delta River.

(22) Numerous noise sensitive areas near Alaska and Richardson Hwy VFR corridors within BUFFALO MOA on segment D to E, remain at/above 4000 MSL, reference local PFP draw files and IFR Enroute Low Altitude Chart L3 for exact dimensions.

(23) Remain clear of Lake George (N63 47.00, W144 32.00) on segment D to E by 2 NM and 1,500 AGL continuously.

(24) Remain clear of the Native village of Healy Lake (N63 59.00, W144 45.00), 10 NM west of Point E, by 3 NM radius or 6,000 MSL continuously.

(25) Maintain 1,500' AGL minimum while within 10 NM of Point H for annual moose hunting season (approximately 1 to 20 Sep).

(26) Remain clear of numerous cabins and fishing camps in the vicinity of Point H on the Alaska Highway.

(27) Remain clear of sheep lambing area under entire segment H to I by 1,000' AGL from 1 May to 30 June. Area bounded by (N63 21.00, W145 05.00) to (N63 33.00, W144 05.00) to (N63 22.00, W144 05.00) to (N63 10.00, W145 05.00) to point of beginning.

(28) Minimum altitude on segments C to 2 NM past D and 23 NM prior to I to J is 1000' AGL from 15 Mar to 30 Sep to comply with the Bald and Golden Eagle Protection Act. Additionally, minimum altitude on segments B to E and H to 17 NM prior to J is 10,000' MSL from 15 May to 15 Jun to avoid sheep lambing areas.

(29) ATC contact: Anchorage Center primary and alternate entry: (322.5/135.3), primary and alternate exit: (317.5/119.5).

(30) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

(31) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement

IR-939


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:
Altitude Data    Pt    Fac/Rad/Dist    Lat/Long
As assigned to    A    BIG 335/28    N64°28.00'    W145°45.00'
                 B    BIG 050/52    N64°15.00'    W143°50.00'
                 C    BIG 076/39    N63°54.00'    W144°16.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through YUKON 1, BUFFALO, and DELTA 4 Military Operations Areas (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(3) When ERC is open, you are required to contact them on UHF primary 229.4, secondary 244.55, or VHF 125.3 prior to entering active MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA and continue periodic reattempts.

(4) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTA.F. The Alaska-unique area CTA.F is commonly 122.9.

(5) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.
(6) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

(7) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSAP) operations. User must coordinate MARSAP operations with the SA prior to use.

(8) Primary Entry: Point A. Alternate Entry: Point B.

(9) Primary Exit: Point C. Alternate Exit: Point B.

(10) All route points are collocated with IR-909, VR-1909 and VR-1939.

(11) Use CAUTION for multiple Airways, including low altitude RNAV routes near Point A and multiple MTR crossings throughout the route.

(12) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at N64°17.00' W144°16.00', south of segment A to B, which uses helicopters for re-supply.

(13) Use CAUTION for Pogo Mine and Pogo Mine Airstrip adjacent to route at Points B and C. Avoid mine center point (N64°27.12' W144°54.19') in Goodpaster River valley by 3NM and 1000' AGL (15 May-15 Jul). Airstrip has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity.

(14) Upon exit, remain clear of the native village of Healy Lake around N63°59.00' W144°45.00' by 3NM or 6,000' MSL continuously; and Lake George around N63°47.00' W144°32.00' by 2NM and 1,500' AGL continuously.

(15) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2,000' AGL. See local OGV FCIF for details and locations.

(16) ATC contact: Anchorage Center; Route Entry: (319.2/120.9) Primary Exit: (322.5/135.3).

(17) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

(18) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS) See Alaska Supplement.

IR-952


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local.

ROUTE DESCRIPTION:

Terrain Following Operations: Authorized entire route.

Route Width - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through YUKON 3 HIGH/3A LOW, YUKON 4, YUKON 2, and YUKON 1 Military Operations Areas (MOA). Route transitions through RESTRICTED AREA 2205 on multiple segments. Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Prior scheduling with SA of R-2205 is required if entering this restricted airspace. This step is required to ensure Restricted Area (RA) will be cold, unless you will be performing hazardous activities which require an active RA.
IR ROUTES

(i.e. dropping bombs). Primary route segments L through N will only be scheduled when Eielson Range Control (ERC) is open or if you are working directly with the Army within R-2205; if not, utilize alternate entry/exit points.

Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

ATC clearance into MTR is not clearance to enter active RA. When ERC is open, you are required to contact them prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic re-attempts.

ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace. A recorded message on 125.3 MHz indicates ERC is closed.

When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

Route approved for Military Assumes Responsibility for Separation of Aircraft (MARSAs) operations. User must coordinate MARSAs operations with the SA prior to use.

Primary entry: Point A. Alternate entry: Points D, F, J, K and L. Alternate R-2205 Racetrack entry at Point N.


All route points (excluding R-2205 Racetrack pattern) are collocated with IR-953, VR-954, and VR-955.

Use CAUTION for multiple Airways, including low altitude RNAV routes, on terminal segments of the route from L to Q, including multiple crossing points on the alternate R-2205 Racetrack pattern. Additionally, multiple MTR crossings at point A and points L to N within R-2205.

Use CAUTION for Pogo Mine and Pogo Mine Airstrip adjacent to route at Points K and L. Avoid mine center point (N64 27.12 W144 54.19) in Goodpaster River valley by 3NM and 1000’ AGL (15 May-15 Jul). Airstrip has high density air activity with helicopters (150’-500’ cable long-lines) and fixed wing activity.

Use CAUTION: After weapons release in R-2205, start an immediate turn away from Eielson AFB to preclude flying into Fairbanks Approach Control’s Airspace.

(17) Use CAUTION: Ft. Wainwright AAF Class E airspace less than 1 NM outside the route, Segment M to O. Eielson AFB Class D and E airspace 2 NM outside the route, Segment N to O.

(18) Routine/daily training sorties: remain at/above 2000’ AGL and 2NM either side of Yukon, Charley, and Kandik River centerlines to avoid Peregrine Falcon Corridor (15 Apr-15 Sep). Segments B to D and F to H.

(19) Major Flying Exercise (Red Flag, Northern Edge, etc.) sorties: remain at/above 2000’ AGL and 2NM either side of Yukon river and at/above 5000’ MSL and 2NM either side of Charley and Kandik River centerlines to avoid Peregrine Falcon Corridor (15 Apr-15 Sep). Segments B to D and F to H.

(20) Remain clear of Salcha River Area 3, on segments K to M, by 2NM either side of Salcha River in the vicinity of Salcha Split VFR waypoint. 1-20 Sep, maintain at/above 5000’ MSL for fighter aircraft and at/above 1000’ AGL for all other aircraft.

(21) Remain clear of Salcha River Area 2 on segment L to M. Maintain at/above 5000’ MSL for fighter aircraft (1-20 Sep). Maintain at/above 1000’ AGL for all other aircraft (continuous).

(22) Remain clear of Chena River State Recreation Site at/above 1,500’ AGL (1 May-30 Sep), segments M to P.

(23) Remain clear of Pleasant Valley Subdivision west of segment N to O at 6,000’ MSL. Flight above 6000’ MSL is restricted to non-maneuvering, non-afterburning, navigational flight only.

Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2,000’ AGL. See local OGV FCIF for details and locations.

ATC contact: Anchorage Center. Primary entry/exit at points A, D and F: (284.7/135.0); backup (225.4/132.7). Primary entry/exit at points J through Q including racetrack: (319.2/120.9); backup (285.4/133.1).

Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS). See Alaska Supplement

IR-953


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>FYU 173/79</td>
<td>N65°18.00' W146°00.00'</td>
</tr>
</tbody>
</table>
ATC clearance into MTR is not clearance to enter active RA. Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC clearance into MTR to be at least five minutes prior to route entry. ATC clearance into MTR is not clearance to enter active RA. When ERC is open, you are required to contact them prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace. A recorded message on 125.3 MHz indicates ERC is closed.

(7) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(8) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(9) Low Altitude Air-to-Air Training (LOWAT) operations are approved on route segments that fall within the confines of a MOA. If scheduling LOWAT operations, user must schedule overlying MOA in addition to MTR.

(10) Route approved for Military Assumes Responsibility for Separation of Aircraft (MARS) operations. User must coordinate MARS operations with the SA prior to use.

(11) Primary entry: Point A. Alternate entry: Points C, E, F, H and L.

(12) Primary exit: Point Q. Alternate exit: Points E, F, H, L, and N.

(13) All route points (excluding R-2205 Racetrack pattern) are collocated with IR-952, VR-954, and VR-955.

(14) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments E to F. Additionally, multiple MTR crossings between points D to F within R-2205 and point Q.

(15) Use CAUTION for Pogo Mine and Pogo Mine Airstrip adjacent to route at Points F and G. Avoid mine center point (N64 27.12 W144 54.19) in Goodpaster River valley by 3NM and 1000' AG for all other aircraft. Maintain at/above 5000' MSL for fighter aircraft (1-20 Sep) and fixed wing activity.

(16) Use CAUTION: Ft. Wainwright AAF Class E airspace less than 1 NM outside the route, Segment C to E. Eielson AFB Class D and E airspace 2 NM outside the route, Segment D to E.

(17) Use CAUTION: Ft. Wainwright AAF Class E airspace less than 1 NM outside the route, Segment C to E. Eielson AFB Class D and E airspace 2 NM outside the route, Segment D to E.

(18) Remain clear of Chena River State Recreation Site at/above 1,500' AGL. (1 May-30 Sep), segments B to E.

(19) Remain clear of Pleasant Valley Subdivision west of segments C to D at 6,000' MSL. Flight above 6000' MSL is restricted to non-maneuvering, non-afterburning, navigational flight only.

(20) Remain clear of Chena River State Recreation Site at/above 1,500' AGL. (1 May-30 Sep), segments B to E.

(21) Remain clear of Salcha River Airstrip, segments E to G, by 2NM either side of Salcha River in the vicinity of Salcha Split VFR waypoint. 1-20 Sep, maintain at/above 5000’ MSL for fighter aircraft and at/above 1500’AGL for all other aircraft.
IR ROUTES

(22) Routine/daily training sorties: remain at/above 2000' AGL and 2NM either side of Yukon, Charley, and Kandik River centerlines to avoid Peregrine Falcon Corridor (15 Apr-15 Sep). Segments J to L and N to P.

(23) Major Flying Exercise (Red Flag, Northern Edge, etc.) sorties: remain at/above 2000' AGL and 2NM either side of Yukon river and at/above 5000' MSL and 2NM either side of Charley and Kandik River centerlines to avoid Peregrine Falcon Corridor (15 Apr-15 Sep). Segments J to L and N to P.

(24) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2,000' AGL. See local OGV FCIF for details and locations.

(25) ATC contact: Anchorage Center. Primary entry/exit at points A through H: (319.2/120.9); backup (285.4/133.1). Primary entry/exit at points L through Q: (284.7/135.0); backup (225.4/132.7).

(26) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

(27) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS). See Alaska Supplement
Chapter 3

VFR MILITARY TRAINING ROUTES (VR)

I. General. STANDARD

II. Route Development. STANDARD

III. Scheduling and Coordination. STANDARD

IV. Flight Plans. STANDARD

V. In Flight.
   A. Entry/Exit. Standard
   B. Route Adherence. Standard
   C. Speed. Standard
   D. Weather.
      1. Operations on VR MTRs shall be conducted only when the weather is at or above VFR minima except that:
         a. The flight visibility shall be 5 miles or more; and
         b. Flights shall not be conducted below a ceiling of less than 3000 feet AGL.
   E. Communications.
      1. Pilots should monitor 255.4 MHz while on VRs, if practicable. This does not preclude the use of tactical or discrete frequencies. The Remarks/Special Operating Procedures section of the MTR may direct mandatory radio calls on specific radio frequencies to warn other aircraft of possible traffic conflicts.
      2. In the event of communications failure (unless otherwise agreed to in a letter of agreement) the pilot should remain VMC, continue the flight VFR, and land as soon as practicable at the most suitable airport.
   F. Transponder. Squawk Code 4000 while operating on a VR MTR unless otherwise assigned by ATC.

VI. Aircraft Separation. STANDARD
VR ROUTES

VR-025

ORIGINATING ACTIVITY: 97 OSS/DOA, 101 S Sixth St., Bldg 225, Altus AFB OK 73521, C580-481-6098, DSN 866-6098

SCHEDULING ACTIVITY: 97 OSS/OSK, 101 S Sixth St., Bldg 225, Altus AFB OK 73521, C580-481-7110/1375/7490, DSN 866-7422/1375/7490

HOURS OF OPERATION: 0700-2200 LCL, other times by NOTAM

ROUTE DESCRIPTION:

Terrain Following Operations: Authorized entire route.

Route Width - 5 NM either side of centerline from A to B; 10 NM left and 8 NM right of centerline from B to D; 10 NM left and 20 NM right of centerline from D to E; 20 NM left and 20 NM right of centerline from E to G.

Special Operating Procedures:

(1) CAUTION - Interstate 95 is a major VFR flyway for civil aircraft.

(2) Route is to be used in conjunction with Townsend Target (R-3007). Do not enter R-3007 without clearance from Townsend Range Control (228.4 or 252.9, 119.225).

(3) Route shares centerline and is reverse course direction of VR-045.

(4) Primary Entry Point A, Alternate Entry Points are B and C.

(5) Primary Exit Point G, Alternate Exit Points are D, E and F.

(6) Avoid overflight of Blackbeard, Harris Neck and Sapelo National Wildlife Refuges by 1500' AGL or 1 NM horizontally.

(7) Minimum altitude of 1500' AGL from Point D to G from 1 December to 31 March.

(8) 1228' MSL Antenna Tower located N31-35.15 W81-20.60.

(9) 1039' MSL Antenna Tower located N31-37.00 W81-21.50.

(10) 518' MSL Antenna Tower located N31-30.60 W81-24.00.

(11) 540' MSL Antenna Tower located N31-26.70 W81-25.60.

(12) Route crosses VR-1041 and VR-1040 at Point D.

FSS Within 100 NM Radius:

GNV MCN

VR-041


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Terrain Following Operations: Authorized entire route.

Route Width - 5 NM either side of centerline from A to B; 2NM left and 5NM right of centerline from B to E; 5NM either side of centerline from E to J; 5NM left and 4NM right of centerline from J to K; 3NM left and 1NM right of centerline from K to L.

Special Operating Procedures:

(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.


(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.

(5) Avoid towns and populated areas by 1NM or overfly 1000' AGL; avoid airports by 3NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
(6) CAUTION: There are numerous powerlines located in mountainous and flat terrain on this route from C to J. Cables that cross large valleys and gorges are extremely difficult to acquire visually depending on sun/environmental conditions.

(7) A-B:
(a) CROSSING: IR-761 parallel entire leg;
(b) CROSSING: IR-715 right to left at A;
(c) CROSSING: VR-096 left to right at A;
(d) CROSSING: IR-762/VR-1756 left to right 12NM prior to B.

(8) B-C:
(a) CAUTION: Springwood Gliderport at N37-31.5 W79-41.5. Glider activity on Sat, Sun and Wed from 0900-SS, sfc to 14,000’MSL. Remain right of centerline in vicinity during these times;
(b) CROSSING: IR-761 parallel entire leg;
(c) CROSSING: VR-1756 right to left at C.
(d) AVOID: Congressional Noise Sensitive Area at N37 39.9 W079 34.7 by 3000’ AGL/2 NM.

(9) C-D1:
(a) Avoid: Springwood Airfield at N37 33.4 W079 44.8 by 1500’ AGL or 3NM;
(b) Avoid: Fincastle Airfield at N37 31.6 W079 51.0 by 1500’ AGL or 3NM;
(c) Caution: Tower, 195’ AGL (2440’ MSL) at N37-37.9 W79-49.9;
(d) Caution: Uncharted airfield at N37-40.0 W79-48.6;
(e) CROSSING: IR-761 parallel until 7NM prior to D1;
(f) CROSSING: IR-096 left to right at D1;
(g) CROSSING: IR-715 left to right 25NM prior to D1;
(h) CROSSING: IR-608 right to left 43NM prior to D;
(i) CROSSING: IR-043 right to left at D1; 

(10) D1-D:
(a) Avoid: Town of Sinks Grove (Congressional Noise Sensitive Area) at N37-39.8 W80-32.8 by 1000’ or 3NM;
(b) Avoid: Hinton-Alderson Airfield at N37 41.1 W080 42.7 by 1500’ AGL or 3NM;
(c) Caution: Tower, 199’ AGL (3514’ MSL) at N37-38.0 W80-34.0;
(d) CROSSING: IR-043 right to left at D1;
(e) CROSSING: IR-080 left to right at D;
(f) CROSSING: IR-723 right to left at D;

(11) D-E:
(a) CROSSING: IR-080 left to right at D;
(b) CROSSING: IR-723 right to left at D;
(c) CROSSING: IR-761 left to right 13NM prior to E.

(12) E-F:
(a) CROSSING: IR-761 parallel entire leg;
(b) CROSSING: VR-093 left to right 1NM prior to F;
(c) AVOID: RICHLANDS/TAZEWELL CO AIRFIELD AT N37-04.0 W081-48.0.

(13) F-G:
(a) CROSSING: IR-761 parallel entire leg;
(b) CROSSING: VR-093 parallel entire leg;
(c) CROSSING: IR-079 left to right 1NM prior to G;
(d) CROSSING: VR-1633 right to left at G;
(e) CAUTION: Charted powerline at N37-06.9 W82-04.1 430’AGL (2604’MSL);
(f) AVOID: GRUNDY AIRFIELD AT N37-14.1 W082-07.4

(14) G-H:
(a) CROSSING: IR-761 parallel entire leg;
(b) CROSSING: IR-079 right to left at G;
(c) CROSSING: VR-1633 right to left at G;
(d) CROSSING: VR-093 right to left 45NM prior to H;
(e) CROSSING: VR-1632 right to left at H;
(f) AVOID: MINGO CO AIRFIELD AT N37-41.2 W082-15.8

(15) H-I:
(a) AVOID: Charleston Class C Airspace 2500’MSL to 6000’MSL;
(b) CROSSING: IR-761 parallel entire leg;
(c) CROSSING: VR-1632 opposite direction until 46NM prior to I;
(d) CROSSING: VR-1633 left to right 3NM prior to I;
(e) CROSSING: IR-723 left to right at I;
(f) CROSSING: IR-080 right to left at I;
(g) AVOID: NEW RIVER GORGE AIRFIELD AT N38-05.5 W081-04.0.

(16) I-J:
(a) CROSSING: IR-761 parallel entire leg;
(b) CROSSING: IR-723 left to right at I;
(c) CROSSING: IR-080 right to left at I;
(d) AVOID: RICHWOOD MUNICIPAL AIRFIELD AT N38-13.8 W080-39.0;
(e) AVOID: SUMMERSVILLE AIRFIELD AT N38-13.8 W080-52.0.

(17) J-K:
(a) CROSSING: IR-715 right to left 50NM prior to K;
(b) CROSSING: IR-043 left to right 39NM prior to K;
(c) CROSSING: IR-608 left to right 37NM prior to K;
(d) CROSSING: IR-715 left to right 30NM prior to K;
(e) CROSSING: IR-762/VR-1756 left to right 19NM prior to K;
(f) CROSSING: IR-760/IR-762/VR-1754/VR-1756 left to right 11NM prior to K;
(g) CROSSING: IR-71 left to right at K
(h) CAUTION: Wind turbine farm, 3.5NM right of point J, turbines approx 400’ AGL.
(i) CAUTION: Wind turbine farm, N38-07.02 W-080-35.42, 453’ AGL.

(18) K-L:
(a) CROSSING: IR-714 left to right at K;
(b) CROSSING: IR-760/VR-1722/VR-1754 left to right 24NM prior to L;
(c) CROSSING: IR-715 right to left 10NM prior to L.

(19) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-079: Pensacola NAS, DSN 922-2735;
(b) IR-080: Pensacola NAS, DSN 922-2735;
(c) IR-608: Pensacola NAS, DSN 922-2735;
(d) IR-714: Oceana NAS, DSN 433-1228;
(e) IR-715: Oceana NAS, DSN 433-1228;
(f) IR-723: Pensacola NAS, DSN 922-2735;
(g) IR-760: Oceana NAS, DSN 433-1228;
(h) IR-761: Oceana NAS, DSN 433-1228;
(i) IR-762: Oceana NAS, DSN 433-1228;
(j) VR-043: Seymour Johnson AFB;
(k) VR-093: Seymour Johnson AFB, DSN 722-2129;
(l) VR-1632: Blue Ash ANG, DSN 340-2950;
(m) VR-1633: Blue Ash ANG, DSN 340-2950;
(n) VR-1722: Oceana NAS, DSN 433-1228;
(o) VR-1754: Oceana NAS, DSN 433-1228;
(p) VR-1756: Oceana NAS, DSN 433-1228.

FSS Within 100 NM Radius:
AOO, DAY, DCA, EKN, RDU
VR ROUTES

VR-042


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM left and 2 NM right of centerline from A to B; 4 NM either side of centerline from B to C; 1 NM either side of centerline from C to D; 4 NM left and 3 NM right of centerline from D to E; 4 NM either side of centerline from E to G; 3 NM either side of centerline from G to J; 4 NM either side of centerline from J to M; 2 NM left and 4 NM right of centerline from M to O.

Special Operating Procedures:

(1) Users must contact 4OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.

(4) Users must make their scheduled entry times plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1NM or overfly 1000' AGL; avoid airports by 3NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, or structure.
(6) Route users deconflict Farmville MOA with 1 OSS/OSO, DSN 574-2483/2559. Deconfliction is needed when routes are used between 0800-1700 HRS local, Mon-Fri. Make call in the blind on UHF Frequency 377.1 when transiting Farmville MOA airspace.
(7) When conducting terrain following operations between F and L, avoid overflight of residential structures to the maximum extent possible. This section of the route is very noise sensitive.
(8) A-B:
   (a) CROSSING: VR-1713/VR-1753 right to left 23NM prior to B;
   (b) CROSSING: IR-062 left to right 9NM prior to B;
   (c) CROSSING: IR-719/IR-720/VR-073 right to left at B;
   (d) AVOID: Water treatment ponds at N36-09 W77-10, Moderate bird hazard by 2000' or 1NM;
   (e) AVOID: Overfly Chowan River by 2000' AGL. Moderate bird hazard.
(9) B-C:
   (a) CROSSING: IR-719/IR-720/VR-073 right to left at B;
   (b) CROSSING: VR-086 parallel entire leg;
   (c) CROSSING: IR-718 right to left 49NM prior to C;
   (d) CROSSING: VR-083/VR-096 left to right 19NM prior to C;
   (e) CROSSING: VR-1759 right to left 14NM prior to C.
   (g) AVOID: Landfill at N36-22.41 W77-48.70, Moderate bird hazard by 2000' AGL or 1NM.
   (h) AVOID: HALIFAX-NORTH HAMPTON REGIONAL AIRPORT AT N36-19.4 W077-38.1.
(10) C-D:
   (a) CROSSING: IR-081/IR-719 right to left 22NM prior to G;
   (b) CROSSING: IR-712/VR-1721 right to left 11NM prior to G.
   (c) AVOID: Water treatment facility at N36-46.4 W80-15.9, Moderate bird hazard by 1500' AGL or 2NM.
(11) D-E:
   (a) CROSSING: VR-093 left to right 5NM to H.
   (b) CROSSING: VR-1061 parallel until 19NM prior to F.
   (c) CROSSING: VR-043 right to left 14NM prior to M.
   (d) AVOID: Noise sensitive area at N36-50.08 W079-41.38 by 1500' AGL or 2NM.
(12) E-F:
   (a) CROSSING: IR-081/IR-719 right to left 22NM prior to G;
   (b) CROSSING: IR-712/VR-1721 right to left 11NM prior to G.
   (c) AVOID: Water treatment facility at N36-46.4 W80-15.9, Moderate bird hazard by 1500' AGL or 2NM.
(13) F-G:
   (a) CROSSING: VR-093 left to right 5NM to H.
(15) H-I:
(a) CROSSING: VR-093 parallel entire leg;
(b) CROSSING: IR-723/IR-726/VR-1726 right to left 12NM prior to I;
(c) CROSSING: IR-080/IR-081 left to right at I;
(d) CROSSING: IR-608 right to left at I;
(e) AVOID: Noise sensitive area at N36-30.52 W81-16.94 by 1500’ AGL or 2NM;
(f) CAUTION: Uncharted tower, 200’ AGL, N36 30.37 W081 07.21.

(16) I-J:
(a) CROSSING: IR-608 opposite direction entire leg;
(b) CROSSING: IR-080/IR-081 parallel entire leg;
(c) CROSSING: VR-093 right to left 17NM prior to J;
(d) AVOID: MARION/WYTHEVILLE/MOUNTAIN EMPIRE AIRFIELD AT N36-53.6 W081-20.9.

(17) J-K:
(a) CROSSING: IR-080/IR-081 right to left 23NM prior to K;
(b) CROSSING: IR-608 left to right 23NM prior to K;
(c) CROSSING: IR-723 left to right 17NM prior to K;
(d) AVOID: MARION/WYTHEVILLE/MOUNTAIN EMPIRE AIRFIELD AT N36-53.6 W081-20.9.
(e) CAUTION: High tension power lines over river gorge, 248’ AGL over river center line, N36 56.05 W080 46.21.

(18) K-L:
(a) CROSSING: IR-726/VR-1726 left to right at K;
(b) CROSSING: IR-081 left to right 33NM prior to K;
(c) CROSSING: VR-093 left to right 17NM prior to K;
(d) AVOID: MARION/WYTHEVILLE/MOUNTAIN EMPIRE AIRFIELD AT N36-53.6 W081-20.9.
(e) CAUTION: MARION/WYTHEVILLE/MOUNTAIN EMPIRE AIRFIELD AT N36-53.6 W081-20.9.

(19) L-M:
(a) CROSSING: VR-1722 left to right 17NM prior to M.

(20) M-N:
(a) CROSSING: VR-083/VR-1061 opposite direction until 12NM prior to N;
(b) CROSSING: IR-715 left to right 46NM prior to N;
(c) CROSSING: VR-1759 left to right 38NM to N;
(d) CROSSING: VR-096 right to left 38NM prior to N;
(e) CROSSING: VR-1722 left to right 30NM to N;
(f) CROSSING: IR-719 left to right 14NM prior to N;
(g) AVOID: Noise sensitive area/equestrian campground, N37 00.83 W080 27.57 by 1500’ AGL/2NM from 0700L 1 JUN-2000L 30 AUG.

(21) N-O:
(a) CROSSING: IR-719 left to right 31NM prior to O;
(b) CROSSING: IR-720 left to right 23NM prior to O;
(c) CROSSING: VR-1753 left to right 12NM prior to O;
(d) CROSSING: IR-718/VR-1713 left to right 8NM prior to O;
(e) AVOID: Noise sensitive area at N36 58.5 W080 15.05 by 1000’ AGL or 1NM;
(f) AVOID: Noise sensitive area/equestrian campground, N37 00.83 W080 27.57 by 1500’ AGL/2NM from 0700L 1 JUN-2000L 30 AUG.

(22) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-062: Oceana NAS, DSN 433-1228;
(b) IR-080: Pensacola NAS, DSN 922-2735;
(c) IR-081: Pensacola NAS, DSN 922-2735;
(d) IR-608: Pensacola NAS, DSN 922-2735;
(e) IR-715: Oceana NAS, DSN 433-1228;
(f) IR-718: Oceana NAS, DSN 433-1228;
(g) IR-719: Oceana NAS, DSN 433-1228;
(h) IR-720: Oceana NAS, DSN 433-1228;
(i) IR-721: Shaw AFB, DSN 965-1118;
(j) IR-723: Pensacola NAS, DSN 922-2735;
(k) IR-726: Seymour Johnson AFB, DSN 722-2129;
(l) VR-043: Seymour Johnson AFB;
(m) VR-073: Seymour Johnson AFB;
(n) VR-083: Seymour Johnson AFB;
(o) VR-086: Seymour Johnson AFB;
(p) VR-093: Seymour Johnson AFB, DSN 722-2129;
(q) VR-096: Seymour Johnson AFB;
(r) VR-1061: Seymour Johnson AFB;
(s) IR-1753: Oceana NAS, DSN 433-1228;
(t) IR-1713: Andrews AFB, DSN 857-3307;
(u) IR-1759: Oceana NAS, DSN 433-1228;
(v) IR-1721: Shaw AFB, DSN 965-1118;
(w) IR-1726: Seymour Johnson AFB, DSN 722-2129;
(x) IR-1759: Oceana NAS, DSN 433-1228;
(y) IR-1722: Oceana NAS, DSN 433-1228.

FSS Within 100 NM Radius:
AND, DCA, EKN, RDU

VR-043


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>ESL 269/13</td>
<td>N39°12.00’ W79°16.00’</td>
</tr>
<tr>
<td>01 AGL B 105 MSL to</td>
<td>B</td>
<td>EKN 084/26</td>
<td>N39°00.50’ W79°33.00’</td>
</tr>
<tr>
<td>01 AGL B 105 MSL to</td>
<td>C</td>
<td>EKN 157/25</td>
<td>N38°33.00’ W79°50.00’</td>
</tr>
<tr>
<td>01 AGL B 105 MSL to</td>
<td>D</td>
<td>BKW 073/46</td>
<td>N38°05.00’ W80°13.50’</td>
</tr>
<tr>
<td>01 AGL B 105 MSL to</td>
<td>E</td>
<td>LWB 110/15</td>
<td>N37°48.50’ W80°04.50’</td>
</tr>
<tr>
<td>01 AGL B 105 MSL to</td>
<td>F</td>
<td>PSK 034/35</td>
<td>N37°36.20’ W80°21.70’</td>
</tr>
<tr>
<td>01 AGL B 105 MSL to</td>
<td>G</td>
<td>PSK 065/9</td>
<td>N37°10.00’ W80°33.00’</td>
</tr>
<tr>
<td>10 AGL B 105 MSL to</td>
<td>H</td>
<td>PSK 112/35</td>
<td>N36°55.50’ W80°01.00’</td>
</tr>
<tr>
<td>02 AGL B 105 MSL to</td>
<td>I</td>
<td>SVB 144/7</td>
<td>N36°35.00’ W78°55.00’</td>
</tr>
<tr>
<td>02 AGL B 105 MSL to</td>
<td>J</td>
<td>TYI 312/39</td>
<td>N36°22.50’ W78°21.00’</td>
</tr>
<tr>
<td>02 AGL B 105 MSL to</td>
<td>K</td>
<td>TYI 006/10</td>
<td>N36°09.00’ W77°42.00’</td>
</tr>
</tbody>
</table>
VR ROUTES

02 AGL B 105 MSL to L CVI 176/28 N35°55.50’ W76°44.50’
02 AGL B 105 MSL to M CVI 155/42 N35°48.00’ W76°23.50’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to F; 3 NM either side of centerline from F to 5 NM NW of G; 1 NM left and 3 NM right of centerline from 5 NM NW of G to G; 3 NM left and 5 NM right of centerline from G to H. 5 NM either side of centerline from H to M.

Special Operating Procedures:

1. Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
4. Users must make their scheduled entry time plus or minus 5 min or reschedule.
5. Avoid towns and populated areas by 1NM or overfly 1000’ AGL; avoid airports by 3NM or overfly 1500’ AGL. Over sparsely populated areas, aircraft may not be operated closer than 500’ to any person, vessel, vehicle or structure.
6. Evers MOA is active with continuous daytime operations from 1000’ AGL to FL 180. Contact 113 OSS/OSA, Joint Base Andrews, MD DSN 857-4183/4194/4171, C240-857-4183/4194/4171 for MOA flight information/deconfliction prior to scheduling.

7. A-B:
   (a) AVOID: Winwood Fly-in resort airport at N39-03.3 W079-25.9.
   (b) CROSSING: IR-760/VR-1754 parallel entire leg.
8. B-C:
   (a) CROSSING: IR-760/VR-1754 right to left at B;
   (b) CROSSING: IR-720 left to right 26NM prior to C;
   (c) CROSSING: IR-720 right to left 15NM prior to C.
9. C-D:
   (a) AVOID: National Radio Astronomy Observatory at N38-26.2 W79-50.1 by 4NM. Avoid UHF communications within 15NM safety permitting;
   (b) CAUTION: Powerliners crossing the Greenbar River at 200’ AGL at N38-18.0 W79-58.0;
   (c) CROSSING: IR-762/VR-1756 left to right 17NM prior to D;
   (d) CROSSING: IR-715 right to left 11NM prior to D;
   (e) CROSSING: IR-608 left to right 5NM prior to D;
   (f) CROSSING: VR-041 right to left 4NM prior to D.
10. D-E:
    (a) CROSSING: IR-608 parallel entire leg;
    (b) AVOID: BIRD SANCTUARY AT N38 04.3 W080 13.8 by 2000’ AGL OR 1NM.
11. E-F1:
    (a) AVOID: School at N37-48.0 W080-04.0 by 3000’ or 1NM;
    (b) CROSSING: IR-608 parallel entire leg;
    (c) CROSSING: IR-715/VR-096 left to right 10NM prior to F1;
    (d) CROSSING: VR-041 left to right at F1;
12. F1-F:
    (a) CROSSING: IR-608 parallel entire leg;
    (b) CROSSING: VR-041 left to right at F1;
    (c) CROSSING: VR-761 left to right 14NM prior to F;
    (d) AVOID: Wildlife refuge at Pt F by 2000’ AGL.
13. F-G:
    (a) CROSSING: IR-608 left to right 13NM prior to G;
    (b) CROSSING: IR-081 left to right 1NM prior to G;
    (c) AVOID: DUBLIN/NEW RIVER VALLEY AIRFIELD AT N37-08.5 W080-40.6.
    (d) CAUTION: Check NOTAMs for model rocket firings; New River Valley Rocketry. Sat/Sun only launches of unmanned Class II rocket(s) in the vicinity of N37-11-54.76 W080-34-31.61, within a 1 NM radius, not to exceed 10,000’ AGL or 11,800’ MSL. Sunrise to sunset. Approximately PULASKI VORTAC (PSK) 051/009.4NM.
    (e) AVOID: RADFORD ARMY AMMUNITION PLANT at N37-11.0 W80-32.0 by 1000’ or 1NM;
14. G-H:
    (a) CROSSING: IR-81 parallel entire leg;
    (b) CROSSING: VR-042 right to left 10NM prior to H;
    (c) CROSSING: IR-721/VR-1721 left to right 6NM prior to H;
    (d) AVOID: Noise sensitive area at N36-58.5 W080-15.05 by 1000’ AGL or 1NM.
15. H-I:
    (a) AVOID: Landfill at N36-55.3 W79-51.4 by 2000’ AGL or 1NM for moderate bird hazard;
    (b) CROSSING: IR-719 left to right 50NM prior to I;
    (c) CROSSING: VR-042 left to right 41NM prior to I;
    (d) CROSSING: IR-715 right to left 19NM prior to I;
    (e) CROSSING: IR-715 left to right 13NM prior to I;
    (f) CROSSING: VR-1041 left to right 10NM prior to I;
    (g) CROSSING: VR-1722 parallel 10NM prior to I;
    (h) CROSSING: IR-719 left to right 5NM prior to I.
    (i) AVOID: Noise Sensitive Area N36-50.08 W079-41.38 by 1500’ AGL or 2NM;
    (j) AVOID: Landfill at N36-46.1 W79-24.8 by 2000’ AGL or 1NM for moderate bird hazard;
16. I-J:
    (a) CROSSING: IR-062 left to right 25NM prior to J;
    (b) CROSSING: IR-086 left to right 11NM prior to J;
    (c) Tower: 200’ AGL, (682’ MSL), N36-23.71 W078-33.43;
    (d) AVOID: HENDERSON-OXFORD AIRFIELD AT N36-22.4 W079-31.8.
17. J-K:
    (a) CROSSING: VR-083 right to left 17NM prior to K;
    (b) CROSSING: VR-1759 left to right 10NM prior to K;
    (c) CROSSING: VR-1046 right to left, 8 NM SW of Pt. K, then parallel 17 NM prior to L.
18. K-L:
    (a) CROSSING: IR-718 left to right 39NM prior to L;
    (b) CROSSING: VR-086 right to left 34NM prior to L;
    (c) CROSSING: VR-085 parallel 25NM prior to L;
    (d) CROSSING: IR-719 left to right 21NM prior to L;
    (e) CROSSING: VR-1046 parallel until 15NM prior to L;
    (f) CROSSING: IR-062 right to left 10NM prior to L;
    (g) CROSSING: VR-073 left to right at L.
    (h) CAUTION: Overfly Roanoke River and Albemarle Sound by 2000’ AGL, moderate bird hazard.
19. L-M:
    (a) CROSSING: VR-073 parallel entire leg;
    (b) CROSSING: VR-085 right to left 17NM prior to M;
    (c) CROSSING: IR-062 right to left 10NM prior to M;
    (d) CROSSING: VR-1713 left to right 5NM prior to M;
    (e) CROSSING: VR-1753 left to right 5NM prior to M;
    (f) AVOID: PLYMOUTH MUNICIPAL AIRFIELD AT N35-48.4 W076-45.4.
(20) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-062: Oceana NAS, DSN 433-1228;
(b) IR-081: Pensacola NAS, DSN 922-2735;
(c) IR-608: Pensacola NAS, DSN 922-2735;
(d) IR-715: Oceana NAS, DSN 433-1228;
(e) IR-718: Oceana NAS, DSN 433-1228;
(f) IR-719: Oceana NAS, DSN 433-1228;
(g) IR-720: Oceana NAS, DSN 433-1228;
(h) IR-721: Shaw AFB, DSN 965-1118;
(i) IR-760: Oceana NAS, DSN 433-1228;
(j) IR-762: Oceana NAS, DSN 433-1228;
(k) VR-041: Seymour Johnson AFB;
(l) VR-042: Seymour Johnson AFB;
(m) VR-073: Seymour Johnson AFB;
(n) VR-083: Seymour Johnson AFB;
(o) VR-085: Seymour Johnson AFB;
(p) VR-086: Seymour Johnson AFB;
(q) VR-1046: Cherry Point, DSN 582-4040;
(r) VR-1061: Seymour Johnson AFB;
(s) VR-1713: Andrews AFB, DSN 857-3307;
(t) VR-1753: Oceana NAS, DSN 433-1228;
(u) VR-1721: Shaw AFB, DSN 965-1118;
(v) VR-1754: Oceana NAS, DSN 433-1228;
(w) VR-1756: Oceana NAS, DSN 433-1228;
(x) VR-1759: Oceana NAS, DSN 433-1228;
(y) VR-1722: Oceana NAS, DSN 433-1228.

FSS Within 100 NM Radius:
AOO, DCA, EKN, RDU

VR-045

ORIGINATING ACTIVITY: Marine Corps Station Beaufort, Townsend Bombing Range, 9177 GA Hwy 57, Townsend, GA 31331, DSN 860-3007.

SCHEDULING ACTIVITY: Same as Origination Activity.

HOURS OF OPERATION: 0700-2200 LCL, Mon-Fri, other time by NOTAM.

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 40 MSL to A</td>
<td>SAV 142/50</td>
<td>N31°32.50' W80°31.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to B</td>
<td>SAV 153/43</td>
<td>N31°32.50' W80°44.80'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to C</td>
<td>SAV 169/38</td>
<td>N31°32.70' W80°59.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to D</td>
<td>SAV 183/36</td>
<td>N31°32.80' W81°10.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to E</td>
<td>SAV 194/36</td>
<td>N31°32.90' W81°17.50'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to F</td>
<td>SAV 204/36</td>
<td>N31°34.50' W81°25.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 40 MSL to G</td>
<td>SAV 215/40</td>
<td>N31°33.70' W81°34.70'</td>
<td></td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 20 NM either side of centerline from A to C; 10 NM left and 20 NM right of centerline from C to D; 10 NM right and 8 NM left of centerline from D to F; 5 NM either side of centerline from F to G.

Special Operating Procedures:
(1) CAUTION: Interstate 95 is a major VFR fly way for civil aircraft.
(2) Route is to be used in conjunction with Townsend Target (R-3007). Do not enter R-3007 without clearance from Townsend Range Control (228.4 or 252.9, 119.225).
(3) Route shares centerline and is reverse course direction of VR-025.
(4) Primary Entry Point A, Alternate Entry Points are B and C.
(5) Primary Exit Point G, Alternate Exit Points are D, E and F.
(6) Avoid overflight of Blackbeard, Harris Neck and Sapelo National Wildlife Refuges by 1500' AGL or 1 NM horizontally.
(7) Minimum altitude of 1500' AGL from Point D to G from 1 December to 31 March.
(8) 1228 MSL Antenna Tower located N31-35.15 W81-20.60.
(9) 1039 MSL Antenna Tower located N31-37.00 W81-21.50.
(10) 518 MSL Antenna Tower located N31-30.60 W81-24.00.
(11) 540 MSL Antenna Tower located N31-26.70 W81-25.60.
(12) Route crosses VR-1041 and VR-1040 at Point D.

FSS Within 100 NM Radius:
GNV, MCN

VR-054

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C 757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C 757-433-1228. Scheduling Hours 0600-1900L (EST)

HOURS OF OPERATION: 0700-2100 local Mon-Fri, OT by NOTAM.

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 2 NM either side of centerline from A to B; 4 NM either side of centerline from B to C.

Special Operating Procedures:
(1) Route reservation and brief required.
(2) Alternate Entry: B.
(3) Alternate Exit: B.
VR ROUTES

(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.

(5) Avoid towns and populated areas by 1NM or overfly 1000’AGL; avoid airports by 3NM or overfly 1500’AGL. Over sparsely populated areas, aircraft may not be operated closer than 500’ to any person, vessel, vehicle or structure.

(6) IMPORTANT INFORMATION Points A to B:
   (a) AVOID: Entire beach area is considered Noise Sensitive - Maintain 1000’AGL when within 1NM of coastal areas;
   (b) CAUTION: Numerous light aircraft along coast.

(7) IMPORTANT INFORMATION Points B to C:
   (a) CAUTION: Conflicting route - VR-071 opposite direction B to C entire leg;
   (b) CAUTION: Heavy VFR traffic exists in and around the area of Hyde Co Airport (N35-33.7 W75-57.3) located approximately 3NM southwest of point C.

(8) CAUTION: Conflicting routes - VR-073 crosses left to right at point A. Deconflict with 4 OSS/OSOS, Seymour Johnson AFB, DSN 722-2129/2124, C919-722-2129/2124.

FSS Within 100 NM Radius:
RDU

VR-058


HOURS OF OPERATION: Continuous (Jan, Mar, May, Jul, Sep, Nov) VR-092 reverse direction other months

ROUTE DESCRIPTION:

ROUTE WIDTH - 8 NM either side of centerline from A to B; 10 NM either side of centerline from B to F.

Special Operating Procedures:

(1) Alternate Entry Point: B and D.
(2) Alternate Exit Point: C, D and E.
(3) WARNING: Avoid Nuclear Power Oconee, SC (N34-47-05 W082-53-09) avoid by 1 NM/do not overfly.

(4) CAUTION: Numerous power lines along routes above 100’ AGL.

(5) 9 towers:
   (a) 250’ AGL N34.57.91 W83.49.78;
   (b) 250’ AGL N34.57.17 W84.02.62;
   (c) 250’ AGL N35.08.91 W84.10.54;
   (d) 350’ AGL N35.19.5 W84.27.05;
   (e) 300’ AGL N35.34.84 W84.58.4;
   (f) 250’ AGL N34.54.77 W85.46.42;
   (g) 300’ AGL N34.55.33 W83.02.82;
   (h) 400’ AGL N34.57.86 W83.49.43;
   (i) 500’ AGL N35.30.99 W84.46.45

(6) Avoid 2 noise sensitive areas:
   (a) N34-42.2 W83-38.1, avoid by 1500’ AGL/1 NM.
   (b) N34-45.9 W83-37.8, avoid by 1000’ AGL/1 NM.

(7) Congressional noise sensitive area, N35-05 W84-04, avoid by 1500’ AGL/5 NM.

(8) Congressional noise sensitive area, Coker Creek, TN, N35-28.0 W85-01.0, avoid by 1500’ AGL/1 NM.
(26) Avoid the following environmental sensitive areas (endangered bats) by 500’ vertically or 1000’ horizontally unless operationally necessary (N35-33.2 W84-47.5), (N35-24.5 W85-00.8), (N35-32.8 W85-40.3), (N35-15.5 W85-52.3), (N34-59.4 W85-36.6).

(27) Avoid: Noise sensitive area N35-35.5 W85-12.0 (SE of Pikeville, TN) avoid by 1000’ AGL/1 NM.

(28) Avoid: Congressional (Extremely) noise sensitive area: Ivy Log Mountain N34-55.0 W83-58.7. Minimum altitude 4200’ MSL within 2 NM.

(29) Make entry time plus or minus 5 minutes or reschedule.

(30) Unpublished towers found by route surveys 200’ AGL and above are listed in this SOP.

(31) Be alert for hot air balloons operating from sfc to 12,000' MSL within 10 NM of N34-42.0 W83-44.0.

FSS Within 100 NM Radius:
ANB, AND, BNA, MCN

VR-060


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1700 Local or by NOTAM

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A MGM 256/38 N32°06.00' W87°03.00'
05 AGL B 15 AGL to B MGM 262/71 N32°06.10' W87°42.30'
01 AGL B 50 MSL to D GCV 057/19 N31°15.00' W88°09.40'
01 AGL B 100 MSL to E GCV 273/16 N31°08.00' W88°48.00'
01 AGL B 95 MSL to A ISO 084/81 N35°36.50' W75°55.50'
01 AGL B 95 MSL to B ISO 091/81 N35°27.00' W75°54.50'
01 AGL B 95 MSL to C ISO 098/84 N35°17.00' W75°51.00'
01 AGL B 95 MSL to D ISO 104/87 N35°08.00' W75°48.30'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 2 NM left and 13.5 NM right of centerline from B to C; 5 NM either side of centerline from C to E.

Special Operating Procedures:
(1) Cross Millers Ferry Lock and Dam 1000’ AGL or above.
(2) Flights entering at A or B will transmit in the blind their intentions to transit the Camden Ridge MOA 1500’ and below on 280.1.
(3) Alternate Entry/Exit Point: B, C or D.
(4) Hazards A-B:
   (a) Antenna Tower N32-06.3 W87-04.6 W (600’ MSL).
   (b) Water Tower N32-04.1 W87-17.6 (450’ MSL).
   (c) Radio Tower N32-04.4 W87-32.8 (500’ MSL).
   (d) Radio Tower N32-07.3 W87-44.0, 1113’ MSL (703’ AGL).
(5) Hazards B-C:
   (a) Smokestack N31-50.0 W88-08.0 (300’ AGL).
   (b) Noise sensitive: Avoid over-flight of Chocaw National Wildlife Refuge N31-54.0 W88-10.0.

(6) Hazards C-D:
   (a) Two water towers: N31-27.0 N88-02.0 W (350’ MSL).
   (b) Two water towers: N31-09.0 W88-33.0 (300’ MSL).
   (c) Antenna: N31-18.0 W88-03.0 (100’ AGL).
   (d) Antenna: N31-17.0 W88-01.0 (200’ AGL).
   (e) Antenna: N31-15.0 W88-08.0 (135’ AGL).
   (f) Antenna: N31-11.0 W88-06.0 (150’ AGL).
   (g) Noise sensitive: Avoid St. Stephens, AL N31-32.5 W88-03.0 by 1000’ AGL and 5 NM.
   (h) Avoid over-flying chemical plant: N31-16.1 W87-59.5.

(7) Hazards D-E:
   (a) Fire tower: N31-11.0 W88-36.0 (400’ MSL).
   (b) Two water towers: N31-09.0 W88-33.0 (300’ MSL).
   (c) Antenna: N31-07.0 W88-29.0 (200’ AGL).
   (d) Noise sensitive: Avoid if possible chicken farm N31-11.0 W88-24.0.

(8) Flight beyond D is not authorized unless the Desota MOA is scheduled for your flight.

(9) Route leg C to E is congruent with VR-179 and opposite direction C to D. Use of this leg requires coordination with the ANG CRTC, DSN 363-8207.


(11) Scheduling activity hours of operations: 0700-1730 central time Tue-Fri, occasional weekends. To schedule use on Sat, Sun, Mon or Tue AM, coordinate prior to 1600 central time the previous Fri.


FSS Within 100 NM Radius:
ANG, DRI, GWO

VR-071

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228.

Scheduling Hours 0600-1900L (EST)

HOURS OF OPERATION: 0700-2100 local Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
01 AGL B 95 MSL to A ISO 084/81 N35°36.50' W75°55.50'
01 AGL B 95 MSL to B ISO 091/81 N35°27.00' W75°54.50'
01 AGL B 95 MSL to C ISO 098/84 N35°17.00' W75°51.00'
01 AGL B 95 MSL to D ISO 104/87 N35°08.00' W75°48.30'
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Route reservation and brief required.
(2) Alternate Entry: B, C.
(3) Alternate Exit: B, C.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
(6) IMPORTANT INFORMATION Points A to B:
(a) Heavy VFR traffic exists in and around the area of Hyde Co Airport (N35-33.7 W75-57.3) located approximately 4NM southwest of point A;
(b) CAUTION: Conflicting route - VR-054 opposite direction A to B entire leg.
(7) IMPORTANT INFORMATION Points B to C:
(a) CAUTION: Conflicting routes - VR-073 crosses right to left at point C. Deconflict with 4 OSS/OSOS, Seymour Johnson AFB, DSN 722-2129/2124, C919-722-2129/2124;
(b) CAUTION: Conflicting route - VR-054 opposite direction until 8NM prior to point C.
(8) IMPORTANT INFORMATION Points C to D:
(a) AVOID: Entire beach area is considered Noise Sensitive - Maintain 1000'AGL when within 1NM of coastal areas;
(b) CAUTION: Numerous light aircraft along coast;
(c) CAUTION: Conflicting routes - VR-073 crosses right to left at point C. Deconflict with 4 OSS/OSOS, Seymour Johnson AFB, DSN 722-2129/2124, C919-722-2129/2124.

FSS Within 100 NM Radius:
RDU

VR-073


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
01 AGL B 65 AGL to A | TYI 333/42 | N36°34.00' | W78°10.00'
01 AGL B 65 AGL to B | TYI 345/37 | N36°33.00' | W77°57.50'
01 AGL B 65 AGL to C | CVI 296/29 | N36°31.00' | W77°27.00'
01 AGL B 65 AGL to D | CVI 247/23 | N36°10.00' | W77°17.00'
01 AGL B 65 AGL to E | CVI 191/21 | N36°01.00' | W76°53.00'
01 AGL B 65 AGL to F | CVI 156/42 | N35°47.00' | W76°24.00'
10 AGL B 65 AGL to G | NKT 035/32 | N35°23.00' | W76°35.00'
01 AGL B 95 MSL to H | ISO 098/64 | N35°18.00' | W76°16.00'
01 AGL B 95 MSL to I | ISO 098/84 | N35°17.00' | W75°51.00'
01 AGL B 65 AGL to J | ISO 093/105 | N35°24.00' | W75°25.00'
01 AGL B 65 AGL to K | CVI 131/84 | N35°38.00' | W75°25.00'
01 AGL B 65 AGL to L | CVI 137/68 | N35°40.50' | W75°46.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to G; 2 NM left and one-half NM right of centerline from G to H; 5 NM either side of centerline from H to L.

Special Operating Procedures:
(1) Users must visit HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPACE/ROUTES for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
(2) Alternate Entry: B, C, D, E, F, G, H, I, J, K.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
(6) IMPORTANT INFORMATION Points A to B:
(a) CROSSING: IR-062 opposite direction entire leg;
(b) CROSSING: VR-096 right to left 7NM prior to B;
(c) CROSSING: VR-83 right to left at B;
(d) AVOID: Lake Gaston by 2000' AGL/1NM, moderate bird hazard.
(7) B-C:
(a) CROSSING: VR-083 right to left at B;
(b) CROSSING: IR-062 parallel until 8NM prior to C;
(c) CROSSING: IR-719 left to right at C.
(d) AVOID: Lake Gaston by 2000' AGL/1NM, moderate bird hazard.
(8) C-D:
(a) CROSSING: IR-719 parallel entire leg;
(b) CROSSING: IR-062 left to right 11NM prior to D;
(c) CROSSING: IR-718 left to right 7NM prior to D;
(d) CROSSING: VR-042 left to right at D;
(e) CROSSING: IR-720 left to right at D;
(f) CAUTION: Vulture sightings concentrated around agricultural fields;
(g) AVOID: Water treatment plant at N36-13.8 W77-22.1, moderate bird hazard, avoid by 2000' AGL/1NM.
(h) AVOID: OVERFLY ROANOKE RIVER by 2000' AGL for moderate bird hazard.
(9) D-E:
(a) CROSSING: VR-042 left to right at D;
(b) CROSSING: IR-720 left to right at D;
(c) CROSSING: IR-719 left to right 19NM prior to E;
(d) CROSSING: IR-062 right to left 7NM prior to E.
(e) AVOID: Landfill at N36-07.25 W77-03.95 by 4500' AGL/1NM, severe bird hazard.

(10) E-F:
(a) Transit R-5314J below 1000'AGL unless scheduled for Dare Co Operations and cleared the Range Control Officer;
(b) CAUTION: Aircraft flying approaches into Edenton Airport north of corridor at N36-01.5 W76-34.0;
(c) CROSSING: VR-043 parallel entire leg;
(d) CROSSING: VR-085 right to left 16NM prior to F;
(e) CROSSING: VR-173 left to right 5NM prior to F;
(f) CROSSING: VR-1753 left to right 5NM prior to F;
(g) CAUTION: Overfly Albemarle Sound and Roanoke River by 2000' AGL, moderate bird hazard.
(h) CAUTION: Large number of vulture sightings noted between points E and F;
(i) AVOID: Phelps Lake by 2000' AGL, moderate bird hazard.

(11) F-G:
(a) Transit R-5314J below 1000'AGL unless scheduled for Dare Co Operations and cleared the Range Control Officer;
(b) CROSSING: VR-084 right to left 15NM prior to G;
(c) CROSSING: IR-012 right to left 4NM prior to G;
(d) CROSSING: IR-062 left to right 2NM prior to G;
(e) CROSSING: VR-084 right to left at G.
(f) CAUTION: Overfly Pamlico and Pungo Rivers by 2000' AGL, moderate bird hazard.

(12) G-H:
(a) CROSSING: VR-084 right to left at G.

(13) H-I:
(a) CROSSING: VR-071 left to right at I.

(14) I-J:
(a) AVOID: Entire beach is considered Noise Sensitive - maintain 1000' AGL when within 1NM of coastal areas;
(b) CROSSING: VR-071 left to right at I;
(c) CROSSING: VR-054 right to left at J;
(d) AVOID: BILLY MITCHELL AIRFIELD AT N35-14.0 W075-37.0.

(15) J-K:
(a) AVOID: Entire beach is considered Noise Sensitive - maintain 1000' AGL when within 1NM of coastal areas;
(b) CROSSING: VR-054 right to left at J.

(16) K-L:
(a) Do not enter R-5313 when active (By NOTAM) unless cleared in;
(b) AVOID: Entire beach is considered Noise Sensitive-maintain 1000' AGL when within 1NM of coastal areas.

(17) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-012: Seymour Johnson AFB;
(b) IR-062: Oceana NAS, DSN 433-1228;
(c) IR-718: Oceana NAS, DSN 433-1228;
(d) IR-719: Oceana NAS, DSN 433-1228;
(e) IR-720: Oceana NAS, DSN 433-1228;
(f) VR-042: Seymour Johnson AFB;
(g) VR-043: Seymour Johnson AFB;
(h) VR-054: Seymour Johnson AFB;
(i) VR-071: Seymour Johnson AFB;
(j) VR-083: Seymour Johnson AFB;
(k) VR-084: Seymour Johnson AFB;
(l) VR-085: Seymour Johnson AFB;
(m) VR-096: Seymour Johnson AFB;
(n) VR-1713: Andrews AFB, DSN 857-3307;
(o) VR-1753: Oceana NAS, DSN 433-1228.

FSS Within 100 NM Radius:

VR-083

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>FLO 082/38</td>
<td>N34°21.00'</td>
</tr>
<tr>
<td>05 AGL 8 65 MSL to B FLO 061/51</td>
<td>B</td>
<td>N34°41.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL 8 65 MSL to C FLO 043/120</td>
<td>C</td>
<td>N35°45.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL 8 65 MSL to D FLO 041/124</td>
<td>D</td>
<td>N35°52.00'</td>
<td></td>
</tr>
<tr>
<td>10 AGL 8 65 MSL to E SBV 089/53</td>
<td>E</td>
<td>N36°46.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL 8 65 MSL to F SBV 055/20</td>
<td>F</td>
<td>N36°53.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL 8 65 MSL to G SBV 350/13</td>
<td>G</td>
<td>N36°53.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL 8 65 MSL to H SBV 298/32</td>
<td>H</td>
<td>N36°53.00'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
(2) Alternate Entry: B, C, D, E, F.
(3) Alternate Exit: B, C, D, E, F.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1NM or overfly 1000' AGL; avoid airports by 3NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
(6) Route users must deconflict Farmville MOA with 1 OSS/OSO, DSN 574-2483/2559. Deconfliction is needed when routes are used between 0800-1700 hrs local, Mon-Fri. Make a call in the blind on UHF frequency 377.1 when transiting Farmville MOA airspace.
(7) A-B:
(a) CROSSING: VR-087 left to right at A;
(b) CROSSING: IR-035/VR-1040/VR-1043 right to left 15NM prior to B;
(c) CROSSING: IR-062 left to right 10NM prior to B;
(d) TOWER, 400' AGL at N34 33.8 W78 45.9.

(8) B-C:
(a) AVOID: Fayetteville Class C Airspace 1400'MSL to 4200'MSL;
(b) CROSSING: VR-1046 right to left 36NM prior to C;
(c) CROSSING: IR-062 left to right 10NM prior to B;
(d) TOWER, 400' AGL at N34 33.8 W78 45.9.

(9) C-D:
(a) AVOID: Fayettville Class C Airspace 1400'MSL to 4200'MSL;
(b) CROSSING: VR-1046 right to left 36NM prior to C;
(c) CROSSING: IR-062 right to left 3NM prior to C.

(10) D-E:
(a) AVOID: Landfill at N34-58.84 W78-27.4, by 2000' AGL/1NM, moderate bird hazard.
(b) CROSSING: VR-1046 left to right 41NM prior to E;
(c) CROSSING: VR-043 left to right 31NM prior to E;
(d) CROSSING: VR-1759 left to right 27NM prior to E;
(e) CROSSING: VR-042 right to left 24NM prior to E;
(f) CROSSING: VR-086/VR096 right to left 23NM prior to E;
(g) CROSSING: IR-062 right to left 14NM prior to E;
(h) CROSSING: VR-073 left to right 13NM prior to E;
(i) CROSSING: IR-719 left to right 4NM prior to E;
(j) CROSSING: VR-042 left to right 3NM prior to E;
(k) CROSSING: IR-715 right to left at E.

(11) E-F:
(a) AVOID: landfill at N36-03.75 W77-59.6 by 2000' AGL/1NM, moderate bird hazard;
(b) CROSSING: IR-715 left to right at E;
(c) CROSSING: VR-1061 parallel entire leg;
(d) CROSSING: VR-1722 left to right 27NM prior to F;
(e) CROSSING: VR-042 right to left 27NM prior to F;
(f) CROSSING: VR-042 left to right 20NM prior to F;
(g) CROSSING: VR-1759 right to left 19NM prior to F;
(h) CROSSING: IR-715 right to left 6NM prior to F;
(i) CROSSING: VR-042 left to right at F.

(12) F-G:
(a) CROSSING: VR-042/VR-1061 parallel entire leg;
(b) CROSSING: VR-1722 right to left at G.

(13) G-H:
(a) CROSSING: VR-1061/VR-1722 right to left at G;
(b) CROSSING: VR-042 parallel entire leg;
(c) CROSSING: IR-715 left to right 4NM prior to H.

(14) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-035: Shaw AFB, DSN 965-1118;
(b) IR-062: Oceana NAS, DSN 433-1228;
(c) IR-715: Oceana NAS, DSN 433-1228;
(d) IR-718: Oceana NAS, DSN 433-1228;
(e) IR-719: Oceana NAS, DSN 433-1228;
(f) VR-042: Seymour Johnson AFB;
(g) VR-043: Seymour Johnson AFB;
(h) VR-073: Seymour Johnson AFB;
(i) VR-086: Seymour Johnson AFB;
(j) VR-096: Seymour Johnson AFB;
(k) VR-087: Seymour Johnson AFB,
(l) VR-1040: Cherry Point, DSN 582-4040;
(m) VR-1043: Cherry Point, DSN 582-4040;
(n) VR-1046: Cherry Point, DSN 582-4040;
(o) VR-1759: Oceana NAS, DSN 433-1228;
(p) VR-1722: Oceana NAS, DSN 433-1228.

FSS Within 100 NM Radius:
EKN, NTU, RDU

VR-084


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 AGL B 65 AGL to A</td>
<td>ILM 194/30</td>
<td>N33°51.00' W77°57.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 AGL to B</td>
<td>ILM 118/8</td>
<td>N34°18.00' W77°43.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 AGL to C</td>
<td>ILM 011/29</td>
<td>N34°50.00' W77°50.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 AGL to D</td>
<td>GSB 138/22</td>
<td>N35°06.00' W77°38.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 AGL to E</td>
<td>NKT 315/31</td>
<td>N35°12.00' W77°23.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 AGL to F</td>
<td>NKT 005/26</td>
<td>N35°20.00' W76°54.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 AGL to G</td>
<td>NKT 015/37</td>
<td>N35°31.00' W76°48.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 AGL to H</td>
<td>NKT 035/32</td>
<td>N35°43.00' W76°11.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 AGL to I</td>
<td>NKT 005/26</td>
<td>N35°20.00' W76°54.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 65 AGL to F1</td>
<td>NKT 035/32</td>
<td>N35°23.00' W76°35.00'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 5 NM either side of centerline from B to I.

Special Operating Procedures:
(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
(2) Alternate Entry: B, C, D, E, F, G, F1.
(3) Alternate Exit: B, C, D, E, F, G.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
(6) CAUTION: Numerous large towers along route.
(7) A-B:
(a) AVOID: Entire beach is considered Noise Sensitive—maintain 2000’ when within 1NM of coastal areas;
(b) CAUTION: Numerous light aircraft along route;
(c) CROSSING: VR-1043 right to left at A;
(d) CROSSING: VR-1043 left to right 12NM prior to B.
(8) B-C:
(a) AVOID: STAG AIRPARK at N34-31.9 w077-51.0; 
(b) CROSSING: IR-718 parallel 26NM prior to C until C.
(c) CAUTION: VFR helicopter tng area (Holly Ridge TERF Route), right side of centerline 23 NM to 13 NM prior to Point C. Ops conducted day and night from 50’ AGL to 1500’ AGL. Contact MAG-29 COPS: DSN 752-5562/4826/5002, C910-449-5562/4826/5002 for deconfliction, or avoid the TERF Route airspace;
(f) AVOID: ROCK QUARRY WITH SUBSTANTIAL WATER BUILDUP at N34-49.2 W077-49.7 by 2000’ AGL or 1NM for potential bird hazard;
(9) C-D:
(a) CROSSING: IR-718 parallel entire leg;
(b) CROSSING: IR-062 parallel entire leg;
(c) CROSSING: IR-012 left to right 5NM prior to D;
(d) CROSSING: VR-1046 right to left at D.
(e) AVOID: PINK HILL AIRFIELD at N35-03.2 W077-44.2.
(10) D-E:
(a) CROSSING: VR-1046 right to left at D;
(b) CROSSING: IR-718 parallel entire leg;
(c) CROSSING: IR-012 parallel entire leg;
(11) E-F:
(a) CROSSING: IR-012 parallel entire leg.
(b) AVOID: fish farm at N35-12 W77-21.0 by 2000’ AGL; 
(c) AVOID: landfill at N35-15.8 W77-13.7 by 2000’ AGL;
(d) AVOID: Horse breeding ranch at N35-19.836 W77-07.021 by 2NM or 1500’;
(e) AVOID Noise Sensitive Area: N35-12.8 W077-11.3 by 1000’ AGL/2NM;
(f) Tower: 150’ AGL at N35-14.482 W77-05.999.
(12) F-G:
(a) AVOID: Over-fly coastal areas by 2000’AGL;
(b) CROSSING: IR-062 left to right 9NM prior to G;
(c) CROSSING: VR-1046 left to right 6NM to G.
(d) CAUTION: overfly Pamlico and Pungo rivers by 2000’ AGL, moderate bird hazard.
(13) G-H:
(a) CROSSING: IR-062 right to left 16NM prior to H;
(b) CROSSING: VR-73 left to right 7NM prior to H;
(c) WARNING: Pinetown possible UAS at N35 37.5 W076 45.1 up to 400’ AGL out to 5 NM;
(d) CAUTION: Overfly Pungo River by 2000’ AGL, moderate bird hazard.
(14) H-I:
(a) CROSSING: IR-012 parallel until 5NM prior to I.
(b) AVOID: Gum Neck at N35 43.9 W076 08.6 by 1500’ AGL and 1.5 NM;
(15) F-F1:
(a) AVOID: Over-fly coastal areas by 2000’AGL;
(b) CROSSING: VR-1046 left to right 13NM prior to F1;
(c) CROSSING: IR-062 left to right 13NM prior to F1;
(d) CROSSING: IR-012 parallel entire leg.
(e) CAUTION: overfly Pamlico and Pungo rivers by 2000’ AGL, moderate bird hazard.
(16) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-012 and VR-084: Seymour Johnson AFB;
(b) IR-062: Oceana NAS, DSN 433-1228;
(c) IR-718: Oceana NAS, DSN 433-1228;
(d) IR-073: VR-084: Setmour Johnson AFB;
(e) VR-1043: Cherry Point, DSN 582-4040;
(f) VR-1046: Cherry Point, DSN 582-4040.
FSS Within 100 NM Radius: RDU
VR-085
HOURS OF OPERATION: Continuous
ROUTE DESCRIPTION:
Altitude Data  Pt Fac/Rad/Dist Lat/Long
As assigned to A TYI 222/38 N35°28.00’ W78°10.00’
05 AGL B 30 MSL to B TYI 179/18 N35°41.00’ W77°40.00’
05 AGL B 30 MSL to C TYI 108/16 N35°55.00’ W77°12.00’
05 AGL B 30 MSL to D TYI 082/25 N36°04.00’ W76°12.00’
05 AGL B 20 MSL to E TYI 099/49 N35°55.00’ W76°42.00’
05 AGL B 20 MSL to F CVI 146/33 N35°58.00’ W76°24.00’
05 AGL B 20 MSL to G CVI 126/45 N36°02.00’ W76°03.00’
50 MSL to Alternate Exit: E CVI 115/58 N36°06.00’ W75°43.00’
05 AGL B 20 MSL to E TYI 099/49 N35°55.00’ W76°42.00’
05 AGL B 20 MSL to E1 TYI 102/56 N35°51.50’ W76°34.00’

TERRAIN FOLLOWING OPERATIONS: Authorized from A to G and E to E1.
ROUTE WIDTH - 5 NM either side of centerline from A to E; 3 NM either side of centerline from E to H; 3 NM either side of centerline from E to E1.

Special Operating Procedures:
(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
(2) Alternate Entry: B, C, D, E, F, G, H.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.

ROUTE DESCRIPTION:
Altitude Data  Pt Fac/Rad/Dist Lat/Long
As assigned to A TYI 222/38 N35°28.00’ W78°10.00’
05 AGL B 30 MSL to B TYI 179/18 N35°41.00’ W77°40.00’
05 AGL B 30 MSL to C TYI 108/16 N35°55.00’ W77°12.00’
05 AGL B 30 MSL to D TYI 082/25 N36°04.00’ W76°12.00’
05 AGL B 20 MSL to E TYI 099/49 N35°55.00’ W76°42.00’
05 AGL B 20 MSL to F CVI 146/33 N35°58.00’ W76°24.00’
05 AGL B 20 MSL to G CVI 126/45 N36°02.00’ W76°03.00’
50 MSL to Alternate Exit: E CVI 115/58 N36°06.00’ W75°43.00’
05 AGL B 20 MSL to E TYI 099/49 N35°55.00’ W76°42.00’
05 AGL B 20 MSL to E1 TYI 102/56 N35°51.50’ W76°34.00’

TERRAIN FOLLOWING OPERATIONS: Authorized from A to G and E to E1.
ROUTE WIDTH - 5 NM either side of centerline from A to E; 3 NM either side of centerline from E to H; 3 NM either side of centerline from E to E1.

Special Operating Procedures:
(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
(2) Alternate Entry: B, C, D, E, F, G, H.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
VR ROUTES

(5) Avoid towns and populated areas by 1NM or overfly 1000’AGL; avoid airports by 3NM or overfly 1500’AGL. Over sparsely populated areas, aircraft may not be operated closer than 500’ to any person, vessel, vehicle or structure.

(6) A-B:
(a) AVOID: WAYNE EXECUTIVE AIRPORT at N35-27.8 W077-58.0;
(b) CROSSING: VR-86 parallel entire leg;
(c) AVOID: KENLY AIRFIELD at N35-35.8 W078-05.7.

(7) B-C:
(a) AVOID: Landfill at N35-49.5 W077-34.2 by 2000’ AGL/1 NM, moderate bird hazard;
(b) CROSSING: VR-086 parallel entire leg;
(c) AVOID: TARBORO AIRFIELD at N35-56.4 W077-32.6 by 2000’ AGL or 1 NM.
(d) AVOID: ROANOKE River and ALBEMALE Sound coastal areas by 2000’ AGL for moderate bird hazard;
(e) CROSSING: IR-719 left to right at D.

(8) C-D:
(a) AVOID: Oak City, NC at N35-57.8 W077-18.3 by 1 NM or overfly 1000’ AGL;
(b) CROSSING: VR-1046 left to right 5NM prior to D;
(c) AVOID: Roanoke River 4NM prior to D by 2000’ AGL for moderate bird hazard;
(d) CROSSING: VR-043 left to right 2NM prior to D;
(e) CROSSING: IR-719 left to right at D.

(9) D-E:
(a) AVOID: Landfill at N36-07.25 W77-03.95 by 4500’/1NM, severe bird hazard;
(b) CROSSING: IR-719 left to right at D;
(c) CROSSING: VR-043 parallel entire leg;
(d) CROSSING: VR-073 parallel entire leg;
(e) CROSSING: IR-062 right to left 14NM prior to E.

(10) E-F:
(a) CROSSING: VR-043 left to right at E;
(b) CROSSING: VR-073 left to right at E;
(c) CROSSING: VR-1713/VR-1753 10NM prior to F;
(d) AVOID: ROANOKE River and ALBEMALE Sound coastal areas by 2000’ AGL for moderate bird hazard;
(e) CROSSING: IR-062 right to left at E1.

(11) F-G:
(a) Do not enter 5-5302 when active (By NOTAM) unless cleared in;
(b) AVOID: ALBEMARLE Sound coastal areas by 2000’ AGL for moderate bird hazard.

(12) G-H:
(a) Contact Oceana Approach 279.2 upon exit for IFR pick-up if required;
(b) AVOID: ALBEMARLE Sound coastal areas by 2000’ AGL for moderate bird hazard.

(13) E-E1:
(a) CROSSING: VR-043 parallel entire leg;
(b) CROSSING: VR-073 parallel entire leg;
(c) CROSSING: VR-1713 left to right at E1;
(d) CROSSING: IR-062 right to left at E1.

(14) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-062: Oceana NAS, DSN 433-1228;
(b) IR-719: Oceana NAS, DSN 433-1228;
(c) VR-043: Seymour Johnson AFB;
(d) VR-073: Seymour Johnson AFB;
(e) VR-085: Seymour Johnson AFB;
(f) VR-1713: Andrews AFB, DSN 857-3307;
(g) VR-1046: Cherry Point, DSN 582-4040;
(h) VR-1753: Oceana NAS, DSN 433-1228;
(i) VR-1759: Oceana NAS, DSN 433-1228.

FSS Within 100 NM Radius:
NTU, RDU

VR-086


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A TYI 222/38 N35°28.00’ W78°10.00’
05 AGL B 30 MSL to B TYI 179/18 N35°41.00’ W77°40.00’
05 AGL B 30 MSL to C TYI 108/16 N35°55.00’ W77°23.00’
05 AGL B 30 MSL to D TYI 058/17 N36°09.00’ W77°25.00’
05 AGL B 30 MSL to E TYI 336/28 N36°23.00’ W77°59.00’
05 AGL B 30 MSL to F RDU 029/38 N36°28.00’ W78°31.00’
05 AGL B 30 MSL to G RDU 339/31 N36°19.00’ W79°06.00’
05 AGL B 30 MSL to H RDU 278/27 N35°52.00’ W79°20.00’
05 AGL B 30 MSL to I RDU 264/32 N35°44.00’ W79°25.00’
05 AGL B 30 MSL to J RDU 248/45 N35°29.00’ W79°34.00’

TERRAIN FOLLOWING OPERATIONS: This route is designated as containing terrain following segments from A to J.

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Special Operating Procedures:
(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
(2) Alternate Entry: B, C, D, E, F, G, H, I.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1 NM or overfly 1000’AGL; avoid airports by 3 NM or overfly 1500’AGL. Over sparsely populated areas, aircraft may not be operated closer than 500’ to any person, vessel, vehicle or structure.
(6) A-B:
(a) CROSSING: VR-86 parallel entire leg.
(b) AVOID: WAYNE EXECUTIVE AIRPORT at N35-27.8 W077-58.0;
(c) AVOID: KENLY AIRFIELD at N35-35.8 W078-05.7.
(7) B-C:
(a) AVOID: Landfill at N35-49.5 W77-34.23 by 2000' AGL/1NM, moderate bird hazard;
(b) CROSSING: VR-086 parallel entire leg;
(c) CROSSING: VR-1759 left to right 3NM prior to C;
(d) AVOID: TARBORO AIRFIELD at N35-56.4 W077-32.6.

(8) C-D:
(a) CROSSING: VR-1046 left to right 6NM prior to D;
(b) CROSSING: VR-043 left to right 4NM prior to D.

(9) D-E:
(a) AVOID: HALIFAX-NORTHHAMPTON REGIONAL AIRFIELD at N36-19.3 W077-37.9;
(b) TOWER: 415'AGL (777'MSL) at N36-26.3 W077-57.0;
(c) CROSSING: VR-1046 left to right 6NM prior to D;
(d) CROSSING: VR-043 left to right 4NM prior to D.

(10) E-F:
(a) CROSSING: VR-096 left to right at E;
(b) CROSSING: VR-083 left to right at E;
(c) AVOID: Landfill at N36-22.5 W078-48.6 by 2000' AGL/1NM. Moderate bird hazard.

(11) F-G:
(a) CROSSING: VR-043 right to left 2NM past F;
(b) AVOID: HENDERSON-OXFORD AIRFIELD at N36-21.7 W078-31.8;
(c) AVOID: Landfill at N36 22.5 W078 37.6 by 2000' AGL/1NM;
(d) CAUTION: High concentration of soaring birds observed at N36-21.9 W078-41.2, moderate bird hazard.
(e) AVOID: Landfill at N36-19.6 W078-49.8 by 2000' AGL/1NM, moderate bird hazard;
(f) AVOID: PERSON COUNTY AIRFIELD at N36-17.1 W078-59.1.

(12) G-H:
(a) AVOID: WHITFIELD AIRFIELD at N36-17.2 W079-04.6;
(b) AVOID: Landfill at N35-55.7 W79-17.5 by 2000' AGL/1NM, moderate bird hazard;
(c) CROSSING: VR-1061 parallel entire leg;
(d) AVOID: HURDLE AIRFIELD at N36-04.5 W079-16.9;
(e) AVOID: DUCHY AIRFIELD at N35-59.0 W079-16.3.

(13) H-I:
(a) CROSSING: VR-1061 parallel entire leg.

(14) I-J:
(a) CROSSING: VR-1061 parallel entire leg;
(b) TOWER: 400' AGL at N35-34.881 W079-28.172;
(c) AVOID: SILER CITY AIRFIELD at N35-42.3 W079-30.1.

(15) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-718: Oceana NAS, DSN 433-1228;
(b) VR-042: Seymour Johnson AFB;
(c) VR-043: Seymour Johnson AFB;
(d) VR-083: Seymour Johnson AFB;
(e) VR-086: Seymour Johnson AFB;
(f) VR-096: Seymour Johnson AFB;
(g) VR-1046: Cherry Point, DSN 582-4040;
(h) VR-1759: Oceana NAS, DSN 433-1228;
(i) VR-1061: Seymour Johnson AFB.

FSS Within 100 NM Radius:
NTU, RDU

VR-087

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-22672, C919-722-22672.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>FLO 321/45</td>
<td>N34°47.00' W80°16.00'</td>
</tr>
<tr>
<td>03 AGL B 65 MSL to</td>
<td>B</td>
<td>FLO 337/20</td>
<td>N34°32.00' W79°50.00'</td>
</tr>
<tr>
<td>03 AGL B 65 MSL to</td>
<td>C</td>
<td>FLO 061/32</td>
<td>N34°31.00' W79°06.00'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to</td>
<td>D</td>
<td>FLO 098/50</td>
<td>N34°09.00' W78°39.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>E</td>
<td>FLO 119/11</td>
<td>N34°09.00' W79°27.00'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to</td>
<td>F</td>
<td>SSC 109/24</td>
<td>N33°54.00' W80°00.00'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to</td>
<td>G</td>
<td>SSC 167/16</td>
<td>N33°43.30' W80°21.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to E; 8 NM either side of centerline from E to G.

Special Operating Procedures:

(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
(2) Alternate Entry: B, C, E, F.
(3) Alternate Exit: B, C, E, F.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1 NM or overfly 1000' AGL; avoid airports by 3 NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, or vehicle.
(6) Avoid towns and populated areas by 1 NM or overfly 1000' AGL; avoid airports by 3 NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, or vehicle.

(7) B-C:
(a) Crossing: IR-721/VR-1721 right to left 6 NM SE of Pt A; (b) Crossing: VR-1043 opposite direction Pt A-C and D-G; (c) AVOID: PAGELAND AIRFIELD at N34-44.7 W080-20.71; (d) AVOID: CHERAW/BELLINGER AIRFIELD at N34-42.7 W079-57.3; (e) AVOID: DARLINGTON AIRFIELD at N34-27.1 W079-53.3.

FSS Within 100 NM Radius:
NTU, RDU
VR ROUTES

(e) AVOID: DILLON COUNTY AIRFIELD at N34-27.3 W079-22.0;
(f) AVOID: LUMBERTON REGIONAL AIRFIELD at N34-36.6 W079-03.6.

(8) C-D:
(a) AVOID: COLUMBUS COUNTY AIRFIELD at N34-16.6 W078-42.6.
(b) Crossing: IR-035 left to right 2 NM SE of Pt. C.

(9) D-E:
(a) AVOID: GREEN SEA AIRFIELD at N34-11.1 W079-44.6;
(b) AVOID: TWIN CITY AIRFIELD at N34-05.4 W078-51.6;
(c) AVOID: MARION COUNTY AIRFIELD at N34-10.8 W079-20.1.

(10) E-F:
(a) AVOID: FLORENCE REGIONAL AIRFIELD at N34-11.2 W079-43.4;
(b) CAUTION: Ultralight aircraft flying at and below 1000' AGL, especially near LAKE CITY EVANS (51J) at N33-51.3 W079-46.4;
(c) AVOID: LAKE CITY EVANS AIRFIELD at N33-51.3 W079-46.4.
(d) Crossing: IR-035 same direction Pt. D-G.

(11) F-G:
(a) CAUTION: Opposite direction traffic exiting VR-088 at G may hold at RIMINI Bridge at N33-30 W080-27 awaiting clearance into R-6002;
(b) CAUTION: After F, be aware of Shaw Class C airspace which extends approximately 2NM into route from the North, 1500' MSL and above;
(c) AVOID: Uncharted dirt airfield at N33-46.2 W080-05.0;
(d) CAUTION: Contact Poinsett Ranger prior to entering the lateral confines of the Poinsett Low MOA and/or R-6002;
(e) CAUTION: Route width excludes FLORENCE AIRPORT Class D airspace and R-6002 when active.
(f) Crossing: IR-035 same direction Pt. D-G.
(g) Crossing: IR-036 left to right, 4 NM SW of Pt. F, then same direction.

(12) Crossing route contact information:
(a) VR-088: Seymour Johnson AFB; DSN 722-2129;
(b) IR-721: Charleston AFB; DSN 673-5552;
(c) VR-1043: Cherry Point MCAS; DSN 582-4040;
(d) IR-062: Oceana NAS; DSN 433-1228.
(e) IR-035: Shaw AFB; DSN 965-1118/1119.
(f) IR-036: Shaw AFB; DSN 965-1118/1119.

(13) CAUTION: Three uncharted (private) duster strips:
(a) 5000’ (Rwy orient E/W) N34-11 W79-01.5;
(b) 2500’ (Rwy orient 03/21) N34-02 W79-28.5;
(c) 2500’ (Rwy orient 07/25) N33-46.2 W80-05.

(14) CAUTION: Four towers:
(a) 250’ AGL (360’ MSL) at N33-52.7 W80-05.0;
(b) 300’ AGL (372’ MSL) at N33-53.5 W79-41.0;
(c) 500’ AGL (595’ MSL) at N34-03.1 W79-44.0;
(d) 450’ AGL (550’ MSL) at N34-05.1 W79-04.3.

(15) WARNING: Minimum altitude 500’ AGL Pt B to E (1 Jun-31 Oct). Numerous crop spraying aircraft carrying hazardous material operating in the vicinity 300’ AGL and below.

(16) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200’ AGL and above are listed in this SOP.

(17) Maintain 1500’ AGL until passing B for numerous noise sensitive areas.

(18) Uncharted Airport (Rwy 08/24 and 15/33), N34-17.7 W79-03.3.

(19) Congressional Noise Sensitive Area: Galivants Ferry N34-03.4 W79-14.3, avoid by 2000’ AGL/2 NM (extremely sensitive).

(20) CAUTION: Multiple Towers 330’ AGL (850’ MSL) N34-46.0 W80-15.9.

(21) CAUTION: Five Towers:
(a) 400’ AGL (950’ MSL) N34-44.8 W80-10.9;
(b) 310’ AGL (900’ MSL) N34-40.4 W80-17.8;
(c) 1500’ AGL (1650’ MSL) N34-11.4 W79-10.5;
(d) 200’ AGL (500’ MSL) N33-57.3 W80-09.9;
(e) 400’ AGL (850’ MSL) N33-45.1 W80-21.4.

(22) CAUTION: Three Towers:
(a) 700’ MSL N34-37.6 W79-36.9;
(b) 550’ MSL N33-58.4 W80-02.2;
(c) 500’ MSL N34-02.6 W79-13.9.

FSS Within 100 NM Radius:
AND, RDU

VR-088


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data          Pt     Fac/Rad/Dist          Lat/Long

As assigned to        A       CAE 346/55          N34°44.00’
                     W81°22.00’
03 AGL B 65 Msl to    B       CAE 292/37          N34°04.00’
                     W81°45.00’
03 AGL B 65 Msl to    C       CAE 222/24          N33°33.00’
                     W81°22.00’
03 AGL B 80 Msl to    D       CAE 180/46          N33°05.00’
                     W81°01.00’
01 AGL B 65 Msl to    E       CAE 168/47          N33°06.00’
                     W80°50.00’
01 AGL B 65 Msl to    F       SSC 197/21          N33°38.00’
                     W80°32.00’
01 AGL B 65 Msl to    G       SSC 183/18          N33°40.80’
                     W80°26.00’

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to F; 8 NM either side of centerline from F to G.

Special Operating Procedures:
(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
(2) Alternate Entry: B, C, D.
(3) Alternate Exit: B, C, D.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1 NM or overfly 1000' AGL; avoid airports by 3 NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle, or structure.

(6) A-B:
(a) AVOID: UNION COUNTY AIRFIELD at N34-41.0 W081-38.4;
(b) AVOID: NEWBERRY COUNTY AIRFIELD at N34-18.5 W081-38.4;
(7) B-C:
(a) Crossing: VR-1059 entry point coincident with Pt B flowing southwest;
(b) Crossing: IR-036 entry Pt. 15 NM east of Pt. C, opposite direction, then flowing south.
(c) AVOID: SALUDA COUNTY AIRFIELD at N33-55.8 W081-47.6;
(d) AVOID: AIKEN MUNICIPAL AIRFIELD at N33-38.9 W081-41.3;
(e) AVOID: GILBERT INTERNATIONAL AIRFIELD at N33-53.1 W080-23.0;
(f) AVOID: PERRY INTERNATIONAL AIRFIELD at N33-37.4 W081-19.8;
(g) AVOID: Horse Farm at N33-31.891 W081-23.318 by 1500' AGL or 1 NM.
(8) C-D:
(a) AVOID: North AB AUX Airfield Class D airspace when active via NOTAM at N33-36.5 W081-04.3;
(b) Crossing: SR-166 entry pt 2.5 NM left of course 20 NM prior to Pt D flowing east.
(c) AVOID: BARNWELL REGIONAL AIRFIELD at N33-15.3 W081-23.4;
(d) AVOID: BAMBERG COUNTY AIRFIELD at N33-18.3 W081-06.5;
(e) Crossing: IR-036 entry Pt. 15 NM east of Pt. C, opposite direction, then flowing south.
(9) D-E:
(a) TOWER: 630' AGL (700' MSL), N33-01 W080-50.
(b) Crossing: IR-036 same direction.
(10) E-F:
(a) CAUTION: Poinsett Low MOA 2 NM prior to Pt F 300' AGL to 2500' AGL;
(b) CAUTION: Opposite direction traffic exiting VR-087 at Pt G may hold at Rimini Bridge at N33-30 W080-27 awaiting clearance into R-6002;
(c) AVOID: ORANGEBURG MUNICIPAL AIRFIELD at N33-27.4 W080-51.5;
(d) TOWER: 400' AGL, N33-27.78 W080-44;
(e) CAUTION: Contact Poinsett Ranger prior to entering the lateral confines if the Poinsett Low MOA and/or R-6002.
(f) Crossing: IR-035 opposite direction, Pt. E-G, 8 NM prior to Pt. F;
(g) Crossing: IR-036 left to right at Pt. E and IR-036 opposite direction 8 NM prior to Pt. F;
(11) F-G:
(a) AVOID: R-6002 4 NM north of Pt G when active without clearance to enter;
(b) CAUTION: Opposite direction traffic exiting VR-087 at Pt G may hold at Rimini Bridge at N33-30 W080-27 awaiting clearance into R-6002;
(c) AVOID: MCNEIL AIRFIELD at N33-34.9 W080-38.9;
(d) Crossing: IR-036 opposite direction.
(12) Crossing route information:
(a) VR-1059: Shaw AFB; DSN 965-1118/1119;
(b) VR-087: Seymour Johnson AFB; DSN 722-2129;
(c) SR-166: Charleston AFB; DSN 965-1118.
(d) IR-035: Shaw AFB; DSN 965-1118/1119.
(e) IR-036: Shaw AFB; DSN 965-1118/1119.
(13) Avoid: Uncharted 2000' private grass strip (N34-29.0 W81-40.0), by 1000' AGL/2 NM.
(14) Avoid: Uncharted airfield (N33-36.5 W81-14.0) by 1000' AGL/2 NM.
(15) CAUTION: Four towers:
(a) 345' AGL (832' MSL) N34-11.8 W81-49.2;
(b) 250' AGL (750' MSL) N34-13.0 W81-29.8;
(c) 680' AGL (1280' MSL) N34-45.9 W81-18.0;
(d) 480' AGL N33-21.1 W80-35.2.
(16) CAUTION: Three towers:
(a) 500' AGL (662' MSL) at N33-39.3 W80-18.6;
(b) 415' AGL (972' MSL) at N34-14.3 W81-33.5;
(c) 250' AGL (825' MSL) at N34-41.3 W81-33.5.
(17) CAUTION: Two towers:
(a) 420' AGL (573') N33-25.5 W80-38.9;
(b) 260' AGL (787') N33-44.3 W81-31.2.
(18) Avoid: Five congressional noise sensitive areas by 1000' AGL/1 NM:
(a) N33-24.7 W81-16.8;
(b) N33-07.8 W81-13.2;
(c) N33-47.6 W81-36.0;
(d) N33-40.4 W81-37.5;
(e) N33-48.2 W81-25.5.
(19) Avoid: Newberry, SC Airport (N34-18.7 W81-38.4). Avoid by 1500' AGL/3 NM. Avoid overlap of the city of Newberry, SC by the same altitude margin.
(20) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
(21) AVOID: From abeam Batesburg, SC (N33-54.0 W81-32.0) to Wagner, SC (N33-39.0 W81-22.0) (18 NM) minimum altitude of 1000' AGL due to numerous congressional noise sensitive areas and towers up to 500' AGL.

FSS Within 100 NM Radius:
AND, McN

VR-092


HOURS OF OPERATION: Continuous (Feb, Apr, Jun, Aug, Oct, Dec) VR-058 opposite direction other months

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A GQO 260/30</td>
<td>N34°53.00'  W85°45.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>B GQO 325/51</td>
<td>N35°40.00'  W85°44.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>C GQO 054/45</td>
<td>N35°23.00'  W84°24.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>D GQO 081/54</td>
<td>N35°05.00'  W84°04.00'</td>
<td></td>
</tr>
</tbody>
</table>
VR ROUTES

01 AGL B 80 MSL to E SPA 262/85 N34°46.00' W83°37.00'
01 AGL B 80 MSL to F SPA 264/54 N34°54.00' W83°00.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to E; 8 NM either side of centerline from E to F.

Special Operating Procedures:
(1) Alternate Entry Points: B and D.
(2) Alternate Exit Points: C, D and E.
(3) CAUTION: Numerous power lines along route above 100' AGL.
(4) Avoid by 1500' AGL/3 NM: Monteagle, TN N35-15.6 W85-0.0. Presidential noise sensitive area.
(5) Avoid by 1000' AGL/1 NM, Steam Plant, N34-52.8 W83-24.0, avoid by 1500' AGL/2 NM.
(6) Avoid the following environmentally sensitive areas (endangered bats) by 500' vertically or 1000' horizontally unless operationally necessary: (N35-33.2 W84-47.5), (N35-32.8 W85-40.3), (N35-39.4 W85-36.6), (N35-24.5 W85-00.8), (N35-15.5 W85 52.3).
(7) Avoid two noise sensitive areas:
(a) By 1000' AGL/1 NM, N34-45.9 W83-37.8.
(b) By 1000' AGL/1 NM, N35-35.5 W85-12.0 (SE of Pikeville, TN).
(8) Avoid noise sensitive area by 1500' AGL/1 NM, Dayton, TN N35-28.0 W85-01.0.
(9) Avoid chlorine gas plant by 1000' AGL/1 NM, N35-17.5 W84-45.0.
(10) Avoid power plant by 1000' AGL/1 NM, N35-36.1 W84-47.5.
(11) Avoid congressional noise sensitive area by 1500' AGL/1 NM, Athens, TN, N35-26.5 W84-36.0.
(12) CAUTION: Chilhowee Glider Port N35-13.8 W84-35.0, numerous glider activities, SFC-5000' within 5 NM.
(13) CAUTION: 3000' runway airport at Telico Plains, TN, N35-22.8 W84-18.0, intensive student training, avoid by 1500'.
(14) Avoid by 1000' AGL/1 NM, Coker Creek, TN, N35-16.0 W84-17.0 Congressional noise sensitive area.
(15) Avoid by 1500' AGL/5 NM N35-05.0 W84-04.0, Congressional noise sensitive area.
(16) Avoid by 1500' AGL/1 NM noise sensitive area, N34-42.2 W83-38.1.
(17) Avoid 9 towers:
(a) 250' AGL N34.57.91 W83.49.78;
(b) 250' AGL N34.57.17 W84.02.62;
(c) 250' AGL N35.08.91 W84.10.54;
(d) 350' AGL N35.19.5 W84.27.05;
(e) 300' AGL N35.34.84 W84.58.4;
(f) 250' AGL N34.54.77 W85.46.42;
(g) 300' AGL N34.55.33 W83.02.82;
(h) 400' AGL N34.57.86 W83.49.43;
(i) 500' AGL N35.30.99 W84.46.45
(18) WARNING, avoid by 1 NM Nuclear Power Plant, Oconee, SC N34-47.5 W82-53.9. Do not over-fly.
(19) Noise Sensitive Areas:
(a) Peachtree Community N35-05.7 W83-57.0, avoid by 1500' AGL/1 NM;
(b) Clayton, GA N34-52.8 W83-24.0, avoid by 1500' AGL/2 NM.
(20) Avoid two noise sensitive areas:
(a) By 1000' AGL/1 NM, N34-45.9 W83-37.8.
(b) By 1000' AGL/1 NM, N35-35.5 W85-12.0 (SE of Pikeville, TN).
(21) Avoid by 1000' AGL/1 NM, Dayton, TN N35-28.0 W85-01.0.
(22) Avoid chlorine gas plant by 1000' AGL/1 NM, N35-17.5 W84-45.0.
(23) Avoid power plant by 1000' AGL/1 NM, N35-36.1 W84-47.5.
(24) Avoid congressional noise sensitive area by 1500' AGL/1 NM, Athens, TN, N35-26.5 W84-36.0.
(25) CAUTION: Chilhowee Glider Port N35-13.8 W84-35.0, numerous glider activities, SFC-5000' within 5 NM.
(26) CAUTION: 3000' runway airport at Telico Plains, TN, N35-22.8 W84-18.0, intensive student training, avoid by 1500'.
(27) Avoid Ivy Log Mountain, N34-55.0 W83-58.7, minimum altitude 4200' MSL within 2 NM. Congressional (Extremely) noise sensitive area:
(28) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
(29) Be alert for hot air balloons operating from Sfc to 12,000' MSL within 10 NM of N34-42.0 W83-44.0.

FSS Within 100 NM Radius:
ANB, AND, BNA, HUA, MCN

VR-093


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>GSO 301/47</td>
<td>N36°25.00' W80°50.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 80 MSL to B</td>
<td>GSO 301/83</td>
<td>N36°41.00' W81°30.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 80 MSL to C</td>
<td>HMV 001/56</td>
<td>N37°22.00' W82°11.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 60 MSL to D</td>
<td>HMV 340/68</td>
<td>N37°28.00' W82°43.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 60 MSL to E</td>
<td>HMV 304/76</td>
<td>N37°04.00' W83°30.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 60 MSL to F</td>
<td>HMV 298/69</td>
<td>N36°44.00' W83°30.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 60 MSL to G</td>
<td>HMV 289/38</td>
<td>N36°36.00' W82°53.00'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.
VR ROUTES

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to F; 5 NM either side of centerline from F to G.

Special Operating Procedures:
(1) Alternate Entry Points: B and C.
(2) Alternate Exit Points: D, E, and F.
(3) Avoid towns and populated areas by 1NM or overfly 1000' AGL; avoid airports by 3NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
(4) A-B
   (a) AVOID: Little Wilson Creek Wilderness Area at N36-39.1 W081-27.5 by 2000' AGL, or 1.5 NM.
(5) B-C
   (a) AVOID: Little Wilson Creek Wilderness Area at N36-40.5 W081-32.7 by 2000' AGL, or 2.5 NM.
   (b) CAUTION: Heavy hospital helicopter traffic to/from Lebanon, VA, N36-54.1 W82-04.5.
   (c) AVOID: TAZWELL COUNTY AIRFIELD at N37-03.9 W081-48.0.
   (d) CAUTION: Congressional Noise Sensitive Area at, N37-12.5 W082-00.7 by 2000' AGL/1NM.
   (e) AVOID: TAZEWELL COUNTY AIRFIELD at N37-14 W082-02.
   (f) AVOID: GRUNDY MUNICIPAL AIRFIELD at N37-14.1 W082-07.4.
(6) C-D
   (a) AVOID: Power Line, 400' AGL, N37-27.3 W082-23.6 (1582' MSL);
   (b) AVOID: Power Lines, 300'-400' AGL, multiple power line sets between peaks;
   (c) AVOID: PIKE COUNTY/HATCHER FIELD at N37-27.3 W082-34.0.
(7) D-E
   (a) AVOID: FORD/WENDELL AIRFIELD at N37-27.3 W082-23.6 (1582' MSL);
   (b) AVOID:-TOWER, 1156' AGL, N37-32.8 W082-26.8 (2547' MSL);
   (c) AVOID: FORD/WENDELL AIRFIELD at N37-27.3 W082-15.6 by 1500' AGL or 3 NM.
(8) E-F
   (a) AVOID: TUCKER-GUTHERIE MEMORIAL AIRFIELD at N36-31.5 W082-23.6.
(9) F-G
   (a) CAUTION: Bristol Class D Airspace 10 NM beyond Pt G from 4000-10,000' MSL;
   (b) AVOID: LEE COUNTY AIRFIELD at N36-39.5 W083-13.1.
(10) CAUTION: IR-726/VR-1726 crosses right to left from A to B and IR-743/ VR-1743 crosses right to left from B to C (de-conflict with 4 OSS/OSOS).
(11) CAUTION: VR-042 crosses R to L at A then same direction to B where if then crosses L to R (de-conflict with DSN 722-2129).
(12) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.

FSS Within 100 NM Radius:
AND, RDU

VR-096

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C917-722-2672.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

As assigned to
Pt Fac/Rad/Dist Lat/Long
05 AGL B 65 MSL to B LHY 085/28 N37°20.00' W78°39.00' W082-02.00' 05 AGL B 65 MSL to C LHY 024/29 N37°43.00' W79°02.00' 05 AGL B 65 MSL to D ROA 002/22 N37°43.00' W80°05.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline entire route.

Special Operating Procedures:
(1) Users must contact 4 OSS/OSOS (DSN 722-2129/2124) for additional avoidance areas.
(2) Alternate Entry: B, C.
(3) Alternate Exit: B, C.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1NM or overfly 1000' AGL; avoid airports by 3NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
(6) Route users deconflict Farmville MOA with 1 OSS/OSO, DSN 574-2483/2559. Deconfliction is needed when routes are used between 0800-1700 hrs local, Mon-Fri. Make a call in the blind on UHF frequency 377.1 when transiting Farmville MOA Airspace.
(7) A-B:
   (a) CROSSING: VR-083 left to right at A;
   (b) CROSSING: VR-086 right to left at A;
   (c) CROSSING: VR-042 right to left at A;
   (d) CROSSING: IR-062 right to left 53NM prior to B;
   (e) CROSSING: VR-073 left to right 53NM prior to B;
   (f) CROSSING: VR-1061/VR-083 right to left 35NM prior to B;
   (g) CROSSING: IR-719 left to right 44NM prior to B;
   (h) CROSSING: VR-1722 left to right 40NM prior to B;
   (i) CROSSING: VR-042 left to right 33NM prior to B;
   (j) CROSSING: VR-1759 right to left 33NM at B;
   (k) CROSSING: IR-715 right to left 27NM prior to B;
   (l) CROSSING: IR-719 right to left 2NM prior to B;
   (m) AVOID: Lake Gaston by 2000' AGL/1 NM, moderate bird hazard;

3-19
VR ROUTES

(n) Tower: 450’ AGA, (821’ MSL) at N36-26.29 W77-57.04;
(o) AVOID: SOUTH HILL/MECKLENBURG-BRUNSWICK
REGIONAL AIRFIELD at N36-41.9 W078-03.2.

(8) B-C:
(a) CROSSING: VR-1722 right to left 28NM prior to C;
(b) CROSSING: VR-041/IR-761 right to left 2NM prior to C;
(c) CROSSING: IR-715 left to right 2NM prior to C.

(9) C-D:
(a) AVOID: Lowmoor Hospital at N37-47.4 W79-53.0 by

1000’ or 1NM;
(b) CAUTION: Numerous powerlines in mountainous areas;
(c) CROSSING: IR-715 right to left 46NM prior to D;
(d) CROSSING: IR-762/VR-1756 left to right 39NM prior to D;
(e) CROSSING: IR-719 right to left 15NM prior to D;
(f) CROSSING: IR-608 right to left 8NM prior to D;
(g) AVOID: Congressional noise sensitive area at N37-39.9

W079-34.7 by 3000’ AGL/2NM;
(h) Use caution for medical helicopters operating to and
from Carilion Stonewall Jackson Hospital Heliport
(N37-46 42.48 W079-26 32.14) 19.8 miles west of Point
C, 3.4 miles north of centerline.

(10) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-062: Oceana NAS, DSN 433-1228;
(b) IR-608: Pensacola NAS, DSN 922-2735;
(c) IR-715: Oceana NAS, DSN 433-1228;
(d) IR-719: Oceana NAS, DSN 433-1228;
(e) IR-761: Oceana NAS, DSN 433-1228;
(f) IR-762: Oceana NAS, DSN 433-1228;
(g) VR-041: Seymour Johnson AFB;
(h) VR-042: Seymour Johnson AFB;
(i) VR-073: Seymour Johnson AFB;
(j) VR-073: Seymour Johnson AFB;
(k) VR-086: Seymour Johnson AFB;
(l) Oceana NAS, DSN 433-1228;
(m) VR-1756: Oceana NAS, DSN 433-1228;
(n) VR-1759: Oceana NAS, DSN 433-1228;
(o) VR-1722: Oceana NAS, DSN 433-1228.

FSS Within 100 NM Radius:
DCA, EKN, NTU, RDU

VR-097

ORIGINATING ACTIVITY: 20 OSS/OSOA, Shaw AFB, SC
29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN
965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC

HOURS OF OPERATION: 0600-2400 local daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude</th>
<th>Pt</th>
<th>Face/Rad/Dir</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>SUG 217/31</td>
<td>N34°58.80' W82°37.80'</td>
</tr>
<tr>
<td>30 MSL to B</td>
<td>B</td>
<td>SUG 229/43</td>
<td>N34°55.20' W82°54.50'</td>
</tr>
<tr>
<td>01 AGL to C</td>
<td>C</td>
<td>SPA 264/54</td>
<td>N34°54.00' W83°00.00'</td>
</tr>
</tbody>
</table>

01 AGL B 80 MSL to D SPA 262/85 N34°46.00' W83°37.00'
01 AGL B 80 MSL to E ODF 261/23 N34°38.20' W83°45.60'
01 AGL B 80 MSL to F ODF 255/27 N34°34.50' W83°44.90'
01 AGL B 80 MSL to G AHN 330/36 N34°28.30' W83°41.00'
01 AGL B 40 MSL to H AHN 338/27 N34°22.00' W83°32.00'
01 AGL B 40 MSL to I AHN 010/17 N34°14.00' W83°16.00'
01 AGL B 40 MSL to J AHN 030/17 N34°12.00' W83°09.00'
01 AGL B 40 MSL to K AHN 045/16 N34°07.90' W83°06.20'
01 AGL B 15 AGL to L AHN 115/23 N33°47.00' W82°54.00'
01 AGL B 15 AGL to LL DBN 006/64 N33°38.00' W82°49.00'
01 AGL B 15 AGL to M DBN 021/38 N33°09.92' W82°37.48'
01 AGL B 15 AGL to N DBN 029/31 N33°02.02' W82°34.98'
01 AGL B 15 AGL to O DBN 055/38 N32°58.22' W82°14.98'
01 AGL B 15 AGL to P DBN 063/43 N32°56.52' W82°05.98'
01 AGL B 15 AGL to Q VAN 221/53 N32°45.00' W81°03.00'
01 AGL B 15 AGL to R VAN 223/41 N32°55.50' W80°56.60'
01 AGL B 40 MSL to RR VAN 228/29 N32°06.90' W80°50.00'
01 AGL B 40 MSL to S VAN 342/10 N33°38.00' W80°22.00'
01 AGL B 40 MSL to T VAN 010/12 N33°40.80' W80°26.00'
01 AGL B 15 AGL to O DBN 055/38 N32°58.22' W82°14.98'
01 AGL B 15 AGL to O1 DBN 080/137 N33°08.02' W82°12.48'
01 AGL B 15 AGL to O2 DBN 043/49 N33°12.72' W82°13.48'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM left and 6 NM right of centerline from
A to C; 8 NM either side of centerline from C to F; 5 NM
either side of centerline from F to J; 5 NM left and 6 NM right of
centerline from J to L; 6 NM left and 10 NM right of centerline
from L to N; 9 NM left and 10 NM right of centerline from N to P;
10 NM either side of centerline from P to S; 8 NM either side of
centerline from S to T.

Special Operating Procedures:
(1) Alternate Entry: M, N, O and P.
(2) Alternate Exit: M, N, O2, P, Q and S.
(3) Tie-In FSS Anderson (AND): Maintain 3000’ MSL until
passing Pt. B.
(4) CAUTION: IR-22 crosses between Points A to B,
9000’-10,000’ MSL.
(5) WARNING/AVOID: Nuclear Power Plant, Oconee, SC, 34-47.5N 82-53.9W, avoid by 1 NM, do not overfly.

(6) CAUTION: Towers:
   (a) 34-57.19N 82-50.12W 300' AGL;
   (b) 34-55.53N 82-56.74W 250' AGL;
   (c) 34-54.07N 82-58.51W 300' AGL;
   (d) 34-52.17N 83-09.07W 300' AGL;
   (e) 32-49N 81-58.8W 400' AGL;
   (f) 35-53N 83-04.4W 400' AGL;
   (g) 34-33.82N 83-46.82W 400' AGL;
   (h) 32-49.11N 81-56.93W 430' AGL.

(7) Six Noise Sensitive Areas:
   (a) N34-42.2W 83-38.1, avoid by 1500' AGL/1 NM;
   (b) Town of Clayton, GA N34-52.8 W83-24.0, avoid overflight of city and adjacent build-up areas by 1500' AGL/2 NM;
   (c) Town of Carnesville, GA N34-19.5 W83-18.2, avoid by 1500' AGL/1 NM;
   (d) Town of Ila, GA N34-11.0 W83-16.5, avoid by 1500' AGL/1 NM;
   (e) 34-20N 83-30W Chicken farm, avoid by 1 NM/1500' AGL;
   (f) 33-03.55N 82-09.58W Horse farm, avoid by 1 NM/1500' AGL;
   (g) 34-36.52N 83-40W, Avoid by 1 NM/1500' AGL.

(8) Fly at or above 1000' AGL between D and G for numerous noise sensitive areas.

(9) Avoid: Four towers N34-52.73 W83-05.69 300' AGL.

(10) CAUTION: Multiple Victor Airways converge at Athens VORTAC between Pts K and L. Exercise increased vigilance while transiting this area. Expect increased traffic between 1 Sep and 30 Nov.

(11) CAUTION: Noise sensitive area, Comer, GA, N34-03.8 W83-07.5. Avoid by flying east of route center line.

(12) CAUTION: Traffic crosses Pt L and 2200' MSL then descends into Washington-Wilkes County Airport, GA, N33-46.6 W82-48.9.

(13) CAUTION: Towers:
   (a) 34-14.7N 83-07W 300' AGL;
   (b) 33-59.63N 82-58.07W 350' AGL.

(14) Congressional noise sensitive area: Washington, GA N33-44.1 W82-44.5, avoid by 1500' AGL or 1 NM.

(15) Use of O-O2 authorized only when scheduled to operate in BULLDOG D MOA and R-3004.

(16) AVOID: Stork Farm N32-51.9 W82-02.0, avoid by 1500' AGL/1 NM.

(17) CAUTION: VR-058 same direction Pt A to D; VR-092 opposite direction to Pts C and D. VR-1059 same direction Pt L to Q (Deconflicted by 20 OSS), VR-088 same direction Pt RR to T (Deconflict with 4 OSS DSN 722-2129).

(18) CAUTION: VR-097 transits BULLDOG MOA (deconflict with 20 OSS/OSOS). When booking VR-097, aircrews should include delay time in Bulldog MOA as applicable. Route users make call IN THE BLIND prior to Point M on UHF frequency 343.75 when transiting BULLDOG MOA airspace.

(19) CAUTION: VR-1004 (L-K) crosses right to left west of Pt N (Deconflict DSN 942-2004).

(20) The following restrictions are located in Bulldog D: AVOID: At N33-16.0 W82-17.2 1465' AGL/(1900' MSL), avoid by 1 NM. AVOID: Noise sensitive area, pond and farm at N33-17.7 W82-16.8, avoid by 1500' AGL/2 NM.

(21) CAUTION: 14 Towers with cables stretched between centered at N32-40.7 W81-08.1; avoid by 1 NM. Maximum height up to 500' AGL.

(22) CAUTION: Powerline 300' AGL, crosses N to S between Pts P and Q, N33-02.5 W81-44.0 to N32-45.0 W81-38.5.

(23) AVOID: Permanently manned fire tower, N32-50.7 W81-18.2 by at least 500'.

(24) AVOID: BEAUFORT 3 MOA or deconflict (DSN 335-7304).

(25) AVOID: Two congressional noise sensitive areas:
   (a) N33-47.0 W80-36.8 Avoid by 1000' AGL/1 NM;
   (b) N34-14.5 W83-22.4 Avoid by 1500' AGL/1 NM.

(26) AVOID: Peregrine Falcon nesting area (endangered species): N35-03.2 W82-42.0 Avoid by 1500' above tree/cliff height and 1 NM (15 Feb thru 15 Jul).

(27) AVOID: Two noise sensitive areas by 1000' AGL/1 NM:
   (a) N34-45.9 W83-46.5;
   (b) N33-02.1 W82-14.9 (Vidette, GA).

(28) CAUTION: SR-166 crosses route from N33-23.0 W81-08.0 to N33-17.0 W80-31.0.

(29) AVOID: Senate National Wildlife Refuge (Lake Marion), avoid by 2200' AGL.

(30) CAUTION: Aircraft holding at Rimini Bridge for R-6002 (Entry Pt S).

(31) CAUTION: When exiting Pt T for opposite direction traffic on VR-087.

(32) AVOID: R-6002 when active.

(33) AVOID: Active private grass strip (Gorton) N32-49.5 W81-21.5, avoid by 1000' AGL/3 NM.

(34) AVOID: Four noise sensitive areas by 1000' AGL/1 NM:
   (a) Structure being used as a tactical target N33-00.5 W82-41.5;
   (b) Dairy farm N32-49.9 W81-52.5;
   (c) Emu Ranch N34-01.5 W82-57.5; and
   (d) Farm N32-51.1 W81-40.5.

(35) CAUTION: Towers:
   (a) N32-47.9 W81-01.65 250' AGL;
   (b) N33-20.54 W80-39.31 250' AGL;
   (c) N32-54 W81-03 250' AGL.

(36) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.

(37) CAUTION: Bird Activity (Landfills) at:
   (a) N34-32.22 W83-25.03;
   (b) N33-09 W82-45.7;
   (c) N33-04.84 W82-25.12;
   (d) 34-21.22N 83-25.03W.

(38) CAUTION: Grass airstrips:
   (a) N32-50.7 W81-38.3 Rwy 05/27 approx 2000';
   (b) N32-58.91 W82-07-08;
   (c) N32-55.07 W80-53.11 aligned N/S approx 2000'.

(39) AVOID: Seven towers:
   (a) 250' AGL (700' MSL) N33-28.2 W80-47.2;
   (b) 250' AGL (800' MSL) N33-04.1 W82-07.4;
   (c) 200' AGL (600' MSL) N32-57.9 W81-58.7;
   (d) 200' AGL (600' MSL) N33-27.6 W80-43.9;
   (e) 200' AGL (600' MSL) N33-28.7 W80-45.9;
   (f) 300' AGL (1300' MSL) N33-30.9 W82-55.4;
   (g) 500' AGL 32-54.55N 80-53.39W.
VR ROUTES

VR-100

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S.
Chindit Ave., Building 790, Rm 120 Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521, 27SOAOS.DOOA.AM (at) us.af.mil.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S.
Chindit Ave., Building 790, Rm 111 Cannon AFB, NM 88103 DSN 681-2276/7634, C575-784-2276/7634, 27SOAOS.DOOS (at) us.af.mil.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to CVS 235/27 N34°10.00' W103°48.00'
01 AGL B 110 MSL to CME 042/50 N34°49.00' W105°49.00'
(Alternate Entry) 01 AGL B 110 MSL to CME 056/43 N33°26.00' W103°50.00'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CME 057/33 N33°32.00' W104°00.00'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CME 344/34 N33°54.00' W104°40.00'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CME 333/34 N33°53.00' W104°48.00'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CME 292/32 N33°38.00' W105°09.00'
(Alternate Entry/Exit) 01 AGL B 125 MSL to CNX 143/44 N33°41.50' W105°19.50'
(Alternate Entry/Exit) 01 AGL B 125 MSL to CNX 167/38 N33°43.50' W105°40.50'
(Alternate Entry/Exit) 01 AGL B 125 MSL to CNX 176/35 N33°47.50' W105°47.50'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CNX 241/16 N34°17.50' W105°59.50'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CNX 280/23 N34°31.00' W106°06.00'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CNX 307/21 N34°38.00' W105°57.00'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CNX 332/14 N34°25.50' W105°45.00'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CNX 012/21 N34°41.00' W105°30.00'
(Alternate Entry/Exit) 01 AGL B 110 MSL to TCC 196/34 N34°41.00' W103°55.00'
(Alternate Entry/Exit) 01 AGL B 110 MSL to CVS 310/25 N34°41.00' W103°40.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route IAW Major Commands/MDS guidance.

ROUTE WIDTH - 3 NM left and 5 NM right of centerline from A to B; 1.5 NM either side of centerline from B to F; 5 NM either side of centerline from F to N; 5 NM increasing to 28 NM either side of centerline from N to O; 28 NM either side of centerline from O to P; 28 NM left and 2 NM right of centerline from P to Q.

Special Operating Procedures:
(1) Tie-in FSS: Albuquerque (ABQ).

(2) Non-27 SOW aircraft entry times are booked no closer than 15 minutes. Users must meet booked entry and exit times plus or minus 5 minutes. If unable to meet planned entry time, enter at an alternate entry to meet booked exit time or do not enter the route.

(3) Aircraft must call in the blind route entry and exit on 255.4. Monitor 255.4 while on this route unless operational requirements dictate otherwise.

(4) Alternate Entry Points: B through P.

(5) Alternate Exit Points: C through P.

(6) Segments N through Q designated Maneuver Area.

(7) Avoid all charted public use airfields by 1500’ AGL or 3 NM.

(8) Avoid Gran Guivira National Monument N34-15.6 W106-05.5 by 2 NM.

(9) Avoid by 1000’ and 1 NM, unless otherwise noted;
   (a) Ranch (N34-54.1 W103-49.5);
   (b) Ranch (N34-21.7 W104-06.9);
   (c) Ranch (N34-19.6 W104-43.9);
   (d) Ranch (N34-16.9 W105-05.2);
   (e) Ranch (N34-14.2 W104-41.4);
   (f) Ranch (N34-20.5 W104-23.2);
   (g) Ranch (N33-45.9 W105-37.6) 1400L-2400L only;
   (h) White Oaks, NM (N33-45.0 W105-44.2);
   (i) Ranch (N34-20.8 W104-32.5);
   (j) Lake Summer Settlement (N34-37.0 W104-24.0) by 2 NM;
   (k) Ranch (N34-36.5 W104-22.0);
   (l) San Jose, NM (N35-23.8 W105-28.5);
   (m) Cattle Co. (N34-46.0 W104-28.9);
   (n) Ranch (N34-16.3 W104-42.5);
   (o) San Jose (SOHAM), NM (N35-24.9 W105-29.7);
   (p) Montoya, NM (N35-08.104-03.9);
   (q) Randalls Ranch (N35-02.69 W104-04.81) 2000’ AGL/1NM.

(10) Aircraft requesting access to R-5104/5105 must be scheduled via the scheduling activity and obtain approval from Melrose RCO.

(11) De-confliction between VR-100 and PECON MOA’S, IR-109, IR-113, VR-108, VR-114, and VR-125 is accomplished by 27 SOW scheduling. Non-27 SOW conflicting routes (IR-133, IR-128, IR-180, VR-176, VR-1107/1195) contact the applicable scheduling activity. See FLIP AP/1B for details. VR-100 users will avoid entry into R-5107 unless scheduled, and entry is approved by Cherokee Control.

(12) Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity.

(13) CAUTION: Wind turbine farm, heights approximately 350’ AGL located nearly between (N34-30.0 W105-58.85 and N34-26.03 W105-57.10).

(14) Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: HTTP://www.usahas.com.

(15) CAUTION: Wind farm south of MAFR, heights approximately 350’ AGL, approximate coordinates:
   (a) NW corner: N33-58.43 W103-52.59
   (b) NE corner: N33-57.33 W103-48.14
   (c) SE corner: N33-55.47 W103-46.16
   (d) SW corner: N33-56.60 W103-52.59

(16) CAUTION: Wind farm west of MAFR (line north to south), heights 350’ AGL, approximate coordinates: N34-43.55 W104-05.89 to N34-31.67 W104-05.33.

3-22
VR ROUTES

FSS Within 100 NM Radius:
ABQ

VR-101

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local, OT by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route in VMC only.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM right and 8 NM left of centerline from B to D.

Special Operating Procedures:
1. Route to be used only by aircraft scheduled into R-6302.
3. Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly (See and Avoid) and users are encouraged to maintain a continuous visual lookout.
4. Units requesting VR-101 shall furnish 301 OG/SUA with planned entry/exit points, times, and planned speeds. Accurate times are critical in the deconfliction process.
5. Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
6. All aircraft will monitor FSS on 255.4 unless assigned a frequency by ARTCC. Users will make an entry and exit call on 255.4.
7. Avoid the following areas by 1500' AGL or 1 NM radius:
   - (N31-13.0 W98-23.5), (N31-13.0 W98-12.0), (N31-24.5 W98-05.0), (N31-23.0 W98-01.0), (N31-22.8 W97-54.8), (N31-26.0 W97-44.0).
8. Obstructions: None.

FSS Within 100 NM Radius:
CXO, FTW, SJT

VR-104

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local, OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | AGJ 251/33 | N31°03.02' W98°46.02'
05 AGL B 40 MSL to | B | AGJ 344/7 | N31°18.02' W98°10.02'
10 AGL B 40 MSL to | C | AGJ 042/10 | N31°18.02' W98°00.02'
10 AGL B 40 MSL to | D | AGJ 064/19 | N31°18.02' W97°48.02'
10 AGL B 40 MSL to | D1 | AGJ 064/19 | N31°18.02' W97°48.02'
30 MSL to | B1 | AGJ 344/7 | N31°18.02' W98°10.02'
Avoid North Fort Hood and Gatesville.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 3 NM either side of centerline from E to J.

Special Operating Procedures:
1. Route will be flown from 300-600 KIAS.
2. Alternate Entry Points: D and I.
3. Alternate Exit Point: D and I.
4. Minimum altitude 1000' AGL at B.
5. Avoid the charted grass strip at N34-40 W97-50 by 1000' AGL and 3 NM.
6. Noise sensitive areas: avoid by 1000' AGL or 2 NM:
   - Ostrich Ranch at N33-30.4 W97-40.0
   - Emu Ranch at N33-37.0 W97-36.9
   - Ostrich Ranch at N33-46.4 W97-38.1
   - Ostrich Ranch at N33-47.0 W97-26.5
   - Ostrich Ranch at N34-24.1 W97-28.5
   - Ostrich Ranch at N34-31.8 W97-31.8
   - Ostrich Ranch at N34-32.5 W97-48.7
7. Units requesting VR-104 shall furnish 301 OG/SUA with planned entry/exit points, times, and planned speeds. Accurate times are critical in the deconfliction process.
8. Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
9. Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | UKW 150/7 | N33°26.00' W97°46.00'
As assigned to | B | ADM 205/28 | N33°49.00' W97°27.00'
As assigned to | C | ADM 322/11 | N34°22.00' W97°17.00'
As assigned to | D | IRW 196/43 | N34°42.00' W97°57.00'
As assigned to | E | IRW 236/29 | N35°08.00' W98°08.00'
As assigned to | F | IRW 281/35 | N35°32.00' W98°17.00'
As assigned to | G | IRW 278/40 | N35°32.00' W98°24.00'
As assigned to | H | HBR 026/31 | N35°17.00' W98°42.00'
As assigned to | I | HBR 086/10 | N34°51.00' W98°52.00'
As assigned to | J | HBR 135/17 | N34°38.00' W98°52.00'

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | UKW 150/7 | N33°26.00' W97°46.00'
As assigned to | B | ADM 205/28 | N33°49.00' W97°27.00'
As assigned to | C | ADM 322/11 | N34°22.00' W97°17.00'
As assigned to | D | IRW 196/43 | N34°42.00' W97°57.00'
As assigned to | E | IRW 236/29 | N35°08.00' W98°08.00'
As assigned to | F | IRW 281/35 | N35°32.00' W98°17.00'
As assigned to | G | IRW 278/40 | N35°32.00' W98°24.00'
As assigned to | H | HBR 026/31 | N35°17.00' W98°42.00'
As assigned to | I | HBR 086/10 | N34°51.00' W98°52.00'
As assigned to | J | HBR 135/17 | N34°38.00' W98°52.00'
VR ROUTES

(11) Route Segment I to J closed except to aircraft scheduled into R-5601F. Aircraft not scheduled into R-5601 must exit by Point I and remain clear of R-5601F.

FSS Within 100 NM Radius:
FTW, ICT, MLC

VR-106

ORIGINATING ACTIVITY: 97 OSS/DOA, 101 S Sixth St., Bldg 225, Altus AFB, OK 73521 DSN 866-6098, CS80-481-6098.


HOURS OF OPERATION: 0830-2400 local Mon-Fri

ROUTE DESCRIPTION:
Altitude Data       Pt   Fac/Rad/Dist     Lat/Long
03 AGL B 40 MSL to A  LTS 250/22  N34°34.20'  W99°42.00'  
03 AGL B 40 MSL to B  CDS 022/17  N34°36.70'  W100°06.50'  
03 AGL B 50 MSL to C  CDS 334/22  N34°43.70'  W100°25.00'  
03 AGL B 50 MSL to D  BFV 260/69  N35°07.50'  W100°36.60'  
03 AGL B 50 MSL to E  BFV 267/51  N35°16.10'  W100°14.80'  
03 AGL B 50 MSL to F  BFV 242/26  N35°03.70'  W99°41.70'  
03 AGL B 40 MSL to G  LTS 250/22  N34°34.20'  W99°42.00'  

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to B; 5 NM either side of centerline from B to D; 5 NM right widening to 7 NM right and 5 NM left of centerline from D to E; 7 NM right narrowing to 5 NM right and 5 NM left of centerline from E to F; 10 NM either side of centerline from F to G.

Special Operating Procedures:
(1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313, CS80-481-6313.
(2) Primary Entry: A; Alternate Entry: B; Primary Exit: G; Alternate Exit: F.
(3) Aircraft accomplishing airdrops at Sooner DZ, report commencement of airdrop run-in not later than 5 minutes prior to Altus Approach Control 353.7, using the phrase (call sign, inbound Sooner DZ, intentions to follow).

(4) At C, when practicable, avoid Memphis Municipal Airport by 1500' AGL or 3 NM.
(5) From C to D avoid flight over town of Quail, TX, by 2 NM.
(6) From D to E avoid flight over town of Shamrock, OK, and when practicable avoid McLean Gray Airport and Shamrock Municipal Airport by 1500' AGL or 3 NM.
(7) From E to F, when practicable, avoid Haddock Airport by 1500' AGL or 3 NM.

(8) Contact Altus Approach Control 125.1/353.7 (CH 6) upon exiting F or G. Monitor 255.4 entire route of flight.


(10) Deconflict with IR-105 (NAS Ft. Worth), VR-1141, VR-1142 (Sheppard AFB) with appropriate route schedulers. For day low levels on legs C, D, E, and F, all aircraft will remain east of the McLean-Hedley line (near Point D) and south of I-40 (south of the town of Shamrock, near Point E) in order to avoid the eastern and southern halves of the VR-1141/1142 corridor. The coordinates for this line are approximately N34-43.08 W100-35.68 straight north to N35-14.42 and straight east to W99-52.10.

(11) PMSV: Altus AFB 239.8.

(12) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.

(13) Use caution for uncharted airfield just beyond Point F, N34-58.5 W99-29.0.

(14) Charted tower south of Russell, OK, approximate location N34-43.00 W099-40.00, has been removed.

(15) Use caution for several uncharted obstructions, approximate locations: N34-56.00 W100-32.00, N34-36.57 W099-51.11, N35-13.27 W100-12.80.

(16) Entire route susceptible to wild fires. Aircrews should check NOTAMs before scheduling.

(17) To report fires, uncharted obstructions or any other operational issues requiring attention on this route, please send an email to: Altus.airspace@Altus.af.mil.

(18) CAUTION: Airdrop operations at or below 3500' MSL between points F and G: N34-34.78 W99-41.09, N34-34.78 W99-42.04, N34-33.47 W99-42.04, N34-33.47 W99-41.09.

(19) Aircraft utilizing Alternate Entry Point B: Do not descend below 4500' MSL until within 10 NM of point B.

(20) Aircraft exiting Alternate Exit Point F: Be at or above 4500' MSL to crossing south of the line between N34-54.28 W99-25.10 and N34-54.28 W100-00.24.

(21) For noise abatement, from B to D remain right of centerline of the McLean-Hedley line (near Point D) and south of I-40 (south of the town of Shamrock, near Point E) in order to avoid the eastern and southern halves of the VR-1141/1142 corridor. The coordinates for this line are approximately N34-43.08 W100-35.68 straight north to N35-14.42 and straight east to W99-52.10.

(22) Maintain at or above 800' AGL when over flying the Red River.

FSS Within 100 NM Radius:
FTW, SJT

VR-108

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S.
Chindit Ave., Building 790, Rm 120 Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521, 27SOAOS.DOOA.AM (at) us.af.mil.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S.
Chindit Ave., Building 790, Rm 111 Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521, 27SOAOS.DOOS.AM (at) us.af.mil.
HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  DHT 276/58  N36°23.00'  W103°41.00'
01 AGL B 120 MSL to  B  DHT 283/59  N36°30.00'  W103°39.00'
01 AGL B 120 MSL to  C  DHT 292/56  N36°37.00'  W103°30.00'
01 AGL B 80 MSL to  D  DHT 318/44  N36°44.00'  W103°00.00'
01 AGL B 80 MSL to  E  TBE 116/37  N36°53.00'  W103°00.00'
01 AGL B 80 MSL to  F  TBE 156/19  N36°57.00'  W103°31.00'
01 AGL B 150 MSL to  G  TBE 190/25  N36°52.00'  W103°48.00'
01 AGL B 150 MSL to  H  TBE 196/28  N36°51.00'  W103°52.00'
01 AGL B 150 MSL to  I  TBE 189/50  N36°29.00'  W103°58.00'
01 AGL B 130 MSL to  J  TCC 330/62  N36°10.00'  W103°59.00'
01 AGL B 80 MSL to  K  TCC 332/36  N35°46.00'  W103°48.00'
01 AGL B 80 MSL to  L  TCC 330/33  N35°42.00'  W103°48.00'
01 AGL B 80 MSL to  M  TCC 264/24  N35°13.50'  W104°05.00'
01 AGL B 70 MSL to  N  TCC 249/22  N35°07.50'  W104°02.00'
01 AGL B 70 MSL to  O  TCC 190/24  N34°48.50'  W103°47.00'
01 AGL B 70 MSL to  M1  TCC 184/33  N34°39.00'  W103°47.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route IAW Major Commands/MDS guidance.

ROUTE WIDTH - 5 NM either side of centerline from A to I; 7.5 NM either side of centerline from I to J; 7.5 NM left and 20 NM right of centerline from J to M1.

Special Operating Procedures:

2. Non-27 SOW aircraft entry times are booked no closer than 15 mins apart. Users must meet booked entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry to meet booked exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry to meet booked exit times plus or minus 5 minutes. Aircraft must call in-the-blind route entry and exit on 255.4. Monitor 255.4 while on this route unless operational constraints dictate otherwise.
3. Aircraft must call in-the-blind route entry and exit on 255.4. Monitor 255.4 while on this route unless operational constraints dictate otherwise.
4. Avoid the following areas:
   (a) Black Mesa State Park (N36-50.31 W102-53.74) by 2 NM;
   (b) Capulin National Monument (N36-47.03 W103-58.05) by 2 NM;
   (c) Conchas Lake Resorts (N35-22.06 W104-12.30) by 1 NM;
   (d) House, NM (N34-39.0 W103-54.0) by 1NM/1000' AGL.
5. Alternate entry points: B through M1.
6. Alternate exit points: D through N.
8. Aircraft not scheduled into R-5104/5 will not enter R-5104/5, exit at or prior to O.
9. Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity.
10. Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: HTTP://www.usahas.com.
11. CAUTION: Wind farm west of MAFR (line north to south), heights 350' AGL, approximate coordinates: N34-43.55 W104-05.89 to N34-31.67 W104-05.33.
12. Aircrew requiring entry into 27 SOW SUA must schedule the appropriate SUA through the scheduling activity. Aircraft must receive clearance from Albuquerque ARTCC prior to entry into PECOS MOA and/or clearance from Melrose RCO prior to entry into R-5104/5.

FSS Within 100 NM Radius:
ABQ

VR-114

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S.
Chindit Ave., Building 790, Rm 120 Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521, 27SOAOS.DOAA.AM (at) us.af.mil.

SCHEDULING ACTIVITY: 27 SOAOS/DOOA, 301 S.
Chindit Ave., Building 790, Rm 111 Cannon AFB, NM 88103 DSN 681-2276/7634, C575-784-2276/7634, 27SOAOS.DOOS (at) us.af.mil.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  TCC 121/47  N36°23.00'  W103°38.50'
01 AGL B 110 MSL to  B  TCC 033/44  N35°42.00'  W102°54.00'
01 AGL B 110 MSL to  C  TCC 344/24  N35°35.00'  W103°58.00'
01 AGL B 110 MSL to  D  TCC 309/27  N35°32.00'  W103°56.50'
01 AGL B 110 MSL to  E  TCC 239/23  N35°03.50'  W104°02.50'
01 AGL B 110 MSL to  F  TCC 186/23  N34°49.50'  W103°44.50'
01 AGL B 110 MSL to  M1  TCC 184/33  N34°39.00'  W103°47.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route IAW Major Commands/MDS guidance.
**VR ROUTES**

**ROUTE WIDTH** - 20 NM either side of centerline from A to B; 10 NM left and 20 NM right of centerline from B to M1.

**Special Operating Procedures:**

1. **Tie-in FSS:** Albuquerque (ABQ).
2. Non-27 SOW aircraft entry times are booked no closer than 15 mins apart. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time, enter at an Alternate Entry to meet booked exit time or do not enter the route.
3. Aircraft must call in the blind route entry and exit on 255.4. Monitor 255.4 while on this route unless operational requirements dictate otherwise.
4. Alternate Entry: B, C, D and E.
5. Alternate Exit: B, C, D, E and F.
6. Avoid the following areas:
   (a) Conchas Lake Resorts (N35-22.06 W104-12.30) by 1 NM.
   (b) House, NM (N34-39.0 W103-54.0) by 1 NM/1000’AGL.
7. Aircraft not scheduled into R-5104/5 will not enter R-5104/5, exit at or prior to F.
8. Deconfliction between VR-114 and IR-107, IR-109, IR-111, VR-100, VR-108, and VR-125 will be accomplished by 27 SOW scheduling. Non-27 SOW conflicting routes (VR-1107/1195, IR-150) contact the applicable scheduling activity. See FLIP AP/1B for details.
9. Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity.
10. **CAUTION:** Wind farm west of MAFR (line north to south), heights 350’ AGL, approximate coordinates: N34-43.55 W104-05.89 to N34-31.67 W104-05.33.
11. Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: HTTP://www.usahas.com.
12. Aircrew requiring entry into 27 SOW SUA must schedule the appropriate SUA through the scheduling activity. Aircraft must receive clearance from Albuquerque ARTCC prior to entry into PECOS MOA and/or clearance from Melrose RCO prior to entry into R-5104/5.

**FSS Within 100 NM Radius:**

**ABQ**

**VR-118**

**ORIGINATING ACTIVITY:** 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 0700-2200 local, OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>MQP 259/38</td>
<td>N32°42.00’ W98°45.00’</td>
</tr>
<tr>
<td>05 AGL B 155 MSL to</td>
<td>B</td>
<td>MQP 272/24</td>
<td>N32°48.00’ W98°28.00’</td>
</tr>
<tr>
<td>05 AGL B 155 MSL to</td>
<td>C</td>
<td>MQP 283/20</td>
<td>N32°51.00’ W98°22.00’</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>D</td>
<td>MQP 347/15</td>
<td>N32°59.00’ W98°01.00’</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>D1</td>
<td>MQP 347/15</td>
<td>N32°59.00’ W98°01.00’</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 5 NM left and 13 NM right of centerline from A to B and B1 to A1; 3 NM left and 13 NM right of centerline from B to C and C1 to B1; 3 NM either side of centerline from C to D and D1 to C1.

**Special Operating Procedures:**

1. Entry to A will be via radar vectors.
2. Pilots will contact Fort Worth ARTCC on 360.6 for flight advisory.
3. Route airspeeds from 150 KIAS to 600 KIAS.
4. Route designed for F-4 and F-16 FCF profiles.
5. C1 to A1 route boundaries designed for FCF profile maneuvering.
6. Avoid the residential area around Possum Kingdom Lake.
7. Units requesting VR-118 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
8. Route Conflicts:
   (a) VR-118 between Points A/A1 to B/B1 and C/C1 to D/D1 conflicts with VR-158 between F to H and B to C. Call the schedulers of VR-158 at 90 FTS Sheppard AFB, DSN 736-2675/4995 to deconflict.

**FSS Within 100 NM Radius:**

**FTW, SJT**

**VR-119**

**ORIGINATING ACTIVITY:** 71 OSS, 301 Gritz Street, Vance AFB, OK 73705-5202 DSN 448-6276/7820, C580-213-6276/7820.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Sunrise-Sunset daily

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>ICT 164/54</td>
<td>N36°51.00’ W97°24.00’</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>B</td>
<td>ANY 200/12</td>
<td>N36°59.00’ W98°17.00’</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>C</td>
<td>ANY 252/10</td>
<td>N37°07.50’ W98°23.00’</td>
</tr>
<tr>
<td>01 AGL B 33 MSL to</td>
<td>D</td>
<td>ANY 303/30</td>
<td>N37°29.00’ W98°39.00’</td>
</tr>
<tr>
<td>01 AGL B 32 MSL to</td>
<td>E</td>
<td>HUT 248/9</td>
<td>N37°57.00’ W98°07.00’</td>
</tr>
</tbody>
</table>
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to F; 6 NM left and 8 NM right of centerline from F to G.

Special Operating Procedures:
(1) Maneuver area will be used in conjunction with Smoky MOA for entry/exit and holding for R-3601.
(2) Contact Smoky Hill Range Officer prior to F for entry into the maneuver area, Smoky MOA, and R-3601.
(3) Route conflicts with VR-138, VR-152, VR-531, VR-532, VR-533, VR-534, VR-535, VR-536, VR-552 and IR-504. Conflicts will be avoided by MARSA and scheduling through the Scheduling Activities. Conflicts at R-3601 will be avoided through scheduling of Smoky Hill Range times.
(4) Minimum altitude 500' AGL entire route.
(5) Exit at F if not scheduled for R-3601, avoid flight into Smoky MOA.
(6) Altitude data for Pt F: 01 AGL B 25 MSL to (Range Maneuver Area), or 01 AGL B 32 MSL to (if cleared by Wichita Approach Control 306.2, 125.5 prior to E). If entry is made at F, despite conflicts with the maneuver area, Smoky MOA, and R-3601, avoid flight into Smoky MOA.
(7) All points may be used as an alternate entry or exit point since the route is flown VFR. Schedule as if using the entire route IAW Major Commands/MDS guidance.

FSS Within 100 NM Radius:
ICT, MLC

VR-125

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S. Chindit Ave., Building 790, Rm 120 Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521, 27SOAOS.DOAA.AM (at) us.af.mil.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S. Chindit Ave., Building 790, Rm 111 Cannon AFB, NM 88103 DSN 681-2276/7634, C575-784-2276/7634, 27SOAOS.DOOS (at) us.af.mil.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>CVS 310/25</td>
<td>N34°41.00'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to (Alternate Entry)</td>
<td>B</td>
<td>TCC 196/34</td>
<td>N34°41.00'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to (Alternate Entry/Exit)</td>
<td>C</td>
<td>CNX 012/21</td>
<td>N34°41.00'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to (Alternate Entry/Exit)</td>
<td>D</td>
<td>CNX 332/14</td>
<td>N34°35.50'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to (Alternate Entry/Exit)</td>
<td>E</td>
<td>CNX 307/21</td>
<td>N34°38.00'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to (Alternate Entry/Exit)</td>
<td>F</td>
<td>CNX 280/23</td>
<td>N34°31.00'</td>
</tr>
</tbody>
</table>

01 AGL B 110 MSL to G CNX 241/16
(Alternate Entry/Exit)
N34°17.50'
W105°59.50'
01 AGL B 110 MSL to H CNX 176/35
(Alternate Entry/Exit)
N33°47.50'
W104°47.50'
01 AGL B 125 MSL to I CNX 167/38
(Alternate Entry/Exit)
N33°43.50'
W104°40.50'
01 AGL B 125 MSL to J CNX 143/44
(Alternate Entry/Exit)
N33°41.50'
W105°19.50'
01 AGL B 125 MSL to K CME 292/32
(Alternate Entry/Exit)
N33°38.00'
W105°09.00'
01 AGL B 110 MSL to L CME 333/34
(Alternate Entry/Exit)
N33°53.00'
W104°48.00'
01 AGL B 110 MSL to M CME 344/34
(Alternate Entry/Exit)
N33°54.00'
W104°40.00'
01 AGL B 110 MSL to N CME 057/33
(Alternate Entry/Exit)
N33°32.00'
W100°00.00'
01 AGL B 110 MSL to O CME 056/43
(Alternate Entry/Exit)
N33°36.00'
W103°50.00'
01 AGL B 110 MSL to P CME 042/50
(Alternate Entry/Exit)
N33°49.00'
W103°49.00'
01 AGL B 110 MSL to M2 CVS 235/27
(Alternate Entry/Exit)
N34°10.00'
W103°48.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route IAW Major Commands/MDS guidance.

ROUTE WIDTH - 2 NM left and 28 NM right of centerline from A to B; 28 NM either side of centerline from B to C; 28 NM either side of centerline decreasing to 5 NM either side of centerline from C to D; 5 NM either side of centerline from D to L; 1.5 NM either side of centerline from L to P; 5 NM left and 3 NM right of centerline from P to M2.

Special Operating Procedures:
(1) Tie-in FSS: Albuquerque (ABQ).
(2) Non-27 SOW aircraft entry times are booked no closer than 15 mins apart. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry to meet booked exit time or do not enter the route.
(3) Aircraft must call in-the-blind route entry and exit on 255.4. Monitor 255.4 while on this route unless operational constraints dictate otherwise.
(4) Alternate Entry Points: B through P.
(5) Alternate Exit Points: C through P.
(6) Segment A through D designated maneuver area.
(7) Avoid all charted public use airfields by 1500' AGL or 3NM.
(8) Avoid Gran Quivira National Monument (N34-15.6 W104-28.9) by 2 NM.
(9) Avoid 1000' AGL and 1 NM unless otherwise noted:
(a) Ranch (N34-54.1 W103-49.5);
(b) Ranch (N34-21.7 W104-06.9);
(c) Ranch (N34-19.6 W104-43.9);
(d) Ranch (N34-16.9 W105-05.2);
(e) Ranch (N34-14.2 W104-41.4);
(f) Ranch (N34-20.5 W104-23.2);
(g) Ranch (N33-45.9 W105-37.6) 1400L-2400L only;
(h) White Oaks, NM (N33-45.0 W105-44.2);
(i) Ranch (N34-20.8 W104-32.5);
(j) Lake Sumner Settlement (N34-37.0 W104-24.0) by 2 NM;
(k) Ranch (N34-36.5 W104-22.0);
(l) San Jose, NM (N35-23.8 W105-28.5);
(m) Cattle Co (N34-46.0 W104-28.9);

Authorized within area to G.
(n) Ranch (N34-16.3 W104-42.5);
(o) San Juan (SOHAM), NM (N34-24.9 W105-29.7);
(p) Montoya, NM (N35-05.8 W105-29.7);
(q) Randall’s Ranch (N35-02.69 W104-04.81) 2000’ AGL/1NM.
(10) Aircraft requesting access to R-5104/5105 must be scheduled via the scheduling authority obtain approval from Melrose RCO.
(11) Deconfliction between VR-125 and PECOS MOAs, IR-109, IR-113, VR-108, VR-114, and VR-100 is accomplished by 27 SOW scheduling. Non-27 SOW conflicting routes (IR-133, IR-128, and IR-180, VR-176, VR-1195) contact the applicable scheduling activity. See FLIP AP/1B for details.
(12) Due to evolving avoidance areas, obstacles and land beneath the route, all users must have/utilize the current local route brief, 27 SOG Masterchum and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity.
(13) CAUTION: Wind turbine farm, heights approximately 350’ AGL, located between N34-30.0 W105-58.85 and N34-26.03 W105-57.10.
(14) Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: HTTP://www.usahas.com.
(15) CAUTION: Wind farm south of MAFR, heights approximately 350’ AGL, approximate coordinates:
(a) NW corner: N33-58.43 W103-52.59
(b) NE corner: N33-57.33 W103-46.16
(c) SE corner: N33-55.47 W103-48.14
(d) SW corner: N33-56.60 W103-51.97.
(16) CAUTION: Wind farm west of MAFR (line north to south), heights 350’ AGL, approximate coordinates: N34-43.55 W104-05.89 to N34-31.67 W104-05.33.

FSS Within 100 NM Radius:
ABQ

VR-138


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>ICT 173/49</td>
<td>N36°56.00’ W97°35.00’</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>B</td>
<td>ANY 252/10</td>
<td>N37°07.50’ W98°23.00’</td>
</tr>
<tr>
<td>01 AGL B 33 MSL to</td>
<td>C</td>
<td>ANY 271/30</td>
<td>N37°13.50’ W98°47.00’</td>
</tr>
<tr>
<td>01 AGL B 36 MSL to</td>
<td>D</td>
<td>HUT 241/53</td>
<td>N37°37.00’ W98°56.00’</td>
</tr>
<tr>
<td>01 AGL B 36 MSL to</td>
<td>E</td>
<td>HUT 248/50</td>
<td>N37°44.00’ W98°56.00’</td>
</tr>
<tr>
<td>01 AGL B 36 MSL to</td>
<td>F</td>
<td>HUT 257/48</td>
<td>N37°52.00’ W98°56.00’</td>
</tr>
<tr>
<td>01 AGL B 36 MSL to</td>
<td>G</td>
<td>HUT 274/46</td>
<td>N38°06.00’ W98°54.00’</td>
</tr>
<tr>
<td>01 AGL B 35 MSL to</td>
<td>H</td>
<td>SLN 223/56</td>
<td>N38°19.00’ W98°32.00’</td>
</tr>
<tr>
<td>01 AGL B 10 AGL to (including 10 AGL to I)</td>
<td>I</td>
<td>SLN 220/30</td>
<td>N38°35.00’ W98°05.00’</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to (Maneuver Area)</td>
<td>J</td>
<td>SLN 201/32</td>
<td>N38°27.30’ W97°56.00’</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to within area.</td>
<td>K</td>
<td>SLN 227/18</td>
<td>N38°45.00’ W97°56.00’</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to J; 6 NM left and 8 NM right of centerline from J to K.

Special Operating Procedures:
(1) Alternate Entry Points: B, C and E.
(2) Alternate Exit Points: B, D, E and I.
(3) Exit at I for entry into Bison MOA and if not scheduled for R-3601, avoid flight into Smoky MOA.
(4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
(5) Contact Smoky Hill Range Officer prior to I for entry into the maneuver area, Smoky MOA, and R-3601.
(6) Route conflicts with VR-119, VR-152, VR-531, VR-532, VR-536. Conflicts will be avoided by MARSA and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling of Smoky Hill Range times.
(7) Avoid the following noise sensitive areas:
(a) All airports charted on the Wichita Sectional Chart by 1500’/3 NM;
(b) Livestock feedlot 2 NM southeast of Seward (N38-08.0 W98-34.0);
(c) Livestock feedlot 4 NM south of Ellingwood (N38-19.0 W98-34.0);
(d) The town of Lorraine by 1500’ (N38-34.0 W98-19.0) by 1500’/5 NM.
(e) Feedlot located at N37-22.5 W98-50.0;
(f) Feedlot located at N37-44.0 W98-54.0;
(g) Feedlot located at N37-55.0 W98-53.5;
(h) Feedlot located at N37-59.9 W98-52.0;
(i) Feedlot located at N38-03.0 W98-50.5;
(j) Feedlot located at N38-07.5 W98-46.0;
(k) Feedlot located at N38-29.0 W98-17.5.

FSS Within 100 NM Radius:
ICT

VR-140

ORIGINATING ACTIVITY: 12 OSS/OSAS, Bldg 28 5th Street East, Randolph AFB, TX 78150-4333, DSN 487-5580, C210-652-5580.
SCHEDULING ACTIVITY: 560 FTS, 1450 5th Street East, Randolph AFB, TX 78150, DSN 487-3518, C210-652-3518.

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | SAT 191/36 | N29°05.00' W98°41.00'
05 AGL B 25 MSL to Alternate Entry | B | COT 051/20 | N28°38.00' W98°47.00'
05 AGL B 25 MSL to Alternate Entry | C | COT 302/17 | N29°39.00' W99°22.00'
05 AGL B 25 MSL to Alternate Entry | D | RSG 129/42 | N29°29.00' W99°46.00'
05 AGL B 40 MSL to Alternate Entry/Exit | E | RSG 095/52 | N29°47.00' W99°20.00'
05 AGL B 45 MSL to Alternate Exit | F | RSG 074/31 | N30°04.00' W99°42.00'
05 AGL B 40 MSL to Alternate Exit | G | JCT 131/25 | N30°17.00' W99°30.00'
05 AGL B 40 MSL to Alternate Exit | H | STV 111/17 | N30°04.00' W98°25.00'

VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

(1) Route Conflicts:
   (a) VR-140 Points B-F overlays VR-168 Points B-F. Also, VR-140 Points E-F overlays IR-149 Points A-C. To deconflict, call COMTRAWLING 2, NAS Kingsville, DSN 876-6518, C361-516-6518. NOTE: The most frequent users of VR-168 are Laughlin T-38 aircraft that usually enter in an easterly heading at VR-168 Point D - a point that is only a few miles from VR-140 Point D.
   (b) VR-140 Points C-E overlays and flows in the opposite direction to VR-1122 Points C-F. Also, VR-140 Points A-B overlays with VR-156 and VR-1105 Points A-B. To deconflict, call the scheduler of VR-1122, VR-156 and VR-1105 at 149 FW, Kelly AFB, DSN 945-5934, C210-925-5934.
   (c) VR-140 Points C-D overlays SR-281, SR-282. Laughlin T-6 aircraft are primary users. To deconflict, call 85 FTS, Laughlin AFB, DSN 732-5121/5429.
   (d) VR-140 G-H cross SR130 C-D. To deconflict call scheduler of SR130, 559th FTS at JBSA Randolph at DSN 487-5661 or C210-652-5661.
   (e) Numerous uncharted U.S. Navy low levels between Point A and D on VR-140. Recommend extra vigilance for clearing between these points. U.S. Navy aircraft normally fly below 500' AGL on these routes. To deconflict, call VT-31/35, NAS Corpus, DSN 861-3350.
   (f) Moderate to severe bird activity possible between point C-D.
   (g) Exit point is within close proximity to Victor routes 222/556/163.

(2) Reporting points:
   (a) Make the following radio call when approaching both C and D on UHF 255.4 (callsign) (number in flight) (altitude AGL) approaching VR-140 point (C/D).

SCHEDULING ACTIVITY: 99 FTS, 1450 5th Street East, Randolph AFB, TX 78150-5000 DSN 487-6746, C210-652-6746.

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | LOA 225/14 | N30°59.00' W96°11.00'
05 AGL B 40 MSL to | B | LOA 360/37 | N31°44.00' W95°52.00'
05 AGL B 40 MSL to | C | ACT 048/32 | N31°57.00' W96°45.00'
05 AGL B 40 MSL to (Alternate Exit Point) | D | ACT 128/38 | N31°12.00' W96°46.00'
05 AGL B 40 MSL to | E | CWK 018/27 | N30°47.00' W97°19.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM right and 5 NM expanding to 10 NM left of centerline from A to B; 5 NM right and 10 NM left of centerline from B to D; 5 NM right and 10 NM tapering to 5 NM left of centerline from D to E.

Special Operating Procedures:

(1) Alternate Exit Pt: D.
(2) Exit route heading approx 240° for Westbound routing towards Georgetown or Round Rock.
(3) Exit route heading approx 100° for Eastbound heading.
(4) Avoid Austin Class C Airspace.
(5) Avoid Centex VORTAC due to converging airways.
(6) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule new entry time with PANTHER OPS on 141.7.

(7) Route Conflicts:
(a) VR-142 between Points D-E conflicts with SR-290 Points C-E and SR-286 Points C-D. To deconflict, call the scheduler of SR-290 and SR-286 at 559 FTS, Randolph AFB, DSN 487-5661, C210-652-5661.

(8) Rwy 32 approach to CRS crosses leg B-C at 2200’ MSL.

(9) Exit Pt E lies near TPL approach routing from CWK at 1700’.


(11) Charted towers at N31-55.2508 W096-33.2271 and N31-55.2508 W096-33.2271 and N31-55.2508 W096-33.2271 and N31-55.2508 W096-33.2271 have been removed or could not be located at charted locations.

(12) Use caution for moderate bird activity along entire route (year-round).

**FSS Within 100 NM Radius:**
CXO, DRI, FTW, SJT

**VR ROUTES**

**ORIGINATING ACTIVITY:** 12 OSS/OSAS, 501 I Street East, Randolph AFB TX 78150-4333, DSN 487-5580, C210-652-5580.

**SCHEDULING ACTIVITY:** 560 FTS, 1450 5th Street East, Randolph AFB TX 78150-4333, DSN 487-3518, C210-652-3518.

**HOURS OF OPERATION:** 0700-2200 local, OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>LLO 124/18</td>
<td>N30°36.00' W98°32.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>B</td>
<td>JCT 103/18</td>
<td>N30°29.50' W99°30.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>C</td>
<td>JCT 225/16</td>
<td>N30°29.00' W100°04.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>D</td>
<td>RSG 282/53</td>
<td>N30°21.00' W101°15.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>E</td>
<td>RSG 277/71</td>
<td>N30°21.00' W101°36.50'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>F</td>
<td>SJT 253/60</td>
<td>N31°15.00' W101°36.50'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>G</td>
<td>SJT 202/40</td>
<td>N30°48.00' W100°52.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>H</td>
<td>JCT 308/22</td>
<td>N30°51.30' W100°06.50'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>I</td>
<td>JCT 032/25</td>
<td>N30°55.30' W99°30.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>J</td>
<td>LLO 306/15</td>
<td>N30°58.50' W99°00.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>K</td>
<td>LLO 001/12</td>
<td>N31°00.00' W98°45.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 11 NM either side of centerline from A to C; 20 NM left and 11 NM right of centerline from C to D; 20 NM either side of centerline from D to F; 20 NM tapering to 8 NM left and 10 NM right of centerline from F to G; 8 NM left and 14 NM right of centerline from G to H; 8 NM tapering to 6 NM left and 14 NM right of centerline from H to I; 6 NM tapering to 3 NM left and 14 NM right of centerline from I to J; 3 NM left and 14 NM right of centerline from J to K.

**Special Operating Procedures:**

(1) Minimum speed: 300 Knots.

(2) Certain portions of the route between points C and F are cleared for operations at or above 500’ AGL only. This area is: Point C to E, north of a line from N30-15.0 W010-04.00 to N30-15.0 W011-30.00; Point E to F, east of a line from N30-15.0 W011-30.0 to N30-55.0 W011-30.0 then north of a line from N30-55.0 W011-30.0 to N30-57.0 W012-00.0.

(3) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.

(4) Route Conflicts:
(a) VR143 between Points E, F, G conflict with VR1116 between Points G-H. To deconflict, call the scheduler of VR1116 at OC-ALC/10 FLTS at Tinker AFB DSN 336-7719/7710, C405-763-7719.
(b) VR143 between Points C to G conflicts in numerous areas with IR169. To deconflict, call controllers at 87 FTS Laughlin AFB, TX DSN 732-5824/5484, C830-298-5824.
(c) The left corridor of VR143 between Points A to B conflicts with the route corridor of VR140 at Point G. To deconflict call the 560 FTS at Randolph AFB, DSN 487-3518/3942, C210-652-3518.
(d) SR281 and SR282 conflict with VR143 from Points A to E in numerous places, and SR283 and SR284 conflict with VR143 between Points C to E and F to G. To deconflict, call the 560 FTS at Laughlin AFB, TX DSN 732-5121/5329, C830-298-5429.
(e) VR-143 from Point A to Point B corridor overlaps SR-130 Point D to Point E. To deconflict call the schedulers, 559th FTS DSN 487-5661, C210-652-5561 Mon-Fri.

(5) Units requesting VR-143 shall furnish 301 OG/SUA with planned Entry/Exit Points, times, and planned speeds. Accurate times are critical in the deconfliction process.

(6) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

(7) All aircraft will monitor FSS UHF 255.4 unless assigned a frequency by ARTCC. Users will make an entry and exit call on UHF 255.4.

(8) Sensitive Areas: Avoid the following areas by 1300’ AGL or 1 NM radius: (N30-23-15 W99-55-00), (N30-24-40 W100-42-00), (N30-18-00 W100-38-45), (N31-11-00 W101-32-00), (N30-32-36 W101-54-24), (N30-40-00 W101-20-40), (N30-49-30 W100-42-15) (N30-53-00 W99-33-00). Avoid the following areas by 1300’ AGL or 2 NM radius: (N30-45-00 W99-14-00), (N30-54-50 W98-58-42). Avoid the following areas by 1.5 NM radius: (N30-24-30 W98-43-00), (N30-24-30 W100-37-00). Avoid the radar site at (N30-58-41 W100-33-08) by 5000’ AGL and 1 NM. Prior to entering at point A avoid the town of Marble Falls, the Colorado River, Llano River and Lake Buchanan by a minimum of 3000’ AGL. To avoid by 1300’ AGL or 1 NM: N30-19-40 W99-54-20.

(9) Obstructions:
(a) 559’ AGL tower at (N31-12-40 W101-21-00);
(b) 319' AGL tower at (N30-26-40 W101-38-20);
(c) 200' AGL tower at (N30-27-05 W100-13-21);
(d) 500' AGL tower at (N30-43-50 W098-57-12);
(e) 300' AGL tower at (N30-52-54 W101-47-40).

(10) Alternate Entry: B, D, F, H and I.
(12) Route Segment J to K closed except for aircraft scheduled into the BRADY MOA. Aircraft not scheduled into the BRADY MOA must exit by Point J and remain clear of the BRADY MOA.

**FSS Within 100 NM Radius:**
FTW, SJT

**VR-144**

**ORIGINATING ACTIVITY:** 97 OSS/DOA, 101 S. Sixth St., Bldg 225, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

**SCHEDULING ACTIVITY:** 97 OSS/OSK, 101 S. Sixth St., Bldg 225, Altus AFB, OK 73521 DSN 866-7422/6002/1375/7490 C580-481-7422/6002/1375/7490.

**HOURS OF OPERATION:** 0830-0230 Local Mon-Fri

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 AGL B 40 MSL to A</td>
<td>LTS 197/25</td>
<td>N34°16.55'</td>
<td>W99°27.57'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to B</td>
<td>LTS 201/38</td>
<td>N34°05.40'</td>
<td>W99°36.80'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to C</td>
<td>LTS 272/20</td>
<td>N34°42.00'</td>
<td>W99°39.90'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to D</td>
<td>BFV 242/26</td>
<td>N35°03.70'</td>
<td>W99°41.70'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 10 NM either side of centerline from A to C; 5 NM either side of centerline from C to D.

**Special Operating Procedures:**
(1) Aircraft desiring to use route, contact scheduling unit 24 hrs in advance or contact Altus command post for same day scheduling at DSN 866-6098, C580-481-6098.
(2) Primary Entry: A; Primary Exit: D; Alternate Exit: B and C.
(3) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed, OK to Altus APP CON 125.1/257.725 (CH 6), using the phrase (call sign, Reed southbound to Sooner DZ, intentions to follow). USE CAUTION FOR UNCHARTED TOWER APPROXIMATELY 200' TALL AT N34-9.872 W099-30.524.
(4) From B to C, avoid Quanah Municipal by 1500' and 3 NM. From C to D avoid Mangum Airport by 1500' AGL and 3 NM. Charted tower 4 miles South of Russell, OK approximate location N34-43.00 W099-40.00, has been removed.
(5) From B to C, avoid flight over town of El Dorado, OK.
(6) At A avoid flight over the town of Chillicothe, TX.
(7) Contact Altus Approach Control on 257.725 at B. Contact Altus Approach 257.725 when exiting (applies if exiting at B, C, or D).
(9) Deconflict with IR-105 (NAS Fort Worth), VR-159, VR-1141, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route schedulers. To avoid the corridors of VR-1141, VR-1142, VR-1143 and VR-159, do not fly south of highway 287 between VR-184 Points B, C, D (deconfliction with VR-162 is still required in all cases, and deconfliction with VR-1141, VR-1142, VR-1143 and VR-159 is required if flying south of highway 287). The line along highway 287 is from N34-21 W99-50 southeast to N34-14 W99-22.

**FSS Within 100 NM Radius:**
FTW, SJT

**VR-151**

**ORIGINATING ACTIVITY:** TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363 DSN 876-6518/4075 C361-516-6518/4075 0800-1530 CST, Mon-Fri (excluding holidays or field closed by NOTAM).

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Daily 0600-2200 local

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 20 MSL to A</td>
<td>PSX 175/20</td>
<td>N28°25.50'</td>
<td>W96°19.50'</td>
</tr>
<tr>
<td>05 AGL B 20 MSL to B</td>
<td>PSX 103/38</td>
<td>N28°32.00'</td>
<td>W95°38.00'</td>
</tr>
<tr>
<td>05 AGL B 20 MSL to C</td>
<td>PSX 047/40</td>
<td>N29°09.00'</td>
<td>W95°41.00'</td>
</tr>
<tr>
<td>10 AGL B 20 MSL to D</td>
<td>ELA 113/23</td>
<td>N29°28.00'</td>
<td>W95°57.00'</td>
</tr>
<tr>
<td>05 AGL B 20 MSL to E</td>
<td>ELA 059/16</td>
<td>N29°46.00'</td>
<td>W96°02.00'</td>
</tr>
<tr>
<td>08 AGL B 20 MSL to F</td>
<td>IDU 105/14</td>
<td>N29°52.00'</td>
<td>W96°19.00'</td>
</tr>
<tr>
<td>05 AGL B 20 MSL to G</td>
<td>ELA 227/20</td>
<td>N29°28.00'</td>
<td>W96°38.00'</td>
</tr>
<tr>
<td>05 AGL B 20 MSL to H</td>
<td>PSX 336/21</td>
<td>N29°06.00'</td>
<td>W96°25.00'</td>
</tr>
<tr>
<td>05 AGL B 20 MSL to I</td>
<td>PSX 241/8</td>
<td>N28°43.00'</td>
<td>W96°27.00'</td>
</tr>
<tr>
<td>05 AGL B 20 MSL to J</td>
<td>PSX 209/26</td>
<td>N28°25.00'</td>
<td>W96°36.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** None

**ROUTE WIDTH** - 5 NM either side of centerline from A to B; 3 NM either side of centerline from B to C; 3 NM left and 1 NM right of centerline from C to D; 3 NM either side of centerline from D to J.
**VR ROUTES**

**Special Operating Procedures:**

1. Maximum airspeed is 480 KIAS.
2. Enter A from Espiritu Santa Bay. Do not overfly Port O’Connor.
3. Maintain 1500’ MSL until past A.
4. Alternate Entry Point: C at/above 1000’ AGL.
5. Maintain 1000’ AGL from D until 5 NM past D.
6. CAUTION: High Intensity low plane/glider operations during weekends/holidays, located 3 NM ESE of D.
8. Climb to cross E at/above 800’ AGL.
9. CAUTION: Tower 490’ AGL N29°49-00.88 W95°07-28.93, located north of centerline points E to F.

**FSS Within 100 NM Radius:**
CXO, SJT

**VR-152**

**ORIGINATING ACTIVITY:** 138 FW, OKANG, 9100 E 46th Street N, Tulsa, OK 74115 DSN 894-7370, C918-833-7370.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>TIK 016/18</td>
<td>N35°43.00' W97°14.00'</td>
</tr>
<tr>
<td>05 AGL B 45 MSL to</td>
<td>B</td>
<td>TIK 007/26</td>
<td>N35°51.00' W97°15.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>C</td>
<td>PER 191/32</td>
<td>N36°14.00' W97°21.00'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>D</td>
<td>PER 311/24</td>
<td>N37°02.00' W97°30.00'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>E</td>
<td>ICT 221/16</td>
<td>N37°34.00' W97°50.00'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>F</td>
<td>HUT 203/9</td>
<td>N37°52.00' W98°01.00'</td>
</tr>
<tr>
<td>25 MSL to</td>
<td>G</td>
<td>SLN 204/37</td>
<td>N38°24.00' W98°01.00'</td>
</tr>
<tr>
<td>05 AGL B 100 MSL to</td>
<td>H</td>
<td>SLN 238/20</td>
<td>N38°47.00' W98°01.00'</td>
</tr>
</tbody>
</table>

**PMSV CONTACTS:** Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

**TERRAIN FOLLOWING OPERATIONS:** Authorized from A to F and G to H only. Reverse course/orbit is authorized between G and H.

**ROUTE WIDTH -** 3 NM either side of centerline from A to F; 2 NM either side of centerline from F to G; on centerline to 9 NM right of centerline from G to H, excluding R-3601.

**Special Operating Procedures:**

1. Approval to fly VR-152 does not constitute authority to enter R-3601.
2. Smoky Hill Range clearance is required for entry into R-3601.
3. Contact Hutchinson Approach/Tower 325.8 passing F for traffic information through the Hutchinson Terminal Area.
4. Alternate Entry Points: B, D, E and G.
5. Alternate Exit Point: G.
7. Alternate Entry Point B is to be utilized by all aircraft not originating out of Tinker.
8. Avoid the following noise sensitive areas:
   a. All airports chartered on the Wichita and Dallas/Fort Worth Sectional Charts by 1500’/3 NM;
   b. Farm at B (N35°43.0 W97°01.0);
   c. Livestock feedlot south of Langston (N35°56.0 W97°14.0);
   d. Airport at Perry (N36°18.0 W97°19.0);
   e. Farm near Billings (N36°32.0 W97°25.0);
   f. Farm (N37°12.0 W97°32.0);
   g. Livestock feedlot 1 NM south of Milan (N37°15.0 W97°41.0);
   h. Airfield 3 NM west of Chany Reservoir Dam (N37°42.0 W97°54.0);
   i. Farm 3 NM east of Nickerson (N38°09.0 W98°00.0);
   j. Farm 7 NM south of Little River (N38°17.0 W98°02.0);
   k. Kanopolis Reservoir Dam below 1000’ AGL (N38°37.0 W97°52.0);
   l. Farm (N38°18.0 W98°02.0) below 1000’ AGL.
9. All heavy aircraft enter at B.
10. Check NOTAMS for rocket firings to FL230 near Argonia, KS (N37°16.0 W97°44.0).

**FSS Within 100 NM Radius:**
ICT, MLC

**VR-156**

**ORIGINATING ACTIVITY:** 149 FTR GP (TX-ANG), Kelly AFB, TX 78241 DSN 945-5934, C210-925-5934.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 0800-1830 local daily, Prior coordination required for Sun-Mon operations

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td></td>
<td>N29°05.00' W98°41.00'</td>
</tr>
<tr>
<td>SFC B 30 MSL to</td>
<td>B</td>
<td>COT 040/19</td>
<td>N28°40.00' W98°51.00'</td>
</tr>
<tr>
<td>SFC B 30 MSL to</td>
<td>C</td>
<td>COT 034/16</td>
<td>N28°39.00' W98°55.00'</td>
</tr>
<tr>
<td>SFC B 30 MSL to</td>
<td>D</td>
<td>COT 345/16</td>
<td>N28°44.00' W99°09.00'</td>
</tr>
<tr>
<td>SFC B 30 MSL to</td>
<td>E</td>
<td>COT 328/32</td>
<td>N28°57.00' W99°21.00'</td>
</tr>
</tbody>
</table>
**TERRAIN FOLLOWING OPERATIONS:** Authorized from F to N.

**ROUTE WIDTH** - 3 NM either side of centerline from A to L; 5 NM either side of centerline from L to O.

**Special Operating Procedures:**

1. **Position reports shall be made to Fort Worth FSS at Mineral Wells, Southbound at C and at Breckenridge, Northbound at G.**

2. **Route conflicts with several IR/VR/SR routes as follows:**

3. Route will be flown at a maximum of 540 knots.

4. Route is designated MARSA.

5. Route of flight checked to 500' AGL. Contour flying authorized on entire route.

6. Alternate Entry Points: E, G and H.


8. Pilots must contact 80 FTW T-38 duty officer for current brief on noise sensitive areas and high density traffic areas.

9. Use caution when operating between A and B and when exiting the route for T-6 aircraft operating at 500' AGL.

10. Due to local deconfliction, route cannot be flown reverse and is normally flown on Monday, Wednesday, and Friday. Call scheduling office for conflicts with other routes.

### SFC B 60 MSL to F COT 319/33
- N28°56.00' W99°27.00'
- N28°07.00' W99°31.00'
- N27°54.00' W99°22.00'
- N27°32.00' W99°12.00'
- N27°32.00' W99°06.00'
- N27°43.00' W98°58.00'

### SFC B 60 MSL to G COT 217/30
- N28°06.00' W98°54.00'
- N28°12.00' W98°53.00'

### SFC B 60 MSL to H LRD 357/25
- N28°15.00' W98°50.00'

### SFC B 60 MSL to I LRD 065/28
- N28°15.00' W98°44.00'

### SFC B 30 MSL to K LRD 050/28
- N27°43.00' W98°58.00'

### SFC B 30 MSL to L COT 143/25
- N28°06.00' W98°54.00'

### SFC B 30 MSL to M COT 132/20
- N28°12.00' W98°53.00'

### SFC B 50 MSL to N COT 121/20
- N28°15.00' W98°50.00'

### SFC B 30 MSL to O COT 113/24
- N28°15.00' W98°44.00'

### SFC B 30 MSL to P COT 104/16
- N28°15.00' W98°44.00'

### SFC B 30 MSL to Q COT 95/12
- N28°15.00' W98°44.00'

### SFC B 30 MSL to R COT 86/8
- N28°15.00' W98°44.00'

### SFC B 30 MSL to S COT 77/4
- N28°15.00' W98°44.00'

### SFC B 30 MSL to T COT 68/0
- N28°15.00' W98°44.00'

### SFC B 30 MSL to U COT 59/6
- N28°15.00' W98°44.00'

### SFC B 30 MSL to V COT 50/2
- N28°15.00' W98°44.00'

### SFC B 30 MSL to W COT 41/8
- N28°15.00' W98°44.00'

### SFC B 30 MSL to X COT 32/4
- N28°15.00' W98°44.00'

### SFC B 30 MSL to Y COT 23/0
- N28°15.00' W98°44.00'

### SFC B 30 MSL to Z COT 14/6
- N28°15.00' W98°44.00'

### SFC B 30 MSL to AA COT 4/2
- N28°15.00' W98°44.00'

### SFC B 30 MSL to BB COT 86/12
- N28°15.00' W98°44.00'

### SFC B 30 MSL to CC COT 68/0
- N28°15.00' W98°44.00'

### SFC B 30 MSL to DD COT 50/2
- N28°15.00' W98°44.00'

### SFC B 30 MSL to EE COT 41/8
- N28°15.00' W98°44.00'

### SFC B 30 MSL to FF COT 32/4
- N28°15.00' W98°44.00'

### SFC B 30 MSL to GG COT 23/0
- N28°15.00' W98°44.00'

### SFC B 30 MSL to HH COT 14/6
- N28°15.00' W98°44.00'

### 05 AGL B 30 MSL to E MQP 182/46
- N31°58.00' W98°10.50'
- N32°26.00' W98°32.00'
- N32°44.00' W98°35.00'
- N33°03.00' W98°48.00'
- N33°16.00' W98°41.00'
- N33°26.00' W98°42.00'

### VR-159

**ORIGINATING ACTIVITY:** 80th OSS/OSOA, 1911 J. Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576, C940-676-0576.

**SCHEDULING ACTIVITY:** 90/469 FTS, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995/8090.

**HOURS OF OPERATION:** Sunrise-Sunset
VR ROUTES

ROUTE DESCRIPTION:

As assigned to
Pt Fac/Rad/Dist Lat/Long
As assigned to A SPS 222/15 N33°50.00' W98°50.00'
05 AGL B 30 MSL to B SPS 267/56 N34°06.00' W99°43.00'
05 AGL B 30 MSL to C SPS 249/74 N33°45.00' W100°03.00'
05 AGL B 30 MSL to D TQA 338/55 N33°08.00' W100°03.00'
05 AGL B 30 MSL to E TQA 033/49 N32°50.00' W99°09.00'
05 AGL B 50 MSL to F SPS 202/41 N33°24.00' W99°02.00'
05 AGL B 50 MSL to G SPS 214/32 N33°36.00' W99°02.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route in VMC only.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:


(2) Routes will be flown at a maximum of 540 knots.

(3) Route is designated MARSA.

(4) Alternate Entry: B, C, D, E and F.

(5) Alternate Exit: B, C, D, E and F.

(6) Pilots must contact 80 FTW T-38 duty officer for current brief on noise sensitive areas and high density traffic areas.

(7) Noise sensitive areas, avoid by 1000' AGL or 2 NM: Waggoner Estate ranch house N33°56.5 W99°16.6.

(8) Use caution when operating between A to B and F to G for T-6 aircraft operating at 500' AGL.

(9) Aircraft on VR-159 (Mon, Wed, Fri) will call ABEAM SANTA ROSA LAKE (15 NM past Point A) and aircraft on reverse SR-278 (Mon, Wed, Fri, Sun) will call APPROACHING SANTA ROSA LAKE. Additionally, aircraft on VR-159 (Mon, Wed, Fri) will call ABEAM OLNEY (point F) and aircraft on reverse SR-278 (Mon, Wed, Fri, Sun) will call APPROACHING OLNEY about 20 miles prior to the town. In all cases if a conflict exists aircraft on Reverse SR-278 will climb accordingly (1500' minimum) and both aircraft will make a position report on 255.4.

(10) Due to local deconfliction, route cannot be flown reverse and is normally flown on Monday, Wednesday, and Friday. Call scheduling office for conflicts with other routes.

FSS Within 100 NM Radius:
FTW, SJT

VR-168

ORIGINATING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363 DSN 876-6518/4075, C361-516-6518/4075 0800-1530 CST Mon-Fri (excluding holidays or field closed by NOTAM).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2400 local daily

ROUTE DESCRIPTION:

As assigned to
Pt Fac/Rad/Dist Lat/Long
As assigned to A THX 100/1 N28°30.00' W98°08.00'
SFC B 20 MSL to B COT 051/20 N28°38.00' W98°47.00'
SFC B 20 MSL to C SFC 302/17 N28°39.00' W99°22.00'
SFC B 40 MSL to D DLF 074/56 N29°30.00' W99°43.00'
SFC B 40 MSL to E RSG 095/52 N29°47.00' W99°20.00'
SFC B 40 MSL to F RSG 074/31 N30°04.00' W99°42.00'
SFC B 40 MSL to G RSG 130/22 N29°44.00' W100°02.00'
SFC B 30 MSL to H RSG 162/39 N29°22.00' W100°12.00'
SFC B 30 MSL to I COT 304/53 N29°04.00' W99°51.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline entire route.

Special Operating Procedures:

(1) Route conflicts with several IR/VR/SR routes as follows: A to B route crosses VR-1121, VR-1105 and VR-1106. B to C underlies VR-140. C to D crosses SR-1124 and crosses SR-1123, VR-1143 opposite direction and VR-140 approaching Point D. D to E shares famous IR-149 and IR-170; MARSA procedures apply.

(2) Maintain 1500' AGL within 3 NM of Three Rivers Muni Airport located at (N28-28-50 W98-12-15) 2 NM NW of Three Rivers, TX.

(3) Use caution when operating between C and D and in the vicinity of point D for obstructions up to 2700' MSL.

FSS Within 100 NM Radius:
SJT
VR-176

ORIGINATING ACTIVITY: 49 OSS/OSOA, 744 Delaware Ave., Holloman AFB, NM 88330-8014, DSN 572-2638, C575-572-2638.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014, DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Normally 1500-2400Z++ daily, usage between 2400-1500Z++ is available

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 20 NM either side of centerline from A to B; 12 NM either side of centerline from B to E; 20 NM left and 10 NM right of centerline from E to G; 15 NM left and 10 NM right of centerline from G to H; 10 NM either side of centerline from H to I; 10 NM left and 37 NM right of centerline from I to J; 20 NM left and 38 NM right of centerline from J to K; 10 NM either side of centerline from K to L; 20 NM left and 25 NM right of centerline from L to M; 10 NM either side of centerline from M to N.

Special Operating Procedures:
(1) Request use through 49 OSS/OSOS 24 hours in advance and between 0730-1630 local Mon-Fri.
(2) From 1 March to 31 August do not fly below 200' AGL between points D to H.
(3) Do not overfly the Rio Grande River below 500' AGL, located between points H through L.
(4) Avoid all forest fires/smoke by at least 5 NM and/or 5000' AGL.
(5) Avoid R-5113, R-5111B, and R-5111D when active.
(6) Do not enter R-5107H or R-5107J unless scheduled into this airspace through 49 OSS/OSOS and then only after having received clearance from SMOKEY 336.2.
(7) Alternate Entry Points: B, C, E, J, K, and L
(8) Alternate Exit Points: D, E, F, H, K, L, and M.
(9) Re-entry Points: B, C and D.
(10) Visual Routes are strictly see and avoid. Users are encouraged to maintain a continuous visual lookout. Deconfliction with IR-133 and IR-142 may be accomplished through 49 OSS/OSOS. For deconfliction with non-49 WG routes (e.g. IR-113, VR-100, VR-125, VR-176, VR-1107, VR-1195) contact applicable scheduling authority.
(11) Numerous towers, avoidance and noise sensitive areas exist within the MTR. You must receive the MTR brief and associated products from 49 OSS/OSOA prior to flying the route.
(12) GAF Tornado is authorized operations down to 100' AGL during daylight and 200' AGL at night.

FSS Within 100 NM Radius:
ABQ

VR-179

ORIGINATING ACTIVITY: ANG CRTC-Gulfport/OSA, 4715 Hewes Ave, Gulfport, MS 39507-4324 DSN 363-6027, C603-363-6027.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 20 NM either side of centerline from A to B; 12 NM either side of centerline from B to E; 20 NM left and 10 NM right of centerline from E to G; 15 NM left and 10 NM right of centerline from G to H; 10 NM either side of centerline from H to I; 10 NM left and 37 NM right of centerline from I to J; 20 NM left and 38 NM right of centerline from J to K; 10 NM either side of centerline from K to L; 20 NM left and 25 NM right of centerline from L to M; 10 NM either side of centerline from M to N.

Special Operating Procedures:
(1) Request use through 49 OSS/OSOS 24 hours in advance and between 0730-1630 local Mon-Fri.
(2) From 1 March to 31 August do not fly below 200' AGL between points D to H.

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.
VR ROUTES

ROUTE WIDTH - 2 NM left and 8 NM right of centerline from A to B; 2 NM left and 1 NM right of centerline from B to C; 5 NM either side of centerline from C to D; 8 NM left and 5 NM right of centerline from D to E; 5 NM left and 8 NM right of centerline from E to F; 5 NM either side of centerline from F to G; 5 NM either side of centerline from F1 to FA.

Special Operating Procedures:
(1) Route branches at F to G for Desoto MOA entry or to FA for Pine Hill West MOA entry.
(2) Alternate Entry Points: C and E.
(3) Alternate Exit Points: D, E and FA.
(4) Users shall avoid flight within 3 NM of the chemical plants located at 31-16-10N 87-59-50W.
(5) Avoid Noise sensitive areas:
   (a) Fort by 2 NM/2000' AGL N30-13.0 W88-58.0 (A-B).
   (b) Do not over fly Horn Island within 1 NM N30-15.5 W88-42.8.
   (c) Power Plant by 1 NM/1500' AGL N30-32.5 W88-33.5 (C-D).
   (d) Llama Farm by 2 NM/1500' AGL W88-41.0 (C-D).
   (e) Camp by 1.5 NM/1000' AGL N30-49.2 W88-44.5 (D-E).
(6) Uncharted Obstructions/Hazards:
   (a) Numerous fish spotting aircraft 500' AGL to 5500' AGL (A-C).
   (b) Avoid Airfield by 3 NM/1500' AGL N30-28.0 W88-32.5 (C-D).
   (c) Tower 1049' MSL/1012' AGL N30-29.0 W88-43.0.
(7) Crossing MTR Routes: Consult the Scheduling Unit, FLIP or Sectional Map for actual location of the routes for de-confliction. See and avoid applies. VR-1022 and IR-038 co-located C to E. VR-1021, VR-1024, VR-1146, and IR-040 co-located D to E. IR-037 co-located E to G. VR-060 co-located opposite direction F to FA.
(8) When crossing the coast line between C and D, fly east of Pascagoula River. Do not fly over land south and west of Pascagoula River until north of bridge at N30-22.8 W88-36.3 Restricted to 3500' MSL by GPT APPROACH from Point A to Point C.
(9) CAUTION: Sky divers within a 2 mile radius of Trent Lott International Airport N30-25.5 W88-28.4 or Radial/DME SJI 204/18; Surface to 21,000' AGL. Operational Times: Fri-Sun 0800 local-sunset.

FSS Within 100 NM Radius:
DRI

VR-184


HOURS OF OPERATION: 0830-0230 local, Mon-Fri

ROUTE DESCRIPTION:
Altitude Data     Pt Fac/Rad/Dist Lat/Long
03 AGL B 40 MSL to A     BFV 242/26 N35°03.70' W99°41.70'

03 AGL B 40 MSL to B     LTS 224/24 N34°24.00' W99°38.30'
03 AGL B 40 MSL to C     LTS 201/38 N34°05.40' W99°36.80'
03 AGL B 40 MSL to D     LTS 197/25 N34°16.20' W99°28.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to D.

Special Operating Procedures:
(1) Aircraft desiring to use route, contact scheduling unit 24 hrs in advance or contact Altus Command Post for same day scheduling at DSN 866-6313, C580-481-6313.
(2) Primary Entry: A; Alternate Entry: B; Primary Exit: D; Alternate Exit: C. Use CAUTION for uncharted tower approximately 200' tall at N34-9.872 W99-30.524.
(3) At A, avoid flight over town of Chillicothe, TX. Use CAUTION for uncharted tower approximately 200' tall at N34-11.052 W99-29.511.
(4) Aircraft accomplishing airdrops at Sooner DZ, report commencement of airdrop run-in not later than 5 minutes prior to Altus Approach Control 353.7 using the phrase (call sign, inbound Sooner DZ, intentions to follow).
(5) From A to B, avoid Mangum Airport by 1500' AGL and 3 NM. From B to C avoid Quahal Airport by 1500' AGL and 3 NM.
(6) From A to B, avoid flight over the town of EIDorado, OK. At D avoid flight over the town of Chillicothe, TX.
(7) Contact Altus Approach Control 353.7 at D (also contact Altus Approach Control 353.7 if exiting at C). Use caution for uncharted airfield southeast of D (N34-58.5 W99-29.0).
(10) PMSV; Altus AFB 239.8.
(11) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.
(12) Charted tower south of Russell, OK, approximate location N34-43.00 W099-40.00, has been removed.
(13) Entire route susceptible to wild fires. Aircrews should check NOTAMS before scheduling.
(14) To report fires, uncharted obstructions or any other operational issues requiring attention on this route, please send an email to: Altus.airspace@Altus.af.mil.

FSS Within 100 NM Radius:
FTW, SJT
**VR-186**

**ORIGINATING ACTIVITY:** 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 0700-2200 local, OT by NOTAM

**ROUTE DESCRIPTION:**

**Terrain Following Operations:** Authorized entire route.

**Route Width -** 5 NM either side of centerline.

**Special Operating Procedures:**

(1) Minimum speed: 300 Knots.

(2) Minimum separation between schedule entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.

(3) Route conflicts:

(a) VR186 between Points B to C conflicts with SR283 Point H (Exit) and SR284 Point A (Entry). Both are on or near the route centerline. To deconflict, call the 85 FTS at Laughlin AFB, TX DSN 732-5121, C830-298-5121/5529.

(b) VR186 conflicts with SR242 Points F-G, SR243 Points C-D-E, SR244 Points B-C-D, and SR267 Points B-C. To deconflict, call Dyess AFB, DSN 461-2792.

(4) Units requesting VR-186 shall furnish 301 OG/SUA with planned entry/exit points, times, and planned speeds. Accurate times are critical in the deconfliction process.

(5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

(6) All aircraft will monitor FSS on 255.4 unless assigned a frequency by ARTCC. Users will make an entry and exit call on 255.4.

(7) Route segment G to H closed except to aircraft scheduled into R-6302. Aircraft not scheduled into R-6302 must exit by Point G and remain below 6000' MSL until clear of Brady MOA.

(8) Sensitive Areas: Avoid the following areas by 1300' AGL or 1 NM radius:

(a) (N31-06-45 W100-40-40)

(b) (N31-07-30 W99-49-30)

(c) (N31-09-35 W99-53-00)

(d) (N31-11-00 W100-54-30)

(e) (N31-15-30 W100-49-00)

(f) (N32-03-00 W100-40-30)

(g) (N31-19-00 W99-14-30)

(h) (N31-07-00 W99-00-00)

(9) Obstructions:

(a) 295' AGL tower at N31-15-30 W100-47-00

(10) Alternate Entry: B, C, D, E and G.

(11) Alternate Exit: D, E, F and G.

**FSS Within 100 NM Radius:** CXO, FTW, SJT

**VR-189**

**ORIGINATING ACTIVITY:** 188 Wing-AR ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502, C479-573-5502.

**SCHEDULING ACTIVITY:** Same as Originating Activity.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

**Terrain Following Operations:** Authorized entire route.

**Route Width -** 5 NM either side of centerline.

**Special Operating Procedures:**

(1) Alternate Entry: B, C and E.

(2) Alternate Exit: E, F and G.

(3) Participating aircraft separation on IR-117, 120, 121, VR-189, 1102, 1103, 1104, 1113, and 1130 as well as in the Hog MOA and Arrowhead MOA is MARSA through see and avoid as well as restrictive scheduling. All legs of the route that enter the Hog MOA (F-H) are prohibited while the Hog MOA (Also scheduled by the 188 WG) is activated--If Hog MOA is active, exit at Point E or adjust route times.
VR ROUTES

(4) Report Hog MOA entry/exit and applicable MTR points in the blind on the Hog MOA tactical frequency 307.375.

(5) CAUTION; Numerous SR routes frequented by flights of multiple C-130s between (Points C-F). CAUTION; multiple converging MTRs and IP to DZ routes (Points F-G) even when the Hog MOA is not active.

(6) CAUTION; Points A-B overlapped by VR-1104/IR-164. CAUTION; Point B crossed by VR-1103/IR-121.

(7) Flights exiting the MTR requesting activation of the Hog MOA complex must report the MTR exit point to Memphis Center on 269.0 or 126.1 and receive clearance out of the route and into the MOA prior to exiting the route. Otherwise, contact Razorback Approach on 343.75 or 120.9 prior to exiting the route.

(8) Avoid flight within 1500' AGL/ 3 NM all charted airports when practicable.

(9) Uncharted obstructions:
   (a) Tower (N34 57.18 W093 07.20) estimated altitude 150' AGL.
   (b) Tower (N34 09.66 W094 35.70) estimated altitude 200' AGL.
   (c) Tower (N34 40.38 W094 19.26) estimated altitude 250' AGL.
   (d) Tower (N34 30.48 W094 40.50) estimated altitude 200' AGL.
   (e) Tower (N34 09.42 W094 29.93) estimated altitude 200' AGL.
   (f) Tower (N34 08.52 W094 36.00) estimated altitude 200' AGL.
   (g) Tower (N34 09.00 W094 43.20) estimated altitude 200' AGL.

(10) CAUTION; Mining activity at (N34 14.15 W093 38.10).

(11) CAUTION; Soaring birds and hang gliders in vicinity of Magazine Mountain (N35 10 W093 09).

(12) Make entry time plus or minus ten minutes or reschedule.

FSS Within 100 NM Radius:
FTW, MLC

VR-190

ORIGINATING ACTIVITY: 97 OSS/DOA, 101 S. Sixth Street, Bldg 225, Altus AFB, OK 73521 DSN 866-6098 C580-481-6098.


HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>A</td>
<td>LTS 197/25</td>
<td>N34°16.20' W99°28.00'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>B</td>
<td>LTS 201/38</td>
<td>N34°05.40' W99°36.80'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>C</td>
<td>CDS 120/19</td>
<td>N34°10.00' W100°00.00'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>D</td>
<td>CDS 076/13</td>
<td>N34°23.00' W100°01.70'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>E</td>
<td>CDS 022/17</td>
<td>N34°36.70' W100°06.50'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>F</td>
<td>CDS 334/22</td>
<td>N34°43.70' W100°25.00'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>G</td>
<td>BFM 260/69</td>
<td>N35°07.50' W100°36.60'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>H</td>
<td>BFM 267/51</td>
<td>N35°16.10' W100°14.80'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>I</td>
<td>BFM 242/26</td>
<td>N35°03.70' W99°41.70'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 5 NM left narrowing to 4 NM left and 5 NM right of centerline from C to D; 4 NM left and 5 NM right of centerline from D to E; 5 NM right widening to 7 NM right and 5 NM left of centerline from G to H; 7 NM right narrowing to 5 NM right and 5 NM left of centerline from H to I.

Special Operating Procedures:

1. Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling DSN 866-6313 or C580-481-6313. Day flights from Point A to E are not permitted due to numerous crossing routes with Sheppard AFB VR routes.

2. Primary Entry A; Alternate Entry B and E; Primary Exit I; Alternate Exit E and F.

3. At A, avoid flight over the town of Chillicothe, TX.

4. Contact Ft. Worth Center 133.5/350.35 at Point C.

5. At F, when practicable, avoid Memphis Municipal Airport by 1500' AGL or 3 NM.

6. From F to G avoid flight over the town of Quail, TX by 2 NM.

7. From G to H avoid flight over the town of Shamrock, OK and when practicable avoid McClean Gray Airport and Shamrock Municipal Airports by 1500' AGL or 3 NM.

8. From H to I, when practicable avoid Haddock Airport by 1500' AGL or 3 NM.

9. Contact Altus Approach Control 353.7 upon exiting at I. Contact Ft. Worth Center 350.35 or 133.5 upon exiting at E or F. Monitor 255.4 entire route of flight.


11. Deconflict with, IR-105 (NAS Fort Worth), VR-159, VR-162, VR-1141, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route schedulers, multiple Sheppard AFB crossing routes conflict with VR-190 Points A through D. For day low levels on legs F, G, H and I, will remain east of the McClean-Hedley line (near Point G) and south of I-40 (south of the town of Shamrock, near Point H) in order to avoid the eastern and southern halves of the VR-1141/1142 corridor. The coordinates for this line are approximately N34-43.08 W100-35.68 straight north to N35-14.42 and straight east to W099-52.10.

12. PMSV: Altus AFB 239.8.

13. Aircraft unable to meet thier assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must exit the route within the window of two minutes early to two minutes late.

14. Use caution for uncharted airfield just beyond Point I, N34-58.50 W099-29.00.

FSS Within 100 NM Radius:  
FTW, SJT

**VR-191**

**ORIGINATING ACTIVITY:** 97 OSS/DOA, 101 S. Sixth Street, Bldg 225, Altus AFB, OK 73521 DSN 866-6098

SCHEDULING ACTIVITY: 97 OSS/OSK, 101 S. Sixth Street, Bldg 225, Altus AFB, OK 73521 DSN 866-7422/1375/7490

HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION: 

### TERRAIN FOLLOWING OPERATIONS: 
Authorized entire route.

ROUTE WIDTH - 5 NM left widening to 7 NM left and 5 NM right of centerline from A to B; 7 NM left narrowing to 5 NM left and 5 NM right of centerline from B to C; 5 NM either side of centerline from C to E; 5 NM left and 4 NM right of centerline from E to F; 4 NM right widening to 5 NM right and 5 NM left of centerline from F to G; 5 NM either side of centerline from G to I.

Special Operating Procedures:

1. **From A to B**, avoid flight over the town of Shamrock, OK and when practicable avoid Haddock Airport and Shamrock Municipal Airport by 1500' AGL or 3 NM.
2. **From B to C**, when practicable avoid McLean-Gray Airport by 2 NM.
3. **From C to D**, avoid flight over the town of Quail, TX by 2 NM.
4. **At D**, when practicable avoid Memphis Municipal Airport by 1500' AGL or 3 NM.
5. **Contact Ft. Worth ARTCC on 133.5/350.35 at Point G.**
6. **At I**, avoid flight over the town of Chillicothe, TX.
8. Deconflict with: IR-105 (NAS Ft. Worth), VR-159, VR-1141, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route scheduling. Multiple Sheppard AFB crossing route conflict with IR-191 F through I. For day low levels on legs A, B, C and D, all aircraft will remain east of McLean-Hedley line (near Point C) and south of I-40 (south of the town of Shamrock, near Point B) in order to avoid the eastern and southern halves of the VR-1141/1142 corridor. The coordinates for this line are approximately N34-43.08 W100-35.68 straight north to N35-14.42 and straight east to W99-14.42.
9. **PMSV:** Altus AFB 239.8.
10. Use caution for uncharted airfield just prior to Point A, N34-58.50 W099-29.00.
11. Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within two minutes early to two minutes late.

FSS Within 100 NM Radius: 
FTW, SJT

**VR-196**

**ORIGINATING ACTIVITY:** 47 OSS/OSOR, 570 2nd Street, Ste. 6, Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 86 FTS/DOS, 307 2nd St, Laughlin AFB, TX 78843 DSN 732-5584, C830-298-5584.

Scheduling hrs, 0730-1630 Mon-Fri (excluding hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION: 

### Altitude Data: Pt Fac/Rad/Dist Lat/Long

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 AGL B 50 MSL to A</td>
<td>BFV 242/26</td>
<td>N35°03.70'</td>
<td>W99°41.70'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to B</td>
<td>BFV 267/51</td>
<td>N35°16.10'</td>
<td>W100°14.80'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to C</td>
<td>BFV 260/69</td>
<td>N35°07.50'</td>
<td>W100°36.60'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to D</td>
<td>CDS 334/22</td>
<td>N34°43.70'</td>
<td>W100°25.00'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to E</td>
<td>CDS 022/17</td>
<td>N34°36.70'</td>
<td>W100°06.50'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to F</td>
<td>CDS 076/13</td>
<td>N34°23.00'</td>
<td>W100°01.70'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to G</td>
<td>CDS 120/19</td>
<td>N34°10.00'</td>
<td>W100°00.00'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to H</td>
<td>LTS 201/38</td>
<td>N34°05.40'</td>
<td>W99°36.80'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to I</td>
<td>LTS 197/25</td>
<td>N34°16.20'</td>
<td>W99°28.00'</td>
</tr>
</tbody>
</table>
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route:
   (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
   (b) This route is covered by the following maps and charts:
       El Paso Sectional, US Low IFR Enroute L-6S, L-6N, TPC H-23A.
   (c) Alternate Entry: C and D.
   (d) Alternate Exit: D, E and F.

(2) Scheduling:
   (a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.
   (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, for the same type/planned ground speed, and a faster dissimilar aircraft will afford 35 minutes behind dissimilar slower aircraft.
   (c) When scheduling VR-196, block off VR-197 for the entire block period of 80 minutes; 40 minutes before and 40 minutes after your entry time.

(3) Restrictions:
   (a) For environmental reasons, this route may only be flown by T-1, T-38, and T-45 aircraft and T-6 for Annual Flight Evaluations.
   (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route.
   (c) Avoid flight within 1500 feet or 3NM of airport when practicable.

(4) Conflicts:
   (a) This route is reverse routing of VR-197.
   (b) Crosses IR-102 near Pt A, overlaps from B-C, crosses from D-E, and overlaps from F-G. IR-102 and IR-141 are inactive and unused UFN. Call 49 OSS/OSA, Holloman AFB, DSN 572-3536, C505-572-3536 to deconflict IR102 and IR-141.
   (c) Crosses IR-141 near A, overlaps from B-C, crosses from D-E and overlaps from F-G.
   (d) Overlaps IR-178 from E-F. Call 7 OSS/OSOR, Dyess AFB to deconflict IR-178; DSN 461-3665, C325-696-3665. Use caution for B-1 and B-52 aircraft operating on IR-178 T-U that will make a blind call on 255.4 when approaching T.
   (e) Cross IR-192 from F-G. Call 49 OSS/OSA, Holloman AFB, DSN 572-3536, C505-572-3536 to deconflict IR-192 and IR-194.
   (f) Cross IR-194 from F-G.

(5) Communications:
   (a) Call entry/exit on 255.4 and monitor while on the route.

(6) Noise Sensitive Areas:
   (a) Upon route exit at Point G, avoid Gaudalupe National Park by 2000' AGL (minimum). Plan to cross G at 9800' MSL.
   (b) Avoid the town of Alpine by 3 NM.

(7) The entire route is designated mountainous terrain.

FSS Within 100 NM Radius:

SJT

VR-197

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Ste. 6, Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 86 FTS/DOS, 307 2nd St, Laughlin AFB, TX 78843 DSN 732-5584, C830-298-5584.

Scheduling hrs, 0730-1630 Mon-Fri (excluding hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A SFL 058/15 N31°50.00' W104°49.00'
05 AGL B 98 MSL to B SFL 092/43 N31°34.00' W104°16.00'
05 AGL B 76 MSL to C FST 264/57 N31°02.00' W104°05.00'
05 AGL B 86 MSL to D FST 217/33 N30°35.00' W103°27.00'
05 AGL B 81 MSL to E FST 204/67 N30°02.00' W103°43.00'
05 AGL B 79 MSL to F FST 195/63 N30°00.00' W103°30.00'
05 AGL B 79 MSL to G FST 192/29 N30°00.00' W103°12.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route:
   (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
   (b) This route is covered by the following maps and charts:
       El Paso Sectional, US Low IFR Enroute L-6S, L-6N, TPC H-23A.
   (c) Alternate Entry: D and E.
   (d) Alternate Exit: B, C and D.

(2) Scheduling:
   (a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.
   (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, for the same type/planned ground speed, and a faster dissimilar aircraft will afford 35 minutes behind dissimilar slower aircraft.
   (c) When scheduling VR-197, block off VR-196 for the entire block period of 80 minutes; 40 minutes before and 40 minutes after your entry time.

(3) Restrictions:
   (a) For environmental reasons, this route may only be flown by T-1, T-38, and T-45 aircraft and T-6 for Annual Flight Evaluations.
   (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route.
   (c) Avoid flight within 1500 feet or 3NM of airport when practicable.

(4) Conflicts:
   (a) This route is reverse routing of VR-196.
(b) Cross IR-192 from F-G. Call 49 OSS/OSA, Holloman AFB, DSN 572-3536, C505-572-3536 to deconflict IR-192 and IR-194.
(c) Cross IR-194 between A-B.
(d) Overlaps IR-102 from A-B, crosses from C-D, and overlaps from E-F, and crosses near G. IR-102 and IR-141 are inactive and unused UFN. Call 49 OSS/OSA, Holloman AFB, DSN 572-3536, C505-572-3536 to deconflict IR-102 and IR-141.
(e) Overlaps IR-191 from A-B, crosses from C-D, overlaps from E-F, and crosses near G.
(f) Overlaps IR-178 from B-C. Call 7 OSS/OSOR, Dyess AFB to deconflict IR-178; DSN 461-3665, C325-696-3665. Use caution for B-1 and B-52 aircraft operating on IR-178 T-U that will make a blind call on 255.4 when approaching T.

(5) Communications:
(a) Call entry/exit on 255.4 and monitor while on the route.

(6) Noise sensitive areas:
(a) On the route entry at A, avoid Guadalupe National Park by 2000' AGL (minimum). If possible, climb to the top of the route to cross A at 9800' MSL.
(b) Avoid the town of Alpine by 3 NM radius.

(7) The entire route is designated mountainous terrain.

FSS Within 100 NM Radius:

VR-198


SCHEDULING ACTIVITY: 97 OSS/OSK, 101 S. Sixth St., Bldg 225, Altus AFB, OK 73521 DSN 866-7422/1375/7490 C580-481-7110/1375/7490

HOURS OF OPERATION: 0600-0300 local, Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
---|---|---|---
03 AGL B 40 MSL to A | LTS 189/14 | N34°26.40' W99°20.30' |
03 AGL B 40 MSL to B | LTS 236/16 | N34°32.00' W99°33.50' |
03 AGL B 40 MSL to C | CDS 022/17 | N34°36.70' W100°06.50' |
03 AGL B 40 MSL to D | CDS 334/22 | N34°43.70' W100°25.00' |
03 AGL B 50 MSL to E | PNH 072/50 | N35°22.90' W100°42.00' |
03 AGL B 50 MSL to F | MMB 199/49 | N35°37.30' W100°21.70' |
03 AGL B 50 MSL to G | MMB 185/44 | N35°38.00' W100°06.60' |
03 AGL B 50 MSL to H | MMB 166/44 | N35°36.50' W99°49.50' |
03 AGL B 40 MSL to I | BFV 286/29 | N35°24.50' W99°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to C; 5 NM either side of centerline from C to F; 5 NM left and 4 NM right of centerline from F to G; 5 NM either side of centerline from G to H; 5 NM left and 4 NM right narrowing to 3 NM right of centerline from H to I; 5 NM left and 3 NM right widening to 5 NM right of centerline from I to J; 5 NM either side of centerline from J to K.

Special Operating Procedures:
(1) This route is closed and is not authorized to schedule or fly due to not being surveyed or reviewed. Contact the originating activity for more information.
(2) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
(3) Primary Entry A; Alternate Entry C; Primary Exit K; Alternate Exit C and J.
(4) When practicable avoid flight over the towns of Hollis, OK; Eldorado, OK; Sayre, OK; and Quail, TX by 2NM.
(5) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed OK to Altus APP COM 353.7 using the phrase (callsign, Reed southbound to Sooner DZ, intentions to follow).
(6) When practicable avoid Oustee Airport, Hollis Airport, Memphis Municipal Airport, McLean-Gray Airport, and Sayre Airport by 1500' AGL or 3 NM.
(7) Contact Altus APP CON on 353.7 at J. Monitor 255.4 the entire route, except when making mandatory radio call to Altus APP.
(9) Deconflict with: IR-105 (NAS Fort Worth), VR-1141, VR-1142, (Sheppard AFB), with appropriate route schedulers. IR-172, IR-173, IR-182 and IR-183 (Vance AFB) cross VR-198 but are deconflicted by altitude (the top of the VR-198 block is below the IR hard altitude). The corridor of IR-145 (Vance AFB) overlaps the corridor of VR-198 Northeast of VR-198 Point H. Avoid the IR-145 corridor at all times. VR-1141/1142 crosses VR-198 near Points E and I. VR-162 crosses VR-198 on the B-C leg. IR-103 crosses VR-198 on the B-C leg and again on the J-K leg.
(10) PMSV: Altus AFB 239.8.
(11) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.
(12) Use Caution for uncharted airfield between A-B coordinates (N34-58.5 W99-29.0)

FSS Within 100 NM Radius:

SJT
VR ROUTES

VR-199


HOURS OF OPERATION: 0830-0230 local, Mon-Fri

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left narrowing to 3 NM left and 5 NM right of centerline from B to C; 3 NM left widening to 4 NM left and 5 NM right of centerline from C to D; 5 NM either side of centerline from D to E; 4 NM left and 5 NM right of centerline from E to F; 5 NM either side of centerline from F to I; 10 NM either side of centerline from I to J; 5 NM either side of centerline from J to K.

Special Operating Procedures:

(1) This route is closed and not authorized to schedule or fly due to not being surveyed or reviewed. Contact the originating activity for more information.

(2) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.

(3) Primary Entry A; Alternate Entry B and I; Primary Exit K; Alternate Exit I.

(4) When practicable avoid flight over towns of Hollis, OK; Eldorado, OK; Sayre, OK; and Quail, TX by 2NM.

(5) Maneuvering Area I to J; Aircraft may slow for airdrop at N34-1-W99-41, report commencement of airdrop run-in NLT 5 minutes prior to Altus APP CON 353.7 using the phrase (Callsign inbound to Sooner DZ, position relative Sooner DZ).

(6) When practicable avoid Olustee Airport, Hollis Airport, Memphis Municipal Airport, McLean-Gray Airport, and Sayre Airport 1500' AGL or 3NM.

(7) Contact Altus APP CON 353.7 10 NM west of J. Monitor 255.4 the entire route, except when making mandatory radio call to Altus APP.


(9) Deconflict with: IR-105 (NAS Fort Worth), VR-1141, VR-1142, (Sheppard AFB), IR-172, IR-173, IR-182, IR-183 (Vance AFB) cross VR-199 but are deconflicted by altitude (the top of VR-199 block is below the IR routes hard altitude). The corridor of IR-145 (Vance AFB) overlaps the corridor at all times. VR-1141/1142 crosses VR-199 near Point C and G. VR-162 crosses VR-199 on the I-J leg.

(10) PMSV: Altus AFB 239.8.

(11) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.

(12) Use Caution for uncharted airfield between J-K coordinates (N34-58.5 W99-29.0).

FSS Within 100 NM Radius:

FTW

VR-201

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

As assigned to A MVA 218/57 N38°01.00' W119°01.00'

02 AGL B 100 MSL to B MVA 239/58 N38°20.00' W119°13.00'

02 AGL B 120 MSL to C MVA 272/40 N38°47.00' W118°50.00'

02 AGL B 90 MSL to D HZN 176/14 N39°17.00' W119°04.00'

02 AGL B 90 MSL to E HZN 260/9 N39°32.00' W119°11.00'

02 AGL B 60 MSL to F HZN 346/11 N39°42.00' W118°59.00'

02 AGL B 60 MSL to G LLC 096/11 N40°03.50' W118°22.00'

3-42
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 6 NM either side of centerline from A to F; 2 NM either side of centerline from F to I.

Special Operating Procedures:
1. Alternate Exit: F, G and H.
2. Tie-in FSS: Rancho Murieta (RIU).
3. Reserving this route does not reserve the Ranch, Churchill or Carson MOA’s. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
4. Aircraft exiting F or I must reserve R-4813 airspace through the NAS Fallon Range Department.
5. Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
6. Avoid all towns and airports along route by 1500’ AGL or 3 NM.
7. Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
8. Remain at 1500’ AGL within 3 NM of Mono Lake at A. Do not perform aerobatic maneuvers over the water.
9. Between A and B, avoid overflight of the historic town of Bodie at N38-12-40 W119-00-40 by at least 3 NM.
10. Near B, avoid the town and airport of Bridgeport.
11. Between B and C, avoid private airfield at N38-37-00 W119-00-00.
12. Caution: C-5/C-141 aircraft flying between 500’ to 1000’ AGL on crossing route near C.
13. Caution: power lines paralleling route between C and D.
14. Between C and D, avoid the town of Schurz by 5 NM laterally.
15. Between C and D, fly west of centerline to avoid the Ranch and Churchill MOA’s unless prior entry has been scheduled. However, avoid the town and airport of Yerington to the west.
18. Caution: VFR traffic crossing route at 8000’ around E.
19. From D to 5 NM southwest of F, maintain 6000’ MSL and route centerline to avoid the extremely noise sensitive areas of Silver Springs and Fernley west of route centerline, and Hazen to the east.

FSS Within 100 NM Radius:
MCC, OAK, RNO, RIU

VR-202

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A ENI 276/50 N39°22.00' W124°16.00'
02 AGL B 15 AGL to B ENI 310/41 N39°37.00' W123°46.00'
05 AGL B 15 AGL to C ENI 330/37 N39°39.00' W123°28.00'
05 AGL B 30 AGL to D RBL 210/28 N39°47.00' W122°41.00'
30 AGL B 80 MSL to E RBL 112/48 N39°35.00' W121°27.00'
02 AGL B 30 AGL to F FMG 284/45 N39°54.00' W120°30.00'
02 AGL B 15 AGL to G LLC 260/49 N40°12.50' W119°38.30'
02 AGL B 15 AGL to H LLC 178/15 N39°53.00' W118°39.50'
02 AGL B 15 AGL to I LLC 096/11 N40°03.50' W118°22.00'
02 AGL B 15 AGL to J LLC 092/21 N40°01.00' W118°09.00'
02 AGL B 15 AGL to K LLC 110/19 N39°56.00' W118°14.50'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
1. Alternate Entry: B and E.
4. Reserving this route does not reserve the Carson MOA between H and J. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
5. Reserving this route does not authorize access to the China MOA between E and F. See AP/1A for MOA scheduling if unable to remain below the China MOA.
6. Aircraft exiting J or K must reserve Carson MOA and R-4813 airspace through the NAS Fallon Range Department.
7. Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
(8) Avoid all towns and airports along route by 1500' AGL or 3 NM.
(9) Aircraft flying this route at night may be operating without flashting collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
(10) Avoid overflight of Laytonville and Dos Rios near C.
(11) Fly south of route centerline between D and E to avoid the town of Orland and the airports of Haigh and Acrewood.
(12) Remain alert for C-5/C-141 aircraft flying at 1000' AGL on crossing routes near D.
(13) Fly south of centerline approaching F to avoid the town of Cromberg by at least 2 NM.
(14) Between F and G, avoid overflight of ranches located between N40-01-00 W120-13-00 and N40-06-00 W119-54-00.

**FSS Within 100 NM Radius:**
ACV, MCC, OAK, RNO, RIU

**VR-208**

**ORIGINATING ACTIVITY:** Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 0800-1630 local

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>OAL 180/45</td>
<td>N37°17.00' W118°03.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 130 MSL to B</td>
<td>OAL 142/36</td>
<td>N37°27.00' W117°30.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 130 MSL to C</td>
<td>TPH 200/26</td>
<td>N37°41.50' W117°21.50'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 130 MSL to D</td>
<td>TPH 312/31</td>
<td>N38°28.00' W117°22.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 100 MSL to E</td>
<td>MVA 039/48</td>
<td>N39°01.00' W117°11.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 120 MSL to F</td>
<td>MVA 028/71</td>
<td>N39°24.00' W116°57.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 120 MSL to G</td>
<td>HZN 087/53</td>
<td>N39°18.00' W117°53.00'</td>
<td></td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 10 NM either side of centerline from A to B; 5 NM either side of centerline from B to C; 3 NM either side of centerline from C to E; 10 NM either side of centerline from E to G.

**Special Operating Procedures:**
(1) Alternate Entry: C.
(2) Tie-in FSS: Rancho Murieta (RIU).
(3) Reserving this route does not reserve the Austin or Gabbs MOA’s between E and G. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.

(4) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
(5) Avoid all towns and airports along route by 1500' AGL or 3 NM.
(6) Aircraft flying this route at night may be operating without flashting collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
(7) Maintain 2000' AGL until over Deep Springs Lake at A.
(8) Between E and F, avoid the town of Kingston located at N39-12-06 W117-05-00 by 3000' AGL or 5 NM.
(9) Remain on route centerline at F, do not early turn. Avoid town of Austin at N39-29-30 W117-04-00 and airport at N39-28-05 W117-11-40 by 5 NM.
(10) Caution: opposite flow traffic on VR-1253 at F.
(11) Caution: from F to G, VFR traffic between 2000' AGL and 10,500' MSL in Fallon Range VFR corridor above US 50.
(12) Fly south of centerline to avoid ranches 10-15 NM west of F on route centerline.
(14) Avoid town of Cold Springs at N39-25-00 W117-52-00 north of G by 3000' AGL or 5 NM.
(15) Maintain vigilance for VFR traffic when exiting route at G. Remain below 2000' AGL in vicinity of VFR corridor.
(16) Avoid unauthorized entry into R-4816S or R-4804 vicinity G.

**FSS Within 100 NM Radius:**
RNO

**VR-209**

**ORIGINATING ACTIVITY:** Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Daylight hours, OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>TPH 074/32</td>
<td>N38°01.00' W116°22.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to B</td>
<td>TPH 083/61</td>
<td>N37°51.00' W115°46.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to C</td>
<td>MMM 323/67</td>
<td>N37°48.50' W114°47.30'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to D</td>
<td>MMM 253/11</td>
<td>N36°46.00' W114°30.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to E</td>
<td>BCE 247/48</td>
<td>N37°34.00' W113°18.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to F</td>
<td>BCE 232/24</td>
<td>N37°32.00' W112°46.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to G</td>
<td>MLF 090/24</td>
<td>N38°15.00' W112°32.00'</td>
<td></td>
</tr>
</tbody>
</table>
TERRAIN FOLLOWING OPERATIONS: Authored entire route, except between Points J to K.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: D and H.
(2) Alternate Exit: D, H, J and L.
(3) Tie-in FSS: Rancho Murieta (RIU).
(4) Avoid all towns and airports along route by 1500' AGL or 3 NM.
(5) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
(6) Reserving this route does not reserve Nellis AFB Range airspace or the Desert or Reveille MOA’s. Contact 99th Range Management Office, Nellis AFB, at DSN 348-4710, C702-652-4710 for range scheduling. Schedule as far in advance as possible. Contact Nellis Control on 343.0 (P), 392.15 (S) for clearance into Nellis AFB airspace.
(7) Reserving this route does not reserve the Sevier A or B MOA’s. Contact the 388th RANS at DSN 777-4401, C810-777-4401 for airspace entry authorization prior to flight. Contact Clover Control on 301.7 or 134.1 prior to Sevier entry. If unable contact, maintain MARSA, and broadcast route number, crossing time, and altitude in the blind.
(8) Reserving this route does not reserve NAS Fallon Range airspace. Contact NAS Fallon Range Department, DSN 890-2416/2418, C775-426-2416/2418 for airspace entry authorization prior to flight. Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
(9) Caution: Watch for power lines between D and E.
(10) Avoid Pine Valley Mountain Wilderness Area between D and E by 3 NM.
(11) Avoid Zion National Park between E and F by 3 NM.
(12) Avoid Cedar Breaks National Monument between F and G by 3 NM.
(13) Avoid Great Basin National Park between J and K; maintain 3000’ AGL.
(14) Remain west of the town of Carvers between M and N.


FSS Within 100 NM Radius:
CDC, RNO

VR-222


SCHEDULING ACTIVITY: Same as Originating Activity

ROUTE DESCRIPTION:

ROUTE WIDTH - 5 NM either side of centerline from A to D; 5 NM left and 3 NM right of centerline from D to E; 5 NM either side of centerline from E to G.

Special Operating Procedures:
(1) Operations within R-4806E and R-4806W, R-4809, or Desert MOA will be conducted IAW AFI 13-212, Nellis AFB Sup 1.
(2) Numerous route confictions with MTR crossings.
(3) Avoid Death Valley Junction/Armagosa, N36-18.0 W116-25.0 by 3 NM/1500’ AGL.
(4) Avoid Ash Meadows National Wildlife Refuse by 2 NM or 2000’ AGL.
VR ROUTES

(5) Avoid ranch, N36-34.21 W116-35.0, by 1500' AGL and 1 NM.
(6) Between segments E and F, 150' tower N36-34.3 W116-27.4.
(7) Multiple power lines, 75' to 100' AGL throughout the MTR.
(9) Mill tower on mine site N35-23.0 W115-31.0.
(10) Multiple towers 200' on hill in draw N34-54.1 W115-03.6.
(11) Radio tower 30' to 50' on small ranch and landing strip N34-42.0 W114-47.0.
(12) Multiple towers 150' N35-01.3 W115-08.0.
(13) Three towers N35-29.15 W115-33.58.
(14) Tower N36-07.9 W116-03.4.
(15) Antenna on peak 30' to 50' N36-37.7 W116-19.6.
(17) Tower 210' N39-09.55 W115-54.09.
(20) Tower 354' N34-56.09 W115-10.48.
(21) Tower 300' N34-51.84 W114-52.65.
(22) Microwave tower 150' N35-22.81 W115-08.71.
(23) Aircrews who suspect they have inadvertently dropped ordinance/objects in southern Nevada will immediately notify 57 WG/SE, DSN 682-6065, C702-652-6065.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 4 NM either side of centerline from C to D; 3 NM either side of centerline from D to F; 4 NM either side of centerline from F to G.

Special Operating Procedures:
(1) Non S6 FW users requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity.
(2) Contact Originating Activity for route brief.
(3) Contact Prescott FSS prior to entry 255.4.
(4) Primary Entry: A. Alternate Entry: B, C, D and E.
(5) Primary Exit: G. Alternate Exit: B, C, D, E and F.
(6) Scheduling this route does not automatically grant permission to use R-2301E, R-2304 or R-2305.
(8) Extremely Noise Sensitive Area: (Tohono O'Odham Reservation) From 23 NM past A to 11 NM past F, avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally and 3000' AGL vertically. Avoid VAYA CHIN (1 NM past Point E) horizontally by a minimum of 2 NM.
(9) Avoid overflight of all charted/uncontrolled airports by at least 1500' vertically and/or 3 NM horizontally.
(10) Make LATN location advisory call at each ALPHA Point on 379.4 (example; Call Sign, VR-223, A).
(11) Route crosses numerous other MTR’s and Victor Airways as depicted on the Phoenix Sectional Charts. See and avoid is paramount:
   (a) 1 NM past A: Crosses VR-242/VR-268.
   (b) 9 NM past B: Crosses VR-241.
   (c) At A, crosses VR-267/VR-268/VR-269.
   (d) Points C-D: Coincident with VR-239/VR-244.
   (f) Point F: Crosses VR-241.
   (g) 4NM past A, crosses V94.
   (h) 14NM past A, crosses V66.
(12) CAUTION:
   (a) There are numerous high tension powerlines located along this route. Lightning protection wires run between the tops of all powerline towers and are significantly higher than the thicker more visible powerlines. The lightning protection wires are difficult to see and can be in excess of 400' AGL in valleys and next to ridges.
   (b) 11.5 NM past A, 254' tower 2.3 NM left of centerline.
   (c) Flares not authorized on this route.

FSS Within 100 NM Radius: RNO

VR-223


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Other times by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A PXR 211/35 N33°00.00' W112°27.00'
05 AGL B 60 MSL to B TUS 281/70 N32°32.50' W112°11.00'
05 AGL B 80 MSL to C TUS 276/47 N32°20.00' W111°48.00'
05 AGL B 80 MSL to D TUS 253/62 N32°00.00' W112°08.00'
05 AGL B 90 MSL to E TFD 204/41 N32°20.00' W112°23.00'
05 AGL B 90 MSL to F TFD 211/36 N32°27.00' W112°23.50'
05 AGL B 90 MSL to G TFD 238/35 N32°41.00' W112°33.00'

FSS Within 100 NM Radius: PRC

VR-231


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Other times by NOTAM
ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>PXR 272/39</td>
<td>N33°35.00' W112°43.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>B</td>
<td>BXX 277/42</td>
<td>N33°42.00' W113°37.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>C</td>
<td>GBN 293/57</td>
<td>N33°31.80' W113°34.50'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to</td>
<td>D</td>
<td>GBN 259/38</td>
<td>N32°59.50' W113°25.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>E</td>
<td>GBN 229/36</td>
<td>N32°41.00' W113°18.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 4 NM right of centerline from B to C; 14 NM left and 6 NM right of centerline from C to D; 8 NM left and 6 NM right of centerline from D to E.

Special Operating Procedures:

1. Non 56 FW users requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity.
2. When not scheduled in conjunction with BMGR/Sells MOA Mission, aircraft must exit by Point D.
3. Contact Originating Activity for route brief.
4. Contact Prescott FSS prior to entry on 255.4.
5. Primary Entry: A. Alternate Entry: B, C and D.
6. Primary Exit: E. Alternate Exit: B, C and D.
7. Scheduling this route does not automatically grant permission to use R-2301E, R-2304 or R-2305.
9. Avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally.
10. Avoid overflights of all charted/uncontrolled airfields by a minimum of 1500' vertically and/or 3 NM horizontally.
   b. 7NM past B, uncharted airstrip (on centerline).
   c. 1.8NM prior to D, 1NM left of centerline, uncharted airstrip (N33-01.34 W113-24.52).
11. 5 NM prior to C, prior to entering the Hope Corridor, make advisory call on 255.4 (example; call sign, VR-231, Hope Low Level Corridor).
12. Route crosses numerous other MTRs and Victor Airways as depicted on the Phoenix Sectional Charts. See and avoid is paramount.
   a. C-E: Coincident with VR-243/VR-245 (Hope Corridor).
   c. 1NM past C, crosses V16.
   d. 11NM past C, crosses V94.
   e. 8NM past D, crosses V66.
13. CAUTION:
   a. There are numerous high tension powerlines located along this route. Lightning protection wires run between the tops of all powerline towers and are significantly higher than the thicker more visible powerlines. The lightning protection wires are difficult to see and can be in excess of 400' AGL in valleys and next to ridges.

(b) Point A to 17NM past A remain at or above 300' AGL, high tension powerlines and extensive flight activity;
(c) 40 NM past A, houses/farms 1 NM left of centerline;
(d) 5 NM past B, cross Interstate 10 at a minimum of 500' AGL;
(e) 5 1/2NM past B, 250' microwave tower 1/2 NM right of centerline used by DOI.
(f) High tension power line at C and D;
(g) 9NM past D, cross Interstate 8 at a minimum of 500' AGL;
(h) Flares not authorized on this route.

FSS Within 100 NM Radius:

PRC

VR-239


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Other times by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>PXR 319/32</td>
<td>N33°54.00' W112°17.00'</td>
</tr>
<tr>
<td>40 MSL B 75 MSL to</td>
<td>B</td>
<td>PXR 346/38</td>
<td>N34°04.00' W112°00.00'</td>
</tr>
<tr>
<td>03 AGL B 95 MSL to</td>
<td>C</td>
<td>PXR 022/46</td>
<td>N34°04.00' W111°27.00'</td>
</tr>
<tr>
<td>03 AGL B 95 MSL to</td>
<td>D</td>
<td>PXR 046/66</td>
<td>N34°00.30' W110°51.00'</td>
</tr>
<tr>
<td>03 AGL B 90 MSL to</td>
<td>E</td>
<td>PXR 081/88</td>
<td>N33°21.00' W110°13.00'</td>
</tr>
<tr>
<td>03 AGL B 90 MSL to</td>
<td>F</td>
<td>TUS 346/41</td>
<td>N32°47.00' W110°57.00'</td>
</tr>
<tr>
<td>03 AGL B 70 AGL to</td>
<td>G</td>
<td>TUS 311/41</td>
<td>N32°38.00' W111°24.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>H</td>
<td>TFD 180/54</td>
<td>N32°00.00' W112°08.00'</td>
</tr>
<tr>
<td>05 AGL B 90 MSL to</td>
<td>I</td>
<td>TFD 204/41</td>
<td>N32°20.00' W112°23.30'</td>
</tr>
<tr>
<td>05 AGL B 90 MSL to</td>
<td>J</td>
<td>TFD 211/36</td>
<td>N32°27.00' W112°23.50'</td>
</tr>
<tr>
<td>05 AGL B 90 MSL to</td>
<td>K</td>
<td>TFD 238/35</td>
<td>N32°41.00' W112°33.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to K.

ROUTE WIDTH - 5 NM either side of centerline from A to H; 3 NM either side of centerline from H to J; 4 NM either side of centerline from J to K.
Special Operating Procedures:
(1) Non 56 FW users requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity.
(2) When not scheduled in conjunction with BMGR/Sells MOA Mission, aircraft must exit at G.
(3) Contact Originating Activity for route brief.
(4) Contact Prescott FSS prior to entry on 255.4.
(5) Primary Entry: A. Alternate Entry: B, C and F.
(7) Scheduling this route does not automatically grant permission to use R-2301E, R-2304, or R-2305.
(8) When planning use of Luke SUA, report low-level exit to Scheduling this route does not automatically grant permission to use R-2301E, R-2304, or R-2305.
(9) Avoid overflight of all towns/settlements/populated areas by a minimum of 1NM horizontally.
(10) Avoid overflight of all charted/uncontrolled airports by a minimum of 1500’ vertically and/or 3 NM horizontally.
(11) From Point E until range entry, make LATN advisory call at 264.125.
(12) Noise sensitive areas:
   (a) 10.5NM Southwest of E, hospital complex (N33-17.90 W110-25.09).
   (b) 18NM past E, avoid Coolidge Dam by 1NM to the left.
   (c) 15NM past G to 11NM past J, extremely noise sensitive area (Tohono O’Odham Reservation) avoid overflight of all towns, settlements/populated areas by a minimum of 1NM horizontally and 3000’ AGL vertically. Avoid VIYA CHIN (1NM past I) horizontally by a minimum of 2NM.
(13) Environmentally sensitive areas:
   (a) There are numerous high tension powerlines located along this route. Lightning protection wires run between the tops of all powerline towers are are significantly higher than the thicker more visible powerlines. The lightning protection wires are difficult to see and can be in excess of 400’ AGL in valleys and next to ridges.
   (b) Powerlines cross 7 NM and 9 NM past A, 7 NM past B, 5 NM past C, 3 NM past D, 36 NM and 47 NM past E, 8 NM past F, 2 NM prior to G, 2 NM and 18 NM past G;
   (c) 31NM past E, 231’ tower 1 1/2 NM left of centerline;
   (d) 2.8NM past D, tower located 2.4NM left of centerline;
   (e) 1NM left of F, 334’ tower;
   (f) 35NM past E, 1000’ smokestack and town of Winkleman, 2NM right of centerline.
(14) Airports along route:
   (a) San Carlos airport (8NM prior to E, 8NM right of centerline). Extensive traffic during fire season (Apr-Sep).
   (b) From 3NM prior to I-10 to 4NM past I-10, maintain a minimum altitude of 2600’ AGL. Extensive helicopter activity between Picacho Field (N32-39.80 W111-29.27) and Silver Bell AAF.
(15) Class B airspace:
   (a) Start point A is 4NM west of PHX Class B airspace, use extreme caution for commercial airliners from A-B.

VR ROUTES

17) Route crosses numerous other MTR’s as depicted on the Phoenix Sectional Charts. See and avoid is paramount. Use caution for extensive glider and general aviation activity in the vicinity of Lake Pleasant:
   (a) 15 NM past A: Crosses VR-241/VR-244.
   (b) 29 NM past E: Crosses VR-267/VR-268/VR-269.
   (c) Point F crosses VR-241.
   (d) Points F-H: Coincident with VR-244.
   (e) 2 NM past G: Crosses VR-241.
   (f) 27 NM past G to H: Coincident with VR-223.
   (g) H-K: Coincident with VR-223/VR-259.
   (h) J crosses VR-241.
   (i) Crosses numerous Victor airways at H, 11NM past H, 8NM past I.

18) CAUTION:
   (a) There are numerous high tension powerlines located along this route. Lightning protection wires run between the tops of all powerline towers are are significantly higher than the thicker more visible powerlines. The lightning protection wires are difficult to see and can be in excess of 400’ AGL in valleys and next to ridges.
   (b) Powerlines cross 7 NM and 9 NM past A, 7 NM past B, 5 NM past C, 3 NM past D, 36 NM and 47 NM past E, 8 NM past F, 2 NM prior to G, 2 NM and 18 NM past G;
   (c) 31NM past E, 231’ tower 1 1/2 NM left of centerline;
   (d) 2.8NM past D, tower located 2.4NM left of centerline;
   (e) 1NM left of F, 334’ tower;
   (f) 35NM past E, 1000’ smokestack and town of Winkleman, 2NM right of centerline.
   (g) Flares not authorized on this route.

FSS Within 100 NM Radius:
PRC

VR-241

 ORIGINATING ACTIVITY: 56 RMO/ASM, 7101 Jerstad,
Luke AFB, AZ 85309-1647 DSN 896-5855,
C623-856-5856/5856/3040.

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7101 Jerstad,

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Other times by NOTAM

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  LUF 336/25  N33°57.00’
W112°28.50’
03 AGL B 90 MSL to  B  LUF 356/38  N34°10.00’
W112°16.00’
03 AGL B 90 MSL to  C  IWA 335/39  N33°56.50’
W111°49.00’
03 AGL B 90 MSL to  D  IWA 359/34  N33°51.00’
W111°30.50’
03 AGL B 90 MSL to  E  IWA 035/30  N33°38.00’
W111°12.50’

3-48
03 AGL B 90 MSL to F IWA 064/33 N33°25.50' W111°01.00'
03 AGL B 95 MSL to G IWA 091/32 N33°10.50' W111°02.00'
03 AGL B 75 MSL to H TFD 085/48 N32°47.00' W111°58.00'
03 AGL B 75 MSL to I GBN 088/66 N32°43.00' W111°24.00'
03 AGL B 65 MSL to J GBN 103/67 N32°27.00' W111°29.50'
05 AGL B 65 MSL to K GBN 141/34 N32°26.50' W112°23.50'

(13) Environmentally sensitive areas:
- Following flight restrictions apply from 1 Dec to 15 Jul:
  - 4 NM to 7 NM past C, fly right of centerline or maintain at or above 2000' AGL.
  - 15 NM past D to E, remain left of centerline or maintain at or above 2000' AGL.

(14) Airports along route:
- (a) Pinal Airpark (12NM past I and 8NM left of centerline), extensive flight and parachute activity. Use caution.
- (b) El Tiro Airport (5NM left of centerline at I), soaring and parachute activity. Use caution.
- (c) Silver Bell AAF (3NM past J and 1.5NM left of centerline) extensive helicopter activity.
- (d) From I (3NM prior to I-10) to 4NM past I-10, maintain a minimum altitude of 2600' AGL. Extensive helicopter activity between Picacho Field (N32-39.80 W111-29.27) and Silver Bell AAF.

(5) Primary Entry: A. Alternate Entry B, C, D, E, F, G, H, I and J.
(6) Contact Prescott FSS prior to entry 255.4.
(7) Scheduling this route does not automatically grant permission to use R-2301E, R-2304 or R-2305.
(9) Avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally.
(10) Avoid overflight of all charted/uncontrolled airports by at least 1500' vertically and/or 3 NM horizontally.
(11) From Point G until range entry make a LATN advisory call at or above 2000' AGL.
(12) Noise sensitive areas:
  - (a) 4 NM left of E, avoid overflight of bridge north of Roosevelt Dam by 1000' vertically and/or 2 NM.
  - (b) 2-3 NM past Point F, numerous homes left of centerline, fly right of centerline from 1-4 NM past F.
  - (c) Extremely noise sensitive area (Tohono O’Odham Reservation) avoid overflight of all towns, settlements/populated areas by a minimum of 1 NM horizontally and 3000' AGL vertically. 7 NM prior to K (2.5 NM right of centerline), avoid overflight of town of Ventana.
  - (d) 5 NM east of Point E avoid the Tonto National Monument (N33-38.41 W111-06.46) by 1 NM laterally or 2,000' vertically.
  - (e) 5 NM past D to E, remain left of centerline or maintain at or above 2000' AGL.
VR ROUTES

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Other times by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>LUF 336/25</td>
<td>N33°57.00' W112°28.50'</td>
</tr>
<tr>
<td>03 AGL B 90 MSL to</td>
<td>B</td>
<td>DRK 219/18</td>
<td>N34°31.50' W112°46.00'</td>
</tr>
<tr>
<td>03 AGL B 85 MSL to</td>
<td>C</td>
<td>BKX 323/63</td>
<td>N34°29.00' W113°07.50'</td>
</tr>
<tr>
<td>03 AGL B 65 MSL to</td>
<td>D</td>
<td>BKX 319/47</td>
<td>N34°09.50' W113°15.00'</td>
</tr>
<tr>
<td>03 AGL B 65 MSL to</td>
<td>E</td>
<td>BKX 278/54</td>
<td>N34°47.50' W113°49.50'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>F</td>
<td>GBN 312/24</td>
<td>N33°17.00' W112°56.00'</td>
</tr>
<tr>
<td>03 AGL B 45 MSL to</td>
<td>G</td>
<td>GBN 063/14</td>
<td>N33°00.50' W112°24.50'</td>
</tr>
<tr>
<td>03 AGL B 55 MSL to</td>
<td>H</td>
<td>GBN 155/15</td>
<td>N32°43.00' W112°37.00'</td>
</tr>
<tr>
<td>Alternate Entry:</td>
<td>AA</td>
<td>PXR 320/48</td>
<td>N34°08.00' W112°25.50'</td>
</tr>
<tr>
<td>03 AGL B 90 MSL to</td>
<td>B1</td>
<td>DRK 219/18</td>
<td>N34°31.50' W112°46.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

1. Non 56 FW users requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity.
2. When not scheduled in conjunction with BMGR Mission, aircraft must exit at Point G.
3. Contact Originating Activity for route briefing.
4. Contact Prescott FSS prior to entry (UHF 255.4).
5. Primary Entry: A. Alternate Entry: AA, B, C, D, E, F, G.
7. Scheduling this route does not automatically grant permission to use R-2301E, R-2304 or R-2305.
9. Avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally.
10. Avoid overflight of all charted/uncontrolled airports by at least 1500’ vertically and/or 3 NM horizontally.
11. Noise sensitive areas:
   a. A to B avoid Peeples Valley by 2 NM horizontally or 1000’ vertically.
   b. A to B avoid the towns of Kirtland Junction and Kirtland by 1 NM horizontally or 1000’ vertically.
   c. Avoid the town of Hope, 7 NM past E by at least 1 NM horizontally.
12. Numerous airports along route:
   a. Cooper Ranch Airport (16 NM past A, 4 NM right of centerline).
   b. Quarter Circle J/S Airport (36 NM past A, 4 NM right of centerline).
   c. Bagdad Airport (7 NM right of C).
   d. Utting Siding Airport (4 NM right of Point E).


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Other times by NOTAM.

CAUTION:

1. There are numerous high tension powerlines located along this route. Lightning protection wires run between the tops of all powerline towers and are significantly higher than the thicker more visible powerlines. The lightning protection wires are difficult to see and can be in excess of 400’ AGL in valleys and next to ridges.
2. G to H, extensive helicopter operations 300’ AGL and below.
3. Cross Interstate 10 (22 NM past E) at a minimum of 500’ AGL.
4. Cross Interstate 8 (8 NM past G) at a minimum of 500’ AGL.
5. Uncharted tower on McCloud Mt., 11 NM past B, 4 NM left of centerline (N34-25.71 W112-57.78).
6. 6 NM past C, tower (est. 300’) 2 NM right of centerline.
7. 26 NM past E, 240’ tower 3 NM left of centerline.
8. Flares not authorized on this route.

FSS Within 100 NM Radius:
PRC, RNO

VR-243
ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>LUF 336/25</td>
<td>N33°57.00' W112°28.50'</td>
</tr>
<tr>
<td>03 AGL B 95 MSL to</td>
<td>B</td>
<td>DRK 159/28</td>
<td>N34°14.00' W112°24.50'</td>
</tr>
<tr>
<td>03 AGL B 95 MSL to</td>
<td>C</td>
<td>DRK 212/30</td>
<td>N34°21.00' W112°55.00'</td>
</tr>
<tr>
<td>03 AGL B 90 MSL to</td>
<td>D</td>
<td>DRK 281/34</td>
<td>N34°56.50' W113°06.50'</td>
</tr>
<tr>
<td>03 AGL B 90 MSL to</td>
<td>E</td>
<td>EED 042/34</td>
<td>N35°04.50' W113°54.00'</td>
</tr>
<tr>
<td>03 AGL B 90 MSL to</td>
<td>F</td>
<td>EED 092/35</td>
<td>N34°35.50' W113°47.50'</td>
</tr>
<tr>
<td>03 AGL B 65 MSL to</td>
<td>G</td>
<td>BXK 276/52</td>
<td>N33°45.00' W113°47.50'</td>
</tr>
<tr>
<td>03 AGL B 65 MSL to</td>
<td>H</td>
<td>GBN 293/57</td>
<td>N33°31.80' W113°34.50'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>I</td>
<td>GBN 259/38</td>
<td>N32°59.50' W113°25.00'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>J</td>
<td>GBN 229/36</td>
<td>N32°41.00' W113°18.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to H; 14 NM left and 6 NM right of centerline from H to I; 8 NM left and 6 NM right of centerline from I to J.

Special Operating Procedures:

1. Non 56 FW users requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity.
2. When not scheduled in conjunction with BMGR/SELLS MOA mission, aircraft must exit by G.
3. Contact Prescott FSS prior to entry 255.4.
4. Contact Originating Activity for route brief.
5. Primary Entry: A. Alternate Entry: B, C, D, E, F, G and H.
8. Avoid overlooking of all towns/settlements/populated areas by a minimum of 1 NM horizontally.
9. Avoid overlook of all charted/uncontrolled airports by a minimum of 1500' vertically and/or 3 NM horizontally.
10. Avoid overlap of all charted/uncontrolled airports by a minimum of 1500' vertically and/or 3 NM horizontally.
11. Noise sensitive areas:
   a. 15 NM past B, 1 NM left of centerline, avoid Peeples Valley by 2 NM horizontally or 1000' vertically.
   b. 2 NM past F, 2 NM left of centerline.
   c. 25 NM past F, 2 NM right of centerline, avoid the Swansea Historical Site, avoid by a minimum of 1 NM horizontally.
   d. 4 NM past G, 2 NM left of centerline (town of Hope), avoid by a minimum of 1 NM horizontally.
12. Environmentally sensitive area:
   Following flight restrictions apply from 1 Feb to 31 Aug:
   a. 5 NM prior to B until B, remain at or above 500' AGL.
13. Airports along route:
   a. Bagdad Airport (18 NM past C, 7 NM left of centerline).

(b) Ford Motor Airport (12 NM past E, 9 NM right of centerline).

14. Numerous uncharted strips along route:
   a. 6 NM past B, 1 NM left of centerline.
   b. 11 NM past C on centerline.
   c. 6 NM prior to E.
   d. 21 NM past E, 4 NM right of centerline.
   e. 7 NM past F, 3 NM left and right of centerline.
   f. 34 NM past F.
   g. 1 NM prior to G.
   h. 18 NM past D.

15. Start point A is 14 NM west of PHX Class B airspace, use extreme caution for commercial airliners from A-B and extensive glider activity west of Lake Pleasant.

16. Prior to entering the Hope Corridor (5 NM prior to C), make advisory call on 255.4 (example: Call Sign, VR-243, Hope Corridor).

17. Route crosses numerous other MTRs as depicted on the Phoenix Sectional Charts. See and avoid is paramount.
   a. 8 NM past A: Crosses VR-245.
   b. 8 NM past B: Crosses VR-245.
   c. 11 NM past B: Crosses VR-242.
   d. 22 NM past B: Crosses IR-250.
   e. 23 NM past B: Crosses IR-254.
   f. 4 NM past C: Crosses VR-245.
   g. 9 NM past C: Crosses IR-254/VR-242.
   h. 16 NM past C: Coincident with VR-1268/IR-214 to Point D.
   i. 29 NM past C: Crosses IR-254.
   j. 2 NM past E to 25 NM past E: Crosses IR-213/IR-214/VR-1268.
   k. 3 NM past F: Crosses VR-299.
   l. 7 NM past F: Crosses IR-213/IR-214.
   m. 15 NM past F: Crosses VR-299.
   o. 45 NM past F: Crosses VR-242.
   q. At G: Crosses VR-242/IR-250.
   r. 3 NM past G: Crosses VR-1267A.
   s. 7 NM past G: Crosses VR-1267/VR-1267A/VR-1268.
   u. From H-J: Coincident with VR-231/VR-245 (Hope Corridor).
   v. Crosses numerous Victor airways at H, 11 NM past H, 8 NM past I.

18. CAUTION:
   a. There are numerous high tension powerlines located along this route. Lightning protection wires run between the tops of all powerline towers and are significantly higher than the thicker more visible powerlines. The lightning protection wires are difficult to see and can be in excess of 400' AGL in valleys and next to ridges.
   b. High tension powerlines cross 15 NM past B, 15 NM past C, 29 NM past D, 12 NM past F, 33 NM past F, at G, at H, and at I.
   c. At E, numerous uncharted antennas (100' AGL).
   d. Uncharted tower on McCloud Mt., 5 NM past C, 1 NM left of centerline (N34-25.71 W112-57.78).
   e. Tower 6.6 NM past G, 3.5 NM right of centerline.
   f. 10 NM past G, cross Interstate 10 at a minimum of 500' AGL.
   g. 9 NM past I, cross Interstate 8 at a minimum of 500' AGL.
   h. Flares not authorized on this route.
VR ROUTES

FSS Within 100 NM Radius:
PRC

VR-244


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Other times by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 3 NM right and 5 NM left of centerline from C to D; 5 NM right and 4 NM left of centerline from D to E; 2 NM right and 4 NM left of centerline from E to F; 2 NM right and 5 NM left of centerline from F to G; 3 NM right and 2 NM left of centerline from G to H; 3 NM right and 4 NM left of centerline from H to I; 3 NM right and 2 NM left of centerline from I to J; 2 NM right and 2 NM left of centerline from J to L; 2 NM right and 3 NM left of centerline from L to M.

Special Operating Procedures:

(1) Non 56 FW users requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity.

(2) Use of this route must be conjunction with BMGR/SELLS MOA Mission.

(3) Contact Originating Activity for route brief.

(4) Contact Prescott FSS prior to entry on 255.4.

(5) Primary Entry: A. Alternate Entry: B, C, H, I, K.

(6) Primary Exit: M. Alternate Exit: J, K, L.

(7) Scheduling this route does not automatically grant permission to use R-2301E, R-2304 or R-2305.


(9) Avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally.

(10) Avoid overflight of all charted/uncontrolled airports by at least 1500' vertically and/or 3 NM horizontally.

(11) From Point H until range entry, make a location advisory call at each alpha Point on 379.4 (example: Call Sign, VR-244H).

(12) Noise sensitive areas:

(a) 4 NM left of E, avoid overflight of bridge north of Roosevelt Dam, avoid by 1000' vertically and/or 2 NM.

(b) 2-3 NM past F, numerous homes left of centerline, fly right of centerline from 1-4 NM past F.

(c) 15 NM past I to L, extremely noise sensitive area (Tohono O’Odham Reservation) maintain a minimum of 500' AGL and avoid overflight of all towns, settlements/populated areas by a minimum of 1 NM horizontally and 3000' AGL vertically.

(d) 5 NM east of Point E avoid the Tonto National Monument (N33-38.41 W111-06.46) by 1 NM laterally or 2000' vertically.

(13) Environmentally sensitive areas:

Following flight restrictions apply from 1 Dec to 15 Jul:

(a) 4 NM to 13 NM past C, fly right of centerline or maintain at or above 2000' AGL.

(b) 15 NM past D to E, remain left of centerline or maintain at or above 2000' AGL.

(14) Airports along route:

(a) 3NM prior to I-10 to 4NM past I-10, maintain a minimum altitude of 2600' AGL. Extensive helicopter activity between Picacho Field (N32-39.80 W111-29.27) and Silver Bell AAF.

(15) Class B airspace:

(a) Start poiont A is 14NM west of PHX Class B airspace, use extreme caution for commercial airliners from A-C.

(b) B-C, right boundary comes within 1.3NM of Class B.

(c) 5 NM prior to D to 7 NM past D, right boundary underlies Class B. Floor of Class B is 8000' MSL.

(16) Route crosses numerous other MTR’s and Victor Airways as depicted on the Phoenix Sectional Charts. See and avoid is paramount.


(b) 4 NM past G: Crosses VR-267/VR-268/VR-269.

(c) Points H-J: Coincident with VR-239.

(d) 2 NM past I: Crosses VR-241.

(e) 14 NM past I: Crosses VR-241.

(f) 24 NM past I to J: Coincident with VR-223.

(g) From K to M: Coincident with VR-260/VR-263.

(h) Crosses numerous Victor airways at 9 NM past A, 7 NM past B, 24 NM past B, 9 NM past C, 2 NM past D, 15 NM past D, 14 NM past H, 2 NM past I, 12 NM past I, 16NM past I.

(17) CAUTION:

(a) High tension wires cross 8 NM and 12 NM past B, at C, 2 NM prior to D, at E, at F, 5 NM past F, at G, 6 NM past G, 9.5 NM past H, 2 NM prior to I, 17 NM past I.
(b) 8.8NM from E, microwave tower (N33-43.827 W111-20.774) on route centerline.
(c) Flares not authorized on this route.

**FSS Within 100 NM Radius:**
PRC

**VR-245**


**SCHEDULING ACTIVITY:** 56 RMO/ASMS, 7101 Jerstad, Luke AFB, AZ 85309-1647 DSN 896-7654, C623-856-7654,

**HOURS OF OPERATION:** 0600-2400 Mon-Fri local, Other times by NOTAM

**ROUTE DESCRIPTION:**

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 2 NM either side of centerline from A to D; 2 NM left and 1.5 NM right of centerline from D to E; 14 NM left and 6 NM right of centerline from E to F; 8 NM left and 6 NM right of centerline from F to G.

**Special Operating Procedures:**

1. Non 56 FW users requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity.
2. When not scheduled in conjunction with BMGR/SELLS MOA mission, aircraft must exit by F.
3. Contact Originating Activity for route brief.
4. Contact Prescott FSS prior to entry on 255.4.
5. Primary Entry: A; Alternate Entry: B, C, D and E.
6. Primary Exit: G; Alternate Exit: D, E and F.
7. Scheduling this route does not automatically grant permission to use R-2301E, R-2304 or R-2305.
9. Avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally.
10. Avoid overflight of all charted/uncontrolled airports by a minimum of 1500’ vertically and/or 3 NM horizontally.
11. Noise sensitive areas:
   a. At B, avoid Kirkland Junction by a minimum of 1 NM horizontally.
   b. 4 NM past D, 2 NM left of centerline, avoid town of Hope by a minimum of 1 NM horizontally.
12. Environmentally sensitive areas: Following flight restrictions apply from 1 Dec to 15 Jul:
   a. 2 NM Northeast of and prior to A, avoid a 2000’ radius of N33-54.75 W112-14.18 and overflight below 2000’ AGL.
   b. 16 NM to 14 NM prior to C remain left of centerline or maintain at or above 2000’ AGL.
13. Uncharted strip along route:
   a. 14NM past D, 1 1/2 NM left of centerline, used daily by Department of the Interior.
14. Class B airspace:
   a. Start point A is 4NM west of PHX Class B airspace, use extreme caution for commercial airliners from A-B.
   b. Use caution for extensive general aviation and glider activity in vicinity of Lake Pleasant to Point A.
15. Maintain a between 1500’ AGL and 7500’ MSL over Lake Pleasant en-route to Point A.
16. 5 NM prior to C, prior to entering the Hope Corridor, make advisory call on 255.4 (example: Call Sign, VR-245, Hope Corridor).
17. Route crosses numerous other MTRs and Victor Airways as depicted on the Phoenix Sectional Charts. See and avoid is paramount.
   a. 9 NM past A: Crosses VR-241/VR-244.
   b. 12 NM past A: Crosses VR-243.
   c. 26 NM past A: Crosses VR-243.
   d. 1 NM past B: Crosses VR-242.
   e. 8 NM past B to 16 NM past B: Crosses VR-243/IR-250/IR-254.
   g. 40 NM past B: Crosses IR-254.
   h. C to E: Coincident with VR-243.
   k. 4 NM prior to D to E: Crosses VR-242/VR-1267/VR-1267A/IR-250.
   m. E to G: Coincident with VR-231/VR-243 (Hope Corridor).
   n. Crosses numerous Victor Airways at A to 27NM past A, parallels V105, 1.2NM past E, 11.2NM past E, 8NM past F.
18. **CAUTION:**
   a. There are numerous high tension powerlines located along this route. Lightning protection wires run between the tops of all powerline towers and are significantly higher than the thicker more visible powerlines. The lightning protection wires are difficult to see and can be in excess of 400’ AGL in valleys and next to ridges.
   b. High tension power lines at B, 41NM past B, 47NM past B, 34NM past C, 38NM past C, at E, at F.
   c. 12NM past D, 250’ microwave tower 1/2NM left of centerline.
   d. 9NM past D, cross Interstate 10 at a minimum of 500’ AGL.
   e. 9NM past F, cross Interstate 8 at a minimum of 500’ AGL.

**Altitude Data Pt Fac/Rad/Dist Lat/Long**

As assigned below 75 MSL

As assigned to A PXR 319/32 N33°54.00’ W112°17.00’
03 AGL B 90 MSL to B DRK 191/22 N34°22.00’ W112°40.00’
03 AGL B 90 MSL to C DRK 251/61 N34°36.30’ W113°43.00’
03 AGL B 70 MSL to D BKK 276/52 N33°45.00’ W113°47.50’
03 AGL B 70 MSL to E GBN 293/57 N33°31.80’ W113°34.50’
03 AGL B 60 MSL to F GBN 259/38 N32°59.50’ W113°25.00’
03 AGL B 50 MSL to G GBN 230/35 N32°42.00’ W113°18.00’
VR ROUTES

(f) Uncharted tower located on McCloud Mt. (N34-25.71 W112-57.78).
(g) Flares not authorized on this route.

FSS Within 100 NM Radius:
CDC, PRC

VR-249


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION: TERRAIN FOLLOWING OPERATIONS: Authorized from A to E and F to L.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Tie-in FSS: San Diego (San).
(2) 450 Knots TAS maximum.
(3) Contact Los Angeles ARTCC on 327.8 for return and climb clearance.
(4) All aircraft contact Monterey Approach Control on 263.6 upon canceling IFR before descending below 6000’ prior to Point Alpha.
(5) All aircraft contact Santa Barbara TRACON on 244.575 prior to E for traffic advisories along the final leg (E-F).
(6) Warning: The route terminates at F which is located inside of Santa Barbara Terminal Radar Control (TRACON) airspace. Also in the vicinity are San Luis Obispo and Santa Maria airports. Thus a high level of civil and military VFR/ IFR traffic exists in the vicinity of F.

FSS Within 100 NM Radius:
HHR, OAK, RAL, RIU

VR-259

ORIGINATING ACTIVITY: 162 OSS/OSOA, 1660 E. El Tigre Way, Tucson, AZ 85706 DSN 844-6366/6731, C520-295-6366. 162OG/OSOA(at)ANG.AF.MIL. Same day 162OSS/OSA, x6731. Weekend Call Tue-Thu, 1300Z-2330Z prior to use.

SCHEDULING ACTIVITY: 162 OSS/OSOA, 1660 E. El Tigre Way, Tucson, AZ 85706 DSN 844-6366/6731, C520-295-6366. 162OG/OSOA(at)ANG.AF.MIL. Same day 162OSS/OSA, x6731. Weekend Call Tue-Thu, 1300Z-2330Z prior to use.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | BSR 282/15 | N36°18.00’ W121°55.00’
30 MSL B 50 MSL to | B | BSR 138/1 | N36°10.00’ W121°38.00’
30 MSL B 50 MSL to | C | MQO 294/37 | N35°39.00’ W121°20.00’
30 MSL B 50 MSL to | D | MQO 295/17 | N35°26.00’ W121°01.00’
30 MSL B 50 MSL to | E | MQO 253/9 | N35°15.00’ W120°57.00’
30 MSL B 50 MSL to | F | MQO 145/14 | N35°02.00’ W120°40.00’

ROUTE WIDTH - 3NM either side of centerline from A to E; 4NM either side of centerline from E to K.

Special Operating Procedures:
(1) Alternate Entry: B, C, D, E, F, G and H.
(2) Alternate Exit: B, C, D, E, F, G and H.
(3) Route segment from Point A to Point E transit airspace used by civil Unmanned Aerial Vehicle (UAV) flights, trailed by manned chase aircraft, operating VFR during daylight from 6000’MSL to 15000’MSL. VFR traffic advisories are available from Albuquerque Center on 327.15 or 269.3.
(4) Noise Sensitive Areas 11 NM NE B (city of Cochise). Cross at 1500’AGL.
(5) From Point B to Point C, VR-259 conflicts head-on with route width of VR-263. Additionally, VR-259 crosses or shares portions of VR-223, VR-239, VR-241, VR-244, and VR-260, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.
(6) At 10NM past Point B, make an advisory call for Tombstone West 1 MOA and VR-263 traffic on 351.4. At 20NM past Point B, make an advisory call for Tombstone West 2 MOA on 378.1. At 10NM past Point C, return to 351.4 and remain on this frequency until clear of the Tombstone MOA.
Missions planning to operate below 500' AGL must be aware of the following uncharted towers within the 300' AGL route segments between B to E: A: points B-C; 6 NM north-northeast of C, near rodeo (N31-20.5 W109-02.5). B: points D-E; 4 NM prior to E, 2 NM north of centerline (N31-54.4 W110-37.0).

**FSS Within 100 NM Radius:**

PRC

**VR-260**

**ORIGINATING ACTIVITY:** 162 OSS/OOSA, 1660 E. El Tigre Way, Tucson, AZ 85706 DSN 844-7078, C520-295-7078. 162OG.OOSA(at)ANG.AF.MIL. TFRS Contact scheduling activity if no response.

**SCHEDULING ACTIVITY:** 162 OSS/OOS, 1660 E. El Tigre Way, Tucson, AZ 85706 DSN 844-6366/6731, C520-295-6366. 162OG.OOSOS(at)ANG.AF.MIL. Same day 162OSS/OSS, x6731. Weekend Call Tue-Thu, 1300Z-2330Z prior to use.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

**Altitude Data** | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
Cross at 10 AGL to | A | TUS 034/31 | N32°27.00' W110°29.00'
03 AGL B 15 AGL to | B | SSO 298/28 | N32°35.00' W109°41.00'
03 AGL B 15 AGL to | C | SSO 272/19 | N32°21.00' W109°37.00'
03 AGL B 70 AGL to | D | SSO 223/45 | N31°51.00' W110°00.00'
03 AGL B 15 AGL to | E | TUS 159/21 | N31°45.00' W110°51.00'
65 MSL to | F | TUS 205/28 | N31°43.00' W111°15.00'
05 AGL B 30 AGL to | G | TUS 216/40 | N31°39.00' W111°30.00'
05 AGL B 30 AGL to | H | TFD 162/74 | N31°39.00' W111°46.00'
05 AGL B 30 AGL to | I | TFD 181/68 | N31°47.00' W112°13.00'
05 AGL B 30 AGL to | J | GBN 155/60 | N31°58.00' W112°27.00'
05 AGL B 30 AGL to | K | GBN 153/52 | N32°07.00' W112°27.00'
05 AGL B 30 AGL to | L | GBN 169/47 | N32°10.00' W112°43.00'
05 AGL B 30 AGL to | M | GBN 207/39 | N32°28.00' W113°11.00'

**TERRAIN FOLLOWING OPERATIONS:** Authorized from A to E and F to M.

**ROUTE WIDTH** - 2NM either side of centerline from A to D; 1NM right and 2NM left of centerline from D to E; 2NM right and 1NM left of centerline from E to F; 3NM either side of centerline from F to K; 2NM either side of centerline from K to L; 2NM right and 3NM left of centerline from L to M.

**Special Operating Procedures:**

(1) Alternate Entry and Exit: B, C, D, E, F, G and H.

(2) Tie-In Flight Service Stations (255.4): Tucson, Prescott.

(3) Route segment from Point B to Point E transit airspace used by civil Unmanned Aerial Vehicle (UAV) flights, trailed by manned chase aircraft, operating VFR during daylight from 6000' MSL to 17999' MSL. VFR traffic advisories are available from Albuquerque Center on 327.15 and 269.3. At point D contact Libby Approach on 254.35 or 127.05 for advisories at least 25 NM from Libby Airfield.

(4) Numerous birds vicinity of Wilcox Playa (between C-E).
VR ROUTES

(6) Remain north of peak 9453 at N31-42-00 W110-51-00 (south of E).
(7) Climb to 1000' AGL (6500' MSL) 10NM prior to Point E.
(8) Prior to Point F, make an advisory call on 264.8 and monitor until clear of Fuzzy MOA.
(9) Point G+8NM to M crosses Sells LATN Area, Numerous A-10 aircraft train throughout the area; Make advisory call on 379.4 and 264.125 (BMGR Range operations call sign 'SNAKEEYE'), Then monitor 379.4 until clear or entering BMGR Restricted airspace.
(10) This route is characterized by mountainous terrain. critical climb points exist between A-B, C-D and D-E.
(11) For Alternate Entry between D and E, aircraft awaiting entry should hold VFR hemispherical altitude between 7500’-9500’MSL to avoid noise impact on Santa Rita Abbey.
(12) Border patrol flies light aircraft at very low altitude in vicinity of F-L.
(13) VR-260 crosses or shares portions of VR-244, VR-259, VR-263, and VR-1233, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.
(14) This route crosses numerous other VR routes. The See and Avoid concept is paramount at all times.
(15) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas if necessary from appropriate scheduling agency (Luke AFB Command Post).
(16) Avoid all forest fires/smoke areas by at least 5NM and/or 5000’AGL. Extensive U.S. Forestry Service aerial tanker/helicopter activity from 1 April to 1 August.
(17) Fly south around Baboquivari Peak. Avoid the peak by 2NM.
(18) This route is closed to casual users on weekends unless they have an established range time on the Goldwater Range Complex or a mission essential requirement to fly this route.
(19) Avoid overflight of any structure on the Tohono O’Odham Nation (west of Point F) by a minimum of one nautical mile below 3000’AGL.
(20) Do not use any person, vehicle or structure as a casual target for dry practice weapons delivery. Avoid multiple crossings of highways to the maximum extent possible.
(21) Santa Margarita Ranch is a noise sensitive area 1.5 NM N of Route centerline between Points G-H at (N31-40.5 W111-35.1).

FSS Within 100 NM Radius:

VR-263


SCHEDULING ACTIVITY: 162 OSS/OSOS, 1660 E. El Tigre Way, Tucson, AZ 85706 DSN 844-6366/6731, C520-295-6366. 162OG.OSOS(at)ANG.AF.MIL. Same day 162OSS/OSA, x6731. Weekend Call Tue-Thu, 1300Z-2330Z prior to use.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data   Pt   Fac/Rad/Dist  Lat/Long

Cross at 10 AGL to then
01 AGL B 15 AGL to A TUS 036/29 N32°25.00’
01 AGL B 15 AGL to B SSO 298/28 N32°35.00’
01 AGL B 15 AGL to C SSO 021/25 N32°37.00’
01 AGL B 15 AGL to D SSO 058/42 N32°29.60’
01 AGL B 15 AGL to E SSO 084/45 N32°10.80’
01 AGL B 15 AGL to F SSO 113/55 N31°43.00’
01 AGL B 15 AGL to G SSO 140/44 N31°36.80’
01 AGL B 15 AGL to H ARH 065/44 N31°45.00’
85 MSL to I ARH 140/10 N31°25.90’
105 MSL to J TUS 134/51 N31°23.00’
01 AGL B 15 AGL to K TUS 146/45 N31°23.50’
01 AGL B 15 AGL to L TUS 160/34 N31°31.70’
85 MSL to M TUS 179/42 N31°24.30’
01 AGL B 30 AGL to N TUS 213/48 N31°32.10’
05 AGL B 30 AGL to O TUS 223/54 N31°34.50’
05 AGL B 30 AGL to P TUS 243/69 N31°47.00’
05 AGL B 30 AGL to Q TUS 253/79 N31°58.00’
05 AGL B 30 AGL to R TUS 259/78 N32°07.00’
05 AGL B 30 AGL to S GBN 169/47 N32°10.00’
05 AGL B 30 AGL to T GBN 207/39 N32°28.00’

TERRAIN FOLLOWING OPERATIONS: Permissible on all legs except between H-J and L-M.

ROUTE WIDTH - 2 NM left and 4 NM right of centerline from A to B; 8 NM left and 10 NM right of centerline from B to D; 10 NM either side of centerline from D to E; 15 NM either side of centerline from E to F except left of centerline near US-Mexico border; 8 NM right and 15 NM left of centerline from F to G; 10 NM right and 13 NM left of centerline from G to H; 2 NM either side of centerline from H to J; 2 NM left and 1 NM right of centerline from J to L; 4 NM right and 2 NM left of centerline from L to M; 4 NM right and 1 NM left of centerline from M to O; 1 NM either side of centerline from O to P; 3 NM either side of centerline from P to R; 2 NM either side of centerline from R to S; 2 NM right and 3 NM left of centerline from S to T.

Special Operating Procedures:

(1) All Points are Alternate Entry/Exit Points.
(2) Route segment A-B crosses the Jackal Low MOA; Make an advisory call on 379.5 and monitor until clear.
(3) B-C crosses Morenci MOA. Make an advisory call on 319.3 until clear.
(4) E-G crosses Tombstone East MOA. Make an advisory call on 286.4 and monitor until clear.
(5) G-I crosses Tombstone West MOA. Make an advisory call on 351.4 and monitor until clear; at point H contact Libby Approach on 254.35 or 127.05 for advisories at least 25 NM from Libby airfield.
(6) M-N crosses Fuzzy MOA. Make advisory call on 264.8 and monitor until clear.
(7) N-S crosses Sells LATN Area. Numerous A-10 aircraft conduct training at random points throughout area. Make advisory call on 379.4 and 264.125(BMGR range operations, Snake Eye). Then monitor 379.4 until clear or transitioning to BMGR restricted airspace.
(8) Segment H-I and L-M highly noise sensitive. Be at 8500' MSL within 2 NM after point H and L.
(9) Restricted area entry (R-2301E-R-2304)near point T, must be prior scheduled; avoid if not.
(10) Route segments that pass through the Jackal MOA, Morenci MOA, Tombstone MOA, and Fuzzy MOA’s are designated as maneuver areas when the applicable MOA has been scheduled and activated for that purpose. MARSA is in effect with other military aircraft operation in these MOA’s.
(11) Tie-in FSS (255.4): TUS, PRC.
(12) Avoid airports between the following points by 1500’ or 3 NM:
   (a) A-B Lightning Ranch (N32-25.7 W110-04.5);
   (b) B-C Lazy B Ranch (N32-33.0 W109-04.3);
   (c) E-F Playas Ranch (N31-56.0 W108-32.0).
(13) Avoid the following Noise Sensitive Areas by 1500’ or 3 NM:
   (a) B-C Town of Duncan;
   (b) J-K Parker Canyon Lake;
   (c) K-L Town of Patagonia and Patagonia Lake.
(14) Avoid uncharted microwave towers 150-200' in height at the following locations: South of Point C (N32-32.3 W108-58.0); Near Point D (N32-29.9 W108-29.5); D-E (N32-22.5 W108-31.5) (N32-21.5 W108-25.0); E-F (N32-04.0 W108-17.5).
(15) Flight Hazard: R-2312, centered 4 NM north of Point I is a tethered balloon, from surface to 14,999’ MSL.
(16) Extremely noise sensitive area from P to T (Tohono O’odham Reservation). Maintain a minimum of 500’ AGL and avoid all villages by 1 NM horizontally or 3000’ AGL.
(17) Avoid the following by 2 NM and 2000’ AGL:
   (a) Ranch between Points A and B (N32-28.0 W109-55.0);
   (b) Buenos Aires Ranch near Point N (N31-34.0 W111-30.0);
   (c) White Signal, NM Subdivision NE Point D (N32-31.6 W108-21.2).
(18) Users should check class II NOTAMS and/or call the 563rd Rescue Group scheduling office (DSN 228-1803) for the status of Playas Temporary MOA (located within 15 NM of Playas Airfield between E to F). This temporary MOA supports the annual Angle Thunder exercise (typically held early spring).
(19) Missions planning to operate below 500’ AGL must be aware of the following uncharted powerlines within the 100’ AGL route segments between C to F: A: South of C town of Summit (N31-58.6 W108-59.3) extending east (N31-57.5 W108-28.0) then east-southeast (N32-17.5 W108-22.0) then east through (N32-16.0 W108-02.0). B: Off-shoot (N32-24.3 W108-36.0) going south-southeast (N32-18.5 W108-33.0) then west towards Lordsburg. C: Off-shoot (N32-02.3 W108-33.0) going east-northeast (N32-20.0 W108-03.0).
(20) Missions planning to operate below 500’ AGL must be aware of the following uncharted powerlines within the 100’ AGL route segments between B to D:
   (a) Points B-C: Unmarked tower 8 NM southwest of C (N32-31.5 W109-06.0).
   (b) Points C-D: Unmarked tower 2 NM north of Lordsburg (N32-23.2 W108-27.7).
   (c) Points D-E: Unmarked towers 8 NM east of E (N32-13.0 W018-07.5) and 8 NM east of E (N32-12.0 W108-07.5).
   (d) Points F-G: Unmarked tower 8 NM prior to G on centerline (N31-38.5 W108-43.5).
   (e) Points G-H: Unmarked towers 16 NM northwest of G, near rodeo (N31-20.5 W108-47.5) (AT) and 13 NM south-southeast of H, atop 6513 peak (N31-33.5 W109-22.8).
   (f) Points K-L: Unmarked tower 5 NM prior to L 1.5 NM north of centerline (N31-30.3 W110-43.5).
(21) Missions planning to operate below 500’ AGL must be aware of the following uncharted towers within the 100’ AGL route segment between M to N:
   (a) 7 NM west of M on centerline (N31-26.5 W110-13.5).
   (b) 14 NM west of M, 2 NM north of centerline (N31-30.5 W110-20.0).
   (c) 16 NM west of M on centerline (N31-29.0 W110-22.3).
   (d) 18 NM west of M, 2 NM south of centerline (N31-27.8 W110-25.2).
   (e) 22 NM west of M, 2.5 NM south of centerline (N31-27.4 W110-27.0).
   (f) 3 NM southeast of N (N31-29.5 W110-33.0).
   (g) 4 NM north of N (N31-35.4 W110-35.0).
(22) CAUTION:
   (a) There are numerous high tension powerlines located along this route. These powerlines have lightning protection wires that run along the tops of all powerline towers and are significantly higher than the thicker more visible powerlines. The lightning protection wires are difficult to see and can be in excess of 400’ AGL in valleys and next to ridges. Exercise extreme caution when maneuvering in proximity of powerlines and remain above that tallest powerline tower for reasons stated above.

**FSS Within 100 NM Radius:**
PRC

**VR-267**

**ORIGINATING ACTIVITY:** TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363, DSN 876-4075.

**SCHEDULING ACTIVITY:** TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363, DSN 876-6518/4075 0800-1530 CST, Mon-Fri (excluding holidays or field closed by NOTAM).

**HOURS OF OPERATION:** 1100-0530Z

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 10 AGL</td>
<td>TUS 034/29</td>
<td>N32°26.00'</td>
<td>W110°30.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>TUS 018/55</td>
<td>N32°53.00'</td>
<td>W110°22.00'</td>
</tr>
</tbody>
</table>
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

(1) Alternate Entry: B, C, D, E, F, G, H, and I.
(2) Alternate Exit: B, C, D, E, F, G, H, and I.
(3) Remain well clear of Estrella Sailport located north of F-G segment.
(4) First half of route traverses rugged terrain. Critical climb point between A-B.
(5) A-B transits Jackal Low MOA.
(6) Passing F, be alert for light aircraft at Casa Grande Airport.
(7) Passing G, be alert for light aircraft at Gila Bend Airport.
(8) VR-268 crosses or shares portions of VR-223, VR-239, VR-241, VR-242, and VR-244, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.
(9) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas, if necessary, from appropriate scheduling agency (Luke AFB Command Post).
(10) Avoid all forest fires/smoke areas by at least 5 NM and/or 5000' AGL. Extensive US. Forestry Service Aerial Tanker/Helicopter activity from 1 April to 1 August.
(11) Do not overfly trailer parks or other residential areas at Christmas, Arizona (left side of course 3 NM short of Point C). Fly around Christmas on the right side of route centerline.
(12) From Estrella to East Tactical Range entry point be alert for rotary wing aircraft below 500' AGL.

FSS Within 100 NM Radius:
PRC, RNO

VR-268

ORIGINATING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX, 78363, DSN 876-4075.

SCHEDULING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363, DSN 876-6518/4075 0800-1530 CST, Mon-Fri (excluding holidays or field closed by NOTAM).

HOURS OF OPERATION: 1300-0530Z++

ROUTE DESCRIPTION:

Altitude Data   Pt   Fac/Rad/Dist   Lat/Long
at or above 10 AGL as assigned
03 AGL B 60 MSL to C TUS 354/62 N33°07.00' W110°47.00'
03 AGL B 15 AGL to D TFD 059/37 N33°05.00' W111°13.00'
03 AGL B 15 AGL to E TFD 064/28 N33°04.00' W111°40.00'
03 AGL B 15 AGL to F TFD 036/16 N33°00.00' W112°25.00'
03 AGL B 15 AGL to G GBN 065/13 N32°59.00' W113°19.00'
03 AGL B 15 AGL to H GBN 278/18 N32°42.00' W113°18.00'
03 AGL B 15 AGL to I GBN 259/32 N32°59.00' W113°19.00'
03 AGL B 15 AGL to J GBN 230/35 N32°42.00' W113°18.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

(1) Alternate Entry: B, C, D, E, F, G, H, and I.
(2) Alternate Exit: B, C, D, E, F, G, H, and I.
(3) Remain well clear of Estrella Sailport located north of F-G segment.
(4) First half of route traverses rugged terrain. Critical climb point between A-B.
(5) A-B transits Jackal Low MOA.
(6) Passing F, be alert for light aircraft at Casa Grande Airport.
(7) Passing G, be alert for light aircraft at Gila Bend Airport.
(8) VR-268 crosses or shares portions of VR-223, VR-239, VR-241, VR-242, and VR-244, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.
(9) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas, if necessary, from appropriate scheduling agency (Luke AFB Command Post).
(10) Avoid all forest fires/smoke areas by at least 5 NM and/or 5000' AGL. Extensive US. Forestry Service Aerial Tanker/Helicopter activity from 1 April to 1 August.
(11) Do not overfly trailer parks or other residential areas at Christmas, AZ. (left side of course 3 NM short of Point C). Fly around Christmas on the right side of the route centerline.
(12) From Estrella to East Tactical Range entry point be alert for rotary wing aircraft below 500' AGL.
(13) Do not overfly trailer parks or other residential areas on route centerline in vicinity of N33°06.50' W110°46.10', 1 NM short of point C. Remain right of centerline and Highway 77 when approaching point C.

**FSS Within 100 NM Radius:**
DMN, PRC

**VR-269**

**ORIGINATING ACTIVITY:** COMTRAWING TWO, NAS Kingsville, TX 78363, DSN 876-6518/6306, C361-516-6518/6306/6810.

**SCHEDULING ACTIVITY:** Same as Originating Activity.

**HOURS OF OPERATION:** 1300-0530Z++

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 10 AGL as assigned.</td>
<td>A</td>
<td>TUS 034/29</td>
<td>N32°26.00' W110°30.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>B</td>
<td>TUS 018/55</td>
<td>N32°53.00' W110°22.00'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>C</td>
<td>TUS 354/62</td>
<td>N33°07.00' W110°47.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>D</td>
<td>TFD 059/37</td>
<td>N33°05.00' W111°13.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>E</td>
<td>TFD 064/28</td>
<td>N33°00.00' W111°22.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>F</td>
<td>TFD 036/16</td>
<td>N33°04.00' W112°40.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>G</td>
<td>GBN 065/13</td>
<td>N33°00.00' W112°25.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>H</td>
<td>GBN 278/18</td>
<td>N33°04.00' W113°00.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>I</td>
<td>GBN 222/15</td>
<td>N32°49.00' W112°55.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH - 2 NM either side of centerline.**

**Special Operating Procedures:**
(1) Alternate Entry: B, C, D, E, F, G, and H.
(2) Alternate Exit: B, C, D, E, F, G, and H.
(3) Remain well clear of Estrella Sailport located north of F-G segment.
(4) First half of route traverses rugged terrain. Critical climb point between A-B.
(5) A-B transits Jackal Low MOA.
(6) Passing F, be alert for light aircraft at Casa Grande Airport.
(7) Passing G, be alert for light aircraft at Gila Bend Airport.
(8) VR-269 crosses or shares portions of VR-223, VR-239, VR-241, VR-242, and VR-244, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.
(9) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas, if necessary, from appropriate scheduling agency (Luke AFB Command Post).

(10) Avoid all forest fires/smoke areas by at least 5 NM and/or 5000' AGL. Extensive US. Forestry Service Aerial Tanker/Helicopter activity from 1 April to 1 August.

(11) Do not overfly trailer parks or other residential areas at Christmas, AZ (left side of course 3 NM short of Point C). Fly around Christmas on the right side of the route centerline.

(12) Do not overfly trailer parks or other residential areas on route centerline in vicinity of N33°06.50' W110°46.10', 1 NM short of point C. Remain right of centerline and Highway 77 when approaching point C.

**FSS Within 100 NM Radius:**
PRC, RNO

**VR-289**

**ORIGINATING ACTIVITY:** TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363, DSN 876-4075.

**SCHEDULING ACTIVITY:** TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363, DSN 876-6518/4075 0800-1530 CST, Mon-Fri (excluding holidays or field closed by NOTAM).

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>GFS 142/14</td>
<td>N34°55.00' W115°04.00'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>B</td>
<td>GFS 205/22</td>
<td>N34°51.00' W115°28.00'</td>
</tr>
<tr>
<td>03 AGL B 45 MSL to</td>
<td>C</td>
<td>GFS 190/40</td>
<td>N34°31.00' W115°31.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>D</td>
<td>TNP 062/10</td>
<td>N34°09.00' W115°34.00'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>E</td>
<td>TNP 110/24</td>
<td>N33°53.00' W115°23.00'</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to</td>
<td>F</td>
<td>TNP 143/28</td>
<td>N33°41.00' W115°34.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>G</td>
<td>TRM 101/19</td>
<td>N33°30.00' W115°49.00'</td>
</tr>
<tr>
<td>03 AGL B 25 MSL to</td>
<td>H</td>
<td>TRM 095/8</td>
<td>N33°35.00' W116°00.00'</td>
</tr>
<tr>
<td>03 AGL B 30 MSL to</td>
<td>I</td>
<td>IPL 296/36</td>
<td>N33°08.00' W116°03.00'</td>
</tr>
<tr>
<td>03 AGL B 10 MSL to</td>
<td>J</td>
<td>IPL 296/31</td>
<td>N33°05.00' W115°59.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH - 5 NM either side of centerline.**

**Special Operating Procedures:**
(1) Tie-in-FSS: Prescott (PRC).
(2) Alternate Entry: G and I.
(3) This route MARSA through (See and Avoid) from entry to exit point.
VR ROUTES

(4) CAUTION: Route coincides with or crosses other VR and IR routes. See FLIP AP/1B charts, IFR/VFR wall planning charts and appropriate sectional/enroute low altitude charts, MARSA (See and Avoid) applies.

(5) Scheduling this route does not automatically grant permission to enter restricted areas. Contact the appropriate scheduling activities for entry clearance.

(6) CAUTION: Frequent VFR fixed wing and helicopter traffic along entire route.

FSS Within 100 NM Radius:
PRC, HHR, RAL, RNO, SAN

VR-296

ORIGINATING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363, DSN 876-4075.

SCHEDULING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363, DSN 876-6518/4075 0800-1530 CST, Mon-Fri (excluding holidays or field closed by NOTAM).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Tie-in FSS: Prescott (PRC).
(2) Alternate Entry: D and J.
(3) Alternate Exit: H.
(4) This route MARSA through (See and Avoid) from entry to exit point.

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A GFS 142/14 N34°55.00’ W115°04.00’
03 AGL B 40 MSL to B PKE 279/22 N34°15.00’ W115°05.00’
03 AGL B 35 MSL to C PKE 341/1 N34°07.00’ W114°41.00’
03 AGL B 32 MSL to D PKE 090/24 N34°00.00’ W114°13.00’
03 AGL B 25 MSL to E BLH 154/11 N33°25.00’ W114°43.00’
03 AGL B 25 MSL to F BLH 281/30 N33°48.00’ W115°18.00’
03 AGL B 40 MSL to G TRM 070/30 N33°41.00’ W115°34.00’
03 AGL B 35 MSL to H TRM 101/19 N33°30.00’ W115°49.00’
03 AGL B 20 MSL to I TRM 113/28 N33°21.00’ W115°42.00’
03 AGL B 10 MSL to J IPL 322/24 N32°57.00’ W115°42.00’
03 AGL B 10 MSL to K IPL 309/18 N32°59.00’ W115°43.00’

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A EED 091/7 N34°44.00’ W114°20.00’
03 AGL B 40 MSL to B EED 098/46 N34°28.00’ W113°37.00’
03 AGL B 39 MSL to C PKE 090/24 N34°00.00’ W114°13.00’
03 AGL B 19 MSL to D BLH 136/11 N33°26.00’ W114°39.00’
03 AGL B 30 MSL to E BLH 178/29 N33°07.00’ W114°53.00’
03 AGL B 32 MSL to F BZA 270/12 N32°49.00’ W114°50.00’
03 AGL B 15 MSL to G IPL 071/12 N32°46.00’ W115°16.00’
03 AGL B 15 MSL to H IPL 348/10 N32°55.00’ W115°30.00’
03 AGL B 10 MSL to I IPL 307/15 N32°57.00’ W115°42.00’

VR-299

ORIGINATING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363, DSN 876-4075.

SCHEDULING ACTIVITY: TRAINING AIR WING TWO (TW-2), NAS Kingsville, TX 78363, DSN 876-6518/4075 0800-1530 CST, Mon-Fri (excluding holidays or field closed by NOTAM).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Tie-in FSS: Prescott (PRC).
(2) CAUTION: High volume rotary wing and fixed wing traffic SFC to 1000’ AGL between Points D and H throughout the entire year. Frequent VFR fixed wing and helicopter traffic along entire route.
(3) Alternate Entry: C and G.
(4) Alternate Exit: D and E.
(5) This route MARSA (See and Avoid) from entry to exit point.
(6) CAUTION: Route coincides with or crosses other VR and IR routes. See FLIP AP/1B, IFR/VFR wall planning charts and appropriate sectional/enroute low altitude charts. MARSA (See and Avoid) applies.

(7) Scheduling this route does not automatically grant permission to enter restricted areas. Contact the appropriate scheduling activities for enter clearance.

**FSS Within 100 NM Radius:**
PRC. HHR, RAL, RNO, SAN

**VR-316**

**ORIGINATING ACTIVITY:** 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.

**SCHEDULING ACTIVITY:** 366 OSS/OSOS, Mountain Home AFB, ID 83648, DSN 728-4607/2172, C208-828-4607/2172/4631. Scheduling request 0730-1630L, Mon-Fri. Must be scheduled minimum 24 hours prior to entry.

**HOURS OF OPERATION:** Continuous or by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>BOI 231/50</td>
<td>N43°14.00' W117°15.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to B</td>
<td>REO 354/36</td>
<td>N43°11.00' W117°41.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to C</td>
<td>REO 300/42</td>
<td>N43°07.50' W118°30.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to D</td>
<td>REO 267/75</td>
<td>N42°55.00' W119°30.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to E</td>
<td>DSD 124/88</td>
<td>N43°05.50' W120°04.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to F</td>
<td>DSD 104/61</td>
<td>N43°42.00' W120°07.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 105 MSL to G</td>
<td>DSD 086/81</td>
<td>N43°55.00' W119°30.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 105 MSL to H</td>
<td>BOI 261/123</td>
<td>N43°47.70' W119°00.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to I</td>
<td>BOI 258/101</td>
<td>N43°40.20' W118°30.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 90 MSL to J</td>
<td>BOI 254/81</td>
<td>N43°33.50' W118°03.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 90 MSL to K</td>
<td>BOI 252/52</td>
<td>N43°31.50' W117°22.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 80 MSL to L</td>
<td>BOI 250/41</td>
<td>N43°31.00' W117°08.50'</td>
<td></td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 6 NM either side of centerline from A to B; 10 NM either side of centerline from B to D; 5 NM right and 10 NM left of centerline from D to E; 5 NM either side of centerline from E to F; 10 NM either side of centerline from F to H; 5 NM right and 10 NM left of centerline from H to I; 10 NM either side of centerline from I to K; 4 NM either side of centerline from K to L.

**Special Operating Procedures:**

(1) VR-319 will not be scheduled when VR-316 is in use.

(2) Route crosses IR-304 between Points C and D, J and K.

(3) MARSA (See and Avoid) conditions apply while operating on this route.

(4) All turn points authorized alternate Entry and Exit points.

(5) Avoid all airports/airstrips by 3 NM laterally and 1500’ AGL vertically. Airports/Airstrips:

(a) Uncharted (N43-12.0 W117-38.5)
(b) Uncharted (N43-18.0 W117-53.0)
(c) Uncharted (N43-45-30 W118-28-00)
(d) Uncharted (N43-31.075 W118-07-462)

(6) Overfly all Noise Sensitive Areas by 1500’ AGL or avoid by 3 NM. Noise Sensitive Areas:

(a) Malheur Lake Bird Flyaway (N43-11-00 W119-02-00, N43-13-00 W118-47-30, N42-54-00 W118-40-00, N42-51-00 W118-55-30, N42-59-30 W118-53-00)
(b) Ballance (N43-14-30 W120-02-30)
(c) Riverside (N43-32-00 W118-09-00)
(d) Bird Habitat (N43-55.0 W119-00.0)
(e) Bird Habitat (N43-44.0 W119-49.0)

(7) Avoid all uncharted obstructions by 1500’ AGL. Uncharted Obstructions:

(a) Tower, 160’ AGL (N43-49-15 W118-50-45)
(b) Multiple towers of varying heights along route, Point I to Point J (N43-40-20 W118-03-00 thru N43-33-50 W118-03-00).

(8) Note: 1 minute prior to Stinking Water Creek (N43-44.0 W118-26.0), make call on UHF 255.4 (with callsign, 1 minute out, Stinking Water) for route deconfliction.

(9) Route bisects JUNIPER LOW MOA, contact Klamath Falls Ops, UHF 271.15, at Point C for deconfliction. 173 FW and 124 FW scheduling personnel will verbally deconflict active airspace prior to scheduling approval.

**FSS Within 100 NM Radius:**
BOI, MMV.

**VR-319**

**ORIGINATING ACTIVITY:** 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.

**SCHEDULING ACTIVITY:** 366 OSS/OSOS, Mountain Home AFB, ID 83648, DSN 728-4607/2172, C208-828-4607/2172/4631. Scheduling request 0730-1630L, Mon-Fri. Must be scheduled minimum 24 hours prior to entry.

**HOURS OF OPERATION:** Continuous or by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>BOI 250/41</td>
<td>N43°31.00' W117°08.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 80 MSL to B</td>
<td>BOI 252/52</td>
<td>N43°31.50' W117°22.50'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 90 MSL to C</td>
<td>BOI 254/81</td>
<td>N43°33.50' W118°03.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 90 MSL to D</td>
<td>BOI 258/101</td>
<td>N43°40.20' W118°30.00'</td>
<td></td>
</tr>
</tbody>
</table>
VR ROUTES

01 AGL B 100 MSL to E BOI 261/123 N43°47.70' W119°00.00'
01 AGL B 105 MSL to F DSD 086/81 N43°55.00' W119°30.00'
01 AGL B 105 MSL to G DSD 104/61 N43°42.00' W120°07.00'
01 AGL B 100 MSL to H DSD 124/88 N43°05.50' W120°04.50'
01 AGL B 100 MSL to I REO 267/75 N42°11.00' W117°41.00'
01 AGL B 100 MSL to J REO 299/42 N42°06.50' W118°30.00'
01 AGL B 100 MSL to K REO 354/36 N43°14.00' W117°15.00'
01 AGL B 100 MSL to L BOI 231/50 N43°14.00' W117°15.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 10 NM either side of centerline from B to D; 5 NM left and 10 NM right of centerline from D to E; 10 NM either side of centerline from E to G; 5 NM either side of centerline from G to H; 5 NM left and 10 NM right of centerline from H to I; 10 NM either side of centerline from I to K; 6 NM either side of centerline from K to L.

Special Operating Procedures:
(1) VR-319 will not be scheduled when VR-316 is in use.
(2) Route crosses IR-304 between Points C and D, J and K.
(3) MARSA (See and Avoid) conditions apply while operating on this route.
(4) All turn points authorized alternate Entry and Exit points.
(5) Avoid all airports/airstrips by 3 NM laterally and 1500' AGL vertically. Airports/Airstrips:
   (a) Uncharted (N43-12.0 W117-38.5)
   (b) Uncharted (N43-18.0 W117-53.0)
   (c) Uncharted (N43-45-30 W118-28-00)
   (d) Uncharted (N43-31.075 W117-08.462)
   (6) Overfly all Noise Sensitive Areas by 1500' AGL or avoid by 3 NM. Noise Sensitive Areas:
      (a) Malheur Lake Bird Flyaway (N43-11-00 W119-02-00, N43-13-00 W118-47-30, N42-54-00 W118-40-00, N42-51-00 W118-55-30, N42-59-30 W118-53-00)
      (b) Ballance (N43-14-30 W120-02-30)
      (c) Chase (N43-11-00 W120-01-00)
      (d) Riverside (N43-32-00 W118-09-00)
      (e) Bird Habitat (N43-55.0 W119-00.0)
      (f) Bird Habitat (N43-44.0 W119-49.0)
(7) Avoid all uncharted obstructions by 1500' AGL. Uncharted Obstructions:
   (a) Tower, 160' AGL (N43-49-15 W118-50-45)
   (b) Multiple towers of varying heights along route, Point I to Point J (N43-40-20 W118-30-00 thru N43-33-50 W118-03-00).
   (8) Note: 1 minute prior to Stinking Water Creek (N43-44.0 W118-26.0), make call on UHF 255.4 (with callsign, 1 minute out, Stinking Water) for route deconfliction.
(9) Route bisects JUNIPER LOW MOA, contact Klamath Falls Ops, UHF 271.15, at Point C for deconfliction. 173 FW and 124 FW scheduling personnel will verbally deconflict active airspace prior to scheduling approval.

FSS Within 100 NM Radius:
BOI, MMV

VR-331


SCHEDULING ACTIVITY: 62 OSS/OSO, McChord AFB, 100 Main St., WA 98438 DSN 382-9925, C253-982-2635. Duty hrs 0800-1700 local Mon-Fri only, next day req accepted NLT 1200 local. Other times ctc McChord Command Post DSN 382-2635, C253-982-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
TERRAIN FOLLOWING OPERATIONS:
300' AGL modified contour will be conducted in VMC only. After crossing Point B, descend to 300' AGL can be initiated. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 4 NM either side of centerline from A to F; 5 NM either side of centerline from F to I.

Special Operating Procedures:
(1) All radius must fall within route width.
(2) Authorized aircraft C-17 and C-130.
(3) Primary Entry Point A. Alternate Entry Points D and G.
(4) Primary Exit Point I. Alternate Exit Point HH.
(5) Route Communications:
   (a) Contact Seattle Center 128.3 or 269.0 prior to Point A for clearance.
   (b) Between Points A and D, monitor Seattle Center 128.3 or 269.0.
   (c) Between Points D and F, monitor Seattle Center 124.2 or 317.6.
FSS Within 100 NM Radius:
MMV, SEA

VR-389

ORIGINATING ACTIVITY: 366 OSS/OOSOA, 1050 Desert Street, Building 2215, Mountain Home AFB, ID 83648, DSN 728-4722.

SCHEDULING ACTIVITY: 366 OSS/OOSOS, Mountain Home AFB, ID 83648, C208-828-2172/4607, DSN 728-2172/4607, Scheduling requests 0730-1630 local Mon-Fri must be scheduled a minimum of 2 hours prior to entry into airspace.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long

Cross at 80 MSL to  A  MUO 242/25  N42°55.77'  W116°25.58'
Or as assigned.  Descend to
10 AGL B 100 MSL to  B  REO 065/29  N42°38.47'  W117°12.72'
Alternate Entry/Exit
01 AGL B 100 MSL to  C  SDO 007/49  N42°08.52'  W117°34.83'
Alternate Entry/Exit
01 AGL B 100 MSL to  C1  REO 104/44  N42°11.12'  W117°02.28'
Alternate Entry/Exit
01 AGL B 100 MSL to  C  SDO 007/49  N42°08.52'  W117°34.83'
Alternate Entry/Exit
01 AGL B 100 MSL to  D  SDO 007/45  N42°04.98'  W117°37.06'
Alternate Entry/Exit
01 AGL B 120 MSL to  E  SDO 017/28  N41°47.39'  W117°40.23'
Alternate Entry/Exit
01 AGL B 120 MSL to  F  SDO 061/14  N41°26.98'  W117°44.05'
Alternate Entry/Exit
01 AGL B 90 MSL to  G  SDO 097/14  N41°18.36'  W117°44.77'
Alternate Entry/Exit
01 AGL B 100 MSL to  H  BAM 316/38  N41°06.48'  W117°21.49'
Alternate Entry/Exit
01 AGL B 100 MSL to  I  BQU 284/57  N41°14.88'  W116°49.83'
Alternate Entry/Exit
01 AGL B 120 MSL to  J  BQU 309/50  N41°27.00'  W116°23.05'
Alternate Entry/Exit
01 AGL B 120 MSL to  K  TWF 213/73  N41°42.50'  W115°45.00'
Alternate Entry/Exit
01 AGL B 120 MSL to  L  TWF 221/56  N41°59.97'  W115°34.00'
Alternate Entry/Exit

ROUTE WIDTH - 4 NM either side of centerline from A to G;
5 NM either side of centerline from G to H; 8 NM from H to J; 4
NM either side of centerline from J to K; 5 NM left and 15 NM
right from K to L.

Special Operating Procedures:

(1) Aircrews should be especially vigilant when crossing the following MTRs:
   (a) VR-1300/VR-1303/VR-1304/IR-302/IR-305 at N42 41 06 W117 05 51 and N41 34 32 W116 04 30.
   (b) VR-1301 at N42 33 18 W117 16 37.
   (c) VR-1302 at N42 15 08 W117 29 54.
   (d) IR-304 at N42 13 01 W117 31 27.
   (e) IR-300 at N41 26 46 W117 44 02.
   (f) IR-303 at N41 18 29 W117 44 50.

(2) WARNING: This route shares centerline elements of IR-300/313 and IR-303. Aircrews should insure those routes are not scheduled concurrently with this route. This route is also opposite in direction to VR-391, and should not be scheduled concurrently.

(3) WARNING: Top-of-block altitudes are within the MHRC MOA altitudes. MARSA status should be obtained with units operating within the MOA structures, prior to entry into the top-of-block altitudes. When utilizing entry/exit into MOAs, aircrew should be at top-of-block for MOA transitions.

(4) Information on migratory bird routes along this route may be obtained from the bird avoidance web page on the Air Force Safety Center site: http://www.usahas.com/
VR ROUTES

(5) Due to mine blasting operation, avoid by 1000' AGL an area formed by N41-06 W117-21, N41-13 W117-15, N41-05 W117-17 to point of beginning.

(6) Uncharted airports: Uncharted airports N42-00-00 W118-38-00 and N41-39-00 W118-30-00 and N41-08-00 W117-14-18, N41-42 W118-31. Overfly at or above 1500' AGL or avoid by 3 NM.


(8) Noise Sensitive Areas (overfly at of above 1500' AGL or avoid by 1 NM):
   (a) Residences at N41-25.5 W117-47.5; N42-00.0 W117-40.0.
   (b) South Mountain Lookout Tower N42-47 W116-54.
   (c) Town of Midas: N41-14-30 W116-47-30.
   (e) Hansen Ranch: N41-43-30 W115-58-30. Overfly at or above 1500' AGL or avoid by 3 NM.

(9) Contact Cowboy Control between K and L on 236.050.

VR-391

ORIGINATING ACTIVITY: 366 OSS/OSSO, 1050 Desert Street, Building 2215, Mountain Home AFB, ID 83648, DSN 728-4722

SCHEDULING ACTIVITY: 366 OSS/OSSS, Mountain Home AFB, ID 83648, C208-828-2172/4607, DSN 728-2172/4607. Scheduling requests 0730-1630 local Mon-Fri. Must be scheduled a minimum of 2 hours prior to entry into airspace.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 AGL B 120 MSL to 10 AGL B 100 MSL to</td>
<td>A</td>
<td>TWF 221/56</td>
<td>N41<em>59.97' W115</em>34.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
<td>B</td>
<td>TWF 213/73</td>
<td>N41<em>42.50' W115</em>45.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
<td>C</td>
<td>BQU 309/50</td>
<td>N41<em>27.00' W116</em>23.05'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>D</td>
<td>BQU 284/57</td>
<td>N41<em>14.88' W116</em>49.83'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>E</td>
<td>BAM 316/38</td>
<td>N41<em>06.48' W117</em>21.49'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>F</td>
<td>SDO 097/14</td>
<td>N41<em>18.36' W117</em>44.77'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
<td>G</td>
<td>SDO 061/14</td>
<td>N41<em>26.98' W117</em>44.05'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
<td>H</td>
<td>SDO 017/28</td>
<td>N41<em>47.39' W117</em>40.23'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>I</td>
<td>SDO 007/45</td>
<td>N42<em>04.98' W117</em>37.06'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>J</td>
<td>SDO 007/49</td>
<td>N42<em>08.52' W117</em>34.83'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>J</td>
<td>REO 104/44</td>
<td>N42<em>11.12' W117</em>02.28'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>J</td>
<td>SDO 007/49</td>
<td>N42<em>08.52' W117</em>34.83'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 4 NM right and 15 NM left from A to B; 4 NM either side of centerline from B to C; 8 NM either side of centerline from C to E; 5 NM either side of centerline from E to F; 4 NM either side of centerline from F to L.

Special Operating Procedures:

(1) Aircrews should be especially vigilant when crossing the following MTRs: VR-1300/VR-1303/VR-1304/VR-1305/IR-302/IR-305 at N42 41 06 W117 05 51 and at N41 34 32 W116 04 30; VR-1301 at N42 33 18 W117 16 37; VR-1302 at N42 15 08 W117 29 54; IR-304 at N42 13 01 W117 31 27; IR-303 at N41 26 46 W117 44 02; IR-303 at N41 18 29 W117 44 50.

(2) WARNING; This route shares centerline elements of IR-300/313 and IR-303. Aircrews should ensure those routes are not scheduled concurrently with this route. This route is also opposite direction to VR-389 and should not be scheduled concurrently.

(3) WARNING; Top-of-block altitudes are within the MHRC MOA altitudes. MARSA status should be obtained with units operating within the MOA structures, prior to entry into the top-of-block altitudes. When utilizing entry/exit into MOAs, aircrews should be at top-of-block for MOA transition.

(4) Information on migratory bird routes along this route may be obtained from the bird avoidance web page on the Air Force Safety Center site: http://www.usahas.com/.

(5) Due to mine blasting operation, avoid by 1000' AGL, an area formed by N41-06 W117-21, N41-13 W117-15, N41-05 W117-17 to point of beginning.

(6) Uncharted airports: N42-00-00 W118-38-00, N41-39-00 W118-30-00, N41-08-00 W117-14-18, and N41-42 W118-31. Overfly at or above 1500' AGL or avoid by 3 NM.


(8) Noise sensitive areas (overfly at or above 1500' AGL or avoid by 1 NM):
   (a) Residences at N41-25.5 W117-47.5, N42-00.0 W117-40.0.
   (b) South Mountain Lookout Tower at N42-47 W116-54.
   (c) Town of Midas: N41-14-30 W116-47-30.
   (e) Hansen Ranch: N41-43-30 W115-58-30. Overfly at or above 1500' AGL or avoid by 3 NM.

(9) Contact MUO RAPCON between K and L on 259.1.

VR-410

ORIGINATING ACTIVITY: 140th Wing /Airspace Office, Buckley AFB, Aurora Co, 80011-9546 DSN 847-9470/9471, C720-847-9470/9471/9955.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0800-1600 local Tue-Sat, OT by NOTAM.
ROUTE DESCRIPTION:

**Altitude Data** | **Pt** | **Fac/Rad/Dist** | **Lat/Long**
--- | --- | --- | ---
05 AGL B 85 MSL to A | PUB 250/27 | N38°12.00' | W104°59.00'
05 AGL B 85 MSL to B | PUB 283/23 | N38°26.00' | W104°53.00'

**ROUTE WIDTH**: 3 NM left and 3 NM right of centerline from A to B.

**Special Operating Procedures**:
1. At Point A, maintain 1000’ AGL minimum until crossing Hwy 50, then 500’ AGL minimum while in Airburst C MOA.
2. Contact Airburst Range on UHF 251.25 before departing Point A.

**FSS Within 100 NM Radius**:
DEN

**ORIGINATING ACTIVITY**: 140th Wing /Airspace Office, Buckley AFB, Aurora Co, 80011-9546 DSN 847-9470/9471, C720-847-9470/9471/9955.

**SCHEDULING ACTIVITY**: Same as Originating Activity.

**HOURS OF OPERATION**: 0800-1600 local Tue-Sat, OT by NOTAM

**ROUTE DESCRIPTION**:

**Altitude Data** | **Pt** | **Fac/Rad/Dist** | **Lat/Long**
--- | --- | --- | ---
Cross at 120 MSL to A | BRK 300/17 | N39°07.00' | W104°55.00'
05 AGL B 110 MSL to B | BRK 258/39 | N38°54.00' | W105°28.00'
05 AGL B 130 MSL to C | HBU 074/55 | N38°29.00' | W105°52.00'
05 AGL B 140 MSL to D | HBU 087/48 | N38°18.00' | W106°02.00'
05 AGL B 140 MSL to D1 | ALS 332/36 | N37°55.75' | W106°00.71'
05 AGL B 140 MSL to D2 | ALS 347/29 | N37°49.98' | W105°48.93'
05 AGL B 110 MSL to E | ALS 038/13 | N37°29.30' | W105°35.80'
05 AGL B 170 MSL to F | ALS 050/33 | N37°36.00' | W105°12.00'
05 AGL B 120 MSL to G | PUB 208/42 | N37°44.00' | W104°57.00'
05 AGL B 80 MSL to H | PUB 194/23 | N37°56.00' | W104°37.00'

**HOURS OF OPERATION**: 0800-1600 local Tue-Sat, OT by NOTAM

**ROUTE DESCRIPTION**:

**Altitude Data** | **Pt** | **Fac/Rad/Dist** | **Lat/Long**
--- | --- | --- | ---
05 AGL B 85 MSL to A | PUB 250/27 | N38°12.00' | W104°59.00'
05 AGL B 85 MSL to B | PUB 283/23 | N38°26.00' | W104°53.00'

**ROUTE WIDTH**: 3 NM left and 3 NM right of centerline from A to B.

**Special Operating Procedures**:
1. Exit Airburst C MOA and cross Hwy 50 at and maintain 1000’ AGL minimum until reaching Point B.
2. If multiple attacks are to be flown, stay on UHF 251.25, Airburst Range and advise entry on to VR-410.
3. Avoid ranches (N38-54.5 W105-31.5, N38-47.0 W105-35.0) by 2 NM and 1000’ AGL.
4. Alternate Entry: Points B, C, D, E, F, and G.
5. Alternate Exit: Points B, C, D, E, F, and G.
6. Minimum altitude prior to H east of Interstate 25 and west of railroad track is 1000’ AGL.
7. Contact Pueblo Approach Control at point H on 290.5 for further clearance.

**FSS Within 100 NM Radius**:
DEN

**ORIGINATING ACTIVITY**: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, 605-988-5745/5746.

**SCHEDULING ACTIVITY**: Same as Originating Activity.

**HOURS OF OPERATION**: Daylight Hours Tue-Sat, OT by NOTAM
VR ROUTES

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
Cross at 100 MSL to A LNK 352/47 N41°42.00'  W96°43.00'
or as assigned. Then descend to
01 AGL B 50 MSL to B ONL 100/83 N41°59.00'  W96°56.00'
01 AGL B 50 MSL to C FSD 181/90 N42°10.00'  W97°08.00'
01 AGL B 50 MSL to D FSD 179/46 N42°35.00'  W96°66.00'
01 AGL B 50 MSL to E FSD 230/27 N43°25.00'  W97°19.00'
01 AGL B 50 MSL to F FSD 269/24 N43°42.00'  W97°19.00'
01 AGL B 50 MSL to G HON 167/20 N44°06.00'  W98°17.00'
01 AGL B 50 MSL to H HON 218/40 N43°59.02'  W99°00.00'
01 AGL B 50 MSL to I PIR 119/42 N43°37.00'  W99°16.00'
SFC B 90 MSL to J ONL 330/73 N43°37.00'  W99°16.00'
SFC B 90 MSL to K ONL 344/41 N43°37.00'  W99°16.00'
55 MSL to L ONL 360/36 N42°57.00'  W98°13.00'
55 MSL to M ONL 026/35 N42°57.00'  W98°13.00'
100 MSL to N ONL 030/37 N42°56.00'  W98°09.00'

FSS Within 100 NM Radius:
FOD, HON, OLU

VR-511

ORIGINATING ACTIVITY: 132 FW OG/CC (ANG), 3100 McKinley Ave, Des Moines, IA 50321-2799 DSN 256-8250 CS15-256-8250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM, (2 hr prior notification required)

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
Cross at 100 MSL to A PWE 168/12 N40°00.00'  W96°10.50'
or as assigned.
15 AGL B 40 MSL to B PWE 168/20 N39°52.00'  W96°09.00'
15 AGL B 40 MSL to C EMP 326/20 N38°35.50'  W96°19.50'
15 AGL B 40 MSL to D EMP 248/23 N38°12.00'  W96°36.50'
15 AGL B 40 MSL to E EMP 250/44 N38°08.50'  W97°02.50'
15 AGL B 40 MSL to F SLN 145/38 N38°22.00'  W97°15.00'
15 AGL B 40 MSL to G SLN 091/17 N38°53.00'  W97°16.00'
15 AGL B 40 MSL to H SLN 056/17 N39°03.00'  W97°18.00'
15 AGL B 40 MSL to I SLN 026/24 N39°16.00'  W97°20.00'
15 AGL B 40 MSL to J SLN 014/33 N39°26.50'  W97°22.00'
15 AGL B 40 MSL to K PWE 242/33 N39°59.00'  W96°51.50'
15 AGL B 40 MSL to L LNK 172/47 N40°08.00'  W96°45.50'

TERRAIN FOLLOWING OPERATIONS: Authorized from C to K.

ROUTE WIDTH - 8 NM either side of centerline from A to L; 4 NM either side of centerline from L to N.

Special Operating Procedures:
(1) Route is common with IR-509 between Points I and N.
(2) Route conflicts with VR-540/541 between A and B, and IR-508/509/518, VR-1520/1521 between K and L.
(3) Route is surveyed to 100' AGL. This altitude will not guarantee obstacle clearance throughout this route.
(4) A minimum of 1000' AGL entire route width from Point A to N42-28 W97-02.
(6) Avoid the following Noise Sensitive Areas by a minimum of 1000' AGL or 3NM of the Vermillion Airport.
(7) Avoid flight within 1500' AGL or 3 NM of the Vermillion Airport.
(8) Migratory birds along the rivers and lakes during spring and fall.
(9) Alternate Entry: All points.
(10) Alternate Exit: All points.

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 100 MSL to A LNK 352/47 N41°42.00'  W96°43.00'
or as assigned. Then descend to
01 AGL B 50 MSL to B ONL 100/83 N41°59.00'  W96°56.00'
01 AGL B 50 MSL to C FSD 181/90 N42°10.00'  W97°08.00'
01 AGL B 50 MSL to D FSD 179/46 N42°35.00'  W96°66.00'
01 AGL B 50 MSL to E FSD 230/27 N43°25.00'  W97°19.00'
01 AGL B 50 MSL to F FSD 269/24 N43°42.00'  W97°19.00'
01 AGL B 50 MSL to G HON 167/20 N44°06.00'  W98°17.00'
01 AGL B 50 MSL to H HON 218/40 N43°59.02'  W99°00.00'
01 AGL B 50 MSL to I PIR 119/42 N43°37.00'  W99°16.00'
SFC B 90 MSL to J ONL 330/73 N43°37.00'  W99°16.00'
SFC B 90 MSL to K ONL 344/41 N43°37.00'  W99°16.00'
55 MSL to L ONL 360/36 N42°57.00'  W98°13.00'
55 MSL to M ONL 026/35 N42°57.00'  W98°13.00'
100 MSL to N ONL 030/37 N42°56.00'  W98°09.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from C to K.

ROUTE WIDTH - 8 NM either side of centerline from A to L; 4 NM either side of centerline from L to N.

Special Operating Procedures:
(1) Route is common with IR-509 between Points I and N.
(2) Route conflicts with VR-540/541 between A and B, and IR-508/509/518, VR-1520/1521 between K and L.
(3) Route is surveyed to 100' AGL. This altitude will not guarantee obstacle clearance throughout this route.
(4) A minimum of 1000' AGL entire route width from Point A to N42-28 W97-02.
(6) Avoid the following Noise Sensitive Areas by a minimum of 1500' AGL or 1 NM: Farm N41-41 W96-44, feedlot N41-52.5 W96-57.5, ranch N43-44.5 W97-42.5, farm N44-11 W98-27, ranch N44-04 W98-25, ranch N44-10.5 W98-39.5, ranch N43-59 W99-08, ranch N43-57.3 W99-28.5, ranch N43-23 W99-05, ranch N43-06 W98-56, farm N43-01 W98-47, feedlot N44-00.5 W98-18.5.
(7) Avoid flight within 1500' AGL or 3 NM of the Vermillion Airport.
(8) Migratory birds along the rivers and lakes during spring and fall.
(9) Alternate Entry: All points.
(10) Alternate Exit: All points.

(7) Avoid flight within 3 NM of the Wamego, Hillsboro, Abilene, Clay Center and Washington Co Airports.

**FSS Within 100 NM Radius:**
ICT, OLU

**VR-512**

**ORIGINATING ACTIVITY:** 132 FW OG/CC (ANG), 3100 McKinley Ave, Des Moines, IA 50321-2799 DSN 256-8250 C515-256-8250.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** By NOTAM, 2hr prior notification required

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 100 MSL</td>
<td>A</td>
<td>PWE 256/26</td>
<td>N40°08.00' W96°45.50'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>B</td>
<td>PWE 242/33</td>
<td>N39°59.00' W96°51.50'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>C</td>
<td>SLN 014/33</td>
<td>N39°26.50' W97°22.00'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>D</td>
<td>SLN 026/24</td>
<td>N39°16.00' W97°20.00'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>E</td>
<td>SLN 056/17</td>
<td>N39°03.00' W97°18.00'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>F</td>
<td>SLN 091/17</td>
<td>N38°53.00' W97°16.00'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>G</td>
<td>SLN 145/38</td>
<td>N38°22.00' W97°15.00'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>H</td>
<td>EMP 250/44</td>
<td>N38°08.50' W97°02.50'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>I</td>
<td>EMP 248/23</td>
<td>N38°12.00' W96°36.50'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>J</td>
<td>EMP 326/20</td>
<td>N38°35.50' W96°19.50'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>K</td>
<td>PWE 168/20</td>
<td>N39°52.00' W96°09.00'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>L</td>
<td>PWE 168/12</td>
<td>N40°00.00' W96°10.50'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from B to K.

**ROUTE WIDTH -** 4 NM either side of centerline from A to B; 8 NM either side of centerline from B to K (except 20 NM left and 8 NM right of centerline between D and E if aircraft are scheduled to conduct operations into R-3602); 4 NM either side of centerline from K to L.

**Special Operating Procedures:**

(1) VR-512 is opposite direction traffic of VR-511. 132 FW will not schedule opposite and conflicting traffic at the same time.

(2) Aircrews should be particularly vigilant of other military traffic-IR-502 in the vicinity of B to C and J to K: VR-533/534/535 in the vicinity of F to J: SR-618, SR-619 in the vicinity of J to K.

(3) When exiting at H, maintain VFR and climb within the route boundary to 10,000' MSL or above, then via flight plan route.

(4) Alternate Entry: C and H.

(5) Alternate Exit: D and H.


**FSS Within 100 NM Radius:**
ICT, OLU

**VR-531**

**ORIGINATING ACTIVITY:** 138 FW, OKANG, 9100 E 46th Street N, Tulsa, OK 74115 DSN 894-7370, C918-833-7370.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>ICT 010/41</td>
<td>N38°24.00' W97°20.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>B</td>
<td>SLN 031/16</td>
<td>N39°08.00' W97°25.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>C</td>
<td>SLN 300/34</td>
<td>N39°16.00' W98°12.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>D</td>
<td>SLN 247/38</td>
<td>N38°45.00' W98°24.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>E</td>
<td>SLN 220/30</td>
<td>N38°35.00' W98°05.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>F</td>
<td>SLN 201/32</td>
<td>N38°27.30' W97°56.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>G</td>
<td>SLN 227/18</td>
<td>N38°45.00' W97°56.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>B1</td>
<td>SLN 030/16</td>
<td>N39°08.00' W97°25.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>AC</td>
<td>SLN 053/35</td>
<td>N39°13.00' W96°58.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.
VR ROUTES

ROUTE WIDTH - 5 NM tapering down to 3 NM left and 5 NM right of centerline from A to B; 3 NM widening out to 5 NM left and 5 NM right of centerline from B to C; 5 NM either side of centerline from C to F; 6 NM left and 8 NM right of centerline from F to G.

Special Operating Procedures:

(1) Alternate Exit: B1, E and AC.
(2) Exit at E for entry to Bison MOA and if not scheduled for R-3601, avoid flight in Smoky MOA.
(3) Exit via Alternate Exit route B to AC for entry into R-3602, Fort Riley.
(4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit and holding for R-3601.
(5) Contact Smoky Hill range officer prior to E for entry into the maneuver area, Smoky MOA, and R-3601.
(6) Route conflicts with VR-512, VR-532, VR-533, VR-534, VR-535 and IR-505. Conflicts will be avoided by MARSA and scheduling through the scheduling activities.
(7) Avoid the following Noise Sensitive Areas:
   (a) All airports charted on the Wichita Sectional Chart by 1500’ AGL/3 NM;
   (b) Livestock feedlot 4 NM southeast of Roxbury, N38-30 W97-23;
   (c) Farm house by 1500’ AGL/3 NM, N39-12 W97-45;
   (d) The town of Lorraine by 1500’ AGL/5 NM, N38-34 W98-19.

FSS Within 100 NM Radius:
ICT, OLU

VR-532


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>ICT 221/16</td>
<td>N37°34.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>HUT 224/46</td>
<td>W97°50.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>HUT 241/53</td>
<td>N37°29.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>HUT 248/50</td>
<td>W98°39.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>HUT 257/48</td>
<td>N37°37.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>F</td>
<td>HYS 186/53</td>
<td>W98°56.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>G</td>
<td>HYS 223/18</td>
<td>N37°52.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>H</td>
<td>HYS 188/11</td>
<td>W99°00.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>I</td>
<td>HYS 130/14</td>
<td>N38°40.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>J</td>
<td>SLN 220/30</td>
<td>W99°05.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>K</td>
<td>SLN 201/32</td>
<td>N38°35.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>L</td>
<td>SLN 227/18</td>
<td>W97°56.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E1</td>
<td>HUT 257/48</td>
<td>N37°52.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>AF</td>
<td>HUT 248/9</td>
<td>W98°56.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>K1</td>
<td>HUT 356/27</td>
<td>N38°57.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>L1</td>
<td>HYS 130/14</td>
<td>W97°56.00’</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>L</td>
<td>HYS 356/45</td>
<td>N38°45.00’</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 5 NM right and 15 NM left of centerline from C to E; 5 NM widening out to 15 NM right and 15 NM left of centerline from E to F; 15 NM either side of centerline from F to G; 15 NM right and 15 NM tapering down to 3 NM left of centerline from G to H; 15 NM tapering down to 8 NM right and 3 NM left of centerline from H to I; 8 NM either side of centerline from I to K; 6 NM left and 8 NM right of centerline from K to L; Alternate Exit-5 NM either side of centerline from E1 to AF; 6 NM left and 8 NM right of centerline from AF to L1.

Special Operating Procedures:

(1) Alternate Entry: B, C, and D.
(2) Alternate Exit: B, E, H, J and K.
(3) Exit at J for entry into Bison MOA, or if not scheduled for R-3601.
(4) Exit at K on alternate route if not scheduled for R-3601.
(5) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
(6) Contact Smoky Hill range officer prior to J for entry into maneuver area, Smoky MOA, and R-3601.
(8) Avoid the following Noise Sensitive Areas:
   (a) All airports charted on the Wichita Sectional Chart by 1500’ AGL/3 NM;
   (b) Livestock feedlot 3 NM north of Pratt, N37-36 W98-43;
   (c) Livestock feedlot 4 NM south of Sylvia, N37-54N 98-24;
   (d) Farm 6 NM north of Bazine by 1500’ AGL/5 NM, N38-33 W99-38;
   (e) Farm 5 NM north of Otis by 1500’ AGL/5 NM, N38-37.5 W99-02;
   (f) Livestock feedlot, N38-47.5 W99-41.0;
(g) The town of Lorraine by 1500’ AGL/5 NM, N38-34 W98-19;
(h) The town of Kinsley by 1500’ AGL/5 NM, N37-55 W99-25;
(i) Farm, N38-37.5 W99-01.5;
(j) The town of Lacrosse by 1500’ AGL/5 NM, 38-37.5N 99-01.5W;
(k) Feedlot at N37-33.0 W98-34.0;
(l) Feedlot at N37-44.0 W98-54.0;
(m) Feedlot at N37-55.0 W98-53.5;
(n) Feedlot at N38-29.0 W98-17.5;
(o) Feedlot at N38-31.5 W98-20.0;
(p) Feedlot at N37-30.5 W98-36.0;
(q) Feedlot at N37-46.0 W99-34.5;
(r) Feedlot at N38-09.5 W99-49.5;
(s) Feedlot at N38-13.0 W99-47.0.
(9) Avoid overflight of cattle farm by 3 NM/1000’ coordinates N38-44.5 W99-25.4.

FSS Within 100 NM Radius:
ICT

VR-533


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION: Altitude Data Pt Fac/Rad/Dist Lat/Long

As assigned to A ICT 084/40 N37°44.00’ W96°45.00’
01 AGL to but not include 25 MSL.
01 AGL B 25 MSL to B EMP 179/32 N37°46.00’ W96°13.00’
01 AGL B 30 MSL to C EMP 262/8 N38°17.50’ W96°19.00’
01 AGL B 30 MSL to D EMP 315/18 N38°32.00’ W96°22.00’
01 AGL B 30 MSL to E EMP 290/33 N38°33.00’ W96°45.00’
01 AGL B 30 MSL to F SLN 117/33 N38°37.00’ W97°02.00’
01 AGL B 06 AGL OR SFC B 30 MSL IF cld by SALINA Apch Con prior to ROX-
BURY/145 RAD
01 AGL B 06 AGL to G SLN 193/30 N38°27.30’ W97°50.00’
01 AGL B 30 MSL to H SLN 201/32 N38°27.30’ W97°56.00’
Maneuver Area.
01 AGL B 100 MSL to I SLN 227/18 N38°45.00’ W97°56.00’
within area to I.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 5 NM tapering down to 2 NM right from B to C; 5

NM left and 2 NM tapering out to 5 NM right from C to D; 5 NM either side of centerline from D to H; 6 NM left and 8 NM right of centerline from H to I.

Special Operating Procedures:
(1) Alternate Entry: B, C and E.
(2) Alternate Exit: B, C, E and G.
(3) Exit at G if not scheduled for R-3601, avoid flight within Smoky MOA.
(4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
(5) Contact Smoky Hill range officer prior to G for entry into the maneuver area, Smoky MOA, and R-3601.
(6) Route conflicts with VR-512, VR-531, VR-534, and VR-535. Conflicts will be avoided by MARSA and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling of Smoky Hill range times.
(7) Avoid the following Noise Sensitive Areas:
(a) All airports on the Wichita and Kansas city Sectional Charts by 1500’ AGL/3 NM;
(b) The town of Eureka by 1500’ AGL/5 NM, N37-49 W96-18;
(c) Livestock feedlot 3 NM west of Burdick, N38-36 W96-54;
(d) Livestock feedlot 3 NM northwest of Romona, N38-36.5 W97-06.0;
(e) The town of Tampa, N38-33 W97-09;
(f) Farm, N38-30.0 W97-22.7;
(g) Livestock feedlot located 5 NM south of Dunlop, N38-30.0 W96-21.0;
(h) Livestock feedlot located 3 NM southwest of Dunlop, N38-32.5 W96-24.0;
(i) Livestock feedlot located 3 NM southeast of Wilsey, N38-35.0 W96-38.5;
(j) Livestock feedlot located 8 NM northwest of McPherson, N38-29.0 W97-47.0.

FSS Within 100 NM Radius:
ICT

VR-534


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION: Altitude Data Pt Fac/Rad/Dist Lat/Long

As assigned to A ICT 119/33 N37°25.00’ W97°01.00’
01 AGL to but not including 25 MSL.
01 AGL B 30 MSL to B BVO 315/41 N37°23.00’ W96°32.00’
01 AGL B 30 MSL to Maneuver Area.
01 AGL B 100 MSL to C EMP 202/33 N37°49.00’ W96°29.00’
within area to I.
01 AGL B 25 MSL to D EMP 268/25 N38°20.00’ W96°40.00’
01 AGL B 30 MSL to E EMP 290/33 N38°33.00’ W96°45.00’
VR ROUTES

01 AGL B 06 AGL to F SLN 193/30 N38°27.30' W97°50.00'
01 AGL B 30 MSL to G SLN 201/32 N38°27.30' W97°56.00'
01 AGL B 100 MSL to H SLN 227/18 N38°45.00' W97°56.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to G; 6 NM left and 8 NM right of centerline from G to H.

Special Operating Procedures:
1. Alternate Entry: D and E.
2. Alternate Exit: D, E and F.
3. Exit at F if not scheduled for R-3601, avoid flight within Smoky MOA.
4. Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
5. Contact Smoky Hill range officer prior to F for entry to maneuver area, Smoky MOA, and R-3601.
6. Route conflicts with VR-512, VR-531, VR-533 and VR-534. Conflicts will be avoided by MARSA and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling at Smoky Hill range times.
7. Avoid the following Noise Sensitive Areas:
   a. All charted airports on the Wichita and Kansas City Sectional Charts by 1500' AGL/3 NM;
   b. Uncharted airfield at Atlanta, N37-26 W96-46;
   c. Uncharted airfield at Wilmont, N37-22 W96-53;
   d. Within 10 NM of Cottonwood Falls, N38-22 W96-33, below 1500 AGL;
   e. Livestock feedlot 3 NM west of Burdick, N38-36 W96-54;
   f. Livestock feedlot 3 NM northwest of Romona, N38-36.5 W97-06.0;
   g. The town of Tampa, N38-33 W97-09;
   h. Livestock feedlot 4 NM southeast of Roxbury, N38-30 W97-23;
   i. Farm, N38-30.0 W97-22.7;
   k. Livestock feedlot located 8 NM northeast of McPherson, N38-29.0 W97-47.0;
   l. Feedlot located 2 NM west of Lincolnville, N38-30.0 W96-59.0.

FSS Within 100 NM Radius:
ICT

VR-535


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A ICT 119/33 N37°25.00' W97°01.00'
01 AGL B 15 AGL to B BVO 315/41 N37°23.00' W96°32.00'
01 AGL B 15 AGL to C EMP 179/32 N37°46.00' W96°13.00'
01 AGL B 25 MSL to D EMP 171/25 N37°52.00' W96°08.00'
01 AGL B 25 MSL to E EMP 259/8 N38°17.00' W96°19.00'
01 AGL B 15 AGL to F EMP 268/25 N38°20.00' W96°40.00'
01 AGL B 15 AGL to G SLN 150/34 N38°24.00' W97°20.00'
01 AGL B 06 AGL to H SLN 193/30 N38°27.30' W97°50.00'
01 AGL B 15 AGL to I SLN 201/32 N38°27.30' W97°56.00'
01 AGL B 100 MSL to J SLN 227/18 N38°45.00' W97°56.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 15 NM right of centerline from B to D; 5 NM left and 15 NM tapering down to 2 NM right of centerline from D to E; 6 NM left and 8 NM right of centerline from E to J.

Special Operating Procedures:
1. Alternate Entry: C and F.
2. Alternate Exit: E, F and H.
3. Exit at H if not scheduled for R-3601, avoid flight within Smoky MOA.
4. Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
5. Contact Smoky Hill range officer prior to F for entry into the maneuver area, Smoky MOA, and R-3601.
6. Route conflicts with VR-512, VR-531, VR-533 and VR-534. Conflicts will be avoided by MARSA and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling at Smoky Hill range times.
7. Avoid the following Noise Sensitive Areas:
   a. All charted airports on the Wichita and Kansas City Sectional Charts by 1500' AGL/3 NM;
   b. Uncharted airfield at Atlanta, N37-26 W96-46;
   c. Uncharted airfield at Wilmont, N37-22 W96-53;
   d. Within 10 NM of Cottonwood Falls, N38-22 W96-33, below 1500' AGL;
   e. Livestock feedlot 3 NM southeast of Roxbury, N38-30 W97-23;
   f. Livestock feedlot 4 NM southeast of Roxbury, N38-30 W97-23;
   g. Livestock feedlot located 8 NM northwest of McPherson, N38-29.0 W97-47.0;
   h. Feedlot located 2 NM west of Lincolnville, N38-30.0 W96-59.0.
(k) Livestock feedlot, N38-28 W96-14;
l) Farm 3 NM northeast of Clements, N38-20 W96-44;
m) Farm N38-20.5 W96-30.5;
n) Livestock feedlot located 8 NM northwest of McPherson, N38-29.0 W97-47.0;
o) Feedlot located 2 NM northwest of Lincolnville, N38-30.0 W96-59.0;
p) 500' tower located 2 NM northwest of Marion, N38-22.0 W97-02.5.

FSS Within 100 NM Radius:
ICT

VR-536


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION: 

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>HYS 188/11</td>
<td>N38°40.00' W99°21.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to B</td>
<td>DDC 063/30</td>
<td>N38°01.00' W99°24.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 40 MSL to 01 AGL B 06 AGL until 5 NM east of Pratt Arpt then</td>
<td>C</td>
<td>HUT 248/50</td>
<td>N37°44.00' W98°56.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to 01 AGL B 06 AGL or 01 AGL B 32 MSL (if cleared by Hutchinson Apch Ctl 325.8 prior to D) to Maneuver Area</td>
<td>D</td>
<td>HUT 248/9</td>
<td>N37°57.00' W98°07.00'</td>
</tr>
<tr>
<td>01 AGL B 06 AGL to 01 AGL B 100 MSL to within area to F</td>
<td>E</td>
<td>HUT 356/27</td>
<td>N38°27.00' W97°56.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to F</td>
<td>SUX 201/32</td>
<td>N38°45.00' W97°56.00'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to E; 6 NM left and 8 NM right of centerline from E to F.

Special Operating Procedures:
(1) Alternate Entry: C.
(2) Alternate Exit: C and E.
(3) Exit at E if not scheduled for R-3601, avoid flight into Smoky MOA.
(4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
(5) Contact Smoky Hill range officer prior to E for entry into the maneuver area, Smoky Hill MOA, and R-3601.

(6) Route conflicts with VR-119, VR-138, VR-152 and VR-532. Conflicts will be avoided by MARSA and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling of Smoky Hill range times.

(7) Avoid the following Noise Sensitive Areas:
(a) All airports charted on the Wichita Sectional Chart by 1500' AGL/3 NM;
(b) Livestock feedlot 3 NM south of Rush Center, N38-26 W99-17;
(c) Livestock feedlot 4 NM south of Lewis, N37-45 W99-14;
(d) Livestock feedlot 3 NM northeast of Trousdale, N37-51 W99-02;
(e) Livestock feedlot 4 NM south of Sylvia, N37-45 W98-24;
(f) Livestock feedlot 4 NM east of Saxman, N38-17 W98-02;
(g) The town of Kinsley by 1500' AGL/5 NM, N37-55 W99-25;
(h) The town of Lacrosse by 1500' AGL/5 NM, N38-37.5 W99-01.5;
(i) Feedlot located 4 NM southwest of Macksville, N37-55.0 W98-55.0;
(j) Feedlot located at N37-44.0 W98-55.0;
(k) Feedlot located 8 NM southwest of Stafford, N37-50.0 W98-40.0.

FSS Within 100 NM Radius:
ICT

VR-540

ORIGINATING ACTIVITY: 114 FW OG/CC (ANG), 1201 W. Algonquin St., Sioux Falls, SD, 57104 DSN 798-7746.

SCHEDULING ACTIVITY: 114 FW OSS/OSA (ANG), Sioux Falls, SD, 57104 DSN 798-7754.

HOURS OF OPERATION: By NOTAM, 2 hr prior notification required

ROUTE DESCRIPTION: 

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to or as assigned. Descend to</td>
<td>A</td>
<td>LNK 327/34</td>
<td>N41°26.00' W97°03.00'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>B</td>
<td>LNK 343/43</td>
<td>N41°38.40' W96°53.00'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>C</td>
<td>SUX 201/32</td>
<td>N41°53.00' W96°41.00'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>D</td>
<td>SUX 127/39</td>
<td>N42°05.30' W95°31.40'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>E</td>
<td>SUX 104/39</td>
<td>N42°11.40' W94°32.40'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>F</td>
<td>FOD 196/28</td>
<td>N42°32.40'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>G</td>
<td>DSM 295/47</td>
<td>N41°51.00' W94°32.40'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>H</td>
<td>LMN 315/42</td>
<td>N40°09.00' W94°32.40'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>I</td>
<td>LMN 268/26</td>
<td>N40°38.00' W94°32.40'</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to</td>
<td>J</td>
<td>PWE 060/45</td>
<td>N40°30.40' W95°19.00'</td>
</tr>
</tbody>
</table>
VR ROUTES

15 AGL B 40 MSL to K PWE 046/21 N40°25.10' W95°51.00'
15 AGL B 40 MSL to L LNK 120/25 N40°39.40' W96°19.00'
15 AGL B 40 MSL to M LNK 120/21 N40°42.20' W96°23.30'

TERRAIN FOLLOWING OPERATIONS: Authorized from B thru L.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 8 NM either side of centerline from B to C; 7.5 NM left and 7 NM right of centerline from C to D; 8 NM either side of centerline from D to E; 7.5 NM left and 7 NM right of centerline from E to F; 8 NM either side of centerline from F to G; 7 NM left and 7.5 NM right of centerline from H to I; 8 NM left and 6 NM right of centerline from I to J; 4 NM either side of centerline from J to K.

Special Operating Procedures:
(1) Route is designated for tactical low level formation, road reconnaissance, radar low level navigation, ground attack tactics, and aerial defense tactics.
(2) VR-540 is opposite direction traffic of VR-541. 132 FW will not schedule opposite and conflicting traffic at the same time.
(3) Aircrews should be aware of VR-510 crossing between B and C.
(4) Avoid flight within 1500' AGL and 3 NM of the Tekamah, Denison, Carroll, Jefferson, Guthrie Center, Greenfield, Peterson and Auburn airports.
(5) Cross Point L at 300 KIAS at 40 MSL to M and contact Lincoln Approach Control on 338.3.
(6) Alternate Entry: E, F and I.
(7) Alternate Exit: G and K.

FSS Within 100 NM Radius:
FOD, COU, OLU

VR-541

ORIGINATING ACTIVITY: 114 FW OG/CC (ANG), 1201 W. Algonquin St., Sioux Falls, SD, 57104 DSN 798-7746.

SCHEDULING ACTIVITY: 114 FW OSS/OSA (ANG), Sioux Falls, SD, 57104 DSN 798-7754.

HOURS OF OPERATION: By NOTAM, 2 hr prior notification required.

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A PWE 046/21 N40°25.10' W95°51.00'
15 AGL B 40 MSL to B PWE 060/45 N40°30.40' W95°19.00'
15 AGL B 40 MSL to C LMK 268/26 N40°39.80' W94°32.40'
15 AGL B 40 MSL to D LMK 315/42 N41°09.00' W94°32.40'
15 AGL B 40 MSL to E DSM 295/47 N41°51.00' W94°32.40'
15 AGL B 40 MSL to F SUX 196/28 N42°11.40' W94°32.40'
15 AGL B 40 MSL to G SUX 104/39 N42°05.30' W95°31.40'
15 AGL B 40 MSL to H SUX 127/39 N41°53.00' W94°43.30'
15 AGL B 40 MSL to I SUX 201/32 N41°53.00' W96°41.00'
15 AGL B 40 MSL to J SUX 343/43 N41°38.40' W96°53.00'
15 AGL B 40 MSL to K LNK 326/34 N41°26.00' W97°03.30'

TERRAIN FOLLOWING OPERATIONS: Authorized from A to J.

ROUTE WIDTH - N40-39-00 W95-51-18 to 6 NM left of B; 2 NM left and 4 NM right of centerline from A to B; 6 NM left and 4 NM right of centerline from B to C; 5 NM either side of centerline from C to D; 8 NM either side of centerline from D to F; 6.5 NM either side of centerline from F to G; 8 NM either side of centerline from G to H; 7 NM left and 7.5 NM right of centerline from H to I; 8 NM left and 6 NM right of centerline from I to J; 4 NM either side of centerline from J to K.

Special Operating Procedures:
(1) Route is designated for tactical low level formation, road reconnaissance, radar low level navigation, ground attack tactics, and aerial defense tactics.
(2) VR-541 is opposite direction traffic of VR-540. 132 FW will not schedule opposite and conflicting traffic at the same time.
(3) Aircrews should be aware of VR-510 crossing between I and J.
(4) Avoid flight within 1500' AGL and 3 NM of the Tekamah, Denison, Carroll, Jefferson, Guthrie Center, Greenfield, Peterson and Auburn Airports.
(5) Cross K at or above 100 MSL.
(6) Alternate Entry: C, E, F and G.
(7) Alternate Exit: D, E, F and G.

FSS Within 100 NM Radius:
FOD, COU, OLU
VR-544

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5745/5746.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM, 2 hours and 15 minutes prior to entry time required

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 7 NM either side of centerline from A to B; 8 NM either side of centerline from B to D; 8 NM east and 4 NM west of centerline from D to E; 8 NM either side of centerline from E to I.

Special Operating Procedures:

1. All Points are Alternate Entry/Exit Points.
2. Route has the same lateral confines as IR-505 C to K. It is also the reverse of VR-545. VR-531 parallels and crosses route from A to F. Numerous VR routes in the vicinity of R-3601.
3. All route reservations and briefings including night and weekend flights must be made during workday hours (Normally Tue-Sat 0700-1730 local).
4. R-3601 cannot be entered unless the user has either a scheduled range period at R-3601, or when R-3601 is inactive. Contact R-3601/Smoky MOA scheduling prior to entering R-3601/Smoky MOA at DSN 743-7600, C785-827-9611/9612.
5. Route segment within Bison/Smoky MOA is designated for tactical low level arial defense/offense tactics. Contact Bison/Smoky MOA scheduling prior to using this option at DSN 743-7600, C785-827-9611/9612.
6. Kansas City Center low altitude frequencies are north end: 322.4; south end: 363.2.
7. Route is surveyed to 200' AGL but obstacle clearance is not guaranteed.
8. Avoid all airports by at least 3 NM or 1500' AGL. Be especially concerned around Beloit Airport (N39-29.0 W98-08.0) and Rose Port Airport (N39-38.0 W98-22.0W). Note that the route boundaries go around the Lucas Airport (N39-40.0 W98-31.0).
12. Migratory bird flyway in the spring and fall.

FSS Within 100 NM Radius:
ICT, OLU

VR-545

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5745/5746.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM, 2 hours and 15 minutes prior to entry time required

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
SFC B 40 MSL to A SLN 208/19 N38°40.00' W97°51.00'
SFC B 40 MSL to B SLN 235/33 N38°40.00' W98°14.00'
SFC B 40 MSL to C SLN 252/38 N38°48.00' W98°25.00'
SFC B 40 MSL to D SLN 270/36 N39°00.00' W98°23.00'
SFC B 40 MSL to E SLN 280/36 N39°06.00' W98°22.00'
SFC B 40 MSL to F TKO 176/31 N39°18.00' W98°20.00'
SFC B 40 MSL to G TKO 176/18 N39°30.00' W98°18.00'
SFC B 40 MSL to H TKO 062/22 N39°55.00' W97°49.00'
SFC B 40 MSL to I TKO 052/36 N40°05.50' W97°34.00'

Altitude Data Pt Fac/Rad/Dist Lat/Long
SFC B 60 MSL to A TKO 052/36 N40°05.50' W97°34.00'
SFC B 40 MSL to B TKO 062/22 N39°06.00' W98°22.00'
SFC B 40 MSL to C TKO 176/18 N39°30.00' W98°18.00'
SFC B 40 MSL to D TKO 176/31 N39°18.00' W98°20.00'
SFC B 40 MSL to E SLN 280/36 N39°06.00' W98°22.00'
SFC B 40 MSL to F SLN 270/36 N39°00.00' W98°23.00'
SFC B 40 MSL to G SLN 252/38 N38°48.00' W98°25.00'
SFC B 40 MSL to H SLN 235/33 N38°40.00' W98°14.00'
SFC B 40 MSL to I SLN 208/19 N38°40.00' W97°51.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM either side of centerline from A to E; 8 NM east and 4 NM west of centerline from E to F; 8 NM either side of centerline from F to H; 7 NM either side of centerline from H to I.

Special Operating Procedures:

1. All points are Alternate Entry/Exit Points.
VR ROUTES

(2) Route has the same lateral confines as IR-505 C to K. It is also the reverse route of VR-544. VR-531 parallels and crosses route from D to I. Numerous VR routes are in the vicinity of R-3601.

(3) All route reservations and briefings including night and weekend flights must be made during workday hours (Normally Tue-Fri 0700-1730 local).

(4) R-3601 cannot be entered unless the user has either a scheduled range period at R-3601, or when R-3601 is inactive. Contact R-3601/Smoky MOA scheduling prior to entering R-3601/Smoky MOA at DSN 743-7600, C785-827-9611/9612.

(5) Route segment within Bison/Smoky MOA is designated for tactical low level aerial defense/offense tactics. Contact Bison/Smoky MOA scheduling prior to using this option at DSN 743-6700, C785-827-9611/9612.

(6) Kansas City Center low altitude frequencies are north end: 322.4; south end: 363.2.

(7) Route is surveyed to 200’ AGL but obstacle clearance is not guaranteed.

(8) Avoid all airports by at least 3 NM or 1500’ AGL. Be especially concerned around Beloit Airport (N39-29.0 W98-08.0) and Rose Port Airport (N39-38.0 W98-22.0). Note that the route boundaries go around the Lucas Airport (39-04.0N W98-31.0).

(9) Avoid livestock farms and towns by 1500’ AGL or 1 NM. Be especially concerned for the feedlots at N39-59.0 W97-39.0, N39-48.0 W98-05.0, N39-00.0 W98-07.0, and N39-00.0 W98-27.0.


(12) Migratory bird flyway in the spring and fall.

FSS Within 100 NM Radius:
ICT, OLU

VR-552


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>SLN 238/20</td>
<td>A N38°47.00’ W98°01.00’</td>
</tr>
<tr>
<td>05 AGL B 100 MSL to</td>
<td>B SLN 204/37</td>
<td>N38°24.00’ W98°01.00’</td>
</tr>
<tr>
<td>25 MSL to</td>
<td>C HUT 203/9</td>
<td>N37°52.00’ W98°01.00’</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>D ICT 221/16</td>
<td>N37°34.00’ W97°50.00’</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>E PER 311/24</td>
<td>N37°02.00’ W97°30.00’</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>F PER 191/32</td>
<td>N36°14.00’ W97°21.00’</td>
</tr>
</tbody>
</table>

05 AGL B 40 MSL to G TIK 007/26 N35°51.00’ W97°15.00’

05 AGL B 45 MSL to H TIK 016/18 N35°43.00’ W97°14.00’

TERRAIN FOLLOWING OPERATIONS: Authorized from A to B and C to H only. Reverse course orbit is authorized between A and B.

ROUTE WIDTH - On centerline to 9 NM left of centerline from A to B, excluding R-3601; 2 NM either side of centerline from B to C; 3 NM either side of centerline from C to H.

Special Operating Procedures:

(1) Contact Hutchinson Approach/Tower (325.8) passing B for traffic information through the Hutchinson Terminal Area.

(2) Alternate Entry: B, D and E.

(3) Alternate Exit: B, C, D, E and F.


(5) Avoid the following Noise Sensitive Areas:

(a) All airports charted on the Wichita and Dallas/Fort Worth Sectional Charts by 1500’ AGL/3 NM;

(b) Farm at Point H, N35-43 W97-01;

(c) Livestock feedlot south of Langston, N35-56 W97-14;

(d) Airport at Perry, N36-18 W97-19;

(e) Farm near Billings, N36-23 W97-25;

(f) Farm, N37-12 W97-32;

(g) Livestock feedlot 1 NM south of Milan, N37-15 W97-41;

(h) Airfield 3 NM west of Cheny Reservoir Dam, N37-42 W97-54;

(i) Farm 3 NM east of Nickerson N38-09 W98-00;

(j) Farm 7 NM south of Little River, N38-17 W98-02;

(k) Kanopolis Reservoir Dam below 1000’ AGL, N38-37 W97-52;

(l) Farm below 1000’ AGL, N38-18 W98-02.

(6) All heavy aircraft exit prior to H.

(7) Check NOTAMs for rocket firings to FL 230 near Argonia, KS (N37-16.0 W97-44.0).

FSS Within 100 NM Radius:
CT, MLC

VR-604

ORIGINATING ACTIVITY: 148 FW (ANG), Duluth Intl, Duluth, MN 55811 DSN 825-7189, C218-788-7189.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1400-0500Z++ daily, 0500-1400Z++ allowable

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to</td>
<td>A HIB 070/88</td>
<td>N47°45.00’ W90°38.00’</td>
</tr>
<tr>
<td>02 AGL B 100 MSL to</td>
<td>B HIB 081/60</td>
<td>N47°25.00’ W91°15.02’</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>C HIB 222/17</td>
<td>N47°06.00’ W92°59.02’</td>
</tr>
</tbody>
</table>
VR ROUTES

3-75

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to Q; 4 NM either side of centerline from Q to R; 5 NM either side of centerline from R to T.

Special Operating Procedures:
(1) Scheduling available through the 148 FIG Mon-Sat to deconflict with VR-607.
(2) All turn points are authorized entry and exit points.
(3) Route designated for tactical low level formation, visual/radar low level navigation, ground attack tactics, and simulated weapons delivery.
(4) Segments A to C are designated a maneuver area. Aircraft will delay 30 minutes between A and C.
(5) Uncharted towers:
   (a) N47 34.66' W090 50.40' 100ft.
   (b) N47 18.28' W092 13.20' 150ft two NM north of charted tower west of Whiteface Reservoir.
   (c) N46 17.19' W092 39.90' 200ft.
   (d) N46 38.90' W093 27.60' 200ft.
   (e) N46 32.23' W092 11.90' 200ft.
   (f) N45 21.52' W090 13.60' 100ft.
   (g) N45 27.72' W089 51.40' 120ft.
   (h) N45 30.15' W090 48.30' 100ft cluster.

FSS Within 100 NM Radius:
GRB, PNM

VR-607

ORIGINATING ACTIVITY: 148 FW (ANG), Duluth Intl, Duluth, MN 55811 DSN 825-7189, C218-788-7189.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1400-0500Z++ daily, 0500-1400Z++ allowable

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to A</td>
<td>DLH 127/64</td>
<td>N46°10.00' W91°03.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to B</td>
<td>EAU 053/36</td>
<td>N45°13.00' W90°46.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to C</td>
<td>RHI 237/27</td>
<td>N45°24.00' W89°00.02'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to D</td>
<td>RHI 177/18</td>
<td>N45°20.00' W88°28.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to E</td>
<td>RHI 237/27</td>
<td>N45°24.00' W89°00.02'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to F</td>
<td>IMT 213/29</td>
<td>N45°59.00' W88°31.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to G</td>
<td>IMT 134/36</td>
<td>N46°46.00' W87°50.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to H</td>
<td>IMT 213/29</td>
<td>N45°24.00' W89°00.02'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to I</td>
<td>IMT 303/20</td>
<td>N45°59.00' W88°31.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to J</td>
<td>IMT 151/25</td>
<td>N45°42.00' W89°13.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to K</td>
<td>IWD 077/38</td>
<td>N46°25.00' W90°46.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to L</td>
<td>IWD 254/41</td>
<td>N45°13.00' W89°13.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to M</td>
<td>CMX 134/36</td>
<td>N46°46.00' W87°50.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to N</td>
<td>CMX 134/36</td>
<td>N46°46.00' W87°50.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to O</td>
<td>IMT 213/29</td>
<td>N45°59.00' W88°31.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to P</td>
<td>IMT 134/36</td>
<td>N46°46.00' W87°50.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to Q</td>
<td>CMX 134/36</td>
<td>N46°46.00' W87°50.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to R</td>
<td>CMX 134/36</td>
<td>N46°46.00' W87°50.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to S</td>
<td>EAU 053/36</td>
<td>N45°13.00' W89°00.02'</td>
</tr>
<tr>
<td>05 AGL B 100 MSL to T</td>
<td>DLH 127/64</td>
<td>N46°05.00' W91°03.02'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.
VR ROUTES

ROUTE WIDTH - 5 NM either side of centerline from A to C; 4 NM either side of centerline from C to D; 5 NM either side of centerline from D to T.

Special Operating Procedures:
(1) Contact 148 FW Mon-Fri for scheduling and to deconflict with VR-604.
(2) All turn points are authorized entry and exit points.
(3) Route designated for tactical low level formation, visual/radar low level navigation, ground attack tactics, and simulated weapons delivery.
(4) Segments I to L are designated a maneuver area. Aircraft will delay 30 minutes between I and L.
(5) Uncharted towers:
   (a) N47 34.66 W090 50.40 100ft.
   (b) N47 18.28 W092 13.20 150ft two NM north of charted tower west of Whiteface Reservoir.
   (c) N46 17.19 W092 11.90 200ft.
   (d) N46 25.52 W093 13.60 100ft.
   (e) N46 32.23 W090 47.20 100ft.
   (f) N45 21.52 W090 36.60 100ft.
   (g) N45 27.72 W089 51.40 120ft.
   (h) N45 30.15 W089 48.30 100ft cluster.

FSS Within 100 NM Radius:
GRB, PNM

VR-619


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset Tue-Sun, OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A TTH 156/14 N39°16.00' W87°08.00'
05 AGL B 30 MSL to B OOM 210/27 N38°45.00' W86°53.00'
05 AGL B 60 MSL to C OOM 195/36 N38°33.00' W86°47.00'
05 AGL B 30 MSL to D OOM 184/54 N38°15.00' W86°39.00'
03 AGL B 30 MSL to E OOM 144/34 N38°42.00' W86°10.00'
03 AGL B 50 MSL to F OOM 117/44 N38°50.00' W85°46.00'
05 AGL B 50 MSL to G OOM 104/54 N38°57.00' W85°29.00'

TERRAIN FOLLOWING OPERATIONS: Contour flying entire route in VMC.

ROUTE WIDTH - 3 NM left and 4 NM right of centerline from A to B; 8 NM left and 4 NM right of centerline from B to C; 3 NM left and 4 NM right of centerline from C to D; 3 NM left and 7 NM right of centerline from D to E; 1 NM left and 6 NM right of centerline from E to F; 2 NM left and 6 NM right of centerline from F to G.

Special Operating Procedures:
(1) Clearance to fly the route does not constitute clearance to enter R-3403. This clearance must be obtained from the Range Control Officer.
(2) Point F Alternate Exit for aircraft not scheduled into R-3403.
(3) Point F Alternate Exit for aircraft scheduled into R-3403.
(4) Route is MARSA thru See and Avoid with IR-618, VR-621, VR-613, VR-1679, VR-1631.
(5) Avoid hard surface airports by 3000' vertically or 3 NM horizontally.
(6) Avoid overtight of cities, towers and villages to extent possible.
(7) If holding required for entry into R-3403, this may be accomplished within route segment F to G.
(8) Alternate Entry: Points B, E and F.
(9) Alternate Exit: Points E and F.
(10) Request users consider a maximum airspeed of 420 KTAS on all route segments. 480 KTAS from IP to target.
(11) For R-3403 range entry. Prior to crossing NABB VORTAC (ABB Ch 82) 010 degree radial, ensure that all members of the flight are 17.5 DME north of NABB.
(12) Use caution for light aircraft operating in the vicinity of an unmarked private airport at Point E.

FSS Within 100 NM Radius:
BNA, CLE, DAY, HUF, IKK, LOU

VR-634

ORIGINATING ACTIVITY: Alpena CRTC/Airspace Scheduling Office, 5884 A. Street, Alpena, MI 49707, C989-354-6386/6204, DSN 741-6386/6204.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
05 AGL B 15 AGL to A TVC 214/21 N44°22.00' W85°49.00'
05 AGL B 15 AGL to B TVC 283/15 N44°43.00' W85°54.00'
05 AGL B 15 AGL to C TVC 360/20 N45°00.00' W85°34.00'
05 AGL B 30 MSL to D PLN 226/27 N45°17.00' W85°05.00'
05 AGL B 40 MSL to E PLN 158/24 N45°17.00' W84°24.00'
05 AGL B 40 MSL to F PLN 182/46 N44°52.00' W84°35.00'
05 AGL B 15 AGL to G PLN 174/48 N44°51.00' W84°26.00'
05 AGL B 15 AGL to H MBS 342/32 N44°02.00' W84°21.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.
ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Avoid all watercraft, structures, vehicles, and persons by 500' on Terrain Following segments.
(2) The techniques for applying MARSA during all operations on route segments are by scheduling and the See and Avoid concept. This route is the reverse of VR-664 and crosses or is common with portions of VR-1624, VR-1625 and VR-1645.
(3) Clearance to fly the route does not constitute clearance into R-4201. Clearance to enter R-4201 must be given by the RCO on 385.7 or 381.1. If not scheduled for R-4201, enter route at Alternate Entry Point D.
(4) Alternate Entry: B, C, and D.
(5) Alternate Exit: B, C, D, E and F.
(6) Minimum altitude for entire route is 1000' AGL from 1 March-15 August.
(7) Minimum altitude over the Pigeon River Country State Forest Noise Sensitive Area is 2000' MSL. NSA begins 5 NM prior to D and ends 12 NM prior to F and covers entire route width.

FSS Within 100 NM Radius:
GRB, LAN

VR-664

ORIGINATING ACTIVITY: Alpena CRTC/Airspace
Scheduling Office, 5884 A. Street, Alpena, MI 49707, C989-354-6386/6204, DSN 741-6386/6204.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Avoid all watercraft, structures, vehicles, and persons by 500' on Terrain Following segments.
(2) The techniques for applying MARSA during all operations on route segments are by scheduling and the See and Avoid concept. This route is the reverse of VR-634 and crosses or is common with portions of VR-1624, VR-1625 and VR-1645.
(3) Clearance to fly the route does not constitute clearance into R-4201. Clearance to enter R-4201 must be given by the RCO on 385.7 or 381.1. If not scheduled for R-4201, enter route at Alternate Entry Point D.
(4) Alternate Entry: B, C, and D.
(5) Alternate Exit: B, C, D, E and F.
(6) Minimum altitude for entire route is 1000' AGL from 1 March-15 August.
(7) Minimum altitude over the Pigeon River Country State Forest Noise Sensitive Area is 3000' MSL. NSA begins 16 NM prior to D and ends 4 NM after D and covers entire route width.

FSS Within 100 NM Radius:
GRB, LAN

VR-704

ORIGINATING ACTIVITY: Bollen Range, 193 SOW, DET 1, 26139 Ammo Road, Annville, PA 17003-5180 C717-861-1136 DSN 423-1136 Toll Free 800-717-2662 FAX DSN 423-1136 FAX C717-861-1139.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800 to 2200 local daily

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.
10 AGL B 50 MSL to L1 RAV 295/16 N40°37.00’ W76°56.50’
10 AGL B 40 MSL to N RAV 240/9 N40°27.50’ W76°44.50’

TERRAIN FOLLOWING OPERATIONS: Authorized from E to J.

ROUTE WIDTH - 3 NM either side of centerline from A to H; 10 NM either side of centerline from H to L; centerline of Victor Airway-170 and 4 NM right of centerline from L to M or L1 to N.

Special Operating Procedures:
(1) Route must be scheduled 2 hours in advance with 193SOW, DET 1, Bollen Range. Also check for route supplemental information posted on 193 SOW, DET 1 BOLLEN RANGE COP. Units desiring to schedule for Saturday or Sunday must place request no later than 1500 hours (Local) on Fri.
(3) Alternate Exit: D, H, I, K and M. Exit toward northeast except Point D exit west.
(4) Low Level Ground Attack Tactics (GAT), Road Reconnaissance E to J.
(5) Aircraft not scheduled to operate in R-5802 will proceed from L to M.
(6) Aircraft scheduled to operate in R-5802 will proceed from L1 to N and call ‘Balky’ on 233.15 (P) or VHF 140.275 (P), 134.1 (S), 139.85 (T) prior to entering R-5802 for clearance onto range.
(7) There is no leg from M to N.
(8) CAUTION: VR-1757 crosses VR-704 26 NM west of Point A and at Point C.
(9) CAUTION: Low flying helicopters from Point B to K. Helicopters service strip mines and quarries below 1000’ AGL within route airspace. Avoid strip mines and quarries at low altitudes due to temporary obstructions such as cranes.
(10) CAUTION: Mount Union Airport 33 NM NW of Point A (N40-20-00 W77-53-00), Student training and traffic in pattern to 2000’ MSL. Parachute jumps within a 2 NM radius of airport, surface to 7500’ MSL. Airport elevation is 560’ MSL. Contact flight service for information on parachute jumps at Mount Union Airport.
(11) CAUTION: Avoid Shirley Airport (Pvt) (N41-14-00 W79-08-30).
(12) CAUTION: Hang Gliders, weather permitting: Route segment I-J Hyner Mountain (N41-20-00 W77-32-00), L1-N Berry Mountain (N40-32-00 W76-47-00). Between Susquehanna River and R-5802A/B, Kiowa MOA surface to 5000’ AGL, Blue Ridge Hang Gliding Club will notify bomb range of operations in this area.
(13) CAUTION: Penns Cave Airport, 10 NM south of Point J (N40-53-00 W77-35-00). Student training in traffic pattern and local area. Traffic pattern altitude to 2700’ MSL over the ridge line south of the airport. Cross a 3 NM radius of Penns Cave Airport no lower than 3200’ MSL.
(14) CAUTION: Bendigo Airport 3 NM NE of Ravine VORTAC, Point M on Aerobatic Training Area that is defined as a 1 NM radius of Bendigo Airport, from 1500’ AGL to, but not including 5000’ MSL.
(15) CAUTION: Noise Sensitive Areas-Avoid by 3 NM or cross no lower than 1500’ AGL.
   (a) Kings Gap Environmental Education and Training Center (N40-05-35 W77-16-10);
   (b) Pine Grove Furnace State Park (N40-02-00 W77-18-00);
   (c) Town of Mt. Union (Congressional) (N40-23-00 W77-53-00);
   (d) Private home (N40-32-00 W76-49-30) no 3 NM restriction. All flight members stay left of (quarry) inbound to Fort Indiantown Gap Range;
   (e) Town of Rebersburg (Congressional) (N40-56-40 W77-26-50);
   (f) Private home (N40-38-00 W78-18-50);
   (g) Private farm, very sensitive (N40-35-52 W78-13-00);
   (h) Enders-Fisherville Elementary School (N40-30-30 W76-50-00), avoid direct overflight, low flying sensitive;
   (i) Private home (N40-33-42 W76-57-57) 200 yards southeast of Lunt Airport.;
   (j) Town of Beavertown (N40-45-30 W77-10-20), Weaving Mill- uses sonar equipment that is sensitive to aircraft overflight.
(16) Note: A 1500’ AGL minimum restriction will be placed on the route when the flight evaluation for this route is not current.
(17) Note: Request for local FSS on OPR any special instructions pertaining to annual (Gypsy Moth Spraying Activities) and (Forest Fire Fighting Operations).
(18) Bird migration hazard along route 15 Sep-15 Jan and 15 Feb-15 Apr annually.
(19) Army National Guard Tactical Helicopters operating surface to 3000’ AGL. Helicopter VFR training area: (N40-32-40 W76-48-10 to N40-33-00 W76-30-00 to N40-31-10 W76-31-30 to N40-28-00 W76-30-30 to N40-44-30 W76-34-00 to N40-18-08 W76-45-05 to N40-17-00 W76-51-00 to N40-17-50 W76-55-00 to N40-21-30 W76-53-30 to N40-23-10 W76-48-30 to beginning).
(20) The following is a list of uncharted known airfields that may effect VR-704 use or entry to, or exit from VR-704: Airfields should be avoided by 3 NM or overflight no lower than 1500’ AGL, except as noted in caution 10, 11, 12, 13, and 14 above: Feltenberger (N40-32-40 W77-58-00), Ride Soaring (N40-53-00 W77-54-00), Centerville (N40-01-00 W77-21-00), Schadel (N40-45-00 W76-41-00), Aerobatics Boxes: Kampel (N40-02-00 W76-59-00) 1500’ AGL to 4000’ MSL/3500 feet square, 0.7 NM of Kampel Airport.
(21) Unpublished Route Obstructions: The following obstructions are within 100’ or less of the base altitude for the listed route segments. Listed heights are approximate and may be greater. Previously charted obstructions are not listed. Ranger Towers which are charted are approximately 60’-75’. Use CAUTION when using Alternate Entry/Exit Points. Uncharted obstructions may exist in these areas outside of route airspace:
   (a) Towers (5), (N40-49-00 W78-57-00) 100’ Points C-D;
   (b) Tower, (N41-11-30 W79-11-30) 100’ Points E-F;
   (c) Ranger Tower, (N41-19-20 W79-12-50) 60’ Points E-F;
   (d) Tower, (N41-14-54 W79-13-00) 60’ Points E-F;
   (e) Ranger tower, (N41-24-30 W78-59-10) 60’ Points E-F;
   (f) Tower, (N41-19-00 W79-08-00) 60’ Points E-F;
   (g) Tower, (N41-20-40 W79-07-00) 60’ Points E-F;
   (h) Tower, (N41-17-00 W79-11-20) 60’ Points E-F;
   (i) Tower, (N41-16-00 W79-11-40) 60’ Points E-F;
   (j) Tower, (N41-28-30 W78-54-00) 60’ Points F-G;
   (k) Tower, (N41-34-20 W78-43-20) 100’ Points F-G;
   (l) Tower, (N41-36-02 W78-35-13) unk AGL-2600’ MSL Points F-G;
   (m) Tower, (N41-03-00 W78-35-13) 150’ Points G;
   (n) Tower, (N41-34-00 W78-35-52) 75’ Point G;
   (o) Ranger Tower 26, (N41-34-20 W78-28-10) 60’ Points G-H;
   (p) Tower, (N41-33-42 W76-57-57) 200 yards southeast of Lunt Airport;
Aircrews scheduled to operate VR-704 should become acquainted with the following:

**FSS Within 100 NM Radius:**
- AOO, BUF, CLE, DCA, EKN, IPT, MIV

**VR-705**

**ORIGINATING ACTIVITY:** Bollen Range, 193 SOW, DET 1, 26139 Ammo Road, Annville, PA 17003-5180 717-861-1139, DSN 423-1136 Toll Free 800-717-2662 FAX DSN 423-1139 FAX 261-39 Ammo Road, Annville, PA 17003-5180

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 0800 to 2200 local daily

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>HAR 221/18</td>
<td>N40°03.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W77°16.00'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>B</td>
<td>PSB 193/30</td>
<td>N40°25.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W78°01.50'</td>
</tr>
<tr>
<td>05 AGL B 60 MSL to</td>
<td>C</td>
<td>PSB 249/24</td>
<td>N40°42.50'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W78°26.50'</td>
</tr>
<tr>
<td>01 AGL B 60 MSL to</td>
<td>D</td>
<td>ETG 262/23</td>
<td>N41°05.60'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W78°38.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from C to F.

**ROUTE WIDTH** - 3 NM either side of centerline from A to E; 10 NM either side of centerline from E to H; centerline of Victor Airway-170 and 4 NM right of centerline from H to I or H1 to J.

**Special Operating Procedures:**

1. Route must be scheduled 2 hours in advance with 193SOW, DET 1, Bollen Range. Also check for route supplemental information posted on 193 SOW, DET 1 BOLLEN RANGE COP. Units desiring to schedule for Saturday or Sunday must place request no later than 1500 hours (Local) on Friday.

2. Alternate Entry: C, D, E, F, G and H.

3. Alternate Exit: D, E, G and I. Exit toward northeast except Point D, exit west.

4. Low ground level Ground Attack Tactics (GAT), Road Reconnaissance C to F.

5. Aircraft not scheduled to operate in R-5802 will proceed from H to I.

6. Aircraft scheduled to operate in R-5802 will proceed H1 to J and call ‘Balky’ on 233.45 (P)/239.15 (S) or VHF 140.275 (P), 134.1 (S), 139.85 (T) prior to entering R-5802 for clearance onto route.

7. There is no leg from I to J.

8. CAUTION: VR-1757 crosses VR-705 26NM west of Point A and at Point C.

9. CAUTION: Low flying helicopters from Point B to G. Helicopters service strip mines and quarries below 1000' AGL within Route Airspace. Avoid strip mines and quarries at low altitudes due to temporary obstructions such as cranes.

10. CAUTION: Mount Union Airport 33 NM NW of Point A (N40-20-00 W77-53-00), Student training and traffic in pattern to 2000' MSL. Parachute jumps within a 2 NM radius of airport, surface to 7500' MSL. Airport elevation is 560' MSL. Contact flight service for information on parachute jumps at Mount Union Airport.

11. CAUTION: Hang Gliders weather permitting: Route Segment E-F Hyner Mountain (N41-20-00 W77-32-00); Route Segment H1-J Berry Mountain (N40-32-00 W76-47-00). Between Susquehanna River and R-5802A/B, Kiowa MOA surface to 5000' AGL. Blue Ridge Hang Gliding Club will notify bomb range of operations in this area.

12. CAUTION: Penns Cave Airport 10 NM south of Point F (N40-53-00 W77-35-00). Student training in traffic pattern and local area. Traffic pattern altitude to 2700' MSL over the ridgeline south of the airport. Cross a 3 NM radius of Penns Cave Airport no lower than 3200' MSL.
CAUTION: Bendigo Airport 3 NM NE of Ravine VORTAC, Point I, and an Aerobatics Training Area that is defined as a 1 NM radius of Bendigo Airport, from 1500’ AGL to, but not including 5000’ MSL.

CAUTION: Noise Sensitive Areas. Avoid by 3 NM or cross no lower than 1500’ AGL:
(a) Kings Gap Environmental Education and Training Center (N40-05-35 W77-10-10).
(b) Pine Grove Furnace State Park (N40-02-00 W77-18-00).
(c) Town of Mt. Union (Congressional) (40-23-00 W77-53-00).

Private home (N40-32-00 W76-49-30), no 3 NM restriction. All flight members stay left of Quarry inbound to Fort Indiantown Gap Range.
(e) Town of Rebersburg (Congressional) (N40-56-40 W77-26-50).
(f) Private home (N40-38-00 W78-15-50).
(g) Private farm, very sensitive (N40-35-52 W78-13-00).
(h) Enders-Fisherville Elementary School (N40-30-30 W76-50-00). Avoid direct overflight, low flying sensitive.
(i) Private home (N40-33-42 W76-57-57) 200 yards southwest of Lunt Airport.
(j) Moshannon Valley School District Complex (Congressional) (N40-48-40 W78-24-00) 2 NM right of route boundary, avoid by 1 NM minimum.
(k) Town of Beavertown (Congressional) (N40-45-30 W77-10-20) Weaving Mill, uses sonar equipment that is sensitive to aircraft overflight.

Note: A 1500’ AGL minimum restriction will be placed on the route when the flight evaluation for this route is not current.

Note: Request from local FSS on OPR any special instructions pertaining to annual Gypsy Moth Spraying Activities and Forest Fire Fighting Operations.

ORIGINATING ACTIVITY: Bollen Range, 193 SOW, DET. 1, 26139 Ammo Road, Annville, PA 17003-5180 C717-861-1136 DSN 423-1136 Toll Free 800-717-2662 FAX DSN 423-1136 FAX C717-861-1139.

SCHEDULING ACTIVITY: Same as Originating Activity.

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A ETX 337/53</td>
<td>N41°20.00’ W76°18.00’</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>B ULW 215/13</td>
<td>N41°54.00’ W77°08.00’</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>C JHW 108/50</td>
<td>N42°01.00’ W78°01.00’</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>D JHW 138/14</td>
<td>N42°02.00’ W78°53.00’</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>E JHW 162/20</td>
<td>N41°53.00’ W78°56.00’</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>F JHW 155/45</td>
<td>N41°33.50’ W78°35.40’</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>G ETG 339/18</td>
<td>N41°28.00’ W78°20.50’</td>
<td></td>
</tr>
</tbody>
</table>
(1) Route must be scheduled 2 hours in advance with 193SOW, DET 1, Bollen Range. Also check for route supplemental information posted on 193 SOW, DET 1 BOLLEN RANGE COP. Units desiring to schedule for Saturday or Sunday must place request no later than 1500 hours (Local) on Fri.

(2) Alternate Entry: B, C, D, E, F, G, H, I, J and K.

(3) Low level, Ground Attack Tactics (GAT), road reconnaissance F to I.


(5) Aircraft not scheduled to operate in R-5802 will proceed from K1 to L.

(6) Aircraft scheduled to operate in R-5802 will proceed from K to M and call 'Balky' on 233.45 (P)/239.15 (S) or VHF 140.275 (P)/134.1 (S)/139.85(T) prior to entering R-5802 for clearance onto the range.

(7) There is no leg from L to M.

(8) CAUTION: SR-823 crosses route at Point C and 10 miles east of Point D.

(9) CAUTION: Low flying helicopters from Point F to J. Helicopters service strip mines and quarries below 1000' AGL within route airspace. Avoid strip mines and quarries at low altitudes due to temporary obstructions such as cranes.

(10) CAUTION: Hang Gliders weather permitting: Route Segment H-I Hyner Mountain (N41-20-00 W77-32-00); K1-M Berry Mountain (N40-32-00 W76-47-00); Between Susquehanna River and R-5802A/B, Kiowa MOA surface to 5000' AGL-Blue Ridge Hang Gliding Club will notify bomb range of operations in this area.

(11) CAUTION: Penns Cave Airport 10 NM south of Point I (N40-53-00 77-35-00) student training in traffic pattern and local area. Traffic patterns to 2700' MSL over the ridge line south of the airport. Cross a 3 NM radius of Penns Cave Airport no lower than 3200' MSL.

(12) CAUTION: Bendigo Airport 3 NM northeast of Ravine VORTAC (Point L) and an Aerobatic Training Area that is defined as a 1 NM radius of Bendigo Airport from 1500' AGL to but not including 5000' MSL.

(13) CAUTION: NOISE SENSITIVE AREAS-Avoid by 3 NM or cross no lower than 1500' AGL.

(a) Town of Middlebury Center, (N41-51-00 W77-16-30) Congressional;

(b) Fox Fire Farms, (N41-55-50 77-17-30) Route Segments A to B and B to C closed 1 March through 30 May annually due to new born Silver Fox pups;

(c) Private home, (N40-32-00 W76-49-30) No 3 NM restriction. All flight members stay left (east) of (Quarry) inbound to Fort Indiantown Gap range;

(d) Town of Rebersburg (Congressional), (N40-56-40 W77-26-50);

(e) Enders-Fisherville Elementary School, (N40-30-30 W76-50-00) avoid direct overflight, low flying sensitive;

(f) Private home, (N40-33-42 W76-57-57) 200 yards southeast of Lunt Airport;

(g) Town of Beavertown, (N40-45-30 W77-10-20) Weaving Mill-use sonar equipment that is sensitive to aircraft overflight.

(14) NOTE: A 1500' AGL minimum restriction will be placed on the route when the flight evaluation for this route is not current.

(15) Request from local FSS on OPR any special instructions pertaining to annual (Gypsy Moth Spraying Activities) and (Forest Fire Fighting Operations).

(16) Bird migration hazard along route 15 Sep-15 Jan, 15 Feb-15 May annually.

(17) Army National Guard tactical helicopters operating surface to 3000' AGL. Helicopter VFR training Area: [40-32-40 W76-48-10 to N40-33-00 W76-30-00 to N40-31-10 W76-31-30 to N40-28-00 W76-30-30 to N40-44-30 W76-34-00 to N40-18-08 W76-45-05 to N40-17-00 W76-51-00 to N40-17-50 W76-55-00 to N40-21-30 W76-53-30 to N40-23-10 W76-48-30 to starting point].

(18) The following is a list of uncharted known airfields that may effect VR-707 use or entry to, or exit from, VR-707. Airfields should be avoided by 3 NM or overflown no lower than 1500' AGL, except as noted in caution 11 above: Ceres (N42-00-30 W78-15-30), Ridge Soaring (N40-53-00 W77-54-00), Centervale (N41-01-00 W77-21-00), Schadel (N40-45-00 W76-41-00), Aerobatic Boxes: Bendigo (N40-33-30 W76-33-00) (Surface to 5000' MSL, 1 NM radius of airfield); Kampel (N40-02-00 W76-59-00) 1500' AGL to 4000' MSL/3500' feet square, 0.7 NM of Kampel Airport.

(19) Unpublished Route Obstructions: The following obstructions are within 100' or less of the base altitude for the listed route segments. Listed heights are approximate and may be greater. Previously charted obstructions are not listed. Ranger Towers which are charted are approximately 60'-75'. Use caution when using Alternate Entry and Exit Points. Uncharted obstructions may exist in these areas outside of route airspace:

(a) Tower,(N41-36-02 W78-35-13) Unk AGL-2600 MSL Points E-F;

(b) Tower, (N41-43-05 W78-41-30) 370' Points E-F;

(c) Ranger Tower 14, (N41-50-50 W78-58-30) 60' Points E-F;

(d) Tower, (N41-03-00 W78-35-13) 150' Point F;

(e) Antenna, (N41-34-36 W78-36-48) 75' Point F;

(f) Ranger Tower 26, (N41-34-20 W78-28-10) 60' Points F-G;

(g) Keating VORTAC, (N41-12-54 W78-08-35) 50' Points G-H;

(h) Ranger Tower 33, (N41-13-15 W78-07-10) 60' Points G-H;

(i) Tower, (N41-13-10 W78-11-40) 60' Points G-H;

(j) Power lines, (N41-16-00 W78-09-15) 460' Points G-H;

(k) Antenna, (N41-20-00 W78-07-09) 60' Points G-H;

(l) Towers (2), (N41-23-50 W77-51-10) 100' Points G-H;

(m) Ranger tower 39 and 4 Antennas, (N41-23-50 W77-51-10) 60' Points G-H;
VR ROUTES

(n) Ranger Tower 29, (N41-20-10 W78-22-00) 60' Points G-H;
(o) Tower, (N41-25-00 W77-53-00) 60' Points G-H;
(p) Ranger Tower, (N41-28-00 W78-07-00) 60' Points G-H;
(q) Antenna tower, (N41-28-52 W78-15-32) 182' Points G-H;
(r) Antenna tower, (N41-29-25 W78-15-20) 188' Points G-H;
(s) Towers (2), (N41-29-30 W78-15-00) 80' Points G-H;
(t) Tower, (N41-30-00 W78-13-30) 60' Points G-H;
(u) Tower, (N41-22-00 W78-06-50) 100' Points G-H;
(v) Power lines from (N41-21-30 W77-43-00 to N41-13-00 W78-12-30) Points G-H.

DANGER: Power lines cross valleys 60' AGL to 450' AGL and are difficult to see depending on light conditions, terrain features, foliage color, aircraft speed and other features. Expect to see wires at 1/4 mile or less. Three aircraft have struck wires in this line. Terrain following is not authorized within 2 NM of these power lines.

(w) Antenna, (N41-18-00 W77-51-28) 100' Point H;
(x) Towers (2), (N41-28-52 W78-15-33) 182' Points H-I;
(y) Tower, (N41-07-00 W77-43-36) 100' Points H-I;
(z) Tower, (N41-06-14 W77-42-00) 100' Points H-I;
(za) Towers (3), (N41-06-18 W77-42-24) 80' Points H-I;
(zb) Tower, (N41-06-42 W77-45-42) 100' Points H-I;
(zc) Ranger Tower, (N41-10-05 W77-53-20) 60' Points H-I;
(zd) Tower, (N41-10-30 W77-50-30) 100' Points H-I;
(ze) Tower, (N41-12-40 W78-05-20) 100' Points H-I;
(zf) Tower, (N41-14-00 W77-45-00) 60' Points H-I;
(zg) Ranger Tower 42, (N41-14-15 W77-45-10) 60' Points H-I.

Aircrews scheduled to operate VR-707 should become familiar with Pennsylvania State Parks within the MTR corridor along route of flight and avoid by 2000' AGL.

FSS Within 100 NM Radius:
AOO, BDR, BUF, CLE, DCA, IPT, ISP, MIV

VR-725

ORIGINATING ACTIVITY: DET1, 174ATKW, P.O. BOX 320, ANTWERP, NY 13608 DSN 772-2835/5990, C315-772-2835/5990.

SCHEDULING ACTIVITY: EADS/DOAS 224 AIR DEF SQUADRON, EASTERN AIR DEFENSE SECTOR DSN 587-6747, C315-334-6747. PRIMARY METHOD OF SCHEDULING IS VIA CSE.

HOURS OF OPERATION: 0800 Local-Sunset daily.

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
A | CAM 321/32 | N43°19.00' | W73°56.00'
B | BTV 229/52 | N43°41.00' | W73°51.00'
C | BTV 235/51 | N43°44.50' | W73°56.10'
D | BTV 251/52 | N44°18.00' | W74°43.00'
E | BTV 261/55 | N44°15.30' | W75°05.80'
F | ART 073/29 | N44°11.00' | W75°29.10'

TERRAIN FOLLOWING OPERATIONS: Authorized from A to H (VMC CONDITIONS ONLY).

ROUTE WIDTH - 6 NM left and 3 NM right of centerline from A to B; 3 NM left and 5 NM right of centerline from B to C; 2 NM left and 5 NM right of centerline from C to D; 3 NM either side of centerline from D to E; 5 NM left and 3 NM right of centerline from E to F; 5 NM either side of centerline from F to H.

Special Operating Procedures:
(1) Aircraft not scheduled into R-5201 exit at G (Do not enter R-5201 without clearance).
(2) Contact Wheeler Sack approach on 226.3 (MOA common) prior to F.

FSS Within 100 NM Radius:
AOO, DCA, EKN, IPT, MIV
VR ROUTES

3-83

VR ROUTES

(3) VR-1801 crosses the route between A and B at 300’ AGL to 1500’ AGL.
(4) VR-1800 joins and mirrors the route between F at 500’ AGL to 1500’ AGL.
(5) Alternate Entry: B, D, and F.
(6) Alternate Exit: D, E, F, and G.
(7) Avoid Adirondack Park High Peaks Wilderness Area N44° 11.2 W74° 29.7 by 500’ AGL or 2 NM (1000 AGL May through October).
(8) Avoid Adirondack Park Hudson Gorge Primitive Area N43° 47.7 W74° 05.7 by 1500’ AGL or 2 NM from March through October.
(9) Avoid uncontrolled airports by 1500 AGL or 3 NM whenever possible.
(10) Noise Sensitive Areas (Avoid by 1500’ AGL or 1 NM):
- Villages of North Creek N43° 41.2’ W73° 58.1’, Pottersville N43° 43.7’ W73° 49.3’, Minerva N43° 47.2’ W73° 59.0’, Childwold N44° 17.3’ W74° 40.0’, Sevey N44° 17.8’ W74° 43.0’, Star Lake/Oswegatchie N44° 10.0’ W75° 04.0’, Lake Bonaparte N44° 09.0’ W75° 23.0’ by 1500 AGL or .5 NM.
- Hudson Gorge N43° 47.7’ W74° 05.7’ by 1500 AGL or 2 NM.
(11) IR-801 no longer active UFN.
(12) VR-724 CLOSED PERMANENTLY.

FSS Within 100 NM Radius:
- BDR, BGR, BTV

VR-840

ORIGINATING ACTIVITY: Eastern Air Defense (EADS)
DSN 587-6247/6313.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A ENE 003/38 N44°02.00’ W70°49.00’
01 AGL B 50 MSL to B ENE 014/59 N44°24.00’ W70°41.00’
05 AGL B 60 MSL to C BGR 287/87 N44°47.00’ W70°54.00’
01 AGL B 70 MSL to D BGR 295/83 N44°58.00’ W70°49.00’
01 AGL B 80 MSL to E AUG 351/60 N45°13.00’ W70°26.00’
01 AGL B 90 MSL to F MLT 299/44 N45°22.00’ W69°33.00’
01 AGL B 100 MSL to G MLT 286/31 N45°33.00’ W69°15.00’
01 AGL B 110 MSL to H BGR 348/31 N45°17.00’ W69°15.00’
01 AGL B 120 MSL to I BGR 326/38 N45°13.50’ W69°35.80’

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route with the exceptions noted in Special Operating Procedures.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 3 NM either side of centerline from C to F; 4 NM either side of centerline from F to H; 5 NM either side of centerline from H to I.

Special Operating Procedures:
(1) Users who wish to schedule these routes must call during normal duty hours (0800-1600, Mon-Fri).
(2) Users should receive current Operations Briefing when calling to schedule this route. If scheduler does not offer this briefing, ASK FOR IT.
(3) Airspeed 250 KIAS to max subsonic.
(4) Alternate Entry: Points B, C, D, and F.
(5) There is a high level of low altitude sightseeing and seaplane activity on all lakes for the route.
(6) Contact Portland Approach (381.2) until past Point C.
(7) Call Bangor Radio (255.4) with entry and exit times.
(8) Squawk appropriate codes.
(9) Route includes 5 NM radius around Point I.
(10) Maintain a minimum of 1000’ AGL within 5 NM of Point A (Mt. Pleasant).
(11) Maintain 1000’ AGL and a 2 NM radius from Hutchinson Pond which is located approximately halfway between Points A and B (N44-15.8 W070-43.2).
(12) Maintain a minimum of 1500’ AGL at Point B until past Androscoggin River, Col. Dyke Airport.
(13) CAUTION: Heavy hang glider activity on the west edge of route corridor from Point B to C. Activity is seasonal and heaviest from Mar-Nov.
(14) CAUTION: Numerous light aircraft in the vicinity of Col. Dyke Airport west of Point B, Bald Mountain at N44-57 W70-47 and Rangeley Airport, NE of Point D.
(15) Minimum altitude from Point B to C is 500’ AGL. THIS AREA IS EXTREMELY NOISE SENSITIVE.
(16) Stay left of centerline from Point A to 10 miles beyond Point D - EXTREMELY NOISE SENSITIVE.
(17) Maintain minimum of 1500’ AGL and 3 NM radius from Bald Mountain, SE of Point D at N44-57 W70-47.
(18) Avoid Rangeley Airport, NE of Point D, by minimum of 1500’ AGL/3 NM radius.
(19) Maintain 1000’ AGL within 3 NM of Point E (Stratton, Eustus, ME).
(20) Unpainted, unlighted tower on mountain top at N44-32.0 W70-45.0.
(21) Alternate Exit: Point C.
(22) Avoid high powered radar site (N45-09.0 W69-51.0) by 5 NM and 5500’ MSL.
(23) IP to target, avoid town of Manson (N45-13.0 W65-28.0) in all cases by 1000’ AGL or above. Stay south of centerline IP to target.

FSS Within 100 NM Radius:
- BGR, BTV

VR-841

ORIGINATING ACTIVITY: Eastern Air Defense (EADS)
DSN 587-6247/6313.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800 local-Sunset daily
VR ROUTES

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route exceptions noted in Special Operating Procedures.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 3 NM either side of centerline from C to E; 5 NM either side of centerline from E to F.

Special Operating Procedures:
(1) Users who wish to schedule these routes must call during normal duty hours (0800-1600, Mon-Fri).
(2) Users should receive current Operations Briefing when calling to schedule this route. If scheduler does not offer this briefing, ASK FOR IT.
(3) Airspeed 250 KIAS to max subsonic.
(4) Alternate Entry: Points B, C and D.
(5) There is a high level of low altitude sightseeing and seaplane activity on all lakes for the route.
(6) Contact Portland Approach (381.2) until past Point C.
(7) Call Bangor Radio (255.4) with entry and exit times.
(8) Squawk appropriate codes.
(9) Route includes 4 NM radius around Point E.
(10) Maintain a minimum of 1000' AGL within 5 NM of Point A (Mount Pleasant).
(11) Maintain a minimum of 1000' AGL and a 2 NM radius from Hutchinson Pond which is located approximately halfway between Points A and B (N44-15.8 W070-43.2).
(12) Maintain a minimum of 1500' AGL at Point B until past Androscoggin River, Col. Dyke Airport.
(13) CAUTION: Heavy hang glider activity on the west edge of route corridor from Point B to C. Activity is seasonal and heaviest from Mar-Nov.
(14) CAUTION: Numerous light aircraft in the vicinity of Col. Dyke Airport west of Point B.
(15) Minimum altitude from Point B to C is 500' AGL. THIS AREA IS EXTREMELY NOISE SENSITIVE.
(16) Stay left of centerline from Point B to 10 miles beyond Point D - EXTREMELY NOISE SENSITIVE.
(17) Maintain minimum of 1500' AGL and 3 NM radius from Bald Mountain, SE of Point D at N44-57 W70-47.
(18) Avoid Rangeley Airport, NE of Point D, by minimum of 1500' AGL/3 NM radius.
(19) Maintain 1000' AGL within 3 NM of Point E (Stratton, Eustus, ME).
(20) Unpainted, unlighted tower on mountain top at N44-32.0 W70-45.0.
(21) Avoid high powered radar site at N45-09.0 W69-51.0 by 5 NM/5500' MSL.
(22) Alternate Exit: Point E.

FSS Within 100 NM Radius:
BGR, BTV

VR-842

ORIGINATING ACTIVITY: Eastern Air Defense (EADS)
DSN 587-6247/6313.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | ENE 003/38 | N44°02.00' W70°49.00'
01 AGL B 50 MSL to | B | ENE 014/59 | N44°24.00' W70°41.00'
05 AGL B 60 MSL to | C | BGR 287/87 | N44°47.00' W70°54.00'
01 AGL B 70 MSL to | D | BGR 295/83 | N44°58.00' W70°49.00'
01 AGL B 80 MSL to | E | AUG 351/60 | N45°13.00' W70°26.00'
01 AGL B 90 MSL to | F | AUG 006/56 | N45°14.50' W70°03.80'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route exceptions noted in Special Operating Procedures.

ROUTE WIDTH - 4 NM either side of centerline from A to E.

Special Operating Procedures:
(1) Users who wish to schedule these routes must call during normal duty hours (0800-1600, Mon-Fri).
(2) Users should receive current Operations Briefing when calling to schedule this route. If scheduler does not offer this briefing, ASK FOR IT.
(3) Airspeed 250 KIAS to max subsonic.
(4) Alternate Entry: Points B and C.
(5) There is a high level of low altitude sightseeing and seaplane activity on all lakes for the route.
(6) Contact Portland Approach (381.2) until past Point C.
(7) Call Bangor Radio (255.4) with entry and exit times.
(8) Squawk appropriate codes.
(9) Route includes 4 NM radius around Point E.
(10) Maintain a minimum of 1000' AGL within 5 NM of Point A (Mount Pleasant).
(11) Maintain 1000' AGL and a 2 NM radius from Hutchinson Pond which is located approximately halfway between Points A and B (N44-15.8 W070-43.2).
(12) Maintain a minimum of 1500' AGL at Point B until past Androscoggin River, Col. Dyke Airport.
(13) CAUTION: Heavy hang glider activity on the west edge of route corridor from Point B to C. Activity is seasonal and heaviest from Mar-Nov.
(14) CAUTION: Numerous light aircraft in the vicinity of Col. Dyke Airport west of Point B.
(15) Minimum altitude from Point B to C is 500' AGL. THIS AREA IS EXTREMELY NOISE SENSITIVE.

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | ENE 003/38 | N44°02.00' W70°49.00'
01 AGL B 50 MSL to | B | ENE 014/59 | N44°24.00' W70°41.00'
05 AGL B 60 MSL to | C | BGR 287/87 | N44°47.00' W70°54.00'
01 AGL B 70 MSL to | D | AUG 348/45 | N44°58.00' W70°20.00'
01 AGL B 80 MSL to | E | AUG 004/45 | N45°03.00' W70°03.60'

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | ENE 003/38 | N44°02.00' W70°49.00'
01 AGL B 50 MSL to | B | ENE 014/59 | N44°24.00' W70°41.00'
05 AGL B 60 MSL to | C | BGR 287/87 | N44°47.00' W70°54.00'
01 AGL B 70 MSL to | D | AUG 348/45 | N44°58.00' W70°20.00'
01 AGL B 80 MSL to | E | AUG 004/45 | N45°03.00' W70°03.60'
Stay left of centerline from Point B to 10 miles beyond Point D - EXTREMELY NOISE SENSITIVE.

Unpainted, unlighted tower on mountain top at N44-32.0 W70-45.0.

Avoid high powered radar site at N45-09.0 W69-51.0 by 5 NM and 5500’ MSL.

FSS Within 100 NM Radius: BGR, BTV

VR-931


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - Segment D-E: 5 NM north and 1 NM south of centerline. All others, 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through NAKNEK Military Operations Area (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.
(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.
(3) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.
(4) Primary Entry: Point A.
(5) Primary Exit: Point E.
(6) All route points are collocated with IR-901, IR-911, and VR-932.
(7) Use CAUTION for IR-903, IR-913, VR-933 and VR-934 crossing at Point A.
(8) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments C to E.
(9) Remain clear of lodge located on the Mulchatna River (N60 24.00 W155 54.00) southwest of Point B, by 1500’ AGL or 1 NM from 1 May to 30 Sep.

(10) Remain above 2,000’AGL starting from 23 NM past Point C (2 NM north of the Lake Iliamna shoreline) until Point D from 1 Jun to 15 Sep.

(11) Remain clear of the Moraine Creek drainage area immediately south of point D by 3 NM, from 1 May to 30 Sep. This area is used for bear viewing and fishing from Kukaklek Lake to Spectacle Lake 10nm east, and resides within Katmai National Park and Preserve. Additionally, remain clear of this area for bear hunting in odd years from 1 to 21 Oct and during even years from 10 to 25 May.

(12) ATC contact: Route Entry: Anchorage Center (379.9/128.5), Primary Exit: Anchorage Center (354.0/124.8).

(13) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

(14) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius: ENA, ILI, MCG, HOM, DLG

VR-932


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99706 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data  Pt Fac/Rad/Dist Lat/Long
As assigned to A SQA 220/38 N60°45.88’ W156°43.17’
01 AGL B 72 MSL to B SQA 157/39 N60°27.63’ W155°31.82’
01 AGL B 72 MSL to C AKN 360/80 N59°59.85’ W156°01.07’
01 AGL B 72 MSL to D AKN 039/54 N59°13.77’ W155°19.55’
01 AGL B 72 MSL to E AKN 051/88 N59°16.82’ W154°07.30’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - Segment A-B: 5 NM north and 1 NM south of centerline. Remainder of route: 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through NAKNEK Military Operations Area (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.
(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

Altitude Data  Pt Fac/Rad/Dist Lat/Long
As assigned to A AKN 051/88 N59°16.82’ W154°07.30’
01 AGL B 72 MSL to B AKN 039/54 N59°13.77’ W155°19.55’
01 AGL B 72 MSL to C AKN 360/80 N59°59.85’ W156°01.07’
01 AGL B 72 MSL to D SQA 157/39 N60°27.63’ W155°31.82’
01 AGL B 72 MSL to E SQA 220/38 N60°45.88’ W156°43.17’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - Segment A-B: 5 NM north and 1 NM south of centerline. Remainder of route: 5 NM either side of centerline.
(3) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.

(4) Primary Entry: Point A.

(5) Primary Exit: Point E.

(6) All route points are collocated with IR-901, IR-911, and VR-931.

(7) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments A to C.

(8) Use CAUTION for IR-903, IR-913, VR-933 and VR-934 crossing at Point E.

(9) Remain clear of the Moraine Creek drainage area immediately south of point B by 3 NM, from 1 May to 30 Sep. This area is used for bear viewing and fishing from Kukaklek Lake to Spectacle Lake 10nm east, and resides within Katmai National Park and Preserve. Additionally, remain clear of this area for bear hunting in odd years from 1 to 21 Oct and during even years from 10 to 25 May.

(10) Remain above 2,000'AGL starting from Point B until 28 NM past Point B (2NM north of the Lake Iliamna shoreline) from 1 Jun to 15 Sep.

(11) Remain clear of lodge located on the Mulchatna River (N60 24.00 W155 54.00) southwest of Point D, by 1500' AGL or 1 NM from 1 May to 30 Sep.

(12) ATC contact: Route Entry: Anchorage Center (354.0/124.8), Primary Exit: Anchorage Center (379.9/128.5).

(13) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

(14) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
ENA, ILI, MCG, HOM, DLG

VR-933


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>SQA 035/61</td>
<td>N61°42.08' W153°55.17'</td>
</tr>
<tr>
<td>01 AGL B 142 MSL to B</td>
<td>SQA 044/40</td>
<td>N61°24.62' W154°24.62'</td>
</tr>
<tr>
<td>01 AGL B 142 MSL to C</td>
<td>SQA 318/7</td>
<td>N61°12.43' W155°43.97'</td>
</tr>
<tr>
<td>01 AGL B 91 MSL to D</td>
<td>SQA 220/38</td>
<td>N60°45.88' W156°43.17'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to E</td>
<td>SQA 213/82</td>
<td>N60°13.67' W157°46.65'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to F</td>
<td>AKN 323/76</td>
<td>N59°54.00' W157°38.00'</td>
</tr>
<tr>
<td>01 AGL B 65 MSL to G</td>
<td>AKN 311/70</td>
<td>N59°42.00' W158°00.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to H</td>
<td>AKN 310/60</td>
<td>N59°32.23' W157°51.17'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through STONY and NAKNEK Military Operations Areas (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

(3) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.

(4) Primary Entry: Point A. Alternate Entry: Point D.

(5) Primary Exit: Point H. Alternate Exit: Point D.

(6) All route points are collocated with IR-903, IR-913, and VR-934.

(7) Use CAUTION for IR-905, IR-915, VR-1905 and VR-1915 crossing at Point A.

(8) Use CAUTION for IR-901, IR-911, VR-931 and VR-932 crossing at Point D.

(9) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments C through D.

(10) Use CAUTION for rapidly rising terrain from segment A to B in revelation mountain range.

(11) On segment A to B remain clear of Lake Clark National Park approximately 12 NM Southeast of route corridor.

(12) ATC contact: Route Primary Entry: Anchorage Center (273.45/123.9), Primary Exit: (282.35/132.75), Alternate Entry/Exit Pt D (379.9/128.5).

(13) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

(14) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
ENA, ILI, MCG, HOM, DLG

VR-934


SCHEDULING ACTIVITY: 3 OSS/OSOS, 8364 Kuter Ave., Elmendorf AFB, AK 99506-2130 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local
**ROUTE DESCRIPTION:**

**Altitude Data**  
Pt | Fac/Rad/Dist | Lat/Long  
--- | --- | ---  
As assigned to | A | AKN 310/60 | N59°32.23'  
01 AGL B 100 MSL to B | AKN 311/70 | N59°42.00'  
01 AGL B 65 MSL to C | AKN 323/76 | N59°54.00'  
01 AGL B 65 MSL to D | SQA 213/82 | N60°13.67'  
01 AGL B 65 MSL to E | SQA 220/38 | N60°45.88'  
01 AGL B 91 MSL to F | SQA 318/7 | N61°12.43'  
01 AGL B 142 MSL to G | SQA 044/40 | N61°24.62'  
01 AGL B 142 MSL to H | SQA 035/61 | N61°42.08'  

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH** - 5 NM either side of centerline.

**Special Operating Procedures:**

1. Route transitions through STONY and NAKNEK Military Operations Areas (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.
2. Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.
3. Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.
4. Primary Entry: Point A. Alternate Entry: Point E.
5. Primary Exit: Point H. Alternate Exit: Point E.
6. All route points are collocated with IR-903, IR-913, and VR-933.
7. Use **CAUTION** for IR-905, IR-915, VR-1905 and VR-1915 crossing at Point H.
8. Use **CAUTION** for IR-901, IR-911, VR-931 and VR-932 crossing at Point E.
9. Use **CAUTION** for multiple Airways, including low altitude RNAV routes, on segments E to F.
10. Use **CAUTION** for rapidly rising terrain from segment G to H in revelation mountain range.
11. On segment G to H remain clear of Lake Clark National Park approximately 12 NM Southeast of route corridor.
12. **ATC contact:** Route Primary Entry: Anchorage Center (100 MSL)  
   
   **Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.**
13. **Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.**

**FSS Within 100 NM Radius:**

ENA, ILI, MCG, HOM, DLG

---

**VR-935**

**ORIGINATING ACTIVITY:** 611 AOC/CODK, 9480 Pease Ave Ste. 121, Elmendorf AFB, AK 99506-2100 DSN 317-552-5715, C907-552-5715/4430.

**SCHEDULING ACTIVITY:** 354 OSS/OSCR, 354 Broadway St, Eielson AFB, AK 99702 DSN 317-377-9327, C907-377-9327/2842.

**HOURS OF OPERATION:** Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

**ROUTE DESCRIPTION:**

**Altitude Data**  
Pt | Fac/Rad/Dist | Lat/Long  
--- | --- | ---  
at or below 95 MSL | A | BIG 033/70 | N64°38.00'  
01 AGL B 95 MSL to B | BIG 041/112 | N64°46.00'  
01 AGL B 95 MSL to C | BIG 050/112 | N64°29.22'  
01 AGL B 95 MSL to D | BIG 055/70 | N64°13.00'  
01 AGL B 95 MSL to E | BIG 076/39 | N63°54.00'  
01 AGL B 88 MSL to F | BIG 037/18 | N64°09.00'  
01 AGL B 74 MSL to G | BIG 335/28 | N64°28.00'  
01 AGL B 74 MSL to H | BIG 313/48 | N64°44.00'  
01 AGL B 74 MSL to I | EIL 072/13 | N64°39.00'  
01 AGL B 95 MSL to D1 to EA | BIG 055/70 | N64°13.00'  
01 AGL B 106 MSL to EA | BIG 048/54 | N63°17.53'  

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH** - Segment E-F: 5 NM north and 0.5 NM south of centerline; All others, 5 NM either side of centerline

**Special Operating Procedures:**

1. Route transitions through YUKON 1, YUKON 3, BUFFALO and BIRCH Military Operations Areas (MOAs) and under DELTA 4 MOA during major flying exercises. Route transitions through R-2205 on segments G to I. Contact Scheduling Activity (SA) for deconfliction prior to use.
2. Prior scheduling with SA of R-2205 is required if entering this restricted airspace. This step is required to ensure restricted area (RA) will be cold, unless you will be performing hazardous activities which require an active RA (ie. dropping bombs). Primary exit Point I will only be scheduled when Eielson Range Control (ERC) is open or if you are working directly with the Army within R-2205; if not, utilize alternate exit points.
3. Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least 5 minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry.

---

3-87
entry/initial descent. ATC may ask if you are a participant in the special use airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(4) ATC clearance into MTR is not clearance to enter active RA. When ERC is open, you are required to contact them prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call in the blind and proceed on route through the MOA (but not into active/hot RA) and continue periodic reattempt.

(5) ERC is not a 24 hr facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area prior to entry.

(6) When ERC closed (generally nights/weekends): confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS scheduling has not specifically scheduled the RA for you, stay clear of RA - Do not enter hot RA. If cold, RA becomes class G/E airspace. A recorded message on 125.3 indicates ERC is closed.

(7) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on are-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(8) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(9) Primary Entry: Point A. Alternate Entry Points B, D, EA and F.

(10) Primary Exit: Point I. Alternate Exit Points EA, E, F and G.

(11) All route entry points are collocated with VR-936. Points A to D/EA are collocated with IR-917 and IR-918.

(12) Use CAUTION for multiple MTR intersections on segments D to E, and G to I, and low altitude RNAV routes near Point G.

(13) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.

(14) Use CAUTION for uncharted airstrip at Healy Lake (N63-59.50 W144-42.50) on segments E to F.

(15) Use CAUTION for Pogo Mine and Pogo Mine Airstrip north of segments F to G. Avoid mine center point (N64-27.12 W144-42.50) on segments E to F.

(16) Remain clear of the native village of Healy Lake (N63-59.00 W144-45.00) by 3 NM radius or 6000’ MSL on segments E to F.

(17) Remain clear of Salcha River Area on segment G to H. Maintain at/above 5000’ MSL for fighter aircraft (1-20 Sep). Maintain at/above 1000’ MSL for all other aircraft (continuous).

(18) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 Jun. Up to four 6 NM wide circles will be avoided by 2000’ AGL. See local OGV FCIF for details and locations.

(19) Contact Agencies: Route Entry : Anchorage Center (322.5/135.3); Route exit: Fairbanks Approach (381.4/126.5).

(20) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

(21) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
FAL, ORT (1 Mar - 30 Sep, other times contact FAL FSS) See Alaska Supplement.

VR-936


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or below 74 MSL A</td>
<td>EIL 072/13 N64°39.00' W146°36.00'</td>
</tr>
<tr>
<td>01 AGL B 74 MSL to B</td>
<td>BIG 313/48 N64°44.00' W146°28.00'</td>
</tr>
<tr>
<td>01 AGL B 74 MSL to C</td>
<td>BIG 335/28 N64°28.00' W145°45.00'</td>
</tr>
<tr>
<td>01 AGL B 74 MSL to D</td>
<td>BIG 037/18 N64°09.00' W145°08.00'</td>
</tr>
<tr>
<td>01 AGL B 88 MSL to E</td>
<td>BIG 076/39 N63°54.00' W144°16.00'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to F</td>
<td>BIG 055/70 N64°13.00' W143°05.00'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to G</td>
<td>BIG 050/112 N64°29.22' W141°35.65'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to H</td>
<td>BIG 041/112 N64°46.00' W141°47.00'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to I</td>
<td>OFFICIAL AOC 033/70 N64°38.00' W143°27.00'</td>
</tr>
<tr>
<td>01 AGL B 95 MSL to F1</td>
<td>BIG 055/70 N64°13.00' W143°05.00'</td>
</tr>
<tr>
<td>01 AGL B 106 MSL to GA</td>
<td>BIG 048/54 N64°17.53' W143°45.37'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - Segment D-E: 5 NM north and 0.5 NM south of centerline; All others, 5 NM either side of centerline

Special Operating Procedures:

(1) Route transitions through R-2205 on segments A to C. Route transitions under DELTA 4 MOA during Major Flying Exercises and through YUKON 1, YUKON 3, BIRCH and BUFFALO Military Operations Areas (MOAs). Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Prior scheduling with SA of R-2205 is required if entering this restricted airspace. This step is required to ensure Restricted Area (RA) will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Primary entry point A will only be
scheduled when Eielson Range Control (ERC) is open or if you are working directly with the Army within R-2205; if not, utilize alternate entry points.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(4) ATC clearance into MTR is not clearance to enter active RA. When ERC is open, you are required to contact them prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace. A recorded message on 125.3 MHz indicates ERC is closed.

(7) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(8) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(9) Primary Entry: Point A. Alternate Entry: Points C, D, E, and GA.

(10) Primary Exit: Point I. Alternate Exit: Points D, E, F, GA, and H.

(11) All route points are collocated with VR-935. Points GA/F1 to I are collocated with IR-917 and IR-918.

(12) Use CAUTION for multiple MTR intersections on segments A to C, and E to F, and low altitude RNAV routes near point C.

(13) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150’-500’ cables strung below for carrying cargo.

(14) Use CAUTION for Pogo Mine and Pogo Mine Airstrip north of segments C to D. Avoid mine center point (N 64°27.12’ W147°46.60’) in the Goodpaster River valley by 3NM and 1000’ AGL (15 May-15 Jul). Airstrip has high density rotary and fixed wing activity.

(15) Use CAUTION for uncharted airstrip at Healy Lake (N 63°59.50’ W144°42.50’) on segments D to E.

(16) Remain clear of Salcha River Area on segment B to C. Maintain at/above 5000’ MSL for fighter aircraft (1-20 Sep). Maintain at/above 1000’AGL for all other aircraft (continuous).

(17) Remain clear of the Native village of Healy Lake (N 63°59.00’ W144°45.00’) by 3 NM radius or 6000’ MSL on segments D to E.

(18) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2000’ AGL. See local OGV FCIF for details and locations.

(19) Contact agencies: Route Entry: Fairbanks Approach (381.4/126.5); Route exit: Anchorage Center (322.5/135.3).

(20) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

(21) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

**FSS Within 100 NM Radius:**
FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS) See Alaska Supplement.

**VR-937**

**ORIGINATING ACTIVITY:** 611 AOC/CODK, 9480 Pease Ave., Ste. 121, Elmendorf AFB, AK 99506 DSN 317-552-7515/4430, C907-552-7515/4430.

**SCHEDULING ACTIVITY:** 354 OSS/OSCR, 354 Broadway St, Eielson AFB, AK 99702 C907-377-9327/2842.

**HOURS OF OPERATION:** Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data Pt</th>
<th>Fa/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>TKA 072/89</td>
<td>N62°13.77' W146°55.48'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to B</td>
<td>TKA 049/78</td>
<td>N62°45.57' W147°29.82'</td>
</tr>
<tr>
<td>01 AGL B 111 MSL to C</td>
<td>TKA 047/107</td>
<td>N62°58.37' W146°31.83'</td>
</tr>
<tr>
<td>01 AGL B 135 MSL to D</td>
<td>TKA 035/108</td>
<td>N63°18.82' W146°51.22'</td>
</tr>
<tr>
<td>01 AGL B 147 MSL to E</td>
<td>TKA 022/96</td>
<td>N63°29.87' W147°46.60'</td>
</tr>
<tr>
<td>01 AGL B 147 MSL to F</td>
<td>BIG 233/51</td>
<td>N63°47.07' W147°33.32'</td>
</tr>
<tr>
<td>01 AGL B 147 MSL to G</td>
<td>BIG 239/34</td>
<td>N63°55.12' W146°58.65'</td>
</tr>
<tr>
<td>01 AGL B 129 MSL to H</td>
<td>BIG 255/39</td>
<td>N64°05.00' W147°10.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to I</td>
<td>FAI 132/35</td>
<td>N64°17.12' W147°24.97'</td>
</tr>
<tr>
<td>as assigned to AC</td>
<td>BIG 144/69</td>
<td>N62°53.23' W145°09.07'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to C1</td>
<td>TKA 047/107</td>
<td>N62°58.37' W146°31.83'</td>
</tr>
<tr>
<td>Alternate entry track AC to C1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terminating route HA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>as assigned to AC</td>
<td>BIG 144/69</td>
<td>N62°53.23' W145°09.07'</td>
</tr>
<tr>
<td>01 AGL B 147 MSL to G1</td>
<td>BIG 239/34</td>
<td>N63°55.12' W146°58.65'</td>
</tr>
<tr>
<td>01 AGL B 129 MSL to HA</td>
<td>BIG 234/22</td>
<td>N63°55.13' W146°31.40'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.
VR ROUTES

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through FOX 3, FOX 1, and EIELSON Military Operations Areas (MOAs). Primary exit point I borders R-2211 and alternate exit point HA, is within R-2202. Operations are restricted in and around active Restricted Areas (RAs) and MOAs.

(2) Prior scheduling with Scheduling Activity (SA) of R-2211 or R-2202 is required if entering this restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Alternate exit HA will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202. If the MOAs are scheduled by other users, the SA will require you to contact the scheduled users to coordinate altitude separation.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for YOU, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. Eielson MOA and R-2211 are cold/inactive when ERC is closed. A recorded message on 125.3 MHz indicates ERC is closed.

(7) R2202 is subdivided. R2202A can be hot while R2202B and C are cold. If R2202B and C are cold, alternate exit G1 to HA may be flown, but stay clear of any hot sub-sections.

(8) This MTR must be flown in contact with ERC as stated above. When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.

(9) Pass post MTR intentions thru ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(10) Primary Entry: Point A. Alternate Entry: Points B, C, D, E, and AC.

(11) Primary Exit: Point I. Alternate Exit: Points AC, E, F, G, H, and HA.

(12) All route points collocated with VR-938, IR-919 and IR-921. Route has shared points with multiple MTRs at points G, H, and I.

(13) Use CAUTION for multiple Airways, including low altitude RNAV routes, on alternate entry segment AC to C1.

(14) Use CAUTION near point G. Route corridor overlaps with R-2202. If not cleared into R-2202, remain clear.

(15) Use CAUTION for uncharted Newman Creek Airstrip (N63 58.60 W147 15.60) west of segment G to H. Avoid by 1 NM below 1,500' AGL.

(16) Minimum altitude on segments A to E, including alternate entry route AC to C1, is 1000' AGL from 15 Mar - 30 Sep to comply with the Bald and Golden Eagle Protection Act.

(17) Alternate Entry leg AC to C1 has 5000' MSL minimum altitude 15 May to 30 Sept due to Gulkana National Wild and Scenic River area. Restriction begins 5 NM west of AC and ends 5 NM east of C1.

(18) Remain clear of caribou hunting area by 1000' AGL from 1 Aug - 30 Sep. Area is bounded by 5 NM either side of the line from (N62 51.00, W147 09.00) to (N62 59.00, W145 54.00) on segments B to C and AC to C1. Additionally, avoid the Delta caribou herd calving area below 2000' AGL 15 May - 15 Jun from the halfway point between points D and E until point E.

(19) Remain clear of Maclarean Lodge and Airstrip east of segment C to D on the Denali Highway (N63 07.00 W146 32.00) by 2 NM and 1,500' AGL.

(20) Remain above 5000' AGL over sheep lambing area on segments E thru G from 15 May - 15 Jun and 15 Nov - 15 Dec. Area bounded by (N64 00.00 W148 00.00) to (N63 34.00 W148 24.00) to (N63 40.00 W146 58.00) to (N63 55.00 W147 15.00) to (N63 58.45 W147 13.20) to (N64 00.00 W147 15.00) to point of beginning.

(21) During September maintain at least 1,000' AGL on segments within Eielson MOA and R-2202. This is a Mid-Air Collision Avoidance safety issue due to high density General Aviation flight operations during the fall hunting season.

(22) Contact Agencies - Primary Route Entry: Anchorage Center (119.5/317.5), Primary Route Exit: Fairbanks Approach (126.5/381.4), AC Entry: Anchorage Center (119.5/317.5), HA Exit: Anchorage Center (135.3/322.5).

(23) Local weather forecast information can be obtained at DSN 317-552-4903/3497. Weather related planning products and day-of forecasts are available 24/7.


FSS Within 100 NM Radius:
ENA, FAI, ORT, PAQ, TKA

VR-938


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>FAI 132/35</td>
<td>N64°17.12' W147°24.97'</td>
</tr>
</tbody>
</table>
Early contact with Air Traffic Control (ATC) before route entry is required. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through EIELSON, FOX 1 and FOX 3 Military Operations Areas (MOAs). Primary entry point A borders R-2211 and alternate entry point AC is within R-2202. Operations are restricted in and around active Restricted Areas (RAs) and MOAs.

(2) Prior scheduling with Scheduling Activity (SA) of R-2211 or R-2202 is required if entering this restricted airspace. This step is required to ensure RA will be cold, unless you are performing hazardous activities which require an active RA (i.e. dropping bombs). Alternate entry AC will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202. If the MOAs are scheduled by other users, the SA will require you to contact the scheduled users to coordinate altitude separation.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for YOU, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required.

(7) R2202 is subdivided. R2202A can be hot while R2202B and C are cold. If R2202B and C are cold, alternate entry AC to C1 may be flown, but stay clear of any hot sub-sections.

(8) This MTR must be flown in contact with ERC as stated above. When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.

(9) Pass post MTR intentions thru ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(10) Primary Entry: Point A. Alternate Entry: Points B, C, D, E, and AC.

(11) Primary Exit: Point I. Alternate Exit: Points E, F, G, H, and HA.

(12) All route points collocated with VR-937, IR-919 and IR-921. Route has shared points with multiple MTRs at points A, B, and C.

(13) Use CAUTION for multiple Airways, including low altitude RNAV routes, on alternate exit segment G1 to HA.

(14) Use CAUTION near point C. Route corridor overlaps with R-2202. If not cleared into R-2202, remain clear.

(15) Use CAUTION for uncharted Newman Creek Airstrip (N63 58.60 W141 15.60) west of segments B to C. Avoid by 1 NM below 1,500' AGL.

(16) During September maintain at least 1,000' AGL on Segments within Eielson MOA and R-2202. This is a Mid-Air Collision Avoidance safety issue due to high density General Aviation flight operations during the fall hunting season.

(17) Remain above 5,000' AGL over sheep lambing area on segments C thru E from 15 May - 15 Jun and 15 Nov - 15 Dec. Area bounded by (N64 00.00 W148 00.00) to (N63 34.00 W148 00.00) to (N63 34.00 W146 24.00) to (N63 40.00 W146 58.00) to (N63 55.00 W147 15.00) to (N63 58.45 W147 13.20) to (N64 00.00 W147 15.00) to point of beginning.

(18) Minimum altitude on segments E to I, including alternate exit route G1 to HA, is 1000' AGL from 15 Mar to 30 Sep to comply with the Bald and Golden Eagle Protection Act.

(19) Remain clear of Maclaren Lodge and Airstrip east of segment F to G on the Denali Highway (N63 07.00 W146 32.00) by 2 NM and 1,500' AGL.

(20) Remain clear of caribou hunting area by 1,000' AGL from 1 Aug - 30 Sep. Area is bounded by 5 NM either side of the line from (N62 51.00, W147 09.00) to (N62 59.00, W145 54.00) on segments G to H and G1 to HA. Additionally, avoid the Delta caribou herd calving area below 2,000' AGL 15 May - 15 Jun from point E to the halfway point between E and F.

(21) Alternate Exit leg G1 to HA has 5,000' MSL minimum altitude 15 May to 30 Sept due to Gulkana National Wild and Scenic River area. Restriction begins 5 NM east of G1 and ends 5 NM west of HA.
VR ROUTES

(22) Contact Agencies - Primary Route Entry: Fairbanks Approach (126.5/381.4), Primary Route Exit: Anchorage Center (119.5/317.5), AC Entry: Anchorage Center (135.3/322.5), HA Exit: Anchorage Center (119.5/317.5).

(23) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.


**FSS Within 100 NM Radius:**
FAI, ORT, ENA, PAQ, TKA

**VR-940**

**ORIGINATING ACTIVITY:** 611 AOC/CODK, 9480 Pease Ave., Ste. 121, Elmendorf AFB, AK 99506-2100 DSN 317-552-5715, C907-552-5715/4430.

**SCHEDULING ACTIVITY:** 354 OSS/OSCR, 354 Broadway St, Eielson AFB, AK 99702 DSN 317-377-9327, C907-377-9327/2842.

**HOURS OF OPERATION:** Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

**ROUTE WIDTH -** 5 NM either side of the route on Segments A-H, 5 NM south of route and 1 NM north of route on Segments H-J. 5 NM either side of alternate exit I1-JA if R-2202 is utilized.

**Altitude Data**

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>BIG 144/69</td>
<td>N62°53.23' W145°09.07'</td>
</tr>
<tr>
<td>B</td>
<td>BIG 135/46</td>
<td>N63°17.35' W145°05.05'</td>
</tr>
<tr>
<td>C</td>
<td>BIG 097/59</td>
<td>N63°29.65' W143°48.32'</td>
</tr>
<tr>
<td>D</td>
<td>BIG 079/68</td>
<td>N63°44.28' W143°13.18'</td>
</tr>
<tr>
<td>E</td>
<td>BIG 055/70</td>
<td>N64°13.00' W143°05.00'</td>
</tr>
<tr>
<td>F</td>
<td>BIG 095/29</td>
<td>N63°46.30' W144°45.00'</td>
</tr>
<tr>
<td>G</td>
<td>BIG 137/26</td>
<td>N63°35.92' W145°22.82'</td>
</tr>
<tr>
<td>H</td>
<td>BIG 154/24</td>
<td>N63°36.23' W145°40.05'</td>
</tr>
<tr>
<td>I</td>
<td>BIG 210/28</td>
<td>N63°43.23' W146°34.24'</td>
</tr>
<tr>
<td>J</td>
<td>BIG 239/34</td>
<td>N63°55.12' W146°58.65'</td>
</tr>
</tbody>
</table>

**Terrain Following Operations:** Authorized entire route.

**ROUTE WIDTH -** 5 NM either side of the route on Segments A-H, 5 NM south of route and 1 NM north of route on Segments H-J. 5 NM either side of alternate exit I1-JA if R-2202 is utilized.

**Special Operating Procedures:**

(1) Route transitions through PAXON, BUFFALO, YUKON 3, FOX 2, FOX 1, and EIELSON Military Operations Areas (MOAs) and through DELTA 4 MOA during Major Flying Exercises. Route transitions immediately south of R-2202 on segments H to J. Alternate exit I1 enters R-2202. Contact Scheduling Activity (SA) for MOA de-confliction prior to use.

(2) Prior scheduling SA of R-2202 is required if entering restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Alternate exit JA will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 124.5 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for YOU, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. A recorded message on 125.3 MHz indicates ERC is closed.

(7) R2202 is subdivided. R2202A can be hot while R2202B and C are cold. If R2202B and C are cold, alternate exit JA may be flown, but stay clear of any hot sub-sections.

(8) This MTR must be flown in contact with ERC as stated above. When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airborne-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(9) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(10) Primary entry: Point A. Alternate entry: Point B, E and G.

(11) Primary Exit: Point J. Alternate exit: Point JA (within R-2202), E and G.

(12) All route points are collocated with VR-941, IR-922 and IR-923.

(13) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments A to H.

(14) Use CAUTION for IR-919, IR-921, VR-937 and VR-938 alt/exit crossings at Point A, J and JA; as well as IR-917, IR-918, VR-935 and VR-936 overlapping segments E to F; and IR-909, IR-939, VR-1909, and VR-1939 at Point F.

(15) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
(16) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles will be avoided by 2,000' AGL. AGL. See local OGV FCIF for details and locations.

(17) Minimum altitude on segments A to C is 1,000' AGL from 15 Mar to 30 Sep to comply with the Bald and Golden Eagle Protection Act.

(18) Remain clear of sheep lambing area under entire segment B to C by 1,000' AGL from 1 May to 30 June. Area bounded by (N63 21.00, W145 05.00) to (N63 33.00, W144 05.00) to (N63 22.00, W144 05.00) to (N63 10.00, W145 05.00) to point of beginning.

(19) Maintain 1,500' AGL minimum when within 10 NM of Point C for annual moose hunting season (approximately 1 to 20 Sep).

(20) Remain clear of numerous cabins and fishing camps in the vicinity of Point C on the Alaska Highway.

(21) Numerous noise sensitive areas near Alaska and Richardson Hwy VFR corridors within BUFFALO MOA on segment F to G, remain at/above 4,000' MSL, reference local PFPS draw files and IFR Enroute Low Altitude Chart L3 for exact dimensions.

(22) Remain clear of the Native village of Healy Lake (N63 59.00, W144 45.00), 10 NM west of Point F, by 3 NM radius or 6,000 MSL continuously.

(23) Remain clear of Lake George (N63 47.00, W144 32.00) on segment F to G by 2 NM and 1,500 AGL continuously.

(24) Remain clear of Gulkana and Delta National Wild and Scenic River areas by 5,000' MSL from 15 May to 30 Sep. The restriction runs from point H to the mid-point of FOX 2 MOA.

(25) Remain clear of Donnelly Creek State Recreation Site (N63 39.40, W145 53.00) on segment H to I by 1 NM radius and 2000' AGL from 15 May to 30 Sep.

(26) Remain clear of Black Rapids Airport (N63 32.10, W145 51.65), 5NM southwest of Point H, by 3 NM radius and 1500' AGL continuously.

(27) ATC contact: Anchorage Center primary and alternate entry: (317.5/119.5); primary and alternate exit: (322.5/135.3).

(28) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.


FSS Within 100 NM Radius:
FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement.

VR-941


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>BIG 239/34</td>
<td>N63°55.12' W146°58.65'</td>
</tr>
<tr>
<td>01 AGL B 154 MSL to B</td>
<td>BIG 210/28</td>
<td>N63°43.23' W146°34.24'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 162 MSL to C</td>
<td>BIG 154/24</td>
<td>N63°36.23' W145°40.07'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 154 MSL to D</td>
<td>BIG 137/26</td>
<td>N63°35.92' W145°22.82'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 140 MSL to E</td>
<td>BIG 095/29</td>
<td>N63°46.30' W144°45.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 135 MSL to F</td>
<td>BIG 055/70</td>
<td>N64°13.00' W143°05.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 97 MSL to G</td>
<td>BIG 079/68</td>
<td>N63°44.28' W143°13.18'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 143 MSL to H</td>
<td>BIG 097/59</td>
<td>N63°29.65' W143°48.32'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 143 MSL to I</td>
<td>BIG 135/46</td>
<td>N63°17.35' W145°05.05'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 143 MSL to J</td>
<td>BIG 144/69</td>
<td>N62°53.23' W145°09.07'</td>
<td></td>
</tr>
<tr>
<td>as assigned to AB</td>
<td>BIG 223/21</td>
<td>N63°51.55' W146°27.10'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 162 MSL to B1</td>
<td>BIG 210/28</td>
<td>N63°43.23' W146°34.23'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM south of route and 1 NM north of route on segments A-C. 5 NM either side on route segments C-J. 5 NM either side of alternate entry AB-B1 if R-2202 is utilized.

Special Operating Procedures:

(1) Route transitions through EIELSON, FOX 1, FOX 2, BUFFALO, PAXON and YUKON 3 Military Operations Areas (MOAs) and through DELTA 4 MOA during Major Flying Exercises. Route transitions immediately south of R-2202 on segments A to C. Alternate entry AB to B1 enters R-2202. Contact Scheduling Activity (SA) for MOA de-confliction prior to use.

(2) Prior scheduling with SA of R-2202 is required if entering restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Alternate entry AB will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated entry/initial descent.

(4) ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.
VR ROUTES

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for YOU, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. A recorded message on 125.3 MHz indicates ERC is closed.

(7) R2202 is subdivided. R2202A can be hot while R2202B and C are cold. If R2202B and C are cold, alternate entry AB to B1 may be flown, but stay clear of any hot sub-sections.

(8) This MTR must be flown in contact with ERC as stated above. When ERC is closed, approaching entry/ext exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(9) Pass post MTR intentions thru ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(10) Primary entry: Point A. Alternate entry: Point AB (within R-2202), D and F.

(11) Primary exit: Point J. Alternate exit: D, F and I.

(12) All route points are collocated with VR-940, IR-922 and IR-923.

(13) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments C to J.

(14) Use CAUTION for IR-919, IR-921, VR-937, and VR-938 crossing at points A, B, and J; as well as IR-909, IR-939, VR-1909, and VR-1939 at Point E; and IR-917, IR-918, VR-935 and VR-936 overlapping segments E to F.

(15) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.

(16) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles will be avoided by 2,000' AGL. See local OGV FCIF for details and locations.

(17) Remain clear of Donnelly Creek State Recreation Site (N63 39.40, W145 53.00) on segment B to C by 1 NM radius and 2000' AGL from 15 May to 30 Sep.

(18) Remain clear of Black Rapids Airport (N63 32.10, W145 51.65), SMN southwest of Point C, by 3 NM radius and 1500' AGL continuously.

(19) Remain clear of Gulkana and Delta National Wild and Scenic River areas by 5000' MSL from 15 May to 30 Sep. The restriction runs from the mid-point of FOX 2 MOA to point C.

(20) Numerous noise sensitive areas near Alaska and Richardson Hwy VFR corridors within BUFFALO MOA on segment D to E, remain at/above 4000 MSL, reference local PFPS draw files and IFR Enroute Low Altitude Chart L3 for exact dimensions.

(21) Remain clear of Lake George (N63 47.00, W144 32.00) on segment D to E by 2 NM and 1,500 AGL continuously.

(22) Remain clear of the Native village of Healy Lake (N63 59.00, W144 45.00), 10 NM west of Point E, by 3 NM radius or 6,000 MSL continuously.

(23) Maintain 1,500' AGL minimum when within 10 NM of Point H for annual moose hunting season (approximately 1 to 20 Sep).

(24) Remain clear of numerous cabins and fishing camps in the vicinity of Point H on the Alaska Highway.

(25) Remain clear of sheep lambing area under entire segment H to I by 1,000' AGL from 1 May to 30 June. Area bounded by (N63 21.00, W145 05.00) to (N63 33.00, W144 05.00) to (N63 22.00, W144 05.00) to (N63 10.00, W145 05.00) to point of beginning.

(26) Minimum altitude on segments C to 2 NM past D and 23 NM prior to I to J is 1000' AGL from 15 Mar to 30 Sep to comply with the Bald and Golden Eagle Protection Act. Additionally, minimum altitude on segments B to E and H to 17 NM prior to J is 10,000' MSL from 15 May to 15 Jun to avoid sheep lambing areas.

(27) ATC contact: Anchorage Center primary and alternate entry: (322.5/135.3), primary and alternate exit: (317.5/119.5).

(28) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.


FSS Within 100 NM Radius:
FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement.

VR-954


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | BIG 041/112 | N64°46.00' W141°47.00'
01 AGL B 170 MSL to | B | BIG 034/116 | N65°00.00' W141°54.00'
01 AGL B 170 MSL to | C | FYU 106/106 | N65°30.00' W141°51.00'
01 AGL B 90 MSL to | D | FYU 104/101 | N65°36.00' W142°42.00'
01 AGL B 90 MSL to | E | FYU 100/73 | N65°57.00' W143°12.00'
01 AGL B 90 MSL to | F | FYU 107/64 | N65°55.00' W143°38.00'
01 AGL B 90 MSL to | G | FYU 126/74 | N65°33.00' W143°52.00'
01 AGL B 110 MSL to | H | FYU 134/81 | N65°22.00' W144°20.00'
01 AGL B 110 MSL to | I | BIG 010/66 | N64°55.00' W144°20.00'
01 AGL B 110 MSL to | J | BIG 009/63 | N64°53.00' W144°28.00'

3-94
01 AGL B 110 MSL to K BIG 004/39 N64°35.00' W145°02.00'
01 AGL B 110 MSL to L BIG 352/33 N64°32.00' W145°23.00'
01 AGL B 110 MSL to M EIL 059/14 N64°42.00' W146°34.00'
01 AGL B 110 MSL to N EIL 033/13 N64°47.00' W146°42.00'
01 AGL B 110 MSL to O EIL 017/17 N64°53.00' W146°42.00'
01 AGL B 110 MSL to P FYU 176/80 N65°18.00' W146°09.00'
01 AGL B 110 MSL to Q FYU 173/79 N65°18.00' W146°00.00'
Alternate RACETRACK
in R-2205:
01 AGL B 110 MSL to N EIL 033/13 N64°47.00' W146°42.00'
01 AGL B 170 MSL to AO FYU 175/102 N64°56.00' W146°20.00'
01 AGL B 170 MSL to AP BIG 355/48 N64°46.00' W145°08.00'
01 AGL B 170 MSL to L1 BIG 352/33 N64°32.00' W145°23.00'
01 AGL B 110 MSL to M1 EIL 059/14 N64°42.00' W146°34.00'
01 AGL B 110 MSL to N1 EIL 033/13 N64°47.00' W146°42.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through YUKON 3 HIGH/3A LOW, YUKON 4, YUKON 2, and YUKON 1 Military Operations Areas (MOA). Route transitions through RESTRICTED AREA 2205 on multiple segments. Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Prior scheduling with SA of R-2205 is required if entering this restricted airspace. This step is required to ensure Restricted Area (RA) will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Primary route segments L through N will only be scheduled when Eielson Range Control (ERC) is open or if you are working directly with the Army within R-2205; if not, utilize alternate entry/exit points.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(4) ATC clearance into MTR is not clearance to enter active RA. When ERC is open, you are required to contact them prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace. A recorded message on 125.3 MHz indicates ERC is closed.

(7) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(8) Fass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(9) Primary entry: Point A. Alternate entry: Points D, F, J, K and L. Alternate R-2205 Racetrack entry at Point N1. In the event an aircrew would like to fly the racetrack, advise ATC of intent to do so, including number of circuits, prior to entering the route.


(11) All route points (excluding R-2205 Racetrack pattern) are collocated with IR-952, IR-953, and VR-955.

(12) Use CAUTION for multiple Airways, including low altitude RNAV routes, on terminal segments of the route from L to Q, including multiple crossing points on the alternate R-2205 Racetrack pattern. Additionally, multiple MTR crossings at point A and points L to N within R-2205.

(13) Use CAUTION for Pogo Mine and Pogo Mine Airstrip adjacent to route at Points K and L. Avoid mine center point (N64 27.12 W144 54.19) in Goodpaster River valley by 3NM and 1000' AGL (15 May-15 Jul). Airstrip has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity.

(14) Use CAUTION: After weapons release in R-2205, start an immediate turn away from Eielson AFB to preclude flying into Fairbanks Approach Control’s Airspace.

(15) Use CAUTION: Ft. Wainwright AAF Class E airspace less than 1 NM outside the route, Segment M to O. Eielson AFB Class D and E airspace 2 NM outside the route, Segment N to O.

(16) Routine/daily training sorties: remain at/above 2000' AGL and 2NM either side of Yukon, Charley, and Kandik River centerlines to avoid Peregrine Falcon Corridor (15 Apr- 15 Sep). Segments B to D and H to F. Avoid mine center point (N64 27.12 W144 54.19) in Goodpaster River valley by 3NM and 1000' AGL (15 May-15 Jul). Airstrip has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity.

(17) Major Flying Exercise (Red Flag, Northern Edge, etc.) sorties: remain at/above 2000' AGL and 2NM either side of Yukon river and at/above 5000' MSL and 2NM either side of Charley and Kandik River centerlines to avoid Peregrine Falcon Corridor (15 Apr- 15 Sep). Segments B to D and F to H.

(18) Remain clear of Salcha River Area 3, on segments K to M, by 2NM either side of Salcha River in the vicinity of Salcha Split VFR waypoint. 1-20 Sep, maintain at/above 5000' MSL for fighter aircraft and at/above 1000'AGL for all other aircraft.

(19) Remain clear of Salcha River Area 2 on segment L to M. Maintain at/above 5000' MSL for fighter aircraft (1-20 Sep). Maintain at/above 1000'AGL for all other aircraft (continuous).

(20) Remain clear of Chena River State Recreation Site at/above 1,500'AGL, (1 May-30 Sep), segments M to P.
VR ROUTES

(21) Remain clear of Pleasant Valley Subdivision west of segment N to O at 6,000’ MSL. Flight above 6000’ MSL is restricted to non-maneuvering, non-afterburning, navigational flight only.

(22) Seasonal Forty mile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2,000’ AGL.

(23) ATC contact: Anchorage Center. Primary entry/exit at points A, D and F: (284.7/135.0); backup (225.4/132.7). Primary entry/exit at points J through Q including racetrack: (319.2/120.9); backup (285.4/133.1).

(24) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products updated every three days, will be avoided by 2,000’ AGL.


FSS Within 100 NM Radius:
FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS) See Alaska Supplement.

VR-955


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A FYU 173/79 N65°18.00’ W146°00.00’
01 AGL B 110 MSL to B FYU 176/80 N65°18.00’ W146°09.00’
01 AGL B 110 MSL to C EIL 017/17 N64°53.00’ W146°42.00’
01 AGL B 110 MSL to D EIL 033/13 N64°47.00’ W146°42.00’
01 AGL B 110 MSL to E EIL 059/14 N64°42.00’ W146°34.00’
01 AGL B 110 MSL to F BIG 352/33 N64°32.00’ W145°23.00’
01 AGL B 110 MSL to G BIG 004/39 N64°35.00’ W145°02.00’
01 AGL B 110 MSL to H BIG 009/63 N65°53.00’ W144°25.00’
01 AGL B 110 MSL to I BIG 010/66 N65°55.00’ W144°20.00’
01 AGL B 110 MSL to J FYU 134/81 N65°22.00’ W143°52.00’
01 AGL B 110 MSL to K FYU 126/74 N65°33.00’ W143°38.00’
01 AGL B 90 MSL to L FYU 107/64 N65°55.00’ W143°12.00’

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through YUKON 2, YUKON 1, YUKON 4, and YUKON 3 HIGH/3A LOW Military Operations Areas (MOA). Route transitions through RESTRICTED AREA 2205 on multiple segments. Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Prior scheduling with SA of R-2205 is required if entering this restricted airspace. This step is required to ensure Restricted Area (RA) will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Primary route segments D through F will only be scheduled when Eielson Range Control (ERC) is open or if you are working directly with the Army within R-2205; if not, utilize alternate entry/exit points.

(3) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(4) ATC clearance into MTR is not clearance to enter active RA. When ERC is open, you are required to contact them prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

(5) ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

(6) When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace. A recorded message on 125.3 MHz indicates ERC is closed.

(7) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(8) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(9) Primary entry: Point A. Alternate entry: Points C, E, F, H and L.
(10) Primary exit: Point Q. Alternate exit: Points E, F, H, L, and N.
(11) All route points (excluding R-2205 Racetrack pattern) are collocated with IR-952, IR-953, and VR-954. 
(12) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments E to F. Additionally, multiple MTR crossings between points D to F within R-2205 and point Q.
(13) Use CAUTION for Pogo Mine and Pogo Mine Airstrip adjacent to route at Points F and G. Avoid mine center point (N64 27.12 W144 54.19) in Goodpaster River valley by 3NM and 1000' AGL (15 May-15 Jul). Airstrip has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity.
(14) Use CAUTION: After weapons release in R-2205, start an immediate turn away from Eielson AFB to preclude flying into Fairbanks Approach Control's Airspace.
(15) Use CAUTION: Ft. Wainwright AAF Class E airspace less than 1 NM outside the route, Segment C to E. Eielson AFB Class D and E airspace 2 NM outside the route, Segment D to E.
(16) Remain clear of Chena River State Recreation Site at/above 1,500'AGL, (1 May-30 Sep), segments B to E.
(17) Remain clear of Pleasant Valley Subdivision west of segments C to D at 6,000' MSL. Flight above 6000' MSL is restricted to non-maneuvering, non-afterburning, navigational flight only.
(18) Remain clear of Salcha River Area 2 on segment E to F. Maintain at/above 5000' MSL for fighter aircraft (1-20 Sep). Maintain at/above 1000'AGL for all other aircraft (continuous).
(19) Remain clear of Salcha River Area 3, on segments E to G, by 2NM either side of Salcha River in the vicinity of Salcha Split VFR waypoint. 1-20 Sep, maintain at/above 5000' MSL for fighter aircraft and at/above 1000'AGL for all other aircraft.
(20) Routine/daily training sorties: remain at/above 2000' AGL and 2NM either side of Yukon, Charley, and Kandik River centerlines to avoid Peregrine Falcon Corridor (15 Apr-15 Sep). Segments J to L and N to P.
(21) Major Flying Exercise (Red Flag, Northern Edge, etc.) sorties: remain at/above 2000' AGL and 2NM either side of Yukon river and at/above 5000' MSL and 2NM either side of Charley and Kandik River centerlines to avoid Peregrine Falcon Corridor (15 Apr-15 Sep). Segments J to L and N to P.
(22) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2,000' AGL. See local OGV FCIF for details and locations.
(23) ATC contact: Anchorage Center. Primary entry/exit at points A through H: (319.2/120.9); backup (285.4/133.1). Primary entry/exit at points L through Q: (284.7/135.0); backup (225.4/132.7).
(24) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Related planning products and day-of forecasts are available 24/7.

**FSS Within 100 NM Radius:**
FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS) See Alaska Supplement.

**VR-1001**


**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fa/Rad/Dis</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A AMG 097/25</td>
<td>N31°29.00' W82°01.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to B</td>
<td>B AYS 277/15</td>
<td>N31°18.00' W82°51.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to C</td>
<td>C AYS 294/29</td>
<td>N31°28.00' W83°04.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to D</td>
<td>D AMG 301/28</td>
<td>N31°47.00' W82°59.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to E</td>
<td>E VNA 225/31</td>
<td>N31°51.00' W83°56.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to F</td>
<td>F PZD 254/14</td>
<td>N31°35.00' W84°33.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to G</td>
<td>G PZD 203/29</td>
<td>N31°12.00' W84°30.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to H</td>
<td>H SZW 007/20</td>
<td>N30°53.00' W84°19.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to I</td>
<td>I GEF 216/10</td>
<td>N30°25.00' W83°54.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to J</td>
<td>J GEF 108/33</td>
<td>N30°22.00' W83°11.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to K</td>
<td>K TAY 091/23</td>
<td>N30°31.00' W82°06.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to K1</td>
<td>TAY 091/23</td>
<td>N30°31.00' W82°06.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to L</td>
<td>L SSI 255/16</td>
<td>N30°58.00' W81°44.00'</td>
</tr>
<tr>
<td>02 AGL B 08 MSL to M</td>
<td>M SSI 318/21</td>
<td>N31°17.50' W81°44.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 2 NM either side of centerline from A to H; 5 NM either side of centerline from H to J; 2 NM either side of centerline from J to M.

**Special Operating Procedures:**
(1) Alternate Entry: Points B, C, D and J.
(2) Alternate Exit: Point J.
(3) Cross Point B, (Pearson, GA.) at 1000' AGL; maintain 1000' AGL until 5 NM past Pearson; noise sensitive area.
(4) Between Points D-E, do not overfly the town of Arabi, GA. at N31-50.0 W83-45.0; noise sensitive area.
(5) Between Points E-F, do not overfly the towns of Warwick, GA. at N31-51.0 W83-54.0 and Leesburg, GA. at N31-44.0 W84-10.0; noise sensitive areas. avoid overflight of horse ranch at N31-39.0 W84-17.0.
VR ROUTES

(6) 5 NM past Point E, uncharted 500’ MSL tower at N31-48.5 W84-02.0.

(7) Between Points F-G, minimum altitude 500’ AGL from May 1-Oct 31 annually, intensive agricultural spraying being conducted. Remain well clear of Morgan, GA at N31-32.0 W84-36.0; noise sensitive area.

(8) 1 NM West of Point H, uncharted 1250’ MSL tower at N30-53.0 W84-20.5.

(9) Between Points F-G, minimum altitude 500’ AGL from May 1-Oct 31 annually, intensive agricultural spraying being conducted. Remain well clear of Morgan, GA at N31-32.0 W84-36.0; noise sensitive area.

(10) Between Points I-J, do not overfly the town of Lamont, FL at N30-23.0 W83-49.0; noise sensitive area.

(11) Between Points J-K, avoid overflight of chicken farm at N30-24.0 W84-20.5 and horse ranch at N30-22.3 W83-03.3; noise sensitive areas.

(12) 2 NM West of Point K, uncharted 400’ MSL tower.

(13) Point K, do not overfly the town of St. George, GA at N30-31.5 W82-02.0; noise sensitive area.

FSS Within 100 NM Radius:
ANB, GNV, MCN, PIE

VR-1002


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

ROUTE WIDTH - 2 NM either side of centerline from A to F; 5 NM either side of centerline from F to K; 2 NM either side of centerline from K to P.

Special Operating Procedures:
(1) Alternate Entry: Points C, G, J and K.
(2) Alternate Exit: Points H, K and O.
(3) Point B, do not overfly the town of St. George, GA at N30-31.5 W82-02.0: Noise Sensitive Area.
(4) Between Points B-C, do not overfly Cuylor Field at N30-22.0 W82-13.5.
(5) Between Points D-E, do not overfly the town of Columbia, FL at N30-04.1 W82-41.5: Noise Sensitive Area.
(6) Point E, maintain centerline or north of centerline until past Point E. Do not cut the corner. This will avoid overflight of Flint’s Flying Ranch and the town of Branford.
(7) Between Points E-F, remain west of the Suwannee River until South of N29-30.0. Do not use River as flight path. Do not overfly the town of Old Town, FL at N29-36.0 W83-59.0: Noise Sensitive Area. Minimum altitude 1000’ AGL. Intensive Helo logging operations being conducted in the vicinity. Helos operating daily with 400’ cable between Old Town and logging area at N29-27.0 W83-01.0.
(8) Point F, do not overfly Cedar Key, Noise Sensitive Area.
(9) Start climb so as to cross Point H at 1500’ AGL, maintain 1500’ AGL until Point I-National Wildlife Refuge.
(10) Between Points I-J, do not overfly the town of Lamont, FL at N32-23.0 W83-13.5.
(11) Segments J-M traverse Moody Two MOA. Aircraft are required to contact Valdosta Approach Control on 285.6 prior to passing J.
(12) Between Points J-K, do not overfly the towns of Jennings, FL at N30-36.0 W83-05.5 and Statenville, GA at N30-42.5 W83-01.5: Noise Sensitive Areas.
(13) Between Points J-K, use caution. Uncharted airfield located at N30-31.0 W83-03.5.
(14) Route terminates in R-3007. Units not scheduled at Townsend Target exit at Point O.
(15) Exercise extreme caution U.S. Fish and Wildlife Heliport located at N30-44.5 W82-07.1. Probable VFR helicopter traffic between segments A and B.

FSS Within 100 NM Radius:
GNV, MCN, PIE

VR-1003


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A AYS 131/33 N30°54.50’ W82°04.50’
02 AGL B 15 AGL to B TAY 091/23 N30°31.00’ W82°06.00’
02 AGL B 15 AGL to C TAY 146/20 N30°14.00’ W82°19.00’
02 AGL B 15 AGL to D TAY 165/23 N30°08.00’ W82°25.00’
02 AGL B 15 AGL to E CTY 012/24 N30°00.00’ W82°58.00’
02 AGL B 15 AGL to F CTY 176/22 N29°14.00’ W83°00.10’
02 AGL B 15 AGL to G CTY 290/29 N29°45.00’ W83°35.00’
02 AGL B 15 AGL to H SZW 169/30 N30°03.50’ W84°17.00’
15 AGL to I GEF 216/10 N30°25.00’ W83°54.00’
02 AGL B 15 AGL to J GEF 108/33 N30°22.00’ W83°11.00’
02 AGL B 15 AGL to K AYS 226/25 N30°59.00’ W82°54.00’
02 AGL B 15 AGL to L AYS 282/35 N31°23.00’ W83°13.00’
02 AGL B 15 AGL to M AMG 301/28 N31°47.00’ W82°59.00’
ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>A</td>
<td>SAV 173/19</td>
<td>N31°50.00' W81°07.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>SSI 352/33</td>
<td>N31°35.00' W81°35.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>SSI 333/29</td>
<td>N31°28.00' W81°44.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>AYS 103/22</td>
<td>N31°11.00' W82°08.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>AYS 131/33</td>
<td>N30°54.50' W82°04.50'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>TAY 091/23</td>
<td>N30°31.00' W82°06.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>TAY 165/23</td>
<td>N30°30.00' W82°25.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>CTY 012/24</td>
<td>N30°00.00' W82°58.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>I</td>
<td>CTY 176/22</td>
<td>N29°14.00' W83°00.10'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>J</td>
<td>CTY 290/29</td>
<td>N29°45.00' W83°35.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>K</td>
<td>GEF 108/33</td>
<td>N30°22.00' W83°11.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>L</td>
<td>AYS 226/25</td>
<td>N30°59.00' W82°54.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>M</td>
<td>AYS 282/35</td>
<td>N31°23.00' W83°13.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>N</td>
<td>AMG 320/15</td>
<td>N31°44.00' W82°42.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>O</td>
<td>AMG 049/29</td>
<td>N31°51.00' W82°05.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>P</td>
<td>AMG 079/15</td>
<td>N31°35.00' W82°13.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>Q</td>
<td>AYS 103/22</td>
<td>N31°11.00' W82°08.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>R</td>
<td>AYS 131/33</td>
<td>N30°54.50' W82°04.50'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline from A to C; 2 NM either side of centerline from C to I; 5 NM either side of centerline from I to J; 2 NM either side of centerline from J to K; 5 NM either side of centerline from K to L; 2 NM either side of centerline from L to R.

Special Operating Procedures:
4. Segments A-B use conjunction with Townsend Target, units not scheduled on Townsend Target enter at C.
5. Between Points A-B, use caution. Aircraft departing Townsend Airport have low visibility due to tree line.
6. Between Points C-D, uncharted airport at N31 12.8 W82-06.8.
7. Point F, do not overfly town of Ste. George, GA. at N30-31.5 W82-02.0; Noise Sensitive Area.
8. Between Points F-G, do not overfly Cuylor Field at N30-22.0 W82-13.5.
10. Point H, maintain centerline or north of centerline until past Point H. Do not cut the corner. This will avoid overflight of Flint’s Flying Ranch and town of Branford.
11. Between Points H-I, remain west of the Suwannee River until south of N30-29.0. Do not use river as flight path. Do not overfly the town of Old Town, FL at N30-36.0 W82-59.0; Noise Sensitive Area. Minimum altitude 1000’ AGL. Intensive Helicopter logging operations being conducted in the vicinity. Helicopters operating daily with 400’ cable between Old Town, FL and logging area at N29-27.0 W83-01.0.
12. Point I, do not overfly Cedar Key; Noise Sensitive Area, Wildlife Refuge.
14. Between Points K-L, use caution, uncharted airfield at N30-31.0 W83-03.5. Do not overfly the towns of Jennings, FL at N30-36.0 W83-05.5 and Stateville, GA. at N30-42.5 W83-01.5; Noise Sensitive Areas.
15. Segments K-N traverse Moody Two MOA. Aircraft are required to contact Valdosta Approach Control on 285.6 prior to passing K.
16. Exercise extreme caution U.S. Fish and Wildlife Heliport located at N30-44.5 W82-07.1. Probable VFR helicopter traffic between segments E and F.

FSS Within 100 NM Radius:
GNV, MCN, PIE

VR-1004


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>SSI 255/16</td>
<td>N30°58.00' W81°44.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>AYS 183/10</td>
<td>N31°06.00' W82°34.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>AYS 282/35</td>
<td>N31°23.00' W83°13.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>AMG 301/28</td>
<td>N31°47.00' W82°59.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>VNA 088/27</td>
<td>N32°13.00' W83°58.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>MCN 055/22</td>
<td>N32°54.00' W83°17.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>ATL 122/35</td>
<td>N33°19.00' W83°51.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>ATL 105/41</td>
<td>N33°27.00' W83°39.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>I</td>
<td>AHN 167/38</td>
<td>N33°20.00' W83°09.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>J</td>
<td>IRQ 213/46</td>
<td>N33°02.00' W82°36.00'</td>
</tr>
</tbody>
</table>
VR ROUTES

02 AGL B 15 AGL to K VNA 073/44 N32°25.00' W82°40.00'
02 AGL B 15 AGL to L AMG 320/28 N31°54.00' W82°52.00'
02 AGL B 15 AGL to M AMG 318/15 N31°43.00' W82°42.00'
02 AGL B 15 AGL to N AMG 049/29 N31°51.00' W82°05.00'

ROUTE WIDTH - 5 NM either side of centerline from A to N; 2 NM either side of centerline from N to O; 2 NM either side of centerline from KA to LA.

Special Operating Procedures:
(1) Alternate Entry: Points D, F, I, J and K.
(2) Alternate Exit: Points J, I, M and N.
(3) Between Points B-C, avoid Pearson, GA at N31-18.0 W82-51.0 by 1 NM; Noise Sensitive Area.
(4) Segments B-D traverse Moody Two MOA. Aircraft are required to contact Valdosta Approach Control on 285.6 prior to passing B.
(5) Between Points E-F, do not overfly the towns of Dexter at N32-26.0 W83-03.5 and Montrose, GA at N32-34.0 W83-09.0; Noise Sensitive Areas.
(6) Fly E of cntrln btn pt F-G due to hvy helicopter act in the vcnty of Piedmont natl wildlife refuge.
(7) Aerobatic flt act btn pt G-H in the vcnty of Monticello sky ranch. N33-19.5 W83-43.3 1500'-3500'.
(8) Between Points H-I, do not overfly farm at N33-25.0 W83-16.0; Noise Sensitive Area.
(9) Alternate exit Point J authorized with scheduled use of Bulldog A MOA.
(10) Route terminates in R-3007, units not scheduled to Townsend Target, exit at N.

FSS Within 100 NM Radius:
ANB, AND, GNV, MCN

VR-1005


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
05 AGL B 15 AGL to A EUF 166/20 N31°37.00' W85°03.00'
05 AGL B 15 AGL to B PZD 246/17 N31°32.00' W84°35.00'
02 AGL B 15 AGL to C SZW 007/20 N30°53.00' W84°19.00'
02 AGL B 15 AGL to D GEF 216/10 N30°25.00' W83°54.00'
02 AGL B 15 AGL to E CTY 258/41 N29°26.00' W83°49.00'
02 AGL B 15 AGL to F CTY 201/19 N29°18.00' W83°10.00'
02 AGL B 15 AGL to G CTY 136/17 N29°24.00' W82°49.00'
05 AGL B 15 AGL to H GNV 219/16 N29°28.00' W82°27.00'
10 AGL B 15 AGL to I OCF 023/17 N29°26.00' W82°06.30'
02 AGL B 15 AGL to J OMN 251/34 N29°07.00' W81°43.00'

ROUTE WIDTH - 5 NM either side of centerline from A to B; 2 NM either side of centerline from B to C; 5 NM either side of centerline from C to H; 2 NM either side of centerline from H to J.

Special Operating Procedures:
(1) Alternate Entry: Points D, E, and F.
(2) Alternate Exit: Points H and I.
(3) Between Points A-B multiple uncharted towers to 600' MSL. Remain well clear of Morgan, GA at N31-32.0 W84-36.0; Noise Sensitive Area.
(4) Between Points B-C, uncharted 400' MSL tower at N31-13.0 W84-27.0.
(5) Between Points C-D, uncharted 800' MSL tower at N30-42.0 W84-14.0.
(6) Between Points C-D, from N30-40.0 W84-09.0 to N30-30.0 W83-58.0; minimum altitude 500' AGL. Remain on or left of centerline, Noise Sensitive Areas.
(7) Between Points D-E do not overfly the towns of Lamont, FL at N30-23.0 W83-49.0; Noise Sensitive Area. Do not overfly mining area at N30-10.5 W83-55.0.
(8) Between Points F-G remain well south of Noise Sensitive Area centered at N30-22.0 W82-53.0.
(9) Between Points G-H minimum altitude is 500' AGL; Noise Sensitive Area. Remain well south of centerline, but do not overfly the towns of Otter Creek and Williston, FL. Avoid horse ranch at N29-26.5 W82-38.0 and houses at N29-25.5 W82-54.5; Noise Sensitive Areas.
(10) Between Points I-J do not overfly the towns of Citra, FL at N29-21.5 W81-58.0; Noise Sensitive Areas. Do not descend below 500' AGL until south of N29-21.0.
(11) Between Points H-I minimum altitude is 1000' AGL; Noise Sensitive Area.
(12) Between Points I-J do not overfly the towns of Citra, FL at N29-25.0 W82-07.0 and Fort McCoy, FL at N29-21.5 W81-58.0; Noise Sensitive Areas. Do not descend below 500' AGL until south of N29-21.0.
(13) 4 NM northwest of Point J uncharted 380' MSL tower N29-10.0 W81-45.0.
(14) Route terminates at R-2910, check Pinecastle Target schedule prior to use.
FSS Within 100 NM Radius:  
ANB, GNV, MCN, PIE

VR-1006


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

**Altitude Data** | **Pt** | **Fac/Rad/Dist** | **Lat/Long**
-----------------|-------|-----------------|-----------
As assigned to    | A     | TAY 119/39      | N30°13.00' W81°53.00'
02 AGL B 15 AGL to B | CTY 012/24 | N30°00.00' W82°58.00'
02 AGL B 15 AGL to C | CTY 176/22 | N29°14.00' W83°00.50'
02 AGL B 15 AGL to D | CTY 216/43 | N29°00.00' W83°30.00'
02 AGL B 15 AGL to E | RSW 300/50 | N26°55.00' W82°36.00'
10 AGL B 15 AGL to F | RSW 296/28 | N26°43.00' W82°15.00'
10 AGL B 15 AGL to G | LBV 082/10 | N26°51.00' W81°12.00'
05 AGL B 15 AGL to H | PHK 336/21 | N27°06.00' W80°51.00'
05 AGL B 15 AGL to I | PHK 350/24 | N27°11.00' W80°46.00'
05 AGL B 15 AGL to J | TRV 293/15 | N27°45.00' W80°46.00'
10 AGL B 15 AGL to K | ORL 171/29 | N28°04.00' W81°15.00'
10 AGL B 15 AGL to L | ORL 246/33 | N28°19.00' W81°54.00'
10 AGL B 15 AGL to M | OCF 181/35 | N28°36.00' W82°14.00'
10 AGL B 15 AGL to N | OCF 245/23 | N29°01.00' W82°37.00'
10 AGL B 15 AGL to O | CTY 167/23 | N29°14.00' W82°56.00'
10 AGL B 15 AGL to P | CTY 284/20 | N29°40.00' W83°25.00'
10 AGL B 15 AGL to Q | CTY 029/13 | N29°48.00' W82°56.00'
10 AGL B 15 AGL to R | GNV 334/17 | N29°56.00' W82°26.00'
05 AGL B 15 AGL to S | GNV 060/10 | N29°47.00' W82°07.00'
05 AGL B 15 AGL to T | GNV 086/24 | N29°45.00' W81°49.00'

Special Operating Procedures:
(1) Point A is usable for units departing from Cecil only.
(2) Alternate Entry: Points B, E, F, G, K and O.
(3) Alternate Exit: Points J, N, Q, R and S.
(4) Between Points A-B, do not fly over the town of Columbia, FL at N30-04.0 W82-41.5; Noise Sensitive Area.
(5) Points B and C, maintain centerline, or north of centerline until past Point B. Do not cut the corner. This will avoid overflight of Flint’s Flying Ranch and the town of Branford.
(6) Between Points B-C, remain west of the Suwannee River until south of N29-30.0. Do not use River as flight path. Do not fly over the town of Old Town, FL at N29-36.0 W82-59.0; Noise Sensitive Area. Minimum, altitude 1000’ AGL. Intensive Helicopter logging operations daily with 400’ cable between Old Town and logging area at N29-27.0 W83-01.0.
(7) Point C, do not fly over Cedar Key or Cedar Key National Wildlife Refuge.
(8) Between Points F-G, minimum altitude 1000’ AGL north of Fort Meyers; Sensitive Area.
(9) Between Points H-J, minimum altitude 500’ AGL.
(10) Caution: IR-46 crosses the route between Points K-L and runs parallel in the opposite direction crossing the route again between points L-N, contact 347 Rescue Det 1/ROA MacDill AFB DSN 968-4642, C813-828-4642 to deconflict. Minimum between Points K-S 1000’ AGL.
(11) Between Points K-L, avoid overflight of Poinciana housing area at N28-08.5 W81-26.5. Do not overfly Deer Creek Resort at N28-13.0 W81-40.0; Noise Sensitive Area. Intensive Helicopter logging operations daily with 400’ cable between Old Town and logging area at N29-27.0 W83-01.0.
(12) Between Points M-N, there is an uncharted unit 300’ tower at N28-52.1 W82-26.3.
(13) Near Point N, do not fly over the towns of Inglis at N29-02.0 W82-40.5 or Yankeetown at N29-02.0 W82-43.0, Point N and housing area 1.5 NM SE of dam.
(14) Between Points O-C, minimum altitude 1000’ AGL.
(15) Between Points P-T, avoid overflight of Poinciana housing area at N28-08.5 W81-26.5. Do not fly over Deer Creek Resort at N28-13.0 W81-40.0; Noise Sensitive Area. Minimum between Points K-S 1000’ AGL.
(16) Between Points M-N, there is an uncharted unit 300’ tower at N28-52.1 W82-26.3.
(17) Route terminates at R-2938, check Stevens Lake Target schedule prior to use. Ensure target is activated prior to entry by Contacting JAX APP on 379.9, 319.9 or 120.75.

ROUTE WIDTH - 2 NM either side of centerline from A to F; 1 NM either side of centerline from F to G; 2 NM either side of centerline from G to L; 1 NM either side of centerline from L to N; 2 NM either side of centerline from N to T.

FSS Within 100 NM Radius:  
GNV, MIA, PIE

VR-1007


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

**Altitude Data** | **Pt** | **Fac/Rad/Dist** | **Lat/Long**
-----------------|-------|-----------------|-----------
As assigned to    | A     | TAY 119/39      | N30°13.00' W81°53.00'
**VR ROUTES**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>TAY 146/20</td>
<td>N30°14.00' W82°19.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>GNV 060/10</td>
<td>N29°47.00' W82°07.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>GNV 143/11</td>
<td>N29°33.00' W82°08.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>OCF 039/15</td>
<td>N29°22.00' W82°03.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>OMN 257/35</td>
<td>N29°10.00' W81°46.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 2 NM either side of centerline for entire route.

**Special Operating Procedures:**

1. Alternate Entry: Point B.
2. Alternate Exit: Points B and C.
3. Between Points B-D, minimum altitude 300' AGL.
4. Do not overfly Marineland at N29-40.0 W81-12.4; Noise Sensitive Area.
5. South of Point B, do not overfly Marineland at N29-40.0 W81-12.4; Noise Sensitive Area.
6. Between Points D-F, minimum altitude 500' AGL; Noise Sensitive Area.
7. Do not overfly South of Point B, Waldo, FL; Noise Sensitive Area.
8. Avoid overflight of housing area at N28-15.0 W81-10.5; Noise Sensitive Area.
9. Route terminates at R-2910, check Pinecastle Target schedule prior to use.

**FSS Within 100 NM Radius:**
GNV, PIE

**VR-1009**


**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>CRG 130/33</td>
<td>N30°00.00' W81°00.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>OMN 345/25</td>
<td>N29°42.00' W81°14.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>OMN 288/19</td>
<td>N29°24.00' W81°14.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>OMN 265/14</td>
<td>N29°17.00' W81°23.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>OMN 239/24</td>
<td>N29°06.00' W81°30.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>OCF 098/26</td>
<td>N29°07.00' W81°44.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 5 NM either side of centerline from A to C; 3 NM either side of centerline from C to F.

**Special Operating Procedures:**

1. Alternate Entry: Point B.
2. Alternate Exit: Point E.
3. Vicinity of Point A, extensive military helicopter training.
4. Between Points B-D, minimum altitude is 300' AGL.
5. Point B, do not overfly town of Summer Haven, Noise Sensitive Area.
6. Do not overfly Marineland at N29-40.0 W81-13.0 south of Point B; Noise Sensitive Area.
(7) Remain East of centerline at Point C.
(8) Between Points C-D, civilian helicopter training area.
(9) Between Points C-D, avoid overflight of horse ranch at N29°19.0' W81°22.0'.
(10) Between Points D-E, do not overfly the town of Barberville, FL at N29°11.0' W81°26.0'; Noise Sensitive Area.
(11) Avoid overflight of Lake Woodruff National Wildlife Refuge near Point E.
(12) Route terminates at R-2910, check Pinecastle Target schedule prior to use.

FSS Within 100 NM Radius:
GNV, PIE

VR-1010


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION: Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A GNV 060/10 N29°47.00' W82°07.00' 05 AGL B 15 AGL to B GNV 115/24 N29°33.00' W81°51.00' 02 AGL B 15 AGL to C GNV 119/29 N29°29.00' W81°46.00'

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Exit: Point B.
(2) Vicinity of Point A, Santa Fe Lake area, Noise Sensitive Area, minimum altitude 500' AGL until past Point B.
(3) Points A-B, remain well clear of Interlachen, FL at N29°37.0' W81°53.0' and houses located west of town; Noise Sensitive Areas. Maintain centerline and observe caution, numerous private airports in vicinity.
(4) Route terminates at R-2906, check Rodman Target schedule prior to use. Remain on centerline or west of centerline when entering R-2906.

FSS Within 100 NM Radius:
GNV, PIE

VR-1014

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-2764, C662-434-2764.

SCHEDULING ACTIVITY: 37/41 FTS, Columbus, MS 39710-5000 DSN 742-7666/7669, C662-434-7666/7669.

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION: Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A CBM 122/19 N33°28.50' W88°07.00' 05 AGL B 15 AGL to B CBM 113/37 N33°24.00' W87°45.50' 05 AGL B 15 AGL to C VUZ 237/29 N33°25.00' W87°23.50' 05 AGL B 15 AGL to D VUZ 220/19 N33°26.00' W87°09.00' 05 AGL B 15 AGL to E VUZ 341/14 N33°53.50' W86°59.00' 05 AGL B 15 AGL to F VUZ 330/29 N34°05.50' W87°10.50' 05 AGL B 15 AGL to G MSL 168/20 N34°15.00' W87°25.00' 05 AGL B 15 AGL to H MSL 232/34 N34°22.00' W88°02.00' 05 AGL B 15 AGL to I CBM 008/33 N34°11.50' W88°21.00' 05 AGL B 15 AGL to J CBM 349/23 N34°01.50' W88°31.50'

ROUTE WIDTH - 3 NM either side of centerline.
VR ROUTES

Special Operating Procedures:
(1) Point A aircraft will Contact Tuscaloosa Tower (126.3/256.7) with position report.
(2) Point C aircraft will Contact Birmingham Approach (127.673/338.2) with position report.
(3) Aircraft will fly at or below 1000' AGL in the following situations: From Points E to F, G to H, and I to J, unless the crew has verified that IR-066, IR-067, VR-1050 and VR-1051 are not being utilized where they cross VR-1014.
(4) Aircrews should watch for glider operations out of M40: Monroe County Airport, MS (N33-52.4 W88-29.4). Glider operations usually take place N of M40 from SFC-8000'.
(5) Alternate Entry/Exit Pts: B, E and F.
(6) Aircrews calling to schedule VR-1014 will ensure they have checked all applicable Bird Hazard products (examples: http://www.usahas.com/ and http://usahas.com/bam/) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
(7) For route briefing, email VR1014@columbus.af.mil.
(8) To schedule for weekend use, contact scheduling activity prior to 2200Z on Friday.
(9) CROSSING ROUTES:
   (a) IR-066 between E and F, G and H, I and J (50 FTS DSN 742-7734/35, C662-434-7734/35).
   (b) IR-067 between E and F, G and H (48 FTS, CBM, DSN 742-7840, C662-434-7840).
   (c) VR-1050 near B, between E and F, G and H, I and J (48 FTS, CBM, DSN 742-7840, C662-434-7840).
   (d) VR-1051 between E and F, G and H (48 FTS, CBM, DSN 742-7840, C662-434-7840).
(10) Exercise caution between Points A and B for civilian aircraft departing/arriving N of Reform, AL Airport.
(11) CAUTION: Uncharted airfield: N33 59.22 W087 04.60 grass strip 4000' runway.

FSS Within 100 NM Radius:
ANB, BNA, GWO, MKL.

VR-1017

ORIGINATING ACTIVITY: 14 OSS, Columbus AFB, Columbus, MS 39710 DSN 742-2764, C662-434-2764.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, Columbus, MS 39710 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A MGM 093/38
05 AGL B 15 AGL to B EUF 168/4 N32°09.00' W85°35.00'
05 AGL B 15 AGL to C MAI 053/11 N31°53.00' W85°07.00'
05 AGL B 15 AGL to D MAI 128/15 N30°38.00' W85°54.00'
05 AGL B 15 AGL to E SZW 271/31 N30°36.00' W85°35.00'

FSS Within 100 NM Radius:
ANB, GNV, MCN.

VR-1020

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32008-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32008-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ weekdays, occasional weekends

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A SJI 043/25 N31°00.00' W88°00.00'

3-104
VR ROUTES

10 AGL B 15 AGL to B MVC 299/10 N31°33.00' W87°31.00'
10 AGL B 15 AGL to C MVC 352/37 N32°05.00' W87°24.00'
10 AGL B 15 AGL to D CEW 352/34 N31°24.00' W86°44.00'
15 AGL to E CEW 016/17 N31°06.00' W86°34.00'

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
(2) Minimum altitude at 1000' AGL except from Point D to E which is 1500' AGL.
(3) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
(a) Crosses VR-1021, VR-1030 and VR-1082 between Points B-C and C-D.
(b) Crosses VR-1085, between Points A-B, B-C, C-D, and at Point D.
(c) Same direction as VR-1083 from Points B-E.
(d) Same direction as VR-1084 from Points D-E.
(e) Crosses IR-057 and IR-059 between Points D-E.
(f) Opposite direction to IR-030 between Points D-E; crosses IR-030 between Points A-B, B-C, and C-D.
(g) Same direction as IR-031 from Points D-E; crosses IR-031 between Points A-B, B-C, and C-D.
(4) Aircraft are required to transmit in the blind on 280.1 MHz their intention to transit Camden Ridge MOA after Point B.
(5) Alternate Entry: Points B, E, G, and K.
(6) Alternate Exit: Points C, D, E, F, K, O, and Q.
(7) Maximum airspeed 420 KTAS Mon-Fri.
(8) CAUTION: Avoid direct overflight of industrial plants at Point C; offset to East.

ROUTE DESCRIPTION:
Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
Cross at 15 AGL to A and remain at 15 AGL until 7 NM NW of Pt A
05 AGL B 15 AGL to B SJI 169/22 N30°22.00' W88°19.00'
05 AGL B 15 AGL to C MVC 247/35 N31°33.00' W88°36.00'
05 AGL B 15 AGL to D MVC 275/35 N31°33.00' W88°00.00'
05 AGL B 15 AGL to E MVC 022/14 N31°40.00' W87°14.00'
05 AGL B 15 AGL to F MVC 058/30 N31°42.00' W86°50.00'
05 AGL B 15 AGL to G MVC 043/36 N31°52.00' W86°50.00'
05 AGL B 15 AGL to H MGM 288/16 N32°19.00' W86°37.00'
05 AGL B 15 AGL to I MGM 320/33 N32°40.00' W86°43.00'
05 AGL B 15 AGL to J LDK 166/23 N32°53.00' W87°27.00'
05 AGL B 15 AGL to K LDK 205/32 N32°47.00' W87°50.00'
05 AGL B 15 AGL to L MEI 064/34 N32°35.00' W88°11.00'
05 AGL B 15 AGL to M MEI 097/41 N32°14.00' W88°01.00'
05 AGL B 15 AGL to N MEI 116/28 N32°08.00' W88°20.00'
05 AGL B 15 AGL to O MEI 146/43 N31°45.00' W88°24.00'
05 AGL B 15 AGL to P MEI 132/51 N31°45.00' W88°07.00'
05 AGL B 15 AGL to Q GCV 046/11 N31°13.00' W88°19.00'
05 AGL B 15 AGL to R GCV 078/24 N31°09.00' W88°01.00'

ROUTE WIDTH - 1 NM either side of centerline from A to B; 5 NM either side of centerline from B to G; 2 NM either side of centerline from G to I; 5 NM either side of centerline from I to M; 3 NM left and 5 NM right of centerline from M to N; 5 NM either side of centerline from N to R.

Special Operating Procedures:
(1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
(2) Minimum altitude on route is 500' AGL.
(3) CAUTION: High density low altitude VFR traffic over water prior to Point A.
(4) Aircraft are required to transmit in the blind on 280.1 MHz their intention to transit Camden Ridge MOA after Point C and at Point O.
(5) Alternate Entry: Points B, E, G, and K.
(6) Alternate Exit: Points C, D, E, F, K, O, and Q.
(7) Maximum airspeed 420 KTAS Mon-Fri.
(8) CAUTION: Avoid direct overflight of industrial plants at Point C; offset to East.

FSS Within 100 NM Radius:
ANB, GNV

VR-1021

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++, weekdays, occasional weekends
VR ROUTES

(9) Aircraft are required to transmit in the blind on 252.9 MHz their intention to transit Birmingham 2 MOA after Point I.

(10) CAUTION: Between Points G and H, N32-08-31 W86-44-31, antenna tower 1799' AGL/2049' MSL.

(11) Noise Sensitive Areas: The following areas should be avoided by 1500' AGL or 3 NM:
   (a) Catherine (Town) N32-11.0 W87-28.0.
   (b) House N32-08.0 W87-25.0.
   (c) Paper Mill N31-58.0 W87-29.0.
   (d) Thomasville (Town) N31-55.0 W87-44.0.
   (e) Choctaw National Wildlife Refuge Area - centered at N31-48.0 W88-11.0, located along the Tombigee River.
   (f) Coffeeville (Town) N31-45.4 W88-05.1.
   (g) Salipta (Town) N31-38.0 W88-02.0.

(12) CAUTION: Between Point D and E, N31-34-28N 87-53-09W, antenna tower 520' AGL/920' MSL.

(13) CAUTION: Between Point L and M, N32-33-42N 88-11-31W, antenna tower 320' AGL/401' MSL.

(14) CAUTION: Between Point N and O, N32-01.5 W88-23.5, antenna tower 30' AGL/250' MSL.

(15) CAUTION: Between Point P and Q, N31-27-58 W88-15-20, antenna tower 218' AGL/528' MSL.

(16) CAUTION: Between Point D and E, N31-38-08 W87-50-16, antenna tower 415' AGL/695' MSL.

(17) CAUTION: Between Point B and C, N31-04-14 W88-14.4, antenna tower 415' AGL/695' MSL.

(18) CAUTION: Between Point P and Q, N31-27-57 W88-16-50, antenna tower 305' AGL/492' MSL.

(19) CAUTION: Between Point B and C, Point Q to R, N31-08-32 W88-13-08, antenna tower 302' AGL/625' MSL.

(20) CAUTION: Between Point B and C, N31-04-25 W88-14-22, antenna tower 415' AGL/695' MSL.

(21) CAUTION: Between Point D and E, N31-34-28 W87-53-09, antenna tower 500' AGL/900' MSL.

(22) CAUTION: C-130 Drop Zone near Point H at N32-22.63 W86-36.82, 600'-1200' AGL. Call Maxwell AFB for zone status. DSN 493-7325.

(23) CAUTION: VR-1021 Points C-L. Aircraft are required to contact Trent Lott Tower (KPQL) on 118.575 MHz prior to Point A.

(24) CAUTION: Between Points N and O, N32-01.5 W88-23.5, antenna tower 300' AGL/430' MSL.

(25) CAUTION: Between Points I and J, avoid town of Oakmulgee, AL, at N32.48.0 W870=-02.5 by 1000' AGL or 1 NM.

FSS Within 100 NM Radius:
ANB, GWO, HUA, OZR

VR-1022

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ weekdays, occasional weekends

ROUTE DESCRIPTION:

Altitude Data

Cross at 15 AGL to A

Pt Fac/Rad/Dist Lat/Long

15 AGL to B

Cross at 10 AGL to A GPT 113/22 N30°15.00' W88°41.00'

15 AGL to B GSJ 230/13 N30°36.00' W88°34.00'

05 AGL B 15 AGL to C

Cross at 10 AGL to EA MVC 355/22 N31°49.50' W87°18.50'

05 AGL B 15 AGL to D GCV 348/20 N31°26.00' W88°32.00'

05 AGL B 15 AGL to E GCV 021/43 N31°45.00' W88°07.00'

05 AGL B 15 AGL to F MVC 011/22 N31°50.00' W87°19.00'

05 AGL B 15 AGL to G MVC 058/30 N31°42.00' W86°50.00'

10 AGL B 15 AGL to EA MVC 355/22 N31°49.50' W87°21.50'

ROUTE WIDTH - 2 NM either side of centerline from A to B; 5 NM either side of centerline from B to G.

Special Operating Procedures:

(1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.

(2) Daylight only, minimum altitude on route is 500' AGL.

(3) CAUTION: High density VFR traffic over water prior to Point A until Point B.

(4) Aircraft are required to transmit in the blind on 255.4 MHz 2 minutes prior to Citronelle.

(5) Aircraft are required to transmit an advisory call on 255.4 MHz 2 minutes prior to Citronelle.

(6) Aircraft are required to transmit in the blind on 280.1 MHz their intention to transit Camden Ridge MOA after Point D.

(7) Alternate Entry: Point C.

(8) Alternate Exit: Points E and F.

(9) Maximum airspeed 420 KTAS Mon-Fri.

(10) Alternate Exit EA, (coincident with alternate entry CA, VR-1082) to be used only for transition to VR-1082.

(11) Noise Sensitive Areas: The following areas should be avoided by 1500' AGL or 3 NM:

(a) Catherine (Town) N32-11.0 W87-28.0.
(b) House N32-08.0 W87-25.0.
(c) Paper Mill N31-58.0 W87-29.0.
(d) Thomasville (Town) N31-55.0 W87-44.0.
(e) Choctaw National Wildlife Refuge Area - centered at N31-48.0 W88-11.0, located along the Tombigee River.
(f) Coffeeville (Town) N31-45.4 W88-05.1.
(g) Salipta (Town) N31-38.0 W88-02.0.

(12) CAUTION: Between Point D and E, N31-34-28N 87-53-09W, antenna tower 520' AGL/920' MSL.
Noise Sensitive Areas: The following areas should be avoided by 1500’ AGL or 3 NM:
(a) Catherine (Town) N32-11.0 W87-28.0.
(b) House N32-08.0 W87-25.0.
(c) Paper Mill N31-58.0 W87-29.0.
(d) Thomasville (Town) N31-55.0 W87-44.0.
(e) Choctaw National Wildlife Refuge Area centered at N31-48.0 W88-11.0, located along the Tombigee River.
(f) Coffeeville (Town) N31-45.4 W88-05.1.
(g) Salipta (Town) N31-38.0 W88-02.0

CAUTION: Between Point D and E, N31-38.2 W88-18.8, antenna tower 360’ AGL/ 489’ MSL.

CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
(a) Crosses VR-060, between Points C-D and E-F.
(b) Same direction as VR-179 between Points A-C. Crosses between C-D.
(c) Crosses VR-1020, between Points E-F and F-G.
(d) Parallels VR-1021 same direction after Point B. Crosses at Points E and G.
(e) Crosses VR-1023 at Point B.
(f) Crosses VR-1024, between Points B-C and C-D.
(g) Crosses VR-1030, between Points E-F and Point G.
(h) Crosses VR-1083, between Points C-D and E-F and F-G.
(i) Crosses VR-1196 at Point C.
(j) Crosses IR-037/IR-040 between Points C-D.

Aircraft are required to contact Trent Lott Tower (KPQL) on 118.575 MHZ prior to Point A.
Aircraft are required to transmit in the blind on 228.85 MHZ their intention to transit Desoto MOA prior to Point C.
Aircraft are required to transmit an advisory call on 255.4 MHZ 1 minute prior to Point D.

FSS Within 100 NM Radius:
ANB, GNV, GWO

VR-1023

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0400Z++ weekdays, occasional weekends

ROUTE DESCRIPTION:

ROUTE WIDTH - 1 NM either side of centerline from A to B; 2 NM either side of centerline from B to C; 5 NM either side of centerline from C to N.

Special Operating Procedures:

(1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
(2) Minimum altitude on route is 500’ AGL.
(3) CAUTION: High density VFR traffic from Point A to D.
(4) Alternate Entry: Point C, G, and H.
(5) Alternate Exit: Point G, H, and M.
(6) Maximum airspeed 420 KTAS Mon-Fri.
(7) NOTE: Aircraft are required to transmit in the blind on 297.1 MHz their intention to transit Desota MOA prior to Point C.
(8) CAUTION: Between Point L and M, N30-42-13 W89-05-27, antenna tower 1176’ AGL/1366’ MSL.
(9) CAUTION: Between Point K and L, N30-41-19 W89-36-04, antenna tower 440’AGL/631’ MSL.
(10) Cross 5 NM radius centered around N30-47.17 W090-26.32 at 1500’ AGL.
(11) Avoid house located at N30-44.0 W90-24.0 by 1000’ AGL or 2 NM.
(12) Aircraft are required to contact Trent Lott Tower (KPQL) on 118.575 MHZ prior to Point A.
(13) Aircraft are required to transmit in the blind on 228.85 MHZ their intention to transit Desoto MOA prior to Point C.
(14) CAUTION: Between Points B-C, N30-36-21.7 W88-38-51.08, uncharted antenna tower 755’ AGL/865’ MSL.
(15) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
(a) Crosses VR-179 at Point B.
(b) Same direction as VR-1021 from Point A-B.
(c) Crosses VR-1022 at Point B.
(d) Same direction as VR-1024 from Points A-E.
(e) Crosses VR-1196 between Points C-D, F-G, I-J, and J-K.
(f) Crosses IR-037 between Points D-E, K-L and at Point N.

FSS Within 100 NM Radius:
DRI, GNV, GWO
VR ROUTES

**VR-1024**

**ORIGINATING ACTIVITY:** Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

**SCHEDULING ACTIVITY:** NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

**HOURS OF OPERATION:** 1200-0400Z++ weekdays, occasional weekends

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>SJI 169/22</td>
<td>N30°22.00' W88°19.00'</td>
</tr>
<tr>
<td>Maintain 15 AGL until 7 NM NW of A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>SJI 262/12</td>
<td>N30°43.00' W88°36.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>SJI 277/40</td>
<td>N30°52.00' W89°07.00'</td>
</tr>
<tr>
<td>Climb to cross and maintain 5 NM SE of D at 10 AGL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 AGL to descend to</td>
<td>D</td>
<td>LBY 185/13</td>
<td>N31°12.00' W89°23.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>MCB 138/17</td>
<td>N31°05.00' W90°03.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>MCB 076/20</td>
<td>N31°22.00' W89°53.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>G</td>
<td>LBY 316/25</td>
<td>N31°45.00' W89°39.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>H</td>
<td>MEI 225/32</td>
<td>N32°02.00' W89°17.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>I</td>
<td>MEI 165/25</td>
<td>N31°58.00' W88°43.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>J</td>
<td>MEI 167/42</td>
<td>N31°41.00' W88°41.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>K</td>
<td>GCV 328/20</td>
<td>N31°24.00' W88°40.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>L</td>
<td>GCV 046/11</td>
<td>N31°13.00' W88°19.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>M</td>
<td>BFM 018/14</td>
<td>N30°50.00' W87°57.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>N</td>
<td>MEI 097/41</td>
<td>N32°14.00' W88°01.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>O</td>
<td>MEI 107/72</td>
<td>N31°56.00' W87°30.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>P</td>
<td>MEI 113/91</td>
<td>N31°40.00' W87°14.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>Q</td>
<td>MGM 217/41</td>
<td>N31°42.00' W86°50.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>R</td>
<td>MGM 228/34</td>
<td>N31°52.00' W86°50.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>S</td>
<td>MGM 288/16</td>
<td>N32°19.00' W86°37.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH -** 1 NM either side of centerline from A to B; 2 NM either side of centerline from B to C; 5 NM either side of centerline from C to M.

**Special Operating Procedures:**

1. **Scheduling Activity operating hours:** Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
2. **Minimum altitude on route is 500’ AGL.**
3. **CAUTION:** High density VFR traffic from Point A to D.
4. **Alternate Entry:** Points C, F, G, H, and I.
5. **Alternate Exit:** Point G and J.
6. **Maximum airspeed:** 420 KTAS Mon-Fri.
7. **CAUTION:** Between Point L and M, N31-08-32 W88-13-08, antenna tower 302’ AGL/ 705’ MSL.
8. **CAUTION:** Between Point L and M, N31-08-32 W88-13-08, antenna tower 302’ AGL/ 705’ MSL.
9. **CAUTION:** Between Point L and M, N31-08-32 W88-13-08, antenna tower 302’ AGL/ 705’ MSL.
10. **NOTE:** Aircraft are required to transmit in the blind on 228.85 MHz their intention to transit Desota MOA prior to Point C.
11. **CAUTION:** Between Point E and F, N31-13-02 W89-59-50, antenna tower 320’ AGL/ 705’ MSL.
12. **CAUTION:** At Point D, N31-16-02 W89-21-38, antenna tower 379’ AGL/ 749’ MSL.
13. **CAUTION:** East of Point J, N31-41-12.7 W88-37-08.1, uncharted tower 302’ AGL/ 652’ MSL.
14. **CAUTION:** Between Points L-M, N30-33-29.84 W88-07-14, uncharted tower 302’ AGL/ 588’ MSL.
15. **CONFLICTS:** (Deconflict with the appropriate Scheduling Activity)
   - Crosses VR-060 at Point L.
   - Crosses VR-179 between Points B-C, K-L and L-M.
   - Same direction as VR-1021 from Points A-B. Crosses between Points L-M.
   - Crosses VR-1022 between Points C-D and K-L.
   - Same direction as VR-1023 from Points A-E.
   - Crosses VR-1033 between Points H-I and I-J.
   - Same Direction as VR-1072 from Points H-I.
   - Crosses VR-1083 between Points L-M.
   - Crosses VR-1196 between Points C-D.
   - Crosses IR-037 between Points D-E.
16. Aircraft are required to contact Trent Lott Tower (KPQL) on 118.575 MHZ prior to Point A.
17. Aircraft are required to transmit an advisory call on 255.4 MHZ 2 minutes prior to Citronelle.
18. **CAUTION:** Between Points F and G, N31-37.9 W089-43.9, antenna tower 320’ AGL/680’ MSL.
19. **Overfly Mount Olive and Purvis NSAS at 1000’ AGL minimum.**
20. **CAUTION:** High density helicopter traffic between Point H and Point I.

**FSS Within 100 NM Radius:**
DRI, GNV, GWO

VR-1030

**ORIGINATING ACTIVITY:** COMTRAWING ONE, NAS MERIDIAN, MS 39309-0136 DSN 637-2487, C601-679-2487.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 1100-0600Z++ daily

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>MEI 097/41</td>
<td>N32°14.00' W88°01.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>MEI 107/72</td>
<td>N31°56.00' W87°30.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>MEI 113/91</td>
<td>N31°40.00' W87°14.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>MGM 217/41</td>
<td>N31°42.00' W86°50.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>MGM 228/34</td>
<td>N31°52.00' W86°50.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>MGM 288/16</td>
<td>N32°19.00' W86°37.00'</td>
</tr>
</tbody>
</table>
VR ROUTES

ROUTE WIDTH - 5 NM either side of centerline from A to E; 10 NM left and 2 NM right of centerline from E to G; 5 NM either side of centerline from G to L.

Special Operating Procedures:
(1) Aircraft are required to transmit in the blind on 267.9 MHz their intention to transit Camden Ridge MOA prior to Point A. Maximum altitude between Point J and K is 1000' AGL.
(2) Alternate Entry: Point C.
(3) Alternate Exit: Points J and K.
(4) Numerous VR/IR/SR route crossing traffic Points A-D.
(5) Make mandatory voice report on 255.4, 1 min prior to Point G on VR-1030.
(6) VR-1031 Points I-J run concurrent with VR-1030 Points G-H.
(7) Make mandatory voice report on 255.4, 1 min prior to Point I on VR-1031.
(8) VR-1033 crosses between Points L-M.
(9) For route briefing, email VR1031@columbus.af.mil.

FSS Within 100 NM Radius:
ANB, DRI, GWO, MCN, MKL

VR-1032

ORIGINATING ACTIVITY: COMTRAWING ONE, NAS MERIDIAN, MS 39309-0136 DSN 637-2487, C601-679-2487.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0600Z++ daily

ROUTE DESCRIPTION:
Altitude Data   Pt   Fac/Rad/Dist   Lat/Long
As assigned to A MEI 027/32 N32°50.00' W88°28.00'
05 AGL B 15 AGL to B LDK 259/46 N33°09.00' W88°27.00'
05 AGL B 15 AGL to Maintain 10 AGL C LDK 266/37 N33°15.00' W88°16.00'
at or below 10 AGL D LDK 195/13 N33°03.00' W87°37.00'
10 AGL B 15 AGL to E VUZ 168/43 N32°58.00' W86°43.00'
10 AGL B 15 AGL to F VUZ 121/31 N33°23.00' W86°23.00'
05 AGL B 15 AGL to G VUZ 119/58 N33°10.00' W85°55.00'
05 AGL B 15 AGL to H MGM 004/40 N32°53.00' W86°13.00'
05 AGL B 15 AGL to I MGM 320/33 N32°40.00' W86°43.00'
05 AGL B 15 AGL to J LDK 166/23 N32°53.00' W87°27.00'
05 AGL B 15 AGL to K LDK 195/32 N32°45.00' W87°44.00'
05 AGL B 15 AGL to L MGM 263/70 N32°08.00' W87°41.00'
05 AGL B 15 AGL to M MEI 123/34 N32°02.00' W88°17.00'

ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 5 NM either side of centerline from B to C; 2 NM either side of centerline from C to D; 5 NM either side of centerline from D to E; 2 NM either side of centerline from E to F; 5 NM either side of centerline from F to M.

Special Operating Procedures:
(1) Maximum altitude between Points C and D is 1000' AGL.
(2) Aircraft are required to transmit in the blind on 267.9 their intention to transit the Camden Ridge MOA prior to Point L.
(3) Alternate Entry: Points C, E and F.
(4) Alternate Exit: Point J and K.
(5) VR-1054 crosses between Points E-F.
(6) SR-069 crosses between Points F-G.
(7) SR-071 and SR-072 cross multiple times between Points G-J.
(8) VR-1054 crosses between Points H-I.
(9) VR-1055 crosses between points H-J.
(10) VR-1021 Points I-J and VR-1030 Points G-H are shared legs with VR-1031 Points I-J.
(11) Make mandatory voice report on 255.4, 1 min prior to Point I on VR-1031.
(12) VR-1033 and VR-1030 crosses between Points L-M.
(13) For route briefing, email VR1031@columbus.af.mil.
VR ROUTES

**ROUTE WIDTH** - 5 NM either side of centerline.

**Special Operating Procedures:**
1. 2130’ MSL tower located at N33-04-41 W92-13-41.
2. CAUTION: Route conflicts with IR-070 at multiple points. To deconflict contact 48 FTS, Columbus AFB, DSN 742-7840, C662-434-7840.
3. Aircraft are required to transmit in the blind on 267.9 MHz their intention to transit the Camden Ridge MOA prior to Point G.
4. Alternate Entry: Points F and G.
5. Alternate Exit: Point G.
6. SR-137 crosses between Points B-C.
7. SR-137 crosses between Points D-E.
8. VR-1072 and VR-1024 crosses between Points G-H.
9. VR-1021 and VR-1024 crosses between Points H-I.
10. Multiple VR routes use Point I as turn point.
11. Make mandatory voice report on 255.4, 1 min prior to Point I on VR-1033.
12. VR-060 crosses between Points I-J.
13. CAUTION: Route conflicts with VR-1072 between Points G and H. To deconflict contact 48 FTS, Columbus AFB, DSN 742-7840, C662-434-7840.

**FSS Within 100 NM Radius:**
DRI, GWO

**VR-1033**

**ORIGINATING ACTIVITY:** COMTRAWING ONE, NAS MERIDIAN, Meridian, MS 39309 DSN 637-2487, C601-679-2487.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 1100-0600Z++ daily

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>MEI 356/9</td>
<td>N32°32.00' W88°48.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>MEI 308/37</td>
<td>N32°48.00' W89°21.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>MEI 326/56</td>
<td>N33°12.00' W89°21.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>MEI 315/75</td>
<td>N33°20.00' W89°45.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>MHZ 057/29</td>
<td>N32°42.00' W89°38.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>MHZ 112/19</td>
<td>N32°19.00' W89°45.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>G</td>
<td>MEI 230/27</td>
<td>N32°07.50' W89°14.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>H</td>
<td>MEI 191/28</td>
<td>N31°56.00' W88°57.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>I</td>
<td>MVC 341/29</td>
<td>N31°56.00' W87°30.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>J</td>
<td>MVC 341/42</td>
<td>N32°08.00' W87°34.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 2 NM either side of centerline from A to B.  

**Special Operating Procedures:**
1. Use restricted to close air support (CAS) training flights only for units scheduled on both R-2907A/B and R-2910.
2. Do not overfly central tower located near Point B.
3. Entry into A may be offset 2 NM to the north.
4. 256’ AGL tower located 4 NM west of A.

**FSS Within 100 NM Radius:**
GNV, PIE
VR-1040

ORIGINATING ACTIVITY: CO MCAS CHERRY POINT, ATTN DIROPS/RMD, Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

SCHEDULING ACTIVITY: Range Management Department, Mission Coordination/Future Operations, MCAS Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Special Operating Procedures:

(1) This route is scheduled through the Mission Coordination/Future Operations Office (MC/FO) between the hours of 0700 and 1600 Mon-Fri. A minimum of two hours prior to use is required if scheduling for same day operations. If scheduling the route on an observed federal holiday or weekend, schedule with MC/FO two working days prior.

(2) CAUTION: Intensive civil aircraft near Hilton Head Airport.

(3) CAUTION: Intensive low altitude helicopter operations between Point J to L in W-158E and W-158F.


(5) Alternate Exit: Points H, L and M.

(6) 2049’ MSL tower located at N34-07-51 W78-11-16.

(7) 1049’ AGL antenna located at N32-30-51 W80-20-16.

FSS Within 100 NM Radius:

AND, GNV, MCN, PIE, RDU, SJU

VR-1041

ORIGINATING ACTIVITY: CO MCAS CHERRY POINT, ATTN DIROPS/RMD, Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

SCHEDULING ACTIVITY: Range Management Department, Mission Coordination/Future Operations, MCAS Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
---|---|---|---
02 AGL B 15 AGL to A | CHS 215/35 | N32°23'.00' | W80°23'.00'

FSS Within 100 NM Radius:

B CHS 159/16 | N32°39'.00' | W79°54'.00'

D CHS 085/36 | N33°00'.00' | W79°20'.00'

E CHS 060/36 | N33°14'.00' | W79°27'.00'

3-111
VR ROUTES

ROUTE WIDTH - 3 NM either side of centerline from A to H; 3 NM right and 1 NM left of centerline from H to I; 1 NM right and 4 NM left of centerline from I to J; 3 NM either side of centerline from J to O.

Special Operating Procedures:

(1) This route is scheduled through the Mission Coordination/Future Operations Office (MC/FO) between the hours of 0700 and 1600 Mon-Fri. A minimum of two hours prior to use is required if scheduling for same day operations. If scheduling the route on an observed federal holiday or weekend, schedule with MC/FO two working days prior.

(2) 1500’ AGL until 3 NM past Point A and then maintain 200’ AGL to 1500’ AGL. Do not fly closer than 1 NM from the coast at Point B below 1500’ AGL.

(3) Do not fly within 1 NM of Harbor, Hunting or Fripp Islands (near Points A and I) below 1500’ AGL.

(4) CAUTION: Intensive banner towing and parasailing operations in vicinity of Folly Beach, Sullivans Island, and Isle of Palms, SC (Point A to Point C) from Memorial Day through Labor Day.

(5) CAUTION: Intensive civil aircraft near Hilton Head Airport.

(6) CAUTION: Intensive low altitude helicopter operations between Points J and L in W-158E and W-158F.


(8) Alternate Exit: Points E, F, H, I, L and M.

(9) Penetration of FACSFAC JAX requires approval from Point I to M. DSN 942-2259, C904-542-2259.

(10) 1049’ AGL tower located at N33°05-06 W79°17.14, less than 1 NM off centerline between Points G and H.

(11) Noise Sensitive Areas: Vicinity of N31°54’ W80°25.0 and N31°32’ W81°11. Remain 1 NM east of centerline from Point I to 10 NM south of K. Do not flyover Wassaw and Blackbeard National Wildlife Refuges located west of Point I and J.

(12) Noise Sensitive Areas: Vicinity of N31°59’ W80°51. Remain 1 NM East of Tybee Island/Savannah Beach area.

(13) Minimum altitude 1000’ AGL from N32°46.0 W80°25.0 to N32°32.0 W80°25.0 between Points G and I. Ace Basin National Wildlife Refuge and Bear Island Wildlife Management Area are in vicinity of N32°40.0 W80°25.0.

(14) CAUTION: Numerous large towers along the route.

(15) CAUTION: Ensure respective mission planning systems and aeronautical charts are updated with the most current vertical obstruction data, which can be downloaded from the NGA WEBDVOF (Digital Vertical Obstruction File) predefined queries site at https://DVOF.GEOINTEL.NGA.MIL/DVOFPRE-NUM.CFM. For assistance with the NGA WEBDVOF website, contact C314-676-5439, DSN846-5439 or C636-321-5207/DSN369-5207.

FSS Within 100 NM Radius:
AND, GNV, MCN, PIE

VR-1043

ORIGINATING ACTIVITY: CO MCAS CHERRY POINT, ATTN DIROPS/RMD, Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

SCHEDULING ACTIVITY: Range Management Department, Mission Coordination/Future Operations, MCAS Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

HOURS OF OPERATION: 0700-2300 Local Daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>NKT 266/10</td>
<td>N34°52.00' W77°04.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>NKT 220/28</td>
<td>N34°30.00' W77°10.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>ILM 193/33</td>
<td>N34°48.30' W77°56.60'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>ILM 229/37</td>
<td>N34°54.00' W78°22.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>ILM 291/20</td>
<td>N34°26.10' W78°16.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>FLO 072/37</td>
<td>N34°27.00' W78°58.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>FLO 026/20</td>
<td>N34°32.00' W79°30.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>FLO 316/31</td>
<td>N34°35.00' W80°07.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>I</td>
<td>FLO 293/32</td>
<td>N34°25.00' W80°16.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>J</td>
<td>FLO 236/21</td>
<td>N34°01.00' W80°00.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>K</td>
<td>FLO 121/23</td>
<td>N34°03.00' W79°15.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>L</td>
<td>ILM 249/43</td>
<td>N34°01.00' W78°38.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>M</td>
<td>ILM 192/16</td>
<td>N34°05.00' W77°54.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>N</td>
<td>NKT 147/25</td>
<td>N34°35.00' W76°32.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>O</td>
<td>NKT 125/20</td>
<td>N34°45.50' W76°31.00'</td>
</tr>
</tbody>
</table>
ROUTE WIDTH - 2 NM either side of centerline from A to I; 1 NM either side of centerline from I to K; 2 NM either side of centerline from K to N1.

**Special Operating Procedures:**

1. This route is scheduled through the Mission Coordination/Future Operations (MC/FO) Office between the hours of 0700 and 1600 Mon-Fri. A minimum of two hours prior to use is required if scheduling for same day operations. If scheduling the route on an observed federal holiday or weekend, schedule with MC/FO two working days prior.

2. Minimum altitude 1000' AGL from Point A until 15 NM past A.

3. Penetration of W-122H (Point B to C, Point M to N) requires approval from FACSFAC VACAPES, Oceana, VA.

4. Alternate Entry: Points D, E and K.

5. Alternate Exit: Points C, M and N.

6. 2049' MSL tower located at N34°07'51" W78°11'16".

7. Minimum altitude 1000' AGL from K until 10 NM past K.

8. Minimum altitude 1500' AGL from 20 NM prior to M until 5 NM past M. (Noise Sensitive Area).

9. Minimum altitude N to N1 750' AGL (Noise Sensitive Area N34°47'00" W76°34'00").

10. Note: 1 June to 1 Sept: Minimum altitude 1500' AGL/5 NM prior to N until N1, Sat-Sun (Noise Sensitive Area).

11. Point N terminates in R-5306A. Aircraft requesting R-5306A access shall Contact Range Control, call sign 'Big Rock', on 244.8/139.3 with call sign, number and type aircraft, mission number, and altitude requested. (NOTE: Approval to enter R-5306A does not constitute clearance into BT-11 and BT-9 targets. Big Rock schedules all same day requests for R-5306A, BT-11, and BT-9).

12. Avoid towns and populated areas by 1 NM or overfly 1000' AGL. Avoid airports by 3 NM or overfly 1500' AGL.

13. Between Point F and G, VR-087 crosses left to right 5 NM prior to Point G.

14. If not scheduled into R-5306A, exit Point N.

15. Tie-in FSS: RDU 255.4 MHz.

16. CAUTION: Numerous large towers along the route.

17. CAUTION: Ensure respective mission planning systems and aeronautical charts are updated with the most current vertical obstruction data, which can be downloaded from the NGA WEBDVOF (Digital Vertical Obstruction File) predefined queries site at https://DVOF.GEOINTEL.NGA.MIL/DVOFPRE-NUM.CFM. For assistance with the NGA WEBDVOF website, contact C314-676-5439, DSN846-5439 or C636-321-5207/DSN369-5207.

**FSS Within 100 NM Radius:**

AND, RDU

**VR-1046**

**ORIGINATING ACTIVITY:** CO MCAS CHERRY POINT, ATTN DIROPS/RMD, Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

**SCHEDULING ACTIVITY:** Range Management Department, Mission Coordination/Future Operations, MCAS Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

**HOURS OF OPERATION:** 0600-1800 Local Mon-Fri

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>NKT 250/17</td>
<td>N34°46.00' W77°10.00'</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>B</td>
<td>NKT 276/19</td>
<td>N34°53.00' W77°15.00'</td>
</tr>
<tr>
<td>(See Special Operating Procedures)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>as assigned to</td>
<td>C</td>
<td>GSB 138/22</td>
<td>N35°06.00' W77°38.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>GSB 211/19</td>
<td>N35°03.00' W78°07.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>GSB 278/31</td>
<td>N35°20.00' W78°36.00'</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>F</td>
<td>RDU 156/15</td>
<td>N35°40.00' W78°37.00'</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>G</td>
<td>RDU 078/18</td>
<td>N35°59.00' W78°26.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>RDU 077/31</td>
<td>N36°04.00' W78°12.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>I</td>
<td>TYI 001/9</td>
<td>N36°08.00' W77°43.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>J</td>
<td>TYI 098/32</td>
<td>N35°57.00' W77°03.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>K</td>
<td>NKT 010/41</td>
<td>N35°35.00' W76°52.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>L</td>
<td>NKT 012/24</td>
<td>N35°18.00' W76°51.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>L1</td>
<td>NKT 027/21</td>
<td>N35°14.00' W76°44.50'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 1 NM either side of centerline.

**Special Operating Procedures:**

1. This route is scheduled through Mission Coordination/Future Operations Office (MC/FO) between the hours of 0700 and 1600 Mon-Fri. A minimum of two hours prior to use is required if scheduling for same day operations. If scheduling the route on an observed federal holiday or weekend, schedule with MC/FO two working days prior.

2. Maintain altitude 1500' AGL until 6 NM past B, then 10 AGL B 15 AGL to C due to extensive helicopter activity.

3. Alternate Entry: Points C, E, H and L.


5. Aircraft entering at Point E, avoid overflight of Dunn, NC.

6. Alternate at Point L, authorized for transition from VR-084.

7. Points E, F and G noise sensitive.

8. Minimum altitude 10 AGL B 15 AGL to D GSB 138/22 N35°06.00' W77°38.00'.

9. Minimum altitude 05 AGL B 15 AGL to Point N1 750' AGL (Noise Sensitive Area N34°47'00" W76°34'00").

10. Point N terminates in R-5306A. Aircraft requesting R-5306A access shall Contact Range Control, call sign 'Big Rock', on 244.8/139.3 with call sign, number and type aircraft, mission number, and altitude requested. (NOTE: Approval to enter R-5306A does not constitute clearance into BT-11 and BT-9 targets. Big Rock schedules all same day requests for R-5306A, BT-11, and BT-9).

11. Avoid towns and populated areas by 1 NM or overfly 1000' AGL. Avoid airports by 3 NM or overfly 1500' AGL.
(12) If not scheduled into R-5306A, exit Point L.
(13) Tie-in FSS: RDU 255.4 MHz.
(14) CAUTION: Numerous large towers along the route.
(15) CAUTION: Ensure respective mission planning systems and aeronautical charts are updated with the most current vertical obstruction data, which can be downloaded from the NGA WEBDVOF (Digital Vertical Obstruction File) predefined queries site at https://DVOF.GEOINTEL.NGA.MIL/DVOFPRE-NUM.CFM. For assistance with NGA WEBDVOF website, contact C314-676-5439/DSN 846-5439 or C662-321-5207/DSN 369-5207.

FSS Within 100 NM Radius:
RDU

VR-1050

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-2764, C662-434-2764.

SCHEDULING ACTIVITY: 48 FTS, Columbus, MS 39710-5000 DSN 742-7840, C662-434-7840.

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within entire route structure.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Aircraft will report Points B to Anniston (ANB) Flight Service on 255.4 (alternate 122.55) and H to Greenwood (GWO) Flight Station on 255.4 (alternate 122.55).
(2) Alternate Entry: Points B, C, D, E, F, G, H and J.
(3) Alternate Exit: Points C, D, E, F, G, H, I and J.
(4) Army National Guard units conduct tactical helicopter operations from surface to 3000’ AGL from N34-45.0 W88-50.0 to N34-20.0 W88-30.0.
(5) Tie-in FSS: Anniston (ANB).
(6) Numerous power lines/antennae below 200’ AGL may be charted.
(7) For route brief, please email 14OSS.OSOP.VR1050@us.af.mil.
(8) Aircrews calling to schedule VR-1050 will ensure they have checked all applicable Bird Hazard products (examples: http://www.usahas.com/ and http://usahas.com/bam/) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.

CROSSING ROUTES:
(a) IR-066 common route from Point A to F, crosses between F and G, common route between Point H-I (50 FTS, DSN 742-7738, C662-434-7738);
(b) IR-067 common route from Point A to D, and from E to F (48 FTS, DSN 742-7840, C662-434-7840);
(c) VR-1014 crosses between Points A and B and between Points B and C and between Points H and I (37/41 FTS, DSN 742-7666, C662-434-7666);
(d) VR-1051 common route from Point A to D, Point E to F (48 FTS, DSN 742-7840, C662-434-7840);

Route Deconfliction:
(a) IR-067, VR-1050, VR-1051: Deconflicted by Scheduler using time (if unable to enter within + or - 4 minutes, re-coordinate a new entry time).
(b) VR-1014: Aircraft flying VR-1050 between Points A and B, until half way between the Points B and C and between Points H and I will fly at 1500’ AGL unless crew has verified that VR-1014 in not being utilized.

(11) Uncharted towers N35 20.42 W087 48.46 320’ AGL, N34 00.35 W088 22.24 200’ AGL, N33 39.65 W088 02.11 200’ AGL, N33 28.95 W087 45.35 200’ AGL.

FSS Within 100 NM Radius:
ANB, BNA, GWO, JBR, MKL.

VR-1051

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-2764, C662-434-2764.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710, DSN 742-7847, C662-434-7847.

HOURS OF OPERATION: Dawn-Dusk Mon-Fri

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>VUZ 001/16</td>
<td>N33°56.00' W86°53.00'</td>
</tr>
<tr>
<td>15 AGL to B</td>
<td></td>
<td>MSL 195/37</td>
<td>N34°07.00' W87°42.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to C</td>
<td></td>
<td>MSL 296/36</td>
<td>N34°59.00' W88°09.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D</td>
<td></td>
<td>BNA 221/65</td>
<td>N35°17.00' W87°31.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to E</td>
<td></td>
<td>Dyr 136/55</td>
<td>N35°19.00' W88°35.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to F</td>
<td></td>
<td>HLI 054/41</td>
<td>N35°08.00' W88°48.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to G</td>
<td></td>
<td>HLI 115/36</td>
<td>N34°29.00' W88°51.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to H</td>
<td></td>
<td>OTB 052/17</td>
<td>N34°23.00' W88°31.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to I</td>
<td></td>
<td>CBM 019/16</td>
<td>N33°54.00' W88°20.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to J</td>
<td></td>
<td>CBM 110/34</td>
<td>N33°27.00' W87°48.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to K</td>
<td></td>
<td>VUZ 260/15</td>
<td>N33°38.00' W87°12.00'</td>
</tr>
</tbody>
</table>

Army National Guard units conduct tactical helicopter operations from surface to 3000’ AGL from N34-45.0 W88-50.0 to N34-20.0 W88-30.0.

TIE-IN FSS: Anniston (ANB).

Numbers power lines/antennae below 200’ AGL may be charted.

For route brief, please email 14OSS.OSOP.VR1050@us.af.mil.

Aircrews calling to schedule VR-1050 will ensure they have checked all applicable Bird Hazard products (examples: http://www.usahas.com/ and http://usahas.com/bam/) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
<table>
<thead>
<tr>
<th>Source</th>
<th>Destination</th>
<th>Pressure Altitude</th>
<th>Pressure Altitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 AGL B 15 AGL to F</td>
<td>BNA 303/25</td>
<td>N36°21.00'</td>
<td>W89°45.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to G</td>
<td>CKV 236/49</td>
<td>N36°08.00'</td>
<td>W89°45.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to H</td>
<td>DNY 082/32</td>
<td>N35°30.00'</td>
<td>W89°45.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to I</td>
<td>HLI 051/56</td>
<td>N35°15.00'</td>
<td>W89°45.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to J</td>
<td>HLI 054/41</td>
<td>N35°10.00'</td>
<td>W89°45.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to K</td>
<td>HLI 068/21</td>
<td>N34°30.00'</td>
<td>W89°45.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to L</td>
<td>SQS 066/28</td>
<td>N33°30.00'</td>
<td>W89°45.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized IAW Command Directives within entire route structure.

**ROUTE WIDTH - 5 NM either side of centerline.**

**Special Operating Procedures:**

1. Aircraft will report Point B to Flight Service on 255.4 (Alternate 122.55).
4. Army helicopter training area (Ft. Campbell) lies between Point F and G.
5. Army National Guard units conduct tactical helicopter operations from surface to 3000’ AGL from N34-45.0 W88-50.0 to N34-20.0 W88-30.0.
7. Aircraft avoid overflight of Camp McCain, MS maintain 1500’ within 2 NM of N33°42’ W89°43.’ (Contains laser range).
8. To schedule for weekend use, Contact Scheduling Activity prior to 2200Z on Friday.
9. Numerous power lines/antennae below 200’ AGL may be uncharted.
10. For route brief, please email OSS.OOSP.VR1051@us.af.mil.
11. Aircrews calling to schedule VR-1051 will ensure they have checked all applicable Bird Hazard products (examples: http://www.usahas.com/ and http://usahas.com/bam/) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
12. **CROSSING ROUTES:**
   (a) IR-066 common route from Point A to D, crosses between Points D and E, common route from Points I to K (48 FTS, DSN 742-7840, C662-434-7840);
   (b) IR-067 common route A to D, crosses between D and E, common route from 15 NM prior to G to K (48 FTS, DSN 742-7840, C662-434-7840);
   (c) IR-068 near Point L (48 FTS, DSN 742-7840, C662-434-7840);
   (d) IR-077/078 starts/ends near Point I and already has altitude separation;
   (e) IR-091 crosses between Point K and L, near Point L (50 FTS, DSN 742-7734, C662-434-7734);
   (f) VR-1014 crosses between Points A and B and between Points B and C (37/41 FTS, DSN 742-7666, C662-434-7666);
   (g) VR-1050 common route from Point A to D, Point I to J (48 FTS, DSN 742-7840, C662-434-7840);
   (h) SR-221 common route (reciprocal hdg) near Point F (314 OSS/OSTX, DSN 762-7504, C901-291-7504).

**ROUTE DESCRIPTION: Altitude Data | Pt | Fac/Rad/Dist | Lat/Long**

- **As assigned to A RMG 357/24** N34°34.00' W89°05.00'
- **02 AGL B 15 AGL to B HRS VORTAC** N34°36.58' W89°54.94'
- **02 AGL B 15 AGL to C HRS 338/20** N35°15.00' W84°04.00'
- **02 AGL B 15 AGL to D HCH 130/11** N35°40.00' W84°48.00'
- **02 AGL B 15 AGL to E GQO 316/42** N35°28.00' W85°44.00'

**SCHEDULING ACTIVITY:** NAS Pensacola, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

**SCHEDULED ACTIVITY:** NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

**HOURS OF OPERATION:** 1200-0500Z++
VR ROUTES

02 AGL B 15 AGL to F RMG 295/28 N34°22.00' W85°37.00'
02 AGL B 15 AGL to G RMG 260/23 N34°06.00' W85°34.00'
02 AGL B 15 AGL to H RMG 030/46 N32°52.00' W85°49.00'
02 AGL B 15 AGL to I MGM 039/25 N32°32.00' W85°59.00'
10 AGL B 15 AGL to J MGM 030/46 N32°32.00' W85°59.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
(2) Maintain 1000' AGL minimum over Lake Martin.
(3) Maintain 1000' AGL minimum within 3 NM radius of Pikeville, TN.
(4) Maintain 1500' AGL minimum within 3 NM of Zack Airport (N34-36-30 W84-58-48).
(5) Do not overfly Murphy, NC (N35-05.0 W84-03-0), avoid by 3 NM.
(6) Do not overfly Mentone, AL (N34-05-30 W85-35-30), avoid by 3 NM.
(8) Alternate Exit: Points C, D, E, F, G, H, I, J and EA.
(9) Tie-in FSS: Birmingham (BHM).
(10) Avoid the following noise sensitive area: N33-54.5 W85-33.4 by 5 NM.
(11) Avoid: tower 200'AGL/890'MSL at N33-34-1. N35-06.00' W84-03-0.
(12) For deconfliction with VR-1056, 2 hours will be required between opposite direction flights.
(13) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
   (a) Crosses VR-058 between Points B-C, D-E and at E.
   (b) Crosses VR-092 between Points B-C, D-E and at E.
   (c) Crosses VR-1054 between Points H-I and at E.
   (d) Crosses VR-1055 between Points A-B and I-J.

FSS Within 100 NM Radius:
ANB, AND, BNA, MCN

VR-1054

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1300-0500Z++ daily

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A VUZ 148/31 N33°13.00' W86°35.00'
01 AGL B 15 AGL to B TGE 287/18 N32°35.00' W86°00.00'
10 AGL B 15 AGL to C TGE 227/12 N32°21.00' W85°51.00'
01 AGL B 15 AGL to D EUF 291/20 N32°05.00' W85°30.00'
01 AGL B 15 AGL to E EUF 041/12 N32°06.00' W84°58.00'
01 AGL B 15 AGL to F EUF 060/22 N32°07.50' W84°45.00'
01 AGL B 15 AGL to G CSG 118/36 N32°19.40' W84°24.00'
01 AGL B 15 AGL to H CSG 092/31 N32°35.00' W84°24.00'
01 AGL B 15 AGL to I LGC 094/36 N32°35.00' W84°30.00'
10 AGL B 15 AGL to J LGC 037/10 N32°35.00' W84°30.00'
01 AGL B 15 AGL to K MGM 030/46 N33°27.00' W85°58.00'
01 AGL B 15 AGL to EA EUF 147/20 N32°06.00' W84°58.00'

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within published altitude blocks.

ROUTE WIDTH - 5 NM either side of centerline from A to K; 5 NM either side of centerline from E to EA.

Special Operating Procedures:
(1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
(2) Tie-in FSS: Birmingham (BHM).
(4) Alternate Exit: Points C, D, E, F, G, H, I, J and EA.
(5) Avoid cities and towns by 1000' vertical and 2000' horizontal.
(6) Avoid areas of forest fires.
(7) Do not over fly dish antenna (N32-56.0 W84-33.0). Avoid by 1 NM.
(8) Flight to Point EA is not authorized unless scheduled into Moody 3 MOA. Moody MOA is scheduled through 23 WG, DSN 460-3531.
(9) Upon exit at Point EA, climb VFR to 10,500' and contact Jacksonville Center on 353.5 or 359.0 for clearance into Moody 3 MOA. If unable to climb VFR TO 10,500', maintain VFR and contact Cairns Approach Control on 234.4.
(10) CAUTION: Between Points I-J, N33-01-41 W84-39-55, uncharted antenna tower 1550 AGL/2360' MSL.
(11) CAUTION: Between Points I-J, N33-01-41 W84-39-55, uncharted antenna tower 1550' AGL/2360' MSL.
(12) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
   (a) Same direction as VR-1017 between points C-D.
VR ROUTES

(b) Crosses VR-1031 between Points A-B.
(c) Crosses VR-1052 between Points B-C and J-K.
(d) Crosses VR-1055 between Points A-B and J-K.
(e) Crosses VR-1056 between Points B-C and J-K.
(f) Same direction as IR-017 between Points C-D.
(g) Crosses IR-057 between Points C-D. Parallels same direction from D-E.
(h) Crosses IR-059 between Points C-D. Parallels opposite direction from D-E.

FSS Within 100 NM Radius:
ANB, AND, MCN

VR-1055

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1300-0500Z++ 7 days a week

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
(2) Exit route at point G if not cleared into Birmingham Two MOA.
(3) Do not overfly Murphy, NC (N35-05.0 W84-02.0). Avoid by 3 NM.
(4) Do not overfly Mentone, AL (N34-34.7 W085-35.4) by 3 NM.
(5) Alternate Entry: Points B, C, D, E, F and G.
(6) Alternate Exit: Points C, D, E, F and G.
(7) Tie-in FSS: Birmingham (BHM).
(8) Avoid the following noise sensitive area: (N33-54.5 W85-33.4) by 5 NM.
(9) Avoid: Tower290’ AGL(1190’ AMSL) at N35-44.5 W84-20.7.
Avoid: Tower 310’ AGL (1175’ AMSL) at N32-59-35.56 W85-2343.34.
(10) COFLICITS: (Deconflict with the appropriate Scheduling Activity)
(a) Crosses VR-058 between Points B-C.
(b) Crosses VR-092 between Points B-C.
(c) Crosses VR-1021 at Point H.
(d) Crosses VR-1030 at Point H.
(e) Crosses VR-1031 between Points G-H and at H.
(f) Opposite direction to VR-1052 between Points A-B. Crosses between B-C, C-D and at G. Parallels same direction from D-F.
(g) Crosses VR1056 between Points A to D same direction, parallels opposite direction D to F, and crosses at Point G.
(11) Avoid the town of Mentone, AL, at N34-34.7 W085-35.4 by 3 NM.

FSS Within 100 NM Radius:
ANB, AND, BNA, MCN

VR-1056

ORIGINATING ACTIVITY: Training Air Wing Six, Pensacola, FL 32508-5509 DSN 459-2875, C850-452-2875.

SCHEDULING ACTIVITY: NAS Pensacola, Pensacola, FL 32508-5217 DSN 459-2735, C850-452-2735.

HOURS OF OPERATION: 1200-0500Z++

ROUTE DESCRIPTION:

Altitude Data
As assigned to A HRS 337/34 N35°28.13' W84°11.12'
01 AGL B 15 AGL to B HRS 337/15 N35°10.00' W84°02.00'
01 AGL B 15 AGL to C RMG 044/37 N34°36.00' W84°35.00'
01 AGL B 15 AGL to D RMG 320/33 N34°35.00' W85°32.00'
01 AGL B 15 AGL to E RMG 241/17 N34°02.00' W85°25.00'
01 AGL B 15 AGL to F LGC 237/6 N33°00.00' W85°18.00'
01 AGL B 15 AGL to G TGE 312/17 N32°41.00' W85°55.00'
01 AGL B 15 AGL to H OKW 159/30 N32°46.00' W87°02.00'
02 AGL B 15 AGL to I MGM 039/25 N32°32.00' W85°59.00'
10 AGL B 15 AGL to B MGM 030/46 N32°52.00' W85°49.00'
02 AGL B 15 AGL to C N33°39.00' W85°25.00'
02 AGL B 15 AGL to D RMG 260/23 N34°06.00' W85°34.00'
02 AGL B 15 AGL to E RMG 295/28 N34°22.00' W85°37.00'
02 AGL B 15 AGL to F GQO 316/42 N35°28.00' W85°44.00'
02 AGL B 15 AGL to G HCH 130/11 N35°40.00' W84°48.00'
02 AGL B 15 AGL to H HRS 338/20 N35°15.00' W84°04.00'
02 AGL B 15 AGL to I HRS VORTAC N34°56.58' W83°54.94'
02 AGL B 15 AGL to J RMG 357/24 N34°34.00' W85°08.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.
VR ROUTES

Special Operating Procedures:
(1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
(2) Maintain 1000’ AGL minimum over Lake Martin.
(3) Maintain 1000’ AGL minimum within 3 NM of Pikesville, TN.
(4) Maintain 1500’ AGL minimum within 3 NM of Zack Airport (N34-36-30 W84-58-48).
(5) Do not overfly Murphy, NC (N35-05.0 W84-02.0). Avoid by 3 NM.
(6) Do not overfly Mentone, AL (N34-34-15 W85-34-30). Avoid by 3 NM.
(8) Alternate Exit: Points C, D, E, F, G, H and I.
(9) Tie-in FSS: Birmingham (BHM).
(10) Maintain 1000’ AGL minimum over Lake Martin.
(11) Maintain 1000’ AGL minimum within 3 NM of Pikesville, TN.
(13) Do not overfly Murphy, NC (N35-05.0 W84-02.0). Avoid by 3 NM.
(14) Do not overfly Mentone, AL (N34-34-15 W85-34-30). Avoid by 3 NM.

FSS Within 100 NM Radius:
ANB, AND, BNA, MCN

VR-1059


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>CAE 292/37</td>
<td>N34°40'.00’ W81°44.98’</td>
</tr>
<tr>
<td>B</td>
<td>AHN 126/32</td>
<td>N33°38.00’ W82°49.00’</td>
</tr>
<tr>
<td>C</td>
<td>DBN 029/31</td>
<td>N33°02.02’ W82°34.98’</td>
</tr>
<tr>
<td>D</td>
<td>DBN 055/38</td>
<td>N32°58.22’ W82°14.98’</td>
</tr>
<tr>
<td>E</td>
<td>DBN 063/43</td>
<td>N32°56.52’ W82°05.98’</td>
</tr>
<tr>
<td>F</td>
<td>VAN 221/53</td>
<td>N32°45.00’ W81°02.98’</td>
</tr>
<tr>
<td>G</td>
<td>VAN 214/49</td>
<td>N32°45.50’ W80°54.50’</td>
</tr>
<tr>
<td>H</td>
<td>VAN 190/40</td>
<td>N32°48.00’ W80°30.00’</td>
</tr>
<tr>
<td>I</td>
<td>VAN 160/15</td>
<td>N33°15.00’ W79°19.00’</td>
</tr>
<tr>
<td>J</td>
<td>VAN 093/33</td>
<td>N33°30.00’ W79°47.00’</td>
</tr>
<tr>
<td>K</td>
<td>FLO 119/11</td>
<td>N34°09.00’ W79°27.00’</td>
</tr>
<tr>
<td>D</td>
<td>DBN 055/38</td>
<td>N32°58.22’ W82°14.98’</td>
</tr>
<tr>
<td>D1</td>
<td>DBN 047/46</td>
<td>N33°08.02’ W82°12.48’</td>
</tr>
<tr>
<td>D2</td>
<td>DBN 041/50</td>
<td>N33°14.52’ W82°15.08’</td>
</tr>
<tr>
<td>D3</td>
<td>DBN 038/51</td>
<td>N33°16.52’ W82°16.18’</td>
</tr>
<tr>
<td>D4</td>
<td>DBN 034/52</td>
<td>N33°18.82’ W82°19.78’</td>
</tr>
</tbody>
</table>

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A CAE 292/37 N34°40'.00’ W81°44.98’
01 AGL B 15 AGL to B AHN 126/32 N33°38.00’ W82°49.00’
01 AGL B 15 AGL to C DBN 029/31 N33°02.02’ W82°34.98’
01 AGL B 15 AGL to D DBN 055/38 N32°58.22’ W82°14.98’
01 AGL B 15 AGL to E DBN 063/43 N32°56.52’ W82°05.98’
01 AGL B 15 AGL to F VAN 221/53 N32°45.00’ W81°02.98’
01 AGL B 15 AGL to G VAN 214/49 N32°45.50’ W80°54.50’
01 AGL B 15 AGL to H VAN 190/40 N32°48.00’ W80°30.00’
01 AGL B 15 AGL to I VAN 160/15 N33°15.00’ W79°19.00’
01 AGL B 15 AGL to J VAN 093/33 N33°30.00’ W79°47.00’
01 AGL B 15 AGL to K FLO 119/11 N34°09.00’ W79°27.00’
01 AGL B 15 AGL to D DBN 055/38 N32°58.22’ W82°14.98’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to B; 10 NM right and 6 NM left of centerline from B to C; 10 NM right and 9 NM left of centerline from C to E; 10 NM either side of centerline from E to F; 5 NM either side of centerline from F to K; For R-3004 ingress from D to D4, 3 NM left of centerline, 4 NM right of centerline.

Special Operating Procedures:
(1) Alternate Entry: C, D, E, F, I and J. D2 authorized for re-entry to R-3004 only.
(2) Alternate Exit: C, D, E, F, G, H and I.
(3) Make a call IN THE BLIND on 287.1 passing Point J to advise aircraft working Gamecock C. Use CAUTION exiting Point J for aircraft in Gamecock C 100’ AGL and above.
(4) Congressional Noise Sensitive Area, Washington, GA. N33-44-00 W82-44-30. Minimum altitude is 1500’ AGL.
(5) Wildlife sanctuary at N32-42-00 W80-44-00. Avoid by 1500'/5 NM.
(6) Use of D-D4 authorized only when scheduled to operate in Bulldog D MOA and R-3004.
(7) VR-088 crosses right to left Point A to B (deconflict DSN 722-2129).
(8) CAUTION: Bird activity (landfills) at 33-09N 82-45.7W; 33-04.84N 82-25.12W; 33-07.67N 80-21.56W; 33-10.09N 80-22.55W
(9) CAUTION: VR-1059 transits Bulldog MOA. When booking VR-1059, aircrews should include delay time in Bulldog A MOA as applicable.
(10) CAUTION: IR-018 crosses left to right from Point E to F (deconflict DSN 942-2004).
(11) CAUTION: VR-1040/1041 opposite direction from Point H to I (deconflict DSN 582-4040).
(12) Avoid Stork Rookery protection area at N32-45.8 W80-28.7 by 1500’AGL/1 NM.
(13) Avoid: Tower 1495' AGL (1900' MSL) at N33-16.0 W82-17.2 and Noise Sensitive Area (pond and farm) at N33-17.7 W82-16.8. Avoid by 1500' AGL (2000' MSL) 2 NM.

(14) CAUTION: Towers:
(a) 32-57.33N 81-59.06W 300' AGL;
(b) 33-03.23N 82-32.16W 250' AGL;
(c) 33-24.92N 79-54.56W 200' AGL;
(d) 33-24.05N 79-56.59W 200' AGL.

(15) CAUTION: Radar globe at 32-39.44N 81-02.64W approx 200' AGL.

(16) Avoid: Louisville and Louisville Airport by 1500'/3 NM.

(17) CAUTION: VR-87 crosses right to left at Point K (deconflict DSN 722-2129).

(18) Avoid: Tower 375' AGL (450' MSL) at 33-26.0N 80-01.6W.

(19) CAUTION: Power line 300' AGL crosses N to S between E and F, 33-02.5N 81-44.0W to N32-45.0 W81-38.5.

(20) Avoid: Noise Sensitive Area, stork farm and Lake at 32-52.0N 82-02.5W, avoid by 1500'/1 NM.

(21) AVOID: N32-41.0 W81-08.1 500' AGL/1 NM, 14 towers with cable in between.

(22) AVOID: Seven Noise Sensitive Areas:
(a) N33-58.0 W81-38.0, avoid by 1000' AGL/2 NM;
(b) Givhans, SC N33-00.8 W80-20.2, avoid by 1000' AGL/1.5 NM;
(c) Lake City, SC N33-52.2 W79-45.5, avoid by 1000' AGL/5 NM;
(d) Lakewood Plantation, SC N33-42.4 W79-34.4, avoid by 1500' AGL/1 NM;
(e) Residential area N34-01.0 W81-43.5, avoid by 1500' AGL/1 NM;
(f) Farm N32-51.1 W81-40.5, avoid by 1500' AGL/1 NM;
(g) Horse Farm, 33-03.54N 82-09.58W, avoid by 1500'/1 NM.

(23) AVOID: Grass strips at:
(a) 34-02N 81-53.9W;
(b) 34-07.17N 81-58.76W;
(c) 32-49.5N 81-38.3W;
(d) 32-58.9N 82-07.08W;
(e) 32-58.9N 82-07.08W.

(24) AVOID: Permanently manned fire tower, N32-50.7 W81-18.2 by at least 500'.

(25) CAUTION: When transiting through BULLDOG A MOA airspace make call IN THE BLIND prior to Point C on UHF frequency 343.75.

(26) AVOID: Three Noise Sensitive Areas:
(a) Vidette GA, N33-02.1 W82-14.9, avoid by 1000' AGL/1 NM;
(b) Structure being used as a target at N33-00.5 W82-41.5, avoid by 1000' AGL/1 NM;
(c) Dairy farm, N32-49.9 W81-52.5, avoid by 1500' AGL/1 NM.

(27) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.

FSS Within 100 NM Radius:
AND, MCN, RDU

**VR-1061**

**ORIGINATING ACTIVITY:** COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C 757-433-9141.

**SCHEDULING ACTIVITY:** FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C 757-433-1228. Scheduling Hours 0600-1900L (EST)

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

**ROUTE WIDTH - 5 NM either side of centerline.**

**Special Operating Procedures:**
(1) Route reservation and brief required.
(2) Alternate Entry: B, C, D, E, F.
(3) Alternate Exit: B, C, D, E, F.
(4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
(5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
(6) IMPORTANT INFORMATION Points A to B:
(a) CROSSING: IR-715 left to right at A;
(b) CROSSING: VR-083 parallel entire leg;
(c) CROSSING: VR-1722 left to right 27NM prior to B;
(d) CROSSING: VR-042 right to left 27NM prior to B;
(e) CROSSING: VR-096 left to right 29NM prior to B;
(f) CROSSING: IR-715 right to left 6NM prior to B;
(g) CROSSING: VR-042 left to right to B.

**FSS Within 100 NM Radius:**
AND, MCN, RDU
VR ROUTES

(c) CROSSING: VR-1722 parallel until 34NM prior to E;
(d) CROSSING: VR-043 right to left 34NM prior to E;
(e) CROSSING: VR-719 right to left 28NM prior to E;
(f) CROSSING: IR-062 left to right 22NM prior to E;
(g) CROSSING: IR-081 right to left 22NM prior to E;
(h) CROSSING: VR-086 parallel from 15NM prior to E.

(10) IMPORTANT INFORMATION Points E to F:
(a) CAUTION: Landfill (potential bird hazard) at N35-55.7 W79-17.5;
(b) CROSSING: VR-086 parallel entire leg.

(11) IMPORTANT INFORMATION Points F to G:
(a) CAUTION: Uncharted airfield at N35-20.4 W79-26.2;
(b) CROSSING: IR-718 left to right 6NM prior to G.

(12) CONFLICTING ROUTE CONTACT INFORMATION
(Deconfliction is the responsibility of the mission commander):
(a) IR-081 Deconflict with Pensacola NAS, DSN 922-2735;

FSS Within 100 NM Radius:
NTU, RDU

VR-1066


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-0000 local daily

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 15 MSL to A VAD 088/15 N30°59.00’ W82°54.00’
01 AGL B 15 MSL to B VAD 004/25 N31°23.00’ W83°11.00’
01 AGL B 15 MSL to C AMG 302/29 N31°47.50’ W82°59.00’
01 AGL B 15 MSL to D AMG 344/33 N32°03.50’ W82°41.00’
01 AGL B 15 MSL to E AMG 063/22 N31°42.00’ W82°08.00’
01 AGL B 15 MSL to F AMG 107/38 N31°21.00’ W81°48.00’
01 AGL B 15 MSL to G AMG 148/38 N31°00.00’ W82°07.00’
15 AGL to H VAD 119/17 N30°50.02’ W82°54.00’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B;
7 NM right and 6 NM left of centerline from B to C; 5 NM either side of centerline from C to D; 3 NM right and 9 NM left of centerline from D to E; 9 NM right and 2 NM left of centerline from E to F; 3 NM right and 8 NM left of centerline from F to G; 3 NM right and 10 NM left of centerline from G to H.

Special Operating Procedures:
(1) Tie-in FSS: Macon (MCN).
(2) Alternate Exit Point: E and G.
(3) Alternate Entry Point: B and F.
(4) Point G to Highway 441, maintain altitude of 1500’ AGL.
(5) Contact Valdosta Approach Control on frequency 285.6 prior to MOA entry on VR-1066.
(6) Avoid overflight of Hatch Power Plant located at (N31-56.3 W82-20.6) by 1500’ or 3NM.
(7) CAUTION: VR-1002/1003 parallel this route from Point A to B. Contact FACS FAC Jacksonville DSN 942-2004/2005 to deconflict.
(8) CAUTION: IR-016 runs opposite direction between Point A and B. 23 OSOS will deconflict VR-1066 point A from IR-016 Point A by 30 minutes.
(9) CAUTION: Point B, VR-1003 crosses this route from SW to NE and VR-1002/1004 parallels this route from Point B to C.
(10) CAUTION: VR-1001 and VR-1002 cross this route at Point C.
(11) CAUTION: VR-1004 crosses this route between Point C and D.
(12) CAUTION: VR-1002/1003 and VR-1004 cross this route 10 NM prior to Point E, with VR-1003 crossing again at Point E.
(13) IR-023 crosses this route from north to south just past Point E, and from NE to SW at Point G.
(14) Route entry/exit times must be made plus/minus 5 minutes or route must be rescheduled.
(15) VR-94 (Shaw AFB, DSN 965-1118/1119) crosses right to left between Points B and C.
(16) VR-1001 (FACS FACJAX, DSN 942-2004/2005) originates S of centerline in corridor between Points E and F.
(17) VR-1003 (FACS FACJAX, DSN 942-2004/2005) crosses left to right just prior to Point F.

FSS Within 100 NM Radius:
GNV, MCN

VR-1070

ORIGINATING ACTIVITY: 187 FW, 5187 Selma Highway, Montgomery, AL 36108-4824 DSN 358-2791.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2000 local, OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A MGM 150/12 N32°03.00’ W86°13.00’
05 AGL B 15 AGL to B MVC 078/33 N31°32.00’ W86°43.00’
15 AGL to C CEW 059/19 N30°58.50’ W86°21.00’
15 AGL to D DWG 055/18 N30°39.00’ W86°14.00’

TERRAIN FOLLOWING OPERATIONS: Authorized A to B.

ROUTE WIDTH - 5 NM either side of centerline from A to B;
2 NM left and 5 NM right of centerline from B to D.
Special Operating Procedures:

(1) This route will not be flown unless scheduled into R-2914.
(2) Hazards A-B: Lighted tower N31-58.5 W86-09.5 (1925' AGL), avoid by 3 NM. Tower N31-56.3 W86-19.3 (190' AGL est.), Tower N31-52.3 W86-22.3 (150' AGL est.), Power line construction from N31-52.0 W86-31.0 to N31-38.0 W86-43.0. Low flying helicopter traffic from A to B left to centerline. Noise sensitive A-B: House N31-45.0 W86-30.0, avoid by 1000' AGL by 1 NM.
(3) Hazards B-C: Low flying helicopter traffic below 1500' AGL.
(4) Alternate Entry: B or C.
(5) Alternate Exit: C.
(6) Contact Montgomery FSS on 255.4 prior to entry.
(7) Contact Elgin Range Control on 262.3 prior to C for clearance into R-2914.
(8) CAUTION: This route crosses, overlaps or runs parallel with VR-1082, VR-1083, VR-1084 and VR-1085.
(9) Tie-in FSS: Montgomery (MGM).
(10) Scheduling activity hours of operation 0700-1730 central time Tue-Fri, occasional weekends. To schedule use on Sat, Sun or Mon phone prior to 1600 central time the previous Friday.

FSS Within 100 NM Radius:

ANB, MCN

VR-1072

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710, DSN 742-2764, C662-767-2764.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710 DSN 742-7840, C662-434-7840.

HOURS OF OPERATION: Dawn-Dusk Mon-Fri

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command directives within entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to A MHZ 185/23 N32°03.00' W90°08.00'
15 AGL to B MHZ 210/28 N32°01.00' W90°22.00'
05 AGL B 15 AGL to C MHZ 225/62 N31°41.00' W90°56.00'
05 AGL B 15 AGL to D MHZ 223/95 N31°15.00' W91°20.00'
05 AGL B 15 AGL to E MHZ 213/97 N31°03.00' W91°06.00'
05 AGL B 15 AGL to F MHZ 174/50 N31°36.00' W89°59.00'
05 AGL B 15 AGL to G MHZ 130/38 N31°58.00' W88°43.00'
05 AGL B 15 AGL to H MEI 165/25

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to A SJU 226/31 N18°01.30' W66°17.70'
05 AGL B 15 AGL to B SJU 233/34 N18°01.00' W66°23.50'
05 AGL B 15 AGL to C SJU 234/46 N17°53.00' W66°32.00'
01 AGL B 15 AGL to D BQN 200/36 N17°54.50' W67°13.00'
05 AGL B 15 AGL to E BQN 201/23 N18°07.20' W67°11.30'
05 AGL B 15 AGL to F BQN 130/31 N18°14.40' W66°38.30'
05 AGL B 15 AGL to G SJU 286/33 N18°29.50' W66°33.80'

FSS Within 100 NM Radius:

DRI, GWO

VR-1076


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Not authorized.
VR ROUTES

ROUTE WIDTH - 2 NM either side of centerline from A to C; 5 NM left and 2 NM right of centerline from C to E; 2 NM either side of centerline from E to G.

Special Operating Procedures:
(1) Two way route (opposite direction designator is VR-1080).
(2) Alternate Entry Points: C, D and E.
(3) Alternate Exit Points: D and F.
(4) Endangered bird species area 1.5 NM radius of N17-57.0 W67-06.0 and N17-58.0 W67-00.0. Do not fly below 1000' AGL.
(5) Flights not scheduled to use R-7103 must enter at C.
(6) CAUTION: Certified light aircraft student training area in vicinity of G.
(7) From Point E to Lago Guaya N18-12.0 W66-50.0 minimum altitude is 1500' AGL for noise abatement. The towns of Cabo Rojo, Maricao and the winding road east from Maricao to 10 NM arc are extreme noise sensitive areas.
(8) CAUTION: Avoid R-7105 (centered N17-58.8 W67-04.9 3 NM radius, surface to 15,000' MSL) which is a tethered unlighted balloon located approximately 10 NM NE of Point D.
(9) Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

FSS Within 100 NM Radius:
SJU

VR-1077


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>SJU 086/41</td>
<td>N18°37.00' W65°18.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to B</td>
<td>B</td>
<td>NRR 083/45</td>
<td>N18°28.00' W64°55.50'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to C</td>
<td>C</td>
<td>NRR 082/79</td>
<td>N18°40.00' W64°20.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D</td>
<td>D</td>
<td>NRR 089/79</td>
<td>N18°30.00' W64°17.50'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to E</td>
<td>E</td>
<td>NRR 133/73</td>
<td>N17°35.00' W64°34.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to F</td>
<td>F</td>
<td>NRR 157/51</td>
<td>N17°32.00' W65°09.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to G</td>
<td>G</td>
<td>NRR 146/28</td>
<td>N17°54.00' W65°17.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to H</td>
<td>H</td>
<td>NRR 117/22</td>
<td>N18°08.30' W65°16.80'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to I</td>
<td>I</td>
<td>SJU 226/31</td>
<td>N18°01.30' W66°17.70'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 2 NM either side of centerline from A to I.

Special Operating Procedures:
(1) Alternate Entry: B and C.
(2) Alternate Exit: F and G.
(3) Do not overfly Great Tobago or Anegada Islands.
(4) Flights not scheduled to use R-7104 must exit at G or F.
(5) All aircraft so equipped report Point B to Beef Island Tower (VHF 118.4) and monitor this frequency until 20 NM past Point D.
(6) Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

FSS Within 100 NM Radius:
SJU

VR-1078


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>SJU 086/41</td>
<td>N18°37.00' W65°18.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to B</td>
<td>B</td>
<td>NRR 083/45</td>
<td>N18°28.00' W64°55.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to C</td>
<td>C</td>
<td>NRR 082/79</td>
<td>N18°40.00' W64°20.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D</td>
<td>D</td>
<td>NRR 089/79</td>
<td>N18°30.00' W64°17.50'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to E</td>
<td>E</td>
<td>NRR 133/73</td>
<td>N17°35.00' W64°34.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to F</td>
<td>F</td>
<td>NRR 157/51</td>
<td>N17°32.00' W65°09.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to G</td>
<td>G</td>
<td>NRR 146/28</td>
<td>N17°54.00' W65°17.50'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to H</td>
<td>H</td>
<td>NRR 255/41</td>
<td>N17°56.00' W66°17.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to I</td>
<td>I</td>
<td>SJU 226/31</td>
<td>N18°01.30' W66°17.70'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Not authorized.
Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

**FSS Within 100 NM Radius:**

SJU

**VR-1079**


**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 1100-0000Z++ (DAILY)

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>SJU 288/24</td>
<td>N18°29.50' W66°24.00'</td>
</tr>
<tr>
<td>10 AGL B</td>
<td>B</td>
<td>SJU 272/39</td>
<td>N18°20.40' W66°40.00'</td>
</tr>
<tr>
<td>01 AGL B</td>
<td>C</td>
<td>BQN 262/22</td>
<td>N18°23.00' W67°29.00'</td>
</tr>
<tr>
<td>01 AGL B</td>
<td>D</td>
<td>BQN 257/59</td>
<td>N18°06.00' W68°03.80'</td>
</tr>
<tr>
<td>01 AGL B</td>
<td>E</td>
<td>BQN 200/36</td>
<td>N17°54.50' W66°13.00'</td>
</tr>
<tr>
<td>01 AGL B</td>
<td>F</td>
<td>SJU 234/46</td>
<td>N17°53.00' W66°32.00'</td>
</tr>
<tr>
<td>01 AGL B</td>
<td>G</td>
<td>SJU 223/37</td>
<td>N17°55.50' W66°19.40'</td>
</tr>
<tr>
<td>10 AGL B</td>
<td>H</td>
<td>SJU 226/31</td>
<td>N18°01.30' W66°17.70'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from Point B to H.

**ROUTE WIDTH** - 2 NM either side of centerline.

**Special Operating Procedures:**

1. **Alternate Entry Point:** E.
2. **Alternate Exit Point:** G.
3. CAUTION: Certified light aircraft student pilot training area in vicinity of Point A.
4. Point B to C minimum altitude over land 500’ AGL, start descent to 100’ AGL after overflying the coast.
6. Point C to D, avoid Mona Island by 1 NM.
7. CAUTION: Avoid R-7105 (centered N17-58.8 W67-04.9, 3 NM radius, surface to 15,000’ MSL) which is tethered, unlighted balloon located approximately 10 NM NE of Point E.
8. Point G to H, cross coastline at minimum of 1000’ AGL. Contact Santiago Range Control on 260.9 prior to departing Point G.

**FSS Within 100 NM Radius:**

SJU

**VR-1080**


**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 1100-0000Z++ (DAILY)

**ROUTE DESCRIPTION:**

**TERRAIN FOLLOWING OPERATIONS:** Not authorized.

**ROUTE WIDTH** - 2 NM either side of centerline from A to C; 2 NM left and 5 NM right of centerline from C to E; 2 NM either side of centerline from E to G.

**Special Operating Procedures:**

1. **Two way route (opposite direction designator is VR-1076).**
2. **Alternate Exit Points:** D and E.
3. **CAUTION:** Certified light aircraft student training area in vicinity of A.
4. From Lago Guaya (N18-12.0 W66-50.0) to Point C minimum altitude is 1500’ AGL for noise abatement. The towns of Cabo Rojo, Maricao and the winding road East from Maricao to 15 NM are extreme noise sensitive areas.
5. **CAUTION:** Avoid R-7105 (centered N17-58.8 W67-04.9, 3 NM radius, surface to 15,000’ MSL) which is tethered, unlighted balloon located approximately 10 NM NE of Point D.
6. **CAUTION:** Endangered bird species area 1.5 NM radius of N17-57.0 W67-06.0 and N17-58.0 W67-00.0. Do not overfly below 1500’ AGL.
7. **Point E to F,** cross coastline at minimum of 1000’ AGL. Contact Santiago Range Control on 260.9 prior to departing Point E. Flights not scheduled to use R-7103 must exit at E.
8. Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

**FSS Within 100 NM Radius:**

SJU
VR ROUTES

VR-1081


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:
TERRAIN FOLLOWING OPERATIONS: Authorized from Point F to G.
ROUTE WIDTH - 2 NM either side of centerline from A to C; 2 NM left and 5 NM right of centerline from C to E; 3 NM either side of centerline from E to G.

Special Operating Procedures:
(1) Two-way route from A to E (opposite direction designator is VR-1076).
(2) Alternate Entry: C and D.
(3) Alternate Exit: D, E and F.
(4) CAUTION: Certified light aircraft student training area in vicinity of Point A.
(5) Endangered bird species area 1.5 NM radius of N17-57.0 W67-06.0 and N17-58.0 W67-00.0. Do not overfly below 1500' AGL.
(6) CAUTION: Avoid R-7105 (centered N17-58.8 W67-04.9, 3 NM radius, surface to 15,000' MSL) which is a tethered, unlighted balloon located approximately 10 NM NE of Point D.
(7) Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

FSS Within 100 NM Radius:
SJU

VR-1082


SCHEDULING ACTIVITY: 96 OSS/OSO (JTTOCC), 505 North Barrancas Ave, Suite 201, Eglin AFB, FL 32542-6818 DSN 872-5800, C850-882-5800.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
TERRAIN FOLLOWING OPERATIONS: Authorized from A to E.
ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 2 NM either side of centerline from B to D; 5 NM left and 2 NM right of centerline from D to E; 2 NM either side of centerline from E to H.

Special Operating Procedures:
(1) All users must receive the current VR-1082 briefing when scheduling the route.
(2) Recommend maintaining at or above 3000' MSL until within 5 nautical miles of Point A. Cross Point A at and maintain 1500' AGL until established on the route. High volume of pattern traffic at Bob Sikes Airport and noise sensitive area IVO Point A.
(3) CAUTION: Open air shooting range 7 NM SW of Point A at N30-58.4 W086-44.6.
(4) CAUTION: High volume of rotary and fixed wing training in A-292, SFC-17.5K feet MSL. Potential small UAS activity throughout the route.
(5) CAUTION: Crosses several MTRs. Same direction as VR-1085 and VR-1084 from Point A. VR-1083, VR-1020, and IR-030/031 cross between Points C and D. IR-030/031 cross C and D. VR-1020, VR-1083, VR-1084, and VR-1085 same direction from/near Point E.
(6) CAUTION: Sod airfield IVO N31-11.84 W087-11.2.
(7) CAUTION: Sod airfield IVO N31-34.1 W087-33.7.
(9) Noise sensitive area. Avoid horse farm at N31-00.8 W086-36.5 by 2 NM or 1500' AGL.
(10) Noise sensitive area. Avoid Brewton AL N31-07.0 W087-03.0 by 4 NM.
(11) Avoid Camden airport by 3NM and 1500' AGL.
(12) Avoid factory (N31-58.2 W087-28.5) IVO Point D. Remain S of East/West Road between factory and Camden Airport.
(13) Alternate entry Point DA (coincident with VR-1022 alternate exit Point EA) to be used only for transition from VR-1022.
(14) Alternate exit: Points D, F, and G.
(15) User must have R2914A scheduled to fly beyond Point G. Contact Eglin Mission on 284.65 prior to Point F for clearance into the Eglin MOA/R2914A.
(16) CAUTION: Multiple uncharted onstacles below the FAA’s 200’ AGL threshold for charting. Uncharted obstacles of note:
   (a) Tower, 641’ (320’) at N31-12.6 W086-52.3.

FSS Within 100 NM Radius:
ANB

VR-1083


SCHEDULING ACTIVITY: 85 Test and Evaluation Squadron/DOOS, Eglin AFB, FL 32542 DSN 872-2622, C904-882-2622. Alternate DSN 872-2413, 55 TES OPS desk. Route must be scheduled. between the hours 1330-2200Z weekdays.

HOURS OF OPERATION: Normally 1200-2300Z++ Mon-Fri, route usage is allowable OT

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>GCV 235/14</td>
<td>N30°59.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W88°43.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>MVC 299/10</td>
<td>N31°33.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W87°31.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>MVC 352/37</td>
<td>N32°05.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W87°24.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>MVC 072/27</td>
<td>N31°34.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W86°51.00’</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>E</td>
<td>CEW 030/19</td>
<td>N31°05.50’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W86°28.50’</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>F</td>
<td>CEW 061/19</td>
<td>N30°58.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W86°21.00’</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>G</td>
<td>DWG 055/18</td>
<td>N30°39.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W86°14.00’</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D.

ROUTE WIDTH - 5 NM either side of centerline from A to G.

Special Operating Procedures:
(1) CAUTION: VR-1083 crosses several other training routes. Heavy A-37 low altitude tactical training entry Point to the Alabama state line. Maintain 1500’ AGL from D to R-2914 to avoid Fort Rucker helicopter training areas.
(2) Contact Elgin Mission Control on 262.3 prior to F for clearance into Elgin MOA/R-2914.
(3) Alternate Entry: C.
(4) Alternate Exit: C, E and F.
(5) Sod airfield near N31-34.2 W87-34.0.
(6) Do not overfly factory at N31-58.2 W87-28.5.
(7) Avoid house (N32-08.0 W87-25.0) by 1500’ AGL or 3 NM.
(8) Avoid Martin Airport (N32-09.2 W87-27.3) by 1500’ AGL or 3 NM.
(9) Noise Sensitive Area: Avoid horse farm at N31-00.8 W86-36.5 by 1500’ AGL or 2 NM.
(10) VR-179, VR-1024, VR-1021, VR-1085, IR-030, IR-031, IR-037 and IR-040 cross between Points A and B.
(11) VR-1020 same direction between Points B and C.
(12) VR-1022, VR-1082 and VR-1033 cross between Points B and C.
(13) VR-1020, VR-1082, VR-1084 and VR-031 same direction near Point F.
(14) Uncharted obstructions:
   (a) Tower 200’ (150) at N31-15.5 W88-01.2;
   (b) Tower 350’ (150) at N31-39.5 W87-03.6;
   (c) Tower 300’ (100) at N31-02.4 W88-43.1;
   (d) Tower 300’ (150) at N31-16.5 W88-00.7;
   (e) Tower 550’ (300) at N30-52.0 W86-31.0;
   (f) Tower 497’ (295) at N31-17.5 W88-04.5;
   (g) Tower 485’ (295) at N31-18.3 W88-02.5;
   (h) Tower 400’ (150) at N31-31.9 W87-47.3;
   (i) Tower 450’ (200) at N31-28.2 W87-50.2;
   (j) Tower 600’ (150) at N31-42.8 W87-02.6;
   (k) Tower 350’ (200) at N31-28.2 W87-45.0;
   (l) Tower 450’ (150) at N31-55.8 W87-15.5;
   (m) Tower 400’ (200) at N31-14.0 W88-00.0;
   (n) Fire tower 500’ (100) at N31-12.9 W88-06.8;
   (o) Tower 450’ (200) at N31-10.5 W88-27.4;
   (p) Tower 450’ (150) at N31-56.0 W87-16.3;
   (q) Tower 350’ (150) at N31-32.6 W86-58.8;
   (r) Tower 500’ (150) at N31-14.5 W88-06.6.

FSS Within 100 NM Radius: ANB, DRI

VR-1084


SCHEDULING ACTIVITY: 85 Test and Evaluation Squadron/DOOS, Eglin AFB, FL 32542 DSN 872-2622, C904-882-2622. Alternate DSN 872-2413, 55 TES OPS desk. Route must be scheduled. between the hours 1330-2200Z weekdays.

HOURS OF OPERATION: Normally 1200-2300Z++ Mon-Fri, route usage is allowable OT

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>CEW 013/12</td>
<td>N31°01.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W86°37.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>MVC 131/21</td>
<td>N31°13.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W87°04.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>CEW 357/34</td>
<td>N31°24.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W86°41.00’</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>D</td>
<td>CEW 019/18</td>
<td>N31°06.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W86°33.00’</td>
</tr>
</tbody>
</table>
VR ROUTES

15 AGL to E CEW 059/18 N30°58.00' W86°22.00'
15 AGL to F DWG 058/18 N30°38.00' W86°14.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from A to C.

ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 5 NM either side of centerline from B to F.

Special Operating Procedures:
1. Maintain 1500' AGL from Point C to R-2914 to avoid Fort Rucker helicopter training areas.
2. Contact Elgin Mission Control on 262.3 prior to Point E for clearance into R-2914.
3. CAUTION: Heavy Navy air training from Point A to C.
4. Alternate Exit: E.
5. Avoid Brewton, AL (N31-07.0 W87-03.0) by 4 NM, noise sensitive area.
6. CAUTION: VR-1084 crosses several other training routes.
7. IR-030 opposite direction Point C to D. IR-030/031 activated by NOTAM.
8. NOISE SENSITIVE AREA: Avoid horse farm at N31-00.8 W86-36.5 by 2NM and 1500' AGL.
9. VR-1082 and VR-1084 same direction from A.
10. VR-1020, VR-1082, VR-1085 and IR-031 cross from left to right prior to C.
11. Uncharted obstructions:
   a. Tower 1500' (1300) at N30-57.0 W86-44.5;
   b. Tower 400' (150) at N31-11.6 W86-50.9;
   c. Tower 641' (320) at N31-12.6 W86-52.3;
   d. Tower 550' (300) at N30-52.0 W86-31.0.

FSS Within 100 NM Radius:
ANB

VR-1085


SCHEDULING ACTIVITY: 96 OSS/OPOS (JTTOCC), 505 North Barrancas Ave, Suite 201, Eglin AFB, FL 32542-6818 DSN 872-5800, C850-882-5800.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A CEW 013/12 N31°01.00' W86°13.00'
01 AGL B 15 AGL to B MVC 131/21 N31°13.00' W87°04.00'
01 AGL B 15 AGL to C MVC 217/22 N31°11.00' W87°38.00'
01 AGL B 15 AGL to D MVC 296/19 N31°37.00' W87°40.00'
05 AGL B 15 AGL to E MVC 022/31 N31°56.00' W87°05.00'
05 AGL B 15 AGL to F MVC 091/32 N31°25.00' W86°44.00'
15 AGL to G CEW 019/18 N31°06.00' W86°33.00'
15 AGL to H CEW 059/18 N30°58.00' W86°22.00'
15 AGL to I DWG 058/18 N30°38.00' W86°14.00'
05 AGL B 15 AGL to F MVC 091/32 N31°25.00' W86°44.00'
15 AGL to F1 CEW 338/11 N31°00.00' W86°45.00'
02 AGL B 10 AGL to F2 CEW 198/10 N30°40.00' W86°45.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from A to F and F to F2.

ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 5 NM either side of centerline from B to I; 3 NM either side of centerline from F to F1 and F2.

Special Operating Procedures:
1. All users must receive the current VR-1085 briefing when scheduling the route.
2. Recommend maintaining at or above 3000' MSL until within 5 NM of Point A. Cross Point A at and maintain 1500' AGL until established on the route. High volume of pattern traffic at Bob Sikes Airport and noise sensitive area IVO Point A.
3. Maintain 1500' AGL and offset 2 NM W of centerline between Points F1 and F2 until 6 NM S of Point F1. Open air shooting range 1.6 NM SSE of Point F1, 7 NM SW of Point A at N30-58.4 W086-44.6.
4. CAUTION: High volume of rotary and fixed wing training in A-292, SFC-17.5K' MSL. Potential small UAS activity throughout the route.
5. CAUTION: Crosses several MTRs. Same direction as VR-1082 and VR-1084 from Point A. Same direction as IR-031 from Point B. VR-1020, VR-1021, VR-1022 and VR-1083 cross between Point C and D.
6. CAUTION: Sod airfield IVO N31-11.84 W087-02.78.
7. CAUTION: Sod airfield IVO N31-34.1 W087-33.7.
9. Noise Sensitive Area. Avoid horse farm at N31-00.8 W86-36.5 by 2NM and 1500' AGL.
10. Noise Sensitive Area. Avoid Brewton AL. N31-07.0 W087-03.0 by 4NM.
11. Avoid Prison at N31-08.0 W087-27.5 by 1000' AGL or 1NM.
12. Avoid Grove Hill airport by 3NM or 1500' AGL.
13. Alternate Entry: Point F.
15. User must have R2914A scheduled to fly route beyond Point H. If scheduled, contact Eglin Mission on 284.65 prior to Point G for clearance into the Eglin MOA/R2914A.
16. User must have R2915A scheduled to fly alternate exit track F to F2. If scheduled, contact Eglin Mission on 284.65 prior to Point F1 for clearance into the Eglin MOA/R2915A.
17. CAUTION: Multiple uncharted obstacles below the FAA's 200' AGL threshold for charting. Uncharted obstacles of note:
   a. Tower 641' (320') at N31-12.5 W86-52.3;
   b. Tower 500' (200') at N31-10.1 W87-27.7;
VR ROUTES

(c) Tower 350' (200') at N31-28.2 W87-45.0;

FSS Within 100 NM Radius:
ANB, DRI

VR-1087

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: Normally 0900-2400Z++ daily, available OT

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from C to E.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 1 NM either side of centerline from C to D; 5 NM either side of centerline from D to E.

Special Operating Procedures:
(1) Alternate Entry: B.
(2) Avoid Immokalee, Labelle, Hendry Isles and Graham-Moore Haven Airports and uncharted airport/housing area at 27-20N 81-02W by 3 NM below 1500' AGL.
(3) All requests for use of this route must be approved by 347 WG, Det 1 Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity. Contact 347 WG, Det 1/ROA during normal duty hours for hazard briefing prior to flight planning.
(4) Route clearance is valid only plus or minus 30 minutes from scheduled time.
(5) This route authorized only for aircraft scheduled to enter R-2901.
(6) Obstruction/hazard/noise sensitive briefing shall be obtained at time of scheduling.
(7) Avoid overflight of Hendry Correctional Complex at N26-19 W81-16 by 1 NM or 1500' AGL.
(8) CAUTION; Uncharted grass airstrips located at N26-20 W81-19.2; N26-20.9 W81-26.5.

FSS Within 100 NM Radius:
MIA, PIE

VR-1088

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: Normally 0900-2400Z++ daily, available OT

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from C to E.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: B.
(2) Avoid Immokalee, Labelle, Hendry Isles and Graham-Moore Haven Airports and uncharted airport/housing area at N27-020.0 W81-02.0 by 3 NM below 1500' AGL.
(3) All requests for use of this route must be approved by 347 WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
(4) Route clearance is valid only plus or minus 30 minutes from scheduled time.
(5) This route authorized only for aircraft scheduled to enter R-2901.
(6) Obstruction/Hazard/Noise Sensitive Briefing shall be obtained at time of scheduling.

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A RSW 146/28 N26°09.00' W81°28.00'
05 AGL B 15 AGL to B RSW 117/25 N26°21.00' W81°21.00'
05 AGL B 15 AGL to C PHK 236/7 N26°43.00' W80°48.00'
10 AGL B 15 AGL to D PHK 329/20 N27°04.00' W80°53.00'
10 AGL B 15 AGL to Coordinate with Avon Park Range Control on 292.2 MHz prior to entering R-2901.

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A RSW 146/28 N26°09.00' W81°28.00'
05 AGL B 15 AGL to B RSW 112/17 N26°26.00' W81°29.00'
05 AGL B 15 AGL to C LBV 118/6 N26°47.00' W81°18.00'
05 AGL B 15 AGL to D PHK 319/20 N27°02.00' W80°56.00'
05 AGL B 15 AGL to Coordinate with Avon Park Range Control on 292.2 MHz prior to entering R-2901.

3-127
VR ROUTES

(7) Avoid overflight of horse ranch at N26-52.0 W81-14.0 by 2 NM or 1500' AGL.

(8) **CAUTION:** Uncharted grass air strips located at N26-20.9 W81-26.5 and N26-49.0 W81-21.5.

(9) **CAUTION:** Uncharted 300’ MSL tower located at N26-7.0 W81-0.5; 250’ MSL water tower located at N27-04.8 W81-0.2; 250’ MSL tower located at N26-50.0 W81-23.7; 200’ MSL oil rig located at N26-32.1 W81-27.3; 200’ MSL tower located at N26-25.9 W81-26.9.

**FSS Within 100 NM Radius:** MIA, PIE

**VR-1089**

**ORIGINATING ACTIVITY:** 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

**SCHEDULING ACTIVITY:** 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

**HOURS OF OPERATION:** Normally 0900-2400Z++ daily, available OT

**ROUTE DESCRIPTION:**

**TERRAIN FOLLOWING OPERATIONS:** Authorized from C to F.

**ROUTE WIDTH -** 5 NM either side of centerline from A to B; 5 NM left and 3 NM right of centerline from B to F.

**Special Operating Procedures:**

(1) Alternate Entry: B.

(2) Avoid Okeechobee and River Ranch Resort Airports by 3 NM below 1500’ AGL.

(3) All requests for use of this route must be approved by 347 WG, Det 1 Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity. Contact 347 WG, Det 1/RO during normal duty hours for hazard briefing prior to flight planning.

(4) Route clearance is valid only plus or minus 30 minutes from scheduled time.

(5) Florida turnpike - avoid flight within 1/2 NM either side except when crossing perpendicular to road bed.

(6) This route is authorized only for aircraft scheduled to enter R-2901.

(7) **CAUTION:** Uncharted grass air strip located at N27-41.0 W80-48.5.

(8) **CAUTION:** Uncharted 250’ MSL tower located at N27-36.0 W80-52.2; 300’ MSL microwave tower located at N27-52.0 W80-52.8; 200’ MSL grain elevator located at N27-48.1 W80-47.8; 300’ MSL grain elevator located at N27-42.6 W80-54.3.

(9) **CAUTION:** 516’ MSL tower depicted at N27-14.3 W80-45.2 is actually located at N27-14.0 W80-40.5. Drive-in movie theater depicted at N27-14.5 W80-40.5 is actually located at N27-14.3 W80-45.2.

**FSS Within 100 NM Radius:** GNV, MIA, PIE

**VR-1097**

**ORIGINATING ACTIVITY:** 347 WG, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

**SCHEDULING ACTIVITY:** 347 WG, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

**TERRAIN FOLLOWING OPERATIONS:** Authorized for entire route.

**ROUTE WIDTH -** 5 NM either side of centerline from A to B; 5 NM left and 3 NM right of centerline from B to C.

**Special Operating Procedures:**

(1) All requests for use of this route must be approved by 347 WG, Det 1 Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.

(2) Contact 347 WG, Det 1/ROA during normal duty hours for hazard briefing prior to flight planning.

(3) To fly VR-1005, coordinate with appropriate agencies according to FLIP.

(4) If Approval to fly VR-1005 is not approved, climb 5 NM prior to C to 1500’ AGL to exit the route.

(5) Entry time requirements: VR-1097 entry is schedule de-conflicted with IR-046 which shares common entry Point. Entry outside the scheduled entry time plus or minus 3
minutes is not authorized and will require rescheduling. Airspeeds between 360-540 knots ground speed must be maintained for 3 minutes after passing A.

(6) Avoid watercraft in accordance with regulations.
(7) 15 Oct to 15 Mar/migratory birds: During heavy migration bird season, flight not authorized from 1 hour before sunset to 1 hour after sunrise.

FSS Within 100 NM Radius:
GNV, PIE

VR-1098


SCHEDULING ACTIVITY: 347th Rescue WG, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to A | MCF 164/23 | N27°30.00' W82°22.00'
05 AGL B 15 AGL to B | LBV 314/46 | N27°21.72' W81°59.98'
05 AGL B 15 AGL to C | LBV 319/37 | N27°18.02' W81°49.98'
05 AGL B 15 AGL to D | LBV 327/26 | N27°11.52' W81°38.98'
05 AGL B 15 AGL to E | PHK 325/28 | N27°10.02' W80°59.28'
05 AGL B 15 AGL to F | TRV 240/17 | N27°30.02' W80°44.98'
05 AGL B 15 AGL to G | TRV 300/25 | N27°50.52' W80°54.98'
05 AGL B 15 AGL to H | ORL 169/29 | N28°04.02' W81°13.98'
05 AGL B 15 AGL to I | ORL 181/32 | N28°00.02' W81°20.98'
05 AGL B 15 AGL to J | ORL 181/46 | N27°46.02' W81°20.98'
(2) Contact 347th Rescue WG, Det 1/RO, Originating Activity during normal duty hours for hazard briefing prior to flying route.
(3) This route is only used for flights entering R-2901 with a scheduled range period. There are no alternate exit points.
(4) Entry/Exit times: For deconfliction with IR/VR routes going to R-2901, enter Point A NET 25 minutes prior to the scheduling Range Start Time (RST) and no later than 30 minutes prior to the Range End Time (RET). Flight must exit the route NET the RST and no later than 10 minutes prior to RET. Airspeeds between 420-540 knots ground speed must be maintained. Entry/exit outside the time windows is not authorized and will require rescheduling.
(5) See and Avoid: VR-1098 crosses IR-034, IR-050, IR-055, VR-1087 and VR-1088 within 3 NM of Point E. VR-1098 coincides with: IR-049 from Point A to E; with IR-050 and IR-051 from Point A to D; and IR-051, IR-056, VR-1006 and VR-1089 from Point H to J. MARSA is accomplished by See and Avoid.
(6) CAUTION: Be alert for light aircraft in vicinity of all major highways along this route. Note, route parallels Florida Turnpike from Point G to I.
(7) 15 Oct-15 Mar/Migratory birds: During heavy migratory bird season, flight not authorized from 1 hour before sunset to 1 hour after sunrise.
(8) Possible bird hazard area located approximately N27-20.6 W80-41.4. Avoid this area by 3 NM or above 2000' AGL.
(9) Alternate Entry: B (A is only authorized on departure from MacDill AFB, FL)
(10) Use Caution: Entry Point A is within 2 NM of Class B and C Airspace.
(11) Use Caution: Alternate Entry Point B is within 20 NM of Class B and C Airspace.

FSS Within 100 NM Radius:
GNV, MIA, PIE

VR-1102


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to A | FSM 072/63 | N35°35.00' W93°01.00'
01 AGL B 15 AGL to B | FSM 086/45 | N35°21.00' W93°21.00'
01 AGL B 15 AGL to C | FSM 102/44 | N35°09.00' W93°26.00'
01 AGL B 15 AGL to D | PGO 063/34 | N34°54.00' W93°58.00'
01 AGL B 15 AGL to E | FSM 131/15 | N35°12.00' W94°04.00'
Alternate Entry: as assigned to then at 01 AGL B 15 AGL to Pt B.
(9) Alternate Entry: B (A is only authorized on departure from MacDill AFB, FL)
(10) Use Caution: Entry Point A is within 2 NM of Class B and C Airspace.
(11) Use Caution: Alternate Entry Point B is within 20 NM of Class B and C Airspace.

FSS Within 100 NM Radius:
GNV, MIA, PIE
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to 35-27N 93-10W, then 3 NM left and 5 NM right of centerline to B; 5 NM left and 8 NM right of centerline from B to C; 5 NM either side of centerline from C to D; 5 NM left and 3 NM right of centerline from D to E. Alternate Entry; 3 NM either side of centerline from AA to B.

Special Operating Procedures:
(1) Alternate Entry: AA.
(2) Alternate Exit: D.
(3) Participating aircraft separation on IR-117, 120, 121, 164, VR-189, 1102, 1103, 1104, 1113, and 1130 as well as in the Hog MOA and Arrowhead MOA is MARSA through see and avoid as well as restrictive scheduling. All legs of the route the enter the Hog MOA (C-E) are prohibited while the Hog MOA (also scheduled by the 188 WG) is activated--If Hog MOA is active, adjust route times.
(4) Report Hog MOA entry/exit and applicable MTR points in the blind on the Hog MOA tactical frequency 307.375.
(5) CAUTION; Multiple converging MTRs (Points B-F) and IP to DZ routes (Points C-E) even when the Hog MOA is not active.
(6) Clearance to enter R-2402 must be received on 339.7. Flights exiting the MTR requesting activation of the Hog MOA complex must report the exit point to Memphis Center 269.0 or 126.1 and receive clearance out of the route and into the MOA prior to exiting the route. Otherwise, contact Razorback Approach on 343.75 or 120.9 prior to exiting the route.
(7) Avoid flight within 1500' AGL/3 NM all charted airports when practicable.
(8) CAUTION; Mining activity at (N34 14.15 W093 38.10) and (N34 13.15 W093 38.10).
(9) Uncharted obstructions:
   (a) Tower (N35 26.76 W093 27.72) estimated altitude 200' AGL.
   (10) CAUTION: Be alert for soaring birds and hang gliders in vicinity of Magazine Mountain (N35 10 W093 39) and Mt Nebo (N35 13 W093 15).
(11) Make entry/exit times plus or minus ten minutes or reschedule.
(12) Avoid direct overflight of Nuclear Facility (N35 19 W093 14).

FSS Within 100 NM Radius:
MLC

e-1103


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous
VR-1104


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline from B to D; 5 NM left and 3 NM right of centerline from D to E.

Special Operating Procedures:
(1) Alternate Entry: B.
(2) Alternate Exit: D.
(3) Participating Aircraft Separation on IR-117, 120, 121, 164, VR-1104, 1102, 1103, 1104, 1113, and 1130 as well as in the Hog MOA and Arrowhead MOA is MARSA through see and avoid as well as restrictive scheduling. All legs of the route that enter the Hog MOA (B-F) are prohibited while the Hog MOA (Also scheduled by the 188 WG) is activated. If Hog MOA is active, adjust route times.
(4) Report Hog MOA entry/exit and applicable MTR points in-the-blind on the Hog MOA tactical frequency 307.375.
(5) CAUTION; Multiple converging MTRs (Points B-E) and IP to DZ routes (Points D-E) even when the Hog MOA is not active.
(6) Clearance to enter R-2402 must be received on 339.7. Flights exiting the MTR requesting activation of the Hog MOA complex must report the MTR exit point to Memphis Center on 269.0 or 126.1 and receive clearance out of the route and into the MOA prior to exiting the route. Otherwise, contact Razorback Approach on 343.75 or 120.9 prior to exiting the route.
(7) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
(8) CAUTION; Point B, crossing MTR (IR-721/VR-1103).
(9) Uncharted Obstructions:
   (a) Tower (N35 08.37 W094 03.57) estimated altitude 200' AGL.
   (b) Tower (N34 12.5 W094 14.00) estimated altitude 200' AGL.
   (c) Tower (N34 28.94 W095 15.95) estimated altitude 100' AGL.
(10) Make entry time plus or minus five minutes or reschedule.

FSS Within 100 NM Radius:
MLC

VR-1105

ORIGINATING ACTIVITY: 149 FTR GP (TX-ANG), Kelly AFB, TX 78241 DSN 945-5934, C210-925-9394.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-1830 local daily

ROUTE DESCRIPTION:

ROUTE WIDTH - 3 NM either side of centerline from A to E; 5 NM either side of centerline from E to F.

Special Operating Procedures:
(1) Minimum altitude from A to C 500' AGL; from C to D 100' AGL.
(2) Request for route utilization shall be coordinated minimum of 1 plus 30 prior to entry time.
(3) MARSA will apply between aircraft using this route and other routes which enter, cross, coincide and terminate under VMC within the route structure.
(4) Speed routes will be flown at 300-520 knots.
(5) Type aircraft: Only jet aircraft assigned to the 149 TFG and/or originating out of Kelly AFB, TX to include aircraft coordinated with the 149 TFC for exercise type operations.
(6) Alternate Entry Points: D and E.
(7) Alternate Exit Points: D and E.

FSS Within 100 NM Radius:
SJT

VR-1106

ORIGINATING ACTIVITY: 149 FTR GP (TX-ANG), Kelly AFB, TX 78241 DSN 969-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-1830 local daily
VR ROUTES

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>COT 113/24</td>
<td>N28°15.00'</td>
<td>W98°44.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to B</td>
<td>THX 213/19</td>
<td>N28°16.00'</td>
<td>W98°23.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to C</td>
<td>THX 282/22</td>
<td>N28°38.00'</td>
<td>W98°33.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to D</td>
<td>COT 074/20</td>
<td>N28°30.00'</td>
<td>W98°45.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to E</td>
<td>COT 040/19</td>
<td>N28°40.00'</td>
<td>W98°51.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to F</td>
<td></td>
<td>N29°05.00'</td>
<td>W98°41.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline from A to C; 3 NM either side of centerline from C to F.

Special Operating Procedures:
(1) Minimum altitude from A to D 100' AGL; from D to F 500' AGL.
(2) Request for route utilization shall be coordinated minimum of 1 plus 30 prior to entry time. Only aircraft assigned to 149 TFG and/or originated out of Kelly AFB, TX to include exercise type operation will use this route.
(3) MARSA (See and Avoid) applies between aircraft using this route and other routes crossing or conflicting with this route structure.
(4) Speed will be 300-520 knots.

FSS Within 100 NM Radius:
SJT

VR-1107


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-2200 local daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 AGL B 15 AGL to A</td>
<td>CNX 291/12</td>
<td>N34°29.00'</td>
<td>W105°33.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to B</td>
<td>CNX 074/46</td>
<td>N34°24.50'</td>
<td>W104°45.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to C</td>
<td>CVS 242/28</td>
<td>N34°13.00'</td>
<td>W103°50.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D</td>
<td>TCC 195/33</td>
<td>N34°41.50'</td>
<td>W103°54.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to E</td>
<td>TCC 239/23</td>
<td>N35°03.50'</td>
<td>W104°02.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to F</td>
<td>ABQ 074/48</td>
<td>N35°05.00'</td>
<td>W105°51.00'</td>
</tr>
</tbody>
</table>

TERAIN FOLLOWING OPERATIONS: VFR terrain following authorized entire route IAW Command Directives within published altitude blocks.

ROUTE WIDTH - 15 NM left and 30 NM right of centerline from A to B; 25 NM left and 30 NM right of centerline from B to C; 10 NM either side of centerline from C to D; 26 NM either side of centerline from E to F.

Special Operating Procedures:
(1) Avoid Ft. Sumner Airport (Segment B-C N34-29-15 W104-12-50) by 3 NM.
(2) Avoid Double V Ranch private airport (Segment A-B N34-05-30 W104-19-55) by 2 NM.
(3) Avoid the following by 1 NM: Santa Rosa Lake (N35-02-30 W104-23-15), Holcroft Ranch N34-43-06 W104-39-18, (Turkey Ranch N34-17-00 W105-59-45), and (House N34-20-00 W104-23-45).
(4) Avoid Mine N34-35-30 W105-35-00 by .5 NM or 1000' AGL.
(5) Avoid the following Houses by .5 NM: N34-02-45 W104-04-50, (N34-17-00 W104-17-55), (N32-59-00 W104-29-00), (N34-17-40 W104-26-00), (N34-21-00 W104-21-50), (N34-13-40 W103-52-30), (N34-14-00 W103-59-00), (N34-03-00 W104-39-00), (N34-12-45 W104-46-20), (N34-04-20 W104-02-50).
(6) Avoid ranch (N34-20-31 W104-23-12) by 2 NM and 1500' AGL.

FSS Within 100 NM Radius: ABQ

VR-1108

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd St., Laughlin AFB, TX 78843 DSN 732-5484, C830-298-5484. Scheduling hrs, 0730-1630 Mon-Fri (excluding hol).

HOURS OF OPERATION: Sunrise-Sunset only

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>FST 185/97</td>
<td>N29°23.50'</td>
<td>W103°30.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to B</td>
<td>FST 172/88</td>
<td>N29°29.00'</td>
<td>W103°04.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to C</td>
<td>FST 155/67</td>
<td>N29°52.00'</td>
<td>W102°40.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to D</td>
<td>FST 155/52</td>
<td>N30°07.00'</td>
<td>W102°44.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to E</td>
<td>DLF 303/101</td>
<td>N30°26.00'</td>
<td>W102°16.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to F</td>
<td>DLF 294/81</td>
<td>N30°03.00'</td>
<td>W102°07.00'</td>
</tr>
</tbody>
</table>

TERAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline tapering to 10 NM left and 3 NM right of centerline from B to C; 10 NM left and 3 NM right tapering to 3 NM left and 5 NM right of centerline from C to D; 3 NM left and 5 NM right expanding to 8 NM either side of centerline from E to F.
centerline from D to E; 8 NM either side of centerline tapering to 4 NM either side of centerline from E to F.

Special Operating Procedures:

(1) Route:
   (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
   (b) This route is covered by the following maps and charts: San Antonio and El Paso Sectionals, Low IFR Enroute L-65, L-19 TPC H-23A, TPC H-23B.
   (c) Alternate Entry: B.
   (d) Alternate Exit: C, D and E.

(2) Scheduling:
   (a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.
   (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.

(3) Restrictions:
   (a) For environmental reasons, this route may only be flown by T-1 and T-38 aircraft and T-6 for Annual Flight Evaluations.
   (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route.
   (c) Avoid flight within 1,500’ or 3 NM of airport when practical.

(4) Conflicts:
   (a) Is identical to VR-1109 and VR-1117 from A to C. VR-1117 is the reverse routing of VR-1108 from A to C (westward) but is weekend use only. Call 87 FTS/DOS Laughlin AFB to deconflict VR-1108 and VR-1117 at DSN 732-5484 C830-298-5484.

(5) Communications:
   (a) Call entry and exit on 255.4 and monitor while on the route.

(6) Noise Sensitive Areas:
   (a) Avoid Neville Springs Cavalry Post (N29-22.3 W103-12.5) by 1500’ AGL or 1.5 NM.
   (b) The National Park Airfield (uncharted) is located at (N29-35.6 W103-15.7); avoid by 3 NM or 1500’ AGL.
   (c) Avoid overflow of Panther Junction (Park Headquarters) located at (N29-20 W103-13) by 3 NM or 3000’ AGL.
   (d) Avoid Terlingua Ranch airport (N29-27 W103-24).

(7) Laughlin Specific Procedures:
   (a) If a problem is encountered on the western portion of the route and the route must be discontinued, climb to a VFR hemispheric altitude and fly heading 025 until able to continue on planned routing without over-flying Mexico. Call departing the route on 255.4 and attempt contact with Del Rio Approach Control on 270.1 prior to entering the Ranch areas (Laughlin Moa 1).
   (b) On exit, fly a VFR hemispheric altitude below 16,000’ west of the DLF 301 radial. Contact Del Rio Approach Control on 270.1.

(8) Route is designated mountainous terrain from Point A to E.

FSS Within 100 NM Radius:
SJT

VR-1109

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Suite. 6, Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd St., Laughlin AFB, TX 78843 DSN 732-5484, C830-298-5484. Scheduling hrs 0730-1630 Mon-Fri (excl hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

Altitude Data Point Fac/Rad/Dist Lat/Long
As assigned to A FST 185/97 N29°23.50’ W103°30.00’
10 AGL B 15 AGL to B FST 172/88 N29°29.00’ W103°04.00’
10 AGL B 15 AGL to C FST 155/67 N29°52.00’ W102°40.00’
05 AGL B 15 AGL to D FST 138/64 N50°02.00’ W102°21.00’
05 AGL B 15 AGL to E DLF 289/78 N29°55.00’ W102°07.00’
05 AGL B 15 AGL to F DLF 298/54 N29°52.00’ W101°37.00’

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline tapering to 10 NM left and 3 NM right of centerline from B to C; 10 NM left and 5 NM right tapering to 5 NM either side of centerline from C to D; 5 NM either side tapering to 3 NM either side of centerline from D to E; 3 NM either side of centerline expanding to 10 NM left and 3 NM right of centerline from E to F.

Special Operating Procedures:

(1) Route:
   (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
   (b) This route is covered by the following maps and charts: San Antonio and El Paso Sectionals, Low IFR Enroute L-65, L-19 TPC H-23A, TPC H-23B.
   (c) Alternate Entry: B.
   (d) Alternate Exit: C, D and E.

(2) Scheduling:
   (a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.
   (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.

(3) Restrictions:
   (a) For environmental reasons, this route may only be flown by T-1 and T-38 aircraft and T-6 for Annual Flight Evaluations.
   (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route.
   (c) Avoid flight within 1,500’ or 3 NM of airport when practical.

(4) Conflicts:
   (a) Is identical to VR-1108 from A to C. Call 87 FTS/DOS Laughlin AFB to deconflict VR-1108 and VR-1117 at DSN 732-5484 C830-298-5484.
VR ROUTES

(b) Is the reverse routing of VR-1117 which is weekend use only.
(c) Over laps IR-169 E-F.

(5) Communications:
(a) Call entry and exit on 255.4 and monitor while on the route.

(6) Noise Sensitive Areas:
(a) Avoid Neville Springs Cavalry Post (N29-22.3 W103-12.5) by 1500’ AGL or 1.5 NM.
(b) The National Park Airfield (uncharted) is located at (N29-35.6 W103-15.7); avoid by 3 NM or 1500’ AGL.
(c) Avoid overflight of Panther Junction (Park Headquarters) located at (N29-20 W103-13) by 3 NM or 3000’ AGL.
(d) Avoid Terlingua Ranch (N29-27 W103-24).

(7) Laughlin Specific Procedures
(a) If a problem is encountered on the western portion of the route and the route must be discontinued, climb to a VFR hemispheric altitude and fly heading 025 degrees until able to continue on planned routing without over-flying Mexico. Call departing the route on 255.4 attempt contact with Del Rio Approach Control on 270.1 prior to entering the Ranch areas (Laughlin Moa 1).
(b) On exit, fly a VFR hemispheric altitude below 16,000’ west of the DLF 301 radial. Contact Del Rio Approach Control on 270.1.

(8) Route is designated mountainous terrain from Point A to E.

FSS Within 100 NM Radius:

SJT

VR-1110

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2200 local daily

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to A MQP 198/4 N32°40.02' W98°02.00'
01 AGL B 15 AGL to B MQP 167/45 N31°58.82' W97°56.52'
01 AGL B 15 AGL to C AGJ 017/24 N31°33.82' W97°58.02'
10 AGL B 15 AGL to D AGJ 050/21 N31°23.02' W97°48.92'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: B and C.
(2) Alternate Exit: B and C.
(3) At B contact Gray Approach for clearance into Hood MOA on 244.0.
(4) Do not proceed beyond C if no clearance into Hood MOA.
(5) At Point C contact Shoal Creek Range Control for clearance into R-6302 on 238.8.
(6) Do not proceed beyond D if not cleared onto Shoal Creek Range.
(7) Exit at Point C if not scheduled for Shoal Creek or Hood MOA CAS missions.
(8) 1000’ AGL minimum from C to R-6302 for Noise Sensitive Areas.
(9) Units requesting VR-1110 shall furnish 301 OG/SUA with planned entry/exit points, times and planned times for deconfliction.
(10) Avoid Gattesville and North Ft Hood.
(11) Avoid the following areas by 1000’ or 1 NM radius:
N31-25.2 W97-42.2, and N31-22.7 W97-54.7.
(12) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
(13) Units requesting VR 1110 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
(14) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
(15) Route Conflicts:
(a) VR1110 between Points A to B conflicts with VR158 between Points C to D to E. To deconflict, call the schedulers at the 90 FTS, Sheppard AFB, DSN 736-2675/4995, C940-676-2675/4995.
(b) VR1110 conflicts with SR261 Points B and C. To deconflict, call Dyess AFB, DSN 461-2792.

FSS Within 100 NM Radius:

C XO, FTW, SJT

VR-1113


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to A TIK 142/15 N35°13.00' W97°13.00'
05 AGL B 15 AGL to B PGO 276/90 N34°55.00' W96°25.00'
SFC B 15 AGL to C PGO 244/56 N34°20.00' W95°39.00'
SFC B 15 AGL to D PGO 288/3 N34°42.00' W94°40.00'
SFC B 15 AGL to E PGO 022/10 N34°50.00' W94°31.00'
10 AGL B 15 AGL to F FSM 167/19 N34°04.00' W94°14.00'
10 AGL B 15 AGL to G FSM 141/14 N34°11.00' W94°07.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.
ROUTE WIDTH - 3 NM either side of centerline from A to D; 2 NM either side of centerline from D to E; 2 NM left and 10 NM right of centerline from E to F; 2 NM either side of centerline from F to G.

Special Operating Procedures:
(1) Alternate Entry: B, C and D.
(2) Alternate Exit: D and F.
(3) Participating aircraft separation on IR-117, 120, 121, 164, VR-189, 1102, 1103, 1104, 1113, and 1130 as well as in the Hog MOA and Arrowhead MOA is MARSA through see and avoid as well as restricted scheduling. All legs of the route that enter the Hog MOA (E-G) are prohibited while the Hog MOA (also scheduled by the 188 WG) is active—if Hog MOA is active, user must exit at Point D.
(4) Report Hog MOA entry/exit and applicable MTR points in the blind on the Hog MOA tactical frequency 307.375.
(5) CAUTION; points E-G, multiple converging MTRs and IP to DZ routes even when the Hog MOA is not active.
(6) Point D a compulsory reporting point; contact Razorback Approach on 343.75 or 120.9 (This may require climbing to the top of the block). Clearance to enter R-2402 must be received on 339.7. Flights exiting the MTR requesting activation of the Hog MOA complex must report the MTR exit point to Memphis Center on 269.0 or 126.1 and receive clearance out of the route and into the MOA prior to exiting the route. Otherwise, contact Razorback Approach on 343.75 or 120.9 to exit the route.
(7) Avoid flight within 1500' AGL/3 NM all charted airports when practicable.
(8) Uncharted obstructions:
   a) Tower (N34 45.00 W096 11.35) estimated altitude 200' AGL.
   b) Tower (N34 55.46 W094 29.47) estimated altitude 150' AGL.
   c) Tower (N34 57.90 W094 51.94) estimated altitude 200' AGL.
   d) Tower (N34 34.20 W095 35.94) estimated altitude 200' AGL.
   e) Tower (N34 34.75 W095 52.91) estimated altitude 300' AGL.
   f) Tower (N34 45.61 W096 06.55) estimated altitude 200' AGL.
   g) Tower (N34 51.25 W096 17.63) estimated altitude 200' AGL.
   h) Tower (N35 12.12 W097 17.10) estimated altitude 200' AGL.
   i) Tower (N34 44.64 W096 13.99) estimated altitude 200' AGL.
   j) Tower (N35 06.31 W094 09.11) estimated altitude 200' AGL.
(10) Make entry time plus or minus 10 minutes or reschedule.

FSS Within 100 NM Radius:
FTW, ICT, MLC

VR-1116

ORIGINATING ACTIVITY: OC-ALC/10 FLTS, 4805 West Dr, Tinker AFB, OK 73145-3300 DSN 336-7719/7710, C405-736-7719/7710.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours only

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
--- | --- | --- | --- |
Cross at 15 AGL to A | BGS 012/67 | N33°25.50' W100°58.00' |
02 AGL B 15 AGL to B | BGS 011/33 | N32°54.00' W101°14.10' |
02 AGL B 15 AGL to C | BGS 013/28 | N32°48.50' W101°15.50' |
02 AGL B 15 AGL to D | BGS 029/21 | N32°39.00' W101°13.00' |
02 AGL B 15 AGL to E | BGS 039/19 | N32°35.00' W101°12.00' |
04 AGL B 15 AGL to F | BGS 148/39 | N31°46.50' W101°12.50' |
02 AGL B 15 AGL to G | BGS 154/44 | N31°40.50' W101°16.00' |
07 AGL B 15 AGL to H | FST 072/48 | N31°02.50' W102°02.50' |

TERRAIN FOLLOWING OPERATIONS: The area from N35-05.5 W101-08.5 to Point B is designated the TA system calibration maneuver area. Enroute delay in the maneuver area will not exceed 30 minutes without notification to FSS. Pilots will plan all turns in the maneuver area as right turns to remain within route corridor.

ROUTE WIDTH - 3 NM left and 4 NM right of centerline from A to B; 4 NM either side of centerline from B to E; 3 NM left and 4 NM right of centerline from E to H.

Special Operating Procedures:
(1) Route is for the sole use of OC-ALC test aircraft.
(2) Alternate Exit: F.

FSS Within 100 NM Radius:
MLC, SJT
VR ROUTES

05 AGL B 15 AGL to D FST 155/67 N29°52.00' W102°40.00'
10 AGL B 15 AGL to E FST 172/88 N29°29.00' W103°04.00'
10 AGL B 15 AGL to F FST 185/97 N29°23.50' W103°30.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM left and 10 NM right of centerline tapering to 3 NM either side of centerline from A to B; 3 NM either side of centerline expanding to 5 NM either side of centerline from B to C; 5 NM either side of centerline expanding to 5 NM left and 10 NM right of centerline from C to D; 3 NM left and 10 NM right of centerline tapering to 3 NM either side of centerline from D to E; 5 NM either side of centerline from E to F.

Special Operating Procedures:
(1) Route:
   (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
   (b) This route is covered by the following maps and charts: San Antonio and El Paso Sectionals, Low IFR Enroute L-6N, L-19 TPC H-23A, H-23B.
   (c) Alternate Entry: B.
   (d) Alternate Exit: C, D and E.
(2) Scheduling:
   (a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.
   (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.
(3) Restrictions:
   (a) For environmental reasons, this route may only be flown by T-1 and T-38 aircraft and T-6 for Annual Flight Evaluations.
   (b) Aircraft unable to enter the route plus or minus three minutes of their assigned entry time will not enter the route.
   (c) Avoid flight within 1,500’ or 3 NM of airport when practicable.
(4) Conflicts:
   (a) Is reverse routing of VR-1109. Call 87 FTS/DOS Laughlin AFB, TX; DSN 732-5484 C830-298-5484 to deconflict VR-1108 and VR-1109.
   (b) VR-1108 is common from D-F.
   (c) When flying to the El Paso area, avoid the Valentine MOA (15,000’ MSL floor) and R-6318 (Surface to 14,000’ MSL). Use caution after route exit for aircraft operating on IR-178 up to 17,000’ MSL. Direct routing to El Paso from the VR-1117 exit F intersects IR-178 approximately 17 NM to the northwest. All users must contact the 87 FTS/DOS Laughlin AFB, TX; DSN 732-5484, C830-298-5484 to determine whether routes VR-1108/1109 are in use. Call 7 OSS/OSOR Dyess AFB, TX; DSN 461-3665, C832-696-3665 to deconflict exit routing with IR-178.
(5) Communications:
   (a) Call entry and exit on 255.4 and monitor while on the route.
   (b) If recovering to Laughlin, contact Del Rio APP Control UHF 270.1.
   (c) Contact Albuquerque Center UHF (292.15) for IFR clearance to all other destinations.
(6) Noise sensitive Areas:
   (a) Avoid the National Park Airfield (uncharted) at N29-35.6 W103-15.7.
   (b) Avoid Neville Springs Cavalry Post at (N29-22.3 W103-12.5) by 1500’ AGL or 1.5 NM.
   (c) Panther Junction (Park Headquarters) located at (N29-20 W103-13) avoid by 3 NM or 3000’ AGL.
   (d) Avoid the Terlingua Ranch (N29-27 W103-24).
(7) Laughlin Specific Procedures:
   (a) Climb VFR to 17,500’ MSL. Proceed direct to the DLF 301/90. Contact Del Rio Approach Control on 270.1 prior to the DLF 301/90. If returning to Laughlin, request the BRIDGE Arrival.
   (b) If a problem is encountered on the western portion of the route and the route must be discontinued, climb to a VFR hemispheric altitude and fly heading 025 degrees until able to continue on planned routing without over-flying Mexico. Attempt contact with Del Rio Approach Control, 270.1, prior to entering the Ranch (Laughlin 1 MOA).
(8) Route is designated Mountainous Terrain from Point D to F.

FSS Within 100 NM Radius:
SJT

VR-1120

ORIGINATING ACTIVITY: 149 FW (TX ANG), 107 Hensley Street, Kelly AFB, TX 78241-5544 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>CWK 168/32</td>
<td>N29°51.00' W97°28.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to B</td>
<td>THX 036/52</td>
<td>N29°08.00' W97°28.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 15 AGL to C</td>
<td>THX 227/33</td>
<td>N28°11.00' W98°40.00'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized between B and C.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: B.
(2) Alternate Exit: B.
(3) Tie-in FSS: Austin (AUS).
(4) Avoid Kennedy Airport by 3 NM and 1500’ AGL.
(5) Approval to fly route does not include clearance into R-6312.
(6) Sensitive areas: Cureo, TX (N29-05 W97-18) by 3 NM, 1500’ AGL; Helena, TX (N28-57 W97-54) by 1 NM, 1500’ AGL; Ranch (N28-28 W98-27) by 1 NM, 1500’ AGL.

FSS Within 100 NM Radius:
CXO, SJT
VR-1121

ORIGINATING ACTIVITY: 149 FW (TX ANG), 107 Hensley Street, Kelly AFB, TX 78241-5544 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A THX 227/33 N28°11.00' W98°40.00'
01 AGL B 15 AGL to B THX 036/52 N29°08.00' W97°28.00'
10 AGL B 15 AGL to C CWK 168/32 N29°51.00' W97°28.00'

TERRAIN FOLLOWING OPERATIONS: Authorized between A and B.

ROUTE WIDTH: 10 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: B.
(2) Alternate Exit: C.
(3) Tie-in FSS: San Angelo (SJT).
(4) Avoid Kennedy Airport by 3 NM and 1500' AGL.
(5) Approval to fly route does not include clearance into R-6312.
(6) Sensitive areas: Cueno, TX (N29-05 W97-18) by 3 NM 1500' AGL. Helena TX (N28-57 W97-42) by 1 NM, 1500' AGL. Ranch (N28-28 W98-27) by 1 NM 1500' AGL. Ostrich farm (N28-35.6 W97-59.5) avoid by 3 NM.

FSS Within 100 NM Radius:
CXO, SJT

VR-1122

ORIGINATING ACTIVITY: 149 FW (TX ANG), 107 Hensley Street, Kelly AFB, TX 78241-5544 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A COT 123/25 N28°17.00' W99°24.00'
01 AGL B 15 AGL to B COT 225/18 N28°17.00' W99°24.00'
01 AGL B 15 AGL to C CSI 201/53 N29°09.00' W99°42.00'
01 AGL B 15 AGL to D CSI 212/39 N29°25.00' W99°42.00'
01 AGL B 15 AGL to E CSI 083/19 N29°55.00' W98°51.00'
01 AGL B 15 AGL to F SAT 023/26 N30°01.00' W98°12.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH: 10 NM either side of centerline.

Special Operating Procedures:
(1) Closed to all aircraft except 149 FW aircraft.
(2) Alternate Entry: B, C, and D.
(3) Alternate Exit: D and E.
(4) Tie-in FSS: San Angelo (SJT).
(5) Avoid Uvalde, Cotulla, Kerrville Airports by 3 NM and 1500’ AGL.
(6) Approval to fly route does not include clearance into R-6312.
(7) Sensitive areas: Ranch (N29-51 W99-09), radio station (N29-49 W99-05), quarry (N29-47 W99-03), ranch (N29-43 W99-09), Bandera, TX (N30-06 W98-26). Avoid by 1 NM and 1500’ AGL. Twin Oaks ranch (N29-19.5 W99-41.0), avoid by 2 NM and do not overfly. Use caution not to overfly enroute to any alternate entry or exit point. Ranch (N29-34.9 W99-17.2) Avoid by 1 NM and 1500’ AGL.
(8) Avoid Twin Oaks by 2 NM and do not overfly.
(9) CAUTION: Intensive T-3 student pilot training above 1500’ AGL from C to F. Remain below 1500’ AGL. Honda Military Supervisor frequency-121.95.

FSS Within 100 NM Radius:
CXO, SJT

VR-1123

ORIGINATING ACTIVITY: 149 FW (TX ANG), 107 Hensley Street, Kelly AFB, TX 78241-5544 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A COT 123/25 N28°11.00' W98°46.00'
01 AGL B 15 AGL to B COT 225/18 N28°17.00' W99°24.00'
01 AGL B 15 AGL to C CSI 201/53 N29°09.00' W99°42.00'
01 AGL B 15 AGL to D CSI 212/39 N29°25.00' W99°42.00'
01 AGL B 15 AGL to E CSI 083/19 N29°55.00' W98°51.00'
01 AGL B 15 AGL to F SAT 023/26 N30°01.00' W98°12.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH: 10 NM either side of centerline.

Special Operating Procedures:
(1) Closed to all aircraft except 149 FW aircraft.
(2) Alternate Entry: B, C, and D.
(3) Alternate Exit: D and E.
(4) Tie-in FSS: San Angelo (SJT).
(5) Avoid Kennedy Airport by 3 NM and 1500’ AGL.
(6) Approval to fly route does not include clearance into R-6312.
(7) Avoid Kennedy Airport by 3 NM and 1500’ AGL.
(8) Avoid Uvalde, Cotulla, Kerrville Airports by 3 NM and 1500’ AGL.
(9) CAUTION: Intensive T-3 student pilot training above 1500’ AGL from C to F. Remain below 1500’ AGL. Honda Military Supervisor frequency-121.95.

FSS Within 100 NM Radius:
CXO, SJT
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Closed to all aircraft except 149 FW aircraft.
(2) Alternate Entry: B, C and D.
(3) Alternate Exit: D, E and F.
(4) Tie-in FSS: San Angelo (SJT).
(5) Avoid Uvalde, Cotulla, Kerrville airports by 3 NM and 1500' AGL.
(6) Approval to fly route does not include clearance into R-6312.
(7) Sensitive Areas: Ranch (N29-51 W99-09), radio station (N29-49 W99-05), quarry (N29-17 W99-39), ranch (N29-43 W99-09), Bandera, Texas (N29-44 W99-04), Blanco, Texas (N30-06 W98-26). Avoid by 1 NM and 1500' AGL. Twin Oaks ranch (N29-19.5 W99-41.0), avoid by 2 NM and do not overfly. Use caution not to overfly enroute to any alternate entry or exit point.
(8) Remain N of centerline from F to G.
(9) CAUTION: Intensive T-3 student pilot training above 1500' AGL from B to E. Remain below 1500' AGL. Honda Military Supervisor frequency-121.95.

FSS Within 100 NM Radius:
CXO, SJT

VR-1124

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local daily, OT by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized between B and K.

ROUTE WIDTH - 2 NM either side of centerline from A to E;
3 NM either side of centerline from E to L.

Special Operating Procedures:
(1) Contact Gray Approach 5 minutes prior to leaving Shoal Creek with intentions to enter VR-1124 and provide with Entry/Exit times.
(2) Avoid North Ft Hood and Gattesville.
(3) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.

Units requesting VR 1124 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.

Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

Route Conflicts:
(a) VR1124 conflicts with SR-261 Points A to B. To deconflict, call Dyess AFB, DSN 461-2792.
(b) P49 has been established and extends from the surface to 5000' MSL within a 3 NM radius of N31-34-57 W97-32-37. Flight within this area is prohibited.

FSS Within 100 NM Radius:
CXO, FTW, SJT

VR-1128

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local daily, OT by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C.
(2) Route designated for 420 knots.
(3) All bank turns—a minimum planned 45 degrees.
(4) Alternate Entry: E, F, and H.
(5) Alternate Exit: J and K.
(6) Noise Sensitive Areas avoid overflight unless at 6000’ MSL or above and or by 2 NM (N34-50.8 W98-49.2).
(7) Avoid by 1500’ or 3 NM all charted airfields.
(8) Do not overfly Refinery at Wyneewood, OK (N34-38.0 W097-01.0).
(9) Avoid Noise Sensitive Area southwest Hilton, OK by 3 NM or 1500’ (N35-27.0 W98-23.0).
(10) Avoid by 1500’ or 3 NM all charted airfields.
(11) Avoid by 1500’ or 3 NM all charted airfields.
(12) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
(13) Units requesting VR 1128 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
(14) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
(15) Route Conflicts:
   (a) VR1128 conflicts with IR117 at the entry point. To deconflict, contact the 188 FW, Fort Smith, DSN 962-8185/8271 to coordinate entry time.
   (b) VR1128 conflicts with VR1139 and VR1140 along many points on the routes. To deconflict, call the 90 FTS, Sheppard AFB, DSN 736-2675/4995.
(16) Route Segment K to L closed except to aircraft scheduled in R-5601. Aircraft not scheduled into R-5601 must exit by Point K and remain clear of R-5601F.

FSS Within 100 NM Radius:
FTW, ICT, MLC

VR-1130


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>RZC 277/34</td>
<td>N36°21.00' W94°49.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>B</td>
<td>RZC 238/36</td>
<td>N35°58.00' W94°46.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>C</td>
<td>FSM 256/34</td>
<td>N35°19.00' W94°57.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>D</td>
<td>FSM 234/22</td>
<td>N35°12.50' W94°39.50'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>E</td>
<td>FSM 171/19</td>
<td>N35°04.00' W94°15.50'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>FSM 146/14</td>
<td>N35°11.00' W94°08.50'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>TIK 142/15</td>
<td>N35°13.00' W97°13.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>TIK 106/41</td>
<td>N35°10.00' W96°37.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>TIK 110/45</td>
<td>N35°06.00' W96°34.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to F.

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from A to C; 3 NM either side of centerline from C to D; 2 NM either side of centerline from D to E; 4 NM left and 5 NM right at E tapering to 5 NM either side of centerline at F.

Special Operating Procedures:
(1) Alternate Entry: B.
(2) Alternate Exit: E.
(3) Participating aircraft separation on IR-117, 120, 121, 164, VR-189, 1102, 1103, 1104, 1113, and 1130 as well as in the Hog MOA and Arrowhead MOA is MARSA as well through see and avoid as well as restrictive scheduling. All legs of the route that enter the Hog MOA (E-F) are prohibited while the Hog MOA (also scheduled by the 188 WG) is activated if the Hog MOA is active, exit approaching Point E or adjust route times.
(4) Report Hog MOA entry/exit and applicable MTR points in the blind on the Hog MOA tactical frequency 307.375.
(5) CAUTION; Point E-F, Multiple converging MTRs and IP to DZ routes even when the Hog MOA is not active.
(6) Clearance to enter R-2402 must be received on 339.7. Flights exiting the MTR requesting activation of the Hog MOA complex must report the MTR exit point to Memphis Center on 269.0 or 126.1 and receive clearance out of the route and into the MOA prior to exiting the route. Otherwise, contact Razorback Approach on 343.75 or 120.9 prior to exiting the route.
(7) Avoid flight within 1500’ AGL/3 NM all charted airports when practicable.
(8) Noise sensitive areas (avoid by 1 NM and 1000’ AGL):
   (a) Sequoyah National Wildlife Refuge (in vicinity of N35 27 W094 57)
   (b) Ostrich Farm (N36 18.50 W092 21.00)
(9) Uncharted Obstructions:
   (a) Tower (N35 06.31 W094 09.11) estimated altitude 200’ AGL.
(10) Make entry time plus or minus 10 minutes or reschedule.

FSS Within 100 NM Radius:
ICT, MLC

VR-1137

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local daily, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>TIK 142/15</td>
<td>N35°13.00' W97°13.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>TIK 106/41</td>
<td>N35°10.00' W96°37.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>TIK 110/45</td>
<td>N35°06.00' W96°34.00'</td>
</tr>
</tbody>
</table>
TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Route designed to 420 knots.
(2) All bank turns-a minimum planned 45 degree.
(3) Alternate Entry: D.
(4) Alternate Exit: F and H.
(5) Noise Sensitive Areas avoid overflight by 2 NM (N34 58.1 W98 41.3); Noise Sensitive Area avoid overflight unless at 6000' MSL or above and or by 2 NM (N34 50.8 W98 49.2).
(6) Avoid by 1500' or 3 NM all charted airfields.
(7) Avoid Turkey Ranch at N35-00.0 W97-01.0 by 1500' and 3 NM.
(8) Do not overfly refinery at Wyneewood, OK (N34-38.0 W97-01.0).
(9) Do not overfly the town of Ft. Cobb, OK (N35-06.0 W98-27.0).
(10) Minimum seperation between scheduled entry times is 10 minutes. VR routes are strickly See and Avoid and users are encouraged to maintain a continuous visual lookout.
(11) Units requesting VR 1137 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
(12) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
(13) Route Conflicts:
(a) VR1137 conflicts with IR117 and VR1113 at the Entry Point. Additionally both routes cross VR1137 between Points C-D. To deconflict, contact the 188 FW, Fort Smith, DSN 962-8185/8271.
(b) VR1137 conflicts with VR1139 and VR1140 along many points on the routes. To deconflict, call the 90 FTS, Sheppard AFB, DSN 736-2675/4995.
(14) Route Segment H to I closed except to aircraft aircraft scheduled into R-5601. Aircraft not scheduled into R-5601 must exit by Point H and remain clear of R-5601F.

FSS Within 100 NM Radius:
FTW, ICT, MLC

VR-1139

ORIGINATING ACTIVITY: 80th OSS/OSSA, 1911 J. Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576, C940-676-0576.

SCHEDULING ACTIVITY: 90/469 FTS, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995/8090.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:
- Route designed to 420 knots.
- All bank turns-a minimum planned 45 degree.
- Alternate Entry: D.
- Alternate Exit: F and H.
- Noise Sensitive Areas avoid overflight by 2 NM (N34 58.1 W98 41.3); Noise Sensitive Area avoid overflight unless at 6000' MSL or above and or by 2 NM (N34 50.8 W98 49.2).
- Avoid by 1500' or 3 NM all charted airfields.
- Avoid Turkey Ranch at N35-00.0 W97-01.0 by 1500' and 3 NM.
- Do not overfly refinery at Wyneewood, OK (N34-38.0 W97-01.0).
- Do not overfly the town of Ft. Cobb, OK (N35-06.0 W98-27.0).
- Minimum seperation between scheduled entry times is 10 minutes. VR routes are strickly See and Avoid and users are encouraged to maintain a continuous visual lookout.
- Units requesting VR 1137 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
- Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- Route Conflicts:
  (a) VR1137 conflicts with IR117 and VR1113 at the Entry Point. Additionally both routes cross VR1137 between Points C-D. To deconflict, contact the 188 FW, Fort Smith, DSN 962-8185/8271.
  (b) VR1137 conflicts with VR1139 and VR1140 along many points on the routes. To deconflict, call the 90 FTS, Sheppard AFB, DSN 736-2675/4995.
- Route Segment H to I closed except to aircraft aircraft scheduled into R-5601. Aircraft not scheduled into R-5601 must exit by Point H and remain clear of R-5601F.

FSS Within 100 NM Radius:
FTW, ICT, MLC

VR-1139

ORIGINATING ACTIVITY: 80th OSS/OSSA, 1911 J. Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576, C940-676-0576.
Use caution for T-6 aircraft operating at 500' AGL at the following locations: on SR-271, SR-272, SR-278, and SR-279. The following deconfliction plan is mandatory: aircraft on VR-1139 (Tue and Thu) will call APPROACHING POOLEVILLE (10 NM prior to point D) and aircraft on SR-271 (everyday) will call APPROACHING POOLEVILLE 10 miles southwest of the town. Aircraft on SR-271 will remain north and east of a line from Rush Springs to the 3-fingered lake at N34-37.0 W97-40.0 until route abort on Tuesdays and Thursdays and aircraft on VR-1139 will remain south and west of this line (between E and 10 NM prior to E). Due to conflict with SR-272 and SR-278, aircraft on VR-1139 will enter the route at Point B and will call ENTERING VR-1139 AT POINT B, aircraft on SR-272 will call ABEAM BRIDGEPORT. Aircraft on VR-1139 will call APPROACHING HINTON about 20 miles prior to the town (Point F). Aircraft on reverse SR-279 (Tues, Thu, Sat) will call APPROACHING HINTON about 10 miles prior to the town. In all cases if a conflict exists aircraft on SR-271, SR-272 and reverse SR-279 will climb accordingly (1500' AGL minimum) and all aircraft on SRs and VR routes will make a position report on 255.4.

Route is designated MARSA.

FSS Within 100 NM Radius:
FTW, ICT, MLC

VR-1140

ORIGINATING ACTIVITY: 80th OSS/OSSA, Sheppard AFB, 1911 J Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576, C940-676-0576.

SCHEDULING ACTIVITY: 90/469 FTS, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995/8090.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
02 AGL B 15 AGL to A    HBR 023/23     N35°11.00' W98°49.00'
02 AGL B 15 AGL to B    IFI 221/25     N35°32.00' W98°24.00'
02 AGL B 15 AGL to C    IRW 236/29     N35°08.00' W98°08.50'
02 AGL B 15 AGL to D    IRW 196/43     N34°42.00' W97°57.00'
02 AGL B 15 AGL to E    ADM 310/13     N34°22.00' W97°21.00'
02 AGL B 15 AGL to F    ADM 205/28     N33°49.00' W97°27.00'
02 AGL B 15 AGL to G    SPS 118/53     N33°26.00' W97°46.00'
02 AGL B 15 AGL to H    SHP 158/27     N33°33.00' W98°20.00'

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Position report will be made to Fort Worth FSS at Chickasha, southbound at Point C.


Route will be flown at a maximum of 540 knots.

Route flight checked to 500' AGL, contour flying is authorized on entire route.

Alternate Entry: B, C, D, E, F and G.

Alternate Exit: B, C, D, E, F and G.

VR-1141

ORIGINATING ACTIVITY: 80th OSS/OSSA, 1911 J. Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576, C940-676-0576.

SCHEDULING ACTIVITY: 90/469 FTS, Sheppard AFB, TX 76311 DSN 736-2675/4995/8090, C940-676-2675/4995/8090.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
02 AGL B 15 AGL to A    B FV 292/15     N35°21.00' W99°28.70'
02 AGL B 15 AGL to B    PNH 070/53     N35°25.00' W100°39.00'
02 AGL B 15 AGL to C    SPS 266/99     N34°09.10' W100°34.30'
02 AGL B 15 AGL to D    SPS 261/84     N33°59.50' W100°16.90'

Position report to Fort Worth FSS at Pt B
02 AGL B 15 AGL to C    PNH 108/58     N34°48.50' W100°38.20'
02 AGL B 15 AGL to D    PNH 126/77     N34°20.00' W100°35.00'
02 AGL B 15 AGL to E    SPS 266/99     N34°09.10' W100°34.30'
02 AGL B 15 AGL to F    SPS 261/84     N33°59.50' W100°16.90'
VR ROUTES

02 AGL B 15 AGL to G SPS 260/65 N33°58.50' W99°54.10'

02 AGL B 15 AGL to H SPS 237/20 N33°51.50' W8°57.80'

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 10 NM either side of centerline from A to C; 10 NM at C tapering to 7 NM at D; 7 NM either side of centerline from D to E; 7 NM either side of centerline at E widening to 8 NM either side of centerline at F; 8 NM either side of centerline at F widening to 10 NM either side of centerline at G; 10 NM either side of centerline from G to H.

Special Operating Procedures:

(1) Position report will be made to Fort Worth FSS at McAllen, southwest bound at Point B.


(3) Route will be flown at a maximum of 540 knots.

(4) Route flight checked to 500' AGL. Contour flying authorized entire route.

(5) Alternate Entry: B, C, D, E, F and G.

(6) Alternate Exit: B, C, D, E, F and G.

(7) VR-1141 is reverse course of VR-1142. VR-1141 will not be flown when VR-1142 is in use. Additionally, due to local deconfliction, route will normally be flown on Tuesday and Thursday. Call Scheduling office for conflicts with other routes.


(9) Prior deconfliction required with IR-105 and IR-103 (NAS JRB, Fort Worth, DSN 739-6903/04/05, C817-782-6903/04/05).

(10) When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Sayre, Haddock, Shamrock, Mclean/Gray Co, Clarendon, Memphis, Foard Co, Wheeler Muni and Richard's.

(11) Pilots must Contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.

(12) Noise Sensitive Area, avoid by 1000' AGL or 2 NM: Waggoner Estate Ranch house at N33-56.5 W99-16.6.

(13) Use caution when operating between G and H for T-6 aircraft operating on SR-278 at 500' AGL. Aircraft on VR-1141 (Tue and Thu) will call ABEAM FOARD (10 NM past Point G), aircraft on SR-278 on normal flow (Tue, Thu, Sat) will call APPROACHING FOARD and if a conflict exists will climb accordingly (1500' AGL minimum) and both aircraft will make a position report on 255.4.

(14) Route is designated MARSA.

(15) Use Caution for route entry at Point A due to possible traffic conflict with RNAV approach in Elk City Rgnl Business.

FSS Within 100 NM Radius:

FTW

VR-1142

ORIGINATING ACTIVITY: 80th OSS/OSOA, 1911 J. Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576/076, C940-676-0576.

SCHEDULING ACTIVITY: 90/469 FTS, Sheppard AFB, TX 76311 DSN 736-2675/4995, 940-676-2675/4995/8090.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long

02 AGL B 15 AGL to A SPS 237/20 N33°51.50' W98°57.80'

02 AGL B 15 AGL to B SPS 260/65 N33°58.50' W99°54.10'

02 AGL B 15 AGL to C SPS 261/84 N33°59.50' W100°16.90'

02 AGL B 15 AGL to D SPS 266/99 N34°09.10' W100°34.30'

02 AGL B 15 AGL to E PNH 126/77 N34°20.00' W100°35.00'

02 AGL B 15 AGL to F PNH 108/58 N34°48.50' W100°38.20'

02 AGL B 15 AGL to G PNH 070/53 N35°25.00' W100°39.00'

02 AGL B 15 AGL to H BFV 292/15 N35°21.00' W99°28.70'

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 10 NM either side of centerline from A to B; 10 NM tapering to 8 NM either side of centerline from B to C; 8 NM either side of centerline at C tapering to 7 NM either side of centerline at D; 7 NM either side of centerline from D to E; 7 NM either side of centerline at E widening to 10 NM at F; 10 NM either side of centerline from F to H.

Special Operating Procedures:

(1) Position report will be made to Fort worth FSS at McAllen, Eastbound at Point G.


(3) Route will be flown at a maximum of 540 knots.

(4) Route flight checked to 500' AGL. Contour flying authorized entire route.

(5) Alternate Entry: B, C, D, E, F and G.

(6) Alternate Exit: B, C, D, E, F and G.
(7) VR-1142 is the reverse course of VR-1141. VR-1142 will not be flown when VR-1141 is in use. Additionally, due to local deconfliction, route will normally be flown on Monday, Wednesday, and Friday. Call scheduling office for conflicts with other routes.


(9) Prior deconfliction required with IR-105 and IR-103 (NAS JRB, Fort Worth, DSN 739-6903/04/05, C817-782-6903/04/05).

(10) When practicable, avoid flight within 1500’ AGL or 3 NM at the following airports: Sayre; Haddock; Shamrock; Mclean/Gray Co; Clarendon; Memphis; Foard Co; Wheeler Muni and Richards.

(11) Pilots must Contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.

(12) Noise Sensitive Area, avoid by 1000’ AGL or 2 NM: Waggoner Estate Ranch house at N33°56.5 W99°16.6.

(13) Use caution when operating between A and B for T-6 aircraft operation on Reverse SR-278 at 500’ AGL. Aircraft on VR-1142 (Mon, Wed, Fri) will call ENTERING VR-1142 AT SANTA ROSA LAKE (Point A), aircraft on reverse SR-278 (Mon, Wed, Fri, Sun) will call APPROACHING SANTA ROSA LAKE and if a conflict exists will climb accordingly (1500’ AGL minimum) and both aircraft will make a position report on 255.4.

(14) Route is designated MARSA.

FSS Within 100 NM Radius:

FTW, SJT

VR-1143

ORIGINATING ACTIVITY: 80th OSS/OSOA, 1911 J. Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576, C940-676-0576.

SCHEDULING ACTIVITY: 90/469 FTS, Sheppard AFB, TX 76311 DSN 736-2675/4995/8090, C940-676-2675/4995/8090.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 AGL B 15 AGL to A</td>
<td>SPS 169/36</td>
<td>N33°23.50'  W98°35.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to B</td>
<td>MQP 252/46</td>
<td>N32°36.00'  W98°54.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to C</td>
<td>TQA 346/49</td>
<td>N33°03.00'  W100°31.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to D</td>
<td>SPS 246/99</td>
<td>N33°35.00'  W99°53.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to E</td>
<td>SPS 268/70</td>
<td>N34°09.00'  W99°58.50'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to F</td>
<td>SPS 238/20</td>
<td>N33°52.00'  W98°57.50'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

(1) Position reports will be made to Fort worth FSS at BreckenRidge, westbound at Point B and at Stamford, westbound at Point C.


(3) Route will be flown at a maximum of 540 knots.

(4) Route flight checked to 500’ AGL. Contour flying authorized entire route.

(5) Alternate Entry: B, C, D and E.

(6) Alternate Exit: B, C, D and E.

(7) VR-1143 is the reverse course of VR-1144. VR-1143 will not be flown when VR-1144 is in use. Additionally, due to local deconfliction, route will normally be flown on Tuesday and Thursday. Call scheduling office for conflicts with other routes.

(8) When practicable, avoid flight within 1500’ AGL or 3 NM of the following airports: Foard Co; Quanah; Richards; Haskell Muni; Arledge; Albany; Stephens Co; Graham; Olney; Eastland and Lockett.

(9) Pilots must Contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.

(10) Noise sensitive areas, avoid by 1000’ AGL or 2NM: Waggoner Ranch at (N33°56.5 W99°16.6).

(11) Use caution when operating between E and F for T-6 aircraft operating on SR-278 at 500’AGL. Aircraft on VR-1143 (Tue and Thu) will call ABEAM FOARD (10 NM past Point E), aircraft on SR-278 on normal flow (Tue, Thu, Sat) will call APPROACHING FOARD and if a conflict exists will climb accordingly (1500’ AGL minimum) and both aircraft will make a position report on 255.4.

(12) Route is designated MARSA.

FSS Within 100 NM Radius:

FTW, SJT

VR-1144

ORIGINATING ACTIVITY: 80th OSS/OSOA, 1911 J. Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576, C940-676-0576.

SCHEDULING ACTIVITY: 90/469 FTS, Sheppard AFB, TX 76311 DSN 736-2675/4995/8090, C940-676-2675/4995/8090.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 AGL B 15 AGL to A</td>
<td>SPS 238/20</td>
<td>N33°52.00'  W98°57.50'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to B</td>
<td>SPS 268/70</td>
<td>N34°09.00'  W99°58.50'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to C</td>
<td>SPS 246/99</td>
<td>N33°35.00'  W100°31.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to D</td>
<td>TQA 346/49</td>
<td>N33°03.00'  W99°53.00'</td>
</tr>
</tbody>
</table>

3-143
VR ROUTES

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Position report made to Fort worth FSS at Paducah, southbound at Point B, and at Stamford, southeast bound at Point D.
(3) Route will be flown at a maximum of 540 knots.
(4) Route flight checked to 500’ AGL. Contour flying authorized entire route.
(5) Alternate Entry: B, C, D and E.
(6) Alternate Exit: B, C, D and E.
(7) VR-1144 is the reverse course of VR-1143. VR-1144 will not be flown when VR-1143 is in use. Additionally, due to high volume of traffic and local deconfliction, VR-1144 will not be flown without prior authorization and coordination with scheduling office.
(8) When practicable, avoid flight within 1500’ AGL or 3 NM of the following airports: Foard Co; Quanah; Richards; Haskell Muni; Arledge; Albany; Stephens Co; Graham; Olney; Eastland and Lockett.
(9) Pilots must contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
(10) Noise sensitive areas, avoid by 1000’AGL or 2NM: Waggoner Ranch at (N33-56.5 W99-16.6).
(11) Use caution when operating between E and F for T-6 aircraft operating on SR-278 at 500’AGL.
(12) Route is designated MARSA.

FSS Within 100 NM Radius:
FTW, SJT

VR-1145

ORIGINATING ACTIVITY: 80th OSS/OSOA, 1911 J. Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576, C940-676-0576.
SCHEDULING ACTIVITY: 90/469 FTS, Sheppard AFB, TX 76311 DSN 736-2675/4995/8090, C940-676-2675/4995/8090.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>A</td>
<td>SHP 145/25</td>
<td>N33°37.00’ W98°14.00’</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>SPS 118/53</td>
<td>N33°26.00’ W97°46.00’</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>BYP 288/38</td>
<td>N33°48.00’ W96°56.00’</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>BYP 307/33</td>
<td>N33°55.00’ W96°43.00’</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>BYP 348/30</td>
<td>N34°02.50’ W96°18.00’</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>ADM 046/37</td>
<td>N34°35.00’ W96°50.00’</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>ADM 006/21</td>
<td>N34°33.00’ W97°05.00’</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>ADM 273/28</td>
<td>N34°17.00’ W97°44.00’</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>I</td>
<td>SHP 095/23</td>
<td>N33°55.00’ W98°01.50’</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 10 NM either side of centerline from A to C; 10 NM left and 5 NM right of centerline from C to D; 10 NM either side of centerline from D to I.

Special Operating Procedures:
(1) Position report will be made to Fort Worth FSS at Ada, westbound at Point F.
(3) Route will be flown at a maximum of 540 knots.
(4) Route flight checked to 500’ AGL. Contour flying authorized entire route.
(5) Alternate Entry: B, C, D, E, F, G and H.
(6) Alternate Exit: B, C, D, E, F, G and H.
(7) VR-1145 is reverse course of VR-1146. VR-1145 will not be flown when VR-1146 is in use. Additionally, due to high volume of traffic and local deconfliction VR-1145 will not be flown without prior authorization and coordination with scheduling office.
(8) When practicable, avoid flight within 1500’ AGL or 3 NM of the following airports: Bowie, Gainesville, Lake Texoma, Durant, Sulphur, Healdton, Crazy Horse Muni, and Pauls Valley.
(9) Pilots must contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
(10) Use caution for T-6 aircraft operating at 500’AGL at the following locations: when operating at route entry, between B and C and from F to H opposite direction.
(11) Route is designated MARSA.

FSS Within 100 NM Radius:
FTW, MLC

VR-1146

ORIGINATING ACTIVITY: 80th OSS/OSOA, 1911 J. Ave. STE 3, Sheppard AFB, TX 76311 DSN 736-0576, C940-676-0576.
SCHEDULING ACTIVITY: 90/469 FTS, Sheppard AFB, TX 76311 DSN 736-2675/4995/8090, C940-676-2675/4995/8090.
**HOUSING OF OPERATION:** Sunrise-Sunset

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 AGL B 15 AGL to A</td>
<td>SHP 095/23</td>
<td>N33°55.00' W98°01.50'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to B</td>
<td>ADM 273/28</td>
<td>N34°17.00' W97°44.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to C</td>
<td>ADM 006/21</td>
<td>N34°33.00' W97°05.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to D</td>
<td>ADM 046/37</td>
<td>N34°35.00' W96°35.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to E</td>
<td>BYP 348/30</td>
<td>N34°02.50' W96°18.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to F</td>
<td>BYP 307/33</td>
<td>N33°55.00' W96°43.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to G</td>
<td>BYP 288/38</td>
<td>N33°48.00' W96°56.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to H</td>
<td>SPS 118/53</td>
<td>N33°26.00' W97°46.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to I</td>
<td>SHP 145/25</td>
<td>N33°37.00' W98°14.00'</td>
<td></td>
</tr>
</tbody>
</table>

**ROUTE WIDTH:**
- 10 NM either side of centerline from A to F; 10 NM right and 5 NM left of centerline from F to G; 10 NM either side of centerline from G to I.

**Special Operating Procedures:**

1. Position report will be made to Fort Worth FSS at Ada, eastbound at Point D.
2. Route conflicts with several VR/SR routes as follows:
3. Route will be flown at a maximum of 540 knots.
4. Route flight checked to 500' AGL. Contour flying authorized on entire route.
5. Alternate Entry: B, C, D, E, F, G, and H.
6. Alternate Exit: B, C, D, E, F, G, and H.
7. VR-1146 is reverse course of VR-1145. VR-1146 will not be flown when VR-1145 is in use. Additionally, VR-1146 can be flown every day. Call scheduling office for conflicts with other routes.
8. When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Bowie, Gainesville, Lake Texoma, Durant, Sulphur, Healdton, Crazy Horse Muni, and Pauls Valley.
9. Pilots must contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
10. Use caution for T-6 aircraft operating on SR-271 at 500' AGL at the following locations: from approaching B to D, between G and H, and at route exit. Aircraft on VR-1146 (Mon through Fri) will call ENTERING VR-1146 AT POINT ALPHA and ABEAM WAURIKA 10 NM after route entry. Aircraft on SR-271 will call APPROACHING POOLEVILLE 10 miles southwest of the town. If a conflict exists, aircraft on SR-271 will climb accordingly (1500' AGL minimum) and both aircraft will make a position report on 255.4. Additionally, due to a conflict with SR-272, reverse SR-272, SR-278, and reverse SR-278, aircraft on VR-1146 will abort the route 20 NM prior to Point H.

(11) Route is designated MARSA.

**FSS Within 100 NM Radius:**
- FTW, MLC

**VR-1175**

**ORIGINATING ACTIVITY:** OC-ALC/10 Flight Test Sqdn, 4805 West Dr, Tinker AFB, OK 73145-3300 DSN 336-7719/7710, C405-736-7719/7710.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOUSING OF OPERATION:** Sunrise-Sunset

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 AGL B 15 AGL to A</td>
<td>DHT 355/32</td>
<td>N36°37.00' W102°28.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to B</td>
<td>CIM 031/14</td>
<td>N36°39.80' W104°40.10'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to C</td>
<td>CIM 311/26</td>
<td>N36°50.60' W105°11.70'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to D</td>
<td>ALS 152/25</td>
<td>N36°56.30' W105°40.90'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to E</td>
<td>ALS 198/28</td>
<td>N36°56.60' W106°07.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to F</td>
<td>SAF 329/36</td>
<td>N36°06.40' W106°17.10'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to G</td>
<td>SAF 298/44</td>
<td>N36°01.20' W106°44.70'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to H</td>
<td>ABQ 344/49</td>
<td>N35°51.50' W106°52.10'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to I</td>
<td>RSK 157/58</td>
<td>N35°47.00' W107°55.00'</td>
<td></td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH:**
- 4 NM either side of centerline.

**Special Operating Procedures:**

1. Maintain on or right (north) of centerline from Point C to N36-54 W105-26 (12 miles east of Ute Peak).
2. Maintain on or left (south) of centerline from Point D (Ute Peak) to west side of Rio Grande River.
3. Maintain within 2 NM of centerline from 4 NM prior until 4 NM after Point G (Mining Mountain).
4. Primary Entry: A, Alternate Entry: D.
5. Primary Exit: I, Alternate Exit: B, D and F.
6. Route is for the sole use of 10 FLTS flight test aircraft.

**FSS Within 100 NM Radius:**
- ABQ
VR ROUTES

VR-1176

ORIGINATING ACTIVITY: OC-ALC/10 Flight Test Sqdn, 4805 West Dr, Tinker AFB, OK 73145-3300 DSN 336-7719/7710, C405-736-7719/7710.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Maintain within 2 NM of centerline from 4 NM prior until 4 NM after Point C (Mining Mountain).
(2) Maintain on or right (south) of centerline from west side of Rio Grande River to Point F (Ute Peak).
(3) Maintain on or left (north) of centerline from N36-54 W105-26 (12 miles east of Ute Peak) to Point G.
(4) Primary Entry: A, Alternate Entry: F.
(5) Primary Exit: I, Alternate Exit: F and H.
(6) Route is for the sole use of 10 FLTS flight test aircraft.

FSS Within 100 NM Radius:
ABQ

VR-1182


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
02 AGL B 15 AGL to A FSM 013/18 N35*47.00' W107*55.00'
02 AGL B 15 AGL to B ARG 269/73 N36*10.00' W92*27.00'
02 AGL B 15 AGL to C ARG 249/46 N35*53.00' W91*52.00'
02 AGL B 15 AGL to D ARG 205/20 N35*49.00' W91*09.00'
02 AGL B 15 AGL to E ARG 176/33 N35*34.00' W90*57.00'
02 AGL B 15 AGL to F ARG 155/37 N35*32.00' W90*41.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: N/A.
(2) Alternate Exit: B.
(3) See and Avoid/restrictive scheduling applies between VR-1182 and IR-120 and VR-1102.
(4) Use caution between Points A and B and Points B and C due to IR-174 crossing SFC B 30.
(5) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
(6) Uncharted Obstructions.
   (a) Tower (N34 14.15 W093 38.10) unknown altitude
   (b) Tower (N35 54.20 W093 28.52) unknown altitude
   (c) Tower (N36 08.77 W092 40.10) unknown altitude
   (d) Tower (N36 04.38 W092 35.26) unknown altitude
   (e) Tower (N35 49.61 W091 37.57) unknown altitude
   (f) Tower (N35 36.41 W090 53.39) unknown altitude
   (g) Tower (N35 33.45 W090 42.69) unknown altitude
   (7) Large power line crossing river N35-54.9 W91-56.4 (100' AGL).
   (8) CAUTION: Large birds soaring in vicinity of river cliffs.
   (9) Make entry time plus or minus five minutes or reschedule.
   (10) CAUTION: Possible military traffic entering VR-1102 half way between points A and B.
   (11) CAUTION: Multiple IR routes crossing 26 NM West of Pt B and 8 NM East of Pt B.
   (12) CAUTION: Numerous SR routes crossing Pt A-E. Flights of multiple C-130's common in the vicinity of of Pt B.
   (13) Height of towers charted at N35 53.22 W91 43.37 are of questionable accuracy, possibly 100' higher than charted (estimated altitude 1678 MSL 838 AGL).
   (14) Noise Sensitive Area (N36 00.206 W093 18.808) avoid by 1 NM.

FSS Within 100 NM Radius:
GWO, MKL, MLC

VR-1195


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous
SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-2200 local daily

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to A | ABQ 074/48 | N35°05.00' W105°51.00'
01 AGL B 15 AGL to B | TCC 239/23 | N35°03.50' W104°02.50'
01 AGL B 15 AGL to C | TCC 195/33 | N34°41.50' W103°54.00'
01 AGL B 15 AGL to D | CVS 242/28 | N34°13.00' W103°50.50'
01 AGL B 15 AGL to E | CNX 074/46 | N34°24.50' W104°45.00'
01 AGL B 15 AGL to F | CNX 291/12 | N34°29.00' W105°53.00'

ROUTE DESCRIPTION:

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline for entire route.

Special Operating Procedures:

(1) Avoid Ft. Sumner Airport (segment D-E N34-29-45 W104-12-50) and Santa Rosa Airport (segment A-B, N34-36-15 W104-38-50) by 3 NM.
(2) Avoid Double V Ranch private airport (segment D-E, N34-35-05 W104-19-55) by 2 NM.
(3) Avoid the following by 1 NM: (Conchas Lake N34-22-20 W104-12-26), (Santa Rosa Lake Dam N34-36-25 W104-23-15), (Holcroft Ranch N34-43-06 W104-39-18).
(4) Avoid mine N34-35-30 W105-35-00 by .5 NM or 1000' AGL.
(5) Avoid the following houses by .5 NM: (N35-34-00 W104-34-00), (N35-59-00 W105-13-00), (N34-54-00 W103-50-00), (N34-21-00 W104-21-50).
(6) Avoid the following towns by .5 NM: Rowe (N35-29-40 W105-40-30), San Jose (N35-23-50 W105-28-30), Bernal (N35-23-35 W105-19-00).
(7) Alternate Exit Points: D and E.
(8) Avoid ranch (N34-20.52 W104-23.2) by 2 NM and 1500' AGL.

FSS Within 100 NM Radius:

ABQ

VR-1196

ORIGINATING ACTIVITY: ANG CRTC-Gulfport/OSA, 4715 Hewes Ave, Gulfport, MS 39507-4324 DSN 363-6027, C228-214-6027.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to A | AEX 098/18 | N31°12.00' W92°09.00'
05 AGL B 15 AGL to B | LSU 330/39 | N31°05.00' W91°36.00'
05 AGL B 15 AGL to C | LSU 051/39 | N30°50.00' W90°40.00'
05 AGL B 15 AGL to D | PCU 355/26 | N30°59.90' W89°44.00'
05 AGL B 15 AGL to E | GPT 026/32 | N30°53.00' W88°47.00'
05 AGL B 15 AGL to F | LBY 120/32 | N31°07.00' W88°50.00'
15 AGL to G | LBY 133/26 | N31°06.00' W89°00.00'

FSS Within 100 NM Radius:

DRI

VR ROUTES
VR ROUTES

VR-1205

ORIGINATING ACTIVITY: COMMANDER 412 TW, 412 OSS/OSOF, 100 East Sparks Road, Edwards AFB, CA 93523-6460 DSN 527-2515, C661-277-2515.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>OAL 222/10</td>
<td>N37°55.00' W117°57.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>BTY 244/46</td>
<td>N36°40.00' W117°41.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>NID 012/38</td>
<td>N36°15.00' W117°21.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>NID 033/34</td>
<td>N36°04.00' W117°11.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>NID 071/30</td>
<td>N35°44.00' W117°05.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>EDW 053/35</td>
<td>N35°14.00' W117°05.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>EDW 085/23</td>
<td>N34°56.00' W117°16.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>DAG 247/34</td>
<td>N34°53.00' W117°16.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: C.
(2) Alternate Exit: D and G.
(3) Monitor 315.9 (R-2508 low level frequency) passing Point B.
(4) Users must schedule into complex MOA's/Restricted Areas when these areas are active:
   (a) R-2508 MOA's-Contact CCF at DSN 527-2508.
   (b) R-2524-Contact NAWC Echo Range scheduling at DSN 437-6800. For real-time requests, contact China Control at DSN 487-6908/6909.
   (c) R-2515-Contact AFFTC scheduling at DSN 527-4110.
(5) Crossing 36 degrees North attempt contact with either China Control 301.0 or Echo Control 381.9 for entry into R-2524. If no contact, do not enter even if you have scheduled R-2524.
(7) Uncharted obstructions: 100' single short unlit tower N34-53.94 W117-17.28.

FSS Within 100 NM Radius:
HHR, RAL, RNO, SAN

VR-1206

ORIGINATING ACTIVITY: COMMANDER 412 TW, 412 OSS/OSOF, 100 East Sparks Road, Edwards AFB, CA 93523-6460 DSN 527-2515, C661-277-2515.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>LHS 309/7</td>
<td>N34°47.00' W118°40.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>PMD 035/20</td>
<td>N34°51.00' W117°45.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Avoid Rosamond Airport by 3 miles.
(2) Avoid General Fox Airport Class D Airspace.
(3) Do not enter Edwards Class D airspace without ATC approval.
(4) Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flt Haz, R-2508.
(5) Special Coordination Procedures-Route conflicts with IR-200, IR-211, IR-425, VR-1257, VR-1265, and VR-1293. See and Avoid for all conflicts.
(6) Point A within 3 NM of two Victor Airways lowest MEA 9000' MSL.
(7) CAUTION: Bird attractant areas located at N34-46.94 W118-09.92, N34-49.6 W118-08.04 and N34-47.58 W118-08.05 sewage disposal ponds.
(8) CAUTION: Rosemond, Buckhorn and Rogers Lake Beds attract large flocks of birds when flooded during winter months.
(9) Uncharted obstructions:
   (a) Tower 100' at N34-52.3 W118-07.0
   (b) Tower 100' at N34-52.16 W117-45.43
   (c) Lite tower aprx 200' at N34-49.6 W118-10.5.
   (d) 150' Lit tower N34 49.04 W117 53.74
(10) Route Conflicts: VR-1206/1265/1257 and IR-200/211 are coincidental then exit north. IR-425 has same ground track but is opposite direction.

FSS Within 100 NM Radius:
HHR, RAL, SAN

VR-1214

ORIGINATING ACTIVITY: COMMANDER, 412 TW, 412 OSS/OOS, 100 East Sparks Road, Edwards AFB, CA 93523-6460 DSN 527-2515, C661-277-2515.

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A OAL 222/10 N37°55.00' W117°57.00'
02 AGL B 15 AGL to B BTY 244/46 N36°40.00' W117°41.00'
02 AGL B 15 AGL to C NID 012/38 N36°15.00' W117°21.00'
02 AGL B 15 AGL to D NID 033/34 N36°04.00' W117°11.00'
02 AGL B 15 AGL to E NID 071/30 N35°44.00' W117°05.00'
02 AGL B 15 AGL to F EDW 053/35 N35°14.00' W117°05.00'
02 AGL B 15 AGL to G EDW 085/23 N34°56.00' W117°16.00'
02 AGL B 15 AGL to H DAG 247/34 N34°53.00' W117°16.00'

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A LHS 309/7 N34°47.00' W118°40.00'
02 AGL B 15 AGL to B PMD 035/20 N34°51.00' W117°45.00'

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A OAL 222/10 N37°55.00' W117°57.00'
02 AGL B 15 AGL to B BTY 244/46 N36°40.00' W117°41.00'
02 AGL B 15 AGL to C NID 012/38 N36°15.00' W117°21.00'
02 AGL B 15 AGL to D NID 033/34 N36°04.00' W117°11.00'
02 AGL B 15 AGL to E NID 071/30 N35°44.00' W117°05.00'
02 AGL B 15 AGL to F EDW 053/35 N35°14.00' W117°05.00'
02 AGL B 15 AGL to G EDW 085/23 N34°56.00' W117°16.00'
02 AGL B 15 AGL to H DAG 247/34 N34°53.00' W117°16.00'

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A LHS 309/7 N34°47.00' W118°40.00'
02 AGL B 15 AGL to B PMD 035/20 N34°51.00' W117°45.00'

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 15 AGL to A</td>
<td>DAG 199/37</td>
<td>N34°27.00'</td>
<td>W117°00.00'</td>
</tr>
<tr>
<td>15 AGL to B</td>
<td>DAG 198/31</td>
<td>N34°32.00'</td>
<td>W116°55.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to C</td>
<td>DAG 160/7</td>
<td>N34°51.00'</td>
<td>W116°34.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D</td>
<td>DAG 026/32</td>
<td>N35°22.00'</td>
<td>W116°09.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to E</td>
<td>DAG 008/56</td>
<td>N35°49.00'</td>
<td>W116°08.00'</td>
</tr>
<tr>
<td>01 AGL B 10 AGL to F</td>
<td>BTY 129/48</td>
<td>N36°08.00'</td>
<td>W116°11.00'</td>
</tr>
<tr>
<td>01 AGL B 10 AGL to G</td>
<td>BTY 111/30</td>
<td>N36°30.00'</td>
<td>W116°15.00'</td>
</tr>
<tr>
<td>01 AGL B 10 AGL to H</td>
<td>BTY 135/11</td>
<td>N36°38.00'</td>
<td>W116°38.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to I</td>
<td>BTY 288/9</td>
<td>N36°53.00'</td>
<td>W116°54.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to J</td>
<td>BTY 304/43</td>
<td>N37°21.00'</td>
<td>W117°19.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to K</td>
<td>BTY 322/40</td>
<td>N37°25.00'</td>
<td>W117°04.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to I (excluding restricted airspace); 5 NM left and 15 NM right of centerline from I to K (excluding restricted airspace).

Special Operating Procedures:

(1) Route terminates at the R-4807 boundary. Approval for entry into R-4807 must be obtained from range scheduling, Nellis AFB, NV (DSN 348-5635, C702-653-5635). Contact Nellis Control (when operational) on 338.7 for ATC clearance into/out of restricted areas or ranges.

(2) Between I and K, right side of route is coincident with the R-4807 boundary, exit authorized anywhere between the points if meeting authorized range time.

(3) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N34-27.4 W117-01.7; N34-33.7 W117-04.7; N34-51.2 W116-47.2; N34-57.8 W116-40.4; N35-17.1 W116-05.0; N35-58.1 W116-16.2; N36-51.7 W116-47.2; N37-17.4 W117-03.3.

(4) Cross I-40 in vicinity of Point C and I-15 between C and D at or above 500' AGL.

(5) Aircrews transiting the Silver MOA located between Points C and E shall contact the 57 Wing/OSOS, Nellis AFB, NV (DSN 682-2040) to deconflict with other air activities. Aircrews will pass the Entry Point and Point E crossing times and any revisions or updates.

(6) Aircrews will broadcast in the blind on 339.95 when crossing the southern boundary of the Silver MOA the following (SUNDANCE, call sign, number and type aircraft, crossing Silver MOA boundary)

(7) Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flt Haz, R-2508. Contact R-2508 Central Coordinating Facility (CCF) (DSN 527-2508) for authorization to enter/operate in R-2508 complex.

(8) Alternate Exit: Points G and I. Caution exiting Point G for traffic arrival/departure to Desert Rock Airport. Exit to west between I and J authorized to enter R-2508 Saline work area.

(9) Alternate Entry: Points B, C, E and H.

(10) Noise Sensitive Areas: Point A Lucerne Valley and Newberry Springs between B and C. Avoid by flying as far east of the western border of Troy Lake as possible within the route corridor. Avoid town of Tecopa, N35-51.0 W116-13.0 between Points E and F by 1 NM horizontally or 1500' vertically. Approaching Point H remain East of the centerline until 3 NM North of Point H.

(11) Maintain 1500' AGL until 5 NM past Point B on leg B to C.

(12) Avoid horse ranch and buildings between E and F located at N35-53.0 W116-09.0 by 1 NM laterally or 1500' vertically. Avoid Ash Meadows National Wildlife Refuge at N36-23-00 W116-17-00 by 2 NM or 1500' vertically.

(13) Avoid Desert Rock Airport N36-37.0 W116-02.0 by not less than 7 NM to the southwest.

(14) Points C to D: Check NOTAMS for model rocket firings Lucerne Dry Lake. SM radius from the KVCV VOR 090R022NM N34-30-04 W116-57-32 surface to 11,000 MSL approx 8,150 AGL sunrise/sunset with windows to 19,000 MSL approx 16,150 AGL. Between sunset/sunrise limited surface to 11,000 MSL.

(15) Route Conflicts: Route VR-1214 runs concurrent with VR-1215 until Point D and coincidental with VR-1265 until C then diverges east; Point B to C VR-1218 route width overlaps from the east, IR-212/213/217 route width overlaps from the south and then turns eastward; Point C VR-1265 diverges east; Point C to D VR-1217/1218 cross east to west; approaching N35-06 to N35-27 see SOP notes 6 and 7 for Silver MOA procedures; North of Point F VR-222 crosses SE to NW; at Point G IR-286 merges from the east and coincidental until H and route widths overlap until J, then crosses from SE to NW from J to K; at Point H VR-222 crosses south to north.

(16) Obstructions:

(a) Four unlit microwave towers (100') at N35-04 W116-23.
(b) 200' tower with guide wires at N35-23.14, W116-06.82, just north of Point D;
(c) 200' tower with guide wires at N35-27.53, W116-07.60, just north of Point D;
(d) 200' tower with guide wires at N35-26.02, W116-07.68, just north of Point D;
(e) 200' tower with guide wires at N35-27.18, W116-09.40, just north of Point D.

(17) Numerous Victor Airways within 5 NM of Point A lowest MEA 9000' MSL. Numerous Victor Airways above entire route lowest MEA between Point B and C 7500' MSL, between C and D 10000' MSL, between Point E and K 11000' MSL.

(18) 200' tower with guide wires at N34-27.18, W116-08.34, 7 NM North of Point H.

Points H and C shall contact the 57 Wing/OSOS, Nellis AFB, NV (DSN 527-2508) for authorization to enter R-2508 complex.

(18) 200' tower with guide wires at N34-27.18, W116-08.34, 7 NM North of Point H.

Commander 412 TW, 412 OSS/OSOS, 235 S. Flight Line Road, Edwards AFB, CA 93523-6460 DSN 527-4110, C661-277-4110.
(b) Turkey Vulture Migration Route in vicinity of Mojave River Basin between points C and D.
(c) Remain on or east of centerline 10 NM prior to Point G until 7 NM beyond Point G to avoid Ash Meadows National Wildlife Refuge.

**FSS Within 100 NM Radius:**
HHR, RAL, RNO, SAN

**VR-1215**

**ORIGINATING ACTIVITY:** COMMANDER, 412 TW, 412 OSS/OSSO, 100 East Sparks Rd, Edwards AFB, CA 93523-6460 DSN 527-2515, C661-277-2515.

**SCHEDULING ACTIVITY:** COMMANDER, 412 TW 412 OSS/OSOS, 235 South Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-4110, C661-277-4110.

**HOURS OF OPERATION:** Sunrise-Sunset daily

**ROUTE DESCRIPTION:**

**TERRAIN FOLLOWING OPERATIONS:** Authorized for entire route.

**ROUTE WIDTH** - 5 NM either side of centerline (excluding restricted airspace).

**Special Operating Procedures:**

1. Route terminates at the R-2524 boundary. Clearance to fly the route does not constitute clearance into restricted area. This clearance must be obtained from the appropriate Scheduling Agency.
2. Avoid R-2502 (include Leach Lake Tactical Range) unless you are scheduled.
3. Alternate Exit: Exit authorized at Point E and beyond. Contact High Desert TRACON (Joshua Approach) for clearance into MOA/Ranges.
4. Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning; AP/1, California fit haz, R-2508. Alternate Exit: Exit anywhere beyond Point D. Obtain clearance into MOA/Range form High Desert Tracon, Joshua Approach.

5. Aircrews transiting the Silver MOA located between Points C and E shall contact the 57 Wing/DOOS, Nellis AFB, NV (DSN 682-2040) for authorization to transit. Aircrews will pass the entry point and Point E crossing times and any revisions or updates.
6. Aircrews will broadcast in the blind on 299.85 when crossing the southern boundary of the Silver MOA the following: SUNDANCE, (call sign, number and type aircraft), crossing Silver MOA boundary.
7. Crossing 36 North attempt contact with either China Control (301.0) or Echo Control (381.9) for entry into R-2524 if no contact Do Not Enter even if you have scheduled this airspace.
8. Cross I-40 in vicinity of Point C and I-15 between C and D at or above 500’ AGL.
9. Noise Sensitive Areas: Point A Lucerne Valley and Newberry Springs between B and C. Avoid by flying as far east of the western border of Troy Lake as possible within the route corridor.
10. Maintain 1500’AGL until 5 NM past Point B on leg B to C.
11. Alternate Entry: B, C and E.
12. Monitor 315.9 (R-2508 low level frequency) passing Point D.
13. Points A to B: Check NOTAMS for Model Rocket Firings Lucerne Dry Lake, 5SM radius from the KVCV VOR 090R022NM (N34-30-04 W116-57-32) surface to 11,000’ MSL (approximately 8,150’ AGL) Sunrise/Sunset with windows to 19,000’ MSL (approximately 16,150’ AGL). Between Sunset/Sunrise limited surface to 11,000’ MSL.
14. Numerous Victor Airways within 5 NM of Point A lowest MEA 9000’MSL. Numerous Victor Airways above entire route lowest MEA between Point B and C 7500’MSL, and between C and D 10000’MSL.
15. Uncharted Obstructions:
   (a) Between Points C and D, a grouping of four 100’ unlit microwave towers (N35-04 W116-23);
   (b) Between Points D and E, a 150’ tower at N35-27.16 W116-09.20;
   (c) 200’ tower with guide wires at N35-27.53, W116-07.60, just north of Point D;
   (d) 200’ tower with guide wires at N35-23.14, W116-06.82, just north of Point D;
   (e) 200’ tower with guide wires at N35-27.35, W116-07.60, just north of Point D;
   (f) 200’ tower with guide wires at N35-26.02, W116-07.68, just north of Point D;
   (f) 200’ tower with guide wires at N35-27.18, W116-09.40, just north of Point D.
16. Route conflicts: VR-1265 is coincidental until C then diverges east; VR-1214 is coincidental until Point D then diverges north; B to C VR-1218 route width overlaps from the east, IR-212/213/217 route width overlaps from the south and turns eastward; Point C VR-1265 diverges east; C to D VR-1217 and VR-1218 cross east to west; approaching N35-06 to N35-27 see SOP notes 5 and 6 for Silver MOA procedures; At Point E IR-212 merges from southeast and is coincidental until Point G.
17. (a) CAUTION: High density helicopter traffic transiting R-2502A in the vicinity of Point D. Remain 3NM East of centerline between Point D to avoid R-2502A.
   (b) Turkey vulture migration route in vicinity of Mojave River Basin between points C and D.

**FSS Within 100 NM Radius:**
HHR, RAL, RNO, SAN

---

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 15 AGL to A</td>
<td>DAG 199/37</td>
<td>N34°27.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W117°00.00’</td>
</tr>
<tr>
<td>15 AGL to B</td>
<td>DAG 198/31</td>
<td>N34°32.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W116°55.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to C</td>
<td>DAG 160/7</td>
<td>N34°51.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W116°34.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D</td>
<td>DAG 026/32</td>
<td>N35°22.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W116°09.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to E</td>
<td>DAG 005/43</td>
<td>N35°38.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W116°17.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to F</td>
<td>DAG 339/46</td>
<td>N35°44.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W116°41.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to G</td>
<td>DAG 325/48</td>
<td>N35°43.00’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W116°55.00’</td>
</tr>
</tbody>
</table>
VR ROUTES

ORIGINATING ACTIVITY: COMMANDER 412 TW, 412 OSS/OSO, 100 East Sparks Road, Edwards AFB, CA 93523-6460 DSN 527-2515, C661-277-2515.


HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to B; 5 NM either side of centerline from B to F.

Special Operating Procedures:

(1) Maintain 1500' AGL until past Point B on leg A to C.
(2) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N34-22.6 W117-18.7; N34-15.8 W116-51.3; N34-25.1 W116-37.1; N34-57.7 W116-40.3.
(3) Cross I-40 in vicinity of C and I-15 between D and E at or above 500' AGL.
(4) Avoid R-2501 between B and C.
(5) Exit anywhere beyond E.
(6) Alternate Entry: B.
(7) Aircrews transiting the R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California F1t Haz, R-2508. Schedule R-2508 MOA/Ranges/Restricted Areas through the R-2508 Central Coordinating Facility (CCF) DSN 527-2508.
(8) Avoid Harvard Recreation Area by 1000' AGL and 2 NM, N34-58.0 W116-40.0.
(9) Ultralight activity within 10 NM Rabbit Dry Lake (N34-27.0 W117-00.0) up to 10000' MSL; most active on weekends and holidays.
(10) Crossing the Barstow MOA eastern boundary, contact either SPORT (343.7/132.75) or JOSHUA (335.6/133.65).
(11) Use caution in the Barstow MOA for helicopters at or below 3000' AGL crossing Coyote Drylake between Barstow and the National Training Center at Pt. Irwin.
(12) Obstructions: Four 100' unlit microwave towers located at: N35-02.5 W116-54.8 near Point F. 300' powerlines south side of route (N34-59.3 W116-39.8; N34-59.3 W116-44.5; N35-01.9 W116-48.6; N35-02.7 W116-53.4; N35-03.3 W116-55.6; N34-58.9 W117-02.1) between Points D-F. 300' tall tower with lights located at: N34-39.0 W116-39.0. Group of 60'-80' towers within 100' of the floor on a hilltop at approximately N34-47.7 W117-20.22.
(13) Numerous Victor Airways within 5NM of Point A lowest MEA 9000'MSL. Numerous Victor Airways above entire route with MEA's of Point A-D MEA 9000'MSL, Point D-E 7500'MSL.
(14) Route Conflicts: At Point A VR-1265 merges from northwest and diverges to the northeast. VR-1257 is coincidental from Point A-B and then exits east. Point A-D VR-1214/1215 route width overlaps. Points A-F VR-1218 route width overlaps entire route. Point C-D VR-1265 merges from the west then transitions northeast of Point D. Point B-D IR-212/213/217 merges from the south, overlap and diverge northeast of Point D. Point D-E VR-1214/1215/1265 cross south to north. Point E to F VR-1218 route width overlaps.
(15) Aircrews transiting the Silver MOA located between Points D and E shall contact the 57th FWW/DOOS, Nellis AFB, NV (DSN) 682-2040 for De-Confliction. Aircrews will pass Points D and E crossing times and any revisions or updates.
(16) Aircrews crossing the Eastern boundary of the Silver MOA will broadcast in the blind on 399.85 the following: Sundance (call sign, number and type aircraft) crossing Silver MOA boundary.
(17) Points A to B: Check notams for model rocket firings Lucerne Dry Lake, 5SM radius from the KVCV VOR 090R022NM (N34-30-04 W116-57-32) surface to 11,000' MSL (Aprx 8,150'AGL) between Sunset/Sunrise altitude is limited surface to 11,000' MSL.
(18) Turkey vulture migration route in vicinity of Mojave River Basin between points D and E.

FSS Within 100 NM Radius:
HHR, RAL, RNO, SAN

VR-1218

ORIGINATING ACTIVITY: COMMANDER, 412 TW 412 OSS/OSO, 100 East Sparks Road, Edwards AFB, CA 93523, DSN 517-2515, C661-277-2515.


HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A DAG 209/53 N34°19.00' W117°19.00'
15 AGL to B DAG 187/38 N34°22.00' W116°52.00'
05 AGL B to C DAG 123/13 N34°48.00' W116°24.00'
01 AGL B to D DAG 083/20 N34°55.00' W116°11.00'
01 AGL B to E DAG 282/9 N35°02.00' W116°45.00'
01 AGL B to F DAG 272/22 N35°04.00' W117°00.00'

(12) Obstructions: Four 100' unlit microwave towers located at: N35-02.5 W116-54.8 near Point F. 300' powerlines south side of route (N34-59.3 W116-39.8; N34-59.3 W116-44.5; N35-01.9 W116-48.6; N35-02.7 W116-53.4; N35-03.3 W116-55.6; N34-58.9 W117-02.1) between Points D-F. 300' tall tower with lights located at: N34-39.0 W116-39.0. Group of 60'-80' towers within 100' of the floor on a hilltop at approximately N34-47.7 W117-20.22.
(13) Numerous Victor Airways within 5NM of Point A lowest MEA 9000'MSL. Numerous Victor Airways above entire route with MEA's of Point A-D MEA 9000'MSL, Point D-E 7500'MSL.
(14) Route Conflicts: At Point A VR-1265 merges from northwest and diverges to the northeast. VR-1257 is coincidental from Point A-B and then exits east. Point A-D VR-1214/1215 route width overlaps. Points A-F VR-1218 route width overlaps entire route. Point C-D VR-1265 merges from the west then transitions northeast of Point D. Point B-D IR-212/213/217 merges from the south, overlap and diverge northeast of Point D. Point D-E VR-1214/1215/1265 cross south to north. Point E to F VR-1218 route width overlaps.
(15) Aircrews transiting the Silver MOA located between Points D and E shall contact the 57th FWW/DOOS, Nellis AFB, NV (DSN) 682-2040 for De-Confliction. Aircrews will pass Points D and E crossing times and any revisions or updates.
(16) Aircrews crossing the Eastern boundary of the Silver MOA will broadcast in the blind on 399.85 the following: Sundance (call sign, number and type aircraft) crossing Silver MOA boundary.
(17) Points A to B: Check notams for model rocket firings Lucerne Dry Lake, 5SM radius from the KVCV VOR 090R022NM (N34-30-04 W116-57-32) surface to 11,000' MSL (Aprx 8,150'AGL) between Sunset/Sunrise altitude is limited surface to 11,000' MSL.
(18) Turkey vulture migration route in vicinity of Mojave River Basin between points D and E.
Noise sensitive area over the community of Lucerne Valley, Aircrews must be aware of airports within or near route Use caution in the Barstow MOA for helicopters at or below Crossing the Barstow MOA eastern boundary, contact Open pit mining operation located on leg C-D at N34-45 On leg E to F, avoid state recreation area left of centerline Aircrews transiting the Silver MOA located between Points Aircrews transiting R-2501 complex airspace are required to Avoid R-2501 between C and D. Cross I-40 between C and D and D to F and I-15 between G Maintain 1500'AGL until past Point B on leg B to C. (14) Numerous Victor Airways within 5NM of Point A lowest MEA 9000' MSL from Point A to E. Numerous Victor Airways above entire route with 1000'MSL MEA's from Point E-F. (15) Route Conflictions: At Point A VR-1265 merges from northwest and overlaps until Point D, then merges between Point F-G. VR-1214/1215 route width overlaps from Point A-D diverges to the northeast to cross route S-N between Point G-H. VR-1257 is coincidental from Point A-B and then exits east. VR-1217 route overlaps Point A-D and Point G-H. Point C-D IR's-212/213/217 merge from the south, overlap and diverge northeast of Point D and merge between Point F-G from S-N. Point D-F IR-252 crosses S-N. Point F VR-222 crosses S-NW. CAUTION: At Point E VR-289 is opposite direction from NE-S. (16) Points A to B: Check notams for model rocket firings Lucerne Dry Lake, 5SM radius from the KCVV VOR 090R022NM (N34-30-04 W116-57-32) surface to 11,000' MSL (aprx 8,150' AGL) Sunrise/Sunset with windows to 19,000' MSL (aprx 16,150' AGL). Between Sunrise/Sunset limited surface to 11,000' MSL. (17) Flight over the Mojave National Preserve is allowed per the 1994 California Desert Protection Act.

FSS Within 100 NM Radius:
HHR, RAL, RNO, SAN

VR-1250

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>FOT 310/23</td>
<td>N41°10.00' W124°30.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to B</td>
<td>FOT 351/33</td>
<td>N41°12.50' W124°06.50'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to C</td>
<td>FOT 028/38</td>
<td>N41°06.00' W123°38.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to D</td>
<td>FJS 232/31</td>
<td>N41°17.00' W123°27.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to E</td>
<td>FJS 149/5</td>
<td>N41°22.00' W122°47.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to F</td>
<td>FJS 109/26</td>
<td>N41°11.00' W122°21.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to G</td>
<td>FJS 100/38</td>
<td>N41°08.00' W122°04.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to H</td>
<td>FJS 087/66</td>
<td>N41°08.00' W121°24.00'</td>
<td></td>
</tr>
</tbody>
</table>

(13) Noise sensitive area over the community of Lucerne Valley, 6.15NM NW of Point B. Uncharted obstructions: Single unlit 50' tower at N34-40.6 W116-48.6; noise sensitive area 6.64 NM ESE of HEC VORTAC; between Point C and D: single unlit 100' tower at N34-47.2 W116-37.5; Point D to Point E: Single unlit 125' tower at N34-44.14 W115-38.0; single unlit 100' tower at N34-43.8 W116-04.4; Point E to F: noise sensitive area 7.15 NM north of Point E just left of centerline centered in the town of Kelso; single unlit 100' white silo tower at N35-00.8 W115-38.8; Point F and G: Single unlit 150' tower at N35-12.0 W116-09.0; Points G to H: Single unlit 100' tower at N35-06 W116-36; single unlit 75' tower at N35-05.3 W116-56.3; 300' power lines south side of route (N34-59.3 W116-39.8; N34-59.3 W116-44.5; N35-01.9 W116-48.6 N35-02.7 W116-50.8 N35-03.2 W116-53.4; N35-03.3 W116-55.6; N34-58.9 W117-02.1).

TERRAIN FOLLOWING OPERATIONS: Authorized 10 NM after B, for remainder of route.

ROUTE WIDTH - 2 NM either side of centerline from A to B. 5 NM either side of centerline from B to H except for R-2501N airspace on leg C to D and R-2502E on leg G to H.

Special Operating Procedures:
(1) Alterate entry point: B
(2) Maintain 1500'AGL until past Point B on leg B to C.
(3) Cross I-40 between C and D to F and I-15 between G and H at or above 500' AGL.
(4) Avoid R-2501 between C and D.
(5) Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California Flt Haz R-2508. Schedule R-2508 complex MOAs/Ranges/Restricted Areas through the Central Coordinating Facility (CCF) DSN 527-2508.
(6) Aircrews transiting the Silver MOA located between Points F and G shall contact the 57FW/DOOS, Nellis AFB, NV (DSN 682-2040) for authorization to transit. Aircrews will pass the entry point, Point F and Point G crossing times and any revisions or updates.
(7) Aircrews will broadcast in the blind on 399.85 MHZ when crossing the eastern boundary of the Silver MOA the following: SUNDANCE (call sign, number and type aircraft) crossing Silver MOA boundary.
(8) On leg E to F, avoid state recreation area left of centerline at N34-48 W116-20 by 2 NM (Noise Sensitive Area) and ranching operation right of centerline at N35-06-00 W115-24-00. Do not overfly Clipper Mountain 3 NM east of Point E.
(9) Open pit mining operation located on leg C-D at N34-45 W116-20.0 approximately 1 NM left of centerline and 7 NM before Point D. Avoid overflight by 1 NM. Open pit blasting occurs on an unscheduled basis.
(10) Crossing the Barstow MOA eastern boundary, contact either SPORT (343.7/132.75) or JOSHUA (335.6/133.65).
(11) Use caution in the Barstow MOA for helicopters at or below 3000'AGL crossing Coyote Drylake between Barstow and the National Training Center at Ft. Irwin.
(12) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N34-22.6 W117-18.7; N34-15.8 W116-51.3; N34-43.7 W116-09.2; N34-57.7 W116-40.3.
(13) Noise sensitive area over the community of Lucerne Valley, 6.15NM NW of Point B. Uncharted obstructions: Single unlit 50’ tower at N34-40.6 W116-48.6; noise sensitive area 6.64 NM ESE of HEC VORTAC; between Point C and D: single unlit 100’ tower at N34-47.2 W116-37.5; Point D to Point E: Single unlit 125’ tower at N34-44.14 W115-38.0; single unlit 100’ tower at N34-43.8 W116-04.4; Point E to F: noise sensitive area 7.15 NM north of Point E just left of centerline centered in the town of Kelso; single unlit 100’ white silo tower at N35-00.8 W115-38.8; Point F and G: Single unlit 150’ tower at N35-12.0 W116-09.0; Points G to H: Single unlit 100’ tower at N35-06 W116-36; single unlit 75’ tower at N35-05.3 W116-56.3; 300’ power lines south side of route (N34-59.3 W116-39.8; N34-59.3 W116-44.5; N35-01.9 W116-48.6 N35-02.7 W116-50.8 N35-03.2 W116-53.4; N35-03.3 W116-55.6; N34-58.9 W117-02.1).
VR ROUTES

3-153

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry Points: E and H.
(2) Alternate Exit Points: J, L, M, and N.
(3) Tie-in FSS: Rancho Murieta (RIU).
(4) Reserving this route does not reserve the Carson MOA or R-4813 between L and O. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
(5) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
(6) Avoid all towns and airports along route by 1500’ AGL or 3 NM.
(7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
(8) Ensure coast-in at Big Lagoon only. Avoid overflight of Trinidad at B.
(9) Caution: Extensive helo logging operations staging from Hoopa airport 3 NM south of C.
(10) Avoid Marble Mountain, Trinity Alps, and Russian Wilderness Areas between C and E by 3 NM.
(11) Maintain 1500’ AGL over Castle Crags Wilderness Area at F.
(12) Fly the southern boundary between F and G to avoid the town of Dunsmuir.
(13) Fly the extreme northern boundary between G and H to avoid the town of Dana and houses vicinity Big Lake.
(14) Be alert for C-5/C-141 aircraft flying at 1000’ AGL on a crossing route between G and H.
(15) Between I and J maintain 1000’ AGL and pass north of lake at N40-11 W120-36. Be alert for Helo logging traffic.
(16) Pass North of Doyle at N40-01-30 W120-06-20 between J and K.

FSS Within 100 NM Radius:
ACV, MCC, RNO, RIU

VR-1251

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

Terrain Following Operations: Authorized entire route.

Route Width - 2 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: D and H.
(2) Alternate Exit: D, H, L, M, N and O.
(3) Tie-in FSS: Rancho Murieta (RIU).
(4) Reserving this route does not authorize access to the Carson MOA or R-4813 between M and P. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
(5) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.

Altitude Data Pt Fac/Rad/Dir Lat/Long
As assigned to A FOT 175/52 N40°15.00’ W120°45.00’
02 AGL B 15 AGL to B FOT 175/26 N40°15.00’ W120°22.00’
02 AGL B 15 AGL to C FOT 066/22 N40°25.00’ W120°51.00’
02 AGL B 15 AGL to D CEC 136/43 N41°08.00’ W123°51.00’
02 AGL B 15 AGL to E CEC 089/31 N41°37.00’ W123°35.00’
10 AGL B 15 AGL to F JJS 326/30 N41°56.00’ W122°59.00’
02 AGL B 15 AGL to G OED 114/27 N42°10.00’ W122°28.00’
02 AGL B 15 AGL to H OED 051/37 N42°41.00’ W122°08.00’
02 AGL B 15 AGL to I LMT 005/40 N42°39.00’ W121°07.00’
02 AGL B 15 AGL to J LMT 090/53 N41°53.00’ W120°36.00’
02 AGL B 15 AGL to K LKV 129/58 N41°40.00’ W119°49.00’
02 AGL B 15 AGL to L LLC 261/45 N40°12.50’ W119°32.50’
02 AGL B 15 AGL to M LLC 178/15 N39°53.00’ W118°39.50’
02 AGL B 15 AGL to N LLC 096/11 N40°03.50’ W118°22.00’
02 AGL B 15 AGL to O LLC 092/21 N40°01.00’ W118°09.00’
02 AGL B 15 AGL to P LLC 110/19 N39°56.00’ W118°14.50’
VR ROUTES

Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.

(6) Avoid all towns and airports along route by 1500' AGL or 3 NM.

(7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.

(8) Between B and C fly south of centerline to avoid the town of Petrolia at N40°19'30" W124°17'15".

(9) Between E and F fly south of centerline and maintain 1500' AGL until 20 NM past E to avoid a Bald Eagle Nesting Area southwest of Happy Camp.

(10) Caution: 310' tower 3 NM south of G at N42°07'25" W122°28'38".

(11) Maintain 1500' AGL from 25 NM south until 5 NM east of H over the Sky Lakes Wilderness Area.

(12) Approaching I remain north of centerline and avoid private airport at N42°39'07" W121°19'40".

(13) Between J and K fly south of route centerline to avoid house on west bank of Goose Lake at N41°52' W120°29' and avoid houses on the east side of Upper Lake.

(14) Caution: power lines paralleling route to east between K and L.

FSS Within 100 NM Radius:
ACV, MCC, RNO, RIU

VR-1252

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>BTY 308/30</td>
<td>N37°12.00' W117°07.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>OAL 111/16</td>
<td>N37°50.00' W117°30.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>OAL 339/19</td>
<td>N38°19.00' W117°48.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>MVA 040/19</td>
<td>N38°44.00' W117°32.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>MVA 009/49</td>
<td>N39°18.00' W117°34.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>LLC 113/51</td>
<td>N39°35.00' W117°43.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>LLC 108/34</td>
<td>N39°48.00' W117°58.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>LLC 110/19</td>
<td>N39°56.00' W118°14.50'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

(1) Alternate Entry: B.

(2) Alternate Exit: E, F and G.

(3) Tie-in FSS: Rancho Murieta (RIU). For route scheduling after hours call 800-752-7860.

(4) Reserving this route does not authorize access to NAS Fallon Range MOA's or restricted areas 4816 N/S or 4813. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.

(5) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.

(6) Avoid all towns and airports along route by 1500' AGL or 3 NM.

(7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.

(8) Caution: avoid the Fallon Range VFR corridor and extensive civilian VFR traffic surrounding US Hwy 50 approaching E, between 2000' AGL and 10,500' MSL.

(9) Avoid overflight of Hudson Airport at N39°33' W117°45' approaching F.

FSS Within 100 NM Radius:
RNO

VR-1253

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>MMM 256/28</td>
<td>N36°47.00' W114°51.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>ILC 264/42</td>
<td>N38°22.00' W115°16.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>ILC 276/43</td>
<td>N38°31.00' W115°14.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>ILC 307/56</td>
<td>N39°00.00' W115°07.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>BAM 108/87</td>
<td>N39°48.00' W115°19.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>BAM 137/30</td>
<td>N40°08.00' W116°36.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>MVA 028/71</td>
<td>N39°24.00' W116°57.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline.
TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: B, E, F, G and I.
(2) Alternate Exits: C, E, G and I.
(3) Tie-in FSS: Rancho Murieta (RIU).
(4) Reserving this route does not reserve NAS Fallon Range airspace. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.
(5) Reserving this route does not reserve Nellis AFB Range airspace or the Desert or Reveille MOA’s. Contact the 99th Range Management Office, Nellis AFB, DSN 348-4710, C702-652-4710 for range scheduling. Schedule as far in advance as possible.
(6) Contact Nellis Control on 343.0 (P), 392.15 (S) for clearance into Nellis AFB airspace.
(7) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
(8) Avoid all towns and airports along route by 1500’ AGL or 3 NM.
(9) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
(10) Approaching G, be on the lookout for civilian traffic between 2000’ AGL and 10,500’ MSL along the Fallon Range VFR corridor over US Hwy 50.
(11) Caution: opposite flow traffic on the VR-208 at G.

FSS Within 100 NM Radius:
CDC, RNO

ROUTE DESCRIPTION:
Altitude Data
Pt Fac/Rad/Dist Lat/Long
As assigned to A FJS 061/69 N41°38.00' W121°18.00'
02 AGL B 15 AGL to B LMT 090/53 N41°53.00' W120°36.00'
02 AGL B 15 AGL to C LKV 129/58 N41°40.00' W119°50.00'
02 AGL B 15 AGL to D LLC 293/90 N41°04.00' W118°07.00'
02 AGL B 15 AGL to E LLC 261/45 N40°22.50' W118°14.50'
02 AGL B 15 AGL to F LLC 293/90 N41°04.00' W118°07.00'
02 AGL B 15 AGL to G LLC 293/90 N41°04.00' W118°07.00'
02 AGL B 15 AGL to H LLC 293/90 N41°04.00' W118°07.00'
02 AGL B 15 AGL to I LLC 110/19 N39°56.00' W118°14.50'

TERRAIN FOLLOWING OPERATIONS: Authorized from B to I.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Exit: F.
(2) Tie-in FSS: Rancho Murieta (RIU).
(3) Reserving this route does not reserve the Carson MOA or R-4813 between F and I. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.
(4) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
(5) Avoid all towns and airports along route by 1500’ AGL or 3 NM.
(6) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
(7) Avoid Eagleville airport, 15 NM north of D.
(8) Between B and C fly south of route centerline to avoid house on west bank of Goose Lake at N41°52' W120°29 and avoid houses on the east side of Upper Lake.

FSS Within 100 NM Radius:
ACV, MCC, RNO, RIU

VR-1254

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

VR-1255

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity
VR ROUTES

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

(1) Alternate Entry: B and C.
(2) Alternate Exit: E, G, H and I.
(3) Tie-in FSS: Rancho Murieta (RIU).
(4) Aircraft entering at A or transiting R-2508 airspace are required to see FLIP-Area Planning-AP/1-California-FLT HAZ-R-2508. Contact R-2508 Central Coordinating Facility at C661-277-2508, DSN 527-2508 for entry approval prior to flight.
(5) Reserving this route does not reserve the Ranch, Churchill or Carson MOA's or R-4813. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight.
(6) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
(7) Avoid all towns and airports along route by 1500' AGL or 3 NM.
(8) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
(9) After R-2508 entry and check-in with Joshua Approach, approaching A, check-in on R-2508 low altitude common frequency, 315.9 with callsign, number and type aircraft, and intentions. Monitor 315.9 until exiting R-2508 complex.
(10) Caution: high migratory bird activity between A and B during daylight hours.

(11) Caution: approaching A be alert for 420' antenna at N36-11-33 W118-00-24, and 196' antenna at N36-12-32 W118-00-07.
(12) Avoid overflight of Olancha at A.
(13) Caution: opposite flow traffic on VR-1205 between A and C.
(14) Caution: intensive hang glider activity in the vicinity of Dolomite and northeast shore of Owens Lake between A and B.
(15) Caution: power lines paralleling route between E and F.
(16) Between Points E and F, avoid the town of Schurz by 5 NM laterally.
(17) Caution: 330' tower between E and F at N39-08-30 W119-08-00.
(18) Between E and F, fly west of centerline to avoid the Ranch and Churchill MOA's unless prior entry has been scheduled. However, avoid the town and airport of Yerington to the west by 1500' or 3 NM.
(20) Maintain 1500' AGL from 3 NM south of Lahontan Reservoir until 5 NM southwest of G.
(21) Caution: VFR traffic crossing route above 8000' MSL along main highways west of HZN VORTAC.
(22) At E, avoid the extremely sensitive areas of Silver Springs and Fernley west of centerline, and Hazen to the east.

FSS Within 100 NM Radius:
HHR, MCC, RAL, RNO, RIU

VR-1256

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri)
C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

ROUTE WIDTH - 2 NM either side of centerline.

TERRAIN FOLLOWING OPERATIONS: 5NM beyond B through F.
Special Operating Procedures:
(1) Tie-in FSS: Rancho Murieta (RIU).
(2) Avoid all towns and airports along route by 1500' AGL or 3 NM.
(3) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
(4) Cross Point A at 1500' AGL.
(5) Avoid Hunter MOA complex and the Oak Country Airport north of centerline between A and B.
(6) Avoid the town of Cayucos south of centerline between A and B by 3 NM.
(7) Cross B at 1500' AGL.
(8) Avoid town of Atascadero southeast of B by 3 NM.
(9) California Valley between C and E is an Extreme Noise Sensitive Area. Fly north of centerline from 5 NM west of C to D to avoid a schoolhouse and the town of Simmler.
(10) Caution: at D and east of centerline between D and E, intensive hang glider activity during daylight hours from surface to 10,000' MSL along Temblor Mountain Range.

FSS Within 100 NM Radius:
HHR, NTD, OAK, RAL, VBG

VR-1257

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, Rm 121, NAS Lemoore, CA 93246-5022 DSN 949-1034, C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>BSR 141/10</td>
<td>N36°02.00' W121°34.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>BSR 082/19</td>
<td>N36°08.00' W121°15.00'</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>C</td>
<td>ROM 262/19</td>
<td>N36°11.00' W121°03.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>ROM 301/5</td>
<td>N36°12.00' W120°44.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>FLW 002/13</td>
<td>N35°18.00' W119°47.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>FLW 088/23</td>
<td>N35°00.00' W119°25.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>GMN 038/5</td>
<td>N34°51.00' W118°47.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>H</td>
<td>LHS 356/7</td>
<td>N34°48.00' W118°33.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>I</td>
<td>LHS 107/11</td>
<td>N34°35.00' W118°23.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>J</td>
<td>PMD 150/9</td>
<td>N34°29.00' W118°01.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>K</td>
<td>EDW 141/45</td>
<td>N34°19.00' W117°19.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>L</td>
<td>HEC 194/26</td>
<td>N34°25.00' W116°43.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>M</td>
<td>TNP 251/39</td>
<td>N34°04.00' W116°33.05'</td>
</tr>
</tbody>
</table>

15 AGL to N TNP 217/24 N33°52.00' W116°08.55' |
02 AGL B 15 AGL to O TRM 073/18 N33°39.00' W115°48.00' |
10 AGL B 15 AGL to P JLI 350/11 N33°19.00' W116°34.00' |
02 AGL B 15 AGL to Q JLI 143/5 N33°04.00' W116°33.00' |
02 AGL B 15 AGL to R JLI 084/29 N33°04.00' W116°01.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to R.

ROUTE WIDTH - 2 NM either side of centerline from A to M; 2 NM left and 1 NM right of centerline from M to O; 2 NM either side of centerline from O to R.

Special Operating Procedures:
(1) Weather minimums 3000' ceiling and 5 miles visibility.
(2) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of Sunset and Sunrise.
(3) Tie-in FSS: Fresno (FAT).
(4) Alternate Entry: E, F, H, K and P.
(5) Alternate Exit: E, H, K, O and Q.
(6) Pilots exiting route at Point R must obtain target times in R-2510 prior to flying route.
(7) Avoid the Monastery in Lucia near Point A.
(8) CAUTION: High density Army Helicopter OPS in and around R-2513 between Points A and B. Cross Points A and B at 1500' AGL.
(9) Maintain centerline between Points B and C.
(10) Avoid King City enroute to Point C by 3 NM.
(11) Avoid airfield and buildings 1 NM southeast of Parkfield between Points D and E.
(13) Cross Hwy 14 between Points I and J at 1500' AGL.
(14) Avoid Aqua Dulce Airport between Points I and J by 3 NM.
(15) Avoid Crystal Airport area west of Point J.
(16) Cross I-15 between Points J and K at 1500' AGL.
(17) Maintain route centerline between Points J and K to avoid glider activity near Crystal Airport and the Table Mountain Observatory 4 miles west of Wrightwood.
(18) When exiting at Point K, beware of aircraft descending from FL 240 to 8000' outbound on the Palmdale 104 radial.
(19) Avoid Morongo Valley at Point M.
(20) Cross Point O at 1500' AGL.
(21) CAUTION: Beware extensive glider operations between Points O and Q.
(22) Between Points O and P remain on or left of centerline and cross Hwy between Points O and P at 1500' AGL.
(23) Remain completely east of Hot Springs Mountain Ridge Line (near Point P) to avoid extremely heavy glider traffic from Warner Springs Ranch Airport.
(24) Between Points Q and R avoid Carroll Airport and Aqua Caliente Springs Airport.
(25) CAUTION:
(a) 110' tower 2 NM east of Point A on route centerline;
(b) 114' tower 5 NM southeast of Point E on route centerline;
(c) 120' tower at Point G;
VR ROUTES

(d) 199’ tower at Point K (N34-24-01 W117-20-36);
(e) 199’ tower 1.5 NM northeast of Point M (N34-03-54 W116-32-42);
(f) 140’ tower 4.5 NM East of Point O.

FSS Within 100 NM Radius:
HHR, NTD, NZY, OAK, RAI, RIU, SAN, VBG

VR-1259

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>TPH 074/32</td>
<td>N38°01.00' W116°22.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>TPH 083/61</td>
<td>N37°51.00' W115°46.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>ILC 214/41</td>
<td>N37°49.00' W115°03.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>ILC 220/11</td>
<td>N38°09.00' W114°35.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>BQU 101/76</td>
<td>N40°10.00' W114°18.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>BQU 076/45</td>
<td>N40°43.00' W114°46.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>BQU 128/13</td>
<td>N40°35.00' W115°36.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>BAM 099/32</td>
<td>N40°22.00' W116°16.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>I</td>
<td>LLC 073/24</td>
<td>N40°08.00' W118°04.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>J</td>
<td>LLC 092/21</td>
<td>N40°01.00' W118°09.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>K</td>
<td>LLC 110/19</td>
<td>N39°56.00' W118°14.50'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to I; 2 NM either side of centerline from I to K.

Special Operating Procedures:

(1) Alternate Entry: F.
(2) Alternate Exit: F, I and J.
(3) Tie-in FSS: Rancho Murieta (RIU).
(4) Avoid all towns and airports along route by 1500‘ AGL or 3 NM.
(5) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
(6) Reserving this route does not reserve Nellis AFB Range airspace or the Desert or Reveille MOA’s. Contact the 99th Range Management Office, Nellis AFB, DSN 348-4710, C702-652-4710 for range scheduling. Schedule as far in advance as possible. Contact Nellis Control on 343.0 (P), 392.15 (S) for clearance into Nellis AFB airspace.

(7) Reserving this route does not reserve Gandy MOA. Contact the 388th RANS at DSN 777-4401, C801-777-4401 for airspace entry authorization prior to flight. Contact Clover Control on 343.0 (P), 392.15 (S) for clearance into Nellis AFB airspace.

(8) Caution: numerous crossing routes between A and C, and F and I.

(9) Reserving this route does not reserve NAS Fallon Range airspace. Contact NAS Fallon Range Department, DSN 890-2416/2418, C775-426-2416/2418, for airspace entry prior to flight. Contact Desert Control on 126.6 or 322.35 prior to Range entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.

(10) Between H and I, avoid ranch at N40-18-30 W116-35-00 by 1500’ or 3 NM.

FSS Within 100 NM Radius:
CDC, RNO

VR-1260

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>TPH 075/28</td>
<td>N38°01.00' W116°27.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>TPH 072/61</td>
<td>N38°03.00' W115°45.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>TPH 059/84</td>
<td>N38°22.00' W115°19.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>BAM 125/126</td>
<td>N39°00.00' W115°07.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>BAM 108/87</td>
<td>N39°48.00' W115°19.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>BAM 139/33</td>
<td>N40°05.00' W116°35.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>BAM 187/31</td>
<td>N40°05.00' W117°09.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>LLC 075/22</td>
<td>N40°07.00' W118°06.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>I</td>
<td>LLC 092/21</td>
<td>N40°01.00' W118°09.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>J</td>
<td>LLC 110/19</td>
<td>N39°56.00' W118°14.50'</td>
</tr>
</tbody>
</table>
**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH - 2 NM either side of centerline.**

**Special Operating Procedures:**

1. Alternate Entry: E.
2. Alternate Exit: E and H.
4. Avoid all towns and airports along route by 1500' AGL or 3 NM.
5. Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
6. Reserving this route does not reserve Nellis AFB Range airspace or the Reveille MOA. Contact the 99th Range Management Office, Nellis AFB, DSN 348-4710, C702-652-4710 for range scheduling. Schedule as far in advance as possible. Contact Nellis Control on 343.0 (P), 392.15 (S) for clearance into Nellis AFB airspace.
7. Reserving this route does not reserve NAS Fallon Range airspace. Contact NAS Fallon Range Department, DSN 890-2416/2418, C775-426-2416/2418 for airspace entry authorization prior to flight. Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.

**FSS Within 100 NM Radius:**
CDC, RNO

**VR-1261**

**ORIGINATING ACTIVITY:** Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Daylight hours, OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A ENI 273/48</td>
<td>N39°19.00' W124°15.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to B ENI 311/48</td>
<td>N39°43.00' W123°50.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to C RBL 243/49</td>
<td>N39°58.00' W123°17.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to D RBL 270/43</td>
<td>N40°19.00' W123°08.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to E FJS 124/32</td>
<td>N41°01.00' W122°23.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to F FJS 071/60</td>
<td>N41°26.00' W121°28.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to G FMG 331/94</td>
<td>N41°04.00' W120°07.00'</td>
<td></td>
</tr>
</tbody>
</table>

**FSS Within 100 NM Radius:**
ACV, MCC, OAK, RNO, RIU

**VR-1262**

**ORIGINATING ACTIVITY:** Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Daylight hours, OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A BSR 151/32</td>
<td>N35°40.00' W121°30.00'</td>
</tr>
</tbody>
</table>

3-159
VR ROUTES

02 AGL B 15 AGL to B PRB 219/21 N35°28.00' W120°59.00'
15 AGL to C AVE 196/19 N35°23.00' W120°11.00'
02 AGL B 15 AGL to D EHF 211/21 N35°14.00' W119°24.00'
10 AGL B 15 AGL to E GMN 323/15 N35°02.00' W118°58.00'
02 AGL B 15 AGL to F GMN 079/13 N34°47.00' W118°36.00'
02 AGL B 15 AGL to G EDW 253/31 N34°56.00' W118°21.00'
02 AGL B 15 AGL to H GMN 040/32 N35°06.00' W118°19.00'
02 AGL B 15 AGL to I EDW 313/23 N35°18.00' W118°00.00'
02 AGL B 15 AGL to J NID 295/15 N35°51.00' W117°56.00'
02 AGL B 15 AGL to K BTY 226/69 N36°15.00' W118°00.00'
02 AGL B 15 AGL to L BTY 235/49 N36°32.00' W117°43.00'
02 AGL B 15 AGL to M BTY 282/50 N37°11.00' W117°40.00'
02 AGL B 15 AGL to N OAL 176/32 N37°29.00' W117°55.00'

TERRAIN FOLLOWING OPERATIONS: C through N.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

1. Alternate Entry: B, F, H, I and K.
4. Avoid all towns and airports along route by 1500' AGL or 3 NM.
5. Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
6. Ensure Hunter Low MOA scheduling deconfliction when scheduling this route with COMSTRKFIGHTWINGPAC.
7. Scheduling this route does not authorize entry into the R-2508 complex. Contact the R-2508 Central Coordinating Facility at DSN 527-2508 or C661-277-2508 for entry authorization and area familiarization briefing. Aircrews transiting the R-2508 complex are required to review FLIP-Area Planning-AP/1-California-Flight Hazards-R-2508, prior to flight. Segregation of air carrier operations in the Inyokern Corridor inside the Isabella MOA may result in denial of MOA airspace to MTR users. Contact Joshua Approach Control prior to entry into the Isabella MOA for entry approval.
8. Between A and B, fly west of centerline to avoid the California Sea Otter Refuge and the town of Cambria by 3 NM.
9. Cross B at 1500' AGL. Maintain 1500' AGL to C - Extremely Noise Sensitive Area. Fly north of centerline from B to 10 NM east of B to avoid the town of Cayucos, then cross over and stay south of centerline until east of Hwy 101 to avoid the town of Atascadero.
10. Avoid the Machesna Wilderness and Beartrap Canyon condor study areas south of C by 3 NM.
11. From 5 NM to 20 NM east of C, fly south of centerline to avoid the Extremely Noise Sensitive Area of California Valley, the town of Simmler, and a schoolhouse.
12. Caution: 20 NM east of C, intensive hang glider activity during daylight hours from surface to 10,000 MSL along Temblor Mountain Range.
14. At D, fly north of centerline to avoid the towns of Taft and Ford City.
15. Caution: numerous towers located between D and I:
   c. 235' windmills east of G-H centerline at N35-02 W118-19.
   d. 196' tower southeast of H-I centerline at N35-07-30 W118-12-30.
16. Caution: numerous airports located between D and I:
   a. Taft at N35-08-30 W119-26-00.
   b. Tejon Ag at N34-59-30 W118-55-00.
   c. Quail Lake at N34-46-30 W118-44-00.
   d. Skyotee at N34-50 W118-25.
   e. Lloyd at N34-55 W118-19.
   f. Mountain Valley at N35-06-30 W118-26-00.
   g. Tehachapi at N35-08-30 W118-26-00.
   h. Mojave at N35-04-00 W118-09-00 (avoid by 3000' AGL or 5 NM).
   i. California City at N35-09-30 W118-01-00 (intensive parachuting activity surrounding California City, surface to 15,000').
17. After R-2508 entry and check-in with Joshua Approach, check-in on R-2508 low altitude common frequency, 315.9 with callsign, number and type aircraft, and intentions. Monitor 315.9 until exiting R-2508 Complex.
18. Caution: high migratory bird activity between G and L during daylight hours.
19. Caution: high density, low altitude civil and military air traffic between G and I.
20. Avoid unauthorized entry into Inyokern VFR corridor between I and J.
21. Avoid unauthorized entry into R-2505 between I and K.
22. Caution: approaching K be alert for 420' antenna at N36-11-33 W119-00-24, and 196' antenna at N36-12-32 W118-00-07.
23. Avoid overflight of Olancha at K.

FSS Within 100 NM Radius:
HHR, NTD, NZY, OAK, RAL, SAN, VBG

VR-1264

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity
HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | OAL 176/32 | N37°29.00' W117°55.00'
02 AGL B 15 AGL to | B | OAL 207/21 | N37°45.00' W118°05.00'
02 AGL B 15 AGL to | C | OAL 336/19 | N38°19.00' W117°49.00'
02 AGL B 15 AGL to | D | MVA 040/19 | N38°44.00' W117°42.00'
02 AGL B 15 AGL to | E | MVA 009/49 | N39°18.00' W117°34.00'
02 AGL B 15 AGL to | F | LLC 113/51 | N39°35.00' W117°43.00'
02 AGL B 15 AGL to | G | LLC 108/34 | N39°48.00' W117°58.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 6 NM either side of centerline.

Special Operating Procedures:

2. Avoid all towns and airports along route by 1500' AGL or 3 NM.
3. Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
4. Reserving this route does authorize access into the Fallon Range Complex, R-4816, or R-4813. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for range entry authorization.
5. Between A and B, fly east of centerline to avoid the noise sensitive valley of Fish Lake, and the private airports of Dyer (N37-37 W118-00) and Circle L (N37-43-30 W118-04-30).
7. Caution: between B and 20 NM north of C, watch for aircraft on multiple crossing low levels, and merging traffic from the right at C on VR-1252 route.
8. Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry at D. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA’s until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
9. Caution: avoid the Fallon Range VFR corridor and extensive civilian VFR traffic surrounding US Hwy 50 approaching E, between 2000’ AGL and 10,500’ MSL.

FSS Within 100 NM Radius:
RIU, RNO

VR-1265

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-5157, C858-577-5157.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | RZS 049/23 | N34°41.00' W119°21.00'
02 AGL B 15 AGL to | B | GMN 121/4 | N34°45.00' W118°48.00'
10 AGL B 15 AGL to | C | GMN 079/13 | N34°47.00' W118°36.00'
10 AGL B 15 AGL to | D | PMD 245/16 | N34°35.00' W118°23.00'
10 AGL B 15 AGL to | E | PMD 150/9 | N34°29.00' W118°01.00'
10 AGL B 15 AGL to | F | PMD 102/42 | N34°19.00' W117°19.00'
02 AGL B 15 AGL to | G | DAG 199/37 | N34°27.00' W117°00.00'
02 AGL B 15 AGL to | H | DAG 160/7 | N34°51.00' W116°34.00'
02 AGL B 15 AGL to | I | GFS 238/52 | N34°52.00' W116°11.00'
02 AGL B 15 AGL to | J | GFS 310/25 | N35°28.00' W115°28.00'
02 AGL B 15 AGL to | K | EED 288/20 | N34°57.00' W114°49.00'
02 AGL B 15 AGL to | L | TNP 042/4 | N34°09.00' W115°42.00'
02 AGL B 15 AGL to | M | TNP 109/26 | N33°52.00' W115°20.00'
02 AGL B 15 AGL to | N | BLH 167/17 | N33°19.00' W114°46.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

1. Weather minimums 3000' and 5 miles.
2. Avoid Conover Airport between A and B, Aqua Duke Airport between D and E, Hesperia Air Lodge at F, Hart Mine Airport between J and K, and Desert Center Airport between M and N by 2000’ or 3 NM.
3. Fly on or north of centerline between E and F to avoid Table Mountain Observatory at N34-23.0 W117-39.0, and glider activity near Crystal Airport.
4. Cross I-15 between E and F at 1500’ AGL.
5. Comply with R-2501 restrictions when exiting at H or L.
6. Contact Los Angeles Center on 285.6 for IFR clearance when exiting R-2501.
VR ROUTES

(7) Contact Yuma Approach Control on 314.0 or 374.8 for IFR clearance when exiting at Point N.
(8) Alternate Entry: H and L.
(9) Alternate Exit: H and L.
(10) Avoid Newberry Springs N34-49.5 W116-38.3 by 1 NM (Noise Sensitive Area).
(12) Separation Criteria—scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
(13) CAUTION: Tower located at N35-29-27 W115-33-27 between Points I and J 4.5 NM northwest of Point J.

FSS Within 100 NM Radius:
HHR, PRC, RAL, RNO, SAN

VR-1266

ORIGINATING ACTIVITY: Commanding Officer, Yuma MCAS, Box 99160 Yuma, AZ 85369-9160 DSN 269-2326/2077, C928-269-2326/2077.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>BZA 331/12</td>
<td>N32°58.00' W114°40.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>BLH 233/22</td>
<td>N33°27.00' W115°10.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>BLH 253/30</td>
<td>N33°34.00' W115°21.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>TRM 084/29</td>
<td>N34°34.00' W115°35.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>TRM 097/23</td>
<td>N34°30.00' W115°44.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>F</td>
<td>JLI 350/11</td>
<td>N33°19.00' W116°34.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>G</td>
<td>JLI 129/10</td>
<td>N33°00.00' W116°28.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>H</td>
<td>JLI 085/32</td>
<td>N33°03.00' W115°58.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 2 NM either side of centerline from C to F; 1 NM right and 2 NM left of centerline from F to G; 2 NM either side of centerline from G to H.

Special Operating Procedures:
(1) Alternate Entry: B.
(2) Alternate Exit: E and F.
(3) Comply with R-2507/2510 restrictions/scheduling.
(4) Remain clear of Imperial National Wildlife Refuge below 3000' AGL between A and B.
(5) Remain below 7000' MSL between E and F and between F and G.
(6) CAUTION Point E is within R-2507W. Prior to route commencement contact Yuma Range Control 276.0 for authorization to transit Point E.
(7) Contact Yuma Range Control on 276.0 prior to entering and exiting R-2507. Contact Los Angeles ARTCC on 291.7 prior to exiting R-2510, for return to IFR clearance.
(8) Extensive hang glider activity in the Warner Springs, Mount Laguna to San Felipe Valley and Hot Springs Area. Aggressive lookout doctrine required between Points F and G. Turn prior to (east of) Point F and remain east of centerline between Points F and G. Do not over-fly Warner Springs Airfield.
(9) Do not overfly Aqua Caliente Springs Airport (N32-58 W116-18) below 3000' AGL.
(10) Tie-in FSS requires confirmation of route usage a minimum of 2 hours prior to scheduled entry time.
(11) High volume of rotary wing and FW traffic SFC-1000' AGL between A and C throughout the entire year.
(12) Towers and powerlines from 120' to 300' AGL from the north end of the Salton Sea to Niland to Brawley within 2 NM of Hwy 111.
(13) Avoid private airstrip located at N33-28 W115-53.
(14) CAUTION uncharted 100' tower in vicinity of N33 30.18 W115 16.29.

FSS Within 100 NM Radius:
HHR, RAL, RNO, SAN

VR-1267

ORIGINATING ACTIVITY: Commanding Officer, Yuma MCAS, Box 99160 Yuma, AZ 85369-9160 DSN 269-2326/2077, C928-269-2326/2077.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>BZA 331/12</td>
<td>N32°58.00' W114°40.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>B</td>
<td>BLH 233/22</td>
<td>N33°27.00' W115°10.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>C</td>
<td>BLH 290/20</td>
<td>N33°47.00' W115°06.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>D</td>
<td>PKE 114/13</td>
<td>N34°58.00' W114°29.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL to</td>
<td>E</td>
<td>PKE 076/46</td>
<td>N34°05.00' W113°46.00'</td>
</tr>
</tbody>
</table>
TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to D; 4 NM either side of centerline from D to E; 2 NM either side of centerline from E to I.

Special Operating Procedures:
1. Remain clear of Imperial National Wildlife Refuge below 3000' AGL between A and B.
2. Alternate Exits: C, G, and H.
4. Contact Yuma Range Control on 276.0 while within the confines of R-2301 for IFR return clearance.
5. Tie-in FSS requires confirmation of route usage a minimum of 2 hours prior to scheduled entry time.
6. High volume of rotary wing and FW traffic SFC-1000' AGL between A and C throughout the entire year.
7. Avoid the town of Hope (N33°43.3 W113°42.0) by 1 NM or 1500' minimum AGL.
8. Alternate Exit Point: G is an alternate exit point only when used in conjunction with entry into R-2308 A/B. Remain at or below 1500' AGL until established in R-2308 A/B.
9. Alternate Exit Point: H, exit at or above 1000' AGL to avoid Noise Sensitive Area and crop dusting activities to the south.
10. Exit Point I will be used only in conjunction with entry into R-2301.
11. CAUTION: Numerous crop dusting activities in vicinity of farmlands between D and E. Remain at or above 1000' AGL between D and E.
12. Tower located at N32°43-36 W113°44-47 near Point I up to 315' AGL.

FSS Within 100 NM Radius:
PRC, RAL, RNO, SAN

VR-1268

ORIGINATING ACTIVITY: Commanding Officer, Yuma MCAS, Box 99160 Yuma, AZ 85369-9160 DSN 269-2326/2077, C928-269-2326/2077.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data      Pt Fac/Rad/Dist Lat/Long
As assigned to    A BZA 331/12 N32°58.00' W114°40.00'
02 AGL B 15 AGL to B BLH 233/22 N33°27.00' W115°10.00'
02 AGL B 15 AGL to C BLH 290/20 N33°47.00' W115°06.00'
02 AGL B 15 AGL to D PKE 114/13 N33°58.00' W114°29.00'
02 AGL B 15 AGL to E PKE 076/46 N34°05.00' W113°46.00'
02 AGL B 15 AGL to F DRK 221/40 N34°19.00' W113°08.00'

VR ROUTES
VR ROUTES

02 AGL B 15 AGL to G DRK 251/25 N34°40.00' W112°59.00'
02 AGL B 15 AGL to H DRK 282/34 N34°57.00' W113°06.50'
02 AGL B 15 AGL to I EED 075/31 N34°46.00' W113°51.00'
02 AGL B 15 AGL to J EED 081/28 N34°43.00' W113°55.00'
02 AGL B 15 AGL to K PKE 076/46 N34°05.00' W113°46.00'
02 AGL B 15 AGL to L BLH 068/54 N33°43.00' W113°42.00'
02 AGL B 15 AGL to M GBN 269/40 N33°06.00' W113°27.00'
02 AGL B 15 AGL to N BZA 077/42 N32°45.00' W113°46.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to D;
4 NM either side of centerline from D to E; 1 NM left and 4 NM right of centerline from E to H; 1 NM either side of centerline from H to I; 2 NM either side of centerline from I to N.

Special Operating Procedures:
(1) Alternate Exit: L, M and N.
(2) Exit L is an Alternate Exit only when used in conjunction with entry into restricted areas R-2308 A/B. Remain at or below 1500' AGL until established within R-2308 A/B.
(3) Alternate Exit M, exit at or above 1000' AGL to avoid Noise Sensitive Area and crop dusting activities to the south.
(4) Exit Point N will be used only in conjunction with entry into R-2301.
(5) Comply with R-2301 restrictions/scheduling.
(6) Contact Yuma Range Control on 276.0 while within the confines of R-2301 for IFR return clearance.
(7) CAUTION: Numerous crop dusting activities in vicinity of farm lands between M and N. Remain at or above 1000' AGL between M and N.
(8) Tie-in FSS requires confirmation of route usage a minimum of 2 hours prior to scheduled entry time.
(9) High volume of rotary and fixed wing traffic SFC-1000' AGL between A and C.
(10) Critical Bald Eagle breeding and nesting areas in the vicinity of Alamo Lake (N34-16.0 W113-34.0), below the Baghdad 1 MOA and to the north towards Mohan Peak (Point H) mid-Dec through mid-June. Recommended 1500' AGL when crossing Aquarius Mountains between H and I.
(11) Tower located at N32-43-36 W113-44-47 near Point N up to 315' AGL.

FSS Within 100 NM Radius:
PRC, RAL, RNO, SAN

VR-1293

ORIGINATING ACTIVITY: COMMANDER 412 TW, 412 OSS/OSOF, 100 East Sparks Road, Edwards AFB, CA 93523-6460 DSN 527-2515, C661-277-2515.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A LHS 011/9 N34°48.70' W118°30.00'
SFC B 15 AGL to B EDW 273/31 N35°07.00' W118°21.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) This route authorized only in direct support of AFFTC’s test program.
(2) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N35-06.1 W118-25.4; N35-08.1 W118-26.4.
(3) Special Coordination Procedures-Route conflicts with VR-1257 between points G-H, VR-1262 between F-H, SR-390 between A-B, IR-200 between E-I, and IR-425 between AD-AH.
(4) Segregation of air carrier operations in the Isabella MOA may result in denial of MOA airspace to MTR users.
(5) Users must schedule into complex MOA/Restricted Areas when these areas are active:
   (a) R-2508 MOAs-Contact CCF at DSN 527-2508.
   (b) R-2515-Contact AFFTC scheduling at DSN 527-4110/3940.
(6) Contact Joshua Approach on 335.6/134.05 immediately upon entering the Isabella MOA.
(7) Avoid Mojave Airport (N35-03.6 W118-09.1) Class D airspace when exiting at point B.
(8) Victor Airways crosses route 7 NM northeast of Point A MEA 10,000 MSL.
(9) Route Conflicts: VR-1206/VR-1265/VR-1257 all cross west to east at the Entry Point; IR-200/IR-211/IR-425 have same ground track with IR-425 being opposite direction; VR-1262 crosses from SW to NE.
(10) Obstructions:
   (a) Use caution crossing the R-2508 boundary, numerous windmills of various heights with some in excess of 350' AGL.
   (b) 199' unlit tower, difficult to see, N34-52.6 W118-29.5
   (c) 200' lit tower N35-07.84 W118-21.02.
   (d) 106' unlit tower with small building at N35-02.63 W118-25.54.
   (e) 200' unlit tower at N35-00.46 W118-24.76.
   (f) 200' unlit tower and building at N34-59.77 W118-26.06.
   (g) 200' unlit tower at N34-59.46 W118-27.41.

FSS Within 100 NM Radius:
HHR, RAL, RNO, SAN
VR ROUTES

VR-1300

ORIGINATING ACTIVITY: 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.

SCHEDULING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648, DSN 728-4607/2172, C208-828-4607/2172/4631. Scheduling request 0730-1630L, Mon-Fri. Must be scheduled minimum 24 hours prior to entry.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 6 NM right of centerline from B to C; 7 NM either side of centerline from C to D; 4 NM either side of centerline from D to G; 8 NM left and 5 NM right of centerline from G to H; 8 NM either side of centerline from H to K; 5 NM either side of centerline from K to L; 4 NM either side of centerline from X to Y.

Special Operating Procedures:

(1) Route crossing at several Points, be especially vigilant for crossing traffic.

(2) Due to bird strike potential, minimum altitude from 5 NM prior to and 5 NM past Point E is 1000' AGL.

(3) Avoid the following Noise Sensitive Areas by 1500' AGL or 3 NM:

- City of Rocks (N42-05-00 W113-43-00);
- Marys River area (N41-39-00 W115-06-00, N41-33-00 W115-20-00, N41-23-00 W115-14-00, N41-28-00 W114-59-00);
- Mountain City (N41-50-30 W115-57-30);
- Ranch (N41-43-50 W115-58-50);
- Ward Ranch/uncharted airport (N42-03-00 W113-29-07);
- Shoshone Ice Caves (N43-10-00 W114-20-30);
- Richfield area (N43-07-00 W114-11-30);
- Henry area (N41-42-10 W114-49-00).

(4) Avoid all airports by overflight of 1500' AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00), (N41-26-00 W115-47-00), (N41-39-00 W114-49-50) (N43-08-46 W113-22-46).

(5) Uncharted obstructions:

- Tower 190' AGL (N43-17-30 W113-11-50);
- Tower 100' AGL (N42-35-24 W113-11-50);
- Tower 75' AGL (N42-30-00 W113-10-00) on top of hill;
- Tower 200' AGL (N43-09-45 W114-19-50);
- Tower 250' AGL (N43-18-49 W115-18-36);
- Tower 70' AGL (N42-02-58 W113-22-46).

(6) All turn points are considered Alternate Entry/Exit points.

FSS Within 100 NM Radius:

BOI

VR-1301

ORIGINATING ACTIVITY: 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.

SCHEDULING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648, DSN 728-4607/2172, C208-828-4607/2172/4631. Scheduling request 0730-1630L, Mon-Fri. Must be scheduled minimum 24 hours prior to entry.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.
VR ROUTES

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route crossing at several points, be especially vigilant for crossing traffic.

(2) Noise Sensitive Areas: Overfly at 1500' AGL or avoid by 3 NM. Buildings (N42-15.0 W118-30.0), (N42-45.0 W118-28.0), (N43-35.0 W118-33.0).

(3) Avoid all airports by overflight by 1500' AGL or 3 NM. Uncharted airports: (N42-45.0 W118-28.0) and (N43-53.1 W119-17.0).

(4) Uncharted obstructions: None above 100' AGL.

(5) Ultralight activity: (N44-10.0 W118-14.0).

(6) All turn points are entry and exit points.

(7) Exit Point D does not constitute clearance into Owyhee MOA.

(8) Route bisects JUNIPER LOW MOA, monitor 271.15 between points D and F for deconfliction. 173FW and 124FW scheduling personnel will verbally deconflict active airspace prior to scheduling approval.

FSS Within 100 NM Radius:

BOI, MMV, RNO

VR-1302

ORIGINATING ACTIVITY: 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.

SCHEDULING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648, DSN 728-4607/2172, C208-828-4607/2172/4631. Scheduling request 0730-1630L, Mon-Fri. Must be scheduled minimum 24 hours prior to entry.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>BKE 133/29</td>
<td>N44°25.00' W117°30.07'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>BOI 258/105</td>
<td>N43°41.00' W118°36.07'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>REO 338/29</td>
<td>N43°04.00' W117°54.07'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>REO 125/30</td>
<td>N42°11.00' W117°28.07'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>REO 098/43</td>
<td>N42°15.60' W117°00.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route crossing at several points, be especially vigilant for crossing traffic.

(2) Noise Sensitive Areas: Overfly at 1500' AGL or avoid by 3 NM. Buildings (N42-46.0 W117-53.0).
TERRAIN FOLLOWING OPERATIONS: Authorized the entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline from B to F; 5 NM left and 8 NM right of centerline from F to G; 4 NM either side of centerline from G to J; 7 NM either side of centerline from J to K; 6 NM left and 5 NM right of centerline from K to L; 5 NM either side of centerline from L to M; 4 NM either side of centerline from X to Y.

Special Operating Procedures:
(1) Route crossing at several points, be especially vigilant for crossing traffic.
(2) Due to bird strike potential, minimum altitude between 5 NM prior to and 5 NM past Point I is 1000’ AGL.
(3) Avoid the following Noise Sensitive Areas by 1500’ AGL or 3 NM:
   (a) City of Rocks (N42-05-00 W113-43-00);
   (b) Marys River area (N41-39-00 W115-06-00, N41-33-00 W115-20-00, N41-23-00 W115-14-00, N41-28-00 W114-59-00);
   (c) Mountain City (N41-50-30 W115-57-30);
   (d) Ranch (N41-43-50 W115-58-50);
   (e) Ward Ranch/UNCHARTED airport (N42-03-00 W113-29-07);
   (f) Shoshone Ice Caves (N43-10-00 W114-20-30);
   (g) Richfield area (N43-07-00 W114-11-30);
   (h) Henry area (N41-42-10 W114-49-00).
(4) Avoid all airports by overflight of 1500’ AGL vertically or 3 NM laterally: UNCHARTED airports (N41-55-30 W114-07-00, N41-26-00 W115-47-00, N43-08-46 W115-32-24).
(5) Uncharted obstructions:
   (a) Tower 190’ AGL (N43-17-30 W113-11-50);
   (b) Tower 100’ AGL (N42-35-24 W113-11-50);
   (c) Tower 75’ AGL (N42-30-00 W113-10-00) on top of hill;
   (d) Tower 200’ AGL (N43-09-45 W114-19-50);
   (e) Tower 250’ AGL (N43-18-49 W115-18-36);
   (f) Tower 70’ AGL (N42-02-58 W113-22-46).
(6) All turn points are considered Alternate Entry/Exit points.

FSS Within 100 NM Radius:
BOI

VR-1304

ORIGINATING ACTIVITY: 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.

SCHEDULING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648, DSN 728-4607/2172, C208-828-4607/2172/4631. Scheduling request 0730-1630L, Mon-Fri. Must be scheduled minimum 24 hours prior to entry.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 130 MSL to</td>
<td>A</td>
<td>BOI 070/46</td>
<td>N43°35.50' W115°08.30'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>BOI 057/98</td>
<td>N43°59.20' W114°00.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>PIH 300/65</td>
<td>N43°39.00' W113°40.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>PIH 298/55</td>
<td>N43°31.00' W113°32.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>PIH 295/40</td>
<td>N43°18.50' W113°19.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>F</td>
<td>PIH 257/26</td>
<td>N42°54.00' W113°14.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>G</td>
<td>PIH 224/28</td>
<td>N42°38.50' W113°12.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>H</td>
<td>PIH 203/42</td>
<td>N42°19.80' W113°15.70'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>I</td>
<td>BYI 120/37</td>
<td>N42°07.00' W113°18.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>J</td>
<td>BYI 153/32</td>
<td>N42°03.00' W113°14.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>JJ</td>
<td>BYI 182/43</td>
<td>N41°54.50' W114°12.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>K</td>
<td>BOI 150/130</td>
<td>N41°26.00' W115°33.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>L</td>
<td>BOI 163/117</td>
<td>N41°36.50' W116°12.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>M</td>
<td>BOI 185/109</td>
<td>N41°52.00' W117°06.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>N</td>
<td>BOI 196/75</td>
<td>N42°30.00' W117°06.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>O</td>
<td>BOI 206/59</td>
<td>N42°50.00' W117°06.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>K1</td>
<td>BOI 150/130</td>
<td>N41°26.00' W115°33.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>X</td>
<td>BOI 149/119</td>
<td>N41°37.00' W115°33.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>Y</td>
<td>BOI 146/97</td>
<td>N42°00.00' W115°33.50'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM either side of centerline from A to F; 4 NM either side of centerline from F to I; 5 NM left and 8 NM right of centerline from I to J; 8 NM either side of centerline from J to M; 5 NM either side of centerline from M to O; 4 NM either side of centerline from X to Y; Alternate Exit: Y, 8 NM either side of centerline from K1 to X.

Special Operating Procedures:
(1) Route crossing at several Points, be especially vigilant for crossing traffic.
(2) Due to bird strike potential, minimum altitude from 5 NM prior to and 5 NM past Point G is 1000’ AGL.
(3) Noise Sensitive Areas: 1500’ AGL minimum altitude from 5 NM prior to and 5 NM past Galena Highway (located between Points A and B).
(4) Avoid the following Noise Sensitive Areas by 1500’ AGL or 3 NM:
   (a) City of Rocks (N42-05-00N W113-43-00).
   (b) Marys River area (N41-39-00N W115-06-00, N41-33-00N W115-20-00, N41-23-00N W115-14-00, N41-28-00W114-59-00).
   (c) Mountain City (N41-50-30W115-57-30).
   (d) Ranch (N41-43-50W115-58-50).
   (e) Ward Ranch/UNCHARTED airport (N42-03-00W113-29-07).

Altitude Data Pt Fac/Rad/Dist Lat/Long
01 AGL B 15 AGL to X BOI 149/119 N41°37.00' W115°33.50'
01 AGL B 15 AGL to Y BOI 146/97 N42°00.00' W115°33.50'
VR ROUTES

(f) Craters of the Moon National Monument (N43-27-45 W113-33-00).
(g) Henry area (N41-42-10 W114-49-00).

(5) Helicopter ski operations in the Boulder and Pioneer Mountains (east of W114-30-00) are conducted in daylight hours from 1 Dec to 30 Apr. Maintain 1500’ AGL minimum altitude between Points A and B during this time frame.

(6) Avoid all airports by overflight of 1500’ AGL vertically or 3 NM laterally. Uncharted airports (N41-55-30 W114-07-00), (N41-26-00 W115-47-00), (N41-39-00 W114-49-50).

(7) Uncharted obstructions:
(a) Tower 190’ AGL (N43-17-30 W113-11-30);
(b) Tower 100’ AGL (N42-35-14 W113-11-30);
(c) Tower 75’ AGL (N42-30-00 W113-10-00);
(d) Tower 70’ AGL (N42-02-58 W113-22-46).

(8) All turn points are considered alternate entry/exit points.

(9) Avoid Big Wood River (N43-19-36 W114-19-13), noise sensitive area. Overfly at or above 3000’ AGL or avoid 5 NM.

FSS Within 100 NM Radius:
BOI, MMV, RNO

VR-1305

ORIGINATING ACTIVITY: 124 WG, Gowen Field, Boise, ID 83705 DSN 422-5348, C208-422-5348.

SCHEDULING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648, DSN 728-4607/2172, C208-828-4607/2172/4631. Scheduling request 0730-1630L, Mon-Fri. Must be scheduled minimum 24 hours prior to entry.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 8 NM either side of centerline from C to G; 5 NM left and 8 NM right of centerline from G to H; 4 NM either side of centerline from H to K; 8 NM either side of centerline from K to P; 4 NM either side of centerline from X to Y.

Special Operating Procedures:
(1) Route crossing at several points, be especially vigilant for crossing traffic.
(2) Due to bird strike potential, minimum altitude from 5 NM prior to 5 NM past Point G is 1000’ AGL.
(3) Noise Sensitive Areas: 1500’ AGL minimum altitude from 5 NM prior to 5 NM past Galena Highway (located between Points O and P).
(4) Avoid the following Noise Sensitive Areas by 1500’ AGL or 3 NM:
(a) City of Rocks (N42-05-00 W113-43-00).
(b) Marys River area (N41-39-00 W115-06-00, N41-33-00 W115-20-00, N41-23-00 W115-14-00, N41-28-00 W114-59-00).
(c) Mountain City (N41-50-30 W115-57-30).
(d) Ranch (N41-43-50 W115-58-50).
(e) Ward Ranch/uncharted airport (N42-03-00 W113-29-07).
(f) Craters of the Moon National Monument (N43-27-45 W113-33-00).
(g) Henry area (N41-42-10 W114-49-00).

(5) Helicopter ski operations in the Boulder and Pioneer Mountains (east of W114-30-00) are conducted in daylight hours from 1 Dec to 30 Apr. Maintain 1500’ AGL minimum altitude between Points O and P during this time frame.

(6) Avoid all airports by overflight of 1500’ AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00), (N41-26-00 W115-47-00), (N41-39-00 W114-49-50).

(7) Uncharted obstructions:
(a) Tower 190’ AGL (N43-17-30 W113-11-30);
(b) Tower 100’ AGL (N42-35-14 W113-11-30);
(c) Tower 75’ AGL (N42-30-00 W113-10-00);
(d) Tower 70’ AGL (N42-02-58 W113-22-46).

(8) All turn points are considered Alternate Entry/Exit Points.

(9) Avoid Big Wood River (N43-19-36 W114-19-13), noise sensitive area. Overfly at or above 3000’ AGL or avoid 5 NM.

FSS Within 100 NM Radius:
BOI
VR-1350

ORIGINATING ACTIVITY: Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

(1) Route speed schedules in 60 knot increments. Average route speed may not exceed 540 knots. Indicate desired speed when scheduling. Advise scheduling agency when MARSA. Route entry times must be within 3 minutes of scheduled time.

(2) Route not usable Points A to D for other than NAS Whidbey based units.

(3) Avoid city of Sedro Woolley, WA by 3 NM while transitioning to the route.

(4) Contact Seattle FSS on 255.4 when entering route.

(5) Remain on or left of centerline between A and B due to logging activity and head-on traffic on VR-1355.

(6) Route crosses IR-348 between A and C; IR-327 and IR-328 between C and D; and IR-324 and IR-325 between C and E; IR-341 at D.

(7) Avoid Silver Fox Farm between C and D, located at N47°47.7 W120°13.5 by 1500' AGL and 2 NM north of centerline.

(8) CAUTION: Crop dusting activity (seasonal) below 500' AGL between C and J. Fly no lower than 300' AGL from Point F to 5 NM south of Point F during agricultural spray season (1 Apr-31 Aug).

(9) Alternate Entry: D.

(10) CAUTION: Head-on traffic with IR-329 between E and I.

(11) CAUTION: Intensive C-130/C-17 activity inbound to Moses Lake Drop Zone (paradrops) in vicinity of N47°03 W119°40.

(12) CAUTION: Heavy hangliding activity Apr-Oct off Chelan Butte in the vicinity of D.

(13) Remain right of centerline between F and G until south of Columbia River to avoid Saddle Mountain National Wildlife Refuge.

(14) Alternate Exits: F and I.

(15) Noise Sensitive Areas: Avoid Prosser, WA in vicinity of N46-12 W119-47.9 between Points G and H by 1500' AGL or 3 NM. Exercise extreme caution to avoid buildings/houses Points G to H by 500' AGL.

(16) Route crosses VR-1351 between Points A and D; VR-1351 between H and J; and VR-1355 between I and J.

(17) CAUTION: Crop dusting activity in vicinity of Paterson Airport (N45-59.0 W119-34.0) and 100 Circles Airport (N45-53.1 W119-48.2) between Points H and I.

(18) Boardman Complex (R-5701, R-5706, Boardman MOA), shall be scheduled prior to use. Prior to entering, contact Boardman Range Control on 305.8/126.2.

(19) CAUTION: Crop dusting activity in vicinity of Taggares Farms Airport, (approximately 10 NM west of Boardman Bull at N45-45.1 W119-56.4) within R-5701. Request advisory from Boardman Range Control.

(20) Upon entering Boardman Complex, avoid city of Arlington by 3000' AGL or 5 NM.

FSS Within 100 NM Radius:

MMV, SEA

VR-1351

ORIGINATING ACTIVITY: Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data    Pt   Fac/Rad/Dist Lat/Long
As assigned to  A    NUW 061/24   N48°25.80' W122°04.90'
02 AGL B 15 AGL to B    NUW 074/66   N48°18.10' W121°01.50'
02 AGL B 15 AGL to C    EPH 283/48   N47°49.00' W120°24.00'
15 AGL to Q    EPH 294/33   N47°46.20' W120°00.00'
02 AGL B 15 AGL to D    EPH 321/21   N47°43.00' W119°35.20'
10 AGL B 15 AGL to E    EPH 231/28   N47°14.10' W120°04.00'
02 AGL B 15 AGL to F    YKM 043/30   N46°47.00' W119°48.00'
02 AGL B 15 AGL to G    YKM 085/26   N46°26.80' W119°50.10'
02 AGL B 15 AGL to H    PDT 303/40   N46°11.00' W119°36.00'
02 AGL B 15 AGL to I    LTJ 062/46   N45°47.70' W120°01.00'
02 AGL B 15 AGL to J    PDT 259/31   N45°43.50' W119°41.00'

CAUTION: Crop dusting activity (seasonal) below 500' AGL between C and J. Fly no lower than 300' AGL from Point F to 5 NM south of Point F during agricultural spray season (1 Apr-31 Aug).

(9) Alternate Entry: D.

(10) CAUTION: Head-on traffic with IR-329 between E and I.

(11) CAUTION: Intensive C-130/C-17 activity inbound to Moses Lake Drop Zone (paradrops) in vicinity of N47°03 W119°40.

(12) CAUTION: Heavy hangliding activity Apr-Oct off Chelan Butte in the vicinity of D.

(13) Remain right of centerline between F and G until south of Columbia River to avoid Saddle Mountain National Wildlife Refuge.

(14) Alternate Exits: F and I.

(15) Noise Sensitive Areas: Avoid Prosser, WA in vicinity of N46-12 W119-47.9 between Points G and H by 1500' AGL or 3 NM. Exercise extreme caution to avoid buildings/houses Points G to H by 500' AGL.

(16) Route crosses VR-1351 between Points A and D; VR-1351 between H and J; and VR-1355 between I and J.

(17) CAUTION: Crop dusting activity in vicinity of Paterson Airport (N45-59.0 W119-34.0) and 100 Circles Airport (N45-53.1 W119-48.2) between Points H and I.

(18) Boardman Complex (R-5701, R-5706, Boardman MOA), shall be scheduled prior to use. Prior to entering, contact Boardman Range Control on 305.8/126.2.

(19) CAUTION: Crop dusting activity in vicinity of Taggares Farms Airport, (approximately 10 NM west of Boardman Bull at N45-45.1 W119-56.4) within R-5701. Request advisory from Boardman Range Control.

(20) Upon entering Boardman Complex, avoid city of Arlington by 3000' AGL or 5 NM.

FSS Within 100 NM Radius:

MMV, SEA
**VR ROUTES**

<table>
<thead>
<tr>
<th>Route</th>
<th>Flight Details</th>
<th>Lat/Lon</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 15 AGL</td>
<td>GEG 279/42</td>
<td>N47°54.50' W118°32.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL</td>
<td>GEG 229/33</td>
<td>N47°22.50' W118°24.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>GEG 191/29</td>
<td>N47°09.00' W118°00.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>PDT 015/61</td>
<td>N46°35.30' W118°13.20'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>PDT 359/15</td>
<td>N45°56.70' W118°51.40'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>PDT 303/40</td>
<td>N46°11.20' W119°36.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>LTJ 062/46</td>
<td>N45°47.70' W120°01.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>PDT 259/31</td>
<td>N45°43.50' W119°41.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 4 NM either side of centerline.

**Special Operating Procedures:**

1. Route speed schedules in 60 Kt increments. Average route speed may not exceed 540 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSA. Route entry times must be within 3 minutes of scheduled time.

2. Route not usable Points A to D for other than NAS Whidbey based units.

3. Avoid city of Sedro Woolley, WA by 3 NM while transitioning to the route.

4. Contact Seattle FSS 255.4 when entering route.

5. Remain on centerline or left of centerline between Points A and B due to logging activity and conflict with VR-1355.

6. Route crosses IR-348 between Points A and C; IR-327 and IR-328 between Points C and G; IR-324 and IR-325 between Points C and H; IR-330 between Points F and G; IR-326 and IR-341 between Points G and J; IR-329 between Points I and J; and VR-1350 between Points A and D, and Points L and M.

7. Avoid Silver Fox Farm between Points C and D, located at N47-47.7 W120-13.5 by 1500' AGL and 2 NM north of centerline.

8. Alternate Entry: D.

9. Route conflicts with IR-341 at Point D.

10. CAUTION: Crop dusting activity below 500' AGL between Points D and M. Fly no lower than 300' AGL between Points I and L during agricultural spray season (1 Apr-31 Aug).

11. Avoid TPC uncharted Sheffles Airfield located right of centerline at N47-47.0 W118-24.0 by 500' AGL or 3 NM between Points E and F.

12. CAUTION: Crop dusting activity in vicinity of Patterson Airport (N45-59.0 W119-34.0) and 100 Circles Airport (N45-53.1 W119-48.2) between Points K and L.

13. Noise Sensitive Areas: Avoid Ostrich Farm located left of centerline, in vicinity of N47-47.0 W118-24.0, southeast of Point F by 500' AGL or 1 NM.


15. CAUTION: Heavy hanggliding activity Apr-Oct off Chelan Butte in the vicinity of Point D.

16. Avoid town of Benge and Clinesmith Airfield (1 NM north of Benge) by 1500' AGL or 3 NM to the east, approximately 14 miles south of Point H.

17. CAUTION: Head-on non-deconflicted VR-1354 traffic between Points I and J.

18. Uncharted airfield in vicinity N45-54.1 W119-56.1 between Points K and L.

19. CAUTION: Crop dusting activity in vicinity of Patterson Airport (N45-59.0 W119-34.0) and 100 Circles Airport (N45-53.1 W119-48.2) between Points K and L.

20. Boardman Complex (R-5701, R-5706, Boardman MOA) must be scheduled prior to use. Prior to entering, contact Boardman Range Control 305.8/126.2.

21. CAUTION: Crop dusting activity in vicinity of Taggares Farms Airport (approximately 10 NM west of Boardman Bull at N45-45.1 W119-56.4 within R-5701. Request advisory from Boardman Range Control.

22. Upon entering Boardman Complex, avoid the city of Arlington by 3000' AGL or 5 NM.

**FSS Within 100 NM Radius:**

**MMV, SEA**

**VR-1352**

**ORIGINATING ACTIVITY:** Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

**SCHEDULING ACTIVITY:** Same as Originating Activity.

Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

**Altitude Data**

<table>
<thead>
<tr>
<th>As assigned</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>IMB 004/8</td>
<td>N44°46.20' W119°38.20'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>B</td>
<td>REO 285/67</td>
<td>N43°12.40' W119°08.30'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>C</td>
<td>REO 275/21</td>
<td>N42°44.00' W118°18.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>D</td>
<td>REO 153/17</td>
<td>N42°19.00' W117°49.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>E</td>
<td>LLC 012/58</td>
<td>N40°59.00' W117°59.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>F</td>
<td>LLC 073/24</td>
<td>N40°08.00' W118°04.00'</td>
</tr>
<tr>
<td>02 AGL B 15 AGL</td>
<td>G</td>
<td>HZN 035/49</td>
<td>N40°01.00' W118°09.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 4 NM either side of centerline.

**Special Operating Procedures:**

1. Route speed schedules in 60 Kt increments. Max ground speed not to exceed 540 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSA. Route entry times must be within 3 minutes of scheduled time.

2. Prior coordination required with NAS Fallon Range Schedules DSN 890-2416/2418, C775-426-2418, for target scheduling.
(3) If practicable, aircrews requested not to overfly the John Day Fossil Beds National Monument in accordance with FAA Advisory Circular 91-36C.
(4) From Point A to a point 10 NM south of Dayville, or (where the route crosses the John Day River) the minimum altitude is 1000’ AGL. Noise Sensitive Area.
(5) Avoid the city of Dayville, Oregon in vicinity N44-28.0 W119-32.0 (20 NM south of Point A) by 1500’ AGL or 3 NM. Noise Sensitive Area. Avoid flight within 1500’ or 3 NM of Land’s Inn Airport and Long View Ranch Airport between Points A and B when practicable.
(6) Route crosses IR-343 at Point A; IR-316 and IR-319 between Points A and B; VR-1301 between Points A and D; IR-304 between Points C and D; IR-300 and IR-303 between Points D and E; SR-300 and SR-301 between Points E and F; VR-1259, VR-1260 and IR-281 at Point F.
(7) Maintain 1500’ AGL between N43-25.0 W119-13.0 and N42-55.0 W118-40.0 to avoid Malheur National Wildlife Refuge between Points A and C.
(8) CAUTION: Forest fire suppression helicopter activity approximately 19 NM past Point A at Dayview Helibase (N44-27.2 W119-30.7) during fire season, normally May-Oct.
(9) Alternate Entry Points: C and F.
(10) Avoid McDermott State Airport near edge of route between D and E by 3 NM.
(11) CAUTION: Uncharted airports at (N41-35.6 W117-50.0), (N41-31.2 W117-50.4) approximately 36 NM prior to Point E. Crop dusting in this area may be expected in the spring and summer months.
(12) CAUTION: 150’ AGL transmission lines between Points E and F at N40-30.0 W118-00.0.
(13) Alternate Exit Point: F.
(14) Pilots exiting at Point G must contact Desert Control on 322.35 prior to entering R-4813.

FSS Within 100 NM Radius: BOI, MMV, RNO, RIU

**VR-1353**

**ORIGINATING ACTIVITY:** Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

**SCHEDULING ACTIVITY:** Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>SDO 243/35</td>
<td>N41°19.00' W118°48.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to B</td>
<td>LKV 093/47</td>
<td>N42°12.00' W119°32.00'</td>
<td></td>
</tr>
<tr>
<td>10 AGL B 15 AGL to C</td>
<td>LKV 064/11</td>
<td>N42°31.00' W120°15.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to Q</td>
<td>LKV 321/36</td>
<td>N43°03.80' W120°47.50'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to Q1</td>
<td>LKV 331/59</td>
<td>N43°28.00' W120°45.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to Q2</td>
<td>IMB 187/62</td>
<td>N44°43.50' W120°21.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to D</td>
<td>PDT 232/72</td>
<td>N45°12.00' W120°30.00'</td>
<td></td>
</tr>
<tr>
<td>02 AGL B 15 AGL to E</td>
<td>PDT 250/38</td>
<td>N45°38.00' W119°50.00'</td>
<td></td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from C to E.

**ROUTE WIDTH** - 4 NM either side of centerline.

**Special Operating Procedures:**

1. Route speed schedules in 60 Kt increments. Average route speed may not exceed 540 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSA. Route entry times must be within 3 minutes of scheduled time.
2. Contact nearest FSS on 255.4 when entering route.
3. Route crosses SR-300 and SR-301 between Points A and C. SR-301 is opposite direction.
4. Remain south of centerline between 42-10.0N 42-30.0N in the vicinity of Hart Mountain National Wildlife Refuge, between Points B and C.
5. Route crosses IR-342 between Points C and D.
6. Alternate Exit: C and D.
7. At Point Q, aircraft shall make an alert call (in the blind) on 272.15 to inform aircraft operating in Juniper MOA of their presence. The alert call will consist of call sign, route, speed, and estimated time to Juniper MOA.
8. CAUTION: Forest fire suppression helicopter activity left of centerline approximately 8 NM south of Point Q1 at Ft.Rock Helibase (N43-26.1 W120-50.6) and Ft. Rock Airstrip (N43-20.4 W120-50.6) during fire season, normally May-Oct.
9. Alternate Exit: D.
10. CAUTION: Crop dusting activity (seasonal) below 500’ AGL between Points D and E.
11. Route crosses IR-342 near Points C and D.

**FSS Within 100 NM Radius:** MMV, RNO

**VR-1354**

**ORIGINATING ACTIVITY:** Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

**SCHEDULING ACTIVITY:** Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>PDT 262/29</td>
<td>N45°45.00' W119°38.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to B</td>
<td>PDT 289/24</td>
<td>N45°55.00' W119°25.00'</td>
<td></td>
</tr>
</tbody>
</table>
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Route speed schedules in 60 Kt increments. Average route speed may not exceed 540 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSA. Route entry times must be within 3 minutes of scheduled time.
(2) Contact nearest FSS 255.4 when entering route.
(3) CAUTION: Crop dusting activity in vicinity of Eastern Farms Oregon Airport (approximately 5 NM Northeast of Boardman Bull at N45°19.6 W119°36.4 within R-5701. Request advisory from Boardman Range Control.
(4) Avoid R-5704 between Points A and B. Remain within the route structure while avoiding the restricted area.
(5) CAUTION: Crop dusting activity (seasonal) below 500' AGL throughout the entire route. Fly no lower than 300' AGL from Point C and E during agricultural season (1 Apr-31 Aug).
(6) Alternate Entry: B.
(7) CAUTION: Head-on traffic with VR-1351 between Points C and D.
(8) CAUTION: Head-on traffic with IR-326 between Points D and F.
(9) Route crosses IR-341 between Pt D and F.
(10) Cross Point F at 1500' AGL (5100' MSL).

FSS Within 100 NM Radius:
MMV

VR-1355

ORIGINATING ACTIVITY: Commanding Officer (N32), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5000 DSN 820-2877, C360-257-2877.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling may be accomplished during scheduling hours with 2.5 hrs prior notice.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data
Pt Fac/Rad/Dist Lat/Long
As assigned to A LTJ 063/45
02 AGL B 15 AGL to B LTJ 014/20
02 AGL B 15 AGL to C YKM 256/35

TERAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Route speed schedules in 60 Kt increments. Average route speed may not exceed 540 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSA. Route entry times must be within 3 minutes of scheduled time.
(2) Contact Seattle FSS 255.4 when entering route.
(3) CAUTION: Crop dusting activity (seasonal) below 500' AGL between Points A and B. Fly no lower than 300' AGL between Points A and B during agricultural spray season (1 Apr-31 Aug).
(4) Avoid buildings/houses on centerline by 500' AGL 7 NM prior to Point B.
(5) Alternate Entry: B.
(6) Non-Boardman Target Range (R-5701/R-5706) aircraft shall enter at Point B only.
(7) CAUTION: Forest fire suppression helicopter activity right of centerline approximately 19 NM past Point B at Ft. Simcoe Helibase (N46°20.8 W120°51.1) during fire season, normally May-Oct.
(8) Avoid ski areas in the vicinity of Stevens Pass and Snoqualmie Pass between Points D and E.
(9) Alternate Exit: E.
(10) Route crosses IR-348, VR-1350 and VR-1351 between Points E and Q.
(11) CAUTION: Hang gliders may be encountered surface to 4000' AGL from F to G.
(12) Avoid overflight of Stillaguamish River between Points F and G.
(13) Avoid Lake Cavanaugh by 1 NM laterally or 1500' vertically between Points F and G.
(14) At Point Q, contact Whidbey Approach on 270.8.

FSS Within 100 NM Radius:
MMV, SEA

VR-1422


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 lcl Mon-Thurs, 0700-1800 lcl Fri, 0800-1700 lcl Sat
VR ROUTES

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | OGD 282/29 | N41°26.00' W112°40.00'
01 AGL B 15 AGL to | B | MLD 205/28 | N41°51.00' W112°52.00'
01 AGL B 15 AGL to | C | MLD 218/38 | N41°50.00' W113°09.00'
02 AGL B 15 AGL to | D | LCU 039/18 | N41°32.00' W113°30.00'
01 AGL B 15 AGL to | E | LCU 254/10 | N41°22.00' W114°04.00'
01 AGL B 15 AGL to | F | LCU 256/25 | N41°23.00' W114°24.00'
05 AGL B 15 AGL to | G | BVL 298/38 | N41°08.00' W114°55.00'
01 AGL B 15 AGL to | H | BVL 284/27 | N41°59.00' W114°17.00'
01 AGL B 15 AGL to | I | BVL 313/11 | N40°53.00' W113°54.00'
01 AGL B 15 AGL to | R-6404B | | |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
1. Contact scheduling agency one day in advance not later than 2000Z++.
2. Traffic advisories available-Clover Control 285.65 or 363.5.
3. If planning to enter restricted area at termination of route, contact Clover Control for clearance into R-6404B prior to beginning route.
4. Without restricted area clearance, exit route at H, climb clear of restricted areas and contact Clover Control.
5. Thiokol Corporation static test fires pyrotechnic rocket motors and flares 5 miles either side of VR-1422, from A to B.
6. Due to bird strike potential with indigenous waterfowl, recommend contacting Clover Control for current bird migration/nesting advisories.
7. Aircrews should be especially vigilant between C and I for aircraft in the Lucian MOA. Aircraft are (See and Avoid) MARSA with other ROUTE/MOA users.
8. Alternate Entry Points: D and H.
9. Alternate Exit Points: D and H.
10. Tie-in FSS: Cedar City, FSS for notification BYI, BQU, IDA, RNO.
11. Powerline running north-south perpendicular to MTR (75' tall) between Point B-C (N41-50 W113-09). Microwave tower approximately one mile south of centerline (200' tall) between Point D-E (N41-27 W113-42). Powerline running SE-NW to centerline, then due north on northside of MTR centerline (75' tall) between D-E (N41-24 W113-56). Microwave tower one mile south of MTR centerline (100' tall) between E-F (N41-21 W114-05). Dirt airstrip one mile south of MTR centerline between E-F (N41-22 W114-15). Powerline running NW-SE through MTR centerline between H-I (N40-50 W114-18).

FSS Within 100 NM Radius:
CDC

VR-1423


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 Icl Mon-Thurs, 0700-1800 Icl Fri, 0800-1700 Icl Sat

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
As assigned to | A | OGD 282/29 | N41°26.00' W112°40.00'
01 AGL B 15 AGL to | B | MLD 205/28 | N41°51.00' W112°52.00'
01 AGL B 15 AGL to | C | MLD 218/38 | N41°50.00' W113°09.00'
01 AGL B 15 AGL to | D | LCU 039/18 | N41°32.00' W113°30.00'
01 AGL B 15 AGL to | E | LCU 076/15 | N41°21.00' W113°30.00'
01 AGL B 15 AGL to | F | LCU 089/30 | N41°13.00' W113°12.00'
01 AGL B 15 AGL to | R-4604A | | |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
1. Contact scheduling agency one day in advance not later than 2000Z++.
2. Traffic advisories available-Clover Control 285.65 or 363.5.
3. If planning to enter restricted area at termination of route, contact Clover Control for clearance into R-6404B prior to beginning route.
4. Without restricted area clearance, exit route at E, climb clear of restricted areas and contact Clover Control.
5. Thiokol Corporation static test fires pyrotechnic rocket motors and flares 5 miles either side of VR-1422, from A to B.
6. Due to bird strike potential with indigenous waterfowl, recommend contacting Clover Control for current bird migration/nesting advisories.
7. Aircrews should be especially vigilant between C and F for aircraft in the Lucian MOA. Aircraft are (See and Avoid) MARSA with other ROUTE/MOA users.
8. Alternate Entry Points: D and H.
9. Alternate Exit Points: D and H.
10. Tie-in FSS: Cedar City, FSS for notification BYI, BQU, IDA, RNO.
11. Powerline running north-south perpendicular to MTR (75' tall) between Point B-C (N41-50 W113-09).

FSS Within 100 NM Radius:
CDC
VR ROUTES

VR-1427

ORIGINATING ACTIVITY: 140th Wing /DOT, Buckley ANGB, Aurora, CO 80011-9546 DSN 847-9466, C303-340-9470/9472.

SCHEDULING ACTIVITY: 140th Wing /DOT, Buckley ANGB, Aurora, CO 80011-9546 DSN 847-9472, C720-847-9472.

HOURS OF OPERATION: 0800-1600 local Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Route intersects IR-414/424 at Pt A; route crosses IR-177/500 between C and D; route crosses IR-409, IR-150/500 and IR-177/501 between D and E; route crosses IR-110 between E and F; route coincides with IR-409 from F to G.
(2) Alternate Entry: B, C, D, E, and F.
(3) Alternate Exit: B, C, D, E, and F.
(4) Avoid the following environmentally sensitive locations by 1500' AGL from 1 May through 31 July:
   (a) N37°32-18 W103°40-36
   (b) N37°36-54 W103°47-56
   (c) N37°39-46 W104°15-22
   (d) N37°58-35 W104°45-09

FSS Within 100 NM Radius:
DEN

VR-1446


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 lcl Mon-Thurs, 0700-1800 lcl Fri, 0800-1700 lcl Sat

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
SFC B 12 AGL to A BVL 086/23 N40°40.30' W113°15.10'
SFC B 12 AGL to B BVL 063/26 N40°50.10' W113°12.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Contact scheduling agency one day in advance not later than 1600 local.
(2) Route connects R-6404 and R-6404.
(3) VR-1445/1446 will only be used by aircraft scheduled into Utah Test and Training Range (UTTR).

FSS Within 100 NM Radius:
CDC

VR-1445


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 lcl Mon-Thurs, 0700-1800 lcl Fri, 0800-1700 lcl Sat

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
SFC B 12 AGL to A BVL 086/23 N40°40.30' W113°15.10'
SFC B 12 AGL to B BVL 063/26 N40°50.10' W113°12.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:
(1) Contact scheduling agency one day in advance not later than 1600 local.
(2) Route connects R-6404 and R-6404.
(3) VR-1445/1446 will only be used by aircraft scheduled into Utah Test and Training Range (UTTR).

FSS Within 100 NM Radius:
CDC
**VR-1520**

**ORIGINATING ACTIVITY:** 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754, C605-988-5754.

**SCHEDULING ACTIVITY:** Same as Originating Activity.

**HOURS OF OPERATION:** Daylight hours, Mon-Sat, OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>LNK 265/21</td>
<td>N40°56.90' W97°12.20'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>B</td>
<td>LNK 288/49</td>
<td>N41°17.00' W97°42.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>OBH 009/17</td>
<td>N41°39.00' W98°15.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>OBH 310/24</td>
<td>N41°40.00' W98°43.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>ONL 191/31</td>
<td>N41°59.00' W98°56.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>F</td>
<td>ONL 217/29</td>
<td>N42°08.00' W99°10.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>G</td>
<td>ONL 242/63</td>
<td>N42°08.00' W100°01.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>H</td>
<td>ONL 283/38</td>
<td>N42°43.00' W99°29.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>I</td>
<td>ONL 352/32</td>
<td>N43°00.00' W98°40.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>J</td>
<td>ONL 069/32</td>
<td>N42°34.00' W97°59.00'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from B to J.

**ROUTE WIDTH** - 8 NM either side of centerline between A and J.

**Special Operating Procedures:**

1. VR-1520 is opposite direction of VR-1521, IR-508 D to J, IR-507 A to C, common with IR-517 A to C and IR-518 D to J.
2. 114 FW will not schedule opposite and conflicting traffic on IR-508/518 and VR-1520 at the same time.
3. Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance throughout the route.
4. Migratory birds along rivers and lakes in spring and fall.
5. Oneill MOA overlaps the route between Points C and E. If VR-1520 is not used in conjunction with Oneill MOA, the user must deconflict Oneill MOA with the 114 FW when scheduling the route.
6. Each point along the route is an Entry and an Exit Point.
7. Maintain a minimum of 1500' AGL entire route width from N41-03.0 W97-21.0 to Point B.
8. Agricultural spraying (seasonal) in the vicinity of Point C.
9. Remain at least 1.5 NM away from either side of a line from N41-58 W98-53 to N41-46 W98-40.
10. Avoid the following Noise Sensitive Areas by a minimum of 1500' AGL or 1 NM: Ranch N42-19.5 W99-46.5, Dairy N42-12.0 W99-42.0, Farm N41-48.0 W98-45.0, Farms N42-43.5 W99-35.2, N41-42.0 W98-37.0, N41-42.5 W98-32.1, N41-38.5 W98-34.0, N41-38.0 W98-32.0, N41-40.0 W98-19.0.

(11) Avoid flight within 1500' AGL or 3 NM of the Adams at Primrose and Rock County Airports.
(12) Uncharted towers located at (N42-32.1 W99-40.1), (N42-06.0 W98-00.0), (N42-06.0 W98-05.0), (N42-52.0 W98-41.0), and (N41-48.3 W98-58.0).
(13) Avoid Bald Eagle Nesting Area at Karl Mundt National Wildlife Refuge N43-00.9 W98-31.6 by 1 NM or 1500' AGL.
(14) Avoid Bird Nesting Areas by 1500' or 1 NM March through October: N42-47.0 W99-22.6, N42-43.3 W99-35.7.

**FSS Within 100 NM Radius:**

HON, OLU

**VR-1521**

**ORIGINATING ACTIVITY:** 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754, C605-988-5754.

**SCHEDULING ACTIVITY:** Same as Originating Activity.

**HOURS OF OPERATION:** Daylight hours, Mon-Sat, OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>ONL 069/32</td>
<td>N42°34.00' W97°59.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>ONL 352/32</td>
<td>N43°00.00' W98°40.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>ONL 283/38</td>
<td>N42°43.00' W99°29.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>ONL 242/63</td>
<td>N42°08.00' W100°01.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>ONL 217/29</td>
<td>N42°08.00' W99°10.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>F</td>
<td>ONL 191/31</td>
<td>N41°59.00' W98°56.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>G</td>
<td>OBH 310/24</td>
<td>N41°40.00' W98°43.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>H</td>
<td>OBH 009/17</td>
<td>N41°39.00' W98°15.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>I</td>
<td>LNK 288/49</td>
<td>N41°17.00' W97°42.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>J</td>
<td>LNK 265/21</td>
<td>N40°56.90' W97°12.20'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized from A to I.

**ROUTE WIDTH** - 8 NM either side of centerline between A and J.

**Special Operating Procedures:**

1. VR-1521 is opposite direction of VR-1520, IR-518 A to G, IR-517 H to J, and common with IR-508 A to G, IR-507 G to J.
2. 114 FW will not schedule opposite direction and conflicting traffic on IR-508/518 and VR-1520 at the same time.
VR ROUTES

(3) Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance throughout the route.

(4) Migratory birds along rivers and lakes in spring and fall.

(5) Oneill MOA overlaps the route between F and H. If VR-1521 is not used in conjunction with Oneill MOA, the user must deconflict Oneill MOA with the 114 FW when scheduling the route.

(6) Each point along the route is an entry and an exit point.

(7) Maintain a minimum of 1500' AGL entire route width from Point I to N41-03.0 W97-21.0.

(8) Agricultural spraying (seasonal) in the vicinity of Point H.

(9) Reman at least 1.5 NM away from either side of a line from N41-58 W98-53 to N41-46 W98-40.

(10) Avoid the following Noise Sensitive Areas by a minimum of 1500' AGL or 1 NM: Ranch N42-19.5 W99-46.5, Dairy N42-12.0 W99-42.0, Farms N42-43.5 W98-35.2, N41-42.0 W98-37.0, N41-42.25 W98-32.1, N41-38.5 W98-34.0, N41-38.0 W98-32.0, N41-40.0 W98-19.0.

(11) Avoid flight within 1500' AGL or 3 NM of the Adams at Primrose and Rock County Airports.

(12) Uncharted towers located at (N42-32.1 W99-40.1), (N42-06.0 W98-00.0), (N42-52.0 W98-41.0) and (N41-48.3 W98-58.0W).

(13) Avoid Bald Eagle Nesting Area at Karl Mundt National Wildlife Refuge N43-00.9 W98-31.6 by 1 NM or 1500' AGL.

(14) Avoid Bird Nesting Areas by 1500' or 1 NM March through October: N42-47.0 W99-22.6, N42-43.3 W99-35.7.

FSS Within 100 NM Radius:
OLU, HON

VR-1525


HOURS OF OPERATION: Sunrise-Sunset Sun-Fri

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>A BUM 021/32</td>
<td>N38°45.00'</td>
<td>W94°10.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B BUM 085/31</td>
<td>N38°15.00'</td>
<td>W93°50.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C SZL 187/51</td>
<td>N37°54.00'</td>
<td>W93°45.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D SZL 146/52</td>
<td>N37°59.00'</td>
<td>W93°00.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E MAP 289/30</td>
<td>N37°48.00'</td>
<td>W92°21.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to B; 2 NM left and 4 NM right of centerline from B to C; 3 NM either side of centerline from C to G.

Special Operating Procedures:
(1) Alternate Entry: C.
(2) Alternate Exit: D and F.
(3) Aircraft will not proceed beyond Point F unless authorized to operate in the Cannon MOA.
(4) Avoid flight within 1500’ AGL or 3 NM all charted airports when practicable.
(5) Uncharted and not in Chum Route Obstructions:
   (a) Tower-N36-49.3 W93-43.5 1650' MSL (150’ AGL);
   (b) Tower-N36-48.5 W93-31.5 1185' MSL (185’ AGL);
   (c) Tower-N36-97.0 W92-53.0 1600' MSL (100’ AGL).
(6) Make entry time plus or minus five minutes or reschedule.
(7) CAUTION: Monett Airport 2.5 nm North of Pt B.
(8) Contact Cannon Range on 392.2/139.45 for clearance into the Cannon MOA/Range.

VR-1546


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A RZC 324/29</td>
<td>N36*39.00'</td>
<td>W94*26.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B RZC 005/38</td>
<td>N36*52.00'</td>
<td>W94*00.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C DGD 244/31</td>
<td>N36*48.00'</td>
<td>W93*28.00'</td>
</tr>
<tr>
<td>05 AGL B 10 AGL to</td>
<td>D DGD 256/6</td>
<td>N37*00.00'</td>
<td>W93*00.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E DGD 018/18</td>
<td>N37*18.30'</td>
<td>W92*45.50'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F MAP 253/39</td>
<td>N37*28.00'</td>
<td>W92*35.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>G MAP 267/29</td>
<td>N37*37.00'</td>
<td>W92*24.30'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to D; 3 NM either side of centerline from D to E.

Special Operating Procedures:
(1) Primary Entry: A. Alternate Entry: B and C.
(2) Primary Exit: E. Alternate Exits: C and D
(3) Avoid flight within 1,500 feet or 3 NM of airports when practicable.

FSS Within 100 NM Radius:
COU, ICT
VR ROUTES

FSS Within 100 NM Radius:
COU, MLC, STL

VR-1616


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise to Sunset Mon-Sat, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to A</td>
<td>MCW 360/53</td>
<td>N43°58.00'</td>
<td>W93°12.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to B</td>
<td>FGT 141/25</td>
<td>N44°17.00'</td>
<td>W92°52.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to C</td>
<td>ODI 334/37</td>
<td>N44°28.00'</td>
<td>W91°50.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to D</td>
<td>ODI 013/30</td>
<td>N44°24.00'</td>
<td>W91°18.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to E</td>
<td>ODI 032/31</td>
<td>N44°21.00'</td>
<td>W91°04.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to F</td>
<td>VOK 320/34</td>
<td>N44°23.00'</td>
<td>W90°46.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to G</td>
<td>VOK 329/27</td>
<td>N44°20.00'</td>
<td>W90°35.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to H</td>
<td>VOK 023/19</td>
<td>N44°14.00'</td>
<td>W90°05.00'</td>
</tr>
<tr>
<td>Alternate Exit: G</td>
<td>VOK 329/27</td>
<td>N44°20.00'</td>
<td>W90°35.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to G</td>
<td>VOK 329/27</td>
<td>N44°07.00'</td>
<td>W90°40.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from B to HH.

ROUTE WIDTH - 2 NM left and 4 NM right of centerline from A to B; 4 NM either side of centerline from B to E; 4 NM left and 2 NM right of centerline from E to F; 3 NM either side of centerline from F to H and G to HH.

Special Operating Procedures:
(1) Route normally will be flown in conjunction with range missions to either R-6901 or R-6904. Clearance to fly VR-1616 does not constitute clearance to enter either R-6901 or R-6904. Clearance to enter R-6904 is required from the Range Control Officer on UHF 358.8/297.75, VHF 132.025, FM 34.2; and to enter R-6901 from Fort McCoy Control Center on UHF 247.4, VHF 123.45/124.6, or FM 41.90.
(2) B52’s and B1’s will use Point C as the entry point into VR-1616.
(3) Alternate Entry: C and E.
(4) Alternate Exit: D, E, F, and G.
(5) All aircraft will maintain 1000’ AGL B 1500’ AGL from 3 NM west of the Mississippi River to Point C.
(6) Noise Sensitive Areas: Avoid by 2000’ AGL or 1.5 NM unless otherwise indicated.

FSS Within 100 NM Radius:
FOD, GRB, PNM

VR-1617

ORIGINATING ACTIVITY: 180th TFG/DO (ANG), Toledo Express Airport, Swanton, OH 43558 DSN 580-4084.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-2100 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or below 15 AGL</td>
<td>A</td>
<td>TOL 211/24</td>
<td>N41°14.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to B</td>
<td>ROD 303/31</td>
<td>N40°32.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to C</td>
<td>ROD 274/42</td>
<td>N40°16.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to D</td>
<td>SHB 068/28</td>
<td>N39°48.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to E</td>
<td>SHB 137/28</td>
<td>N39°17.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to F</td>
<td>SHB 199/42</td>
<td>N38°58.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to G</td>
<td>SHB 205/26</td>
<td>N39°15.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to Enter R-3401</td>
<td>SHB 205/26</td>
<td>N38°58.00'</td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from C to G.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: C.
(2) Alternate Exit: D, E and F.
(3) All aircraft will maintain 1000’ AGL from C to D.
(4) Avoid overflight of Freetown, IN and surrounding area, below 1000’ AGL. Noise sensitive area.
VR ROUTES

FSS Within 100 NM Radius:
CLE, DAY, HUF, IKK, LAN, LOU

VR-1624

ORIGINATING ACTIVITY: ALPENA CRTC/Airspace
Scheduling Office, 5884 A. Street, Alpena, MI 49707, C989-354-6386, DSN 741-6386.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to G;
2 NM either side of centerline from G to H; 3 NM left and 4 NM right of centerline from H to I; 4 NM either side of centerline from F to F1; 2 NM left and 3 NM right of centerline from F1 to F2; 2 NM either side of centerline from F2 to F3; 3 NM left and 4 NM right of centerline from F3 to F4.

Special Operating Procedures:

(1) Avoid all watercraft, structures, vehicles, and persons by 500' AGL minimum on all route segments; over water portion and Point C- 100' AGL minimum; over land or within 1 NM of land- 500' AGL minimum.

(2) Point A to B:

(a) Minimum altitude: 1000' AGL first 5 NM;

(b) Uncharted sod airstrip (N43-34.0 W82-47.0).

(3) Point D to E:

(a) Do not fly over pit mine at water plant (N44-15.84 W83-41.40) Point D by 1 NM due to unannounced mine blasting.

(b) Uncharted sod airstrip (N44-16.0 W83-47.0);

(c) Avoid Stier Airport (N44-31.0 W83-41.0) by 3 NM;

(d) Avoid Glennie (N44-33.0 W83-43.0) by 3 NM;

(e) Avoid the following nesting areas by 1 NM and 1000' AGL during listed time frames: (Kirtland's Warbler from 1 May-15 Aug: N44-20.0 W83-38.5, N44-22.0 W83-38.0, N44-34.0 W83-35.0); (Great Blue Heron from 15 Mar-15 Aug: N44-34.6 W83-42.7); (Common Loon from 1 Apr-15 Jul: N44-36.0 W83-36.3); (Bald Eagle from 1 Feb-1 Aug: N44-26.3 W83-38.5, N44-27.5 W83-45.5).

(4) Point E to F:

(a) Uncharted sod airstrips: (N44-48.0 W83-48.0, N44-52 W83-53, N44-54 W83-55);

(b) Avoid the following nesting areas by 1 NM and 1000' AGL during listed time frames: (Common Loon from 1 Apr-15 Jul: N44-40.7 W83-36.3); (Bald Eagle from 1 Feb-1 Aug: N44-46.5 W83-53, N44-53N 83-55).

(5) Point F to G:

(a) Avoid flying over any structure below 1000' AGL;

(b) Avoid Hillman Airport (N45-05 W83-55) by 3 NM;

(c) Avoid Bald Eagle nesting areas by 1NM and 1000' AGL from 1 Feb-1 Aug: (N44-57 W83-52, N45-02 W83-53, N45-09 W83-58.5, N45-15 W83-58).

(6) Point G to H:

(a) Uncharted sod airstrip: (N45-16 W84-05);

(b) CAUTION: 1349' AGL (2409' MSL) tower (N45-08 W84-09.8);

(c) Avoid Clear Lake State Park: (N45-07.5 W84-10.8 by 1 NM);

(d) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N44-57 W83-52, N45-02 W83-53, N45-09 W83-58.5).

(7) Point H to I: Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N44-53.4 W83-34.2).

(8) Point F to F1:

(a) Avoid flying over any structure below 1000' AGL;

(b) Avoid Heaverton (N45-01 W84-22.2) by 1 NM.

(9) Point F1 to F2:

(a) Avoid flying over any structure below 1000' AGL;

(b) Avoid Hillman Airport: (N45-05 W83-55 by 3 NM);

(c) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N44-57 W83-52, N45-02 W83-53, N45-09 W83-58.5).

(10) Point F2 to F3: Avoid Johannesburg: (N44-59 W84-27.3) by 1 NM.

(11) Point F3 to F4: Avoid Bald Eagle nesting area by 1NM and 1000' AGL from 1 Feb-1 Aug: (N44-53.4 W84-34.2).

(12) Clearance to fly the route does not constitute clearance into R-4201 which must be given by the RCO on 266.6/261.2. Do not proceed beyond Point H (F3) unless cleared into R-4201.

(13) All Points are Alternate Entry/Exit Points.

- Altitude Data Pt Fac/Rad/Dist Lat/Long

Point A to B:

10 AGL B 15 AGL to A MBS 108/62 N43°15.35" W82°43.07" 05 AGL B 15 AGL to B MBS 060/60 N44°04.00" W82°55.00" 01 AGL B 15 AGL to C MBS 046/41 N44°02.00" W83°26.00" 01 AGL B 15 AGL to D MBS 023/43 N44°12.00" W83°44.00" 05 AGL B 15 AGL to E APN 194/26 N44°39.00" W83°38.00" 10 AGL B 15 AGL to F APN 245/19 N45°55.00" W83°56.00" 05 AGL B 15 AGL to G APN 302/23 N45°14.70" W84°02.90" 05 AGL B 15 AGL to H APN 270/41 N45°00.00" W84°31.40" 05 AGL B 15 AGL to I APN 261/45 N45°52.00" W84°34.80" 10 AGL B 15 AGL to F1 APN 280/19 N45°05.80" W83°59.80" 05 AGL B 15 AGL to F2 APN 274/37 N45°02.70" W84°26.00" 05 AGL B 15 AGL to F3 APN 270/41 N45°00.00" W84°31.40" 05 AGL B 15 AGL to F4 APN 261/45 N44°52.00" W84°34.80"
(14) VR-1624 is opposite direction traffic with VR-1644, VR-1627 A to C and VR-1647 alternate route A1 to B2. VR-1624 alternate route is opposite direction traffic with VR-1644 alternate route and VR-1647 alternate route B1 to B3. 127 TFW will not schedule opposite and conflicting traffic at the same time.


FSS Within 100 NM Radius:
CLE, LAN

VR-1625

ORIGINATING ACTIVITY: ALPENA CRTC/Airspace
Scheduling Office, 5884 A. Sreet, Alpena, MI 49707, C989-354-6386, DSN 741-6386.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS:
Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Point A: Maintain minimum altitude of 1000' AGL first 5 NM.
(2) Avoid all watercraft, structures, vehicles, and persons by 500' on terrain following segments.
(3) Points C to D: Maintain minimum altitude 1000' AGL from Landfall to D. Noise Sensitive Area.
(4) Points E to F: Maintain minimum altitude 1000' AGL within 3 NM of Lovells, N44-48 W84-29.

(6) Clearance to fly the route does not constitute clearance into R-4201 which must be given by the RCO on 266.6/261.2. Do not proceed beyond Point H (F3) unless cleared into R-4201.

(7) Alternate Entry: B, C and D.

(8) Alternate Exit: B, C, D and E.

(9) Avoid Michigan Islands Wildlife Refuge between Points C-D at N44-54 W83-19 by 2 NM.

FSS Within 100 NM Radius:
GRB, LAN

VR-1626

ORIGINATING ACTIVITY: ALPENA CRTC/Airspace

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
05 AGL B 15 AGL to A MBS 108/62 N44°15.35' W82°43.07'
05 AGL B 15 AGL to B MBS 060/60 N44°04.00' W82°55.00'
05 AGL B 15 AGL to C APN 131/29 N44°49.00' W83°00.00'
05 AGL B 15 AGL to D APN 245/19 N44°55.00' W83°56.00'
05 AGL B 15 AGL to E APN 246/43 N44°43.00' W84°25.00'
05 AGL B 15 AGL to F APN 255/48 N44°47.00' W84°36.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to B; 1 NM either side of centerline from B to C; 3 NM either side of centerline from C to E.

Special Operating Procedures:
(1) Alternate Entry: B, C, and D.
(2) Alternate Exit: B, C, and D.

FSS Within 100 NM Radius:
GRB, LAN

VR-1627

ORIGINATING ACTIVITY: ALPENA CRTC/Airspace
Scheduling Office, 5884 A. Sreet, Alpena, MI 49707, C989-354-6386, DSN 741-6386.

SCHEDULING ACTIVITY: Same as Originating Activity
VR ROUTES

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>A</td>
<td>APN 131/29</td>
<td>N44°49.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W83°00.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to (Below 05 AGL only over water)</td>
<td>B</td>
<td>APN 041/13</td>
<td>N45°16.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W83°23.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to (Below 05 AGL only over water)</td>
<td>C</td>
<td>PLN 069/41</td>
<td>N45°56.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W83°48.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to (Below 05 AGL only over water)</td>
<td>D</td>
<td>PLN 061/34</td>
<td>N45°57.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W84°00.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to (Below 05 AGL only over water)</td>
<td>E</td>
<td>PLN 097/20</td>
<td>N45°37.40'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W84°12.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>APN 302/23</td>
<td>N45°14.70'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W84°02.90'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>G</td>
<td>APN 270/41</td>
<td>N45°00.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W84°31.40'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>H</td>
<td>APN 261/45</td>
<td>N45°52.00'</td>
</tr>
<tr>
<td>Alternate Exit:</td>
<td></td>
<td></td>
<td>W84°34.80'</td>
</tr>
<tr>
<td>SFC B 15 AGL to</td>
<td>E</td>
<td>PLN 097/20</td>
<td>N45°37.40'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W84°12.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E1</td>
<td>APN 280/19</td>
<td>N45°05.80'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W83°59.80'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E2</td>
<td>APN 274/37</td>
<td>N45°02.70'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W84°26.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E3</td>
<td>APN 270/41</td>
<td>N45°00.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W84°31.40'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E4</td>
<td>APN 261/45</td>
<td>N44°52.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W84°34.80'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to E; 4 NM left and 3 NM right of centerline from E to F; 2 NM either side of centerline from F to G; 3 NM left and 4 NM right of centerline from G to H; 4 NM left and 3 NM right of centerline from E to F; 2 NM left and 3 NM right of centerline from E1 to E2; 2 NM either side of centerline from E2 to E3; 3 NM left and 4 NM right of centerline from E3 to E4.

Special Operating Procedures:

(1) Avoid all watercraft, structures, vehicles, and persons by 500’ AGL minimum on all route segments; over water portion and Point C- 100’ AGL minimum; over land or within 1 NM of land- 500’ AGL minimum.

(2) Point A to B:
   (a) Uncharted lighthouse on middle Island (N45-11 W83-19);
   (b) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb-1 Aug: (N45-01.5 W83-16).

(3) Point B to C:
   (a) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb-1 Aug: (N45-16.5 W83-26);
   (b) Approaching Drummond Island, turn over first landfall and go direct to Point D. Do not penetrate land in area of Point C by more than 1 NM. If over land fly 1000’ AGL minimum.

(4) Point C to D: Uncharted lighthouse 100’ AGL south entrance of De Tour Channel (N45-57 W83-54).

(5) Point D to E:
   (a) Uncharted lighthouse 100’ AGL (N45-46 W84-08);
   (b) Flight is prohibited within 2 NM of the Lake Huron shoreline from St. Vital Point (N45-57 W84-00) west to Huron Point (N45-58 W84-04) below 1500’ AGL.
   (c) Flight within 1 NM of Saddlebag Island (N45-57.2 W84-02.6) is prohibited below 1500’ AGL.

(6) Point E to F:
   (a) Avoid overflying any structure below 1000’ AGL;
   (b) Avoid Ocuquec (N45-24.6 W84-05.3) and Millersburg (N45-20.3 W84-03.7) by 1 NM;
   (c) Uncharted sod airstrip (N45-16 W84-05);
   (d) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb-1 Aug: (N45-15 W83-58).

(7) Point F to G:
   (a) CAUTION: 1349’ AGL (2409’ MSL) tower (N45-08.3 W84-09.8);
   (b) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1 NM;
   (c) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb-1 Aug: (N45-07 W84-15);
   (d) Avoid Johannesburg (N44-59 W84-27.3) by 1 NM.

(8) Point G to H: Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb to 1 Aug: (N44-53.4 W84-34.2).

(9) Point E1 to E:
   (a) Avoid overflying any structure below 1000’ AGL;
   (b) Avoid Ocuquec (N45-24.6 W84-05.3) and Millersburg (N45-20.3 W84-03.7) by 1 NM;
   (c) Uncharted sod airstrip (N45-16 W84-05);
   (d) Avoid Bald Eagle nesting areas by 1 NM and 1000’ AGL from 1 Feb-1 Aug: (N45-15 W83-58, N45-09 W83-58).

(10) Point E1 to E2:
    (a) CAUTION: 1349’ AGL (2409’ MSL) tower (N45-08.3 W84-09.8);
    (b) Avoid Bald Eagle nesting areas by 1 NM and 1000’ AGL from 1 Feb-1 Aug: (N45-04.5 W84-07, N45-07 W84-15);
    (c) Avoid Clear Lake State Parks (N45-07.5 W84-10.8) by 1 NM;
    (d) Avoid Heatherton (N45-01 W84-22.2) by 1 NM.

(11) Point E2 to E3: Avoid Johannesburg (N44-59 W84-27.3) by 1NM.

(12) Point E3 to E4: Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb-1 Aug: (N44-53.4 W84-34.2).

(13) Clearance to fly the route does not constitute clearance into R-4201 which must be given by the RCO on 266.6/261.2. Do not proceed beyond Point G (E3) unless cleared into R-4201.

(14) All points are Alternate Entry and Exit Points.

(15) VR-1627 is opposite direction traffic with VR-1647, VR-1644 A to C, and VR-1644 alternate route A1 to B2. VR-1627 alternate route is opposite direction traffic with VR-1647 alternate route and VR-1644 A to B and first 5 NM of B to C. Alpena scheduler will not schedule opposite and conflicting traffic at same time.

(16) Route transits Pike East MOA between Points A-C.

(17) (See and Avoid) concept applies. Route conflicts with several VR and SR routes. Ask Alpena scheduler for possible conflicts when booking.

FSS Within 100 NM Radius:
LAN
VR-1628

ORIGINATING ACTIVITY: ALPENA CRTC/Airspace

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) Avoid all watercraft, structures, and persons by 500' AGL minimum on all route segments.
(2) Point A to B:
(a) Uncharted lighthouse on Middle Island (N45-11 W83-19);
(b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb-1 Aug:(N45-01.5 W83-16.0).
(3) Point B to C:
(a) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-16.5 W83-26.0);
(b) Approaching Drummond Island, turn over first landfall and go direct to Point D. Do not penetrate land in area of Point C by more than 1 NM. If over land, fly 1000' AGL minimum.
(4) Point C to D: Uncharted lighthouse 100' AGL south entrance of De Tour Channel (N45-57 W83-54).
(5) Point D to E:
(a) Flight is prohibited within 2 NM of the Lake Huron shoreline from St. Vital Point (N45-58 W84-00) west to Huron Point (N45-58 W84-04) below 1500' AGL;
(b) Flight within 1 NM of Saddlebag Island (N45-57.2 W84-02.6) is prohibited below 1500' AGL;
(c) Avoid Lindberg Airport (N46-02.5 W84-25.0) by 3 NM.
(6) Point E to F: Uncharted 100' AGL tower (N46-13.0 W84-57.0).
(7) Point F to G: Uncharted 100' AGL Tower (N46-13.0 W84-57.0).
(8) Point G to H:
(a) Uncharted 200' AGL tower (N46-12.0 W85-51.0);
(b) Avoid Germfask (N46-14.8 W85-55.6) by 2 NM and 1000' AGL.
(9) Point H to I:
(a) Uncharted 200' AGL tower (N45-59.0 W87-09.0).
(b) All Points are Alternate Entry/Exit Points.
(11) SR-782 starts between Point B to C. IR-609 and IR-610 cross between Point H to I. VR-604 and reciprocal VR-607 cross between Point I to J. VR-1666 share common legs from mid-point H through J.
(12) Route transits Huron MOA between Point H through J.
(13) See and Avoid concept applies. Route conflicts with several VR and SR routes.

FSS Within 100 NM Radius:
GRB, LAN

VR-1629

ORIGINATING ACTIVITY: ALPENA CRTC/Airspace

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.
VR ROUTES

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) This route is reverse of VR-1639.
(2) Route conflicts with VR-604/607 and IR-601. At conflict points, See and Avoid concept will apply.
(3) Alternate Entry: B, C, D, E, and F.
(4) Alternate Exit: B, C, E and F.

FSS Within 100 NM Radius:
GRB

VR-1631


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: B, C, D, E, F and G.
(2) Alternate Exit: B, C, D, E, F and G.
(3) Minimum altitude for F-4 and F-111 aircraft is 500' AGL (unless otherwise stated).
(4) CAUTION: Numerous other MTR cross or are coincident with VR-1632. See FLIP AP/1B IFR/VFR Wall Planning Chart.
(5) Scheduling of VR-1632 does not give automatic scheduling of Brush Creek MOA. To fly G-H, Brush Creek must be scheduled.

FSS Within 100 NM Radius:
CLE, DAY, EKN, LOU
VR ROUTES

VR-1633


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:
(1) Alternate Entry: B, C, D.
(2) Alternate Exit: B, C, D.
(3) Be especially vigilant for helicopter operations entire route.
(4) CAUTION: Numerous other MTR cross or are coincidental with VR-1633. See FLIP AP/1B IFR/VFR Wall Planning Charts. (See and Avoid) applies.
(5) Note: Route is designated mountainous.

FSS Within 100 NM Radius:
CLE, DAY, EKN

VR-1636

ORIGINATING ACTIVITY: Alpena CRTC/OTM (ANG), 5884 A. Street, Alpena, MI 49707-8125 DSN 741-3509/3226.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from C to F.

ROUTE WIDTH - 2 NM either side of centerline for entire route.
VR ROUTES

Special Operating Procedures:
(1) Clearance to fly route does not constitute clearance into R-3403. This clearance must be obtained from scheduling agency.
(2) Point E is Alternate Exit for aircraft not scheduled into R-3403.
(3) Alternate Entry: C.
(4) Alternate Exit: E.
(5) All aircraft will maintain 1000’ AGL from C to D.

FSS Within 100 NM Radius:
CLE, DAY, HUF, IKK, LAN, LOU

VR-1639

ORIGINATING ACTIVITY: ALPENA CRTC/Airspace

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:
TERRAIN FOLLOWING OPERATIONS: Authorized entire route.
ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:
(1) This route is reverse of VR-1629.
(2) Route conflicts with VR-604/607 and IR-601. At conflicting points, (See and Avoid) concept will apply.
(3) Alternate Entry: B, D.
(4) Alternate Exit: B, D.

FSS Within 100 NM Radius:
GRB

VR-1640


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0300Z++ daily

ROUTE DESCRIPTION:
Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
05 AGL B 15 AGL to A | FWA 258/32 | N40°52.00' | W85°53.00'
05 AGL B 15 AGL to B | FWA 264/44 | N40°54.00' | W86°09.00'
05 AGL B 15 AGL to C | FWA 269/77 | N40°57.00' | W86°30.00'
05 AGL B 15 AGL to D | FWA 255/108 | N40°30.00' | W87°28.00'
05 AGL B 15 AGL to E | FWA 243/110 | N40°07.00' | W87°19.00'
05 AGL B 15 AGL to F | FWA 229/110 | N39°45.00' | W86°59.00'
05 AGL B 15 AGL to G | FWA 224/119 | N39°32.00' | W86°58.50'
05 AGL B 15 AGL to H | FWA 220/130 | N39°18.00' | W86°58.00'
05 AGL B 15 AGL to I | FWA 217/136 | N39°09.50' | W86°57.70'
05 AGL B 15 AGL to J | FWA 211/142 | N38°56.00' | W86°45.00'
05 AGL B 15 AGL to K | FWA 201/129 | N38°58.00' | W86°12.00'
05 AGL B 15 AGL to L | FWA 203/114 | N39°13.00' | W86°08.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM left and 5 NM right of centerline from A to B; 5 NM left and 8 NM right of centerline from B to C; 10 NM left and 8 NM right of centerline from C to D; 10 NM either side of centerline from D to F; 5 NM left and 3 NM right of centerline from F to G; 9 NM left and 3 NM right of centerline from G to H; 9 NM left and 10 NM right of centerline from H to I; 4 NM left and 10 NM right of centerline from I to J; 3 NM left and 10 NM right of centerline from J to K; 7 NM left and 8 NM right of centerline from K to L.

Special Operating Procedures:
(1) Clearance to fly the route does not constitute clearance into R-3401. This clearance must be obtained from the scheduling agency.
(2) Route is the reverse of VR-1642 from A to F. Route is concurrent with VR-1641 from F to L. Route is concurrent with VR-615 from J to L. Route is concurrent with VR-619/IR-618 from H to J. Route is concurrent with VR-1631, VR-1679, IR-618, VR-1617 from I to J. Route is the reverse of VR-1667 from J to L. See and Avoid concept applies.
(3) Avoid overflight of cities, towns, and villages to maximum extent.
(4) Avoid hard surfaced airports by 3 NM horizontally.
(5) Avoid lake west of Point F by 2 NM.
(6) Avoid Vermillion Airport on leg D-E by 6 NM.
(7) If holding is required for entry into R-3401, this may be accomplished within route segment K to L.
(8) Point K Alternate Exit for aircraft not scheduled into R-3401.
(9) Point K Alternate Entry for aircraft scheduled into R-3401.
(10) Alternate Entry: B, F and K.
(11) Alternate Exit: D, F, H and K.
(12) Noise Sensitive Areas: School at N40-56 W86-18 on leg B-C; chicken farm at N40-52 W86-47 on leg B-C; chicken farm at N40-58 W86-46 on leg B-C; town of Wolcott at N40-45 W87-03 on leg C-D; town of West Lebanon at N40-16 W87-23 on leg D-E; town of Covington at N40-08 W87-23 on leg D-E; lake at N39-53 W87-05 on leg E-F; Harden Lake at N39-45 W87-04 on leg E-F; horse farm at N39-38 W86-54 on leg F-G; town on Poland at N39-00 W86-57 on leg G-H; town of Patricksburg at N39-18 W86-56 on leg G-H; day care center at N39-00 W86-45 on leg I-J; Freetown at N38-58 W86-08 on leg K-L.
(13) CAUTION:
(a) 300’ AGL tower N40-15 W87-15;
(b) 475’ AGL tower N40-34.8 W87-16.1;
(c) 300’ AGL tower N40-56.6 W86-38.5 (12 Mile MOA);
(d) 550’ AGL tower N40-34.5 W87-19.0.

FSS Within 100 NM Radius:
CLE, DAY, HUF, IKK, LAN, LOU

VR-1641


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0300Z++ daily

ROUTE DESCRIPTION:
Altitude Data Fac/Rad/Dist Lat/Long
05 AGL B 15 AGL to A OKK 227/21 N40°17.00’ W86°24.00’
05 AGL B 15 AGL to B TTH 036/20 N39°45.00’ W86°59.00’
05 AGL B 15 AGL to C TTH 076/13 N39°32.00’ W86°58.50’
05 AGL B 15 AGL to D TTH 129/17 N39°18.00’ W86°58.00’
05 AGL B 15 AGL to E OOM 275/16 N39°09.50’ W86°57.70’
05 AGL B 15 AGL to F OOM 209/14 N38°56.00’ W86°45.00’
05 AGL B 15 AGL to G OOM 121/22 N38°58.00’ W86°12.00’
05 AGL B 15 AGL to H OOM 081/23 N39°13.00’ W86°08.00’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

VR-1642


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0100Z++ daily

ROUTE DESCRIPTION:
Altitude Data Fac/Rad/Dist Lat/Long
05 AGL B 15 AGL to A OKK 227/21 N40°17.00’ W86°24.00’
05 AGL B 15 AGL to B TTH 036/20 N39°45.00’ W86°59.00’
05 AGL B 15 AGL to C BVT 259/18 N40°07.00’ W87°19.00’
05 AGL B 15 AGL to D BVT 202/29 N40°30.00’ W87°28.00’
VR ROUTES

05 AGL B 15 AGL to E BVT 019/25 N40°57.00' W86°53.00'
05 AGL B 15 AGL to F FWA 264/44 N40°54.00' W86°09.00'
05 AGL B 15 AGL to G FWA 258/32 N40°52.00' W85°53.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 6 NM left and 10 NM right of centerline from A to B; 10 NM either side of centerline from B to D; 8 NM left and 10 NM right of centerline from D to E; 8 NM left and 5 NM right of centerline from E to F; 5 NM left and 4 NM right of centerline from F to G.

Special Operating Procedures:
1. Clearance to fly the route does not constitute clearance to leave the boundaries of the low level and fly within 12 mile MOA. This clearance must be obtained from the scheduling agency.
2. Sorties scheduled into 12 mile MOA will exit at F and contact Grissom Approach.
3. Avoid overflight of cities, towns, and villages to the maximum extent.
4. Route is the reverse of VR-1640 from Point B to G. Route is concurrent with VR-1641 from Point A to B. See and Avoid concept applies.
5. Avoid hard surface airports by 3 NM horizontally.
6. Avoid Ceci M. Harden Lake by 2 NM.
7. Alternate Entry: B and D.
8. Alternate Exit: F.
9. Avoid Vermillion Airport on leg C to D by 6 NM.
10. Noise Sensitive Areas:
   a. Harden Lake at N39-45 W87-04 on leg B-C;
   b. Lake at N39-53 W87-05 on leg B-C;
   c. Town of Covington at N40-08 W87-23 on leg C-D;
   d. Town of West Lebanon at N40-16 W87-23 on leg C-D;
   e. Town of Wolcott at N40-45 W87-03 on leg D-E;
   f. Chicken farm at N40-52 W86-57 on leg D-E;
   g. Chicken farm at N40-58 W86-46 on leg E-F;
   h. School at N40-56 W86-18 on leg E-F.
11. CAUTION:
   a. 300' AGL tower N40-15 W87-15;
   b. 475' AGL tower N40-34.8 W87-16.1;
   c. 300' AGL tower N40-56.6 W86-38.5 (12 Mile MOA);
   d. 550' AGL tower N40-34.5 W87-19.0.

FSS Within 100 NM Radius:
CLE, DAY, HUF, IKK, LAN, LOU

VR-1644


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A APN 261/45 N44°52.00' W84°34.80'
05 AGL B 15 AGL to B APN 270/41 N45°00.00' W84°31.40'
05 AGL B 15 AGL to C APN 302/23 N45°14.70' W84°02.90'
05 AGL B 15 AGL to D APN 245/19 N44°55.00' W83°56.00'
10 AGL B 15 AGL to E APN 194/26 N44°39.00' W83°38.80'
05 AGL B 15 AGL to F MBS 023/43 N44°12.00' W83°44.00'
01 AGL B 15 AGL to G MBS 046/41 N44°02.00' W83°26.00'
01 AGL B 15 AGL to (Below 05 AGL only over water)
01 AGL B 15 AGL to H MBS 060/60 N44°04.00' W82°55.00'
05 AGL B 15 AGL to I MBS 108/62 N43°15.35' W82°43.07'
05 AGL B 15 AGL to Alternate Entry: D as assigned to A1 APN 261/45 N44°52.00' W84°34.80'
05 AGL B 15 AGL to B1 APN 270/41 N45°00.00' W84°31.40'
05 AGL B 15 AGL to B2 APN 274/37 N45°02.70' W84°26.00'
05 AGL B 15 AGL to C1 APN 280/19 N45°05.80' W83°59.80'
05 AGL B 15 AGL to D1 APN 245/19 N44°55.00' W83°56.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from A to B; 2 NM either side of centerline from B to C; 4 NM either side of centerline from C to I; 4 NM left and 3 NM right of centerline from A1 to B1; 2 NM either side of centerline from B1 to B2; 3 NM left and 2 NM right of centerline from B2 to C1; 4 NM either side of centerline from C1 to D.

Special Operating Procedures:
1. Avoid all watercraft, structures, vehicles and persons by 500' AGL minimum on all route segments over water portion and Point G - 100' AGL minimum over land or within 1 NM of land - 500' AGL minimum.
2. Point A to B: avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: N44°55.00' W83°56.00'.
3. Point B to C:
   a. Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N44°54.3 W84-34.2);
   b. SR-781 crosses route; deconflict with Alpena scheduler.
   c. Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1 NM;
   d. CAUTION: 1349' AGL (2409' MSL) tower (N45-08.3 W84-09.8);
   e. Uncharted sod airstrip (N45-16.0 W84-05.0).
4. Point C to D:
   a. Avoid overflying any structure below 100' AGL;
   b. Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-15.0 W83-58.5);
(N45-15.0 W83-58.0); (N45-09.0 W83-58.5); (N45-02.0 W83-53.0); (N44-57.0 W83-52.0);
(c) Avoid Hillman Airport (N45-05.0 W83-55.0) by 3 NM.

(5) Point D to E:
(a) Uncharted sod airstrips: (N44-54.0 W83-55.0); (N44-52.0 W83-53.0); (N44-48.0 W83-48.0);
(b) Avoid the following nesting areas by 1 NM and 1000' AGL during listed time frames: (Common Loon from 1 Apr through 15 Jul: N44-40.7 W83-36.3); (Bald Eagle from 1 Feb through 1 Aug: N44-53.0 W83-55.0; N44-46.3 W83-53.0).

(c) SR-782 crosses route, deconflict with Alpena scheduler.

(6) Point E to F:
(a) Avoid Stier Airport (N44-31.0 W83-41.0) by 3 NM;
(b) Avoid Glennie (N44-33.0 W83-43.0) by 3 NM;
(c) Uncharted sod airstrip (N44-16.0 W83-47.0);
(d) Avoid the following nesting areas by 1 NM and 1000' AGL during listed time frames: (Common Loon from 1 Apr through 15 Jul: N44-36.0 W83-36.3); (Great Blue Heron from 15 Mar through 15 Aug: 44°34.6N 83°42.7W); (Bald Eagle from 1 Feb through 15 Aug: N44-27.5 W83-45.5); (Kirtland's Warbler from 1 May through 15 Aug: N44-20.0 W83-38.5; N44-22.0 W83-38.0; N44-34.0 W83-35.0).
(e) Do not overfly open pit mine at water plant (N44-15.84 W83-41.40) Point F by 1 NM due to unannounced mine blasting.

(7) Point H to I:
(a) Uncharted sod airstrip (N43-34.0 W82-47.0);
(b) Minimum altitude 1000' AGL last 5 NM.

(8) Point A1 to B1: Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: N44-53.4 W84-27.2.

(9) Point B1 to B2: Avoid Johannesburg (N44-59.0 W84-27.3) by 1 NM.

(10) Point B2 to C1:
(a) Avoid Heatherton (N45-01.0 W84-22.2) by 1 NM;
(b) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-07.0 W84-04.5), (N45-04.5 W84-07.0);
(c) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1 NM;
(d) CAUTION: 1349' AGL (2409' MSL) tower (N45-08.3 W84-09.8).

(11) Point C1 to D1:
(a) Avoid overflying any structure below 1000' AGL;
(b) Avoid Hillman Airport (N45-05.0 W83-55.0);
(c) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-09.0 W83-58.5); (N45-02.0 W83-53.0); (N44-57.0 W83-52.0).

(12) Clearance to fly route does not constitute clearance into R-4201 which must be given by the RCO on 266.6/261.2. Do not proceed to Point A (A1) unless cleared into R-4201.

(13) All Points are Alternate Entry and Exit Points.

(14) VR-1644 is opposite direction traffic with VR-1624, VR-1627 F to H, and VR-1627 alternate route E2 to E4. VR-1644 alternate route is opposite direction traffic with VR-1624 alternate route and VR-1627 alternate route E1 to E4.

(15) (See and Avoid) concept applies. Route conflicts with several VR and SR routes.

**FSS Within 100 NM Radius:**
CLE, LAN

**VR-1645**

**ORIGINATING ACTIVITY:** ALPENA CRTC/Airspace

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Sunrise-Sunset

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 15 AGL to A</td>
<td>APN 255/48</td>
<td>N44°47.00'</td>
<td>W84°36.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to B</td>
<td>APN 246/43</td>
<td>N44°43.00'</td>
<td>W84°25.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to C</td>
<td>APN 245/19</td>
<td>N44°55.00'</td>
<td>W83°56.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D</td>
<td>APN 131/29</td>
<td>N44°49.00'</td>
<td>W83°00.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to E</td>
<td>MBS 060/60</td>
<td>N44°04.00*</td>
<td>W82°55.00*</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to F</td>
<td>MBS 108/62</td>
<td>N43°15.35*</td>
<td>W82°43.07*</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 4 NM either side of centerline.

**Special Operating Procedures:**

(1) Avoid all watercraft, structures, vehicles and persons by 500' on terrain following segments.

(2) This route can be flown in conjunction with range missions in the R-4201 restricted area. Route begins at R-4201 boundary. Clearance to fly the route does not constitute clearance into R-4201. This clearance must be obtained from Range Scheduling, DSN 741-6335. Prior to entering R-4201 obtain inflight clearance/instructions from Range Officer on 266.6. Begin route at alternate entry B unless scheduled for R-4201.

(3) Route is reverse of VR-1625. In addition, route conflicts with VR-1624, VR-1644, VR-1627, VR-1628. At conflicting Points, See and Avoid concept will apply.

(4) Route conflicts with SR-701/702 between Point E-F, contact 127 OG at DSN 273-4663 for deconfliction.

(5) Points A to B: Maintain minimum altitude 1000' AGL 3 NM of Lovells (N44°48 W84°29').

(6) Route conflicts with SR-782 between Point B-D, contact Alpena scheduler for deconfliction.

(7) Points E to F: Maintain minimum altitude of 1000' AGL over land. Noise Sensitive Area. 1 NM after landfall maintain minimum altitude of 100' AGL.

(8) Alternate Entry: B, C, D and E.

(9) Alternate Exit: B, C, D and E.

(10) Route conflicts with SR-782 between Point B-D, contact Alpena scheduler for deconfliction.

**FSS Within 100 NM Radius:**
CLE, LAN
VR ROUTES

VR-1647

ORIGINATING ACTIVITY: ALPENA CRTC/Airspace
Scheduling Office, 5884 A. Sreet, Alpena, MI 49707,
C989-345-6386/6204, DSN 741-6386/6204.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from A to B; 2 NM either side of centerline from B to C; 3 NM left and 4 NM right of centerline from C to D; 4 NM either side of centerline from D to H; 4 NM left and 3 NM right of centerline from A1 to B1; 2 NM either side of centerline from B1 to B2; 3 NM left and 2 NM right of centerline from B2 to C1; 3 NM left and 4 NM right of centerline from C1 to D.

Special Operating Procedures:

(1) Avoid all watercraft, structures, vehicles and persons by 500’ AGL minimum on all route segments over water portion - 100’ AGL minimum over land or within 1 NM of land - 500’ AGL minimum.

(2) Points A to B:

(a) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N44-53.4 W84-34.2).

(b) Crossing route SR-781, contact Alpena scheduler to deconflict.

(3) Points B to C:

(a) Avoid Johannesburg (N44-59.0 W84-27.3) by 1 NM;

(b) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N45-07.0 W84-15.0);

(c) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1 NM;

(d) CAUTION: 1349’ AGL (2409’ MSL) tower (N45-08.3 W84-09.8).

(4) Point C to D:

(a) Avoid overflying any structure below 1000’ AGL;

(b) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N45-15.0 W83-58.5);

(c) Uncharted sod airstrip (N45-16.0 W84-05.0);

(d) Avoid Millersburg (N45-20.3 W84-03.7), and Ocqueoc (N45-24.6 W84-05.3) by 1 NM.

(5) Points D to E:

(a) Uncharted lighthouse 100’ AGL (N45-46.0 W84-08.0);

(b) Flight within 1 NM of Saddlebag Island (N45-57.2 W84-02.6) is prohibited below 1500’ AGL;

(c) Flight is prohibited within 2 NM of the Lake Huron shoreline from St. Vital Point (45-57.0N 84-00.0W) west to Huron Point (N45-58.0 W84-04.0) below 1500’ AGL.

(6) Points E to F:

(a) Uncharted lighthouse 100’ AGL south entrance of De Tour Channel (N45-57.0 W83-54.0);

(b) Approaching Drummond Island, do not penetrate land in area of Point F by more than 1 NM. If over land, fly minimum of 1000’ AGL.

(7) Points F to G:

(a) Uncharted lighthouse 100’ AGL (N45-57.0 W84-26.0);

(b) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N45-16.5 W83-26.0).

(8) Point G to H:

(a) Uncharted lighthouse 100’ AGL on Middle Island (N45-11.6 W83-19.5);

(b) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N45-16.5 W83-16.0).

(9) Points A1 to B1:

(a) Avoid Heatherton (N45-01.0 W84-22.2) by 1 NM;

(b) Avoid Bald Eagle nesting areas by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N45-05.0 W84-07.5);

(c) Avoid Hillman Airport (N45-05.0 W83-55.0) by 3 NM;

(d) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1 NM;

(e) CAUTION: 1349’ AGL (2409’ MSL) tower (N45-08.3 W84-09.8).

(10) Points B1 to B2:

(a) Avoid Bald Eagle nesting area by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N45-16.5 W83-26.0).

(11) Points C1 to D1:

(a) Avoid Heatherton (N45-01.0 W84-22.2) by 1 NM;

(b) Avoid Bald Eagle nesting areas by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N45-05.0 W84-07.5);

(c) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1 NM;

(d) CAUTION: 1349’ AGL (2409’ MSL) tower (N45-08.3 W84-09.8).

(12) Points C1 to D1:

(a) Avoid overflying any structure below 1000’ AGL;

(b) Avoid Bald Eagle nesting areas by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N45-05.0 W83-55.0) by 3 NM;

(c) Avoid Bald Eagle nesting areas by 1 NM and 1000’ AGL from 1 Feb through 1 Aug: (N45-09.0 W83-58.5);

(d) Uncharted sod airstrip (N45-16.0 W84-05.0);

(e) Avoid Millersburg (N45-20.3 W84-03.7) and Ocqueoc (N45-24.6 W84-05.3) by 1 NM.

(13) Clearance to fly the route does not constitute clearance into R-4201 which must be given by the RCO on 266.6/261.2. Do not proceed to Point A (A1) unless cleared into R-4201.
(14) All points are alternate Entry/Exit Points.
(15) VR-1647 is opposite direction traffic with VR-1627, VR-1624 G to H, and VR-1624 alternate route F2 to F4. VR-1647 alternate route is opposite direction traffic with VR-1624 alternate route F1 to F4. 127 TFW will not schedule opposite and conflicting traffic.
(16) Route transits Pike East MOA between Points F through H.
(17) See and Avoid concept applies. Route conflicts with several VR and SR routes.

**FSS Within 100 NM Radius:**
LAN

**VR-1648**

**ORIGINATING ACTIVITY:** ALPENA CRTC/Airspace Scheduling Office, 5884 A. Sreet, Alpena, MI 49707, C989-345-6386/6204, DSN 741-6386/6204.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Sunrise-Sunset

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>A</td>
<td></td>
<td>N46°26.0' W88°20.0'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>ESC 333/16</td>
<td>N45°58.0' W87°16.0'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>ESC 059/59</td>
<td>N46°13.0' W85°52.0'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>SSM 258/52</td>
<td>N46°10.0' W85°31.0'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>SSM 255/26</td>
<td>N46°16.0' W84°55.0'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>PLN 021/21</td>
<td>N45°58.0' W84°32.0'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>G</td>
<td>PLN 061/34</td>
<td>N45°57.0' W84°00.0'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to (below 05 AGL only over water)</td>
<td>H</td>
<td>PLN 069/41</td>
<td>N45°56.0' W83°48.0'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to (below 05 AGL only over water)</td>
<td>I</td>
<td>APN 041/13</td>
<td>N45°16.0' W83°23.0'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>J</td>
<td>APN 131/29</td>
<td>N44°49.0' W83°00.0'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to (below 05 AGL only over water)</td>
<td>K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 AGL B 15 AGL to (below 05 AGL only over water)</td>
<td>L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 AGL B 15 AGL to (below 05 AGL only over water)</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 AGL B 15 AGL to (below 05 AGL only over water)</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 AGL B 15 AGL to (below 05 AGL only over water)</td>
<td>O</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 4 NM either side of centerline.

**Special Operating Procedures:**
(1) Avoid all watercraft, structures, vehicles and persons by 500’ AGL minimum on all segments.
(2) Point B to C: Uncharted 200' AGL tower - N45-59.0 W87-09.0.
(3) Point C to D:
   a) Uncharted 200' AGL tower - N46-12.0 W85-51.0;
   b) Avoid Germfask- N46-14.8 W85-55.6 - by 2 NM or 1000' AGL.

(4) Point D to E: Uncharted 100' AGL tower- N46-13.0 W84-57.0.
(5) Point E to F:
   a) Uncharted 100' AGL tower - N46-13.0 W84-57.0;
   b) Uncharted 100' AGL, 1000' MSL, tower on NW side of hill, N46-09.5 W84-46.7.
(6) Point F to G:
   a) Avoid Lindberg Airport- N46-02.5 W84-25.0 - by 3 NM;
   b) Flight within 1 NM of Saddlebag Island, N45-57.2 W84-04.6, below 1500' AGL prohibited;
   c) Flight is prohibited within 2 NM of the Lake Huron shoreline from Huron Point, N45-58.0 W84-04.0, east to St. Vital Point N45-58.0 W84-00.0, below 1500' AGL.
(7) Point G to H: Uncharted 100' AGL lighthouse at south entrance of DeTour Channel- N45-57.0 W83-54.0.
(8) Point H to I:
   a) Uncharted 100' AGL lighthouse on Middle Island - N45-11.8 W83-19.0;
   b) Avoid Bald Eagle nest area 1 NM and 1000' AGL 1 Feb through 1 Aug.
(9) Point I to J:
   a) Uncharted 100' AGL lighthouse on Middle Island - N45-11.8 W83-19.0;
   b) Avoid Bald Eagle nest area 1 NM and 1000' AGL 1 Feb through 1 Aug.
(10) All points are Alternate Entry and Exit.
(11) VR-1636 and reciprocal VR-1666 share common legs from A through mid-point B to C. VR-604 and reciprocal VR-607 cross between SR-782 starts between Points I to J.
(12) Route transits Huron MOA between Points H thru J.
(13) This route is reciprocal route to VR-1628. This route shares common legs with VR-1647 and opposite legs with VR-1627 for which 127 TFW is scheduling agency. The 127 TFW will not schedule opposite and conflicting traffic at the same time.
(14) (See and Avoid) concept applies. Route conflicts with several VR, SR and IR routes.

**FSS Within 100 NM Radius:**
GRB, LAN

**VR-1650**

**ORIGINATING ACTIVITY:** ANG CRTC, Camp Douglas, WI 54618-5001 DSN 871-1445 C608-427-1445.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 0730 local-Sunset Tue-Sat, OT by NOTAM

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>EAU 123/32</td>
<td>N44°34.70' W90°53.50'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>B</td>
<td>EAU 100/34</td>
<td>N44°45.30' W90°43.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>C</td>
<td>AUW 272/36</td>
<td>N44°53.40' W90°26.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>D</td>
<td>AUW 275/22</td>
<td>N44°53.30' W90°06.00'</td>
</tr>
</tbody>
</table>
TERRAIN FOLLOWING OPERATIONS: Authorized from A to G.

ROUTE WIDTH - 2 NM right and 4 NM left of centerline from A to D; 3 NM either side of centerline from D to G.

Special Operating Procedures:
(1) Route normally will be flown in conjunction with range missions at R-6904 or as an entry into the Volk West MOA. On entering the route, contact Volk Mission Coordinator, callsign Phoenix, UHF 346.525. Clearance to fly VR-1650 does not constitute clearance to enter R-6904. Clearance to enter R-6904 is required from the Range Control Officer on UHF 358.8/297.75, VHF 132.026, FM 34.2. Aircraft not scheduled into R-6904 must exit at F.
(2) Alternate Entry Point: F.
(3) Alternate Exit Point: F.
(4) Crop dusting operations are conducted up to 1500' AGL over or near Cranberry Bogs.
(5) Noise sensitive areas, avoid by 2000' AGL or 1.5 NM unless otherwise indicated:
   (a) Points C-D; Mink ranch N45-09.0 W90-14.0, avoid by 2500' AGL or 1.5 NM;
   (b) Numerous dairy and veal farms throughout route;
   (c) Points E-F; George W. Mead Wildlife Area (N44-43.5 W89-53.0 to N44-42.5 W89-49.0 to N44-44.2 W89-46.0 to N44-44.0 W89-46.0 to N44-43.5 W89-53.0 back to starting point).
(7) Possible route conflicts:
   (a) Points F-H transit Volk West MOA;
   (b) Points E-F crossing traffic on SR-785;
   (c) Endpoint G coincides with VR-1616, endpoint H at Hardwood Range (R-6904).
(8) Soaring raptors prevalent SFC to 2000' AGL for entire route from Feb-Nov during the mid-day time period.
(9) Waterfowl feeding flights SFC to 2000' AGL between points B-D from Apr-May and Aug-Nov during the dawn/dusk time period.
(10) Caution; High numbers of waterfowl feeding flights SFC to 2000' AGL between points B-C from Sep-Oct during the dawn/dusk time period.

FSS Within 100 NM Radius:
GRB, PNM

VR-1667

ORIGINATING ACTIVITY: 180 TFG/DO, Toledo Express Airport, Swanton, OH 43558 DSN 580-4084.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise - 0200Z++

ROUTE DESCRIPTION:
Altitude Data   Pt   Fac/Rad/Dist   Lat/Long at or below 15 AGL
05 AGL B 15 AGL to B SHB 199/42 N38°58.00' W86°08.00'
05 AGL B 15 AGL to C SHB 137/28 N39°17.00' W85°25.00'
05 AGL B 15 AGL to D SHB 068/28 N39°48.00' W85°15.00'
05 AGL B 15 AGL to E ROD 274/42 N40°16.00' W84°58.00'
05 AGL B 15 AGL to F ROD 303/31 N40°32.00' W84°39.00'
05 AGL B 15 AGL to G TOL 211/24 N41°14.00' W84°02.00'

SCHEDULING ACTIVITY: Same as Originating Activity
TERRAIN FOLLOWING OPERATIONS: Authorized from A to E.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
(1) Entry Point A is within confines of R-3401. Clearance to fly the route does not constitute clearance into R-3401. Alternate entry Point B will be used by aircraft not scheduled into R-3401.
(2) All aircraft will maintain 1000' AGL from D to E.
(3) Alternate Entry: B, C and D.
(4) Alternate Exit: B, C, D and E.
(5) This route is reverse of VR-1617 and is concurrent with VR-1638 and VR-1668 from Points C to G. The 180 TFG is scheduling agency for these routes and will deconflict these routes through scheduling.
(6) Avoid direct overflight of Freetown, IN below 1000' AGL, Point B. Noise Sensitive Area.

FSS Within 100 NM Radius:
CLE, DAY, HUF, IKK, LAN, LOU

VR-1668

ORIGONATING ACTIVITY: 180TH FW/OSO, Toledo Express Airport, Swanton, OH 43558 C419-868-4036, DSN 580-4036.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-2100 local

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM right and 4 NM left of centerline from B to C; 5 NM either side of centerline from C to F; 5 NM left and 8 NM right of centerline from F to G; 3 NM left and 7 NM right of centerline from G to H; 5 NM either side of centerline from H to I; 10 NM left and 4 NM right of centerline from I to J.

Special Operating Procedures:
(1) Clearance to fly the route does not constitute clearance to enter R-3401.
(2) Route is MARSA thru See and Avoid with IR-618, VR-619, IR-620 and VR-621.
(3) Point I Alternate Exit for aircraft scheduled into R-3401.
(4) Avoid overflight of cities, towns, and villages to extent possible.
(5) If holding is required for entry into R-3401, accomplish between route segment I and J at holding airspeed.
VR ROUTES

(6) Alternate Entry: F, G and I.
(7) Alternate Exit: E, F and G.

**FSS Within 100 NM Radius:**
BNA, DAY, HUF, IKK, LOU, STL

**VR-1709**

**ORIGINATING ACTIVITY:** 177/FW/DET1, Warren Grove Range, NJ DSN 455-6700, C609-761-6700. E-mail usaf.nj.177-fw.list.wgr-scheduler at mail.mil

**SCHEDULING ACTIVITY:** EASTERN AIR DEFENSE SECTOR, Rome, NY, DSN 587-6247, C315-334-6247.

**HOURS OF OPERATION:** Sunrise-2200L

**ROUTE DESCRIPTION:**

**TERRAIN FOLLOWING OPERATIONS:** Authorized from A to F.

**ROUTE DATABASE**

VR-1711

**ORIGINATING ACTIVITY:** 113 WG, Andrews AFB, MD 20331 DSN 857-3307/08, C240-857-3307/3308/4190.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 0730 local-Sunset daily

**ROUTE DESCRIPTION:**

**FSS Within 100 NM Radius:**
AOO, BDR, DCA, MIV, IPT, ISP

**VR-1711**
TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:
(1) Those wanting to schedule this route must call during normal duty hours (0730-1530 on Mon and 0630-1530 on Tue-Sat).
(2) Bird hazard exists along route 15 Sep-1 Dec and 1 Mar-30 Apr.
(3) Alternate Entry: B, C, D, E and F.
(4) Alternate Exit: B, C, D, E and F.
(5) Avoid hospital (N38-33 W76-35) 6 NM NNE of Point D.
(6) CAUTION: Helicopter traffic in vicinity of PXT TACAN 270 deg-340 deg, 15-20 NM radius, altitude 500'-1500' daily.
(7) Avoid towns and populated areas by 1 NM or overfly by 1000' AGL; Avoid airports and hospitals by 3 NM or overfly by 1500' AGL.
(8) CAUTION: Numerous light aircraft between D and E, 1 Jun-30 Oct.
(9) Route passes through restricted area R6604E between points E and F. Aircrew must check NOTAM for restricted area status within 9 hrs of use. Aircrews cannot penetrate R6604E when active.

FSS Within 100 NM Radius:
AOO, DCA, IPT, MIV

VR-1713


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0730 local-Sunset daily

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A OTT 081/15 N38°47.00' W67°27.00'
05 AGL B 15 AGL to B OTT 177/16 N38°27.00' W67°40.00'
05 AGL B 15 AGL to C OTT 186/34 N38°08.00' W67°42.00'
05 AGL B 15 AGL to D HCM 354/23 N37°49.00' W76°49.00'
05 AGL B 15 AGL to E CCV 089/22 N37°25.00' W75°33.00'
05 AGL B 15 AGL to F SBY 237/14 N38°11.00' W75°43.00'
05 AGL B 15 AGL to G HCM 045/55 N38°10.00' W76°00.00'
01 AGL B 15 AGL to H CVI 159/40 N35°48.00' W76°28.00'

FSS Within 100 NM Radius:
AOO, DCA, IPT, MIV
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from B to F; 7.5 NM either side of centerline from F to G; 3 NM either side of centerline from G to H.

Special Operating Procedures:
(1) Those wanting to schedule this route must call during normal duty hours (0730-1530 on Mon and 0630-1530 on Tue-Sat).
(2) Bird hazard exists along route 15 Sep-1 Dec and 1 Mar-30 Apr.
(3) Alternate Entry: C, D, G.
(4) Alternate Exit: C, G.
(5) Avoid hospital (N38-33 W76-35) 6 NM NNE of Point B, by 1500' AGL and 2 NM.
(6) CAUTION: Helicopter traffic in vicinity of PXT TACAN 270 deg-340 deg, 15-20 NM radius, altitude 500'-1500' daily.
(7) Avoid towns and populated areas by 1 NM or overfly by 1000' AGL; avoid airports and hospital by 3 NM or overfly by 1500' AGL.
(8) Avoid 300' AGL Tower located at 37-29N 76-57W. Avoid 500' AGL tower at 37-26N 76-57W.

FSS Within 100 NM Radius:
AOO, DCA, IPT, RDU

VR-1721


SCHEDULING ACTIVITY: Same as originating activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from A to I.

ROUTE WIDTH - 5 NM either side of centerline from A to H; 1 NM left and 9 NM right of centerline from H to I.

Special Operating Procedures:
(1) VR-1721 will not be flown unless the aircrew has filed for IR-721 and IFR procedural problems are encountered.
(2) Monitor Greensboro Approach 327.075 passing Pt B.
(3) Monitor Charlotte Approach 307.8 passing Pt G and report Pt I level at 3000' MSL.
(4) Contact Shaw RAPCON 318.1 passing Pt I.
(6) CAUTION: VR-087 crosses from right to left, Pt H to Pt I (Deconflict with 4 FW DSN 722-2129).
(7) Mission permitting, avoid the following environmentally sensitive areas (woodpecker concentrations) by 500' vertically or 1000' horizontally: N32-25.5 W80-01.2 and N35-25.2 W80-02.2.
(8) CAUTION: Glider activity in vicinity of Mount Airy Airport, NC (N36-27.5 W80-33.1).
(10) Noise Sensitive Areas: Avoid each by 1000' AGL and 1 NM
(a) N36-03 W80-43W;
(b) N36-43 W80-18W;
(c) N35-40.0 W80-20.5;
(d) N35-47.3 W80-26.0;
(e) N35-43.0 W80-25.2.
(f) Congressional noise sensitive area (cattle farm) N36-28.8 W80-27.5

(11) AVOID: Towers
(a) 275' AGL (3150' MSL) N36-40.0 W80-23.3;
(b) 225' AGL (1000' MSL) N35-23.0 W79-58.6;
(c) 225' AGL (810' MSL) N34-59.5 W80-15.9;
(d) 300' AGL N35-52.4 W80-33.6;
(e) 300' AGL N34-42.2 W80-16.5;
(f) 300' AGL N34-59.7 W80-10.6 (just west of a charted tower);
(g) 225' AGL N36-42.9 W80-20.1;
(h) 200' AGL N36-42.97 W80-19.89;
(i) 250' AGL N36-19.38 W80-33.71;
(j) 300' AGL N36-16 W80-35;
(k) 300' AGL N35-47 W80-21;
(l) 200' AGL N35-24.55 W79-57.35;
(m) 200' AGL N35-33.4 W80-06;
(n) 250' AGL N35-36.49 W80-17.02;
(o) 300' AGL N35-14.32 W79-59.69;
(p) 350' AGL N36-20.57 W80-37.77;
(q) 300' AGL N36-58.32 W80-10.43;
(r) 300' AGL N36-20.09 W80-37.20;
(s) 300' AGL N35-58.08 W80-38.19;
(t) 250' AGL N35-31.18 W80-03.61;
(u) 300' AGL N35-22.20 W79-56.70;
(v) 300' AGL N36-31.13 W80-30.50 - 100 yards North of charted antenna 340' AGL;
(w) 200' AGL N37-07.05 W80-01.04;
(x) 300' AGL N36-45.05 W80-19.28;
(y) 300' AGL N36-42.78 W80-19.89;
(z) 396' AGL N35-19.56 W79-53.10;

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at 15 AGL to A ROA 181/17 N37°03.50' W80°03.00'
03 AGL B 15 AGL to B ROA 195/27 N36°53.80' W80°11.00'
03 AGL B 15 AGL to C GSO 336/42 N36°40.00' W80°22.00'
03 AGL B 15 AGL to D GSO 326/34 N36°30.00' W80°24.00'
03 AGL B 15 AGL to E GSO 297/35 N36°17.00' W80°38.50'
03 AGL B 15 AGL to F GSO 248/34 N35°48.50' W80°36.67'
03 AGL B 15 AGL to G GSO 230/26 N35°44.83' W80°22.48'
03 AGL B 15 AGL to H GSO 180/41 N35°21.60' W79°56.00'
03 AGL B 15 AGL to I SSC 027/43 N34°39.00' W80°11.50'
(aa) 200' AGL N35-33.63 W80-09.36;
(ab) 200' AGL N35-18.08 W80-03.83;
(ac) 300' AGL N35-42.18 W80-22.48;
(ad) 300' AGL N35-48.61 W80-22.63;
(ae) 200' AGL N35-19.56 W79-53.10;

(12) Avoid uncharted private grass strips by 1000' AGL and 2 NM:
(a) N36-03.51 W80-39.67, possible grass strip 1600' runway;
(13) Include route entry/exit times in the remarks section of the flight plan. Make entry times plus or minus 5 minutes or reschedule.
(15) Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
(17) AVOID: Class D airspace at Stanly Co Airport (N35-24.9 W80-09.1), sfc to and including 3100' MSL within a 5.8 NM radius with a 3 NM 'key-hole' 1.5 NM either side of centerline for Rwy 22L out to 7.8 NM; contact tower on 291.9/126.275 passing Pt G and Pt H (Twr hrs 0800-2200L Tues-Sat). Pt. Hotel is a new required reporting point.

FSS Within 100 NM Radius:
AND, EKN, RDU

VR-1722


SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Duty hours 0600-1900 local (EST).

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: VFR terrain following is authorized in accordance with Command Directives within published altitude blocks (05 AGL B 15 AGL) along entire route except within 3 NM of F, where 1500' AGL must be maintained.

ROUTE WIDTH - 3 NM either side of centerline from A to E; 2 NM either side of centerline from E to F; 3 NM either side of centerline from F to G; 2 NM either side of centerline from G to H; 3 NM either side of centerline from H to L.

Special Operating Procedures:
(1) Route reservation and brief required.
(2) Route users must deconflict Farmville MOA with 1FW, if routes are used between the hours 0930-1430 and 1600-1700 (all times local) Mon-Fri DSN 574-2483/2559.
(3) Alternate Entry: B and H.
(4) Alternate Exit: D, G, I and F.
(5) Conflicting routes: (Deconfliction is the responsibility of the mission commander):
(a) VR-096 boundaries overlap between Points A-B opposite direction and crosses between C-D and F-G. Deconflict with 4 OSS/OSOS, Seymour Johnson AFB, DSN 722-2129/2124, C919-722-2129/2124;
(b) VR-1061 is coincident from Point D to E and crosses between Points F and G. Deconflict with 4 OSS/OSOS, Seymour Johnson AFB, DSN 722-2129/2124, C919-722-2129/2124;
(c) VR-1754 is coincident from Point A to B and crosses between Points J and K;
(d) VR-1755 is coincident from Point J to L;
(e) VR-1759 crosses between Points F-G, H-I and J-K.

FSS Within 100 NM Radius:
AOO, DCA, EKN, MIV, RDU

Altitude Data Pt Fac/Rad/Dist Lat/Long
05 AGL B 15 AGL to A LYH 352/44 N37°58.00' W79°27.00'
05 AGL B 15 AGL to B GVE 239/32 N37°41.70' W78°41.50'
05 AGL B 15 AGL to C LYH 079/30 N37°23.30' W78°37.50'
05 AGL B 15 AGL to D LYH 156/13 N37°04.00' W79°06.40'
05 AGL B 15 AGL to E SBV 253/4 N36°38.80' W79°06.00'
05 AGL B 15 AGL to F SBV 109/24 N36°34.70' W78°32.40'
05 AGL B 15 AGL to G LVL 316/7 N36°53.20' W78°00.80'
05 AGL B 15 AGL to H FAK 182/23 N37°08.60' W77°47.70'
05 AGL B 15 AGL to I FAK 269/24 N37°28.70' W78°19.50'
05 AGL B 15 AGL to J FAK 343/11 N37°41.60' W77°55.00'
05 AGL B 15 AGL to K BRV 209/22 N37°59.20' W77°31.00'
05 AGL B 15 AGL to L PXT 240/29 N37°58.40' W76°52.60'

3-195
VR ROUTES

VR-1726


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from A to I.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to C; 15 NM right and 6 NM left of centerline from C to D; 15 NM either side of centerline from D to E. On centerline to 10 NM right of centerline from E to F; 1 NM left and 10 NM right of centerline from F to G; 5 NM left and 10 NM right of centerline from G to H; 5 NM either side of centerline from H to I.

Special Operating Procedures:

(1) Route reservation and brief required.
(2) VR-1726 will not be flown unless the aircrew has filed for IR-726 and procedural problems are encountered. If refused entry into IR-726, please call 4 OSS/OSOS with time and reason entry was refused.
(3) See Special Operating Procedures for IR-726, for other route information.
(4) Alternate Entry: B, C, D, and E.
(5) Alternate Exit: E, G, and H.

FSS Within 100 NM Radius:
AND, EKN, RDU

VR-1743

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C 757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from A to J.

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Special Operating Procedures:

(1) Route reservation and brief required.
(2) VR-1743 will not be scheduled and cannot be flown unless the aircrew has filed for IR-743 and procedural problems are encountered. If refused entry into IR-743, please inform FFVC with date/time and reason entry was refused. Check FLIP AP/1B guidance for specifics on IR-743.
(3) See Special Operating Procedures for IR-743 for other route information.
(4) Alternate Entry: C and D.
(5) Alternate Exit: E and H.

FSS Within 100 NM Radius:
AND, EKN, RDU

VR-1753

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9521, C757-433-9521.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous
ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 5 NM either side of centerline from C to F; 2 NM either side of centerline from F to G; 3 NM either side of centerline from G to H.

Special Operating Procedures:

(1) Route reservation and brief required.
(2) Alternate Entry: C, D, E. Alternate Exit: F.
(3) Contact Leesburg FSS prior to entry on 255.4 with entry/exit times.
(4) If exiting route at Point H, transit R-5314 below 1000' AGL unless scheduled and/or cleared by Navy Dare Range Control Officer on frequency 358.8. Do not enter R-5313 unless scheduled.
(5) Conflicting routes:
(a) VR-1754/VR-1755 are coincident from Point A to B;
(b) VR-1713 crosses between Point B and C, and runs parallel from Point D to H;
(c) VR-163 crosses at Point D, and between Point E and F.

(6) Hazards:
(a) Extensive civilian fish-spotter aircraft from SFC to 5000' AGL over Chesapeake Bay, between Point A and B, from Apr-Nov.
(b) Ultralight activity in the vicinity of Point B.
(c) N37-20.8 W76-50.5 - Chart depicted antenna tower is actually 700' AGL.
(d) N36-55.2 W77-16.9 - Uncharted 250' AGL antenna tower.
(e) N36-41.4 W77-10.0 - Uncharted 500' AGL antenna tower.
(f) N36-23.0 W76-53.0 - Two 250' AGL powerline towers cross Chowan River.
(g) Exercise caution in the vicinity R-5314. Numerous MTRs terminate in this area. Military aircraft may be holding VFR over Phelps Lake or at the Alligator River bridge awaiting for clearance into the Dare bombing range.

(7) Do not fly over:
(a) N37-25.0 W76-32.0 - Remain 2 NM from hospital.
(b) N37-07.8 W77-13.5 - Remain 3 NM north of the town of Disputanta.

(8) Avoid:
(a) N37-20.0 W76-45.0 - Williamsburg Pottery Factory and vicinity.
(b) N36-03.0 W76-42.0 - West bank of Chowan River in vicinity of Point F.
(c) N35-47.5 W76-24.8 - Phelps Lake boat ramp.

FSS Within 100 NM Radius:
DCA, MIV, RDU

VR-1754


SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long

As assigned to A CCV 115/11 N37°19.00' W75°47.00'
10 AGL B 15 AGL to B HCM 081/15 N37°31.01' W76°25.00'
10 AGL B 15 AGL to C HPW 223/16 N37°07.00' W77°19.00'
05 AGL B 15 AGL to D CVI 328/18 N36°36.00' W77°07.00'
05 AGL B 15 AGL to E CVI 327/1 N36°23.00' W76°53.00'
05 AGL B 15 AGL to F CVI 166/21 N36°03.00' W76°42.00'
05 AGL B 15 AGL to G CVI 162/29 N35°56.00' W76°36.00'
05 AGL B 15 AGL to H CVI 159/40 N35°48.00' W76°28.00'

Altitude Data Pt Fac/Rad/Dist Lat/Long

05 AGL B 15 AGL to A CCV VORTAC N37°20.85' W75°59.86'
SFC B 15 AGL to B HCM 054/15 N37°37.00' W76°29.00'
SFC B 15 AGL to C BRV 230/25 N38°01.00' W77°42.00'
15 AGL to D GVE 330/22 N38°19.00' W78°26.00'
05 AGL B 15 AGL to E CSN 275/35 N38°38.00' W78°37.00'
05 AGL B 15 AGL to E1 LDN 273/22 N38°50.00' W78°41.00'
05 AGL B 15 AGL to F ESL 057/7 N39°18.20' W78°52.00'
05 AGL B 15 AGL to G ESL 261/25 N39°07.00' W79°31.00'
SFC B 15 AGL to H EKN 165/47 N38°11.00' W79°44.00'
SFC B 15 AGL to I ROA 031/50 N38°55.00' W78°45.00'
SFC B 15 AGL to J LYH 352/44 N37°41.00' W78°39.00'
10 AGL B 15 AGL to K GVE 236/31 N37°39.00' W78°29.00'

TERRAIN FOLLOWING OPERATIONS: Authorized 16 NM NW of Point E to J.

ROUTE WIDTH - 3 NM either side of centerline from Point A to L.
Special Operating Procedures:

(1) Route reservation and brief required.
(3) Crossover to join Point G of VR-1756 is authorized from VR-1754 at Point E1 and E2 with approval of Scheduling Activity.
(4) Contact Leesburg FSS prior to Point A or Elkins FSS prior to Point E2 on 255.4 with entry/exit times.
(5) Maintain 1500’ AGL from Point A until 10 NM past Point B then maintain 1000’ AGL to Point C.
(6) Maintain 1000’ AGL from 3 NM north of Point D until 10 NM past Point E.
(7) Conflicting routes:
   (a) VR-1713 crosses between Point B and C;
   (b) VR-1753/VR-1755 run parallel from Point A to B;
   (c) VR-041 crosses at Point I, and between Point J and K;
   (d) VR-1756 crosses between Point E1 and F, and crosses at Point I;
   (e) VR-1722 is coincident from Point J to K, and crosses at Point C;
   (f) VR-1755 crosses twice between Point B and D;
   (g) VR-1759 begins at Point C;
   (h) VR-1722 crosses at Point C. (Deconflict with Richmond 192FG DSN 864-6411/10.
(8) Hazards:
   (a) Evers MOA is active with continuous daytime operations from 1000’ AGL to FL 180. Contact 113 OSS/OSA, Joint Base Andrews, MD DSN 857-4183/4194/4171, C240-857-4183/4194/4171 for MOA flight information/deconfliction prior to scheduling;
   (b) Extensive civilian fish-spotter aircraft from SFC to 5000’ AGL over the Chesapeake Bay, between Point A and B, from Apr-Nov;
   (c) Ultralight activity in the vicinity of Point B;
   (d) Extensive helicopter operations from Point D and J;
   (e) Numerous civilian aircraft cross route midway between Point D and E transiting VFR between New Market and Luray Airports;
   (f) NS7-47.6 W77-03.7 - Uncharted 400’ AGL antenna tower;
   (g) NS7-49.2 W77-02.9 - Uncharted 400’ AGL antenna tower;
   (h) NS7-57.7 W77-30.5 - Uncharted 300’ AGL antenna tower.
(9) Do not fly over:
   (a) NS7-48.2 W77-00.7 - Remain 2 NM from church;
   (b) NS7-50.0 W77-27.0 - Remain 1000’ AGL and 2 NM from Kings Dominion;
   (c) NS8-05.0 W78-48.0 - Remain 2 NM from nuclear power plant;
   (d) NS9-19.9 W78-55.1 - Remain 2 NM from elementary school;
   (e) NS7-58.8 W79-30.6 - Remain 2 NM from horse farm;
   (f) NS7-07.0 W79-29.0 - Remain 2 NM from elementary school;
   (g) NS8-26.2 W79-50.1 - Remain 4 NM from National Radio Astronomy Observatory. Avoid UHF communication to maximum extent (not to interfere with safty) within 15 NM of Observatory;
   (h) Do not fly over: NS7-59.0 W77-31.0 - Remain at least 1 NM South of Lake Caroline.

(10) AVOID:
   (a) NS7-48.0 W77-06.0 - Uncharted airfield;
   (b) NS7-44.0 W78-58.0 - Uncharted airfield.
(11) Due to several windmills under construction between Points F and G, this leg shall be flown between 500’ and 1500’ AGL until further notice.

FSS Within 100 NM Radius:
AOO, DCA, EKN, IFT, MIV, RDU

VR-1755


SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228, Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>CCV 115/11</td>
<td>N37°18.00’/W75°47.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to B</td>
<td>B</td>
<td>HCM 334/18</td>
<td>N37°42.00’/W76°55.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to C</td>
<td>C</td>
<td>BRV 265/17</td>
<td>N38°16.00’/W77°42.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to D</td>
<td>D</td>
<td>GVE 239/10</td>
<td>N37°55.00’/W78°19.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to E</td>
<td>E</td>
<td>GVE 155/22</td>
<td>N37°42.00’/W77°55.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to F</td>
<td>F</td>
<td>BRV 209/23</td>
<td>N37°59.00’/W77°31.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to G</td>
<td>G</td>
<td>PXT 240/30</td>
<td>N37°58.00’/W76°53.00’</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline from A to C; 3 NM left and 2 NM right of centerline from C to D; 3 NM either side of centerline from D to G.

Special Operating Procedures:

(1) Route reservation and brief required.
(2) Alternate Entry: B. Alternate Exit: D and E.
(3) Contact Leesburg FSS prior to entry on 255.4 with Entry/Exit times.
(4) Maintain 1000’ AGL from Point A to C.
(5) Conflicting routes:
   (a) VR-1753/VR-1754 run parallel from Point A to B.
   (b) VR-1713 crosses between Point A and B.
   (c) VR-1754 crosses between Point C and D, and at Point F.
   (d) VR-1759 crosses between Point D and E. VR-1759 begins at Point F and runs in the opposite direction towards Point E.
   (e) VR-1722 runs same direction from Point E to G. Deconflict with Richmond 192FG, DSN 864-6411-6410.

(6) Hazards:
(a) Extensive civilian fish-spotter aircraft from SFC to 5000' AGL over Chesapeake Bay, between Point A and B, from Apr-Nov.
(b) Ultralight activity midway between Point A and B.
(c) N37-47.6 W77-03.7 - Uncharted 400' AGL antenna tower.
(d) N37-49.2 W77-02.9 - Uncharted 300' AGL antenna tower.
(e) N37-57.7 W77-30.5 - Uncharted 300' AGL antenna tower.
(f) N38-05.0 W77-13.0 - Do not enter R-6601.

Do not fly over:
(a) N37-55.0 W78-19.0 - Remain 1 NM from Lake Monticello at Point D.
(b) N37-59.0 W77-31.0 - Remain at least 1 NM South of Lake Caroline.

Avoid:
(a) N37-47.0 W77-49.0 - Uncharted airfield.

FSS Within 100 NM Radius:
AOO, DCA, EKN, MIV, RDU

**VR-1756**

**ORIGINATING ACTIVITY:** COMSTRKFIGHTWINGLANT, NAS Oceana, Virginia Beach, VA 23460-5200 DSN 433-9141, C757-433-9141.

**SCHEDULING ACTIVITY:** FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228, Scheduling hours 0600-1900 local (EST).

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>LYH 048/20</td>
<td>N37°30.00' W78°57.00'</td>
</tr>
<tr>
<td>15 AGL to B</td>
<td>B</td>
<td>LYH 342/46</td>
<td>N37°58.00' W79°37.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to</td>
<td>C</td>
<td>EKN 229/21</td>
<td>N38°39.00' W80°24.00'</td>
</tr>
<tr>
<td>D</td>
<td>MGW 214/16</td>
<td>N39°19.00' W80°02.00'</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>MGW 118/11</td>
<td>N39°29.00' W79°36.00'</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>ESL 079/22</td>
<td>N39°20.00' W78°32.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 15 AGL to</td>
<td>G</td>
<td>ESL 185/19</td>
<td>N38°55.00' W78°59.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>H</td>
<td>ROA 031/50</td>
<td>N38°05.00' W79°36.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>I</td>
<td>ROA 031/30</td>
<td>N37°47.00' W79°47.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>J</td>
<td>LYH 258/22</td>
<td>N37°09.00' W79°40.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 2 NM either side of centerline from A to B; 2 NM left and 1 NM right of centerline from B to I; 1 NM left and 4 NM right of centerline from I to J.

**Special Operating Procedures:**

(1) Route reservation and brief required.
(3) Entry to VR-1756 at Point G is authorized from VR-1754 Point E2 with approval of Scheduling Activity.
(4) Contact Leesburg FSS prior to Point A or Elkins FSS prior to Point E on 255.4 with entry/exit times.

(5) Conflicting routes:
(a) VR-096 crosses between Point A and B, and between Point I and J.
(b) VR-041 crosses between Point A and B, and between Point I and J.
(c) VR-1756 crosses at Point B.
(d) VR-043 crosses between Point B and C.
(e) VR-1754 crosses between Point F and G, and at Point H.

(6) Hazards:
(a) Extensive helicopter operations in the vicinity of Point D.
(b) N39-18.4 W79-41.5 - Chart depicted powerline tower is actually 360' AGL.
(c) N37-31.5 W79-41.5 - Springwood Gliderport. Glider activity on Sat, Sun, and Wed from 0900-sunset, SFC to 14,000' MSL. Remain right of centerline in the vicinity of Point I.
(d) Extensive Army helicopter operations from Point A to F.

(7) Do not fly over:
(a) N39-18.4 W79-41.5 - Chart depicted powerline tower is actually 360' AGL.
(b) N37-31.5 W79-41.5 - Springwood Gliderport. Glider activity on Sat, Sun, and Wed from 0900-sunset, SFC to 14,000' MSL. Remain right of centerline in the vicinity of Point I.

(8) CAUTION: Severe bird activity along route. Highest concentrations Dec-Mar.

**FSS Within 100 NM Radius:**
AOO, DCA, EKN, IPT, RDU

**VR-1757**

**ORIGINATING ACTIVITY:** COMSTRKFIGHTWINGLANT, NAS Oceana, Virginia Beach, VA 23460-5200 DSN 433-9141, C757-433-9141.

**SCHEDULING ACTIVITY:** FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228, Scheduling hours 0600-1900 local (EST).

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>HAR 262/29</td>
<td>N40°09.00' W77°40.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>HAR 294/32</td>
<td>N40°26.00' W77°45.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>PSB 185/14</td>
<td>N40°41.00' W77°58.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 2 NM either side of centerline from A to B; 2 NM left and 1 NM right of centerline from B to I; 1 NM left and 4 NM right of centerline from I to J.
VR ROUTES

ROUTE DESCRIPTION:

Altitude Data  Pt Fac/Rad/Dist Lat/Long
As assigned to A BRV 209/23  N37°59.00' W77°31.00'
05 AGL B 15 AGL to B GVE 178/18  N37°43.00' W78°06.00'
20 AGL B 25 AGL to C GVE 185/28  N37°32.52' W78°08.73'
10 AGL B 15 AGL to D LVL 322/27  N37°08.02' W78°19.00'
05 AGL B 15 AGL to E LVL 242/24  N36°35.00' W78°18.00'
05 AGL B 15 AGL to F TYI 339/10  N36°08.00' W77°48.00'
05 AGL B 15 AGL to G TYI 122/21  N35°49.00' W77°19.00'
05 AGL B 15 AGL to H NKT 010/41  N35°35.00' W76°52.00'

ROUTE WIDTH - 2 NM either side of centerline.

TERRAIN FOLLOWING OPERATIONS: Authorized from B to K.

Special Operating Procedures:
(1) Route reservation and brief required.
(2) Contact Altoona FSS prior to entry on 255.4 with Entry/Exit times.
(3) Conflicting routes:
   (a) VR-704/VR-705 cross between Point A and B, and between Point E and F.
   (b) VR-708 crosses at Point H and J, and between Point K and L.
(4) From 15 Mar-15 May, overfly Point C at 1500’ AGL and remain north of centerline.
(5) Hazards:
   (a) N40°41.00’ W78°15.00’ Private residence near Pt 05 AGL B 15 AGL to B.
   (b) N40°30.00’ W78°10.00’ Private residence near Pt 05 AGL B 15 AGL to B.
   (c) N40°20.00’ W78°05.00’ Private residence near Pt 05 AGL B 15 AGL to B.
(6) Do not fly over:
   (a) N40°10.00’ W78°00.00’ Private residence near Pt 05 AGL B 15 AGL to B.
   (b) N39°50.00’ W77°50.00’ Private residence near Pt 05 AGL B 15 AGL to B.
   (c) N39°40.00’ W77°40.00’ Private residence near Pt 05 AGL B 15 AGL to B.
(7) CAUTION: Severe bird activity along route. Highest concentrations Dec-Mar.

FSS Within 100 NM Radius:
AOO, BUF, DCA, EKN, IPT, MIV

VR-1759


SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228, Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous
(8) Avoid the Bald Eagle’s nest located at N37-13.4 W78-18.3 by 1 NM and 1000’ AGL between 15 Nov-15 Jul.
(9) Do not fly over: N37-59.0 W77-31.0 - Remain at least 1 NM South of Lake Caroline.

FSS Within 100 NM Radius:
- AOO, DCA, EKN, MIV, RDU

VR-1800

ORIGINATING ACTIVITY: DET 1, 174 ATKW, PO Box 320, Antwerp, NY 13608 DSN 772-5990/2835, C315-772-5990/2835.

SCHEDULING ACTIVITY: EADS/DOAS 224 Air Def Squadron, EASTERN AIR DEFENSE SECTOR DSN 587-6247, C315-334-6247. Primary method of scheduling is via CSE.

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from entire route A to H (VMC CONDITIONS ONLY).

ROUTE WIDTH - 6 NM left and 8 NM right of centerline from A to B; 2 NM left and 8 NM right of centerline from B to C; 5 NM left and 8 NM right of centerline from C to E; 5 NM either side of centerline from E to H.

Special Operating Procedures:
(1) Aircraft not scheduled into R-5201 exit at G (Do not enter R-5201 without clearance).
(2) Contact Wheeler Sack approach on 226.3 (MOA Common) prior to F.
(3) VR-725 joins and mirrors the route at F at 100’AGL to 6000’MSL.
(4) IR-801 No longer active UFN. VR-724 CLOSED PERMANENTLY.
(5) Alternate Entry: B, D, and E.
(6) Alternate Exit: D, E, and G.
(7) Avoid Adirondack Parks St. Regis Canoe Area N44°23.8’ W75°21.4’ by 1000’ AGL May through October.
(8) Avoid uncontrolled airports by 1500’ AGL or 3 NM whenever possible.

(9) Use CAUTION between Points A and B. Model rocket club occasionally firing unguided rockets up to 10,120’ MSL IVO N44 49.5 W073 09.8. Activity will be reflected in NOTAMs at least 24 hours prior to firing.
(10) Tie-in FSS: Burlington (BTV).

FSS Within 100 NM Radius:
- BGR, BTV

VR-1801

ORIGINATING ACTIVITY: DET 1, 174 ATKW, PO. BOX 320, ANTWERP, NY 13608 DSN 772-2835/5990, C315-772-2835/5990.

SCHEDULING ACTIVITY: EADS/DOAS 224 Air Def Squadron, EASTERN AIR DEFENSE SECTOR DSN 587-6247, C315-334-6247. Primary method of scheduling is via CSE.

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from entire route A to H (VMC CONDITIONS ONLY).

ROUTE WIDTH - 5 NM either side of centerline from A to D; 6 NM left and 5 NM right of centerline from D to E; 8 NM left and 5 NM right of centerline from E to F; 8 NM left and 3 NM right of centerline from F to G, 8 NM left and 3 NM right of centerline from G to H.

Special Operating Procedures:
(1) Aircraft not scheduled into R-5201 exit at G (Do not enter R-5201 without clearance).
(2) Contact Wheeler Sack approach on 226.3 (MOA Common) prior to F.
(3) VR-725 crosses the route between C and D from surface to 5000’ MSL.
(4) IR-801 No longer active UFN. VR-724 CLOSED PERMANENTLY.
(5) Alternate Entry: B, C, E, and F.
(6) Alternate Exit: D, E, F, and G.
(7) Schedule the Lowville MOA if planning to Exit at G.
(8) Call Griffiss Approach with an advisory at E.
VR ROUTES

9. Avoid uncontrolled airports by 1500 AGL or 3 NM whenever possible.

10. Avoid by 500’ AGL(1000 AGL May through October) The Adirondack Parks Silver Lake Wilderness Area (North of centerline and up to 4 NM south of centerline between N43°18.6’ W74°14.5’ and N43°18.2’ W74°33.4’) West Canada Lake Wilderness Area (East of centerline between N43°21.5’ W74°43.8’ and N43°25.1’ W74°50.7’), and HA-DE-RON-DAH Wilderness Area (East of centerline between N43°38.9’ W75°07.5’ and N43°42.2’ W75°09.7’).

11. Noise Sensitive Areas (Avoid by 1500’ AGL or 1.5 NM):
   - Villages of Brandon N43°48.0’ W73°05.0’, Subury N43°48.0’ W73°12.0’, Orwell N43°48.0’ W73°18.0’, Benson N43°42.0’ W73°18.0’, Proctor N43°40.0’ W73°02.0’, Sunrise Lake N43°45.0 W73°16.0’, Campsite N43°21.3’ W74°16.0’ by 2000’ AGL or 1.5 NM, Natural Bridge N44°04.1’ W75°29.6’ by 1500’ AGL.75 NM.


FSS Within 100 NM Radius:
BDR, BGR, BTV

VR-1900


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

ROUTE WIDTH - 5 NM either side of centerline.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

1. Route transitions through EIELSON Military Operations Areas (MOA). Primary exit enters RESTRICTED AREA R-2211; EA alternate exit transitions RESTRICTED AREA R-2202, DELTA 2 and YUKON 1 MOA; EB alternate exit enters RESTRICTED AREA R-2202. Contact Scheduling Activity (SA) for de-confliction prior to use.

2. Prior scheduling with Scheduling Activity (SA) of R-2211 or R-2202 is required if entering this restricted airspace. This step is required to ensure RA will be cold, unless you will be performing hazardous activities which require an active RA (i.e. dropping bombs). Primary exit point E will only be utilized if you also have R-2211 scheduled for use, if not utilize alternate exit point D within Eielson MOA. Alternate exit points EA and EB will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202. If the MOAs are scheduled by other users, the SA will require you to contact the scheduled users to coordinate altitude separation.

3. Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

4. ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

5. ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

6. When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA. If cold, RA becomes Class G/E airspace - no clearance required. Eielson MOA and R-2211 are cold/inactive when ERC is closed. A recorded message on 125.3 MHz indicates ERC is closed.

7. R2202 is subdivided. R2202A can be hot while R2202B and C are cold. If R2202B and C are cold, alternate exits EA and EB may be flown, but stay clear of any hot sub-sections.

8. Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

9. Primary Entry: Point A. Alternate Entry: Points B, C and D.

10. Primary Exit: Point E. Alternate Exit: Points D, EA, and EB.

11. All route points are collocated with IR-916, IR-900 and VR-1916.

12. Use CAUTION for multiple Airways, including low altitude RNAV routes near Points A to C and multiple MTR crossings throughout the entire route.

13. Use CAUTION for float plane activity at Mucha Lake (N64 13.00 W150 53.00) on segment A to B in the Kantishna River valley.

14. Use CAUTION on segment B to C. In IMC conditions, maintain 1,000’ AGL minimum to avoid multiple isolated cabins, light-aircraft emergency airstrips, and numerous wind turbines within 3NM of route centerline.
(15) Use CAUTION for VFR traffic in the vicinity of the Nenana River on Segment B to C for light aircraft transiting to/from Windy Pass and Denali Park.
(16) Use CAUTION for uncharted Newman Creek Airstrip (N63 58.60 W147 15.60) 6NM southwest of Point D. Avoid by 1 NM below 1,500' AGL.
(17) Remain clear of hunting cabins in vicinity of Gold King Creek Airstrip (N64 11.47 W147 55.57) 4NM north of segment C to D. Remain clear by 1,500' AGL or 3 NM, continuous.
(18) Remain clear of two uncharted airstrips: (N64 07.10 W148 00.00) directly on segment C to D crossing Gold King creek; and (N64 06.50 W147 33.20) 0.5NM north of segment C to D crossing Wood River. Remain clear by 1,500' AGL or 3 NM, continuous.
(19) Remain clear of Shaw Creek Youth Camp and Clear Creek Cabins on Delta River east of alternate exit route segment D1 to EA by 1,500' AGL or 1 NM, continuous.
(20) Remain clear of Birch Lake State Recreation Site on Delta River west of alternate exit route segment D1 to EA by 2,000' AGL or 1 NM from 15 May-30.
(21) ATC contact: Route entry/exit A through E: Anchorage Center (319.2/120.9). Alternate exit points EA and EB: Anchorage Center (322.5/135.3).
(22) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.
(23) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

**FSS Within 100 NM Radius:**
FAI, MCG, ORT, TKA

**VR-1902**

**ORIGINATING ACTIVITY:** 611 AOC/CODK, 9480 Pease Ave., Ste. 121, Elmendorf AFB, AK 99506-2100 DSN 317-552-5715/4430, C907-552-5715/4430.

**SCHEDULING ACTIVITY:** 3 OSS/OSOS Elmendorf AFB, AK 99706 DSN 317-552-2406, C907-552-2406.

**HOURS OF OPERATION:** Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td></td>
<td>MCG 134/44</td>
<td>17.58'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to B</td>
<td>MCG 211/20</td>
<td>W154*54.47'</td>
<td>10.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to C</td>
<td>MCG 258/68</td>
<td>N63*04.00'</td>
<td>W158*04.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D</td>
<td>UNK 085/45</td>
<td>N63*45.00'</td>
<td>W159*02.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to E</td>
<td>UNK 067/67</td>
<td>N64*02.00'</td>
<td>W158*11.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D1</td>
<td>UNK 085/45</td>
<td>N63*45.00'</td>
<td>W159*02.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to EA</td>
<td>UNK 194/18</td>
<td>N63*37.33'</td>
<td>W161*00.90'</td>
</tr>
</tbody>
</table>

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route.

**ROUTE WIDTH -** 5 NM either side of centerline.

**Special Operating Procedures:**
(1) Route transitions through STONY Military Operations Area (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.
(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.
(3) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.
(4) Primary Entry: Point A.
(5) Primary Exit: Point E. Alternate Exit: Point EA.
(6) All route points are collocated with IR-902, IR-1912, and VR-1912.
(7) Use CAUTION for IR-905, IR-915, VR-1905 and VR-1915 crossing at Point A.
(8) Use CAUTION for McGrath Airport Class E Airspace, north of segment A to B.
(9) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments B through D and on alternate exit route D1 to EA.
(10) During the Iditarod Sled Dog Race (approximately 1-15 March), on odd number years, the minimum altitude on segments B to E is 1500' AGL, and must remain at least 1 NM east of the Yukon River shore on segments C to E.
(11) Remain clear of Peregrine Falcon Nests on segment D to E. Remain 1 NM E of the Yukon River shore or 2000' AGL, (15 Apr-31 Aug).
(12) Remain above 1500' AGL on segments C to E during moose hunting season, (27 Aug-30 Sep).
(13) Segments B to E and alternate exit routing are flown over Innoko National Wildlife Refuge and Wilderness Areas. Remain clear of human activity by at least 1/2 NM. (1 May-30 Sep).
(14) Avoid direct overflight of hunting camp located on segment C to D on the Iditarod River at (N63 10.90, W158 18.00).
(15) ATC contact: Route Entry: Anchorage Center (353.8/128.1), Primary Exit: (290.2/127.0), and Alternate Exit (335.5/135.7).
(16) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.
(17) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

**FSS Within 100 NM Radius:**
MCG, TKA

**VR-1905**

**ORIGINATING ACTIVITY:** 611 AOC/CODK, 9480 Pease Ave., Ste. 121, Elmendorf AFB, AK 99506-2100 DSN 317-552-5715, C907-552-5715/4430.

**SCHEDULING ACTIVITY:** 3 OSS/OSOS Elmendorf AFB, AK 99706 DSN 317-552-2406, C907-552-2406.
VR ROUTES

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  TKA 209/49  N61°44.43’  W151°23.48’
01 AGL B 15 AGL to  B  TKA 229/58  N61°55.73’  W151°59.55’
Seasonal alternate entry
01 AGL B 15 AGL to  C  TKA 224/82  N61°39.53’  W152°40.88’
01 AGL B 15 AGL to  D  SQA 035/61  N61°42.08’  W153°55.17’
01 AGL B 15 AGL to  E  MCG 134/44  N62°17.58’  W154°54.47’
01 AGL B 15 AGL to  F  MCG 069/49  N62°58.00’  W153°50.00’
01 AGL B 15 AGL to  G  MCG 026/66  N63°42.53’  W153°18.33’
01 AGL B 15 AGL to  H  MCG 023/101  N64°10.43’  W153°03.03’
01 AGL B 15 AGL to  I  MCG 032/131  N64°16.00’  W151°44.00’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through STONY and GALENA Military Operations Areas (MOAs). Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Request ATC clearance at least 5 minutes prior to route entry. Approaching entry/exit points, turn points, and periodically throughout the route, advise civil traffic with position reports on 122.9.

(3) Primary Entry: Point A. (Seasonal 1 Jun to 15 Aug entry: Point B, enter at an AS ASSIGNED to alternate entry altitude). Alternate Entry: Points B, D or E.

(4) Primary Exit: Point I. Alternate Exit: Points D or E.

(5) Route segment A to B will be deactivated from 1 Jun - 15 Aug during the fishing season due to numerous light aircraft near rivers/lakes. During this time, the seasonal primary entry point for VR-1905 will be Point B.

(6) All route points are collocated with IR-915, IR-905 and VR-1915.

(7) Point D is collocated with IR-903, IR-913, VR-933 and VR-934.

(8) Point E is collocated with IR-902, IR-912, VR-902 and VR-1912.

(9) Use CAUTION for low VFR traffic especially in the summer between Point McKenzie, Mt Spurr, and approximately 20 NM around Point A.

(10) Use CAUTION for sling load helicopter ops from the SFC to 3000’ AGL between Points B to C from 1 Jun - 1 Oct.

(11) Use CAUTION for light aircraft operating in the vicinity of an uncharted airstrip (N61 54.63, W 154 22.19) on segments D to E, approximately 18NM past Point D, just left of route centerline.

(12) Use CAUTION for IR-903/913 and VR-933/934 at point D as well as IR-902/912 and VR-1902/1912 at point E and IR-900-916 and VR-1900/1916 at point I.

(13) Heavy mining operations with numerous helicopter sling-load and light fixed wing aircraft operating in vicinity. Remain Clear of multiple uncharted airstrips (Whiskey Bravo at N61 57.50, W 152 36.00 and unknown at N61 43.00, W 152 47.00) within the Whistler Mine mandatory communication area located immediately north of Point C and along segment B to C (approximately Jun-Oct). Self-announce position and intentions on 122.9. Whiskey Bravo airstrip personnel may respond with traffic advisories.

(14) Remain clear of Lake Clark National Park approximately 4 NM south of route corridor on segment C to D.

(15) During the Iditarod Sled Dog Race (approximately 1-15 March) maintain minimum altitude of 1500’ AGL over the South Fork of the Kuskokwim River on segment E to F. Numerous light aircraft support the race.

(16) ATC contact: Route Entry: Anchorage Center (254.3/125.55), Primary Exit: (319.2/120.9), and Alternate Exit (353.8/128.1).

(17) Local weather forecast information can be obtained at DSN 317-575-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.

(18) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
ENAI, PAQ, ILI, MCG, HOM,TKA, FAL

VR-1909


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  BIG 076/39  N63°54.00’  W144°16.00’
01 AGL B 15 AGL to  B  BIG 050/52  N64°15.00’  W143°50.00’
01 AGL B 15 AGL to  C  BIG 335/28  N64°28.00’  W145°45.00’

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through DELTA 4, BUFFALO, and YUKON Military Operations Areas (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Request ATC clearance at least 5 minutes prior to route entry. Approaching entry/exit points, turn points, and periodically throughout the route, advise civil traffic with position reports on 122.9.

(3) Primary Entry: Point A. (Seasonal 1 Jun to 15 Aug entry: Point B, enter at an AS ASSIGNED to alternate entry altitude). Alternate Entry: Points B, D or E.

(4) Primary Exit: Point I. Alternate Exit: Points D or E.

(5) Route segment A to B will be deactivated from 1 Jun - 15 Aug during the fishing season due to numerous light aircraft near rivers/lakes. During this time, the seasonal primary entry point for VR-1905 will be Point B.

(6) All route points are collocated with IR-915, IR-905 and VR-1915.

(7) Point D is collocated with IR-903, IR-913, VR-933 and VR-934.

(8) Point E is collocated with IR-902, IR-912, VR-902 and VR-1912.

(9) Use CAUTION for low VFR traffic especially in the summer between Point McKenzie, Mt Spurr, and approximately 20 NM around Point A.

(10) Use CAUTION for sling load helicopter ops from the SFC to 3000’ AGL between Points B to C from 1 Jun - 1 Oct.

(11) Use CAUTION for light aircraft operating in the vicinity of an uncharted airstrip (N61 54.63, W 154 22.19) on segments D to E, approximately 18NM past Point D, just left of route centerline.
(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs or/and RAs.

(3) When ERC is open, you are required to contact them on UHF primary 229.4, secondary 244.55, or VHF 125.3 prior to entering active MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA and continue periodic reattempts.

(4) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(5) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(6) Primary Entry: Point A. Alternate Entry: Point B.

(7) Primary Exit: Point C. Alternate Exit: Point B.

(8) All route points are collocated with IR-939, IR-909 and VR-1939.

(9) Use CAUTION for multiple Airways, including low altitude RNAV routes near Point C and multiple MTR crossings throughout the route.

(10) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at N64 17.00 W144 16.00, south of segment B to C, which uses helicopters for re-supply.

(11) Use CAUTION for Pogo Mine and Pogo Mine Airstrip adjacent to route at Points B and C. Avoid mine center point (N64 27.12 W144 54.19) in Goodpaster River valley by 3NM and 1000’ AGL (15 May–15 Jul). Airstrip has high density air activity with helicopters (150’-500’ cable long-lines) and fixed wing activity.

(12) Prior to entry, remain clear of the native village of Healy Lake around N63 59.00 W144 45.00 by 3NM or 6,000’ MSL continuously; and Lake George around N63 47.00 W144 32.00 by 2NM and 1,500’ AGL continuously.

(13) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May–30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2,000’ AGL. See local OGV FCIF for details and locations.

(14) ATC contact: Anchorage Center; Route Entry: (322.5/135.3), Primary Exit: (319.2/120.9).

(15) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.


FSS Within 100 NM Radius:
FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS) See Alaska Supplement

VR-1912


SCHEDULING ACTIVITY: 3 OSS/OSOS Elmendorf AFB, AK 99706 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:
Altitude Data
Pt Fac/Rad/Dist Lat/Long
As assigned to A UNK 067/67 N64*02.00' W158*11.00' 01 AGL B 15 AGL to B UNK 085/45 N63*45.00' W159*02.00' 01 AGL B 15 AGL to C MCG 258/68 N63*04.00' W158*04.00' 01 AGL B 15 AGL to D MCG 211/20 N62*44.00' W156*10.00' 01 AGL B 15 AGL to E MCG 134/44 N62*17.58' W154*54.47' 01 AGL B 15 AGL to B1 as assigned to AA UNK 194/18 N63*37.33' W161*00.90' 01 AGL B 15 AGL to B1 UNK 085/45 N63*45.00' W159*02.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route transitions through STONY Military Operations Area (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry.

(3) Approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. This Alaska-unique area CTAF is commonly 122.9.

(4) Primary Entry: Point A. Alternate Entry: Point AA.

(5) Primary Exit: Point E.

(6) All route points are collocated with IR-902, IR-912 and VR-1902.

(7) Use CAUTION for multiple Airways, including low altitude RNAV routes, on segments B to D and on alternate entry route from AA to B1.

(8) Use CAUTION for McGrath Airport Class E Airspace, north of segment D to E.

(9) Use CAUTION for IR-905, IR-915, VR-1905 and VR-1915 crossing at Point E.

(10) During the Iditarod Sled Dog Race (approximately 1-15 March), on odd number years, the minimum altitude on segments C to D is 1500’ AGL and must remain at least 1 NM east of the Yukon River shore on segments A to C.

(11) Remain clear of Peregrine Falcon Nests on segment A to B. Remain 1 NM E of the Yukon River shore or 2000’ AGL, (15 Apr-31 Aug).

(12) Remain above 1500’ AGL on segments A through C during moose hunting season, (27 Aug-30 Sep).
VR ROUTES

(13) Segments A to D and alternate entry routing are flown over Innoko National Wildlife Refuge and Wilderness Area. Remain clear of human activity by at least 1/2 NM. (1May-30 Sep).

(14) Avoid direct overflight of hunting camp located on segment B to C on the iditarod River at (N63 10.90, W158 18.00).

(15) ATC contact: Route Entry: Anchorage Center (920.2/127.0), Alternate Entry: (335.5/135.7), Primary Exit: (353.8/128.1).

(16) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.

(17) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
MCG, TKA

VR-1915


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>MCG 032/131</td>
<td>N64°16.00' W151°44.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>MCG 023/101</td>
<td>N64°10.43' W153°03.03'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>MCG 026/66</td>
<td>N63°42.53' W153°51.83'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>MCG 069/49</td>
<td>N62°58.00' W153°50.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>MCG 134/44</td>
<td>N62°17.58' W154°54.47'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>F</td>
<td>SQA 035/61</td>
<td>N61°42.08' W153°55.17'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>G</td>
<td>TKA 224/82</td>
<td>N61°39.53' W152°40.88'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>H</td>
<td>TKA 229/58</td>
<td>N61°55.73' W151°59.50'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>I</td>
<td>TKA 209/49</td>
<td>N61°44.43' W151°23.48'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
1. Route transitions through STONY and GALENA Military Operations Areas (MOAs). Contact Scheduling Activity (SA) for de-confliction prior to use.

2. Request ATC clearance at least 5 minutes prior to route entry. Approaching entry/exit points, turn points, and periodically throughout the route, advise civil traffic with position reports on 122.9.

3. Primary Entry: Point A. Alternate Entry: Points E or F.

4. Primary Exit: Point I. Point I closed 1 Jun to 15 Aug, use seasonal exit point H. Alternate Exit: Points E, F, and H.

5. Route segment H to I will be deactivated from 1 Jun - 15 Aug during the fishing season due to numerous light aircraft near rivers/lakes. During this time, the primary exit point for VR-1915 will be Point H.

6. All route points are collocated with IR-905, IR-915 and VR-1905.

7. Point F is collocated with IR-903, IR-913, VR-933 and VR-934.

8. Point E is collocated with IR-902, IR-912, VR-1902 and VR-1912.

9. Use CAUTION for IR-903/913 and VR-933/934 at point F as well as IR-902/912 and VR-1902/1912 at point E and IR-900-916 and VR-1900/1916 at point A.

10. Use CAUTION for light aircraft operating in the vicinity of an uncharted airstrip (N61 54.63. W 154 22.19) on segments E to F, approximately 28 NM past Point E, just right of route centerline.

11. Use CAUTION for sling load helicopter ops from the SFC to 3000' AGL between Points G to H from 1 Jun - 1 Oct.

12. Use CAUTION for low VFR traffic especially in the summer between Point McKenzie, Mt Spurr, and approximately 20 NM around Point I.

13. During the Iditarod Sled Dog Race (approximately 1-15 March) maintain minimum altitude of 1500' AGL over the South Fork of the Kuskokwim River on segment D to E. Numerous light aircraft support the race.

14. Remain clear of Lake Clark National Park approximately 4 NM south of route corridor on segment F to G.

15. Heavy mining operations with numerous helicopter sling-load and light fixed wing aircraft operating in vicinity. Remain Clear of multiple uncharted airstrips (Whiskey Bravo at N61 57.50, W 152 36.00 and unknown at N61 43.00, W 152 47.00) within the Whistler Mine mandatory communication area located immediately north of Point G and along segment G to H (approximately Jun-Oct). Self-announce position and intentions on 122.9. Whiskey Bravo airstrip personnel may respond with traffic advisories.

16. ATC contact: Route Entry: Anchorage Center (319.2/120.9), Primary Exit: (254.3/125.55), and Alternate Exit (353.8/128.1).

17. Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.


FSS Within 100 NM Radius:
ENA, PAQ, ILI, MCG, HOM, TKA, FAI

VR-1916


HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A BIG 269/48</td>
<td>N64°17.12' W147°24.97'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to B BIG 255/39</td>
<td>N64°05.00' W147°10.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 15 AGL to C BIG 254/74</td>
<td>N64°08.12' W148°31.55'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D BIG 252/100</td>
<td>N64°05.17' W149°31.27'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 15 AGL to E TAL 149/56</td>
<td>N64°16.00' W151°44.00'</td>
<td></td>
</tr>
<tr>
<td>as assigned to AA EIL 088/37</td>
<td>N64°28.00' W145°45.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 15 AGL to B1 BIG 255/39</td>
<td>N64°05.00' W147°10.00'</td>
<td></td>
</tr>
<tr>
<td>Thence along remainder of route</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternate entry track: AB-B2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>as assigned to AB BIG 234/22</td>
<td>N63°55.13' W146°31.40'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 15 AGL to B2 BIG 255/39</td>
<td>N64°05.00' W147°10.00'</td>
<td></td>
</tr>
<tr>
<td>Thence along remainder of route</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

1. Primary route entry is in RESTRICTED AREA R-2211, remainder of route transitions through EIELSON Military Operations Areas (MOA); AA Alternate Entry transitions through RESTRICTED AREA R-2202, YUKON 1 and DELTA 2 MOA; AB Alternate entry is in RESTRICTED AREA R-2202. Contact Scheduling Activity (SA) for de-confliction prior to use.

2. Prior scheduling with Scheduling Activity (SA) of R-2211 or R-2202 is required if entering this restricted airspace. This step is required to ensure RA will be cold, unless you are performing hazardous activities which require an active RA (i.e. dropping bombs). Primary entry point A will only be utilized if you also have R-2211 scheduled for use, if not utilize alternate entry point B within Eielson MOA. Alternate entry points AA and AB will only be scheduled when Eielson Range Control is open or if you are working directly with the Army within R-2202. If the MOAs are scheduled by other users, the SA will require you to contact the scheduled users to coordinate altitude separation.

3. Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

4. ATC clearance into MTR is not clearance to enter active RA. When Eielson Range Control (ERC) is open, you are required to contact ERC prior to entering active RAs and/or MOAs.

Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA (but NOT into active/hot RA) and continue periodic reattempts.

5. ERC is not a 24 hr. facility. When ERC is open (generally 0900-1900 M-F, hours shift to cover the fighter flying window) all aircraft will contact ERC on UHF primary 229.4, secondary 244.55, or VHF 125.3 and receive clearance into restricted area PRIOR TO ENTRY.

6. When ERC is closed (generally nights/weekends): Confirm RA status (hot/cold) with ATC controller prior to MTR entry. If hot and 354 OSS Scheduling has not specifically scheduled the RA for you, stay clear of RA - DO NOT ENTER HOT RA.

8. Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

9. Primary Entry: Point A. Alternate Entry: Points B, AA and AB.

10. Primary Exit: Point E. Alternate Exit: Point B, C and D.

11. All route points are collocated with IR-900, IR-916 and VR-1900.

12. Use CAUTION for multiple Airways, including low altitude RNAV routes near Points C to E and multiple MTR crossings throughout the entire route.

13. Use CAUTION for uncharted Newman Creek Airstrip (N63°58.60 W147°15.60) 6NM southwest of Point B. Avoid by 1 NM below 1,500' AGL.

14. Use CAUTION on segment C to D. In IMC conditions, maintain 1,000' AGL minimum to avoid multiple isolated cabins, light-aircraft emergency airstrips, and numerous wind turbines within 3NM of route centerline.

15. Use CAUTION for VFR traffic in the vicinity of the Nenana River on Segment C to D for light aircraft transiting to/from windy Pass and Denali Park.

16. Use CAUTION for float plane activity at Mucha Lake (N64°13.00 W150°53.00) on segment D to E in the Kantishna River valley.

17. Remain clear of Birch Lake State Recreation Site on Delta River west of alternate entry route segment AA to B1 by 2,000' AGL or 1 NM from 15 May-30.

18. Remain clear of Shaw Creek Youth Camp and Clear Creek Cabins on Delta River east of alternate entry route segment AA to B1 by 1,500' AGL or 1 NM, continuous.

19. Remain clear of hunting cabins in vicinity of Gold King Creek Airstrip (N64°11.47 W147°55.57) 4NM north of segment B to C. Remain clear by 1,500' AGL or 3 NM, continuous.

20. Remain clear of two uncharted airstrips: (N64°06.50 W147°33.20) 0.5NM north of segment B to C crossing Wood River; (N64°11.47 W147°55.57) 4NM north of segment B to C crossing Wood River. Remain clear by 1,500' AGL or 3 NM, continuous.

21. ATC contact: Route entry/exit A through E: Anchorage Center (319.2/120.9); Alternate entry points AA and AB: Anchorage Center (322.5/135.3).

22. Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of-forecasts are available 24/7.
(23) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at http://www.usahas.com.

FSS Within 100 NM Radius:
FAI, MCG, ORT, TKA

VR-1939


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

(1) Route transitions through YUKON 1, BUFFALO, and DELTA 4 Military Operations Areas (MOA). Contact Scheduling Activity (SA) for de-confliction prior to use.

(2) Early contact with Air Traffic Control (ATC) before route entry will increase mission effectiveness. Request ATC clearance at least five minutes prior to route entry. Expect ATC to give route and MOA clearance prior to route entry/initial descent. ATC may ask if you are a participant in the Special Use Airspace. This means you have coordinated with the SA for the use of MOAs and/or RAs.

(3) When ERC is open, you are required to contact them on UHF primary 229.4, secondary 244.55, or VHF 125.3 prior to entering active MOAs. Radio contact with ERC may be difficult. If no contact, call IN THE BLIND, then proceed on route through the MOA and continue periodic reattempts.

(4) When ERC is closed, approaching entry/exit points and periodically throughout the route, advise civil traffic with geographic position reports on area-specific and/or airfield-specific CTAF. The Alaska-unique area CTAF is commonly 122.9.

(5) Pass post MTR intentions through ERC or to ATC five minutes prior to exit. ATC cannot issue follow-on clearance while you are within an active MOA or RA.

(6) Primary Entry: Point A. Alternate Entry: Point B.

(7) Primary Exit: Point C. Alternate Exit: Point B.

(8) All route points are collocated with IR-909, IR-939 and VR-1909.

(9) Use CAUTION for multiple Airways, including low altitude RNAV routes near Point A and multiple MTR crossings throughout the route.

(10) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at N64 17.00 W144 16.00, south of segment A to B, which uses helicopters for re-supply.

(11) Use CAUTION for Pogo Mine and Pogo Mine Airstrip adjacent to route at Points B and C. Avoid mine center point (N64 27.12 W144 54.19) in Goodpaster River valley by 3NM and 1000' AGL (15 May-15 Jul). Airstrip has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity.

(12) Upon exit, remain clear of the native village of Healy Lake around N63 59.00 W144 45.00 by 3NM or 6,000' MSL continuously; and Lake George around N63 47.00 W144 32.00 by 2NM and 1,500'AGL continuously.

(13) Seasonal Fortymile caribou sensitive areas entire route from approximately 1 May-30 June. Up to four 6NM wide circles, updated every three days, will be avoided by 2,000' AGL. See local OGV FCIF for details and locations.

(14) ATC contact: Anchorage Center; Route Entry: (319.2/120.9) Primary Exit: (322.5/135.3)

(15) Local weather forecast information can be obtained at DSN 317-552-4903/4397. Weather related planning products and day-of forecasts are available 24/7.


FSS Within 100 NM Radius:
FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS) see Alaska Supplement.

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A BIG 335/28 N64°28.00’
W145°45.00’
01 AGL B 15 AGL to B BIG 050/52 N64°15.00’
W143°50.00’
01 AGL B 15 AGL to C BIG 076/39 N63°54.00’
W144°16.00’
Chapter 4

SLOW SPEED LOW ALTITUDE TRAINING ROUTES (SR)

I. General. Unlike IRs VRs, SRs are not part of the MTR system and therefore have no directive guidance in the Aeronautical Information Manual (AIM) or the Order JO 7610.4x. Slow Routes are low-level routes at or below 1500 feet AGL, and are published in AP/1B. Flight above 1500 feet AGL does not meet the prescribed criteria of the SR system.

II. Route Development. Guidance for development and publication of SR routes is provided in applicable service directives. Since there is no widely available guidance to pilots on route development, great caution should be exercised when planning to fly SRs. For example, a USN user of an USAF developed/owned route would not normally have access to the route development information contained in USAF service directives. Additionally, SRs are not displayed on VFR Sectionals or on Jeppesen Enroute Charts. File SR Routes using the same procedures as VR Routes shown. Many SRs do not show the FRD of the published entry/alternate entry points or published exit/alternate exit points. Pilots are not authorized to file IFR to Lat/Long points unless aircraft equipment supports such navigation. Unlike IRs and VRs, the number of characters (ex SR-XXX or SR-XXXX) in a SR has no bearing on route altitudes within the SR. Developers/Route Originators will ensure that all SRs are displayed on FLIP AP/1B Military Training Route Charts. Developers/Route Originators will review SR data published in AP/1B and will immediately inform the appropriate authorities when a disparity exists. Route Developers should specify route entry windows in the Remarks/Special Operating Procedures (for example, plus or minus five minutes) to ensure aircraft enter on time and provide maximum route deconfliction for other military and civilian pilots.

III. Scheduling and Coordination. Standard except:

A. Unlike IRs or VRs, FSS’s are not notified of a scheduled SR. There is no overall mechanism to inform military or civilian aviators that a SR Route is active; the burden rests squarely on the SR. As a result, pilots should expect no pre-planned deconfliction from other IFR/VFR military or civilian traffic within the ATC System. Any VFR/IFR Pilot (planning flights at 1500 feet or below) must call each SR originator/scheduler to see if their planned route of flight conflicts with an active SR. SR users should be aware of other IR & VR users and associated route times in the event delays occur affecting crossing of other active routes.

B. In the interest of safety within the SR environment, users should contact the Scheduling Activity within 24 hours preceding the route use for the purpose of receiving a current briefing on:
   1. Recent noise complaints/sensitive areas.
   2. New unpublished airports, obstructions, etc.
   3. Recent bird migrations/nesting activity.

IV. Flight Plans. STANDARD

V. In Flight. STANDARD

A. Entry/Exit - Standard

B. Route Adherence - Standard

C. Speed. High-speed aircraft must not use low speed routes (SR). Operations on SR routes are flown at airspeeds of 250 knots IAS or less.

D. Weather. Weather minima for flight on SR routes are specified in appropriate service directives. Some routes may list weather minimums in the Remarks/Special Operating Procedures.

E. Communications.

1. Pilots should monitor 255.4 MHz while on SRs, if practicable, this does not preclude the use of tactical or discrete frequencies. The Remarks/Special Operating Procedures section of the SR may direct mandatory radio calls on specific radio frequencies to warn other aircraft of possible traffic conflicts.

2. In the event of communications failure (unless otherwise agreed to in a letter of agreement) the pilot should remain VMC, continue the flight VFR, and land as soon as practicable at the most suitable airport.

F. Transponder. Squawk Code 1200 while operating on SRs unless otherwise assigned by ATC.

VI. Aircraft Separation. STANDARD
SR ROUTES

**SR-038**

**(COLUMBUS)**

**ORIGINATING ACTIVITY:** Base Operations, Lawson AAF, Fort Benning, GA. DSN 835-3524/2471 C706-545-3524/2471.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td>N32°27.30'</td>
<td>W85°11.60'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>B</td>
<td>N32°36.90'</td>
<td>W85°01.10'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>C</td>
<td>N32°35.20'</td>
<td>W84°21.90'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>D</td>
<td>N31°57.50'</td>
<td>W84°19.40'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>E</td>
<td>N31°36.10'</td>
<td>W84°50.90'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>F</td>
<td>N32°01.20'</td>
<td>W84°55.10'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>G</td>
<td>N32°16.30'</td>
<td>W84°57.50'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ROUTE WIDTH -** 5 NM either side of centerline.

**Remarks:**

1. This route will be flown no lower than 300' AGL day, 1000' AGL night.
2. Primary Entry Point: (A).
3. Primary Exit Point: (G).

**SR-039**

**(COLUMBUS)**

**ORIGINATING ACTIVITY:** Base Operations, Lawson AAF, Fort Benning, Ga. DSN 835-3524/2471 C706-545-3524/2471.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td>N32°22.60'</td>
<td>W85°22.10'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ROUTE WIDTH -** 5 NM either side of centerline.

**Remarks:**

1. Point (D) is common with (A) on SR-39.
2. Minimum altitude is 300' AGL from (A) to (D) except 1500' AGL within 3 NM of Callaway Airport, LaGrange and Valley Airport, West Point.
3. Route flown no lower than 300' AGL during daylight hours and no lower than 1000' AGL at night.
SR ROUTES

(MONTGOMERY)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1400-0400Z++

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/ Rad/ Dist</th>
<th>Lat/ Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL (Night-1000’ AGL or above)</td>
<td>A</td>
<td></td>
<td>N32°32.50’ W86°11.50’</td>
</tr>
<tr>
<td>at or above 05 AGL (Night-1000’ AGL or above)</td>
<td>B</td>
<td></td>
<td>N32°40.50’ W85°54.00’</td>
</tr>
<tr>
<td>at or above 05 AGL (Night-1000’ AGL or above)</td>
<td>C</td>
<td></td>
<td>N33°06.30’ W86°28.80’</td>
</tr>
<tr>
<td>at or above 05 AGL (Night-1000’ AGL or above)</td>
<td>D</td>
<td></td>
<td>N32°54.00’ W86°54.50’</td>
</tr>
<tr>
<td>at or above 05 AGL (Night-1000’ AGL or above)</td>
<td>E</td>
<td></td>
<td>N32°38.10’ W86°30.30’</td>
</tr>
<tr>
<td>at or above 05 AGL (Night-1000’ AGL or above)</td>
<td>F</td>
<td></td>
<td>N32°22.50’ W86°21.90’</td>
</tr>
<tr>
<td>at or above 05 AGL (Night-1000’ AGL or above) (Drop Zone)</td>
<td>G</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline, except (D) to (E) which is 3 NM left and 5 NM right of centerline and (E) to (F) which is 5 NM left and 1 NM right of centerline.

Remarks:
1. Altitude: At or above 500’ AGL day, 1000’ AGL night.
2. Entry Point: (A).
3. Exit Point: (G).
4. Alternate Exit Points: (D) and (E).

SR-071

(MONTGOMERY)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/ Rad/ Dist</th>
<th>Lat/ Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Entry Point)</td>
<td>A</td>
<td></td>
<td>N32°32.20’ W86°11.50’</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td>N32°17.60’ W85°55.00’</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td>N32°07.20’ W86°28.00’</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td>N32°31.50’ W86°58.80’</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td>N32°35.10’ W86°58.10’</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td>N32°39.90’ W86°32.30’</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td>N32°22.50’ W86°21.90’</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline except (B) to (C) which is 3 NM left and 3 NM right of centerline, (C) to (D) which is 3 NM left and 5 NM right of centerline, (E) to (F) which is 3 NM left and 2 NM right of centerline, and (G) to (H) which is 5 NM left and 1 NM right of centerline.

Remarks:
1. Altitude: At or above 500’ AGL day, 1000’ AGL night.
2. Primary Entry Point: (A).
3. Exit Point: (G).
4. Alternate Exit Points: (C), (E), and (F).
SR ROUTES

3 NM left and 5 NM right of centerline, and (F) to (G) which is 5 NM left and 1 NM right of centerline.

Remarks:
(1) Altitude Data: 300'-1500' AGL (A) to (F); 500'-1500' AGL (F) to (G).
(2) Airspeed: 210 KIAS.
(3) Primary Entry Point: (A).
(4) Exit Point: (G).
(5) Alternate Exit Point: (E).

SR-072

(MONTGOMERY)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
03 AGL B 15 AGL to A | N32°32.20' | W86°11.50' | (Entry Point)
03 AGL B 15 AGL to B | N32°39.90' | W86°32.30' |
03 AGL B 15 AGL to C | N32°51.70' | W86°58.10' |
03 AGL B 15 AGL to D | N32°31.50' | W86°58.80' |
03 AGL B 15 AGL to E | N32°06.50' | W86°27.70' |
03 AGL B 15 AGL to F | N32°04.30' | W86°03.70' |
03 AGL B 15 AGL to G | N32°14.80' | W85°55.10' |
03 AGL B 15 AGL to H | N32°32.20' | W86°11.50' |
03 AGL B 15 AGL to I | N32°25.50' |
03 AGL B 15 AGL to J | N32°27.30' |
03 AGL B 15 AGL to K | N32°29.10' |
03 AGL B 15 AGL to L | N32°31.90' |
03 AGL B 15 AGL to M | N32°34.70' |
03 AGL B 15 AGL to N | N32°37.50' |
03 AGL B 15 AGL to O | N32°40.30' |
03 AGL B 15 AGL to P | N32°43.10' |
03 AGL B 15 AGL to Q | N32°45.90' |
03 AGL B 15 AGL to R | N32°48.70' |
03 AGL B 15 AGL to S | N32°51.50' |
03 AGL B 15 AGL to T | N32°54.30' |
03 AGL B 15 AGL to U | N32°57.10' |
03 AGL B 15 AGL to V | N32°59.90' |
03 AGL B 15 AGL to W | N33°02.70' |
03 AGL B 15 AGL to X | N33°05.50' |
03 AGL B 15 AGL to Y | N33°08.30' |
03 AGL B 15 AGL to Z | N33°11.10' |

ROUTE WIDTH - 5 NM either side of centerline except (A) to (B) which is 1 NM left and 5 NM right of centerline, (B) to (C) which is 4 NM left and 3 NM right of centerline, (D) to (E) which is 5 NM left and 3 NM right of centerline.

Remarks:
(1) Altitude is 300'-1500' AGL.
(2) Entry Point: (A).
(3) Exit Point: (H).
(4) Alternate Exit Point: (D).
(5) Avoid noise sensitive areas N32-37.3246'/N086-37.3665', 1/2 NM, 1000' AGL.

SR-101

(CRESTVIEW)

ORIGINATING ACTIVITY: 1 SOAO/DOGR, Hurlburt Field, FL 32544 DSN 579-7812/7813, C850-884-7812/7813.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
--- | --- | --- | ---
AA | N30°49.57' | W86°40.75' | (Entry Point)
BD | N31°07.90' | W86°43.00' |
BE | N31°32.50' | W86°43.00' |
BF | N31°43.00' | W87°03.10' |
BG | N32°23.63' | W86°46.80' |
BH | N32°51.85' | W86°22.43' |
BI | N33°12.05' | W86°29.28' |
BJ | N33°30.22' | W86°26.72' |
BK | N33°50.18' | W86°32.80' |
BL | N34°26.18' | W86°25.30' |
BM | N35°10.30' | W85°47.48' |
BN | N35°18.87' | W85°24.30' |
BO | N35°38.30' | W85°07.90' |
BP | N35°47.50' | W84°40.95' |
BQ | N35°32.85' | W84°08.25' |
BR | N35°23.30' | W83°34.00' |
BS | N34°39.20' | W83°52.33' |
BT | N34°46.25' | W84°10.50' |
BU | N34°48.10' | W84°37.00' |
BV | N34°52.15' | W85°00.00' |
BW | N34°41.82' | W85°34.23' |
BL1 | N34°26.18' | W86°25.30' |
BK1 | N33°50.18' | W86°32.80'
ROUTE WIDTH - 2 NM either side of centerline.

Remarks:
1. Route is bi-directional and limited to C130 operations.
2. Coordination required with Scheduling Activity, two days prior.
3. Minimum Altitude Data: 250’ AGL except 1000’ AGL (CH) to (CG); 750’ AGL 20 NM prior to (CD) on leg (CD) to (CE). Legs (CE) to (CD) and (CC) to (CD) are climb segments to IFR altitude for ECM activity with Statesboro RBS site.
4. A mission number is required for entry into R-2915/R-2914. Contact Eglin Range Control at (AO) for clearance into R-2915 and Alternate Exit Point (AQ) for clearance into R-2914.
5. Avoid the Hinch Mountain 106/22 (N35-41 W84-32) by 2 NM or 1500’ AGL.

SR-103
(CRESTVIEW)

ORIGINATING ACTIVITY: 1 SOAOS/DOGR, Hurlburt Field, FL 32544 DSN 579-7812/7813, C850-884-7812/7813.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
--------------|----|--------------|----------|
AA | N30’49.57’ | W86’40.75’ |
AB | N31’00.00’ | W86’38.00’ |
AC | N31’33.40’ | W86’36.60’ |

(Entry Point)
SR ROUTES

ROUTE DESCRIPTION:

Altitude Data   Pt   Fac/Rad/Dist   Lat/Long

AA  N30°49.57'  W86°40.75'
AB  N31°00.00'  W86°38.00'
AC  N31°33.40'  W86°36.60'
DA  N31°49.50'  W86°51.30'
DB  N32°06.00'  W86°30.93'
DC  N32°23.38'  W85°33.28'
DD  N32°41.25'  W85°10.28'
DE  N32°49.38'  W84°03.82'
DF  N33°17.00'  W83°15.15'
DH  N33°59.00'  W83°06.00'
DI  N34°22.50'  W83°15.38'
DJ  N34°48.83'  W83°07.77'
DK  N35°07.88'  W82°56.67'
EA  N35°32.13'  W82°55.42'
AC1 N31°33.40'  W86°36.60'
AO  N30°51.72'  W86°49.80'
AP  N30°37.97'  W86°01.87'
AR  N30°49.27'  W86°24.80'
AO  N30°56.20'  W86°24.80'
AQ  N30°56.20'  W86°24.80'
AQ  N30°51.72'  W86°49.80'
AK  N30°27.35'  W84°29.22'
AL  N30°34.77'  W84°57.70'
AM  N30°39.78'  W85°34.62'
AN  N30°49.27'  W86°01.87'
AG  N31°55.25'  W84°42.28'
AH  N31°39.82'  W84°41.20'
AI  N31°10.22'  W84°28.00'
AJ  N30°53.10'  W84°28.10'
AK  N30°27.35'  W84°29.22'
AL  N30°34.77'  W84°57.70'
AM  N30°39.78'  W85°34.62'
AN  N30°49.27'  W86°01.87'

(Alternate Entry Point)

(ALTERNATE ROUTING:

AQ  N30°56.20'  W86°24.80'
AO  N30°51.72'  W86°49.80'
AP  N30°37.97'  W86°01.87'

(Sontay Drop Zone).

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

(1) Route is bi-directional and limited to C130 operations.
(2) Coordination required with Scheduling Activity, two days prior.
(3) Contact Eglin Range Control at (AO) or (AQ) for clearance into R-2915/R-2914.
(4) Minimum altitude: 250' AGL except (AA) to 10 NM past (AB) northbound 1700' MSL; 10 NM prior to (AB) southbound 1700' MSL or above; (AD) to (AE) at 750' AGL; (AH) to (AL) at 500' AGL; if flying two clockwise trips around SR-103, aircraft must be at 1700' MSL prior to (AB).

SR-104

(CRESTVIEW)

ORIGINATING ACTIVITY: 1 SOAOS/DOGR, Hurlburt Field, FL 32544 DSN 579-7812/7813, C850-884-7812/7813.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

(1) Route is bi-directional and limited to C130 operations.
(2) Coordination required with Scheduling Activity, two days prior.
(3) Minimum Altitude Data: 250' AGL except (AA) to (AB) northbound 1700' MSL; (AC) to (AD) northbound 1700' MSL; (AO) to (AP) southbound 1200' MSL. 5 NM either side of (AO) 500' AGL.
(4) (AO) coincides with (AB) on SR-105.
(5) When not flying SR-105 in conjunction with SR-104, aircraft will not be below 1500' AGL at (AO).
(6) Mission number is required for entry into R-2915/ R-2914. Contact Eglin Range Control at (AO) for clearance into R-2915/R-2914.
(7) NOTE: SR-104 altitude restrictions for (AB) to (AC) are the same as SR-103 and provide 500' separation between northbound/southbound aircraft. SR-102 traffic between (DH) and (DI) is 1000' AGL or higher.

SR-105

(ASHEVILLE)

ORIGINATING ACTIVITY: 1 SOAOS/DOGR, Hurlburt Field, FL 32544 DSN 579-7812/7813, C850-884-7812/7813.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
at or above 02.5 AGL | BR | N35°23.30' | W83°34.00'
(Entry/Exit Point) | EA | N35°32.13' | W82°55.41'
(Alternate Entry/Exit Point) | EF | N35°46.68' | W82°59.10'
at or above 02.5 AGL | EG | N35°34.30' | W81°50.83'
at or above 02.5 AGL | EH | N35°25.40' | W81°18.10'
at or above 02.5 AGL | EI | N35°22.30' | W80°49.00'
at or above 02.5 AGL | EJ | N35°15.08' | W80°30.18'
at or above 02.5 AGL | EK | N34°52.09' | W80°10.63'
at or above 02.5 AGL | EL | N34°56.61' | W79°52.17'
(Alternate Entry/Exit Point) | EM | N35°00.61' | W79°28.19'
(Luzon Drop Zone).

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

(1) Route is bi-directional and is limited to C130 operations.
(2) Coordination required with Scheduling Activity, two days prior.
(3) Minimum Altitude Data: 250' AGL.
(4) When not flying SR-105 in conjunction with SR-101, aircraft will not be below 1500' AGL at (BR).
(5) NOTE: (EA) is also (EA) on SR-104.
(6) Prior coordination with Pope ALCE, DSN 486-4261 is required when operating on any drop zone in the Pope area and R-5311.
(7) Eastbound aircraft contact and monitor Charlotte Approach Control on 134.75 or 307.8 at (EG). Westbound aircraft contact and monitor Charlotte Approach Control on 120.5 or 307.8 at (EL).
(8) CAUTION: Be alert for extensive civilian airliner traffic between (EH) and (EL). Route crosses arrival/departure course for Charlotte Douglas International Airport.

(9) Contact Concord Tower at (EI) and (EJ) for clearance through Class D airspace.
(10) CAUTION: Intensive light civilian traffic between (EI) and (EJ) in the vicinity of oncord airport.
(11) Avoid overflight of nuclear power plant between (EG) and (EI).

SR-106

(CRESTVIEW)

ORIGINATING ACTIVITY: 1 SOAOS/DOGR, Hurlburt Field, FL 32544 DSN 579-7812/7813, C850-884-7812/7813.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
AA | N30°49.57' | W86°40.75'
(Entry Point) | BD | N31°07.90' | W86°43.00'
BE | N31°32.50' | W86°43.00'
FA | N31°38.70' | W87°14.00'
FB | N31°19.50' | W87°54.70'
FC | N31°22.05' | W88°15.00'
FD | N31°57.60' | W88°35.00'
FE | N31°41.50' | W88°52.90'
FF | N31°20.20' | W88°41.98'
FB1 | N31°19.50' | W87°54.70'
FA1 | N31°38.70' | W87°14.00'
BE1 | N31°32.50' | W86°43.00'
BD1 | N31°07.90' | W86°43.00'
AO | N30°51.72' | W86°49.80'
(SONTAY DROP ZONE) | AP | N30°37.97' | W86°45.68'
AO1 | N30°51.72' | W86°49.80'
(SONTAY DROP ZONE) | AQ | N30°56.20' | W86°24.80'
AR | N30°41.20' | W86°23.57'
(PINO DROP ZONE).

ROUTE WIDTH - 2 NM either side of centerline.
SR ROUTES

Remarks:
(1) Route is bi-directional and limited to C130 operations.
(2) Coordination required with Scheduling Activity, two days prior.
(3) Minimum Altitude Data: 250’ AGL except 3000’ MSL between (AA) and (BD), (BD) to (BE) at 1700’ MSL northbound, (BE) to (BD) 1200’ MSL southbound, (FA) to (FB) 500’ AGL, 5 NM either side of (FF) 500’ AGL.
(4) NOTE: SR-106 altitudes for (BE) to (BD) are the same as SR-101 and provide 500’ AGL separation northbound/southbound aircraft.

SR-119

(CRESTVIEW)

ORIGINATING ACTIVITY: 1 SOAOS/DOGR, Hurlburt Field, FL 32544 DSN 579-7812/7813, C850-884-7812/7813.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>A</td>
<td>N29°*21.17’</td>
<td>W99°*00.11’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>N29°*39.69’</td>
<td>W98°*57.27’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>N30°*04.05’</td>
<td>W99°*19.86’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>N30°*25.55’</td>
<td>W99°*09.70’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>N30°*21.66’</td>
<td>W98°*28.19’</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:
(1) Route is limited to C130 operations.
(2) Coordination required with Scheduling Activity, two days prior.
(3) Minimum Altitude Data: 250’ AGL except 1700’ MSL (A) to (B); 500’ AGL, 30-20 NM prior to (F), (O) to (P), (P) to (Q).
(4) A mission number is required for entry into R-2915/R-2914. Contact Eglin Mission Control at (V) for entry into R-2915 or (X) for entry into R-2914.

SR-130

(FORT WORTH)

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street East, Randolph AFB, TX 78150 C210-652-5580, DSN 487-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX 78150 C210-652-5561, DSN 487-5561.

HOURS OF OPERATION: Sunrise-Sunset daily, except holidays

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>A</td>
<td>N29°*21.17’</td>
<td>W99°*00.11’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>N29°*39.69’</td>
<td>W98°*57.27’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>N30°*04.05’</td>
<td>W99°*19.86’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>N30°*25.55’</td>
<td>W99°*09.70’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>N30°*21.66’</td>
<td>W98°*28.19’</td>
</tr>
</tbody>
</table>
TERRAIN FOLLOWING OPERATIONS: Authorized. Points are flown in the order listed above: A, B, C, D, E. Minimum weather is 1500' ceiling and 3 miles visibility. Aircraft will fly 500' to 1500' AGL.

ROUTE WIDTH - A-B 6NM either side of centerline, B-C 6NM right and 5NM left of centerline, C-D 7NM right and 10NM left of centerline, D-E 6NM right and 10 NM left of centerline.

Remarks:
(1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to schedule route.
(2) Minimum altitude: 500' AGL.
(3) T-6 and T-1 aircraft are the only authorized users of this route.
(4) Comply with the AFI 11-202 Vol 3 altitude minimums when overlying Lakehillks, TX in the vicinity of Medina Lake (N29-35.00 W98-56.52).
(5) Avoid flight within 1500' or 3NM of chartered uncontrolled airports when practicable.
(6) Route conflicts:
(a) C-D crosses VR-140 G-H. To deconflict, call the scheduler of VR-140 at 56 FTS, Randolph AFB, DSN 652-3518, C210-652-3518;
(b) B-C crosses VR-1122 B-C. To deconflict, call the scheduler of VR-1122 at 149th FW, Kelly AFB, DSN 945-5934, C210-925,5934;
(c) D-E corridor overlaps VR-143 A-B corridor. Point D is within 0.5NM of IR-123 A-B. To deconflict, call the scheduler of VR-143 and IR-123 at 560 FTS, Randolph AFB, DSN 652-3518, C210-652-3518;
(7) The overlying Randolph 2A MOA begins at 9000' MSL.
(8) Primary Entry Point: (A).
(9) Alternate Entry Point: (B, C, D).
(10) Primary Exit Point: (E).
(11) Alternate Exit Point: (B, C, D).
(13) CAUTION: Be alert for extensive bird activity year-round.
(14) CAUTION: Be alert for tall towers (approximately 1500' AGL) to the east and west of Point B within the route corridor.
(15) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule a new entry time with TEXAN OPS on 149.525 or 311.3.
(16) Avoid Kerrville (KERV) and Gillespie County (T82) airports by 5NM. Contact KERV and T82 on 122.7 (CTAF) with position report.
(17) Be alert for extensive VFR civilian traffic in the vicinity of KERV and T82 airports.
(18) Be alert for potential IFR traffic in the vicinity of CSI VORTAC, Castroville Municipal Airport (KCVB), KERV and T82 airports. Route crosses beneath the following approach corridors: RNAV 15 (KCVB), VOR-A (KERV), RNAV 14 (T82).

SR-137

(COLUMBUS) GWO

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 37/41 FTS, Columbus AFB, MS 39710-5000 DSN 742-7666/7667, C662-434-7666/7667.

HOURS OF OPERATIONS: SR-SS, Daily

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A N33°31.03' W88°56.13'
05 AGL B 15 AGL to B N33°32.03' W89°54.00'
05 AGL B 15 AGL to C N33°06.10' W89°54.00'
05 AGL B 15 AGL to D N32°53.09' W89°33.02'
05 AGL B 15 AGL to E N33°01.00' W89°13.13'
05 AGL B 15 AGL to F N33°14.09' W88°40.00'

ROUTE WIDTH - 3 NM either side of centerline (A) to (E), 2 NM left and 3 NM right of centerline (E) to (F).

Remarks:
(1) As assigned to (A), 500' AGL-1500' AGL (A) to (F).
(2) Mandatory Reporting Points: (A), (B), (C) to Greenwood FSS 255.4 (Altene 122.55).
(3) Aircrews calling to schedule SR-137 will ensure that they have checked all applicable Bird Hazard products (example: http://www.usahas.com/ and http://usahas.com/bam/) and are applying appropriate Operational Risk Management (ORM) guidance in accordance with their respective instructions/regulations to reduce the risk of bird strikes.
(4) CAUTION: SR-137 is the reciprocal of SR-138. Check with scheduling agency for deconfliction of route times.
(5) CROSSING ROUTES: IR-68 - Between (A) and (B) (48 FTS, CBM, DSN 742-7840, C662-434-7840). IR-44 - Near (C), between (E) and (F) (NAS Meridian, DSN 637-2487, C601-679-2487). VR-1033 - Between (C) and (D), (D) and (E) (NAS Meridian, DSN 637-2487, C601-679-2487). IR-044 is already deconflicted by altitude.
(6) For route briefing, email SR137@columbus.af.mil.
(7) To schedule for weekend use, contact scheduling activity prior to 2200Z+1 on Friday.
(8) Aircrews desiring to enter SR-137 at points (B) or (D) must coordinate with 37/41 FTS route schedulers prior to entering DSN 742-7666/7667, C662-434-7666/7667.
(9) Route Deconfliction:
(a) SR-138 (opposite direction route) has the same scheduler of SR-137 will ensure that they are applying appropriate Operational Risk Management (ORM) guidance in accordance with their respective instructions/regulations to reduce the risk of bird strikes.
(b) IR-044 is already deconflicted by altitude.
(c) Contact the scheduling activities for IR-068 and VR-1033 to verify if they are being utilized. Aircraft should be climbing to exit IR-068 when it becomes a factor. As long as aircraft flying IR-068 are above 2000' AGL at the IR-068 exit point, there should be a 500' buffer. IR-068 is normally only flown on Tuesdays and Thursdays.
(10) During BASH Phase II, 14 FTS aircrew will consider (a minimum) Points B-D as Bird Watch Condition Moderate. BASH Phase II high bird activity during migratory season Sep-Apr. Potential for large formations of waterfowl SFC-2000' AGL.

ROUTE WIDTH - 3 NM either side of centerline (A) to (E), 2 NM left and 3 NM right of centerline (E) to (F).
SR ROUTES

SR-138

(COLUMBUS) GWO

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 37/41 FTS, Columbus AFB, MS 39710 DSN 742-7666/7667, C662-434-7666/7667.

HOURS OF OPERATION: SR-SS, Daily

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  N33°14.09' W88°40.00'
05 AGL B 15 AGL to  B  N33°01.00' W89°03.13'
05 AGL B 15 AGL to  C  N32°53.09' W89°33.02'
05 AGL B 15 AGL to  D  N33°06.10' W89°54.00'
05 AGL B 15 AGL to  E  N33°32.03' W89°50.00'
05 AGL B 15 AGL to  F  N33°31.03' W88°56.13'

ROUTE WIDTH - 2 NM right and 3 NM left of centerline (A) to (B), 3 NM either side of centerline (B) to (F).

Remarks:
(1) Altitude as assigned to (A), 500'AGL-1500'AGL from (A) to (F).
(2) Mandatory Report Meridian Approach 120.95/276.4 at (A).
(3) Mandatory Report to Greenwood FSS 255.4 (Alternate 122.55) at (C), (D), (E) and (F).
(4) CAUTION: SR-138 is the reciprocal of SR-137. Check with scheduling agency for deconfliction of route times.
(5) Use caution when exiting at Alternate Exit Point (E) for low-level traffic exiting IR-44 in vicinity of Louisville, MS.
(6) For route briefing, email SR138@columbus.af.mil.
(7) To schedule for weekend use, contact scheduling activity prior to 2200Z+ on Friday.
(8) CROSSING ROUTES: IR-68 - Between (E) and (F) (48 FTS, CBM, DSN 742-7840, C662-434-7840). IR-44 - Near (D), between (A) and (B) (NAS Meridian, DSN 637-2487, C601-679-2487). VR-1059 - Between (D) and (E) and (C) (NAS Meridian, DSN 67-2487, C601-679-2487).
(9) Aircrews calling to schedule SR-138 will ensure that they have checked all applicable Bird Hazard products (examples: http://www.usahas.com/ and http://usahas.com.bam/) and are applying appropriate Operational Risk Management (ORM) guidance in accordance with thier respective instructions/regulations to reduce the risk of bird strikes.
(10) Aircrews desiring to enter SR-138 at points (C) and (E) must coordinate with 37/41 FTS route schedulers at DSN 742-7666/7667 prior to entering.
(11) Route Deconfliction:
(a) SR-137 (opposite direction route) has the same scheduler and will be able advise if there is a conflict.
(b) IR-044 is already deconflicted by altitude.

(c) Contact the scheduling activities for IR-068 and VR-1033 to verify if they are being utilized. Aircraft should be climbing to exit IR-068 when it becomes a factor. As long as aircraft flying IR-068 are above 2000' AGL at the IR-068 exit point, there should be a 500' buffer. IR-068 is normally only flown on Tuesdays and Thursdays.

SR-166

(CHARLESTON) CHS, FLO, SAV


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
at or above 03 AGL  A  N33°23.00' W81°08.00'
at or above 03 AGL  B  N33°17.00' W80°31.00'
at or above 03 AGL  C  N33°23.00' W79°57.00'
at or above 03 AGL  D  N33°35.00' W79°07.00'
at or above 03 AGL  E  N33°45.00' W80°12.00'
at or above 03 AGL  F  N33°36.00' W80°33.00'
at or above 03 AGL  G  N33°36.00' W80°59.00'
at or above 03 AGL  H  N33°36.20' W81°10.20'
at or above 03 AGL  I  N33°28.10' W81°16.90'
at or above 03 AGL  A1  N33°23.00' W81°08.00'

ROUTE WIDTH - 2 NM either side of centerline. Excludes North AF Aux, SC Class E airspace.

Remarks:
(1) Minimum altitude is 300' AGL.
(2) Users flying this or a point-to-point route on top of this route MUST contact the scheduling agency for route deconfliction and usage tracking.
(3) CAUTION: VR-087,097,1059,IR-035, and 036 deconflicted by scheduling agency when route is booked.
(4) Alternate Entry: C, Alternate Exit: G.
(5) Users MUST contact Shaw Approach 225.4 133.25 passing (D) for Poinsett MOA separation.
(6) CAUTION: Prior to (F) look for flights of fighter acth holding (VFR) over the Rimini Bridge awaiting entry into R-6002 (hours of operation 1200-0300Z+).
(7) Landings at North Field can be accomplished when in contact with North Field LZ/DZ Ops Facility on 120.475 235.775. Prior coordination and approval with 437 OSS/OSO DSN 673-5554 is required prior to operations into North Field.

(8) Route is designated for MARSA operations established by coordinated scheduling.

(9) Avoid overflight of Holly Hill airport, use caution for light aircraft in the vicinity, N33-18.06 W80-23.64.

(10) CAUTION: Near (B) look for aircraft on approach to St George airport from the Vance VORTAC.

(11) CAUTION: Vicinity of North Airfield, SC, C5, C17, and C130 acft conducting tactical training operations into and out of the airfield.

(12) Avoid: Santee National Wildlife Refuge (Lake Marion) just prior to (F), avoid by 2200’ AGL.

(13) Avoid four noise sensitive areas:
   (a) N33-39.1 W80-27.1 by 1,000’ AGL/1NM;
   (b) N33-29.7 W81-16.8 by 1,000’ AGL/1NM;
   (c) N33-40.8 W80-03.5 by 1,000’ AGL/1NM;
   (d) N33-36.0 W81-06.5 town of North, SC by 1500’AGL/1NM.

(14) CAUTION: three towers:
   (a) N33-26.0 W80-01.6 375’ AGL (450’ MSL);
   (b) N33-32.3 W79-59.3 1207’ AGL (1281’ MSL);
   (c) N33-39.5 W80-18.6 500’ AGL (662’ MSL).

(15) Avoid within Santee NWR five Eagle Nest locations (endangered species):
   (a) N33-36.9 W80-31.8 by 1500’AGL/1 NM;
   (b) N33-18.4 W80-10.6 by 2000’AGL;
   (c) N33-26.1 W80-07.4 by 2000’AGL;
   (d) N33-24.4 W80-11.6 by 2000’AGL;
   (e) N33-25.4 W80-16.9 by 2000’AGL.

(16) Contact Joint Base Charleston Airfield Management 372.2 DSN 673-3026 or relay through Charleston Command Post 349.4 to report any unusual active bird conditions along the route.

(17) Unpublished towers found by route surveys 200’ AGL and above are listed in the remarks section. A quick reference to the latest Charlotte sectional chart (1-500 scale) will show charted towers on the route.

(18) Occasionally, aircraft flying point-to-point above this route IFR, may be requested by Columbia Approach Control to maintain route centerline or north of centerline from (F) to (G). If unable to comply, notify ATC and expect to be issued a climb to 3,000’MSL.

SR-200

(ALBUQUERQUE) ABQ


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data     Pt Fac/Rad/Dist  Lat/Long
at or above 02.5 AGL  A N34°55.00’ W107°07.80’

SR ROUTES

SR-201

(ALBUQUERQUE) ABQ


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data     Pt Fac/Rad/Dist  Lat/Long
at or above 02.5 AGL  A N34°55.00’ W107°07.80’

4-11
SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude 250’ AGL.
(2) All points are Alternate Entry/Exit Points.
(3) Route terminates at AR-117V.
(4) Avoid the following areas:
   (a) Town of Guadelupe (N35-32.0 W107-09.0) by 1 NM or 1000’ AGL;
   (b) Petrified Forest National Monument (as outlined on TPC beginning at (N35-10.2 W109-54.2) by 2000’ AGL;
   (c) Happy Mountain Airfield (N34-03.5 W108-05.6) by 2 NM.
(5) 58 SOW is the scheduling authority and retains preemptive rights.
(6) Contact 58 OSS/DOO for a fax or email of most current Avoid Areas.
(7) Route is bi-directional. Coordination with the Scheduling Activity is required.
(8) Route is restricted to turboprop and tilt-rotor type aircraft.
(9) If aircrews are going to miss their scheduled entry time by more than 10 minutes, they must call the 58 SOW Wing Operations Center (DSN 246-9482) for a new entry time.

SR-205

(HOBART) HBR, CDS


HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td></td>
<td>N35°05.85' W99°15.60'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>B</td>
<td></td>
<td>N35°16.00' W99°38.70'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>C</td>
<td></td>
<td>N34°51.52' W99°41.82'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM left and 2 NM right of centerline from (A) to (B), 5 NM either side of centerline from (B) to (E).

Remarks:
(1) This route is closed until further notice. Route has not been surveyed or reviewed and is considered inactive. Contact the originating activity for more information.
(2) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313 or C580-481-6313.
(3) Minimun Altitude 300’ AGL.
(4) When practicable avoid flight over the town of Eldorado, OK.
(5) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed, OK to Altus APP CON 353.7 using the phrase (callsign, Reed Southbound to Sooner DZ, intentions to follow). Aircraft not accomplishing airdrop at Sooner DZ, report passing (C).
(7) Deconflict with: IR-105 (NAS Fort Worth) and VR-162 (Sheppard AFB) with appropriate route schedulers. SR-205 (B-C-D legs) is opposite direction VR-162 (C-D leg). VR-162 (E-F leg) also crosses SR-205 (D-E leg). SR-205 (B-C-D legs) is opposite direction to IR-105 (D-E leg). IR-105 (E-F leg) crosses SR-205 (Point A). VR-1141/1142 corridor overlaps SR-205 Point B. Deconflict with Sheppard AFB or fly south of SR-205 Point B to avoid the VR-1141/1142 corridor.
(8) Monitor Altus APP CON 353.7 and 255.4 entire route. If unable to monitor both Altus Approach and 255.4, monitor 255.4, except when making mandatory report to Altus Approach at C or Reed southbound.
(9) PMSV: Altus AFB 239.8.
(10) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

SR-206

(CHILDERSS) CDS, HBR


HOURS OF OPERATION: 0830-0230 Local Mon-Fri
ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
---|---|---|---
At or above 03 AGL | A | N35°13.60' | W100°01.00'
At or above 03 AGL | B | N34°55.50' | W100°26.05'
At or above 03 AGL | C | N34°32.17' | W100°09.90'
At or above 03 AGL | D | N34°30.60' | W99°41.83'
(Alternate Entry/Exit Point) |  |  |  
At or above 03 AGL | E | N34°36.70' | W100°06.83'

ROUTE WIDTH - 5 NM right and 2 NM left of centerline from (A) to (B), 5 NM either side of centerline from (B) to (E).

Remarks:
1. This route is closed until further notice. Route has not been surveyed or reviewed and is considered inactive. Contact the originating activity for more information.
2. Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313 or C580-481-6313.
3. Minimum Altitude 300' AGL.
4. Avoid ranch 3 NM east and 1/2 NM south of Lutie (N35°01.0' W100°10.1') by 3 NM.
5. When practicable avoid flight over the town of Eldorado, OK.
6. Immediate left turn at (D).
7. Aircraft accomplishing airdrops at Sooner DZ report commencement of airdrop run-in NLT 5 minutes prior to Altus APP CON 353.7 using the phrase (callsign inbound to Sooner DZ, position relative to Sooner DZ, intentions to follow).
9. Deconflict with: IR-105 (NAS Fort Worth) and VR-162 (Sheppard AFB) with appropriate route scheduling. IR-105 conflicts with SR-208 near SR-208 D. VR-162 conflicts with SR-206 (C-D-E legs). The corridor for VR-1141/1142 overlaps SR-206 Point A. Deconflict with Sheppard AFB or fly south of I-40 to avoid the corridor for VR-1141/1142. Do not fly west of Point B to avoid the corridor for VR-1141/1142.
10. Monitor Altus APP CON 353.7 and 255.4 entire route. If unable to monitor both Altus Approach and 255.4, monitor 255.4, except when making mandatory report to Altus Approach while inbound Sooner DZ.
11. PMSV: Altus AFB 239.8.
12. Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

SR-208

(HOBART) HBR, CDS

SR ROUTES

SR-210

(ALBUQUERQUE) ABQ


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 02.5 AGL</td>
<td>A</td>
<td>N32°52.00' W108°35.70'</td>
<td></td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>AA</td>
<td>N33°01.80' W108°09.10'</td>
<td></td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>B</td>
<td>N33°27.20' W107°48.50'</td>
<td></td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>C</td>
<td>N34°05.00' W107°29.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>D</td>
<td>N34°22.80' W107°13.20'</td>
<td></td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>E</td>
<td>N34°46.50' W107°02.50'</td>
<td></td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>F</td>
<td>N34°49.30' W106°58.60'</td>
<td></td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude 250' AGL.
(2) Contact ‘Coyote’ (349.5) at (D) for helicopter traffic advisories.
(3) All points are Alternate Entry/Exit Points.
(4) Avoid the following areas:
    a) Gila Center Heliport (N33-13.5 W108-14.0) by 3 NM.
    b) Populated areas along the Rio Grande Valley by 1000' AGL.
(5) 58 SOW is the scheduling authority and retains pre-emptive rights.
(6) Contact 58 OSS/DOO for a fax or email of most current Avoid Areas.
(7) Route is restricted to turboprop and tilt-rotor type aircraft only.
(8) If aircrews are going to miss their scheduled entry time by more than 10 minutes, they must call the 58 SOW Wing Operations Center (DSN 246-9482) for a new entry time.

SR-212

(ALBUQUERQUE) ABQ

ORIGINATING ACTIVITY: 27 SOAOS/DOOA, 301 S. Chindit Ave, Bldg 790, Rm 120, Cannon AFB, NM 88103, 27.SOSS.OSOA-at-cannon.af.mil, DSN 681-2521, C575-784-2521.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S. Chindit Ave, Bldg 790, Rm 120, Cannon AFB, NM 88103, 27SOAS.DOOS-at-cannon.af.mil, DSN 681-2276/7634, C575-784-2276/7634.

HOURS OF OPERATION: Continuous

SR-211

(ALBUQUERQUE) ABQ


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous
ROUTE DESCRIPTION:
Altitude Data	Pt	Fac/Rad/Dist	Lat/Long
at or above 02.5 AGL A	N35°36.00' W107°05.50'
at or above 02.5 AGL B	N35°53.50' W106°43.20'
at or above 02.5 AGL C	N36°12.80' W105°54.80'
at or above 02.5 AGL D	N36°00.50' W105°12.20'
at or above 02.5 AGL E	N35°13.00' W105°34.00'
at or above 02.5 AGL F	N35°05.00' W106°00.10'
at or above 02.5 AGL G	N34°52.00' W106°35.50'
at or above 02.5 AGL H	N34°49.30' W106°58.60'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude 250' AGL.
(2) Route terminates at AR-117V. Contact 58 SOW Scheduling at DSN 263-5979 to deconflict.
(3) All points are Alternate Entry/Exit Points.
(4) This route is bi-directional.
(5) Avoid the following areas:
(a) USFS Helipad N35-53.0 W106-40.57 by 1000' AGL/1 NM.
(b) Dixon and Rinconado, NM N36-12.32 W105-52.75 by 1000' AGL/2 NM.
(c) Penasco and Vadito, NM N36-10.74 W105-40.93 by 2000' AGL/3.5 NM.
(d) Hermit Peak N35-45.0 W105-25.0 by 2 NM.
(e) San Jose, NM N35-23.8 W105-28.49 by 1000' AGL/2 NM.
(f) Soham, NM N35-26.59 W105-33.50 by 1000' AGL/2 NM.
(g) South San Ysidro N35-27.0 W105-35.0 by 1000' AGL/2 NM.
(h) The area west of Moriarity, NM by 1500' AGL (from N35-06.0 W106-17.0 to N35-00.0 W106-02.0 to N34-52.0 W106-02.0 to N34-58.0 W106-17.0 to beginning)
(i) Explosive Test Site N34-48.52 W107-02.47 by 1 NM.
(j) Cutler Ranch Ribera, NM N35-15.18 W105-27.47 by 1500'/3 NM.
(6) Be vigilant for increased air traffic IVO Albuquerque Class C and the 58 SOW 'local area.' See 27 SOG/58 OG MOA for more specifics.
(7) Aircrew will call-in position reports on Roadrunner (249.5) when entering, when west of the Manzano Mountains crossing from F to G and before exiting.
(8) Aircrew will monitor and call in-the-blind route entry and when crossing points C through E on 255.4.
(9) Due to evolving avoidance areas, obstacles and land uses beneath the route, all users must have/utilize the current local route brief, 27 SOG MasterCHUM and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity (SA).
(10) Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: http://www.usahas.com.

(11) Turnpoint A and SR-200 turnpoint H are collocated. Contact 58 SOW SA for deconfliction and/or scheduling SR-200.
(12) Turnpoint H and SR-200 turnpoint A are collocated. Route terminates at SR-200. Contact 58 SOW SA for deconfliction and/or scheduling SR-200.
(13) Turnpoint H and SR-201 turnpoint M are collocated. Contact 58 SOW SA for deconfliction and/or scheduling SR-201.

SR-213
(ABQ)

ORIGINATING ACTIVITY: 27 SOAOS/DOOAS, 301 S.
Chindit Ave, Bldg 790, Rm 120, Cannon AFB, NM 88103, 27.SOSS.OSOA-at-cannon.af.mil, DSN 681-2521, C575-784-2521.

SCHEDULING ACTIVITY: 27 SOAOS/DOOS, 301 S.
Chindit Ave, Bldg 790, Rm 120, Cannon AFB, NM 88103, 27SOAS.DOOS-at-cannon.af.mil, DSN 681-2276/7634, C575-784-2276/7634.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data	Pt	Fac/Rad/Dist	Lat/Long
at or above 02.5 AGL A	N34°41.00' W105°46.50'
at or above 02.5 AGL B	N34°16.50' W105°16.50'
at or above 02.5 AGL C	N34°34.50' W104°14.80'
at or above 02.5 AGL D	N34°53.70' W104°46.30'
at or above 02.5 AGL E	N35°05.00' W105°26.50'
at or above 02.5 AGL F	N35°05.00' W106°00.10'
at or above 02.5 AGL G	N34°52.00' W106°35.50'
at or above 02.5 AGL H	N34°49.30' W106°58.60'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude 250' AGL.
(2) Route terminates at AR-117V. Contact 58 SOW Scheduling at DSN 263-5979 to deconflict.
(3) All points are Alternate Entry/Exit Points.
(4) Avoid the following areas:
(a) Ft. Sumner Rec Area (N34-37.0 W104-24.0) by 2 NM;
(b) Area west of Moriarity (N35-06.0 W106-17.0 to N35-00.0 W106-02.0 to N34-52.0 W106-02.0 to N34-58.0 W106-17.0 to beginning)
(c) Populated areas along the Rio Grande Valley by 1000' AGL minimum;
(d) Explosive Test Site (N34-48.52 W107-02.47) by 1 NM.
(5) Be vigilant for increased air traffic IVO Albuquerque Class C and the 58 SOW 'local area.' See 27 SOG/58 OG MOA for more specifics.
SR ROUTES

(6) Aircrew will call-in position reports on Roadrunner (249.5) when west of the Manzano Mountains crossing from F to G and before exiting.

(7) Aircrew will call-in-the-blind route entry and points B, C, E, and F on 255.4.

(8) Aircrew will call in-the-blind before entering and when exiting Pecos MOA on 267.9.

(9) Due to evolving avoidance areas, obstacles and land uses beneath the route, all users must have/utilize the current local route brief, 27 SOG MasterCHUM and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity (SA).

(10) Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: http://www.usahas.com.

(11) Route is opposite direction of SR-214 and majority of the route overlaps SR-214. Both routes are deconflicted by the scheduling activity (SA).

(12) Turnpoint I and SR-201 turnpoint A are collected. Route terminates at SR-201. Contact 58 SOW SA for deconfliction and/or scheduling SR-201.

(13) Route overlaps SR-211 from turnpoints G to I. Contact 58 SOW SA for deconfliction and/or scheduling SR-211.

SR-214

(ALBUQUERQUE) ABQ

ORIGINATING ACTIVITY: 27 SOAO/DOOA, 301 S. Chindit Ave, Bldg 790, Rm 120, Cannon AFB, NM 88103, 27.SOSS.OSOA-at-cannon.af.mil, DSN 681-2521, C575-784-2521.

SCHEDULING ACTIVITY: 27 SOAO/DOOS, 301 S. Chindit Ave, Bldg 790, Rm 120, Cannon AFB, NM 88103, 27SOAS.DOOS-at-cannon.af.mil, DSN 681-2276/7634, C575-784-2276/7634.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 02.5 AGL A N35°04.80’ W105°56.10’
at or above 02.5 AGL B N35°05.00’ W105°26.50’
at or above 02.5 AGL C N34°53.70’ W104°46.30’
at or above 02.5 AGL D N34°34.50’ W104°14.80’
at or above 02.5 AGL E N34°16.50’ W105°16.50’
at or above 02.5 AGL F N34°52.00’ W105°55.40’
at or above 02.5 AGL G N34°52.00’ W106°35.50’
at or above 02.5 AGL H N34°41.90’ W106°34.10’
at or above 02.5 AGL I N34°29.10’ W106°37.00’

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

(1) Minimum altitude 250’ AGL.

(2) Route terminates at Burris DZ. Contact 58 SOW Scheduling at DSN 263-5979.

(3) All points are Alternate Entry/Exit Points.

(4) Avoid the following areas:
   a. Ft. Sumner Rec Area (N34-37.0 W104-24.0) by 2 NM;
   b. Area west of Moriarity (N35-06.0 W106-17.0 to N35-00.0 W106-02.0 to N34-52.0 W106-02.0 to N34-58.0 W106-17.0 to beginning);
   c. Populated areas along the Rio Grande Valley by 1000’ AGL minimum.

(5) Be vigilant for increased air traffic IVO Albuquerque Class C and the 58 SOW ‘local area.’ See 27 SOG/58 OG MOA for more specifics.

(6) Aircrew will call-in position reports on Roadrunner (249.5) when west of the Manzano Mountains crossing from F to G and before exiting.

(7) Aircrew will call in-the-blind route entry and points C, through F on 255.4.

(8) Aircrew will call in-the-blind before entering and when exiting Pecos MOA on 267.9.

(9) Due to evolving avoidance areas, obstacles and land uses beneath the route, all users must have/utilize the current local route brief, 27 SOG MasterCHUM and Masterdrawfile before flying the route. This information can be obtained by request to the scheduling activity (SA).

(10) Information on migratory bird activity along this route may be obtained from the bird avoidance web page on AHAS at: http://www.usahas.com.

(11) Route is opposite direction of SR-213 and majority of the route overlaps SR-213. Both SR-213 and SR-214 are deconflicted by the scheduling activity (SA).

(12) Turnpoint H and SR-200 turnpoint A are collected. Route terminates at SR-200. Contact 58 SOW SA for deconfliction and/or scheduling SR-200.

(13) Turnpoint H and SR-201 turnpoint M are collected. Route terminates at SR-201. Contact 58 SOW SA for deconfliction and/or scheduling SR-201.

(14) Route overlaps SR-211 from turnpoints G to H. Contact 58 SOW SA for deconfliction and/or scheduling SR-211.

SR-216

(CHILDERNESS) CDS, HBR


HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 03 AGL A N34°59.60’ W100°35.30’

ROUTE WIDTH - 5 NM either side of centerline.
ROUTE WIDTH - 2 NM either side of centerline except from (B) to (C) 2 NM right of centerline.

Remarks:
(1) This route is closed until further notice. Route has not been surveyed or reviewed and is considered inactive. Contact the originating activity for more information.
(2) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
(3) Minimum altitude 300’ AGL day, 500’ AGL night.
(4) Avoid flight over:
   (a) Ranch 4 NM north and 3 NM east of Erick (N35°16.4’ W100°14.8’);
   (b) Ranch 2 NM north and 1 NM east of Erick (N35°15.0’ W99°51.0’).
(5) 5 NM prior to (C) climb to 1500’ AGL.
(6) Descent to low-level enroute altitude may be initiated after passing (C).
(7) When practicable avoid flight over the town of Eldorado, OK.
(8) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed, OK to Altus APP CON 353.7 using the phrase (callsign, Reed Southbound to Sooner DZ, intentions to follow), Others report passing (D).
(10) Deconflict with: IR-105 (NAS Fort Worth), VR-162, VR-1141, VR-1142 (Sheppard AFB) with appropriate route scheduling. The corridor for VR-1141/1142 overlaps the corridor of SR-217 north of SR-217 Point D. Completely avoid the corridor for VR-1141/1142 while on SR-217.
(11) Monitor Altus APP CON 353.7 and 255.4 entire route. When practicable avoid flight over the town of Eldorado, OK.
(12) Deconflict with: IR-105 (NAS Fort Worth) and VR-162 (Sheppard AFB) with appropriate route scheduling. Aircraft passing through the corridor of VR-1141/1142 must be coordinated with Altus APP CON 353.7.
(13) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

SR-217

(HOBART) HBR, CDS


HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

Altitude Data   Pt   Fac/Rad/Dist     Lat/Long

at or above 03 AGL A  N34°31.00' W99°41.80'
at or above 03 AGL B  N34°34.65' W99°51.23'
at or above 03 AGL C  N34°35.00' W99°41.80'
at or above 03 AGL D  N35°08.77' W99°31.50'
at or above 03 AGL E  N34°31.00' W99°41.80'
at or above 03 AGL F  N34°36.80' W100°06.80'
at or above 03 AGL G  N34°36.80' W100°06.80'

ROUTE WIDTH - 5 NM either side of centerline except from (C) to (D) 2 NM left and 5 NM right.

Remarks:
(1) This route is closed and not authorized to schedule or fly due to not being surveyed or reviewed. Contact the originating activity for more information.
(2) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
(3) Minimum altitude 300’ AGL day.
(4) Do not extend past (C) for any reason.
(5) Avoid ranch 3 NM east and 1/2 NM south of Lutie (N35°01.0’ W100°14.8’).
(6) When practicable avoid flight over the town of Eldorado, OK.
(7) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed, OK to Altus APP CON 353.7 using the phrase (callsign, Reed Southbound to Sooner DZ, intentions to follow), Others report passing (E).
(9) Deconflict with: IR-105 (NAS Fort Worth), VR-162 (Sheppard AFB) with appropriate route scheduling. The corridor for VR-1141/1142 overlaps the corridor of SR-217 north of SR-217 Point D. Completely avoid the corridor for VR-1141/1142 while on SR-217.
(10) Monitor Altus APP CON 353.7 and 255.4 entire route. When unable to monitor both Altus Approach and 255.4, monitor 244.4, except when making mandatory report to Altus Approach when Reed southbound/passing Point E.
SR ROUTES

(11) PMSV: Altus AFB 239.8.
(12) Alternate Entry: Point B.
(13) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.
(14) Charted Tower south of Russell OK, approximate location N34-43.00/W99-40.00 has been removed.
(15) Entire route is susceptible to wild fires. Aircrews should check NOTAMS before scheduling.
(16) To report fires, uncharted obstructions or any other operational issues requiring attention on this route, send email to Altus.airspace@altus.af.mil.

SR-218

(LITTLE ROCK) LIT


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data pt</th>
<th>Lat/Long</th>
<th>Pt Fac/Rad/Dist</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N35°19.50'</td>
<td>N92°20.40'</td>
</tr>
<tr>
<td>B</td>
<td>N35°48.50'</td>
<td>N92°38.60'</td>
</tr>
<tr>
<td>C</td>
<td>N35°47.00'</td>
<td>N93°05.50'</td>
</tr>
<tr>
<td>D</td>
<td>N35°17.30'</td>
<td>N93°25.20'</td>
</tr>
<tr>
<td>E</td>
<td>N35°51.60'</td>
<td>N93°29.40'</td>
</tr>
<tr>
<td>F</td>
<td>N35°52.70'</td>
<td>N92°39.40'</td>
</tr>
<tr>
<td>G</td>
<td>N35°54.90'</td>
<td>N92°18.10'</td>
</tr>
<tr>
<td>H</td>
<td>N35°35.10'</td>
<td>N92°18.30'</td>
</tr>
<tr>
<td>I</td>
<td>N35°33.20'</td>
<td>N92°42.20'</td>
</tr>
<tr>
<td>J</td>
<td>N35°23.80'</td>
<td>N92°27.70'</td>
</tr>
<tr>
<td>K</td>
<td>N35°10.90'</td>
<td>N92°16.20'</td>
</tr>
<tr>
<td>L</td>
<td>N35°11.70'</td>
<td>N92°27.00'</td>
</tr>
<tr>
<td>M</td>
<td>N35°12.50'</td>
<td>N92°01.40'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Remarks:
(1) A left turn to 350 degrees must be made no later than 1 NM past (G).

SR-219

(LITTLE ROCK) LIT


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data pt</th>
<th>Lat/Long</th>
<th>Pt Fac/Rad/Dist</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N35°19.50'</td>
<td>N92°20.40'</td>
</tr>
<tr>
<td>B</td>
<td>N35°47.00'</td>
<td>N93°05.50'</td>
</tr>
<tr>
<td>C</td>
<td>N35°17.30'</td>
<td>N93°25.20'</td>
</tr>
<tr>
<td>D</td>
<td>N35°51.60'</td>
<td>N93°29.40'</td>
</tr>
<tr>
<td>E</td>
<td>N35°52.70'</td>
<td>N92°39.40'</td>
</tr>
<tr>
<td>F</td>
<td>N35°54.90'</td>
<td>N92°18.10'</td>
</tr>
<tr>
<td>G</td>
<td>N35°35.10'</td>
<td>N92°18.30'</td>
</tr>
<tr>
<td>H</td>
<td>N35°33.20'</td>
<td>N92°42.20'</td>
</tr>
<tr>
<td>I</td>
<td>N35°23.80'</td>
<td>N92°27.70'</td>
</tr>
<tr>
<td>J</td>
<td>N35°10.90'</td>
<td>N92°16.20'</td>
</tr>
<tr>
<td>K</td>
<td>N35°11.70'</td>
<td>N92°27.00'</td>
</tr>
<tr>
<td>L</td>
<td>N35°12.50'</td>
<td>N92°01.40'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Remarks:
(1) A right turn to 360 degrees must be made immediately, safety permitting, upon passing Point H on SR219A.
(2) Do not exceed 1500’ MSL within 16 NM of the LFR TACAN (CH 29) unless in contact with Little Rock Approach Control.
(3) Due to extensive air traffic, users must contact 19 OSS(OSK) prior to use.
(4) Do not overfly the Holla Bend Wildlife Refuge.
(5) Avoid overflight of the town of Wooster, AR north of Point I.
(6) Avoid overflight of Enola School complex 8 NM prior to Point J.
(7) Minimum altitude 300’ AGL day and 500’ AGL night, except re-entry track from Point H to A, at or below 1500’ MSL.
(8) Primary Entry Point is A.
(9) Primary Exit Point for SR-219A is H.
(10) Primary Exit Point for SR-219B is J.
(11) All other Points are Alternate Entry/Exit Points.

**SR-220**

**(LITTLE ROCK) LIT**

**ORIGINATING ACTIVITY:** 19 OSS(OSK), 380 Chief Williams Drive, Little Rock AFB, AR 72099-9476 DSN 731-3301, C501-987-3301.

**SCHEDULING ACTIVITY:** 19 OSS(OSO), 320 Thomas Avenue, Little Rock AFB, AR 72099-9476 DSN 731-6850, C501-987-6850.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N35°19.50'</td>
<td>W92°20.40'</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>N35°22.50'</td>
<td>W92°42.40'</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>N35°10.50'</td>
<td>W93°09.30'</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>N34°52.40'</td>
<td>W93°06.70'</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>N34°52.70'</td>
<td>W92°39.40'</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N34°54.90'</td>
<td>W92°18.10'</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>N35°24.40'</td>
<td>W92°44.40'</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>N35°11.70'</td>
<td>W92°27.20'</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>N35°12.50'</td>
<td>W92°01.40'</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>N35°10.50'</td>
<td>W92°20.40'</td>
<td></td>
</tr>
</tbody>
</table>

(1) **ALL AMERICAN DROP ZONE:**

<table>
<thead>
<tr>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N35°19.50'</td>
</tr>
<tr>
<td>B</td>
<td>N35°33.60'</td>
</tr>
<tr>
<td>C</td>
<td>N35°57.60'</td>
</tr>
<tr>
<td>D</td>
<td>N36°01.40'</td>
</tr>
<tr>
<td>E</td>
<td>N36°25.20'</td>
</tr>
<tr>
<td>F</td>
<td>N36°39.80'</td>
</tr>
<tr>
<td>G</td>
<td>N36°19.30'</td>
</tr>
<tr>
<td>H</td>
<td>N36°10.80'</td>
</tr>
<tr>
<td>I</td>
<td>N36°33.40'</td>
</tr>
<tr>
<td>J</td>
<td>N36°27.70'</td>
</tr>
</tbody>
</table>

(2) **BLACKJACK DROP ZONE:**

<table>
<thead>
<tr>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N35°19.50'</td>
</tr>
<tr>
<td>B</td>
<td>N35°33.60'</td>
</tr>
<tr>
<td>C</td>
<td>N35°57.60'</td>
</tr>
<tr>
<td>D</td>
<td>N36°01.40'</td>
</tr>
<tr>
<td>E</td>
<td>N36°25.20'</td>
</tr>
<tr>
<td>F</td>
<td>N36°39.80'</td>
</tr>
<tr>
<td>G</td>
<td>N36°19.30'</td>
</tr>
<tr>
<td>H</td>
<td>N36°10.80'</td>
</tr>
<tr>
<td>I</td>
<td>N36°33.40'</td>
</tr>
<tr>
<td>J</td>
<td>N36°27.70'</td>
</tr>
</tbody>
</table>

(3) **SUCCCHON DROP ZONE**

<table>
<thead>
<tr>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>N36°36.30'</td>
</tr>
<tr>
<td>L</td>
<td>N36°33.30'</td>
</tr>
<tr>
<td>M</td>
<td>N36°26.50'</td>
</tr>
<tr>
<td>N</td>
<td>N36°27.50'</td>
</tr>
<tr>
<td>O</td>
<td>N36°38.80'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 5 NM either side of centerline for entire route.

**Remarks:**

1. A left turn to 350 degrees must be made no later than 1 NM past (F).
SR ROUTES

(b) BASTOGNE DROP ZONE

 K
 N36°36.30'
 W88°04.60'

 Q
 N36°37.70'
 W87°34.40'

 M
 N36°26.50'
 W87°28.80'

 N1
 N36°27.50'
 W87°14.30'

 O1
 N36°38.80'
 W87°11.90'

 P1
 N36°44.30'
 W87°24.80'

 Remarks:
 (1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use.
 (2) Caution, numerous IRs, VRs, and SRs crossing along the entire route.
 (3) Minimum Altitude is 300 AGL day and 500 AGL night except:
   (a) 500 AGL from G to H,
   (b) Maintain 2500 MSL from M to P.
 (4) To avoid bird flyways, the following restrictions apply from 1 Oct to 15 Apr.
   (a) Maintain 3000' MSL F to U.
   (b) 300 AGL on all other legs.
 (5) Extensive crop duster training in the vicinity of Mid Continent Airport (M28), between Pts G and H, approx N36-13.455 W89-43-73.
 (6) Avoid Bald Eagle Nesting Area at N36-34.3 W87-58.8 by 2 NM.
 (7) Primary Entry Point is A.
 (8) Primary Exit Point is P.
 (9) All other Points are Alternate Entry/Exit Points.

(c) CORREGIDOR DROP ZONE

 R
 N36°13.80'
 W88°06.30'

 S1
 N36°23.60'
 W87°38.00'

 T
 N36°37.80'
 W87°37.80'

 U
 N36°44.00'
 W87°34.00'

 P2
 N36°44.30'
 W87°24.80'

 (d) LOS BANDOS DROP ZONE

 R
 N36°13.80'
 W88°06.30'

 V
 N36°20.30'
 W87°36.60'

 W
 N36°35.20'
 W87°36.50'

 U1
 N36°44.00'
 W87°34.00'

 P3
 N36°44.30'
 W87°24.80'

(e) CARENTAN DROP ZONE

 R
 N36°13.80'
 W88°06.30'

 X
 N36°18.20'
 W87°56.80'

 Y
 N36°36.40'
 W87°44.90'

 U
 N36°44.00'
 W87°34.00'

 P4
 N36°44.30'
 W87°24.80'

(f) VEGHEL DROP ZONE

 R
 N36°13.80'
 W88°06.30'

 Z
 N36°19.30'
 W87°50.40'

 AA
 N36°41.50'
 W87°47.50'

 U
 N36°44.00'
 W87°34.00'

 P5
 N36°44.30'
 W87°24.80'


 HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

 Altitude Data Pt Fac/Rad/Dist Lat/Long

 A N35°19.50'
 W92°20.40'
 B N35°44.60'
 W92°20.40'
 C N35°48.60'
 W92°38.80'
 D N35°51.00'
 W93°11.70'
 E N35°33.20'
 W93°43.30'
 F N35°23.10'
 W93°48.80'
 G N35°16.80'
 W94°13.40'

(arrowhead Drop Zone)

 ROUTE WIDTH - 5 NM either side of centerline.

 Remarks:
 (1) Due to extensive air traffic and coordination required, users must contact 19 OSS/OSK prior to use.
 (2) Minimum altitude 300' AGL day and 500' AGL night.

SR-222

(LITTLE ROCK) LIT

ROUTE WIDTH - 5 NM either side of centerline.

 Remarks:
 (1) Due to extensive air traffic and coordination required, users must contact 19 OSS/OSK prior to use.
 (2) Minimum altitude 300' AGL day and 500' AGL night.
(3) Contact Razorback Approach Control on 120.9 or 343.75 prior to Point (F) for advisories.
(4) Primary Entry Point is (A).
(5) Primary Exit Point is (G).
(6) All other Points are Alternate Entry/Exit Points.

**SR-223**

**(LITTLE ROCK)** LIT

**ORIGINATING ACTIVITY:** 19 OSS/OSK, 380 Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-3301, C501-987-3301.

**SCHEDULING ACTIVITY:** 19 OSS/OSO, 320 Thomas Avenue, Little Rock AFB, AR 72099-4976 DSN 731-6850, C501-987-6850.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>N35°15.00'</td>
<td>W94°34.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N35°30.60'</td>
<td>W94°41.40'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N35°36.50'</td>
<td>W94°11.10'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>N35°48.60'</td>
<td>W93°47.70'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>N35°33.00'</td>
<td>W93°33.70'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>N35°23.10'</td>
<td>W93°48.80'</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>N35°16.80'</td>
<td>W94°13.40'</td>
</tr>
</tbody>
</table>

**(Arrowhead Drop Zone)**

**ROUTE WIDTH** - 5 NM either side of centerline for entire route.

**Remarks:**
(1) Due to extensive air traffic and coordination required, all users must contact 19 OSS/OSK prior to use.
(2) Minimum altitude 300’ AGL day and 500’ AGL night.
(3) Contact Razorback Approach Control on 120.9 or 343.75 prior to Point (F) for advisories.
(4) Primary Entry Point is (A).
(5) Primary Exit Point is (G).
(6) All other Points are Alternate Entry/Exit Points.

**SR-224**

**(LITTLE ROCK)** LIT

**ORIGINATING ACTIVITY:** 19 OSS/OSK, 380 Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-3301, C501-987-3301.

**SCHEDULING ACTIVITY:** 19 OSS/OSO, 320 Thomas Avenue, Little Rock AFB, AR 72099-4976 DSN 731-6850, C501-987-6850.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>N36°52.50'</td>
<td>W87°44.60'</td>
</tr>
</tbody>
</table>
SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Remarks:
(1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
(2) A right turn to 360 degrees must be made no later than 1 NM past (K).
(3) Minimum altitude 300' AGL day and 500' AGL night except 1 Oct-15 Apr fly appropriate altitudes as required by LRAFB BASH plan from Point (A)-(E).
(4) Contact Little Rock Approach Control no later than 20 DME from LRF TACAN (CH 29), if no contact, hold VFR right turns until contact is made.
(5) Do not exceed 1500' MSL within 16 NM of LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
(6) Primary Entry Point is (A).
(7) Primary Exit Point for SR-218A is (G).
(8) Primary Exit Point for SR-218B is (J).
(9) All other Points are Alternate Entry/Exit Points.

SR-227
(LITTLE ROCK) LIT


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION: Altitude Data Pt Fac/Rad/Dist Lat/Long
A N35°19.50' W92°20.40'

(a) ALL AMERICAN DROP ZONE:

B N35°46.30' W88°07.50'
C N35°39.40' W88°49.80'
D N35°45.60' W89°32.30'
E N35°35.50' W90°14.70'
F N35°04.20' W90°40.20'
G N35°47.80' W90°56.50'
H N35°15.20' W91°06.80'
I N35°07.30' W91°35.50'
J N34°59.30' W91°52.40'
K N34°54.90' W92°18.10'

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Remarks:
(1) A left turn to 350 degrees must be made no later than 1 NM past (G).
(2) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
(3) Minimum altitude 300' AGL day and 500' AGL night except re-entry from (G) to (A) at or below 1600' MSL.
(4) Avoid overflight of the town of Wooster AR north of (I).
(5) Avoid overflight of Enola School complex 8 NM prior to (J).
(6) Primary Entry Point is (A).
(7) Primary Exit Point for SR-218A is (G).
(8) Primary Exit Point for SR-218B is (J).
(9) All other Points are Alternate Entry/Exit Points.

SR-228
(DALLAS-FORT WORTH)

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB Fort Worth, TX DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local; other times by NOTAM

ROUTE DESCRIPTION: Altitude Data Pt Fac/Rad/Dist Lat/Long
A N32°35.00' W96°11.00'
B N33°08.00' W95°50.00'
SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
1. 72 hr prior coordination required.
2. Minimum altitudes: 500' AGL (A) to (C), (G) to (I), 300' AGL (C) to (G).

SR-229

(LITTLE ROCK) LIT


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td></td>
<td>N35°19.50' W92°20.40'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td>N35°33.60' W92°22.60'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td>N35°55.50' W92°09.70'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td></td>
<td>N35°56.20' W92°29.70'</td>
</tr>
<tr>
<td>(a) All American Drop Zone:</td>
<td>E</td>
<td></td>
<td>N35°28.90' W91°34.90'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>N35°07.30' W91°35.50'</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td></td>
<td>N34°59.30' W91°52.40'</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td></td>
<td>N34°54.90' W92°18.10'</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td></td>
<td>N35°28.90' W91°34.90'</td>
</tr>
<tr>
<td></td>
<td>J</td>
<td></td>
<td>N35°10.50' W92°01.40'</td>
</tr>
</tbody>
</table>

(c) All American Drop Zone:

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Remarks:
1. A right turn to 360 degrees must be made immediately, safety permitting, upon passing (H).
2. A right turn to 277 degrees must be made no later than 1 NM past (J).
3. Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
4. Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
5. Minimum altitude 300' AGL day and 500' AGL night, except re-entry from Point (H) to (A) at or below 1600' MSL.
6. Avoid congested area 3 NM either side of Hwy 67 by 1000' AGL on SR-229A between (G) and (H).
7. On SR-229A, if no contact with Little Rock Approach Control by 20 DME LRF (CH 29) between (F) and (G), hold VFR right turns until contact established.
8. Primary Entry is (A).
10. Primary Exit Point for SR-229B is (J).
11. All other Points are Alternate Entry/Exit Points.
12. Avoid town of El Paso adjacent to (K).

SR-230

(LITTLE ROCK) LIT


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td></td>
<td>N35°19.50' W92°20.40'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td>N35°44.80' W92°20.50'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td>N35°44.00' W91°55.50'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td></td>
<td>N35°28.90' W91°34.90'</td>
</tr>
<tr>
<td>(a) ALL AMERICAN DROP ZONE:</td>
<td>E</td>
<td></td>
<td>N35°19.50' W92°20.40'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>N35°44.80' W92°20.50'</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td></td>
<td>N35°44.00' W91°55.50'</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td></td>
<td>N35°28.90' W91°34.90'</td>
</tr>
</tbody>
</table>
SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Remarks:
(1) A right turn to 360 degrees must be made immediately, safety permitting, upon passing (G).
(2) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
(3) Due to extensive air traffic, users must contact 19 OSS/OSK prior to use.
(4) Minimum altitude is 300' AGL day and 500' AGL night except, re-entry track from (G) to (A) at or below 1600' MSL.
(5) Avoid congested area 3 NM either side of Hwy 67 by 1000' AGL between (F) and (G) on SR-231A.
(6) On SR-231A between (E) to (F), contact must be made with Little Rock Approach Control by 20 DME of LRF, otherwise hold right turns until contact is established.
(7) Avoid overflight of the town of El Paso.
(8) Primary Entry Point is (A).
(9) Primary Exit Point for SR-230A and SR-230C is (G).
(10) Primary Exit Point for SR-230B is (I).
(11) All other Points are Alternate Entry/Exit Points.

SR-231

(LITTLE ROCK) LIT


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
A N35°19.50' W92°20.40'

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Remarks:
(1) A right turn to 360 degrees must be made as soon as practical upon passing (G).
(2) A right turn to 277 degrees must be made no later than 1 NM past (I).
(3) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
(4) Due to extensive air traffic, users must contact 19 OSS/OSK prior to use.
(5) Minimum altitude is 300' AGL day and 500' AGL night except, re-entry track from (G) to (A) at or below 1600' MSL.
(6) Avoid congested area 3 NM either side of Hwy 67 by 1000' AGL between (F) and (G) on SR-231A.
(7) On SR-231A between (E) to (F), contact must be made with Little Rock Approach Control by 20 DME of LRF, otherwise hold right turns until contact is established.
(8) Avoid overflight of the town of El Paso.
(9) Primary Entry Point is (A).
(10) Primary Exit Point for SR-231A and SR-231C is (G).
(11) Primary Exit Point for SR-231B is (I).
(12) All other Points are Alternate Entry/Exit Points.

SR-232

(LITTLE ROCK) LIT


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
--- | --- | --- | --- |
A | N35°19.50' | W92°20.40' |
B | N35°30.20' | W92°58.20' |
C | N35°17.30' | W93°25.20' |
D | N34°54.90' | W93°07.00' |
E | N34°52.70' | W92°39.40' |
F | N34°54.90' | W92°18.10' |

(a) ALL AMERICAN DROP ZONE:

D | N34°54.90' | W93°07.00' |
E | N34°52.70' | W92°39.40' |
F | N34°54.90' | W92°18.10' |

(b) BLACKJACK DROP ZONE:

D | N34°54.90' | W93°07.00' |
E | N34°52.70' | W92°39.40' |
F | N34°54.90' | W92°18.10' |

ROUTE WIDTH - 5 NM either side of centerline for the entire route.

Remarks:

(1) A left turn to 350 degrees must be made no later than 1 NM past (F).
(2) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
(3) Due to extensive air traffic, all users must contact 19 OSS/OSK prior to use.
(4) Avoid overflight of the town of Wooster, AR north of (H).
(5) Minimum altitude is 300' AGL day and 500' AGL night except re-entry from (F) to (A), at or below 1600' MSL.
(6) Primary Entry Point is (A).
(7) Primary Exit Point for SR-232A is (F).
(8) Primary Exit Point for SR-232B is (I).
(9) All other Points are Alternate Entry/Exit Points.

SR-233

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
--- | --- | --- | --- |
A | N32°36.00' | W100°04.00' |
B | N32°59.00' | W100°24.00' |
C | N32°55.00' | W101°03.00' |
D | N33°19.00' | W101°16.00' |
E | N33°20.00' | W100°14.00' |
F | N33°03.20' | W100°03.40' |
G | N32°45.00' | W100°01.00' |
H | N32°25.00' | W99°52.00' |
I | N32°24.00' | W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

(1) Maintain 300' AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 296/13.
(3) Exit Point: ABI VORTAC (CH 84) 221/07.
(4) All aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to de-conflict with departing/arriving traffic. This call should be made at least 15 NM north or south of Dyess AFB. C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
(5) Traffic permitting, Dyess Tower may allow other transient aircraft to continue, providing the run-in direction is the same direction as the runway in use. If no such request is on file with Tower, transient aircraft must exit southwest at (F).
(6) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
(7) Tower will not approve run-ins opposite to the Dyess traffic flow for transient aircraft, other than C130.

SR-234

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous
SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
1. Maintain 300' AGL or higher for entire route.
2. Entry Point: ABI VORTAC (CH 84) 296/13.
3. Exit Point: ABI VORTAC (CH 84) 221/07.
4. All aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to deconflict with departing/arriving traffic. This call should be made at least 15 NM north or south of Dyess AFB.
5. C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
6. Dyess Tower may allow other transient aircraft to continue, traffic permitting.
7. Generally, aircraft will be able to continue if the run-in direction is the same direction as the runway in use.
8. If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
9. Tower does not usually approve run-ins opposite to the Dyess traffic flow.

SR-235

(VANCE)

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276/7820 C580-213-6276/7820.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise -Sunset and active days per local directives

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 03 AGL A N32°36.00' W100°04.00'
at or above 03 AGL B N32°44.02' W99°52.52'
at or above 03 AGL C N32°56.23' W99°12.77'
at or above 03 AGL D N33°32.15' W99°22.13'
at or above 03 AGL E N33°33.23' W100°05.37'
at or above 03 AGL F N33°05.63' W100°00.25'
at or above 03 AGL G N32°45.00' W100°01.00'
at or above 03 AGL H N32°25.00' W99°52.00'
at or above 03 AGL I N32°24.00' W99°58.00'

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from (A) to 37-00-30N 98-46-42W, 3 NM left and 2 NM right of centerline from 37-00-30N 98-46-42W to (C), 4 NM either side of centerline from (C) to (E), 4 NM left and 2 NM right of centerline from (E) to (F), and 2 NM left and 4 NM right of centerline from (F) to (G).

Remarks:
1. Avoid flight within 1500' AGL or 3 NM of airports when practicable.
2. Alternate Exit Point: (C).
3. Alternate Exit Point: (D).
4. Alternate Exit Point: (E).
5. Upon route exit, all 71 FTW aircraft maintain VFR. Comply with local procedures and contact Vance Approach Control or Kansas City Center, as applicable.
6. SR-235 and SR-253 are the same geographical points, routes flown in opposite directions.

SR-236

(ABILENE)

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 03 AGL A N33°15.00' W100°00.00'
at or above 03 AGL B N32°45.00' W100°01.00'
at or above 03 AGL E N32°25.00' W99°52.00'
at or above 03 AGL F N32°24.00' W99°58.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
1. Maintain 300' AGL or higher for entire route.
2. Primary Entry Point: A.
3. Primary Exit Point: F.
4. All aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to deconflict with departing/arriving traffic. This call should be made at least 15 miles north or south of Dyess AFB.
(5) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.

(6) Dyess Tower may allow other transient aircraft to continue, traffic permitting.

(7) Generally, aircraft will be able to continue if the run-in direction is the same direction as the runway in use.

(8) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.

(9) Tower does not usually approve run-ins opposite to the Dyess traffic flow.

(10) All other Points are Alternate Entry/Exit Points.

**SR-237**

**(LITTLE ROCK) LIT, MEM**

**ORIGINATING ACTIVITY:** 19 OSS/OSO, 320 Thomas Avenue, Little Rock AFB, AR 72099-4976 DSN 731-3358, C501-987-3358.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>A</td>
<td>N35°19.50'</td>
<td>W92°20.40'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>B</td>
<td>N35°26.40'</td>
<td>W91°50.60'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>C</td>
<td>N35°15.20'</td>
<td>W91°01.70'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>D</td>
<td>N35°04.20'</td>
<td>W90°42.60'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>E</td>
<td>N34°50.00'</td>
<td>W90°24.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 5 NM either side of centerline for entire route.

**Remarks:**

(1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.

(2) Minimum altitude is 300' AGL day and 500' AGL night.

(3) Point (E) is the Entry Point for SR-73 and SR-74 (Memphis Air National Guard).

(4) Primary Entry Point is (A).

(5) Primary Exit Point is (E).

(6) All other Points are Alternate Entry/Exit Points.

**SR-238**

**(LITTLE ROCK) LIT, MEM**

**ORIGINATING ACTIVITY:** 19 OSS/OSK, 380 Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-3301, C501-987-3301.

**SCHEDULING ACTIVITY:** 19 OSS/OSO, 320 Thomas Avenue, Little Rock AFB, AR 72099-4976 DSN 731-6850, C501-987-6850.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>A</td>
<td>N34°45.00'</td>
<td>W90°33.00'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>B</td>
<td>N34°56.50'</td>
<td>W90°59.60'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>C</td>
<td>N35°11.80'</td>
<td>W91°22.80'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>D</td>
<td>N34°58.80'</td>
<td>W91°52.40'</td>
</tr>
<tr>
<td>(Night-1000' AGL or above)</td>
<td>E</td>
<td>N34°54.90'</td>
<td>W92°18.10'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 5 NM either side of centerline for entire route.

**Remarks:**

(1) Due to extensive air traffic, users must contact 19 OSS/OSK prior to use.

(2) Minimum altitude is 300' AGL day and 500' AGL night.

(3) A right turn of 360 degrees must be made no later than 1 NM past (E).

(4) Contact Little Rock Approach no later than 20 DME from LRF TACAN (CH 29), if no contact, hold VFR right turns until contact is made.

(5) Do not exceed 1500' MSL within 16 NM of LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.

(6) Primary Entry Point is (A).

(7) Primary Exit Point is (E).

(8) All other Points are Alternate Entry/Exit Points.

**SR-239**

**(LITTLE ROCK) LIT**

**ORIGINATING ACTIVITY:** 19 OSS/OSO, 320 Thomas Avenue, Little Rock AFB, AR 72099-4976 DSN 731-3358, C501-987-3358.

**SCHEDULING ACTIVITY:** 314 OSS/OSK, 380 CMSGT Williams Street, Little Rock AFB, AR 72099-4976 DSN 731-3719, C501-987-3719.

**HOURS OF OPERATION:** Continuous
SR ROUTES

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/ Dist | Lat/Long
--- | --- | --- | ---
(Night-1000' AGL or above) | A | N35°39.20’ | W93°17.80’
(Night-1000' AGL or above) | B | N35°52.10’ | W93°32.00’
(Night-1000' AGL or above) | C | N36°11.10’ | W93°24.20’
(Night-1000' AGL or above) | D | N36°25.90’ | W93°30.80’
(Night-1000' AGL or above) | E | N36°46.60’ | W93°30.80’
(Night-1000' AGL or above) | F | N36°11.20’ | W93°27.20’
(Night-1000' AGL or above) | G | N35°55.80’ | W93°40.90’
(Night-1000' AGL or above) | H | N35°40.50’ | W93°39.90’
(Night-1000' AGL or above) | I | N35°38.60’ | W93°18.00’

ROUTE WIDTH - 5 NM either side of centerline entire route.

Remarks:
1. Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
2. Minimum altitude: 300’ AGL day, 500’ AGL night.
3. This route starts at (C) of SR-227 direct to (A) of SR-239.
4. The last route segment is from (I) of SR-239 to (D) of SR-227.

SR-240

(ABILOE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607
DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/ Dist | Lat/Long
--- | --- | --- | ---
at or above 03 AGL | A | N36°36.00’ | W100°04.00’
at or above 03 AGL | B | N32°44.00’ | W99°53.00’
at or above 03 AGL | C | N32°51.00’ | W99°16.00’
at or above 03 AGL | D | N32°21.00’ | W99°18.00’
at or above 03 AGL | E | N32°01.00’ | W99°39.00’
at or above 03 AGL | F | N32°10.00’ | W99°49.00’
at or above 03 AGL | G | N32°25.00’ | W99°52.00’
at or above 03 AGL | H | N32°24.00’ | W99°58.00’

ROUTE WIDTH - 5 NM either side of centerline entire route.

Remarks:
1. Maintain 300’ AGL or higher for entire route.
2. Entry Point: ABI VORTAC (CH 84) 296/13.
3. Exit Point: ABI VORTAC (CH 84) 221/07.
4. Aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to deconflict with departing/arriving traffic.
5. This call should be made at least 15 NM north or south of Dyess AFB.
6. C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
7. Traffic permitting, Dyess Tower may allow other transient aircraft to continue, providing the run-in direction is the same direction as the runway in use.
8. If no such request is on file with Tower, transient aircraft must exit south bound at (F).
9. If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
10. Tower will not approve Run-ins opposite to the Dyess traffic flow for transient aircraft, other than C130.

SR-241

(VANCE)

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276/7820 C580-213-6276/7820.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset and active days per local directives

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/ Dist | Lat/Long
--- | --- | --- | ---
at or above 05 AGL | A | N36°25.00’ | W97°02.50’
at or above 05 AGL | B | N36°13.50’ | W96°47.00’
at or above 05 AGL | C | N36°17.00’ | W96°34.50’
at or above 05 AGL | D | N36°41.00’ | W96°29.00’
at or above 05 AGL | E | N36°59.50’ | W96°18.00’
at or above 05 AGL | F | N37°05.00’ | W96°38.00’
SR ROUTES

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from (A) to (B), 3 NM either side of centerline from (B) to (I).

Remarks:
(1) Avoid flight within 1500’ or 3NM of airports when practicable. Use caution for several uncontrolled airports in the vicinity of exit/entry points.
(2) Alternate Exit Point: (C).
(3) Alternate Exit Point: (D).
(4) Alternate Exit Point: (E).
(5) Upon route exit, all 71 FTW aircraft maintain VFR. Comply with local procedures and contact Vance Approach Control or Kansas City Center, as applicable.
(6) SR-241 and SR-247 are the same geographical points, routes flown in opposite directions.
(7) Avoid (F) by 3/4 NM at all route altitudes.

SR-242

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607
DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
A | at or above 03 AGL | N32°36.00' | W100°04.00'
B | at or above 03 AGL | N32°44.00' | W99°52.52'
C | at or above 03 AGL | N32°49.65' | W99°15.78'
D | at or above 03 AGL | N32°23.05' | W99°15.12'
E | at or above 03 AGL | N31°38.12' | W99°21.33'
F | at or above 03 AGL | N31°31.88' | W99°41.43'
G | at or above 03 AGL | N32°12.60' | W99°50.50'
H | at or above 03 AGL | N32°25.00' | W99°52.00'
I | at or above 03 AGL | N32°24.00' | W99°58.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300’ AGL or higher for entire route.
(2) Primary Entry Point: A.

SR-243

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607
DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
A | at or above 03 AGL | N32°36.00' | W100°04.00'
B | at or above 03 AGL | N32°34.00' | W100°04.00'
C | at or above 03 AGL | N32°09.00' | W100°45.00'
D | at or above 03 AGL | N31°42.00' | W100°43.00'
E | at or above 03 AGL | N31°51.00' | W99°52.00'
F | at or above 03 AGL | N32°12.60' | W99°50.50'
G | at or above 03 AGL | N32°25.00' | W99°52.00'
H | at or above 03 AGL | N32°24.00' | W99°58.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300’ AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 296/13.
(3) Exit Point: ABI VORTAC (CH 84) 221/07.
(4) Aircraft must contact Abilene Approach prior to entering the Abilenel Class C airspace to de-conflict with departing/arriving traffic. This call should be made at least 15 miles north or south of Dyess AFB.
SR ROUTES

(5) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.

(6) Traffic permitting, Dyess Tower may allow other transient aircraft to continue, providing the run-in direction is the same direction as the runway in use.

(7) If no such request is on file with Tower, transient aircraft must exit south bound at (D).

(8) If the route is to be continued to the end point, every effort should be made to fly a route that arrives in the landing direction.

(9) Tower will not approve run-ins opposite to the Dyess traffic flow for transient aircraft, other than C130.

SR-244

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607
DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
at or above 03 AGL A     N32°36.00'     W100°04.00'
at or above 03 AGL B     N32°09.33'     W100°22.72'
at or above 03 AGL C     N31°44.17'     W100°25.87'
at or above 03 AGL D     N31°57.02'     W99°55.18'
at or above 03 AGL E     N32°12.60'     W99°50.50'
at or above 03 AGL F     N32°25.00'     W99°52.00'
at or above 03 AGL G     N32°24.00'     W99°58.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300’ AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 296/13.
(3) Exit Point: ABI VORTAC (CH 84) 221/07.

SR-245

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607
DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
at or above 03 AGL A     N32°36.00'     W100°04.00'
at or above 03 AGL B     N32°46.00'     W99°35.00'
at or above 03 AGL C     N33°11.00'     W99°22.00'
at or above 03 AGL D     N33°01.00'     W99°59.00'
at or above 03 AGL E     N32°45.00'     W100°01.00'
at or above 03 AGL F     N32°25.00'     W99°52.00'
at or above 03 AGL G     N32°24.00'     W99°58.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300’ AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 296/13.
(3) Exit Point: ABI VORTAC (CH 84) 221/07.

SR-246

(LITTLE ROCK) LIT


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
A     N34°51.30'     W92°29.30'
B     N34°39.00'     W92°46.90'
SR ROUTES

**SR-247**

**(VANCE)**

**ORIGINATING ACTIVITY:** 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276/7820 C580-213-6276/7820.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Sunrise-Sunset and active days per local directives

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N36°33.00' W97°17.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>B</td>
<td>N36°33.00' W96°54.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N36°50.00' W96°51.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N37°05.00' W96°38.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N36°59.50' W96°18.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N36°41.00' W96°29.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>N36°17.00' W96°34.50'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>H</td>
<td>N36°13.50' W96°47.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>I</td>
<td>N36°25.00' W97°02.50'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 3 NM either side of centerline from (A) to (H); 2 NM left and 3 NM right of centerline from (H) to (I).

**Remarks:**

(1) Avoid flight within 1500' or 3 NM of airports when practicable. Use caution for several uncontrolled airports in the vicinity of Exit/Entry Points.

(2) Alternate Exit Point: (C).

(3) Alternate Exit Point: (E).

(4) Alternate Exit Point: (F).

(5) Upon route exit, all 71 FTW aircraft maintain VFR. Comply with local procedures and contact Vance Approach Control or Kansas City Center, as applicable.

(6) SR-241 and SR-247 are the same geographical points, routes flown in opposite directions.

(7) Avoid (D) by 3/4 NM at all route altitudes.

**SR-248**

**(LITTLE ROCK)**

**ORIGINATING ACTIVITY:** 19 OSS(OSK), 380 Chief Williams Drive, Little Rock AFB, AR 72099-4976, DSN 731-3301, C501-987-3301.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous
SR ROUTES

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
A N33°49.40' W93°57.40'
B N34°08.70' W94°05.80'
C N34°25.90' W94°30.00'
D N34°48.11' W94°14.21'
E N34°58.30' W93°40.60'
F N34°52.40' W93°06.70'
G N34°57.70' W92°44.40'
H N35°11.70' W92°27.20'

BLACKJACK DROP ZONE:
I N35°12.50' W92°01.40'

ROUTE WIDTH - 5NM either side of centerline.

Remarks:
(1) Maintain 300' AGL day and 500' AGL night.
(2) All users must contact 19 OSS/OSK prior to use, due to extensive air traffic.
(3) Avoid overflight of the town of Wooster, AR (north of H) and Enola School Complex (8NM prior to I).
(4) Primary entry point is (A), all other points are alternate Entry/Exit points.
(5) Do not exceed 1500' MSL within 16NM of LRF TACAN unless in contact with Little Rock Approach Control.

SR-249

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 03 AGL A N32°36.00' W100°04.00'
at or above 03 AGL B N32°44.00' W99°53.00'
at or above 03 AGL C N32°51.00' W99°16.00'
at or above 03 AGL D N33°32.00' W99°22.00'
at or above 03 AGL E N33°33.00' W100°06.00'
at or above 03 AGL F N33°06.00' W99°59.00'
at or above 03 AGL G N32°45.00' W100°01.00'
at or above 03 AGL H N32°25.00' W99°52.00'
at or above 03 AGL I N32°24.00' W99°58.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300' AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 296/13.
(3) Exit Point: ABI VORTAC (CH 84) 221/07.

SR-250

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 03 AGL A N32°36.00' W100°04.00'
at or above 03 AGL B N32°52.77' W100°21.10'
at or above 03 AGL C N33°01.57' W100°06.87'
at or above 03 AGL D N32°45.00' W100°01.00'
at or above 03 AGL E N32°25.00' W99°52.00'
at or above 03 AGL F N32°24.00' W99°58.00'

ROUTE WIDTH - 5NM either side of centerline.

Remarks:
(1) Maintain 300' AGL or higher for entire route.
(2) Primary Entry Point: A.
(3) Primary Exit Point: C.
(4) Aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to de-conflict with departing/arriving traffic.
(5) This call should be made at least 15 miles north or south of Dyess AFB.
(6) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
(7) Dyess Tower may allow other transient aircraft to continue, traffic permitting.
(8) Generally, aircraft will be able to continue if the run-in direction is the same direction as the runway in use.
(9) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
(10) Tower does not usually approve run-ins opposite to the Dyess traffic flow.
(11) All other Points are Alternate Entry/Exit Points.

**SR-251**

**ORIGINATING ACTIVITY:** 317 AW, Dyess AFB, TX 79607
DSN 461-2318, C325-696-2318.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td>N32°36.00' W100°04.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>B</td>
<td>N32°45.00' W99°43.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>C</td>
<td>N32°56.00' W99°55.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>D</td>
<td>N32°45.00' W100°01.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>E</td>
<td>N32°25.00' W99°52.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>F</td>
<td>N32°24.00' W99°58.00'</td>
<td></td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 5 NM either side of centerline for entire route.

**Remarks:**
(1) Minimum altitude 300' AGL day and 500' AGL night.
(2) All users must contact 19 OSS/OSK prior to use, due to extensive air traffic.
(3) Avoid overflight of the town of Wooster, AR (north of G) and Enola School Complex (8NM prior to H).
(4) Primary entry point is (A), all other points are alternate Entry/Exit points.
(5) Do not exceed 1500' MSL within 16NM of LRF TACAN unless in contact with Little Rock Approach Control.

**SR-253**

**ORIGINATING ACTIVITY:** 71 OSS, 301 Gritz St., Vance
AFB, OK 73705-5202 DSN 448-6276/7820 C580-213-6276/7820.

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Sunrise-Sunset and active days per local directives

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N36°38.00' W98°18.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>B</td>
<td>N36°31.00' W98°46.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N36°54.00' W99°02.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N36°48.50' W99°15.50'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N37°09.00' W99°14.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N36°55.00' W98°29.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>N36°52.00' W98°24.00'</td>
<td></td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 2 NM right and 4 NM left of centerline from (A) to (B), 2 NM left and 4 NM right of centerline from (B) to (C), 4 NM either side of centerline from (C) to (E), 4 NM left and 3 NM right of centerline from (E) to N37-00-30 W98-46-42, 2 NM
SR ROUTES

left and 3 NM right of centerline from N37-00-30 W98-46-42 to (G).

Remarks:
(1) Avoid flight within 1500' or 3 NM of airports when practicable.
(2) Alternate Exit Point: (C).
(3) Alternate Exit Point: (D).
(4) Alternate Exit Point: (E).
(5) Route route exit, all 71 FTW aircraft maintain VFR. Comply with local procedures and contact Vance Approach Control or Kansas City Center, as applicable.
(6) SR-235 and SR-253 are the same geographical points, routes flown in opposite direction.

SR-255

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td>N32°36.00'</td>
<td>W100°04.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N32°19.00'</td>
<td>W100°21.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N31°59.00'</td>
<td>W99°52.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>N32°10.00'</td>
<td>W99°49.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>N32°25.00'</td>
<td>W99°52.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>N32°24.00'</td>
<td>W99°58.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300' AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 296/13.
(3) Exit Point: LZZ VORTAC (CH 72) 049/22.

SR-258

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td>N32°36.00'</td>
<td>W100°04.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N32°19.00'</td>
<td>W100°21.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N31°46.00'</td>
<td>W99°29.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>N31°32.00'</td>
<td>W99°06.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>N31°37.00'</td>
<td>W98°43.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>N31°29.00'</td>
<td>W98°09.00'</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>N31°23.00'</td>
<td>W97°47.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300' AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 296/13.
(3) Exit Point: LZZ VORTAC (CH 72) 049/22.

SR-261

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td>N31°23.00'</td>
<td>W97°47.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N31°33.00'</td>
<td>W97°36.00'</td>
</tr>
</tbody>
</table>
SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300' AGL or higher for entire route.
(2) Entry Point: LZZ VORTAC (CH 72) 049/22.
(3) Exit Point: LZZ VORTAC (CH 72) 049/22.
(4) Turn prior to Point B due to Prohibited Airspace 0.75 NM past Point B.

SR-267

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data          Pt Fac/Rad/Dist Lat/Long
at or above 03 AGL A  N32°36.00'  W100°04.00'
at or above 03 AGL B  N32°10.00'  W100°23.00'
at or above 03 AGL C  N31°44.00'  W100°26.00'
at or above 03 AGL D  N31°42.00'  W100°43.00'
(Alternate Exit Point) E  N32°34.00'  W100°34.00'
(Alternate Entry Point) F  N33°18.00'  W98°37.00'
(Alternate Entry Point) G  N33°19.00'  W98°03.00'
(Alternate Entry Point) H  N33°07.00'  W98°02.00'
(Alternate Entry Point) I  N33°52.00'  W98°03.00'
(Alternate Entry Point) J  N33°02.00'  W98°07.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) 72 hours prior coordination required.
(2) Minimum altitudes: 500' AGL (A) to (B), 300' AGL (B) to (I), 500' AGL (I) to (J).

SR-270

(DALLAS-FT WORTH)

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB Fort Worth, TX DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local; other times by NOTAM

ROUTE DESCRIPTION:

Altitude Data          Pt Fac/Rad/Dist Lat/Long
at or above 03 AGL A  N32°06.00'  W97°20.00'
at or above 03 AGL B  N32°09.00'  W97°55.00'
at or above 03 AGL C  N32°22.00'  W98°01.00'
(Alternate Exit Point) D  N32°32.00'  W98°19.00'
(Alternate Entry Point) E  N32°59.00'  W98°44.00'
(Alternate Entry Point) F  N33°18.00'  W98°37.00'
(Alternate Entry Point) G  N33°19.00'  W98°03.00'
(Alternate Entry Point) H  N33°07.00'  W98°02.00'
(Alternate Entry Point) I  N33°52.00'  W98°03.00'
(Alternate Entry Point) J  N33°02.00'  W98°07.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300' AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 296/13.
(3) Exit Point: ABI VORTAC (CH 84) 221/07.
(4) Alternate Exit Point: ABI VORTAC (CH 84) 267/36.

SR-271

(SHEPPARD AFB) SPS


SCHEDULING ACTIVITY: 89/459 FTS, Sheppard AFB, TX 76311 DSN 736-2240, C940-676-2240.

HOURS OF OPERATION: 30 minutes after Sunrise - 30 minutes prior to Sunset

ROUTE DESCRIPTION:

Altitude Data          Pt Fac/Rad/Dist Lat/Long
05 AGL B 20 AGL to A  N34°06.00'  W98°16.00'

ROUTE WIDTH - 5 NM either side of centerline.
SR ROUTES

ROUTE WIDTH - 5 NM either side of route centerline.

Remarks:
(1) Due to extensive air traffic, coordination is required. Users must contact 80 FTW T-6 duty officer (see scheduling activity number) for current brief on Noise Sensitive Areas, high density traffic areas and deconfliction prior to use.
(2) Minimum altitude is 500’ AGL.
(3) Primary entry point is A.
(4) Primary exit point is I.
(5) All other points are alternate entry/exit points.
(6) Route conflicts with VR-1128, VR-1137, VR-1139, VR-1140, VR-1145, VR-1146, VR-104, SR-296 and coordination with respective scheduling offices is mandatory. Route is VMC only, minimum aircraft separation is 5 minutes; users must monitor 255.4 and call route entry 1 minute prior point A (Waurika Bridge). The following deconfliction plan is mandatory: aircraft on VR-1146 (Mon through Fri) will call ENTERING VR-1146 at Point A and ABEAM WAURIKA, aircraft on SR-271 will call APPROACHING POOLEVILLE 10 miles southwest of the town (at point B) and if a conflict exists between Alpha and Foxtrot will climb accordingly (1500’ AGL minimum) and make a position report on 255.4. Aircraft on VR-1139 (Tues and Thu) will call Approaching Pooleville and aircraft on SR-271 will call APPROACHING POOLEVILLE 10 miles southwest of the town (at point B) and if a conflict exists will climb accordingly (1500’ AGL minimum) and make a position report on 255.4.
(7) Aircraft on SR-271 must remain north and east of a line from Rush Springs to the 3-fingered lake at N34-37.0 W97-40.0 until route abort (5NM prior to point I) on Tuesdays and Thursdays (when VR-1139 is in use). Aircraft on VR-1139 will remain south and west of this line.
(8) Route cannot be flown reverse and is available everyday.

SR-272

(SHEPPARD AFB) SPS


SCHEDULING ACTIVITY: 89/459 FTS, Sheppard AFB, TX 76311 DSN 736-2240, C940-676-2240.

HOURS OF OPERATION: 30 minutes after Sunrise - 30 minutes prior to Sunset

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long

ROUTE WIDTH - 5 NM either side of route centerline.

Remarks:
(1) Due to extensive air traffic, coordination is required. Users must contact 80 FTW T-6 duty officer (see scheduling activity number) for current brief on Noise Sensitive Areas, high density traffic areas and deconfliction prior to use.
(2) Minimum altitude is 500’ AGL.
(3) Primary entry point is A.
(4) Primary exit point is G.
(5) All other points are alternate entry/exit points.
(6) Route conflicts with VR-104, VR-158, VR-1139, VR-1140, VR-1146, VR-1139, VR-1140, VR-1146, VR-104, SR-296, SR-278, Reverse SR-278 and coordination with respective scheduling offices is mandatory. Route is VMC only, minimum aircraft separation is 5 minutes; due to first 2 legs (A to C) in common with SR-278 same 5 minute separation applies; users must monitor 255.4 and call route entry 1 minute prior point A (Waurika Bridge) on normal flow (Tues, Thu, Sat) and at point G on reverse flow (Mon, Wed, Fri, Sun). The following deconfliction plan is mandatory: aircraft on VR-1139 (Tues and Thu) will call ENTERING VR-1139 AT POINT BRAVO, aircraft on SR-272 on normal flow (Tues, Thu, Sat) and at point G on reverse flow (Mon, Wed, Fri, Sun) will call ABEAM BRIDGEPORT (at point E) and if a conflict exists will climb accordingly (1500 ft AGL minimum) and make a position report on 255.4. Aircraft on Reverse SR-272 (Mon, Wed, Fri, Sun) will call APPROACHING JERMYN approximately 10 miles prior to the town (at point E) and aircraft on Reverse SR-278 (Mon, Wed, Fri, Sun) will call APPROACHING JERMYN approximately 10 miles prior to the town. If a conflict exists, aircraft on Reverse SR-278 will climb to 1,500’ AGL until visual. If unable to maintain visual separation the aircraft on Reverse SR-278 will abort the route no later than 5 miles prior to Jermyn. Aircraft on Reverse SR-272 (Mon, Wed, Fri, Sun) will call APPROACHING JERMYN approximately 10 miles prior to the town (at point E) and aircraft on Reverse SR-278 (Mon, Wed, Fri, Sun) will call APPROACHING JERMYN approximately 10 miles prior to the town. If a conflict exists, aircraft on Reverse SR-278 will climb to 1,500’ AGL until visual. If unable to maintain visual separation the aircraft on Reverse SR-278 will abort the route no later than 5 miles prior to Jermyn. Aircraft on Reverse SR-272 (Mon, Wed, Fri, Sun) will terminate the route no later than 10 NM prior to point A (Waurika Bridge).
(7) Use caution in the vicinity of Wizard Wells, as civilian aircraft from Bridgeport may use this area as an unofficial training area. Also, use caution for arriving/departing aircraft near both Bridgeport and Graham, as they are busy civilian airfields.
(8) Route is bi-directional: normal flow on Tuesday, Thursday and Saturday; reverse flow on Monday, Wednesday, Friday and Sunday.
SR-273

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
at or above 03 AGL  A  N32°36.00'  W100°04.00'
at or above 03 AGL  B  N32°45.00'  W99°43.00'
at or above 03 AGL  C  N33°03.00'  W100°34.00'
at or above 03 AGL  D  N33°00.00'  W100°41.00'
at or above 03 AGL  E  N32°36.00'  W100°42.00'
at or above 03 AGL  F  N32°34.00'  W100°23.00'
at or above 03 AGL  G  N32°36.00'  W100°11.00'
at or above 03 AGL  H  N33°03.00'  W100°23.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Maintain 300' AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 296/13.
(3) Exit Point: ABI VORTAC (CH 84) 313/43.

SR-274

(FT WORTH) FTW

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276/7820 C580-213-6276/7820.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise to Sunset daily

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
A  N33°01.00'  W101°24.00'
B  N33°18.30'  W101°41.00'
C  N33°29.70'  W101°30.80'
D  N33°45.50'  W101°27.00'

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B); 3 NM left and 4 NM right from (B) to (C); 3 NM either side of centerline from (C) to (D); 4 NM either side of centerline from (D) to (E), (E) to (F), (F) to (G); 3 NM left and 2 NM right from (G) to (H); 4 NM either side of centerline from (H) to (I).

Remarks:
(1) Tie-in FSS: Ft Worth (NOTAM-FTW).
(2) Primary Entry Point: (A).
(3) Alternate Entry Point: (B).
(4) Alternate Exit Point: (C).
(5) Alternate Exit Point: (E).
(6) Primary Exit Point: (I).
(7) Alternate Exit Point: (G).
(8) Users must contact the scheduling agency to determine the daily status of the route and bird activity status along the route.
(9) Aircraft separation controlled by scheduled entry times, like aircraft expect ten minutes minimum separation, route is VMC only 'See and Avoid' at route crossing points.
(10) Users must cancel IFR upon route entry, monitor 255.4 when on route,
(11) All Entry/Alternate Entry and Exit/Alternate Exit Points are compulsory reporting points.
(12) Contact Lubbock Approach 279.9 exiting at (G) or (I).
(13) Due to environmental considerations, route is limited to T37 and T1A (250 knots max) operations only.
(14) Route is reverse of SR-275, both routes cannot be scheduled simultaneously.
(15) Avoid over-flight of communities Grassland, Graham, and New Lynn between (A) and (B), Slayton, and Wilson between (B) and (C), Robertson between (C) and (D), Cone and Dougherty between (D) and (E), Cedar Hill, and South Plains between (E) and (F).

SR-275

(FT WORTH) FTW

ORIGINATING ACTIVITY: 71 OSS, 301 Gritz St., Vance AFB, OK 73705-5202 DSN 448-6276/7820 C580-213-6276/7820.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise to Sunset daily

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
A  N34°02.70'  W102°04.20'
SR ROUTES

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B); 2 NM left and 3 NM right from (B) to (C); 4 NM either side of centerline from (C) to (D), (D) to (E), (E) to (F); 3 NM either side of centerline from (F) to (G); 4 NM left and 3 NM right from (G) to (H); 4 NM either side of centerline from (H) to (I).

Remarks:
(1) Tie-in FSS: Ft Worth (NOTAM-FTW).
(2) Primary Entry Point (A).
(3) Alternate Entry Point (C).
(4) Alternate Exit Point (C).
(5) Alternate Exit Point (E).
(6) Primary Exit Point (I).
(7) Alternate Exit Point (H).
(8) Users must contact the scheduling agency to determine the daily status of the route and bird activity status along the route.
(9) Aircraft separation controlled by scheduled entry times, like aircraft expect ten minutes minimum separation, route is VMC only, ‘See and Avoid’ at route crossings.
(10) Users must cancel IFR upon route entry, monitor 255.4 when on route.
(11) All Entry/Alternate Entry and Exit/Alternate Exit Points are compulsory reporting Points.
(12) Contact Lubbock approach 351.8 exiting at (H) or (I).
(13) Due to environmental considerations, route is limited to T37 and T1A (250 knots maximum) operations only.
(14) Route is reverse of SR-274, both routes cannot be scheduled simultaneously.
(15) Avoid over-flight of communities of Cedar Hill, South Plains between (D) and (E), Cone, Dougherty between (E) and (F), Robertson between (F) and (G), Slaton, Wilson between (G) and (H), Grassland, Graham, and New Lynn between (H) and (I).

SR-276

(FT WORTH) FTW

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street., Suite 6, Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864.
SR ROUTES

SR-277

(FT WORTH) FTW

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Suite 6, Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 86 FTS/DOS, 307 2nd Street, Laughlin AFB, TX 78843 DSN 732-5584, C830-298-5584. Scheduling hours, 0730-1630 Mon-Fri (excluding holidays).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
---|---|---|---
A | N34°46.80’ | W102°06.00’
B | N34°27.50’ | W102°12.00’
C | N34°09.80’ | W102°24.80’
D | N34°06.00’ | W102°35.20’
E | N33°45.70’ | W102°32.20’
F | N33°24.80’ | W102°45.30’
G | N32°52.50’ | W102°38.30’
H | N32°50.80’ | W102°17.30’
I | N32°22.00’ | W101°47.50’

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), (B) to (C), 2 NM either side of centerline from (C) to (D), 2 NM left and 4 NM right from (D) to (E), 4 NM either side of centerline from (E) to (F), 3 NM left and 4 NM right from (F) to (G), 2.5 NM left and 4 NM right from (G) to (H), 4 NM either side of centerline from (H) to (I).

Remarks:

(1) Route:
   (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
   (b) This route is covered by the following maps and charts: Albuquerque and Dallas-Fort Worth Sectionals, IFR Enroute Low Altitude US L-6N, TPC G-19C, G-20D.
   (c) Alternate Entry Point: B and C.
   (d) Alternate Exit Point: H.

(2) Scheduling:
   (a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.
   (b) When scheduling SR-277, block off entry times for SR-276 60 minutes plus and minus your entry time to prevent simultaneous usage. Laughlin AFB owned routes are deconflicted using local program, confirm with scheduling activity that you are deconflicted for planned flight time.
   (c) Aircraft shall be scheduled with minimum of 10 minutes separation.

(3) Restrictions:
   (a) For environmental reasons, this route may only be flown by T-6 and T-1 aircraft.
   (b) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.
   (c) Avoid flight within 1500 feet or 3 NM of airport when practicable.

(4) Conflicts:
   (a) Crosses IR-128 between F-G. Crosses IR-180 between F-G. Call 7 OSS/OSOR Dyess AFB to deconflict IR-128 and IR-180; DSN 461-3665/3666, C325-696-3665/3666 Mon-Fri 0730-1700 CST.
   (b) Be vigilant for numerous crop dusters along entire route flying without transponder and on unknown frequencies.

(5) Communications:
   (a) Call entry/exit on 255.4, and monitor while on route.
   (b) Contact Lubbock Approach 351.8 or 119.2 when exiting at H or I.

(6) Noise Sensitive Areas:
   AVOID OVERFLIGHT
   (a) Patricia community between A and B.
   (b) Earth, Springlake, and Sunnyside communities between B and C.
   (c) White Face, Pep, Bula, Friendship and Circle Back communities between E and F.
   (d) Nazareth community between H and I.

(7) Obstacles: Uncharted Airfield N34-13.72 W102-19.37, strip is paved and parallel to a road.

(8) Be vigilant for sUAS flight operations at or below 400’ AGL. If you encounter or have to avoid a sUAS please contact the originating authority with as much detail about the event as possible. Please attempt to mark the position with Lat/Lon for proper positioning of the event.

Altitude Data Pt Fac/Rad/Dist Lat/Long
---|---|---|---
A | N34°46.80’ | W102°06.00’
B | N34°27.50’ | W102°12.00’
C | N34°09.80’ | W102°24.80’
D | N34°06.00’ | W102°35.20’
E | N33°45.70’ | W102°32.20’
F | N33°24.80’ | W102°45.30’
G | N32°52.50’ | W102°38.30’
H | N32°50.80’ | W102°17.30’
I | N32°22.00’ | W101°47.50’
SR ROUTES

SR-278

(SHEPPARD AFB) SPS


SCHEDULING ACTIVITY: 89/459 FTS, Sheppard AFB, TX 76311 DSN 736-2240, C940-676-2240.

HOURS OF OPERATION: 30 minutes after Sunrise - 30 minutes prior to Sunset

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
05 AGL B 20 AGL to A N34°11.00' W98°10.00'
05 AGL B 20 AGL to B N33°43.00' W98°03.00'
05 AGL B 20 AGL to C N33°18.00' W98°25.00'
05 AGL B 20 AGL to D N33°31.00' W98°10.00'
05 AGL B 20 AGL to E N33°19.00' W99°26.00'
05 AGL B 20 AGL to F N33°52.00' W99°35.00'
05 AGL B 20 AGL to G N34°09.00' W99°00.00'

ROUTE WIDTH - 5 NM either side of route centerline.

Remarks:

1. Due to extensive air traffic, coordination is required. Users must contact 80 FTW T-6 duty officer (see scheduling activity number) for current brief on Noise Sensitive Areas, high density traffic areas and deconfliction prior to use.

2. Minimum altitude is 500' AGL.

3. Primary entry point is A.

4. Primary exit point is G.

5. All other points are alternate entry/exit points.

6. Route conflicts with VR-158, VR-159, VR-1139, VR-1140, VR-1141, VR-1142, VR-1143, VR-1144, VR-1145, VR-1146, SR-236, SR-249, SR-272, Reverse SR-272 and coordination with respective scheduling offices is mandatory. Route is VMC only, minimum aircraft separation is 5 minutes; due to first 2 legs (A to C) in common with SR-272 same 5 minutes separation applies; users must monitor 255.4 and call route entry 1 minute prior point A (Waurika Bridge) on normal flow (Tues,Thu, and Sat) and at point G on reverse flow (Mon, Wed, Fri, and Sun). The following deconfliction plan is mandatory: aircraft on VR-1141/43 (Tues and Thu) will call ABEAM FOARD, aircraft on SR-278 on normal flow (Tues, Thu, and Sat) will call APPROACHING FOARD (at point F) and if a conflict exists will climb accordingly (1500' AGL minimum) and make a position report on 255.4. When on Reverse SR-278 (Mon, Wed, Fri, Sun) aircraft on VR-159 (Mon, Wed, Fri) will call ENTERING VR-1142 AT SANTA ROSA LAKE, aircraft on Reverse SR-278 (Mon, Wed, Fri) will call APPROACHING SANTA ROSA LAKE (15NM past point G) and if a conflict exists will climb accordingly (1500' AGL minimum) and make a position report on 255.4. Additionally, aircraft on VR-159 will call ABEAM OLNEY and aircraft on Reverse SR-278 will call APPROACHING OLNEY about 20 miles prior to the town (15NM prior to point D). If a conflict exists aircraft on Reverse SR-278 will climb accordingly (1500' AGL minimum) and make a position report on 255.4. Aircraft on Reverse SR-278 (Mon, Wed, Fri, Sun) will call APPROACHING JERMYN approximately 10 miles prior to the town (at point C) and aircraft on Reverse SR-272 (Mon, Wed, Fri, Sun) will call APPROACHING JERMYN approximately 10 miles prior to the town. If a conflict exists, aircraft on Reverse SR-278 (Mon, Wed, Fri, Sun) will climb to 1500' AGL until visual with aircraft on Reverse SR-272 but if unable to maintain visual separation the aircraft on Reverse SR-278 will abort the route no later than 5 miles prior to Jermyrn (point C). In general, even when there are no conflicts, aircraft on Reverse SR-278 (Mon, Wed, Fri, Sun) will terminate the route no later than 10 NM prior to point A (Waurika Bridge).

7. Use caution for IR-103/105 traffic south of Archer City, east of, and south of Oklaunion.

8. Route is bi-directional: normal flow on Tuesday, Thursday, and Saturday; reverse flow on Monday, Wednesday, Friday, and Sunday.

SR-279

(SHEPPARD AFB) SPS


SCHEDULING ACTIVITY: 89/459 FTS, Sheppard AFB, TX 76311 DSN 736-2240, C940-676-2240.

HOURS OF OPERATION: 30 minutes after Sunrise - 30 minutes prior to Sunset

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
05 AGL B 20 AGL to A N34°05.00' W98°06.00'
05 AGL B 20 AGL to B N34°51.00' W98°10.00'
05 AGL B 20 AGL to C N35°05.00' W98°43.00'
05 AGL B 20 AGL to D N35°26.00' W98°41.00'
05 AGL B 20 AGL to E N35°26.00' W98°07.00'
05 AGL B 20 AGL to F N35°06.00' W97°46.00'
05 AGL B 20 AGL to G N34°52.00' W97°52.00'

ROUTE WIDTH - 5 NM either side of route centerline.

Remarks:

1. Due to extensive air traffic, coordination is required. Users must contact 80 FTW T-6 duty officer (see scheduling activity number) for current brief on Noise Sensitive Areas, high density traffic areas and deconfliction prior to use.
(2) On normal flow (Mon, Wed, Fri, Sun) between A and B and when north of Hastings contact Fort Sill approach on 290.375 for traffic advisory. When on Reverse flow (Tues, Thu, Sat), contact Fort Sill between C and B abeam Carnegie.

(3) Minimum altitude is 500' AGL.

(4) Primary entry point is A.

(5) Primary exit point is G.

(6) All other points are alternate entry/exit points.

(7) Use CAUTION for low-level traffic between Sterling and Washita, east and north of and near Rush Springs. Also use CAUTION 10 NM radius from Point F for civilian aircraft flying above 3500' MSL.

(8) Route conflicts with VR-104, VR-1128, VR-1137, VR-1139, VR-1140, SR-294, SR-295, SR-296 and coordination with respective scheduling offices is mandatory. Route is VMC only, minimum aircraft separation is 5 minutes; users must monitor 255.4 and call route entry 1 minute prior point A (Waurika Bridge) on normal flow (Mon, Wed, Fri, Sun) and at point G on reverse flow (Tue, Thu, Sat). The following deconfliction plan is mandatory: during Reverse flow (Tues, Thu, Sat) aircraft on VR-1139 (Tues and Thu) will call APPROACHING HINTON about 20 miles prior to the town, aircraft on Reverse SR-279 (Tue, Thu, Sat) will call APPROACHING HINTON about 10 miles prior to the town (point E) and if a conflict exists will climb accordingly (1500' AGL minimum) and make a position report on 255.4. Aircraft on Reverse SR-279 (Tues, Thu, Sat) will terminate the route no later than 10 NM prior to point A (Waurika Bridge).

(9) Route is bi-directional: normal flow on Monday, Wednesday, Friday, and Sunday; reverse flow on Tuesday, Thursday, and Saturday.

---

SR-281

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Suite 6, Laughlin AFB, TX 78843 DSN 732-5864/5337, C830-298-5864/5337.

SCHEDULING ACTIVITY: 85 FTS/DOS, 570 2nd Street, Laughlin AFB, TX 78843 DSN 732-5121/5429, C830-298-5121/5429. Scheduling hours: 0730-1630 Mon-Fri (excluding holidays)

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
03 AGL B 15 AGL to A | | N29°02.80' | W100°36.30'
03 AGL B 15 AGL to B | | N28°55.50' | W100°24.00'
03 AGL B 15 AGL to C | | N28°53.00' | W100°10.00'
03 AGL B 15 AGL to D | | N28°37.30' | W99°57.00'
03 AGL B 15 AGL to E | | N28°18.70' | W99°24.00'
03 AGL B 15 AGL to F | | N28°32.00' | W99°56.00'
03 AGL B 15 AGL to G | | N28°52.50' | W99°36.00'
03 AGL B 15 AGL to H | | N29°05.80' | W99°56.20'
03 AGL B 15 AGL to I | | N29°14.70' | W100°12.10'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route in VMC only.

ROUTE WIDTH - 4 NM either side of centerline from (A) to (C), 3 NM left and 4 NM right from (C) to (D), 4 NM either side of centerline from (D) to (E), 2 NM left and 5 NM right from (E) to (F), 4 NM left and 3 NM right from (F) to (G), 4 NM either side of centerline from (G) to (I).

Remarks:

(1) Route:
   (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
   (b) This route is covered by the following maps and charts: San Antonio and Brownsville Sectionals, IFR Enroute Low Altitude - US L-19, L-20, TPC H-23B, H-23C.
   (c) Primary Entry Point: A.
   (d) Alternate Entry Points: C.

(2) Scheduling:
   (a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.
   (b) Aircraft shall be scheduled with a minimum of 10 minutes separation.

(3) Restrictions:
   (a) Due to environmental considerations, route is limited to T-6 and T-1 operations only.

---

SR-280

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AW, Dyess AFB, TX 79607 DSN 461-2318, C325-696-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
at or above 03 AGL | A | N32°34.00' | W100°34.00'
| B | N32°30.00' | W100°10.00'
| C | N32°19.00' | W99°52.00'
| D | N32°24.00' | W99°58.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

(1) Maintain 300' AGL or higher for entire route.
(2) Entry Point: ABI VORTAC (CH 84) 267/40.
(3) Exit Point: ABI VORTAC (CH 84) 221/07.
SR ROUTES

(b) Aircraft unable to enter the route +/-3 minute of their assigned entry time will not enter the route.

(c) SR-281 is the reverse routing of SR-282. Both routes will not be active at the same time.

(d) Avoid flight within 1500 feet AGL feet or 3 NM of airport when practicable.

(4) Conflicts:

(a) Offstation owned conflicts: Crosses IR-149 between B-C, overlaps from C to just beyond E, and crosses at I. Overlaps VR-168 prior to H to I. Call 301 COMRAVING TWO, NAS Kingsville to schedule IR-149 at DSN 876-6518, C361-516-6518 Mon-Fri 0800-1600 CST. To deconflict VR-168 call DSN 876-6108, C361-516-6108 Mon-Fri 0730-2300 CST.

(b) Offstation owned conflicts: Crosses VR-156 between E and F and between F and G. Crosses VR-1122/1123 near F and overlaps until H. Call 149th FW (TX ANG) Kelly AFB to deconflict VR-156 and VR-1122/1123; DSN 945-5934 or C210-925-5934.

(c) Offstation owned conflicts: Overlaps VR-140 from F to G, call the 560 FTS at Randolph AFB to deconflict VR-140; DSN 487-3518 or C210-652-3518 Mon-Fri 0700-1630 CST.

(d) Locally owned conflict: Crosses IR-170 between B-C, overlaps from C to just beyond E, and crosses at I. Laughlin AFB owned routes are deconflicted using local program, confirm with scheduling activity the IR-170 and SR-282 deconflicted for planned flight time.

(e) Instrument approach conflicts: Conflicts with the approach path for the RNAV (GPS) Rwy 31 at Carrizo Springs/Dimmit Co. (KCZT), the approach for RNAV (GPS) Rwy 13 and 31 at Maverick County (ST9) and the CISKU holding pattern for the RNAV (GPS) 13/31 at Cotulla/La Salle Co. Make a position report to Carrizo Springs/Dimmit Co. CTAF (122.8) immediately passing E and NLT US Hwy 83 to deconflict the final approach for RNAV (GPS) 31, which crosses route centerline at 17 NM remaining to F. Make another position report to Cotulla/La Salle Co. CTAF (122.7) immediately passing F and NLT 21 NM remaining to G.

(5) Communications:

(a) Call entry/exit on 255.4, and monitor while on the route.

(b) Contact Del Rio Approach 326.2 exiting at I.

(6) Noise sensitive areas: Avoid Overflight by 1300' AGL feet and 1 mile.

(a) Batesville community between G-H.

(b) Cline community from H-I.

(7) Obstacles:

(a) Use caution for wind turbines approximately 3 NM east of point I up to 30' AGL.

(b) Uncharted airfield: paved airfield N28-53.60 W100-13.42.

(8) Be vigilante for sUAS flight operations at or below 400' AGL. If you encounter or have to avoid a sUAS please contact the originating authority with as much detail about the event as possible. Please attempt to mark the position with Lat/Lon for proper positioning of the event.

SR-282

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Suite. 6, Laughlin AFB, TX 78843 DSN 732-5864/5337, C830-298-5864/5337.

SCHEDULING ACTIVITY: 85 FTS/DOS, 570 2nd Street, Laughlin AFB, TX 78843 DSN 732-5121/5429, C830-298-5121/5429. Scheduling hours. 0730-1630 Mon-Fri (excluding holidays).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

Altitude Data   Pt Fac/Rad/Dist   Lat/Long
03 AGL B 15 AGL to A N29°14.70'   W100°12.10'
03 AGL B 15 AGL to B N29°05.80'   W99°56.20'
03 AGL B 15 AGL to C N28°52.50'   W99°36.00'
03 AGL B 15 AGL to D N28°32.00'   W99°24.00'
03 AGL B 15 AGL to E N28°18.70'   W99°57.70'
03 AGL B 15 AGL to F N28°37.30'   W100°02.70'
03 AGL B 15 AGL to G N28°53.00'   W100°10.00'
03 AGL B 15 AGL to H N28°57.50'   W100°24.00'
03 AGL B 15 AGL to I N29°02.80'   W100°36.30'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route in VMC only.

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), 4 NM right and 3 NM left from Point (B) to (C), 2 NM right and 5 NM left from (C) to (D), 4 NM either side of centerline from Point (D) to (E), 3 NM right and 4 NM left from Point (E) to (F), 4 NM either side of centerline from Point (F) to (I).

Remarks:

(1) Route:

(a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.

(b) This route is covered by the following maps and charts: San Antonio and Brownsville Sectionals, IFR Enroute Low Altitude - US L-19, L-20, TPC H-23B, H-23C.

(c) Alternate Entry Points: E.

(2) Scheduling:

(a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.

(b) Users must contact the Scheduling Activity to determine the daily status.

(c) Aircraft shall be scheduled with a minimum of 10 minutes separation.

(d) Active weekend routes shall be determined by the Scheduling Activity weekend Supervisor.

(3) Restrictions:

(a) Due to environmental considerations, route is limited to T-6 and T-1 operations only.

(b) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.

(c) SR-282 is the reverse routing of SR-281. Both routes will not be active at the same time.

(d) Avoid flight within 1500 feet AGL feet or 3 NM of airport when practicable.
(4) Conflicts:
(a) Offstation owned conflicts: Crosses IR-149 between G-H, overlaps just before E to G, and crosses at A. Overlaps VR-168 prior to A to B. Call 301 COMTRAWING TWO, NAS Kingsville to schedule IR-149 at DSN 876-6518, C361-516-6518 Mon-Fri 0800-1600 CST. To deconflict VR-168 call DSN 876-6108, C361-516-6108 Mon-Fri 0730-2300 CST.
(b) Offstation owned conflicts: Crosses VR-156 between C-D and between D-E. Overlaps VR-1122/1123 from B-F and crosses near F. Call 149th FW (TX ANG) to deconflict VR-156 adn VR-1122/1123; DSN 945-5934, C210-925-5934.
(c) Offstation owned conflicts: Overlaps VR-140 from C-D, call the 560 FTS at Randolph AFB to deconflict VR-140; DSN 487-3518 or C210-652-3518 Mon-Fri 0700-1630 CST.
(d) Locally owned conflict: Crosses IR-170 at A and overlaps from E-G, and crosses at A. Laughlin AFB owned routes are deconflicted using local program, confirm with scheduling activity that IR-170 and SR-282 deconflicted for planned flight time.
(e) Conflicts and the CISKU holding pattern for the RNAV (GPS) 13/31 at Cotulla/La Salle Co., and the approach path for the RNAV (GPS) 31 at Carrizo Springs/Dimmit Co. (KCZT), and the approach for RNAV (GPS) RWY 13 and 31 at Maverick County (ST9). Make a position report to Cotulla/La Salle Co. CTF 122.7 after passing C and NLT 13 NM remaining to D to deconflict the RNAV (GPS) 13-31 holding pattern at CISKU, which lies to the left of the route centerline between 8 NM and 2 NM remaining to D. Make another position report to Carrizo Springs/Dimmit Co. CTF 122.8 after passing D between 26 NM and NLT 21 NM remaining to E to deconflict the RNAV (GPS) 31 final approach path, which crosses route centerline between 16 NM remaining to E.

(5) Communications:
(a) Call entry/exit on 255.4, and monitor while on the route.
(b) Contact Del Rio Approach 263.125 exiting at I.
(c) Avoid flight within 1000 feet or 3 NM of airport when practicable.
(d) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.
(e) Aircraft shall be scheduled with a minimum of 10 minutes separation. The following minimum deconfliction times will be used for entries on SR-283 and IR-169.
1. A T-6 may enter SR-283 NET 20 minutes after a T-38 enters IR-169.
2. A T-6 may enter SR-283 NET 30 minutes after a T-1 enters IR-169.

(6) Noise sensitive areas: Avoid Overflight by 1300' AGL feet and 1 mile.
(a) Cline community at A.
(b) Batesville community near C.

(7) Obstacles:
(a) Use caution for wind turbines approximately 3 NM east of point I up to 30' AGL.
(b) Uncharted airfield: paved airfield N28-53.60 W100-13.42.
(c) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.
(d) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.
(e) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.
(f) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.

(8) Be vigilant for sUAS flight operations at or below 400' AGL. If you encounter or have to avoid a sUAS please contact the originating authority with as much detail about the event as possible. Please attempt to mark the position with Lat/Lon for proper positioning of the event.

**SR-283**

**(SAN ANGELO) SJT**

**ORIGINATING ACTIVITY:** 47 OSS/OSOR, 570 2nd Street, Suite 6, Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864.

**SCHEDULING ACTIVITY:** 85 FTS/DOS, 570 2nd Street, Laughlin AFB, TX 78843 DSN 732-5121/5429, C830-298-5121/5429. Scheduling hours. 0730-1630 Mon-Fri (excluding holidays).

**HOURS OF OPERATION:** Sunrise-Sunset daily

**ROUTE DESCRIPTION:**

**ROUTE WIDTH** - 4 NM left and 3 NM right of centerline from (A) to (B), 4 NM either side of centerline from (B) to (G), 3 NM left and 4 NM right from (G) to (H).

**Remarks:**
(1) Route:
(a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
(b) This route is covered by the following maps and charts: San Antonio Sectional, IFR Enroute Low Altitude - US L-19, TPC H-23B.

(2) Scheduling:
(a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.
(b) Aircraft shall be scheduled with a minimum of 10 minutes separation. The following minimum deconfliction times will be used for entries on SR-283 and IR-169.
1. A T-6 may enter SR-283 NET 20 minutes after a T-38 enters IR-169.
2. A T-6 may enter SR-283 NET 30 minutes after a T-1 enters IR-169.
3. In addition, aircraft shall be scheduled with a minimum of 10 minutes separation when entering or exiting the route.
4. A T-6 may enter SR-283 NET 20 minutes after a T-38 enters IR-169.
5. A T-6 may enter SR-283 NET 30 minutes after a T-1 enters IR-169.

(3) Restrictions:
(a) Due to environmental considerations, route is limited to T-6 and T-1 operations only.
(b) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.
(c) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.
(d) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.
(e) Aircraft unable to enter the route +/-3 minutes of their assigned entry time will not enter the route.

(4) Conflicts:
(a) Call 560 FTS, Randolph AFB, TX to deconflict VR-143 and IR-123 at DSN 487-3518/3942, C210-652-3518. Call 301 OG/SUA, NAS JRB Fort Worth to deconflict VR-186; DSN 739-6903/6904/6905, C817-784-6903/6904/6905.
(b) Crosses VR-143 between C-E and overlaps from E-H.
(c) Crosses VR-186 at H.
(d) It is identical to IR-169 from A-B, and overlaps from B-I.
(e) Crosses IR-170 between B-C.
(f) Crosses IR-170 between B-C.
(g) Crosses IR-170 between B-C.
(h) Crosses IR-170 between B-C.
(i) Crosses IR-170 between B-C.
(j) Crosses IR-170 between B-C.
(k) Crosses IR-170 between B-C.

(5) Communications:
(a) Call entry/exit on 255.4, and monitor while on the route.
SR ROUTES

(b) Aircraft will report approaching C on 255.4. Attention all aircraft: (call sign)(number)(type) flying SR-283 approaching Pandale on IR-123, IR-169, and VR-143 at (altitude)(speed).

(c) Aircraft will report approaching F on 255.4. Attention all aircraft: (call sign)(number)(type) flying SR-283 approaching Pandale on IR-123, IR-169, and VR-143 at (altitude)(speed).

(d) Aircraft will report approaching point G on 255.4: ‘Any aircraft, (call sign)(number)(type) approaching point G on SR-283.’

(e) Contact San Angelo Approach 354.1 or 125.35 upon exit at H.

(6) Noise sensitive areas: AVOID OVER-FLIGHT

(a) Pandale community between C-D.
(b) Comstock community between A-B.

SR-284

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street., Suite. 6, Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 85 FTS/DOS, 570 2nd Street., Laughlin AFB, TX 78843 DSN 732-5121/5429, C830-298-5121/5429. Scheduling hours. 0730-1630 Mon-Fri (excluding holidays)

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 AGL to B 15 AGL</td>
<td>A</td>
<td>N31°11.00'</td>
<td>W100°53.90'</td>
</tr>
<tr>
<td>05 AGL to B 15 AGL</td>
<td>B</td>
<td>N30°52.50'</td>
<td>W101°12.50'</td>
</tr>
<tr>
<td>05 AGL to B 15 AGL</td>
<td>C</td>
<td>N30°41.80'</td>
<td>W101°28.70'</td>
</tr>
<tr>
<td>05 AGL to B 15 AGL</td>
<td>D</td>
<td>N30°24.00'</td>
<td>W101°14.70'</td>
</tr>
<tr>
<td>05 AGL to B 15 AGL</td>
<td>E</td>
<td>N30°14.10'</td>
<td>W101°15.30'</td>
</tr>
<tr>
<td>05 AGL to B 15 AGL</td>
<td>F</td>
<td>N30°07.80'</td>
<td>W101°34.30'</td>
</tr>
<tr>
<td>05 AGL to B 15 AGL</td>
<td>G</td>
<td>N29°45.00'</td>
<td>W101°08.20'</td>
</tr>
<tr>
<td>05 AGL to B 15 AGL</td>
<td>H</td>
<td>N29°35.70'</td>
<td>W101°04.30'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from (A) to (B), 4 NM either side of centerline from (B) to (G), 3 NM left and 4 NM right from (G) to (H).

Remarks:

(1) Route:

(a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
(b) This route is covered by the following maps and charts: San Antonio Sectional, IFR Enroute Low Altitude - US L-19, TPC H-23B.

(c) Alternate Exit Point E.

(2) Scheduling:

(a) Request for weekend use shall be coordinated with the Scheduling Activity during above hours.
(b) Aircraft shall be scheduled with a minimum of 10 minutes separation. T-6 aircraft will not fly SR-284 while a T-38 or T-1 is on IR-169.

(3) Restrictions:

(a) Due to environmental considerations, route is limited to T-6 and T-1 operations only.
(b) Aircraft unable to enter the route +/-3 minute of their assigned entry time will not enter the route.
(c) Avoid flight within 1500 feet or 3 NM of airport when practicable.

(4) Conflicts:

(a) Crosses IR-123 and VR-143 between A-B, and between D-E. Call 560 FTS, Randolph AFB, TX to deconflict VR-143 and IR-123; DSN 487-3518/3942, C210-652-3518.
(b) Crosses VR-186 crosses between A-B. Call 301 OG/SUA, NAS JRB Fort Worth to deconflict VR-186; DSN 739-6903/6904/6905, C817-782-6903/6904/6905.
(c) IR-169 overlaps from B-H. Call 87 FTS/DOS, Laughlin AFB to deconflict IR-169 and IR-170; DSN 732-5484, C830-289-5484.
(d) Crosses IR-170 between F-G.

(5) Communications:

(a) Call entry/exit on 255.4 and monitor while on the route.
(b) Contact Del Rio Approach 263.125 upon exiting at H.

(6) Noise sensitive areas: Avoid overflight.

(a) Pandale community between E-F.
(b) Comstock community between G-H.

SR-286

(FORT WORTH) FTW

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street East, Randolph AFB, TX 78150, DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX 78150 DSN 487-5661, C210-652-5661.

HOURS OF OPERATION: Open Daily Sunrise-Sunset

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N30°30.00'</td>
<td>W98°16.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>B</td>
<td>N30°51.00'</td>
<td>W98°07.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N30°50.50'</td>
<td>W97°15.50'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N30°36.00'</td>
<td>W97°14.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N30°15.00'</td>
<td>W97°16.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N30°06.00'</td>
<td>W97°17.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM left and 5 NM right of centerline from (A) to (B), 2 NM left and 5 NM right of centerline from (B) to
(C), 5 NM either side of centerline from (C) to (E), 2 NM left and 1
NM right of centerline from (E) to (F).

Remarks:
(1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to
schedule route.
(2) Minimum altitude: 500' AGL.
(3) Route Conflicts:
   (a) SR-286 and SR-290 overlay and are congruent from
SR-286 Points D-F and SR-290 Points E-G. Additionally,
SR-292 Exit Points IS just south of SR286/290 Exit Points.
To deconflict these routes call the 559 FTS, Randolph
AFB, DSN 487-5661, C210-652-5661.
   (b) SR-286 between Points C-D cross VR-142 Points D-E
(Exit Point). To deconflict, call the scheduler of VR-142 at
99 FTS, Randolph AFB, DSN 487-6746, C210-652-6746.
(4) This route crosses VR-142 between point (C) and (D).
(5) Use caution for aircraft exiting SR-292.
(6) Aircrews will call turning south on 255.4 to de-conflict with
traffic from SR-290.
(7) Primary Exit Point: (F).
(8) Alternate Exit Point: (E).
(10) CAUTION: Camp Swift parachute jumping area 1 NM west
of (E).
(11) Be alert for extensive VFR rotary wing activity south of the
Fort Hood area.
(12) CAUTION: be alert for extensive bird activity year-round.
(13) Aircraft unable to meet their assigned entry time within the
window two minutes early to five minutes late must not
enter the route. Pilots may schedule new entry time with
TEXAN OPS on 149.52.
(14) Be alert for extensive glider activity in the vicinity of FLF
Gliderport 9 NM east of (B), (2 NM southwest of Briggs,
TX.).
(15) CAUTION: Avoid Smithville airport parachute jumping area
7NM SE of Point F. Parachute activities occur within a 2NM
radius of airport, surface to 10,500' MSL.
(16) Salado airport parachute jumping area over a 5 NM radius
of Salado airport from surface to 15000' between points
B and C.

SR-287

(FORT WORTH) FTW

ORIGINATING ACTIVITY: 12 OSS/OSAS, 1350 5th Street
East, JBSA-Randolph AFB, TX 78150, DSN 487-5580,
C210-652-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX
78150 DSN 487-5661, C210-652-5661.

HOURS OF OPERATION: Sunrise-Sunset Daily, except
holidays

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>Pt</td>
<td>N29°07.50'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>B</td>
<td>Rad</td>
<td>W98°09.50'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>Dist</td>
<td>N28°35.50'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>AGL</td>
<td>W98°21.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>AGL</td>
<td>N28°45.50'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>AGL</td>
<td>W97°58.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>AGL</td>
<td>N28°48.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>H</td>
<td>AGL</td>
<td>W97°32.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>I</td>
<td>AGL</td>
<td>N29°00.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>J</td>
<td>AGL</td>
<td>W97°45.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>K</td>
<td>AGL</td>
<td>N29°14.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>L</td>
<td>AGL</td>
<td>W97°57.50'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

(0) 5 NM either side of centerline. (0)5 NM either side of
centerline.

Remarks:
(1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to
schedule Route.
(2) Minimum altitude: 500' AGL.
(3) ONLY T-6 aircraft authorized to fly this route.
(4) Comply with AFI 11-202 Vol 3 altitude minimums if
overflying Floresville, Kenedy, and Stockdale.
(5) Avoid flight within 1500’ or 3 NM of chartered uncontrolled
airports when practicable.
(6) Route Conflicts:
   (a) SR-287 between Points A-B is in very close proximity to
the IR-148 Entry Point (A). And SR-287 between Points
F-G crosses IR-148 between Points B-C. Additionally,
SR-287 Point (C) is within VR-168 A-B corridor. To
deconflict, call the scheduler of IR-148 and VR-168 at
COMTRAWLING TWO, NAS Kingsville, DSN 876-6518,
C361-516-6518.
   (b) SR-287 between Points D-F twice crosses VR-1120
between Points B-C and VR-1121 between Points A-B.
To deconflict, call scheduler of VR-1120 and VR-168 at
149 FW, Kelly AFB, DSN 945-5934, C210-925-5934.
(7) The overlying Randolph 1B MOA begins at 7000' MSL.
(9) CAUTION: Be alert for extensive bird activity year-round.
(10) Aircraft unable to meet their assigned entry time within the
window two minutes early to five minutes late must not
enter the route. Pilots may schedule new entry time with
TEXAN OPS on 149.52.
(11) Point D is an Alternate Route Exit.

SR-290

(FORT WORTH) FTW

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street
East, Randolph AFB, TX 78150, DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX
78150 DSN 487-5661, C210-652-5661.

HOURS OF OPERATION: Sunrise-Sunset Daily, except
holidays
SR ROUTES

ROUTE DESCRIPTION:

Altitude Data   Pt   Fac/Rad/Dist     Lat/Long
at or above 05 AGL A   N30°18.00'   W96°57.00'
at or above 05 AGL B   N30°34.00'   W96°45.00'
at or above 05 AGL C   N30°58.00'   W96°45.00'
at or above 05 AGL D   N31°02.00'   W97°09.00'
at or above 05 AGL E   N30°36.00'   W97°14.00'
at or above 05 AGL F   N30°15.00'   W97°16.00'
at or above 05 AGL G   N30°06.00'   W97°17.00'

ROUTE WIDTH - 5 NM left and 3 NM right of centerline from (A) to (B), 5 NM either side of centerline from (B) to (F), 2 NM left and 1 NM right of centerline from (F) to (G).

Remarks:
(1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to schedule route.
(2) Minimum altitude is 500' AGL.
(3) Route Conflicts:
   (a) SR-290 and SR-286 overlay and are congruent from SR-290 Points E-G and SR-286 Points D-F. Additionally, SR-292 Exit Points are just north of SR-290 Exit Points. To deconflict these routes call the 559 FTS, Randolph AFB, DSN 487-5661, C210-652-5661.
   (b) SR-286 between Points C-E twice crosses VR-142 Points D-F. To deconflict, call the scheduler of VR-142 at COMTRAWLING TWO, NAS Kingsville, DSN 876-6518, C361-516-6518.
(4) Aircrews will call turning south on 255.4 to de-conflict with traffic from SR-286.
(5) Primary Exit Point: (G).
(6) Alternate Exit Point: (F).
(7) Point (A): IDU 308/29; Point (G): CWK 129/020.
(8) CAUTION: Camp Swift parachute jumping area 1 NM West of (E).
(9) CAUTION: Be alert for extensive VFR rotary wing activity south of the Fort Hood area.
(10) CAUTION: Be alert for extensive bird activity year-round.
(11) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule new entry time with TEXAN OPS on 149.52.
(12) CAUTION: Avoid Smithville airport parachute jumping area 7NM SE of Point G. Parachute activities occur within a 2NM radius of airport, surface to 10,500′ MSL.
(13) Unmarked Towers: 250′ AGL at N30°58.95 W96°59.43; 250′ AGL at N31°03.45 W97°08.76; 250′ AGL at N30°22.46 W97°15.33; 300′ AGL N30°17.96 W97°17.06.

SR-292

(OKLAHOMA CITY) OKC, GAG, HBR, SPS

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street
East, Randolph AFB, TX 78150, DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX 78150 DSN 487-5661, C210-652-5661.

HOURS OF OPERATION: Sunrise-Sunset daily except holidays

ROUTE DESCRIPTION:

Altitude Data   Pt   Fac/Rad/Dist     Lat/Long
at or above 05 AGL A   N30°18.00'   W96°57.00'
at or above 05 AGL B   N30°04.00'   W96°42.00'
at or above 05 AGL C   N29°33.00'   W96°55.00'
at or above 05 AGL D   N29°33.00'   W97°18.00'
at or above 05 AGL E   N29°43.50'   W97°16.70'
at or above 05 AGL F   N30°00.80'   W97°14.80'
at or above 05 AGL G   N30°15.00'   W97°16.00'

ROUTE WIDTH - 5 NM left and 3 NM right of centerline from (A) to (B), 5 NM left and 2 NM right of centerline from (B) to (C), 5 NM either side of centerline for the remainder of the route.

Remarks:
(1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to schedule route.
(2) Minimum altitude: 500′AGL.
(3) Route Conflicts:
   (a) SR-286 and SR-290 Exit Points are just north of SR-292 Exit Point. To deconflict these routes call the 559 FTS, Randolph AFB, DSN 487-5661, C210-652-5661.
   (b) SR-292 between Points C-E twice crosses IR-148 Points D-F. To deconflict, call the scheduler of IR-148 at COMTRAWLING TWO, NAS Kingsville, DSN 876-6518, C361-516-6518.
(4) Aircrews will call turning north on 255.4 to deconflict with traffic from SR-293.
(5) Avoid flying over the Double D ranch between (E) and (F).
(6) Point (A): IDU 308/029, Point (F): CWK 149/029.
(7) CAUTION: Be alert for extensive bird activity year-round.
(8) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule new entry time with TEXAN OPS on 149.52.
(9) CAUTION: Avoid Smithville airport parachute jumping area 4NM E of Point F. Parachute activities occur within a 2NM radius of airport, surface to 10,500′ MSL.

SR-294

(OKLAHOMA CITY) OKC, GAG, HBR, SPS


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset
SR ROUTES

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
At or above 05 AGL | A | N35°26.00' W98°07.00'
At or above 05 AGL | B | N35°49.00' W98°25.00'
At or above 05 AGL | C | N36°03.00' W98°58.00'
At or above 05 AGL | D | N35°33.00' W98°52.00'
At or above 05 AGL | E | N35°06.00' W98°44.00'
At or above 05 AGL | F | N34°58.00' W97°57.00'
At or above 05 AGL | G | N34°51.00' W98°00.00'
At or above 05 AGL | H | N34°39.00' W98°18.00'
At or above 05 AGL | I | N34°36.00' W97°58.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

2. Avoid flight within 1500’ or 3 NM of airports when practicable.
3. Alternate Entry Points: (C), (E) and (F).
4. Contact Lawton-Ft Sill Approach on 120.55 or 322.4 at Point H for traffic advisories.

SR-295

(OKLAHOMA CITY) OKC, GAG, HBR, SPS

ORIGINATING ACTIVITY: 80 OSS/OSOA, 1911 J. Ave Ste 3, Sheppard AFB, TX 76311, DSN 736-0576, C940-676-0576

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
At or above 05 AGL | A | N35°10.00' W97°36.00'
At or above 05 AGL | AA | N35°03.00' W97°22.70'
At or above 05 AGL | B | N34°55.00' W97°00.00'
At or above 05 AGL | C | N34°31.00' W97°10.00'
At or above 05 AGL | D | N34°27.00' W97°40.00'
At or above 05 AGL | E | N34°05.00' W98°11.00'
At or above 05 AGL | F | N34°23.00' W98°20.00'
At or above 05 AGL | G | N34°39.00' W98°18.00'
At or above 05 AGL | H | N34°55.00' W97°49.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

1. Avoid flight within 1500’ or 3 NM of airports when practicable.
2. Alternate Entry Points: (B), (D) and (F).
3. Route conflicts with VR-1140, VR-163, VR-104 along with SR-295 and SR-296. Aircrews are responsible for resolving conflicts. Reference Area Planning AP/1B Chart.
4. Monitor Chickasha CTAF 123.0 from points D to F. Announce position after crossing dam west of Chickasha. (Chickasha traffic, CALLSIGN, aircraft type and number, 5 miles west of Chickasha crossing at 1500’ AGL eastbound SR-295.)
5. Alternate Exit Point: (F).
6. Contact Lawton-Ft Sill Approach on 120.55 or 322.4 at Point H for traffic advisories.

SR-296

(OKLAHOMA CITY) OKC, GAG, HBR, SPS

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7820 C980-213-7820.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/ Dist | Lat/Long
--- | --- | --- | ---
At or above 05 AGL | A | N35°*26.00' W98°*07.00'
At or above 05 AGL | AA | N35°*25.00' W98°*52.00'
At or above 05 AGL | B | N35°*06.00' W98°*44.00'
At or above 05 AGL | C | N35°*08.00' W97°*58.00'

At or above 05 AGL | F | N35°*08.00' W97°*40.00'
At or above 05 AGL | G | N34°*51.00' W98°*00.00'
At or above 05 AGL | H | N34°*39.00' W98°*18.00'
At or above 05 AGL | I | N34°*36.00' W97°*58.00'

ROUTE WIDTH - 5 NM either side of centerline.
SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline

Remarks:
(1) Avoid flight within 1500’ AGL or 3 NM of airports when practicable.
(2) Alternate Entry Points: (AA), (C) and (E).
(4) Contact Lawton-Ft Sill Approach om 120.55 or 322.4 at Point (F) for traffic advisories.
(5) Alternate Exit Point: (E).

SR-300

( STOCKTON ) SCK, RNO

ORIGINATING ACTIVITY: 60 OSS/OSO, 611 E. St., Travis AFB, CA 94535 DSN 837-1075, C707-424-1075.

SCHEDULING ACTIVITY: 60 OSS/OSO, 611 E. St., Travis AFB, CA 94535 DSN 837-5145, C707-424-5145.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N38°04.30'</td>
<td>W121°00.20'</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>N38°32.00'</td>
<td>W120°15.00'</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>N38°51.00'</td>
<td>W119°44.00'</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>N38°51.00'</td>
<td>W118°46.70'</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>N38°44.60'</td>
<td>W118°02.60'</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N39°24.00'</td>
<td>W117°18.20'</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>N40°01.00'</td>
<td>W117°11.50'</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>N40°36.83'</td>
<td>W117°20.00'</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>N40°26.67'</td>
<td>W117°56.12'</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>N40°55.00'</td>
<td>W118°37.00'</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>N41°19.00'</td>
<td>W118°48.00'</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>N42°12.00'</td>
<td>W119°32.00'</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>N42°31.00'</td>
<td>W120°15.00'</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>N41°50.30'</td>
<td>W120°57.00'</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>N41°16.80'</td>
<td>W121°13.80'</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>N41°02.00'</td>
<td>W121°59.20'</td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>N41°01.00'</td>
<td>W122°23.00'</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>N40°29.80'</td>
<td>W122°56.90'</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>N39°53.20'</td>
<td>W122°32.60'</td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>N39°18.20'</td>
<td>W122°29.50'</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>N39°04.10'</td>
<td>W122°01.50'</td>
<td></td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline

Remarks:
(1) Points (A)-(Q) altitudes will be 05 AGL B for all C130 night operations and as published for Helicopter operations.
(2) Overflight of all towns will be avoided to the extent possible. If unavoidable, the requirements of AFR 60-16 will apply.
(3) Avoid flight within 1500’ or 3 NM of charted/uncontrolled airports when practical.
(4) See and avoid applies during all operations.
(5) Aircrews are responsible for resolving route conflicts with the following routes and agencies: IR-203, 207, Lemoore NAS (DSN 949-1034), IR-264, 275, 280, 281, 282, 60 AMW Travis AFB (DSN 837-5145), IR-300, Mountain Home AFB (DSN 728-2172), VR-201, 202, 1250, 1251, 1252, 1254, 1255, 1259, 1260, 1261, Lemoore NAS (DSN 949-1034), VR-1352, 1353, Whidbey Island (DSN 820-2877), Austin 1, Gabbs South MOAs, Fallon NAS (DSN 890-3643).
(6) Scheduling aircrew must provide conflict point crossing times to within 3 minutes to the agencies listed above.
(7) Route is designed for MARSA operations established by coordinated scheduling.
(8) Schedule thru 60 AMW/AOT, seven days prior to date being requested.
(9) Warning: Vector Vertical Obstruction Data (VVOD) used to construct navigational charts does not address vertical construction data below 200’ AGL. Aircrews flying this route will report their observations to Scheduling Activity if new developments or cultural changes are apparent which will affect safety of flight on this route.
(10) Terrain Following Operations -
(a) Day/night VFR terrain following (TF)/contour operations are authorized IAW command directives within published block altitudes and authorized maneuvering areas.
(b) Segment altitude provides 1500’ AGL clearance above the highest obstacle within 5 NM of centerline.
(c) The entire route will be designated mountainous terrain.
(d) The route has been flight checked by HC130 to a 5 NM lateral limit from course centerline.
(11) Altitude Data: (A) to (B) 03 AGL B 76 MSL, (B) to (C) 03 AGL B 119 MSL, (C) to (D) 03 AGL B 107 MSL, (D) to (E) 03 AGL B 90 MSL, (E) to (F) 03 AGL B 119 MSL, (F) to (G) 03 AGL B 97 MSL, (G) to (I) 03 AGL B 101 MSL, (I) to (J) 03 AGL B 79 MSL, (J) to (K) 03 AGL B 77 MSL, (K) to (L) 03 AGL B 104 MSL, (L) to (N) 03 AGL B 93 MSL, (N) to (O) 10 AGL B 77 MSL, (O) to (P) 03 AGL B 79 MSL, (P) to (Q) 03 AGL B 85 MSL, (Q) to (R) 05 AGL B 85 MSL, (R) to (S) 03 AGL B 83 MSL, (S) to (T) 03 AGL B 55 MSL, (T) to (U) 03 AGL B 40 MSL.
(12) Points (L)-(M), stay 1 NM left of centerline for bird sanctuary.
SR ROUTES

SR-301

(MARYSVILLE) ILS, RNO

ORIGINATING ACTIVITY: 60 OSS/OSO, 611 E. St., Travis AFB, CA 94535 DSN 837-1075, C707-424-1075.

SCHEDULING ACTIVITY: 60 OSS/OSO, 611 E. St., Travis AFB, CA 94535 DSN 837-5145, C707-424-5145.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS:

TERRAIN FOLLOWING OPERATIONS: Day/night VFR terrain following (TF)/contour operations are authorized IAW command directives within published block altitudes and authorized maneuvering areas. Segment altitude provides 1500' AGL clearance above the highest obstacle within 5 NM of centerline. The entire route will be designated mountainous terrain. The route has been flight checked by HC130 to a 5 NM lateral limit from course centerline.

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

(1) Points (F)-(U) altitudes will be 05 AGL B for all C130 night operations and as published for helicopter operations.

(2) Over-flight of all towing will be avoided to the extent possible. If unavoidable the requirement of AFI 11-202 Vol 3 will apply.

(3) Avoid flight within 1500' or 3 NM of charted/uncontrolled airports when practical.

(4) See and avoid applies during all operations.

(5) Aircrews are responsible for resolving route conflicts with the following routes and agencies: IR-203, 207, Lemoore NAS (DSN 949-1034), IR-264, 275, 280, 281, 282, 60 AMW Travis AFB (DSN 837-5145), IR-300, Mountain Home AFB (DSN 728-2172), VR-201, 202, 1250, 1251, 1252, 1255, 1259, 1260, 1261, Lemoore NAS (DSN 949-1034), VR-1352, 1353, Whidbey Island (DSN 820-2877), Austin 1, Gabbs South MOAs, Fallon NAS (DSN 890-3643).

(6) Scheduling aircrew must provide conflict point crossing times to within 3 minutes to the agencies listed in (5) above.

(7) Route is designed for MARSA operations established by coordinated scheduling.

(8) Schedule thru 60 AMW/AOT seven days prior date requested.

(9) WARNING: Vector Vertical Obstruction Data (VVOD) used to construct navigational charts does not address vertical construction data below 200' AGL. Aircrews flying this route will report their observations to Scheduling Activity if new developments or cultural changes are apparent which will affect safety of flight on this route.

(10) Points (I)-(J) stay 1 NM right of centerline for bird sanctuary.

(11) Altitude data: (A) to (B) 10 AGL B 40 MSL, (B) to (C) 10 AGL B 55 MSL, (C) to (D) 05 AGL B 83 MSL, (D) to (E) 03 AGL B 85 MSL, (F) to (G) 03 AGL B 79 MSL, (G) to (H) 03 AGL B 77 MSL, (H) to (J) 03 AGL B 93 MSL, (J) to (K) 10 AGL B 104 MSL, (K) to (L) 03 AGL B 77 MSL, (L) to (M) 03 AGL B 114 MSL, (M) to (N) 03 AGL B 104 MSL, (N) to (O) 03 AGL B 95 MSL, (O) to (P) 03 AGL B 97 MSL, (P) to (Q) 03 AGL B 119 MSL, (Q) to (R) 03 AGL B 90 MSL, (R) to (S) 03 AGL B 107 MSL, (S) to (T) 03 AGL B 119 MSL, (T) to (U) 03 AGL B 76 MSL.

SR-311

(SACRAMENTO) SAC

ORIGINATING ACTIVITY: 129 OSF/DOW, PO Box 103, Stop 14, Moffett Federal Afld, CA 94035-5000 DSN 359-9357, C650-603-9357.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous
SR ROUTES

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>N39°05.10' W122°09.30'</td>
</tr>
<tr>
<td>N39°05.00' W122°24.50'</td>
</tr>
<tr>
<td>N39°04.90' W122°32.20'</td>
</tr>
<tr>
<td>N39°08.90' W122°43.50'</td>
</tr>
<tr>
<td>N39°28.50' W123°09.00'</td>
</tr>
<tr>
<td>N39°32.80' W123°45.90'</td>
</tr>
<tr>
<td>N39°27.20' W123°31.90'</td>
</tr>
<tr>
<td>N39°13.80' W123°27.80'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:

(1) Avoid Lake Pillsbury by 3 NM due to hang gliding and bald eagle nesting area.

(2) Remain clear of Ft. Bragg.

(3) Route is designated for MARSA operations established by coordinated scheduling.

(4) See and avoid applies during VMC operations.

(5) Route altitude data: (A) to (AA) 500'-1500' AGL, (AA) to (B) 1000'-1500' AGL, (B) to (C) 500'-1500' AGL, (C) to (G) 50'-1500' AGL.

(6) CAUTION: 500' AGL turbine towers between (AA) and (B), minimum altitude 1000' AGL until passing towers.

(7) Manual route deconfliction: IR-207 from J to K conflicts with this route from B to C. Contact Strike Fighter Wing at Lemoore NAS, DSN 949-1034 or C559-998-1034.

SR-353

(MARYSVILLE) ILA

ORIGINATING ACTIVITY: 129 OG/OGV, 656 Jonny Luv Lane, Moffett ANGB, CA 94035, C650-603-9356, DSN359-9356

SCHEDULING ACTIVITY: 129 OSS/OSA, 656 Jonny Luv Lane, Moffett ANGB, CA 94035, C650-603-9357, DSN359-9357

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>N38°39.00' W120°07.00'</td>
</tr>
<tr>
<td>N38°25.00' W121°12.00'</td>
</tr>
<tr>
<td>N38°13.80' W123°27.80'</td>
</tr>
<tr>
<td>N38°33.50' W120°25.00'</td>
</tr>
<tr>
<td>N38°06.50' W120°28.00'</td>
</tr>
<tr>
<td>N38°04.90' W120°32.20'</td>
</tr>
<tr>
<td>N38°05.00' W120°07.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:

(1) Helicopter altitude data; (A) to (G) 100'-1500' AGL, (G) to (I) 1000'-1500' AGL (avoid N38-32-30 W121-22-30 by 2 NM).

(2) Over-flight of all towns will be avoided to the maximum extent possible.

(3) Avoid charted/uncontrolled airports by 3 NM or 1500' AGL.

(4) Avoid coordinate N38° 33.55 W120° 43.32 by 1 NM or 1000'.
TERRAIN FOLLOWING OPERATIONS: All operations will be conducted in VMC under Visual Flight Rules. Operations will be primarily conducted during daylight hours with a limited number of night flights. Aircraft will operate using random check point/navigation procedures, but will remain within 3 NM of route (as published) centerline. SR-359 begins at SR-311 end-point and ends at SR-311 start-point.

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:
1. Helicopter altitude data: (A) to (C) 1000'-1500' AGL, (C) to (I) 100'-1500' AGL (avoid N38-32-30 W122-22-30 by 2 NM).
2. Over-flight of all towns will be avoided to the maximum extent possible.
3. Avoid charted/uncontrolled airports by 3 NM or 1500' AGL.
4. Avoid coordinate N38°33.55' W120°43.32' by 1 NM or 1000'.

SR-390

(LANCASTER) WJF

ORIGINATING ACTIVITY: 146 AW/DOXT (ANG), 106 Mulcahey Dr., Port Hueneme, CA 93041-4003 DSN 893-7590/7577.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N34°57.00'</td>
<td>W118°18.00'</td>
</tr>
<tr>
<td>B</td>
<td>N35°07.00'</td>
<td>W118°12.00'</td>
</tr>
<tr>
<td>C</td>
<td>N35°24.00'</td>
<td>W117°48.00'</td>
</tr>
<tr>
<td>D</td>
<td>N34°59.00'</td>
<td>W117°29.00'</td>
</tr>
<tr>
<td>E</td>
<td>N34°49.00'</td>
<td>W117°50.00'</td>
</tr>
<tr>
<td>F</td>
<td>N34°49.00'</td>
<td>W118°03.00'</td>
</tr>
</tbody>
</table>

Re-Entry: Aircraft scheduled for additional drops shall after passing (F) turn right and maintain 2200' MSL to N32-56 W114-30 then turn right and continue via published route.

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
1. Units desiring to use this route are requested to contact the Originating Activity for de-confliction.

SR-397

(BLYTHE) BLH, YUM

ORIGINATING ACTIVITY: 146 AW/DOXT (ANG), 106 Mulcahey Dr., Port Hueneme, CA 93041-4003 DSN 893-7590/7577.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N34°06.00'</td>
<td>W114°55.00'</td>
</tr>
<tr>
<td>B</td>
<td>N34°07.00'</td>
<td>W114°31.00'</td>
</tr>
<tr>
<td>C</td>
<td>N33°59.00'</td>
<td>W114°13.00'</td>
</tr>
<tr>
<td>D</td>
<td>N33°25.00'</td>
<td>W114°39.00'</td>
</tr>
<tr>
<td>E</td>
<td>N33°01.00'</td>
<td>W114°37.00'</td>
</tr>
<tr>
<td>F</td>
<td>N32°55.00'</td>
<td>W114°23.00'</td>
</tr>
</tbody>
</table>

Re-Entry: Aircraft scheduled for additional drops shall after passing (F) turn right and maintain 2200' MSL to N32-56 W114-30 then turn right and continue via published route.

ROUTE WIDTH - 3 NM either side of centerline from (A) to (D), 3 NM either side of centerline from (D) to (F).

Remarks:
1. Units desiring to use this route are requested to contact the Originating Activity for de-confliction.
2. High volume of rotary wing and fixed wing traffic SFC-1000' AGL between (D) and (F) throughout the entire year.
SR ROUTES

SR-616

(KANSAS CITY) MKC, DSM

ORIGINATING ACTIVITY: 139 Airlift Wg., 705 Memorial Drive, St. Joseph, MO 64503-9307 DSN 356-3029/3260.

SCHEDULING ACTIVITY: 139 AW WG/Tactics, 705 Memorial Drive, St. Joseph, MO 64503 DSN 356-3029/3260.

Email-usaf.mo.139-aw.list.139-oss-tactics@mail.mil.

HOURS OF OPERATION: 1300-2200Z++ daily

ROUTE DESCRIPTION:

ROUTE WIDTH - 3 NM either side of centerline.

REMARKS: 1. Altitude data: 500' AGL to 1500' AGL PT A to B, then 300' to 1500' AGL.

SR-617

(KANSAS CITY) MKC, DSM

ORIGINATING ACTIVITY: 139 Airlift Wg., 705 Memorial Drive, St. Joseph, MO 64503-9307 DSN 356-3029/3260.

SCHEDULING ACTIVITY: 139 AW WG/Tactics, 705 Memorial Drive, St. Joseph, MO 64503 DSN 356-3029/3260.

Email-usaf.mo.139-aw.list.139-oss-tactics@mail.mil.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

ROUTE WIDTH - 3 NM either side of centerline.

REMARKS: 1. Altitude data: 500' AGL to 1500' AGL, then 300' AGL to 1500' AGL. 2. Day operations only. 3. CAUTION: Numerous windmill farms along route. 4. CAUTION: Numerous cattle and poultry farms along route.

SR-618

(KANSAS CITY) MKC, MHK

ORIGINATING ACTIVITY: 139 Airlift Wg., 705 Memorial Drive, St. Joseph, MO 64503-9307 DSN 356-3029/3260.

SCHEDULING ACTIVITY: 139 AW WG/Tactics, 705 Memorial Drive, St. Joseph, MO 64503 DSN 356-3029/3260.

Email-usa.can.139-aw.list.139-oss-tactics@mail.mil.

HOURS OF OPERATION: 1300-0500Z++ daily

ROUTE DESCRIPTION:

ROUTE WIDTH - 3 NM either side of centerline from (A) to (D), 2 NM either side of centerline from (D) to (E), 3 NM either side of centerline from (E) to (F).

REMARKS: Altitude data: 300' AGL to 1500' AGL.

SR-619

(KANSAS CITY) MKC, MHK

ORIGINATING ACTIVITY: 139 Airlift Wg., 705 Memorial Drive, St. Joseph, MO 64503-9307 DSN 356-3029/3260.

SCHEDULING ACTIVITY: 139 AW WG/Tactics, 705 Memorial Drive, St. Joseph, MO 64503 DSN 356-3029/3260.

Email-usa.can.139-aw.list.139-oss-tactics@mail.mil.

HOURS OF OPERATION: 1300-0500Z++ daily
SR ROUTES

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
03 AGL B  15 AGL to  A  N39°46.00'  W95°15.00'
03 AGL B  15 AGL to  B  N39°50.00'  W95°46.00'
03 AGL B  15 AGL to  C  N39°44.00'  W96°19.00'
03 AGL B  15 AGL to  D  N39°33.00'  W95°45.00'
03 AGL B  15 AGL to  E  N39°20.00'  W95°20.00'
03 AGL B  15 AGL to  F  N39°30.00'  W95°01.00'
03 AGL B  15 AGL to  G  N39°46.00'  W94°55.00'

ROUTE WIDTH - 2 NM either side of centerline from (A) to (C), 3 NM either side of centerline from (C) to (G).

Remarks: Altitude data: 300’ AGL to 1500’ AGL.

SR-701

(Detroit) DET, MBS


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1600-0400Z++ Tue-Sat, 1600-2200Z++ Sun

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
A  N42°53.00'  W83°11.00'
B  N43°14.00'  W83°13.00'
C  N43°36.00'  W83°21.00'
D  N43°53.00'  W83°16.00'
E  N43°54.00'  W82°54.00'
F  N43°27.00'  W83°04.00'
G  N43°02.00'  W82°46.00'
H  N42°40.00'  W82°38.00'
I  N42°36.00'  W82°50.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude: 500’ AGL (A) to (B); 300’ AGL (B) to (G); 500’ AGL (G) to (I).
(2) Entry Point: MTC TACAN 324/23.
(3) Exit Point: MTC TACAN 173/0.8.

SR-702

(Detroit) DET, MBS


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1600-0400Z++ Tue-Sat, 1600-2200Z++ Sun

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
A  N42°49.00'  W83°09.00'
B  N43°25.00'  W83°15.00'
C  N43°56.00'  W83°11.00'
D  N43°49.00'  W82°45.00'
E  N43°25.00'  W82°58.00'
F  N43°08.00'  W82°54.00'
G  N42°41.00'  W82°31.00'
H  N42°36.00'  W82°50.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude: 500’ AGL (A) to (B); 300’ AGL (B) to (F); 500’ AGL (F) to (H).
(2) Entry Point: MTC TACAN 317/19.
(3) Exit Point: MTC TACAN 173/0.8.

SR-703

(Detroit) DET, MBS


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1600-0400Z++ Tue-Sat, 1600-2200Z++ Sun

ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
at or above 05 AGL  A  N42°49.00'  W83°09.00'

at or above 05 AGL  B  N43°06.00'  W83°09.00'
SR ROUTES

at or above 05 AGL C N43°08.00' W82°54.00'

at or above 05 AGL D N42°41.00' W82°31.00'

at or above 05 AGL E N42°36.00' W82°50.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude: 500' AGL.
(2) Entry Point: MTC TACAN 317/19
(3) Exit Point: MTC TACAN 173/0.8.

SR-707
(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm
Airport, OH 44903-0179 DSN 696-6124, C419-520-6124.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A N40°28.00' W82°43.00'
05 AGL B 15 AGL to B N40°32.00' W82°18.00'
05 AGL B 15 AGL to C N40°21.00' W82°05.00'
05 AGL B 15 AGL to D N40°26.00' W81°12.00'
05 AGL B 15 AGL to E N40°35.00' W81°37.00'
05 AGL B 15 AGL to F N40°48.00' W82°01.00'
05 AGL B 15 AGL to G N40°51.00' W82°18.00'
05 AGL B 15 AGL to H N40°50.00' W82°32.00'

ROUTE WIDTH - 2 NM either side of centerline except the route width is reduced to 1 NM either side of centerline between (D) and (E).

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-709
(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm
Airport, OH 44903-0179 DSN 696-6124, C419-520-6124.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to A N40°41.00' W83°01.00'
05 AGL B 15 AGL to B N40°42.00' W83°28.00'
05 AGL B 15 AGL to C N41°15.00' W83°30.00'
05 AGL B 15 AGL to D N40°58.00' W82°41.00'
05 AGL B 15 AGL to E N40°50.00' W82°32.00'

ROUTE WIDTH - 2 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-708
(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm
Airport, OH 44903-0179 DSN 696-6124, C419-520-6124.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

ROUTE WIDTH - 3 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-710
(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm
Airport, OH 44903-0179 DSN 696-6124, C419-520-6124.
SR ROUTES

SCHEDULING ACTIVITY: Same as Originating Activity
HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>N40°28.00'</td>
<td>W82°32.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>N40°32.00'</td>
<td>W82°18.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>N40°21.00'</td>
<td>W82°05.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>N40°33.00'</td>
<td>W81°47.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>N40°48.00'</td>
<td>W82°01.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>N41°02.00'</td>
<td>W82°03.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>G</td>
<td>N40°57.00'</td>
<td>W82°22.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>H</td>
<td>N40°50.00'</td>
<td>W82°32.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-712

(COLUMBUS)


SCHEDULING ACTIVITY: Same as Originating Activity
HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>N40°41.00'</td>
<td>W83°01.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>N40°43.00'</td>
<td>W83°23.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>N41°15.00'</td>
<td>W83°30.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>N41°36.00'</td>
<td>W82°50.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>N41°23.00'</td>
<td>W82°28.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>N41°02.00'</td>
<td>W82°33.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>G</td>
<td>N40°50.00'</td>
<td>W82°32.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 2 NM either side of centerline except the route width is reduced to 1 NM either side of centerline between (C) and (D).

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-711

(COLUMBUS)


SCHEDULING ACTIVITY: Same as Originating Activity
HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>N40°28.00'</td>
<td>W82°32.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>N40°29.00'</td>
<td>W83°19.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>N40°02.00'</td>
<td>W83°39.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>N39°39.00'</td>
<td>W83°32.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>N39°37.00'</td>
<td>W83°08.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>N39°48.00'</td>
<td>W82°56.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 2 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-713

(COLUMBUS)


SCHEDULING ACTIVITY: Same as Originating Activity
HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>N40°28.00'</td>
<td>W82°32.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>N40°32.00'</td>
<td>W82°18.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>N40°21.00'</td>
<td>W82°05.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>N41°02.00'</td>
<td>W82°03.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>N41°11.00'</td>
<td>W82°25.00'</td>
</tr>
</tbody>
</table>
SR ROUTES

ROUTE WIDTH - 3 NM either side of centerline.
Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-714
(COLUMBUS)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  N40°28.00'  W82°43.00'
05 AGL B 15 AGL to  B  N40°32.00'  W82°18.00'
05 AGL B 15 AGL to  C  N40°21.00'  W82°05.00'
05 AGL B 15 AGL to  D  N40°12.00'  W82°15.00'
05 AGL B 15 AGL to  E  N40°09.00'  W82°32.00'
05 AGL B 15 AGL to  F  N39°56.00'  W82°41.00'
05 AGL B 15 AGL to  G  N39°48.00'  W82°56.00'

ROUTE WIDTH - 2 NM either side of centerline except the route width is reduced to 1 NM either side of centerline between (C) and (D).
Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-727
(MINNEAPOLIS)  MSP, RWF


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to  A  N44°58.00'  W92°45.00'
05 AGL B 15 AGL to  B  N45°08.00'  W92°17.00'
05 AGL B 15 AGL to  C  N45°23.00'  W92°10.00'
05 AGL B 15 AGL to  D  N45°31.00'  W93°14.00'
05 AGL B 15 AGL to  E  N45°24.00'  W94°00.00'
05 AGL B 15 AGL to  F  N45°07.00'  W94°11.00'
05 AGL B 15 AGL to  G  N44°53.00'  W94°35.00'
05 AGL B 15 AGL to  H  N44°41.00'  W94°14.00'
05 AGL B 15 AGL to  I  N44°40.00'  W93°41.00'

ROUTE WIDTH - 5 NM either side of centerline.
SR ROUTES

Remarks: Units desiring use of this route are requested to contact Originating Activity.

SR-728

(MINNEAPOLIS) MSP, RST, RWF


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N44°29.00'</td>
<td>W93°26.00'</td>
</tr>
<tr>
<td>B</td>
<td>N44°03.00'</td>
<td>W93°42.00'</td>
</tr>
<tr>
<td>C</td>
<td>N43°46.00'</td>
<td>W93°56.00'</td>
</tr>
<tr>
<td>D</td>
<td>N43°59.00'</td>
<td>W94°55.00'</td>
</tr>
<tr>
<td>E</td>
<td>N44°40.00'</td>
<td>W94°43.00'</td>
</tr>
<tr>
<td>F</td>
<td>N44°41.00'</td>
<td>W94°14.00'</td>
</tr>
<tr>
<td>G</td>
<td>N44°40.00'</td>
<td>W93°41.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route are requested to contact Originating Activity.

SR-729

(MINNEAPOLIS) MSP, RST, RWF


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N44°29.00'</td>
<td>W93°26.00'</td>
</tr>
<tr>
<td>B</td>
<td>N44°03.00'</td>
<td>W93°42.00'</td>
</tr>
<tr>
<td>C</td>
<td>N43°46.00'</td>
<td>W93°56.00'</td>
</tr>
<tr>
<td>D</td>
<td>N43°59.00'</td>
<td>W94°55.00'</td>
</tr>
<tr>
<td>E</td>
<td>N44°40.00'</td>
<td>W94°43.00'</td>
</tr>
<tr>
<td>F</td>
<td>N44°41.00'</td>
<td>W94°14.00'</td>
</tr>
<tr>
<td>G</td>
<td>N44°40.00'</td>
<td>W93°41.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route are requested to contact Originating Activity.

SR-730

(MINNEAPOLIS) MSP, RWF


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N44°54.00'</td>
<td>W93°44.00'</td>
</tr>
<tr>
<td>B</td>
<td>N45°28.00'</td>
<td>W93°35.00'</td>
</tr>
<tr>
<td>C</td>
<td>N45°24.00'</td>
<td>W94°00.00'</td>
</tr>
<tr>
<td>D</td>
<td>N45°07.00'</td>
<td>W94°11.00'</td>
</tr>
<tr>
<td>E</td>
<td>N44°53.00'</td>
<td>W94°35.00'</td>
</tr>
<tr>
<td>F</td>
<td>N44°41.00'</td>
<td>W94°14.00'</td>
</tr>
<tr>
<td>G</td>
<td>N44°40.00'</td>
<td>W93°41.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route are requested to contact Originating Activity.

SR-731

(MINNEAPOLIS) MSP, RWF


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N44°29.00'</td>
<td>W93°26.00'</td>
</tr>
<tr>
<td>B</td>
<td>N44°03.00'</td>
<td>W93°42.00'</td>
</tr>
<tr>
<td>C</td>
<td>N44°14.00'</td>
<td>W94°34.00'</td>
</tr>
<tr>
<td>D</td>
<td>N44°26.00'</td>
<td>W94°48.00'</td>
</tr>
</tbody>
</table>
SR ROUTES

ROUTE DESCRIPTION:

**SR-771**

**ROUTE WIDTH** - 5 NM either side of centerline.

**Remarks**: Units desiring use of this route are requested to contact Originating Activity.


**SCHEDULING ACTIVITY**: Same as Originating Activity

**HOURS OF OPERATION**: 2200-0330Z++ Tue-Fri; 1500-2200Z++ Sat-Sun

**ROUTE DESCRIPTION**:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>N44°54.00'</td>
<td>W93°44.00'</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>N45°07.00'</td>
<td>W94°11.00'</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>N44°53.00'</td>
<td>W94°35.00'</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>N44°41.00'</td>
<td>W94°14.00'</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>N44°40.00'</td>
<td>W93°41.00'</td>
</tr>
</tbody>
</table>

**Remarks**:

(1) Minimum altitude: 3000' MSL (A) thru (B), 500' AGL (B) thru (D), 300' AGL (D) thru (I), 3000' MSL (I) thru (K).

(2) Entry Point: Dells VORTAC 130/042.

(3) Alternate Entry Point: Nodine VORTAC 081/035.

(4) Exit Point: Badger VORTAC 250/19.

(5) Alternate Exit Points: Dells VORTAC 077/020; Nodine VORTAC 081/035.

**ROUTE WIDTH** - 4 NM either side of centerline from (A) to (B), 5 NM either side of centerline from (B) to (C), 4 NM right and 5 NM left of centerline from (C) to (D), 5 NM either side of centerline from (D) to (G), 4 NM left and 5 NM right of centerline from (G) to (H), 5 NM either side of centerline from (H) to (K).


**SCHEDULING ACTIVITY**: Same as Originating Activity

**HOURS OF OPERATION**: 2000-0400Z++ Tue-Fri; 1600-2200Z++ Sat-Sun

**ROUTE DESCRIPTION**:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>N43°58.00'</td>
<td>W90°39.00'</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>N43°46.00'</td>
<td>W90°16.00'</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>N43°09.00'</td>
<td>W89°52.00'</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>N43°02.00'</td>
<td>W90°23.00'</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>N43°27.00'</td>
<td>W90°57.00'</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>N43°50.00'</td>
<td>W90°58.00'</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td>N43°58.00'</td>
<td>W90°40.00'</td>
</tr>
<tr>
<td>H</td>
<td></td>
<td>N43°43.00'</td>
<td>W90°09.00'</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>N43°37.00'</td>
<td>W89°18.00'</td>
</tr>
<tr>
<td>J</td>
<td></td>
<td>N43°25.00'</td>
<td>W89°00.00'</td>
</tr>
<tr>
<td>K</td>
<td></td>
<td>N43°01.00'</td>
<td>W88°42.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 4 NM left and 5 NM right of centerline from (A) to (B), 5 NM either side of centerline from (B) to (C), 2 NM right and 5 NM left of centerline from (C) to (D), 5 NM either side of centerline from (D) to (E), 1 NM left and 5 NM right of centerline from (E) to (F), 5 NM either side of centerline from (F) to (G).

**Remarks**:

(1) Minimum altitude: 300' AGL (A) thru (C), 500' AGL (C) thru (D), 300' AGL (D) thru (G).

(2) Entry/Exit Points: Nodine VORTAC 081/035.
**SR ROUTES**

**HOURS OF OPERATION:** 0700-2300 local daily

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N45°03.00'</td>
<td>W83°03.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>B</td>
<td>N44°42.00'</td>
<td>W83°16.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N44°49.00'</td>
<td>W84°03.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N45°08.00'</td>
<td>W84°39.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N45°29.00'</td>
<td>W84°08.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N45°12.00'</td>
<td>W83°45.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>N45°05.00'</td>
<td>W83°33.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH - 3 NM either side of centerline.**

**Remarks:**
1. Minimum altitude: 500' AGL.
2. For traffic de-confliction information with VR-1624, VR-1625, VR-1627 and VR-1628, contact 127 WG/OG Selfridge ANGB, MI.

**SR-800**

**(NORTH PHILADELPHIA)** PNE, MIV

**ORIGINATING ACTIVITY:** 166 OSF/OSK, 2805 Spruance Drive, New Castle 19720-1615 DSN 445-7554 C302-323-3554.

**SCHEDULING ACTIVITY:** 166 AW/OSK, New Castle, DE, schedule (pri) by website https://cseaf.eglin.af.mil/cse/home.aspx or email (sec) 166AW.OSK(at)ang.af.mil, (Primary), DSN 445-7554 C302-323-3554.

**HOURS OF OPERATION:** 0800-2300 local

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N39°49.00'</td>
<td>W75°58.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>B</td>
<td>N39°27.00'</td>
<td>W75°52.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N39°12.00'</td>
<td>W75°02.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N39°38.00'</td>
<td>W74°42.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N39°30.00'</td>
<td>W74°18.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N39°42.00'</td>
<td>W74°25.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>N39°49.00'</td>
<td>W74°44.00'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (C), 2 NM either side of centerline from (C) to (D), 3 NM either side of centerline from (D) to (E), 0 NM left and 5 NM right of centerline from (E) to (F), 5 NM either side of centerline from (F) to (H).**

**Remarks:**
1. Minimum altitude: 500' AGL.
2. Entry Point: Modena VORTAC 255/15.
3. Alternate Entry Points: (C) N39-12 W75-02, (D) N39-38 W74-42.
4. (D) to (E): Do not over-fly southern tip of Long Beach Island, bird nesting area.
5. (E) to (F): All aircraft will remain a minimum of 1 NM east of Long Beach Island.
6. (F) to (G): Minimum altitude 1200' MSL turboprop (2000' MSL turbojet). Aircraft will be established prior to crossing island. Maintain altitude until 5 NM prior to (G).
SR ROUTES

SR-801

(NORTH PHILADELPHIA) PNE, MIV


HOURS OF OPERATION: 0800-2300 local

ROUTE DESCRIPTION:

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), 5 NM either side of centerline from (B) to (E), 2 NM eitherside of centerline from (E) to (F), 3 NM either side of centerline from (F) to (G), 0 NM left and 5 NM right of centerline from (G) to (H), 5 NM either side of centerline from (H) to (J).

Remarks:
1. Minimum altitude: 500’ AGL.
2. Entry Point: Modena VORTAC 255/15.
3. Alternate Entry Point: (F) N39-38 W74-42.
4. (F) to (G): Do not over-fly southern tip of Long Beach Island, bird nesting area.
5. (G) to (H): All aircraft will remain a minimum of 1 NM east of Long Beach Island.
6. (H) to (I): Minimum altitude 1200’ MSL turboprop (2000’ MSL turbojet). Aircraft will be established prior to crossing island. Maintain altitude until 5 NM prior to (I).
8. All aircraft must remain north of the road out of (C).

SR-802

(MARTINSBURG) MRB, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 05 AGL A N39°33.00' W78°08.00'
at or above 05 AGL B N39°17.00' W78°33.00'
at or above 05 AGL C N39°06.00' W78°35.00'
at or above 05 AGL D N39°01.00' W78°19.00'
at or above 05 AGL E N39°05.00' W78°05.00'
at or above 05 AGL F N39°11.00' W78°04.00'
at or above 05 AGL G N39°24.00' W78°00.00'

ROUTE WIDTH - 3 NM either side of centerline from (A) to (D), 1 NM either side of centerline from (D) to (G).

Remarks:
1. Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
2. Minimum altitude: 500’ AGL.
3. Entry Point: Martinsburg VORTAC 313/16.
4. Exit Point: Martinsburg VORTAC 283/7.

SR-803

(MARTINSBURG) MRB, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 05 AGL A N39°33.00' W78°08.00'
at or above 05 AGL B N39°32.00' W78°37.00'
at or above 05 AGL C N39°01.00' W78°19.00'
at or above 05 AGL D N39°05.00' W78°05.00'

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 05 AGL A N39°33.00' W78°08.00'
at or above 05 AGL B N39°32.00' W78°37.00'
at or above 05 AGL C N39°01.00' W78°19.00'
at or above 05 AGL D N39°05.00' W78°05.00'

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 05 AGL A N39°33.00' W78°08.00'
at or above 05 AGL B N39°32.00' W78°37.00'
at or above 05 AGL C N39°01.00' W78°19.00'
at or above 05 AGL D N39°05.00' W78°05.00'

Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 05 AGL A N39°33.00' W78°08.00'
at or above 05 AGL B N39°32.00' W78°37.00'
at or above 05 AGL C N39°01.00' W78°19.00'
at or above 05 AGL D N39°05.00' W78°05.00'
ROUTE WIDTH - 3 NM either side of centerline from (A) to (C), 1 NM either side of centerline from (C) to (F).

Remarks:
1. Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
2. Minimum altitude: 500' AGL.
3. Entry Point: Martinsburg VORTAC 313/16.
4. Exit Point: Martinsburg VORTAC 283/7.

SR-804

(MARTINSBURG) MRB, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data   Pt   Fac/Rad/Dist   Lat/Long
at or above 05 AGL A  N39°33.00'  W78°08.00'
at or above 05 AGL B  N39°33.00'  W78°27.00'
at or above 05 AGL C  N39°21.00'  W78°46.00'
at or above 05 AGL D  N39°06.00'  W78°35.00'
at or above 05 AGL E  N39°01.00'  W78°19.00'
at or above 05 AGL F  N39°05.00'  W78°05.00'
at or above 05 AGL G  N39°11.00'  W78°04.00'
at or above 05 AGL H  N39°24.00'  W78°00.00'

ROUTE WIDTH - 3 NM either side of centerline from (A) to (E), 1 NM either side of centerline from (E) to (H).

Remarks:
1. Minimum altitude: 500' AGL (A) to (B); 300' AGL (B) to (E); 500' AGL (E) to (I).
2. Alternate Entry Points: (C) N39°21' W78°46'; (D) N39°06' W78°35'; (E) N39°01' W78°19'; (F) N39°05' W78°05'; (G) N39°11' W78°04'; (H) N39°24' W78°00'.

SR-805

(NORTH PHILADELPHIA) PNE, MIV


HOURS OF OPERATION: 0800-2300 local

ROUTE DESCRIPTION:

Altitude Data   Pt   Fac/Rad/Dist   Lat/Long
A  N39°49.00'  W75°58.00'
B  N39°27.00'  W75°52.00'
C  N39°21.00'  W75°22.00'
D  N39°12.00'  W75°02.00'
E  N39°38.00'  W74°42.00'
F  N39°30.00'  W74°18.00'
G  N39°42.00'  W74°11.00'
H  N39°49.00'  W74°25.00'
I  N39°45.00'  W74°44.00'

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (D), 2 NM either side of centerline from (D) to (E), 3 NM either side of centerline from (E) to (F), 0 NM left and 5 NM right of centerline from (F) to (G), 5 NM either side of centerline from (G) to (I).

Remarks:
1. Minimum altitude: 500' AGL (A) to (B); 300' AGL (B) to (E); 500' AGL (E) to (I).
2. Entry Point: Modine VORTAC 255/15.
3. Alternate Entry Points: (C) N39°21 W75°22; (D) N39°38 W74°42.
4. (E) to (F): Do not over-fly southern tip of Long Beach Island, bird nesting area.
5. (F) to (G): All aircraft will remain a minimum of 1 NM east of Long Beach Island.
6. (G) to (H): Minimum altitude 1200' MSL turboprop (2000' MSL turbojet). Aircraft will be established prior to crossing island. Maintain altitude until 5 NM prior to (H).
SR ROUTES

SR-806

(MARTINSBURG) MRB, AOO, HAR, MGW, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
at or above 05 AGL | A | N39°33.00' | W78°08.00'
at or above 05 AGL | B | N39°52.00' | W77°58.00'
at or above 05 AGL | C | N39°32.00' | W78°37.00'
at or above 05 AGL | D | N39°01.00' | W78°19.00'
at or above 05 AGL | E | N39°05.00' | W78°05.00'
at or above 05 AGL | F | N39°11.00' | W78°04.00'
at or above 05 AGL | G | N39°24.00' | W78°00.00'
at or above 05 AGL | D | N39°42.00' | W78°39.00'
at or above 05 AGL | E | N39°01.00' | W78°19.00'
at or above 05 AGL | F | N39°05.00' | W78°05.00'
at or above 05 AGL | G | N39°11.00' | W78°04.00'
at or above 05 AGL | H | N39°24.00' | W78°00.00'

ROUTE WIDTH - 1 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (D), 1 NM either side of centerline from (D) to (G).

Remarks:
(1) Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
(2) Minimum altitude: 500' AGL.
(3) Entry Point: Martinsburg VORTAC 313/16.
(4) Exit Point: Martinsburg VORTAC 283/7.

SR-808

(MARTINSBURG) MRB, AOO, HAR, MGW, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---
at or above 05 AGL | A | N39°33.00' | W78°08.00'
at or above 05 AGL | B | N39°52.00' | W77°58.00'
at or above 05 AGL | C | N39°01.00' | W78°37.00'
at or above 05 AGL | D | N39°05.00' | W78°05.00'
at or above 05 AGL | E | N39°11.00' | W78°04.00'
at or above 05 AGL | F | N39°11.00' | W78°04.00'
at or above 05 AGL | G | N39°24.00' | W78°00.00'
at or above 05 AGL | H | N39°42.00' | W78°39.00'
at or above 05 AGL | I | N39°01.00' | W78°19.00'
at or above 05 AGL | D | N39°05.00' | W78°05.00'
at or above 05 AGL | E | N39°11.00' | W78°04.00'
at or above 05 AGL | F | N39°24.00' | W78°00.00'

ROUTE WIDTH - 1 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (E), 1 NM either side of centerline from (E) to (H).

Remarks:
(1) Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
(2) Minimum altitude: 500' AGL.
(3) Entry Point: Martinsburg VORTAC 313/16.
(4) Exit Point: Martinsburg VORTAC 283/7.
Remarks:
(1) Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
(2) Minimum altitude: 500' AGL.
(3) Entry Point: Martinsburg VORTAC 313/16.
(4) Exit Point: Martinsburg VORTAC 283/7.

SR-809

(NORFOLK) NGU, ORF

ORIGINATING ACTIVITY: CHSCW Atlantic, 610 A Street, Suite 150, Norfolk, VA 23511-4222.

SCHEDULING ACTIVITY: FACSFAC VACAPES, 601 Ocean Blvd. Virginia Beach, VA 23460

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 05 AGL A N36°44.78' W76°20.40'
at or above 05 AGL B N36°34.65' W76°23.12'
at or above 05 AGL C N36°26.64' W76°19.50'
at or above 05 AGL D N36°12.07' W76°16.77'
at or above 05 AGL E N36°06.38' W76°11.65'
at or above 05 AGL F N36°08.63' W76°04.10'
at or above 05 AGL G N36°05.00' W76°00.00'
at or above 05 AGL H N36°05.32' W75°45.51'
at or above 05 AGL I N36°16.95' W75°51.53'
at or above 05 AGL J N36°25.19' W75°57.87'
at or above 05 AGL K N36°30.32' W76°02.50'
at or above 05 AGL L N36°36.88' W76°03.01'
at or above 05 AGL M N36°42.66' W75°58.23'
at or above 05 AGL N N36°49.79' W75°58.15'
at or above 05 AGL O N36°55.74' W75°59.58'
at or above 05 AGL P N36°58.12' W76°06.36'

TERRAIN FOLLOWING OPERATIONS: VFR terrain following authorized for entire route within published altitude blocks. Route not authorized for IFR. If IMC is encountered, maintain MSA for area of operations to assure terrain/obstacle clearance.

ROUTE WIDTH - 1 NM either side of centerline for entire route.

Remarks:
(1) Route may be flown in reverse (bidirectional).
(2) Aircraft shall make route segment calls at each check point over HSCWL designated sector frequencies.
(3) Use caution for towers and power lines.
(4) Avoid low flight over houses, farms and livestock.
(5) Aircraft unable to meet their assigned entry time within the window of 15 minutes early to 15 minutes late shall not enter the route. Aircraft shall also exit the route within the window of 15 minutes early to 15 minutes late.
(6) All Check Points can be used as entry/exit points.
(7) Altitudes day/night are the same.
(8) Assigned for helicopters only.
(9) Avoid all restricted areas, warning areas, and wildlife areas.
(10) Preferred scheduling 24 hrs in advanced; same day scheduling available.

SR-810

(NORFOLK) NGU, ORF

ORIGINATING ACTIVITY: CHSCW Atlantic, 610 A Street, Suite 150, Norfolk, VA 23511-4222.

SCHEDULING ACTIVITY: FACSFAC VACAPES, 601 Ocean Blvd. Virginia Beach, VA 23460

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 05 AGL A N36°56.90' W76°35.18'
at or above 05 AGL B N36°59.18' W76°48.95'
at or above 05 AGL C N36°54.42' W77°02.03'
at or above 05 AGL D N37°00.30' W77°13.01'
at or above 05 AGL E N37°03.88' W77°22.31'
at or above 05 AGL F N37°02.17' W77°37.82'
at or above 05 AGL G N37°05.95' W77°43.60'
at or above 05 AGL H N36°58.57' W77°42.44'
at or above 05 AGL I N36°51.22' W77°25.46'
at or above 05 AGL J N36°45.29' W77°15.85'
at or above 05 AGL K N36°43.00' W77°04.43'
at or above 05 AGL L N36°37.03' W76°59.82'
at or above 05 AGL M N36°34.68' W76°52.58'
SR ROUTES

at or above 05 AGL  N  N36°41.13' W76°46.08'
at or above 05 AGL  O  N36°52.04' W76°39.69'
at or above 05 AGL  P  N36°53.26' W76°29.58'

TERRAIN FOLLOWING OPERATIONS: VFR terrain following authorized for entire route within published altitude blocks. Route not authorized for IFR. If IMC is encountered, maintain MSA for area of operations to assure terrain/obstacle clearance.

ROUTE WIDTH - 1 NM either side of centerline for entire route.

Remarks:
(1) Route may be flown in reverse (bidirectional).
(2) Aircraft shall make route segment calls at each check point over HSCWL designated sector frequencies.
(3) Use caution for towers and power lines.
(4) Avoid low flight over houses, farms and livestock.
(5) Aircraft unable to meet their assigned entry time within the window of 15 minutes early to 15 minutes late shall not enter the route. Aircraft shall also exit the route within the window of 15 minutes early to 15 minutes late.
(6) All Check Points can be used as entry/exit points.
(7) Altitudes day/night are the same.
(8) Assigned for helicopters only.
(9) Avoid all restricted areas, warning areas, and wildlife areas.
(10) Preferred scheduling 24 hrs in advanced; same day scheduling available.
(11) Route deconfliction: Route crosses VR-1713 from C to D, route crosses VR-1753 from D to E, route crosses SR-867 from E to F and F to G, route crosses IR-720 from I to J, route crosses VR-1713 and VR-1753 from J to K, route crosses VR-42 from M to N.

SR-811

(NORFOLK) NGU, FAF

ORIGINATING ACTIVITY: CHSCW Atlantic, 610 A Street, Suite 150, Norfolk, VA 23511-4222.

SCHEDULING ACTIVITY: FACSFAC VACAPES, 601 Ocean Blvd. Virginia Beach, VA 23460

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data   Pt Fac/Rad/Dist Lat/Long
at or above 05 AGL  A  N37°15.96' W76°23.05'
at or above 05 AGL  B  N37°25.24' W76°26.85'
at or above 05 AGL  C  N37°33.98' W76°34.48'
at or above 05 AGL  D  N37°39.39' W76°30.20'
at or above 05 AGL  E  N37°43.68' W76°37.14'

TERRAIN FOLLOWING OPERATIONS: VFR terrain following authorized for entire route within published altitude blocks. Route not authorized for IFR. If IMC is encountered, maintain MSA for area of operations to assure terrain/obstacle clearance.

ROUTE WIDTH - 1 NM either side of centerline for entire route.

Remarks:
(1) Route may be flown in reverse (bidirectional).
(2) Aircraft shall make route segment calls at each check point over HSCWL designated sector frequencies.
(3) Use caution for towers and power lines.
(4) Avoid low flight over houses, farms and livestock.
(5) Aircraft unable to meet their assigned entry time within the window of 15 minutes early to 15 minutes late shall not enter the route. Aircraft shall also exit the route within the window of 15 minutes early to 15 minutes late.
(6) All Check Points can be used as entry/exit points.
(7) Altitudes day/night are the same.
(8) Assigned for helicopters only.
(9) Avoid all restricted areas, warning areas, and wildlife areas.
(10) Preferred scheduling 24 hrs in advanced; same day scheduling available.
(11) Route deconfliction: Route crosses VR-1755, VR-1754, IR-714, and IR-760 from C to D, route crosses VR-1754, IR-714, IR-760 and VR-1713 from E to F, route crosses VR-1755 from F to G, route crosses VR-1713 from H to I, route crosses VR-1753 from I to J.

SR-812

(NORFOLK) NGU, ORF

ORIGINATING ACTIVITY: CHSCW Atlantic, 610 A Street, Suite 150, Norfolk, VA 23511-4222.

SCHEDULING ACTIVITY: FACSFAC VACAPES, 601 Ocean Blvd. Virginia Beach, VA 23460

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data   Pt Fac/Rad/Dist Lat/Long
at or above 05 AGL  A  N37°02.78' W76°03.78'
SR ROUTES

TERRAIN FOLLOWING OPERATIONS: VFR terrain following authorized for entire route within published altitude blocks. Route not authorized for IFR. If IMC is encountered, maintain MSA for area of operations to assure terrain/obstacle clearance.

ROUTE WIDTH - 1 NM either side of centerline for entire route.

Remarks:
(1) Route may be flown in reverse (bidirectional).
(2) Aircraft shall make route segment calls at each check point over HSCWL designated sector frequencies.
(3) Use caution for towers and power lines.
(4) Avoid low flight over houses, farms and livestock.
(5) Aircraft unable to meet their assigned entry time within the window of 15 minutes early to 15 minutes late shall not enter the route. Aircraft shall also exit the route within the window of 15 minutes early to 15 minutes late.
(6) All Check Points can be used as entry/exit points.
(7) Altitudes day/night are the same.
(8) Assigned for helicopters only.
(9) Avoid all restricted areas, warning areas, and wildlife areas.
(10) Preferred scheduling 24 hrs in advanced; same day scheduling available.
(11) Route deconfliction: Route crosses VR-1755 from C to D, route crosses VR-1712 from E to F, to G, to H, and J to K, route crosses VR-1711 from J to K, route crosses IR-714, IR-760, and VR-1754 from K to L and VR-1753, VR-1755 from L to M.

SR-820

(WASHINGTON) DCA, SBY, CHO


HOURS OF OPERATION: 0900-2300 local daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL A</td>
<td>N30°00.00'</td>
<td>W75°00.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL B</td>
<td>N30°16.00'</td>
<td>W75°08.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL C</td>
<td>N30°32.00'</td>
<td>W75°16.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL D</td>
<td>N30°48.00'</td>
<td>W75°24.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL E</td>
<td>N30°00.00'</td>
<td>W75°32.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL F</td>
<td>N30°16.00'</td>
<td>W75°40.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL G</td>
<td>N30°32.00'</td>
<td>W75°48.00'</td>
<td></td>
</tr>
<tr>
<td>at or above 05 AGL H</td>
<td>N30°48.00'</td>
<td>W75°56.00'</td>
<td></td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 2 NM right side of centerline from (A) to (B), 1 NM either side of centerline from (B) to (H);

Remarks:
(1) Entry Point: Andrews VORTAC 211/19.
(2) Exit Point: Brooke VORTAC 193/11.
(3) Minimum altitude: Day 300' AGL (A) to (C); 500' AGL (C) to (D); 300' AGL (D) to (H); night 1000' AGL.

SR-821

(WASHINGTON) DCA, SBY, CHO


HOURS OF OPERATION: 0900-2300 local daily
SR ROUTES

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
A  N38°30.00'  W77°02.00'
B  N38°08.00'  W77°30.00'
C  N38°16.00'  W77°58.00'
D  N37°47.00'  W77°53.00'
E  N37°50.00'  W77°22.00'
F  N38°04.00'  W77°20.00'
G  N38°10.00'  W77°22.00'

ROUTE WIDTH - 2 NM right side of centerline from (A) to (B), 1 NM either side of centerline from (B) to (G).

Remarks:
1. Entry Point: Andrews VORTAC 211/19.
2. Exit Point: Brooke VORTAC 193/11.
3. Minimum altitude: Day 300' AGL (A) to (B); 500' AGL (B) to (C); 300' AGL (C) to (G); night 1000' AGL.

SR-822

(PITTSBURGH)  AGC, HLG


HOURS OF OPERATION: 1000-0300Z Mon-Sat

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
A  N38°30.00'  W77°02.00'
B  N38°08.00'  W77°30.00'
C  N38°16.00'  W77°58.00'
D  N37°47.00'  W77°53.00'
E  N37°50.00'  W77°22.00'
F  N38°04.00'  W77°20.00'
G  N38°10.00'  W77°22.00'

ROUTE WIDTH - 2 NM right side of centerline from (A) to (B), 1 NM either side of centerline from (B) to (F).

Remarks:
1. SR-835 shares common airspace with VR-1753 from (C) to (D), coordination must be performed with COMMAT WING ONE, Oceana NAS, VA through 459 TAW prior to use.
2. Minimum altitude: Days, 300' AGL (A) to (D), 500' AGL (D) to (F); 1000' AGL nights.

SR-844

(MILLVILLE)  MIV, SBY


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0900-2300 local

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
A  N38°30.00'  W77°02.00'
B  N38°08.00'  W77°30.00'
C  N38°16.00'  W77°58.00'
D  N37°47.00'  W77°53.00'
E  N37°50.00'  W77°22.00'
F  N38°04.00'  W77°20.00'

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:
1. Minimum altitude: 300' AGL.
2. Entry Point: MMJ VORTAC (CH 57) 270/26.
4. All other points are Alternate Entry/Exit Points.
5. Contact Wheeling Tower (KHLG) VHF 118.1 / UHF 257.8 between (E) and (F) with altitude and direction of flight.
6. Avoid overflight of noise sensitive area by 1000' AGL and 0.5 NM:
   (a) N40°11.44 W80°57.23.

SR-835

(WASHINGTON)  DCA, SBY, CHO


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0900-2300 local

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
A  N38°30.00'  W77°02.00'
B  N38°08.00'  W77°30.00'
C  N38°16.00'  W77°58.00'
D  N37°47.00'  W77°53.00'
E  N37°50.00'  W77°22.00'
F  N38°04.00'  W77°20.00'

ROUTE WIDTH - 2 NM right side of centerline from (A) to (B), 1 NM either side of centerline from (B) to (F).

Remarks:
1. SR-835 shares common airspace with VR-1755 from (C) to (D), coordination must be performed with COMMAT WING ONE, Oceana NAS, VA through 459 TAW prior to use.
2. Minimum altitude: Days, 300' AGL (A) to (D), 500' AGL (D) to (F); 1000' AGL nights.

SR-844

(MILLVILLE)  MIV, SBY


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0900-2300 local

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
A  N38°30.00'  W77°02.00'
B  N38°08.00'  W77°30.00'
C  N38°16.00'  W77°58.00'
D  N37°47.00'  W77°53.00'
E  N37°50.00'  W77°22.00'
F  N38°04.00'  W77°20.00'

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:
1. Minimum altitude: 300' AGL.
2. Entry Point: MMJ VORTAC (CH 57) 270/26.
HOURS OF OPERATION: 0800-2359 local

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
at or above 05 AGL  A  N39°28.00'  W75°25.00'
at or above 05 AGL  B  N39°11.00'  W75°08.00'
at or above 05 AGL  C  N38°49.00'  W75°13.00'
at or above 05 AGL  D  N39°12.00'  W75°02.00'
at or above 05 AGL  E  N39°38.00'  W74°42.00'
at or above 05 AGL  F  N39°30.00'  W74°18.00'
at or above 05 AGL  G  N39°29.00'  W74°14.00'
at or above 05 AGL  H  N39°37.00'  W74°05.00'
at or above 05 AGL  I  N39°42.00'  W74°11.00'
at or above 05 AGL  J  N39°49.00'  W74°27.00'

ROUTE WIDTH - 4 NM either side of centerline from (A) to (F), 2 NM either side of centerline from (F) to (H), 0 NM left and 2 NM right of centerline from (H) to (I), 3 NM either side of centerline from (I) to (J).

Remarks:
(1) Minimum altitude: 500' AGL.
(2) Entry Point: DQO VORTAC (CH 87) 156/16 DME.
(3) (F) to (G): Do not over-fly southern tip of Long Beach Island, bird nesting area.
(4) (G) to (H): All aircraft will remain a minimum of 1 NM East of Long Beach Island.
(5) (H) to (I): Minimum altitude 1200' MSL turboprops (2000' MSL turbojets). Aircraft will be established at altitude prior to crossing island. Maintain altitude until 5 NM prior to (J).
(6) Over-flight of Surf City, NJ (N39-40 W74-10) prohibited (Congressional).
(7) Avoid noise sensitive area at N39-36.8 W74-35.2 by 1 NM or 1000' AGL.
(8) Contact Warren Grove Range to de-conflict with VR-1709.
(9) Remain alert for VFR traffic along NJ coastline, particularly during summer months.

**SR-845**

*(MILLVILLE)* MIV, SBY


HOURS OF OPERATION: 0800-2359 local

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
at or above 05 AGL  A  N39°28.00'  W75°25.00'
at or above 05 AGL  B  N39°20.00'  W75°36.00'
at or above 05 AGL  C  N39°00.00'  W76°10.00'
at or above 05 AGL  D  N38°50.00'  W75°51.00'
at or above 05 AGL  E  N38°49.00'  W75°18.00'
at or above 05 AGL  F  N39°38.00'  W74°42.00'
at or above 05 AGL  G  N39°30.00'  W74°18.00'
at or above 05 AGL  H  N39°29.00'  W74°14.00'
at or above 05 AGL  I  N39°37.00'  W74°05.00'
at or above 05 AGL  J  N39°42.00'  W74°11.00'
at or above 05 AGL  K  N39°49.00'  W74°27.00'

ROUTE WIDTH - 4 NM either side of centerline from (A) to (G), 2 NM either side of centerline from (G) to (H), 0 NM left and 2 NM right of centerline from (H) to (I), 3 NM either side of centerline from (J) to (K).

Remarks:
(1) Minimum altitude: 500' AGL.
(2) Entry Point: DQO VORTAC (CH 87) 156/16 DME.
(3) (G) to (H): Do not over-fly southern tip of Long Beach Island, bird nesting area.
(4) (H) to (I): All aircraft will remain a minimum of 1 NM East of Long Beach Island.
(5) (I) to (J): Minimum altitude 1200' MSL turboprops (2000' MSL turbojets). Aircraft will be established at altitude prior to crossing island. Maintain altitude until 5 NM prior to (K).
(6) Over-flight of Surf City, NJ (N39-40 W74-10) prohibited (Congressional).
(7) Avoid noise sensitive area at N39-36.8 W74-35.2 by 1 NM or 1000' AGL.
(8) Contact Warren Grove Range to de-conflict with VR-1709.
(9) Remain alert for VFR traffic along NJ coastline, particularly during summer months.

**SR-846**

*(MILLVILLE)* MIV


HOURS OF OPERATION: 0800-2359 local
SR ROUTES

ROUTE DESCRIPTION:

Altitude Data | Pt | Fac/Rad/Dist | Lat/Long
--- | --- | --- | ---

SR-847

(MILLVILLE) MIV


SCHEDULING ACTIVITY: 166 AW/OSK, New Castle, DE, schedule (pri) by website https://cseaf.caf.gov/cse/home.aspx or email (sec) 166AW.OSK@ang.af.mil, (Primary), DSN 445-7554 C302-323-3554.

HOURS OF OPERATION: 0800-2359 local

ROUTE WIDTH - 1 NM either side of centerline.

Remarks:

(1) Minimum altitude: 500' AGL; 1000' AGL night.
(2) Minimum altitude: 1500' AGL between (G) and (H).
(3) All flights departing Langely AFB will be under IFR until reaching (A).
SR-900

(BRIDGEPORT) BDR


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td></td>
<td>N42°39.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°45.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td>N42°40.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°00.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td>N42°16.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W71°34.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td></td>
<td>N41°45.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W71°35.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td></td>
<td>N41°47.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°05.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>N42°03.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°10.00'</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td></td>
<td>N42°12.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°32.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline from (A) to (C), 3 NM left and 5 NM right of centerline from (B) to (D), 5 NM either side of centerline from (D) to (G).

Remarks:
1. Minimum altitude: 500 AGL; except 1000 AGL until 13 NM past (A).
2. Entry Point: Keene VORTAC 233/22.
3. Exit Point (G); Westover VOR - THIS IS WITHIN THE CLASS D AIRSPACE FOR WESTOVER (see FLIP for active hours and frequencies).
4. Point (D) Alternate Exit Point prior to the Westover Class D Airspace.
5. Point (E) is within the Westover Class D Airspace, contact Westover Tower prior to entering the active Class D Airspace (see FLIP for active hours and frequencies).
6. Point (B) is under the PVD Class C Airspace, use caution in vicinity.

SR-901

(BRIDGEPORT) BDR


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td></td>
<td>N43°11.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W71°04.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td>N43°29.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W71°10.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td>N43°13.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°10.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td></td>
<td>N42°47.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°07.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td></td>
<td>N42°33.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W71°53.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>N42°03.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°10.00'</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td></td>
<td>N42°12.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°32.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline from (A) to (B), 3 NM left and 5 NM right of centerline from (B) to (C), 5 NM either side of centerline from (C) to (E).

Remarks:
1. Minimum altitude: 500 AGL; except 1000 AGL until 13 NM past (A).
2. Entry Point: Westover VOR 171/17.
3. Exit Point: Westover VOR - THIS IS WITHIN THE CLASS D AIRSPACE FOR WESTOVER (see FLIP for active hours and frequencies).
4. Point (D) Alternate Exit Point prior to the Westover Class D Airspace.
5. Point (E) is within the Westover Class D Airspace, contact Westover Tower prior to entering the active Class D Airspace (see FLIP for active hours and frequencies).
6. Point (B) is under the PVD Class C Airspace, use caution in vicinity.

SR-902

(BRIDGEPORT) BDR


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td></td>
<td>N43°11.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W71°04.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td>N43°29.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W71°10.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td>N43°13.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°10.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td></td>
<td>N42°47.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°07.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td></td>
<td>N42°33.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W71°53.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>N42°03.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°10.00'</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td></td>
<td>N42°12.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W72°32.00'</td>
</tr>
</tbody>
</table>
SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline from (A) to (E), 3 NM left and 5 NM right of centerline from (E) to (F), 5 NM either side of centerline from (F) to (G).

Remarks:
(1) Minimum altitude: 500’ AGL, except 1000’ AGL from 23 NM past (E) to (F).
(2) Avoid town of Gilmanton 12 NM past (B).
(3) Avoid area marked by the Concord VOR CON 302/030 by at least 1 NM and 1000’ AGL for noise abatement.
(4) Entry Point: Pease VORTAC 316/11.
(5) Exit Point: Westover VOR - THIS IS WITHIN THE CLASS D AIRSPACE FOR WESTOVER (see FLIP for active hours and frequencies).
(6) Point (F) Alternate Exit Point prior to the Westover Class D Airspace.
(7) Point (G) is within the Westover Class D Airspace, contact Westover Tower prior to entering the active Class D airspace (see FLIP for active hours and frequencies).
(8) Avoid town of Fitzwilliam NH, 2NM west of (D).

SR-904

(BOSTON) BOS


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1000-2200 local

ROUTE DESCRIPTION:
Altitude Data       Pt       Fac/Rad/Dist       Lat/Long
at or above 05 AGL A       N42°32.00'        W71°46.00'
                        B       N42°30.00'        W71°40.00'
                        C       N42°28.00'        W71°40.00'
                        D       N42°26.00'        W71°40.00'

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:
(1) Minimum altitude: 500’ AGL.

SR-1001

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DODH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data       Pt       Fac/Rad/Dist       Lat/Long
A       N61°18.80'        W150°26.80'
B       N61°12.30'        W151°10.20'
C       N61°23.90'        W151°28.70'
D       N61°56.20'        W151°28.50'
E       N62°12.80'        W151°33.50'
ROUTE WIDTH - 5 NM either side of centerline from (A) to (C), 2 NM either side of centerline from (C) to (E).

Remarks:
(1) Day altitude: 300’ AGL (A) to (C); 500’ AGL (C) to 5 NM prior to (D) and no lower than 2000’ MSL from 5 NM before (D) to 6 NM after (D).
(2) Night altitude: 1000’ AGL from (A) to 5 NM before (D).
(3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1004
(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
A N61°18.80’ W150°35.00’
B N61°18.80’ W149°50.20’
C N61°18.80’ W149°37.00’
D N61°21.30’ W149°39.00’
E N61°21.30’ W149°39.00’
F

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (F), 2 NM either side of centerline from (D) to (F).

Remarks:
(1) Day altitude: 300’ AGL (A) to (D); 500’ AGL (D) to 5 NM prior to (E) and no lower than 2000’ MSL from 5 NM before (E) to 6 NM after (E).
(2) Night altitude: 1000’ AGL from (A) to 5 NM before (D).
(3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).
ROUTE WIDTH - 3 NM either side of centerline from (A) to (B), 5 NM either side of centerline from (B) to 6 NM prior to (D) and 2 NM either side of centerline from 6 NM prior to (D) to (A1).

Remarks:
1. Day altitude: 1500' AGL (A) to (B); 300' AGL (B) to (C) to 6 NM prior to (D); and 500' AGL from 6 NM after (D) to point of beginning.
2. Night altitude: 1000' AGL from (B) to 6 NM prior to (D).
3. Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1006

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>N61°18.80'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W150°26.00'</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>N61°34.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W150°27.70'</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>N61°36.70'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W149°40.30'</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>N61°21.30'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W149°39.00'</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>N61°34.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W150°27.70'</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>N61°36.70'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W149°40.30'</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td>N61°21.30'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W149°39.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline from (A) to (B) second time, 3 NM either side of centerline from (B) to (H) second time.

Remarks:
1. From 1 May through 30 September, route is restricted to 1500' AGL due to increase of summer recreational activities.
2. From 1 October through 30 April, day altitudes will be no lower than 300' AGL from (A) to (B) second time, 1000' AGL from (B) second time to (G) and 2000' MSL from (G) to 6 NM after (G).
3. Night altitudes: 1000' AGL from (A) to (G).
4. Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).
SR ROUTES

SR-1007

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
A N61°18.80' W150°26.80'
B N61°34.00' W150°27.00'
C N61°43.50' W150°39.70'
D N61°37.00' W149°59.10'
E N61°35.00' W149°38.00'
F N61°21.30' W149°39.00'

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (D), 2 NM either side of centerline from (D) to (F).

Remarks:
(1) Day altitude: 300’ AGL (A) to (E); 500’ AGL (E) to (F); 1000’ AGL (F) to 6 NM after (F).
(2) Night altitude: 1000’ AGL (A) to (G).
(3) Route is restricted to 1500’ AGL (B) to (F) from 1 May to 30 September.
(4) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1008

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
A N61°18.80' W150°26.80'
B N61°34.00' W150°27.70'
C N61°54.40' W150°54.40'
D N61°58.50' W150°12.20'
E N61°43.20' W151°16.80'
F N61°37.00' W149°59.10'
G N61°35.00' W149°38.00'
H N61°21.30' W149°39.00'

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (B), 4 NM either side of centerline from (B) to (C), 5 NM either side of centerline from (C) to (D), 3 NM either side of centerline from (D) to (F), and 2 NM either side of centerline from (F) to (H).

Remarks:
(1) Day altitude: 300’ AGL (A) to (E); 500’ AGL (E) to (F); 1000’ AGL (F) to (G); 2000’ MSL (G) to 6 NM after (G); 500’ AGL 6 NM after (G) to (H).
(2) Night altitude: 1000’ AGL (A) to (G).
(3) Route is restricted to 1500’ AGL (B) to (F) from 1 May to 30 September.
(4) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1009

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
A N61°18.80' W150°26.80'
B N61°12.30' W151°10.20'
C N61°23.90' W151°28.70'
D N61°56.20' W151°28.50'
E N62°12.80' W151°33.50'
F N62°16.90' W151°10.00'
G N61°55.80' W150°23.00'
SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline from (A) to (H), 2 NM either side of centerline from (H) to (I).

Remarks:
(1) Day altitude: 300' AGL (A) to (H); 500' AGL (H) to (I).
(2) Night altitude: 1000' AGL (A) to (H).
(3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1010

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N61°18.80'</td>
<td>W150°26.80'</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>N61°34.60'</td>
<td>W150°36.70'</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>N61°37.10'</td>
<td>W151°11.50'</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>N61°52.00'</td>
<td>W151°24.70'</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>N61°51.30'</td>
<td>W150°46.70'</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N62°07.60'</td>
<td>W150°52.00'</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>N61°55.80'</td>
<td>W150°23.00'</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>N61°52.00'</td>
<td>W150°04.30'</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>N61°35.50'</td>
<td>W149°37.00'</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>N61°21.30'</td>
<td>W149°39.00'</td>
<td></td>
</tr>
</tbody>
</table>

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (H), 2 NM either side of centerline from (H) to (J).

Remarks:
(1) Day altitude: 300' AGL (A) to (H); 500' AGL (H) to 5 NM prior to (I); 2000' MSL from 5 NM prior to (I) to 6 NM after (I).
(2) Night altitude: 1000' AGL (A) to 5 NM prior to (I).

(Stinson Drop Zone).
Chapter 5

REFUELING TRACKS/ANCHORS/
VFR HELICOPTER REFUELING
TRACKS/ANCHORS

I. General.
A. The conduct of aerial refueling is based on the strict requirement that participating aircraft remain within specifically designated airspace. Air refueling operations are normally conducted on tracks or in anchor areas published in this document. There are certain mission requirements and operational considerations which may necessitate enroute refueling operations or the establishment of special tracks/anchors not published in this document. Refer to FAA 7610.4x for information on those requirements.

B. Aerial refueling operations will be conducted under instrument flight rules on the Aerial Refueling Tracks/Anchors described in this section. New refueling tracks/anchors or changes to existing refueling tracks/anchors will become effective on the date of this booklet or the Planning Change Notice unless indicated otherwise.

C. The tanker aircraft is responsible for requesting altitude clearance and routing (if different than flight plan routing) for the receiver and tanker aircraft beyond the AR exit point. Throughout the refueling operation, controller initiated heading assignments may not be effected without the concurrence of the tanker. Each aircraft must receive a specific clearance prior to leaving the refueling track/anchor. In the event of no clearance, the tanker(s) and receiver(s) will continue on the tanker’s filed route and assigned block altitudes until a clearance to separate the flight can be obtained, or the aircraft will request an extension of the aerial refueling track.

NOTE: Aerial refueling operations are terminated at the end of the refueling point unless an extension of the aerial refueling track is received.

II. EXPLANATION OF TERMS
A. REFUELING TRACKS
1. ARIP - Air Refueling Initial Point - A point located upstream from the ARCP at which the receiver aircraft initiates a rendezvous with the tanker. Descent to refueling altitude will be made between ARIP and ARCP.
2. ARCP - Air Refueling Control Point - The location where the tanker and receiver rendezvous is completed prior to refueling. Tankers orbit at this point.
3. NAVIGATION CHECKPOINTS - These are designated where required to provide a means for adequate navigation for refueling aircraft and for departure from the track subsequent to refueling.
4. EXIT - The point at which the refueling track terminates.
5. COMMUNICATION/RENDEZVOUS PLAN -
   a. Primary UHF
   b. Backup UHF
   c. N/R = Not Required
   d. N/R = Not Required
   e. TACAN Channels Receiver/Tanker
   f. N/R = Not Required.
6. REFUELING ALTITUDES - The block of airspace within which refueling operations may be conducted.
7. SCHEDULING UNIT - The military unit responsible for scheduling refueling operations. It provides daily schedules covering requested altitudes/flight levels and times of use for proposed operations to the assigned ARTCC.
8. ASSIGNED ARTCC - The FAA Air Traffic Control Center that controls the airspace within which the track is located.
9. SODAR - Simultaneous Opposite Direction Air Refueling.

B. REFueling Anchors
1. ENTRY POINTS - These are designated points where tanker aircraft may enter the anchor area without the assistance of radar. When either FAA Center Radar or Ground TAC Radar is operative, a tanker may proceed to the Anchor Point without crossing an Entry Point.
2. ANCHOR POINT - The geographical point upon which the anchor pattern is oriented.
3. ANCHOR PATTERN - A left-hand race track pattern with legs separated by a minimum of 20 NM and a minimum leg length of 50 NM.
4. EXIT POINTS - These are designated points where tanker and receiver aircraft may depart the anchor area after refueling is completed.
5. MILITARY RADAR - The call sign and frequencies of the military unit responsible for radar control of refueling operations within the anchor area. These are normally an ADCF (Air Defense Control Facility) or CRC/CRP (Control and Reporting Center/Post).

NOTES:
AR ROUTES

1. The general location of the refueling tracks/anchors are depicted on the graphic published on the following page.

2. See DD 175, item (9) under Flight Plans, Chapter 4 in General Planning for Special Instructions.

3. If there is no information for a particular field, it will be omitted.

C. ARTCC FREQUENCIES

The ARTCC frequencies to be used at the control and/or exit points are listed under the "Assigned ARTCC" column, e.g., ARCP 297.3 EXIT 295.4.
CONUS REFUELING TRACKS / ANCHORS*

See tabulation for information regarding entrance and exit reporting points and specified operational altitudes.

See North East / Puerto Rico / Alaska refueling tracks on appropriate AP1B chart.

*VFR Helicopter Refueling Tracks are shown on the appropriate AP1B Chart.
ALASKA REFUELING TRACKS / ANCHORS*

See tabulation for information regarding entrance and exit reporting points and specified operational altitudes. *VFR Helicopter Refueling Tracks are shown on the appropriate AP/1B Chart.
# REFUELING TRACKS

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR1</td>
<td>BAM VORTAC</td>
<td>MLD VOR-DME</td>
<td>MLD VOR-DME 090/10 N42°09.00' W112°14.00'</td>
<td>OCS VOR-DME 008/118 N43°25.00' W108°04.00'</td>
<td>a. 343.500</td>
<td>b. 256.650</td>
<td>c. N/Rd. 30/93</td>
<td>60/00 OSS/OSS</td>
</tr>
</tbody>
</table>

**REMARKS:** Tankers eastbound on the track may routinely proceed to the exit point, execute a turn to the north and continue refueling westbound, when annotated on the flightplan.

| AR2    | OCS VOR-DME 008/118 | BOY VOR-DME 227/92 | MLD VOR-DME 090/10 N42°09.00' W112°14.00' | BAM VORTAC 060/30 N40°43.00' W110°09.62' | a. 283.900 | b. 256.650 | c. N/Rd. 31/94 | 60/00 OSS/OSS | Travis AFB, CA | DSN 837-7151C707-424-7151 | Salt Lake City | ARCP-323.0W | EXIT-363.15W |

**REMARKS:** Tankers westbound on the track may routinely proceed to the exit point, execute a turn to the north and continue refueling eastbound, when annotated on the flightplan.

| AR3H   | PGS VOR-DME 065/45 | N35°45.00' W112°38.00' | RSK VORTAC 225/38 N36°25.00' W108°46.00' | RSK VORTAC 076/65 N36°44.00' W106°45.00' | a. 265.050 | b. 271.650 | c. N/Rd. N/R | 60/00 OSS/OSS | Travis AFB, CA | DSN 837-7151C707-424-7151 | Salt Lake City | ARCP-386.8E | EXIT-290.4E NAV | CHK PT-386.8E Los Angeles ARIP-323.2E |

**REMARKS:** Due to track proximity to ARTCC boundaries, aircrews should not request nor expect to receive amendments to flight plan routing after air refueling exit. Availability from 1700-1900Z++ and 2100-2230Z++ is limited. Track cannot be scheduled simultaneously with AR233.

| AR3L   | ALS VORTAC 187/26 | RSK VORTAC 147/15 | RSK VORTAC 230/86 N36°07.00' W109°41.00' | RSK VORTAC 145/16 N36°30.00' W107°59.00' | a. 235.100 | b. 256.650 | c. N/Rd. N/R | FL190/FL230 | 151 AREFG | Salt Lake City, UT | DSN 245-2274/2273C801-245-2274/2273 | Denver | ARCP-343.7W | EXIT-343.7W |

**REMARKS:** None
### AR4A

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR4A</td>
<td>LKV VORTAC</td>
<td>BOI VORTAC</td>
<td>DNJ VOR-DME</td>
<td>GEG VORTAC</td>
<td>096/46</td>
<td>a. 344.700</td>
<td>FL210/FL230</td>
<td>Seattle</td>
</tr>
<tr>
<td>(North)</td>
<td>099/83</td>
<td>250/89</td>
<td>250/63</td>
<td>296/60</td>
<td>292.600</td>
<td>b. 292.600</td>
<td>620SS/OSS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N41°50.00'</td>
<td>N43°27.00'</td>
<td>N44°44.00'</td>
<td>N47°13.00'</td>
<td>N/R</td>
<td>c. N/R</td>
<td>McChord Field, WA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W118°52.00'</td>
<td>W118°13.00'</td>
<td>W117°41.00'</td>
<td>W116°37.00'</td>
<td>N/R</td>
<td>d. N/R</td>
<td>DSN 382-9925</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PDT VORTAC 062/77</td>
<td>32/95</td>
<td></td>
<td>e. 32/95</td>
<td>C253 982-9925</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W117°09.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### REMARKS: Portions of AR4A lie within SADDLE airspace. Receiver units scheduling this track must contact the 366 FW Scheduling at DSN 728-2172 or 728-4607 to ensure deconfliction of air refueling operations with SADDLE activity.

### AR4B

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR4B</td>
<td>BAM VORTAC</td>
<td>BOI VORTAC</td>
<td>DNJ VOR-DME</td>
<td>GEG VORTAC</td>
<td>247/55</td>
<td>a. 235.100</td>
<td>FL210/FL230</td>
<td>Seattle</td>
</tr>
<tr>
<td>(North)</td>
<td>313/92</td>
<td>247/55</td>
<td>247/30</td>
<td>189/16</td>
<td>292.600</td>
<td>b. 292.600</td>
<td>620SS/OSS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N41°50.00'</td>
<td>N43°27.00'</td>
<td>N44°44.00'</td>
<td>N47°13.00'</td>
<td>N/R</td>
<td>c. N/R</td>
<td>McChord Field, WA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W118°05.00'</td>
<td>W117°27.00'</td>
<td>W116°55.00'</td>
<td>W115°48.00'</td>
<td>N/R</td>
<td>d. N/R</td>
<td>DSN 382-9925</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MLP VOR-DME 184/92</td>
<td>33/96</td>
<td></td>
<td>e. 33/96</td>
<td>C253 982-9925</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N46°00.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N16°17.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### REMARKS: Portions of AR4A lie within SADDLE airspace. Receiver units scheduling this track must contact the 366 FW Scheduling at DSN 728-2172 or 728-4607 to ensure deconfliction of air refueling operations with SADDLE activity. AR4B (North) - To make an early exit from this track, air crews will file to NAV point DNJ 247/030 as an end point for refueling.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>(South)</td>
<td>MLP VOR-DME</td>
<td>GEG VORTAC</td>
<td>DNJ VOR-DME</td>
<td>LKV VORTAC</td>
<td>274/60</td>
<td>a. 235.100</td>
<td>FL210/FL230</td>
<td>Seattle</td>
</tr>
<tr>
<td></td>
<td>308/41</td>
<td>137/74</td>
<td>274/60</td>
<td>064/87</td>
<td>292.600</td>
<td>b. 292.600</td>
<td>620SS/OSS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N48°00.00'</td>
<td>N46°25.00'</td>
<td>N45°09.00'</td>
<td>N42°39.00'</td>
<td>N/R</td>
<td>c. N/R</td>
<td>McChord Field, WA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W116°15.00'</td>
<td>W116°57.00'</td>
<td>W117°31.00'</td>
<td>W118°34.00'</td>
<td>N/R</td>
<td>d. N/R</td>
<td>DSN 382-9925</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BOI VORTAC 265/84</td>
<td>33/96</td>
<td></td>
<td>e. 33/96</td>
<td>C253 982-9925</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N43°50.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W118°05.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### REMARKS: Portions of AR4A lie within SADDLE airspace. Receiver units scheduling this track must contact the 366 FW Scheduling at DSN 728-2172 or 728-4607 to ensure deconfliction of air refueling operations with SADDLE activity. AR4B (South) - To make an early exit from this track, air crews will file to NAV point DNJ 247/030 as an end point for refueling.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR5H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(East)</td>
<td>N39°20.00'</td>
<td>W131°00.00'</td>
<td>N39°23.00'</td>
<td>N39°23.00'</td>
<td>N39°23.00'</td>
<td>ENI VORTAC 279/38</td>
<td>FL250/FL330</td>
<td>Oakl</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>arid</td>
</tr>
</tbody>
</table>

**REMARKS:** Tankers westbound on the track may routinely proceed to the exit point, execute a right turn and continue refueling eastbound, when annotated on the flight plan. Flight plan remarks will state: Continuous refueling through turn and eastbound to ARCP. SODAR authorized with AR5L.

| AR5L   |      |      |                          |      |         |                      |                 |                |
| (East) | N39°20.00' | W131°00.00' | N39°23.00' | N39°23.00' | N39°23.00' | ENI VORTAC 279/38 | FL250/FL330 | Oakl | ARCP-387.1E |
|        |      |      |                          |      |         |                      |                 | arid | EXIT-134.15E |

**REMARKS:** Tankers westbound on the track may routinely proceed to the exit point, execute a right turn and continue refueling eastbound, when annotated on the flight plan. Flight plan remarks will state: Continuous refueling through turn and eastbound to ARCP. SODAR authorized with AR5L.

| AR5L   |      |      |                          |      |         |                      |                 |                |
| (West) |      |      |                          |      |         |                      |                 |                |
|        |      |      |                          |      |         |                      |                 | Oakl | ARCP-387.1W |
|        |      |      |                          |      |         |                      |                 | arid | EXIT-134.15W |

**REMARKS:** Tankers westbound on the track may routinely proceed to the exit point, execute a right turn and continue refueling eastbound, when annotated on the flight plan. Flight plan remarks will state: Continuous refueling through turn and eastbound to ARCP. SODAR authorized with AR5L.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR6</td>
<td>SNS VORTAC</td>
<td>SNS VORTAC</td>
<td>SNS VORTAC 137/102</td>
<td>W121°45.00'</td>
<td>ENI VORTAC 291/53</td>
<td>FL250/FL330</td>
<td>60OSS/OSS</td>
<td>Oakland ARCP-290.5W</td>
</tr>
<tr>
<td></td>
<td>N35°08.00'</td>
<td>N36°03.00'</td>
<td>N37°12.00'</td>
<td>W122°28.00'</td>
<td>N39°48.00'</td>
<td>N35°08.00'</td>
<td>N39°08.00'</td>
<td>N/R</td>
</tr>
<tr>
<td></td>
<td>W120°41.00'</td>
<td>W121°45.00'</td>
<td>W124°09.00'</td>
<td>W123°37.00'</td>
<td>W120°41.00'</td>
<td>N/R</td>
<td>N/Re</td>
<td>50/113</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SNS VORTAC 137/102</td>
<td>W121°45.00'</td>
<td>ENI VORTAC 291/53</td>
<td>FL250/FL330</td>
<td>60OSS/OSS</td>
<td>Oakland ARCP-290.3E</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N35°08.00'</td>
<td>N36°03.00'</td>
<td>N37°12.00'</td>
<td>N35°08.00'</td>
<td>N39°08.00'</td>
<td>N/R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W120°41.00'</td>
<td>W121°45.00'</td>
<td>W124°09.00'</td>
<td>W123°37.00'</td>
<td>W120°41.00'</td>
<td>N/R</td>
</tr>
</tbody>
</table>

**Remarks:** Hours of operation: 1630-2359Z++ and 0330-1400Z++ daily. All turns shall be made to the west.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR7A</td>
<td>RBL VORTAC</td>
<td>RBL VORTAC</td>
<td>RBL VORTAC 098/76</td>
<td>W120°48.00'</td>
<td>LKV VORTAC 176/51</td>
<td>FL240/FL310</td>
<td>60OSS/OSS</td>
<td>Travis AFB, CA</td>
</tr>
<tr>
<td></td>
<td>098/76</td>
<td>042/76</td>
<td>N39°32.00'</td>
<td>W120°48.00'</td>
<td>N41°40.00'</td>
<td>325°52</td>
<td>236.500</td>
<td>52/115</td>
</tr>
<tr>
<td></td>
<td>N39°48.00'</td>
<td>N40°44.00'</td>
<td>N39°20.00'</td>
<td>W120°50.00'</td>
<td>N42°31.00'</td>
<td>257/13</td>
<td>236.500</td>
<td>52/115</td>
</tr>
<tr>
<td></td>
<td>W120°48.00'</td>
<td>W125°50.00'</td>
<td>N42°31.00'</td>
<td>W120°48.00'</td>
<td>N42°31.00'</td>
<td>257/13</td>
<td>236.500</td>
<td>52/115</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LKV VORTAC 176/51</td>
<td>W120°48.00'</td>
<td>N39°48.00'</td>
<td>N39°20.00'</td>
<td>W120°50.00'</td>
<td>N42°31.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N41°40.00'</td>
<td>W120°48.00'</td>
<td>N42°31.00'</td>
<td>W120°48.00'</td>
<td>N42°31.00'</td>
<td>W120°48.00'</td>
</tr>
</tbody>
</table>

**Remarks:** Refueling southbound only. Due to ARTCC VHF communication limitations, contact ARTCC 10 minutes prior to the end of track with tanker and receiver END AR request.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR7B</td>
<td>RBL VORTAC</td>
<td>RBL VORTAC</td>
<td>RBL VORTAC 098/76</td>
<td>W120°48.00'</td>
<td>LKV VORTAC 176/51</td>
<td>FL240/FL310</td>
<td>60OSS/OSS</td>
<td>Travis AFB, CA</td>
</tr>
<tr>
<td></td>
<td>098/76</td>
<td>042/76</td>
<td>N39°32.00'</td>
<td>W120°48.00'</td>
<td>N41°40.00'</td>
<td>325°52</td>
<td>236.500</td>
<td>52/115</td>
</tr>
<tr>
<td></td>
<td>N39°48.00'</td>
<td>N40°44.00'</td>
<td>N39°20.00'</td>
<td>W120°50.00'</td>
<td>N42°31.00'</td>
<td>257/13</td>
<td>236.500</td>
<td>52/115</td>
</tr>
<tr>
<td></td>
<td>W120°48.00'</td>
<td>W125°50.00'</td>
<td>N42°31.00'</td>
<td>W120°48.00'</td>
<td>N42°31.00'</td>
<td>257/13</td>
<td>236.500</td>
<td>52/115</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LKV VORTAC 176/51</td>
<td>W120°48.00'</td>
<td>N39°48.00'</td>
<td>N39°20.00'</td>
<td>W120°50.00'</td>
<td>N42°31.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N41°40.00'</td>
<td>W120°48.00'</td>
<td>N42°31.00'</td>
<td>W120°48.00'</td>
<td>N42°31.00'</td>
<td>W120°48.00'</td>
</tr>
</tbody>
</table>

**Remarks:** Refuel northbound only.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR8A</td>
<td>EUG VORTAC</td>
<td>OED VORTAC</td>
<td>RBL VORTAC</td>
<td>278/114</td>
<td>a. 240.350</td>
<td>FL240/FL330</td>
<td>60OSS/OSO</td>
<td>Seattle</td>
</tr>
<tr>
<td></td>
<td>255/55</td>
<td>272/75</td>
<td>N40°54.00'</td>
<td>N42°30.00'</td>
<td>b. 256.650</td>
<td></td>
<td>Travis AFB, CA</td>
<td>ARCP-360.7E</td>
</tr>
<tr>
<td></td>
<td>N44°07.00'</td>
<td>W124°30.00'</td>
<td>W124°30.00'</td>
<td>N42°30.00'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 837-7151</td>
<td>EXIT-360.7E</td>
</tr>
<tr>
<td></td>
<td>W124°30.00'</td>
<td>N42°30.00'</td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td>C707-424-7151</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 33/96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>Refuel southbound only.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR8B</td>
<td>RBL VORTAC</td>
<td>OED VORTAC</td>
<td>OED VORTAC</td>
<td>EUG VORTAC</td>
<td>a. 305.500</td>
<td>FL240/FL330</td>
<td>60OSS/OSO</td>
<td>Seattle</td>
</tr>
<tr>
<td></td>
<td>228/58</td>
<td>191/79</td>
<td>247/40</td>
<td>255/25</td>
<td>b. 256.650</td>
<td></td>
<td>Travis AFB, CA</td>
<td>ARCP-360.7W</td>
</tr>
<tr>
<td></td>
<td>N39°42.00'</td>
<td>N41°20.00'</td>
<td>N42°26.00'</td>
<td>N44°07.00'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 837-7151</td>
<td>EXIT-279.6W</td>
</tr>
<tr>
<td></td>
<td>W123°23.00'</td>
<td>W123°48.00'</td>
<td>W123°48.00'</td>
<td>W123°48.00'</td>
<td>d. N/R</td>
<td></td>
<td>C707-424-7151</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 32/95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>Refuel northbound only.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER</td>
<td>ARIP</td>
<td>ARCP</td>
<td>NAVIGATION CHECK POINTS</td>
<td>EXIT</td>
<td>CR PLAN</td>
<td>REFUELING ALTITUDES</td>
<td>SCHEDULING UNIT</td>
<td>ASSIGNED ARTCC</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------</td>
<td>------------------</td>
<td>------------------------------------------</td>
<td>---------------</td>
<td>-------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>AR9</td>
<td>GEG VORTAC 285/36</td>
<td>MLP VOR-DME 330/56</td>
<td>GTF VORTAC 299/94 N48°38.00' W111°49.00'</td>
<td>LWT VOR-DME 018/117</td>
<td>a. 238.900</td>
<td>FL240/FL270</td>
<td>120FW</td>
<td>Salt Lake City</td>
</tr>
<tr>
<td>(East)</td>
<td>N47°55.00'</td>
<td>N48°21.00'</td>
<td>N48°40.00' W108°00.00' GTF VORTAC 331/73</td>
<td>N48°40.00' W108°00.00'</td>
<td>b. 292.600</td>
<td>FL310/FL330</td>
<td>Great Falls, IAP, MT</td>
<td>ARCP-251.1E</td>
</tr>
<tr>
<td></td>
<td>W118°21.50'</td>
<td>W116°00.00'</td>
<td>N48°38.00' W111°49.00' MLP VOR-DME 324/104</td>
<td>W110°32.00' LWT VOR-DME 353/98</td>
<td>c. N/R</td>
<td>DSN 791-0192</td>
<td></td>
<td>EXIT-269.4E</td>
</tr>
<tr>
<td>AR9</td>
<td>LWT VOR-DME 018/117</td>
<td>LWT VOR-DME 324/104</td>
<td>GFT VORTAC 293/106 N48°32.00' W113°30.00'</td>
<td>GEG VORTAC 285/36</td>
<td>N47°55.00'</td>
<td>360/42</td>
<td></td>
<td>Salt Lake City</td>
</tr>
<tr>
<td>(West)</td>
<td>N48°40.00' W108°00.00'</td>
<td>N48°40.00' W110°32.00'</td>
<td>N48°28.00' W114°47.00' MLP VOR-DME 015/70</td>
<td>N47°55.00' W118°21.50'</td>
<td>N/R</td>
<td>ARCP-317.6W</td>
<td>120FW</td>
<td>EXIT-251.1W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N48°21.00' W116°00.00' MLP VOR-DME 330/56</td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GEG VORTAC 30/93 N48°13.00' W117°15.00'</td>
<td></td>
<td>e. 30/93</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** AR9 and AR9A simultaneous operations not authorized. See remarks section AR9A.
### AR ROUTES

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR9A</td>
<td>GEG VORTAC</td>
<td>MLP VOR-DME</td>
<td>GTF VORTAC 299/94 N48°33.00' W113°05.00'</td>
<td>GTF VORTAC 357/74 N48°39.00' W111°00.00'</td>
<td>a. 238.900 b. 292.600 c. N/R d. N/R e. 30/93</td>
<td>FL240/FL270 FL310/FL330</td>
<td>120FW Great Falls, IAP, MT DSN 791-0192</td>
<td>Salt Lake City ARCP-251.1E EXIT-269.4E</td>
</tr>
</tbody>
</table>

**REMARKS:** AR9 and AR9A simultaneous operations not authorized. To deconflict AR9 from AR604/Bearpaw ATCAA, scheduling unit will assign AR9A. Scheduling unit will inform users when abbreviated track is required; otherwise AR9 will be flown full length. End eastbound refueling operations no later than W111-00-00 (GTF 357/74). Complete turn for westbound (reverse course) operation no later than W110-32-00 (LWT 323/103). Bearpaw ATCAA N49-00-00 W110-00-00 to N49-00-00 W107-00-00 to N47-30-00 W107-00-00 to N47-30-00 W110-00-00 to beginning.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>GTF VORTAC 233/36 N48°21.00' W116°00.00'</td>
<td>GTF VORTAC 330/56 N48°38.00' W111°49.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** When AR10 (Northwest) is flown in conjunction with AR10 (Southeast), HLN 158/69 may be used as an alternate exit point. Crews planning on ending refueling operations at the alternate exit point should advise ATC prior to course reversal. Upon exiting AR10 (Southeast), crews should plan a left turn for course reversal to joint AR10 (Northwest).
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR11</td>
<td>OCS VOR-DME 359/33</td>
<td>CZI VOR-DME 171/112</td>
<td>BFF VORTAC 276/36</td>
<td>RAP VORTAC 121/114</td>
<td>a. 235.100</td>
<td>FL230/FL260</td>
<td>Denver ARCP-363.025E</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N42°08.00'</td>
<td>N42°08.00'</td>
<td>N42°05.00'</td>
<td>N42°05.00'</td>
<td>b. 320.900</td>
<td>28 OSS/OSXS Ellsworth AFB, SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W108°52.00'</td>
<td>W106°36.00'</td>
<td>W104°15.00'</td>
<td>W101°09.00'</td>
<td>c. N/R</td>
<td>DSN 675-4246. C605-385-4246</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td>(After hours: relay through Raymond 33 DSN 675-3800)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 33/96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR12H</td>
<td>BIL VORTAC 343/32</td>
<td>MLS VOR-DME 222/16</td>
<td>MLS VOR-DME 103/34</td>
<td>DPR VOR-DME 347/25</td>
<td>a. 352.600</td>
<td>FL270/FL310</td>
<td>Minneapolis EXIT-317.5E Salt Lake City</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N46°20.00'</td>
<td>N46°13.00'</td>
<td>N46°10.00'</td>
<td>N45°30.00'</td>
<td>b. 320.900</td>
<td>28 OSS/OSXS Ellsworth AFB, SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W108°40.00'</td>
<td>W106°15.00'</td>
<td>W105°12.00'</td>
<td>W101°45.00'</td>
<td>c. N/R</td>
<td>DSN 675-4246. (After hours: relay through Raymond 33 - 675-3800)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DIK VORTAC 209/75</td>
<td>BIL VORTAC 343/32</td>
<td>d. N/R</td>
<td>C605-385-4246</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N45°56.00'</td>
<td>W104°00.00'</td>
<td>e. 31/94</td>
<td>(After hours: relay through Raymond 33 - 675-3800)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W104°15.00'</td>
<td>W108°52.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR12L</td>
<td>DPR VOR-DME 347/25</td>
<td>DIK VORTAC 209/75</td>
<td>MLS VOR-DME 103/34</td>
<td>BIL VORTAC 343/32</td>
<td>a. 352.600</td>
<td>FL270/FL310</td>
<td>Salt Lake City ARCP-272.75E</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N45°30.00'</td>
<td>N45°56.00'</td>
<td>N46°10.00'</td>
<td>N46°20.00'</td>
<td>b. 320.900</td>
<td>28 OSS/OSXS Ellsworth AFB, SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W101°45.00'</td>
<td>W104°00.00'</td>
<td>W105°12.00'</td>
<td>W108°40.00'</td>
<td>c. N/R</td>
<td>DSN 675-4246. (After hours: relay through Raymond 33 - 675-3800)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DiK VORTAC 209/75</td>
<td>BIL VORTAC 343/32</td>
<td>d. N/R</td>
<td>C605-385-4246</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N45°56.00'</td>
<td>W104°15.00'</td>
<td>e. 31/94</td>
<td>(After hours: relay through Raymond 33 - 675-3800)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N46°13.00'</td>
<td>W106°36.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** For AR11 (East) SODAR operations are authorized with AR14B (West). For AR11 (West) SODAR operations are authorized with AR14B (East).

**REMARKS:** SODAR authorized with AR12L.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>(East)</td>
<td>N46°20.00' W108°40.00'</td>
<td>N46°13.00' W106°15.00'</td>
<td>N45°56.00' W104°00.00'</td>
<td>N45°30.00' W101°45.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>DPR VOR-DME 347/25</td>
<td>DIK VORTAC 209/75</td>
<td>BIL VORTAC 343/32</td>
<td>N46°13.00' W106°15.00'</td>
<td></td>
<td></td>
<td></td>
<td>Salt Lake City</td>
</tr>
<tr>
<td></td>
<td>N45°30.00' W101°45.00'</td>
<td>N45°56.00' W104°00.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ARCP-272.75W EXIT-351.9W</td>
</tr>
<tr>
<td>REMARKS:</td>
<td>SODAR authorized with AR12H.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR13</td>
<td>TCC VORTAC 203/38</td>
<td>PNH VORTAC 197/35</td>
<td>SPS VORTAC 283/78</td>
<td>SPS VORTAC 051/31</td>
<td>FL240/FL310</td>
<td>2OSS/OSOS Barksdale AFB, LA DSN 781-4832/7076 C318-456-4832/7076</td>
<td>Fort Worth</td>
<td>ARCP-381.6E EXIT-285.6E</td>
</tr>
<tr>
<td>(East)</td>
<td>N34°40.00' W104°02.00'</td>
<td>N34°42.00' W102°00.00'</td>
<td>N34°29.00' W100°03.00'</td>
<td>N34°14.00' W98°03.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPS VORTAC 304/30</td>
<td>N34°20.00' W99°01.50'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. 238.900</td>
<td>b. 260.200</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 32/95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>SPS VORTAC 051/31</td>
<td>SPS VORTAC 283/78</td>
<td>PNH VORTAC 197/35</td>
<td>TCC VORTAC 203/38</td>
<td></td>
<td></td>
<td></td>
<td>Fort Worth</td>
</tr>
<tr>
<td></td>
<td>N34°14.00' W98°03.00'</td>
<td>N34°29.00' W100°03.00'</td>
<td>N34°29.00' W102°00.00'</td>
<td>N34°40.00' W104°02.00'</td>
<td></td>
<td></td>
<td></td>
<td>ARCP-285.6W EXIT-251.1W</td>
</tr>
<tr>
<td>REMARKS:</td>
<td>1 Primary means of scheduling track reservation requests is CSE. Email <a href="mailto:2ossoso@us.af.mil">2ossoso@us.af.mil</a> for any questions/concerns.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 A/R prohibited 1630 - 1930Z++ and 2330 - 0130Z++.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### AR14

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>(East)</td>
<td>OCS VOR-DME</td>
<td>C2I VOR-DME</td>
<td>BFF VORTAC</td>
<td>RAP VOR</td>
<td>a. 336.100</td>
<td>FL190/FL220</td>
<td>28OSS/OSXS</td>
<td>Denver</td>
</tr>
<tr>
<td></td>
<td>359/33</td>
<td>171/112</td>
<td>276/36</td>
<td>121/114</td>
<td>b. 359.100</td>
<td></td>
<td></td>
<td>ARCP-239.0E</td>
</tr>
<tr>
<td></td>
<td>N42°08.00'</td>
<td>N42°05.00'</td>
<td>N42°39.00'</td>
<td>N100°3</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W108°52.00'</td>
<td>W104°15.00'</td>
<td>W101°09.00'</td>
<td>N100°3</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>RAP VOR</td>
<td>BFF VORTAC</td>
<td>BFF VORTAC</td>
<td>OCS VOR-DME</td>
<td>359/33</td>
<td>121/114</td>
<td>b. 359.100</td>
<td>N100°3</td>
</tr>
<tr>
<td></td>
<td>121/114</td>
<td>005/24</td>
<td>276/36</td>
<td>121/114</td>
<td>b. 359.100</td>
<td></td>
<td></td>
<td>Denver</td>
</tr>
<tr>
<td></td>
<td>N42°39.00'</td>
<td>N42°05.00'</td>
<td>N42°08.00'</td>
<td>N100°3</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>ARCP-338.2W</td>
</tr>
<tr>
<td></td>
<td>W101°09.00'</td>
<td>W104°15.00'</td>
<td>W108°52.00'</td>
<td>N100°3</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td>Lake City</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td>EXIT-291.6W</td>
</tr>
</tbody>
</table>

**REMARKS:** AR14 (East) SODAR operations are authorized with AR11 (West). AR14 (West) SODAR operations are authorized with AR11 (East).

### AR16

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>(East)</td>
<td>PWE VORTAC</td>
<td>LMN VOR-DME</td>
<td>IRK VORTAC</td>
<td>IRK VOR</td>
<td>a. 343.500</td>
<td>FL240/FL260</td>
<td>1ACCS</td>
<td>Chicago</td>
</tr>
<tr>
<td></td>
<td>183/32</td>
<td>207/38</td>
<td>318/18</td>
<td>059/84</td>
<td>b. 319.700</td>
<td></td>
<td></td>
<td>EXIT-353.5E Kansas City</td>
</tr>
<tr>
<td></td>
<td>N39°40.00'</td>
<td>N40°03.80'</td>
<td>N40°22.50'</td>
<td>N40°3</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>ARCP-343.7E</td>
</tr>
<tr>
<td></td>
<td>W96°18.50'</td>
<td>W94°25.80'</td>
<td>W92°49.30'</td>
<td>W90°5</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>IRK VORTAC</td>
<td>IRK VORTAC</td>
<td>LMN VOR-DME</td>
<td>PWE VOR</td>
<td>e. 30/93</td>
<td></td>
<td>28OSS/OSXS</td>
<td>Denver</td>
</tr>
<tr>
<td></td>
<td>059/84</td>
<td>318/18</td>
<td>207/38</td>
<td>183/32</td>
<td></td>
<td></td>
<td></td>
<td>ARCP-353.7W</td>
</tr>
<tr>
<td></td>
<td>N40°43.50'</td>
<td>N40°03.80'</td>
<td>N40°22.50'</td>
<td>N39°4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W90°55.50'</td>
<td>W94°25.80'</td>
<td>W92°49.30'</td>
<td>W96°18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Aircrews File AR016 on DD 175 or DD 1801 to deconflict with other routing with same identifier.

### AR17

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>(North)</td>
<td>HLC VORTAC</td>
<td>HCT VORTAC</td>
<td>TDD VOR-DME</td>
<td>RAP VOR</td>
<td>a. 276.500</td>
<td>FL190/FL220</td>
<td>28OSS/OSXS</td>
<td>Denver</td>
</tr>
<tr>
<td></td>
<td>N39°15.52'</td>
<td>N40°54.00'</td>
<td>N40°54.00'</td>
<td>N40°5</td>
<td>b. 320.900</td>
<td></td>
<td></td>
<td>ARCP-353.7W</td>
</tr>
<tr>
<td></td>
<td>W100°13.55'</td>
<td>W100°31.00'</td>
<td>W100°31.00'</td>
<td>N100°3</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(South)</td>
<td>RAP VOR</td>
<td>TDD VOR-DME</td>
<td>TDD VOR-DME</td>
<td>HLC VOR</td>
<td>e. 50/113</td>
<td></td>
<td></td>
<td>Denver</td>
</tr>
<tr>
<td></td>
<td>140/23</td>
<td>309/35</td>
<td>N41°58.90'</td>
<td>N39°1</td>
<td></td>
<td></td>
<td></td>
<td>ARCP-338.2E</td>
</tr>
<tr>
<td></td>
<td>N43°38.00'</td>
<td>N42°25.00'</td>
<td>W100°43.14'</td>
<td>N100°3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W102°46.00'</td>
<td>W101°15.00'</td>
<td>W100°13.55'</td>
<td>N100°3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** None
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(North)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HLC VORTAC</td>
<td>HCT VORTAC</td>
<td>TDD VOR-DME</td>
<td>RAP VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>061/30</td>
<td>037/59</td>
<td>041/07.00'</td>
<td>042/12.00'</td>
<td>043/51.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N39°26.00'</td>
<td>W99°38.00'</td>
<td>W99°57.50'</td>
<td>W100°11.00'</td>
<td>W102°07.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(South)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RAP VORTAC</td>
<td>TDD VOR-DME</td>
<td>TDD VOR-DME</td>
<td>HLC VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>088/40</td>
<td>356/37</td>
<td>052/27</td>
<td>052/27</td>
<td>061/30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N43°51.00'</td>
<td>N42°36.00'</td>
<td>N42°12.00'</td>
<td>N39°26.00'</td>
<td>W99°38.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** FL 270/FL 290 to be used only between 0230-1630Z++ daily.

<table>
<thead>
<tr>
<th>AR20</th>
<th>YQI VOR-DME</th>
<th>YQI VOR-DME</th>
<th>YHZ VOR-DME</th>
<th>YQY VOR-DME</th>
<th>15000/FL280</th>
<th>NEADS/DOAS</th>
<th>Rome, NY</th>
<th>DSN 587-6247</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Northeast)</td>
<td>247/82</td>
<td>N43°49.51'</td>
<td>N44°55.39'</td>
<td>N46°09.20'</td>
<td></td>
<td></td>
<td>Boston</td>
<td>E Moncton</td>
</tr>
<tr>
<td></td>
<td>N42°56.74'</td>
<td>W66°04.95'</td>
<td>W63°24.11'</td>
<td>W60°03.35'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W67°30.45'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Southwest)</td>
<td>082/100</td>
<td>N46°09.20'</td>
<td>N44°55.39'</td>
<td>N43°49.51'</td>
<td></td>
<td></td>
<td>Gander</td>
<td>W Moncton</td>
</tr>
<tr>
<td></td>
<td>N46°53.38'</td>
<td>W60°03.35'</td>
<td>W63°24.11'</td>
<td>W66°04.95'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W67°53.45'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Primary means of scheduling track reservation requests is email to: doas@neads.ang.af.mil. Transatlantic fighter crossings will still require altitude reservations.

1. Alternate Primary freq: 305.5. Alternate Backup freq: 265.65

2. AR20 (SOUTHWEST) REFUELING ALTITUDES: BTN FL230 and FL250, or BTN FL260 and FL280.

<table>
<thead>
<tr>
<th>AR24</th>
<th>HLC VORTAC</th>
<th>HCT VORTAC</th>
<th>TDD VOR-DME</th>
<th>RAP VORTAC</th>
<th>28 OSS/OSXS</th>
<th>Ellsworth AFB, SD</th>
<th>DSN 675-4246</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(North)</td>
<td>061/30</td>
<td>037/59</td>
<td>041/07.00'</td>
<td>042/12.00'</td>
<td>043/51.00'</td>
<td>N39°26.00'</td>
<td>088/40</td>
<td>320.900</td>
</tr>
<tr>
<td>N39°26.00'</td>
<td>W99°38.00'</td>
<td>W99°57.50'</td>
<td>W100°11.00'</td>
<td>W102°07.00'</td>
<td>N43°51.00'</td>
<td>N/193</td>
<td>300/93</td>
<td></td>
</tr>
<tr>
<td>(South)</td>
<td>RAP VORTAC</td>
<td>TDD VOR-DME</td>
<td>TDD VOR-DME</td>
<td>HLC VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>088/40</td>
<td>356/37</td>
<td>052/27</td>
<td>052/27</td>
<td>061/30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N43°51.00'</td>
<td>N42°36.00'</td>
<td>N42°12.00'</td>
<td>N39°26.00'</td>
<td>W99°38.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W102°07.00'</td>
<td>W100°38.50'</td>
<td>W100°11.00'</td>
<td>W100°11.00'</td>
<td>W102°07.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** None
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR62</td>
<td>YKL VOR-DME</td>
<td>YKL VOR-DME</td>
<td>YKL VOR-DME</td>
<td>YVR VOR-DME</td>
<td>014/152</td>
<td>FL210/FL280</td>
<td>NEADS/DOAS</td>
<td>Gander ACC</td>
</tr>
<tr>
<td></td>
<td>290/143</td>
<td>302/68</td>
<td>068/50</td>
<td>014/152</td>
<td>014/152</td>
<td></td>
<td></td>
<td>Rome, NY</td>
</tr>
<tr>
<td>CANADA</td>
<td>N54°40.00'</td>
<td>N55°00.00'</td>
<td>N55°23.00'</td>
<td>N55°50.00'</td>
<td>N55°50.00'</td>
<td></td>
<td></td>
<td>DSN 587-6247</td>
</tr>
<tr>
<td></td>
<td>014/152</td>
<td>089/133</td>
<td>068/43.00'</td>
<td>W60°51.00'</td>
<td>W60°51.00'</td>
<td></td>
<td></td>
<td>C315-334-6247</td>
</tr>
<tr>
<td></td>
<td>W70°51.00'</td>
<td>W70°51.00'</td>
<td>W70°51.00'</td>
<td>W70°51.00'</td>
<td>W70°51.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YKL VOR-DME</td>
<td>ACK VOR-DME</td>
<td>N42°00.00'</td>
<td>YQI VOR-DME</td>
<td>247/82</td>
<td>FL180/FL280</td>
<td>EADS/DOAS</td>
<td>Gander ACC</td>
</tr>
<tr>
<td></td>
<td>014/152</td>
<td>089/133</td>
<td>068/50</td>
<td>N42°56.00'</td>
<td>290/143</td>
<td></td>
<td></td>
<td>ARCP-135.4E</td>
</tr>
<tr>
<td></td>
<td>N55°40.00'</td>
<td>N55°38.00'</td>
<td>N55°23.00'</td>
<td>068/43.00'</td>
<td>068/43.00'</td>
<td></td>
<td></td>
<td>Mont-real ACC</td>
</tr>
<tr>
<td></td>
<td>N55°00.00'</td>
<td>N55°30.00'</td>
<td>W60°51.00'</td>
<td>W70°51.00'</td>
<td>W70°51.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W60°51.00'</td>
<td>W63°10.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>ACK VOR-DME</td>
<td>YQI VOR-DME</td>
<td></td>
<td>N42°49.51'</td>
<td>N42°49.51'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>014/152</td>
<td>089/133</td>
<td></td>
<td>068/43.00'</td>
<td>068/43.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N55°40.00'</td>
<td>N55°38.00'</td>
<td></td>
<td>W60°51.00'</td>
<td>W60°51.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N55°00.00'</td>
<td>N55°30.00'</td>
<td></td>
<td>W60°51.00'</td>
<td>W60°51.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W60°51.00'</td>
<td>W63°10.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACK VOR-DME</td>
<td>YQI VOR-DME</td>
<td></td>
<td>N42°49.51'</td>
<td>N42°49.51'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>014/152</td>
<td>089/133</td>
<td></td>
<td>068/43.00'</td>
<td>068/43.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N55°40.00'</td>
<td>N55°38.00'</td>
<td></td>
<td>W60°51.00'</td>
<td>W60°51.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N55°00.00'</td>
<td>N55°30.00'</td>
<td></td>
<td>W60°51.00'</td>
<td>W60°51.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W60°51.00'</td>
<td>W63°10.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:**
- Track comes within 12 NM of CYA 732 (controlled by Goose Bay).
- Primary means of scheduling track reservation requests is email: doas@neads.ang.af.mil

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR80</td>
<td>ACK VOR-DME</td>
<td>N42°00.00'</td>
<td>YQI VOR-DME</td>
<td>YQI VOR-DME</td>
<td>N43°49.51'</td>
<td>FL180/FL280</td>
<td>EADS/DOAS</td>
<td>Boston Center</td>
</tr>
<tr>
<td></td>
<td>150/18</td>
<td>247/82</td>
<td>247/82</td>
<td>N42°56.00'</td>
<td>N43°49.51'</td>
<td></td>
<td></td>
<td>ARCP-128.75/290.3</td>
</tr>
<tr>
<td></td>
<td>N41°04.00'</td>
<td>247/82</td>
<td>247/82</td>
<td>W67°30.00'</td>
<td>W67°30.00'</td>
<td></td>
<td></td>
<td>Moncton Center</td>
</tr>
<tr>
<td></td>
<td>W69°44.00'</td>
<td>247/82</td>
<td>247/82</td>
<td>DAVES</td>
<td>DAVES</td>
<td></td>
<td></td>
<td>EXIT-128.75/290.3</td>
</tr>
<tr>
<td>(Northwest)</td>
<td>YQI VOR-DME</td>
<td>N42°00.00'</td>
<td>YQI VOR-DME</td>
<td>YQI VOR-DME</td>
<td>N43°49.51'</td>
<td>FL180/FL280</td>
<td>EADS/DOAS</td>
<td>Boston Center</td>
</tr>
<tr>
<td></td>
<td>247/82</td>
<td>247/82</td>
<td>247/82</td>
<td>N42°56.00'</td>
<td>N43°49.51'</td>
<td></td>
<td></td>
<td>ARCP-128.75/290.3</td>
</tr>
<tr>
<td></td>
<td>N43°49.51'</td>
<td>247/82</td>
<td>247/82</td>
<td>W67°30.00'</td>
<td>W67°30.00'</td>
<td></td>
<td></td>
<td>Moncton Center</td>
</tr>
<tr>
<td></td>
<td>W66°04.95'</td>
<td>247/82</td>
<td>247/82</td>
<td>DAVES</td>
<td>DAVES</td>
<td></td>
<td></td>
<td>EXIT-128.75/290.3</td>
</tr>
<tr>
<td></td>
<td>YQI VOR-DME</td>
<td>N42°00.00'</td>
<td>YQI VOR-DME</td>
<td>YQI VOR-DME</td>
<td>N43°49.51'</td>
<td>FL180/FL280</td>
<td>EADS/DOAS</td>
<td>Boston Center</td>
</tr>
<tr>
<td></td>
<td>247/82</td>
<td>247/82</td>
<td>247/82</td>
<td>N42°56.00'</td>
<td>N43°49.51'</td>
<td></td>
<td></td>
<td>ARCP-128.75/290.3</td>
</tr>
<tr>
<td></td>
<td>N43°49.51'</td>
<td>247/82</td>
<td>247/82</td>
<td>W67°30.00'</td>
<td>W67°30.00'</td>
<td></td>
<td></td>
<td>Moncton Center</td>
</tr>
<tr>
<td></td>
<td>W66°04.95'</td>
<td>247/82</td>
<td>247/82</td>
<td>DAVES</td>
<td>DAVES</td>
<td></td>
<td></td>
<td>EXIT-128.75/290.3</td>
</tr>
</tbody>
</table>

**REMARKS:**
- Participating aircraft will remain within track boundaries. Track is under radar control; therefore, it will be IAW ATC instructions. Preferred left hand turns when proceeding northeast and right hand turns while proceeding southwest. SODAR as determined by ATC.
- Primary means of scheduling track reservation requests is email: eads.doasomb@ang.af.mil.
- Airspace Manager/Owner is the 157th Air Refueling Wing Pease ANGB, NH.
- Huntress Primary 364.2 Secondary as dir by mil radar.

---

1. Primary means of scheduling track reservation requests is email: doas@neads.ang.af.mil.
2. Airspace Manager/Owner is the 157th Air Refueling Wing Pease ANGB, NH.
3. Huntress Primary 364.2 Secondary as dir by mil radar.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AR81</strong></td>
<td>HTO VORTAC</td>
<td>N40°42.00'</td>
<td>ACK VOR-DME 150/18</td>
<td>FL180/FL280</td>
<td>EADS/DOAS Rome, NY</td>
<td>Boston Center ARCP-135.8E/292.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>180/35</td>
<td>W71°00.00'</td>
<td>N41°04.00'</td>
<td>343.500</td>
<td>DAVES</td>
<td>135-334-6247</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N40°21.01'</td>
<td>W69°44.00'</td>
<td>N42°56.00'</td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W72°08.70'</td>
<td>YAHOO</td>
<td>W67°30.00'</td>
<td>40</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DAVES</td>
<td>50/113</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Primary means of scheduling track reservation request by email; eads.doasomb@ang.af.mil. Airspace manager/owner is the 157th Air Refueling Wing (Pease ANGB NH). Part of this AR track is located in W-105 airspace. Prior coordination is required with EADS and VACAPES for airspace de-confliction. Contact VACAPES (Giant Killer) prior to W-105 usage, DSN: 433-1286/1216 C757-433-1286/1216. Participating aircraft will remain within track boundaries. Simultaneous refueling in opposite direction of AR80 (Southwest Bound) is authorized provided the tracks are vertically separated by a minimum of 2,000' between altitude blocks. Track is under radar control, therefore it will be IAW ATC instructions.

1. Primary means of scheduling track reservation requests is email: eads.doasomb@ang.af.mil.
2. Airspace Manager/Owner is the 157th Air Refueling Wing Pease ANGB, NH.
3. Part of this track is located in W-105 airspace. Prior coordination is required with EADS and VACAPES for airspace deconfliction. Contact VACAPES (Giant Killer) prior to W-105 usage, DSN: 433-1286/1216 C757-433-1286/1216.

<table>
<thead>
<tr>
<th><strong>AR101</strong></th>
<th>HRV VORTAC</th>
<th>MEM VORTAC</th>
<th>MCB VORTAC</th>
<th>SQS VORTAC</th>
<th>HRV VORTAC</th>
<th>OSS/OSOS</th>
<th>MEMPHIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(North)</td>
<td>280/44</td>
<td>336/64</td>
<td>336/64</td>
<td>330/36</td>
<td>280/44</td>
<td>OSS/OSOS</td>
<td>OSS/OSOS</td>
</tr>
<tr>
<td></td>
<td>250/27</td>
<td>N36°00.00'</td>
<td>N36°00.00'</td>
<td>N34°00.00'</td>
<td>300/00.00'</td>
<td>OSS/OSOS</td>
<td>OSS/OSOS</td>
</tr>
<tr>
<td></td>
<td>W90°50.00'</td>
<td>N36°00.00'</td>
<td>W90°50.00'</td>
<td>W90°50.00'</td>
<td>W90°50.00'</td>
<td>OSS/OSOS</td>
<td>OSS/OSOS</td>
</tr>
<tr>
<td>(South)</td>
<td>336/64</td>
<td>330/36</td>
<td>330/36</td>
<td>330/36</td>
<td>330/36</td>
<td>OSS/OSOS</td>
<td>OSS/OSOS</td>
</tr>
<tr>
<td></td>
<td>330/36</td>
<td>N36°00.00'</td>
<td>N34°00.00'</td>
<td>N34°00.00'</td>
<td>N34°00.00'</td>
<td>OSS/OSOS</td>
<td>OSS/OSOS</td>
</tr>
</tbody>
</table>

**REMARKS:**
1. Primary means of scheduling track reservation requests through CSE. Questions email 2ossoso@us.af.mil.
2. SOUTH ARCP-Between 1500-1630Z++ limited to either buddy, on course or enroute cell rendezvous.
3. SOUTH EXIT - When refueling on the southbound track, aircraft will exit the track with turns to the right unless otherwise authorized by ATC.
4. Refueling is prohibited between 1900Z++ and 2100Z++.
5. SOUTH ASSIGNED ARTCC-ARCP- 322.35/133.075; use ARIP 257.6/132.375 between 1500-1630Z++ or when buddy, on course or enroute cell is planned.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR102A (East)</td>
<td>ABI VORTAC 044/16</td>
<td>MQP VORTAC 106/20</td>
<td>ACT VORTAC 035/76 N32°34.00' W96°13.70'</td>
<td>EIC VORTAC 120/35 N32°25.00' W93°16.00'</td>
<td>a. 276.500 b. 260.200 c. N/R d. N/R e. 30/93</td>
<td>FL240/FL310 7OSS/OSR</td>
<td>Dyess AFB, TX DSN 461-3665 C325-696-3665</td>
<td>Fort Worth ARCP-323.0E EXIT-327.8E</td>
</tr>
<tr>
<td>AR102B</td>
<td>LBB VORTAC 233/70 N33°11.00' W103°09.00'</td>
<td>LBB VORTAC 149/48 N32°57.00' W101°35.00'</td>
<td>ABI VORTAC 044/16 N32°38.00' W99°37.00'</td>
<td>MQP VORTAC 106/20 N32°35.00' W97°38.00'</td>
<td>ACT VORTAC 035/76 N32°34.00' W96°13.70'</td>
<td>TXK VORTAC 199/70 N32°27.70' W94°40.00'</td>
<td>EIC VORTAC 120/35 N32°25.00' W93°16.00'</td>
<td>FL240/FL310 7OSS/OSR</td>
</tr>
</tbody>
</table>

**REMARKS:**
1. Primary means of scheduling track reservation requests is through CSE.
2. After hours scheduling is not available.
3. Open for night-time use only: 0240-1200Z++.
4. Restricted to a refueling block altitude of FL 270/FL 290 between 0240-0500Z++.
5. No simultaneous refueling with AR102A.

AR103 | MCB VORTAC 304/39 N31°42.00' W90°52.00' | HRV VORTAC 319/14 N30°01.80' W89°43.00' | N29°09.00' W89°41.00' N27°30.00' W88°43.00' N25°32.00' W87°37.00' | N24°20.00' W87°05.00' | a. 327.600 b. 260.200 c. N/R d. N/R e. 32/95 | FL240/FL260 5OSS/OSKR | Offutt AFB, NE DSN 271-5009 C402-294-5009 | Houston ARCP |

**REMARKS:** To be used by Offutt based aircraft and support tankers only. Tanker Orbit Pattern: N29-48-00 W90-11-00 to N29-56-00 W89-43-00 to N30-54-00 W90-08-00 to N30-45-00 W90-35-00. Email: 5OSSOSKR@offutt.af.mil
### AR104

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR104</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSS/OSOS</td>
<td></td>
</tr>
</tbody>
</table>
| (East) | 189/28 | 225/99 | AB1 VORTAC 149/46 | ACT VORTAC N31°46.00' W99°32.00' | a. 344.700 | FL260/FL310 | Barksdale AFB, LA  
DSN 781-4832/7076  
C318-456-4832/7076 | Fort Worth  
ARCP-269.0E  
EXIT-269.0E |
|        | N31°26.00' | N31°31.00' |                        | N32°00.00' W97°30.00' | b. 260.200 |         |               |               |
|        | W103°26.00' | W101°26.00' |                        | W97°30.00' | c. N/R |         |               |               |
|        |          |          |                        |      | d. N/R |         |               |               |
|        |          |          |                        |      | e. 31/94 |         |               |               |

#### REMARKS:

1. Primary means of scheduling track reservation requests is through CSE. Email 2ossoso@us.af.mil for any questions/concerns.
2. SODAR Operations authorized with AR-113 and AR-114.

### AR104M

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR104M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSS/OSOS</td>
<td></td>
</tr>
</tbody>
</table>
|        |      |      |                         |      |         |                     | Barksdale AFB, LA  
DSN 781-4832/7076  
C318-456-4832/7076 | Fort Worth  
ARCP-351.9W  
EXIT-351.9W |
|        |      |      |                         |      |         |                     |               |               |
|        |      |      |                         |      |         |                     |               |               |
|        |      |      |                         |      |         |                     |               |               |

#### REMARKS:

1. Primary means of scheduling track reservation requests is through CSE. Email 2ossoso@us.af.mil for questions/concerns.
2. Air refueling authorized during the following hours only: 1600-1900Z++ (1000-1300 Central Time).
3. Restricted for use to B-52 FTU aircraft and support tankers only.
4. SODAR operations authorized with AR-113 and AR-114. No simultaneous refueling with AR-104.

### AR105

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSS/OSOS</td>
<td></td>
</tr>
</tbody>
</table>
| (East) |      |      |                         |      |         |                     | Barksdale AFB, LA  
DSN 781-4832/7076  
C318-456-4832/7076 | Minneapolis  
ARCP-269.0E  
EXIT-269.0E |
|        |      |      |                         |      |         |                     |               |               |
|        |      |      |                         |      |         |                     |               |               |
|        |      |      |                         |      |         |                     |               |               |

#### REMARKS:

1. Primary means of scheduling track reservation requests is through CSE. Email 2ossoso@us.af.mil for questions/concerns.
2. Air refueling authorized during the following hours only: 1600-1900Z++ (1000-1300 Central Time).
3. Restricted for use to B-52 FTU aircraft and support tankers only.
4. SODAR operations authorized with AR-113 and AR-114. No simultaneous refueling with AR-104.

### AR105 (West)

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSS/OSOS</td>
<td></td>
</tr>
</tbody>
</table>
| (West) |      |      |                         |      |         |                     | Barksdale AFB, LA  
DSN 781-4832/7076  
C318-456-4832/7076 | Minneapolis  
ARCP-269.0W  
EXIT-269.0W |
|        |      |      |                         |      |         |                     |               |               |
|        |      |      |                         |      |         |                     |               |               |
|        |      |      |                         |      |         |                     |               |               |

#### REMARKS:

1. Primary means of scheduling track reservation requests is through CSE. Email 2ossoso@us.af.mil for questions/concerns.
2. Air refueling authorized during the following hours only: 1600-1900Z++ (1000-1300 Central Time).
3. Restricted for use to B-52 FTU aircraft and support tankers only.
4. SODAR operations authorized with AR-113 and AR-114. No simultaneous refueling with AR-104.

### AR105

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSS/OSOS</td>
<td></td>
</tr>
</tbody>
</table>
| (West) |      |      |                         |      |         |                     | Barksdale AFB, LA  
DSN 781-4832/7076  
C318-456-4832/7076 | Minneapolis  
ARCP-269.0W  
EXIT-269.0W |
|        |      |      |                         |      |         |                     |               |               |
|        |      |      |                         |      |         |                     |               |               |
|        |      |      |                         |      |         |                     |               |               |

#### REMARKS:

1. Primary means of scheduling track reservation requests is through CSE. Email 2ossoso@us.af.mil for questions/concerns.
2. Air refueling authorized during the following hours only: 1600-1900Z++ (1000-1300 Central Time).
3. Restricted for use to B-52 FTU aircraft and support tankers only.
4. SODAR operations authorized with AR-113 and AR-114. No simultaneous refueling with AR-104.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR106H (East)</td>
<td>MLS VOR-DME 346/21</td>
<td>DIK VORTAC</td>
<td>217/46 N46°22.00' W103°38.00'</td>
<td>ABR VOR-DME 279/100 N45°52.00' W100°39.00'</td>
<td>ABR VOR-DME N45°25.04' W98°22.12'</td>
<td>a. 295.800 b. 320.900 c. N/R d. N/R e. 50/113</td>
<td>FL260/FL310</td>
<td>5 BMW Minot AFB, ND DSN 453-2002/3527 C701-723-2002/3527</td>
</tr>
<tr>
<td>(West)</td>
<td>ABR VOR-DME N45°25.04' W98°22.12'</td>
<td>ABR VOR-DME 279/100 N45°52.00' W100°39.00'</td>
<td>DIK VORTAC 217/46 N46°22.00' W103°38.00'</td>
<td>MLS VOR-DME 346/21 N45°52.00' W106°00.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR106L (East)</td>
<td>MLS VOR-DME 346/21</td>
<td>DIK VORTAC</td>
<td>217/46 N46°22.00' W103°38.00'</td>
<td>ABR VOR-DME 279/100 N45°52.00' W100°39.00'</td>
<td>ABR VOR-DME N45°25.04' W98°22.12'</td>
<td>a. 305.500 b. 320.900 c. N/R d. N/R e. 52/115</td>
<td>17000/FL230</td>
<td>55 WG Offutt AFB, NE DSN 271-6010 C402-294-6010</td>
</tr>
<tr>
<td>(West)</td>
<td>ABR VOR-DME N45°25.04' W98°22.12'</td>
<td>ABR VOR-DME 279/100 N45°52.00' W100°39.00'</td>
<td>DIK VORTAC 217/46 N46°22.00' W103°38.00'</td>
<td>MLS VOR-DME 346/21 N45°52.00' W106°00.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR107</td>
<td>TVC VOR-DME 191/49</td>
<td>TVC VOR-DME 053/26 N44°56.00' W85°05.00'</td>
<td>TVC VOR-DME 038/55 N45°24.00' W84°47.00'</td>
<td>TVC VOR-DME N44°40.08' W85°33.00'</td>
<td>a. 324.600 b. 282.700 c. N/R d. N/R e. 31/94</td>
<td>14000/FL230</td>
<td>Alpena Combat Readiness Training Center CRT/OTM (ANG), Alpena, MI DSN 741-6509/6226</td>
<td>Minneapolis ARCP-353.6E EXIT-353.6E</td>
</tr>
</tbody>
</table>

**REMARKS:**

- For AR106L, SODAR operations are authorized with AR106L.
- For AR106H, SODAR operations are authorized with AR106L.
- Refueling aircraft at the TVC VORTAC 038/55, shall execute a left turn and continue refueling southbound to the exit point.

**REMARKS:**

- SODAR operations are authorized with AR106L.
- Refueling aircraft at the TVC VORTAC 038/55, shall execute a left turn and continue refueling southbound to the exit point.

**REMARKS:**

- Refueling aircraft at the TVC VORTAC 038/55, shall execute a left turn and continue refueling southbound to the exit point.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR108</td>
<td>(East)</td>
<td>N27°30.00'</td>
<td>W93°30.00'</td>
<td>N27°30.00'</td>
<td>W91°37.00'</td>
<td>N27°30.00'</td>
<td>W88°25.00'</td>
<td>348.900</td>
</tr>
<tr>
<td></td>
<td>(West)</td>
<td>N27°30.00'</td>
<td>W93°25.00'</td>
<td>N27°30.00'</td>
<td>W91°18.00'</td>
<td>N27°30.00'</td>
<td>W88°25.00'</td>
<td>343.500</td>
</tr>
</tbody>
</table>

**REMARKS:**
1. Primary means of scheduling track reservation requests is through CSE. Email 2ossoso@us.af.mil for any questions/concerns.
2. Aerial refueling permitted from 1130-1330L and 1730-2300L daily. SODAR operations are authorized with AR108 in specific altitude blocks.
3. Refueling aircraft will execute a southbound turn and remain within 30 NM of track course and return to centerline within 20 NM of exit point/turn point.
4. 433 OSS/OSC scheduling agency will resolve conflicts with W92, W54 and AR101.
5. Southbound turns to avoid flying north into W147, W59 and northern sections of W92, W54, and AR101.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR109H</td>
<td>(East)</td>
<td>DLH VORTAC</td>
<td>240/53</td>
<td>N46°25.00'</td>
<td>N45°48.00'</td>
<td>W85°15.00'</td>
<td>343.500</td>
<td>320.900</td>
</tr>
<tr>
<td></td>
<td>(West)</td>
<td>TVC VOR-DME</td>
<td>013/66</td>
<td>N45°45.00'</td>
<td>N45°48.00'</td>
<td>W85°15.00'</td>
<td>343.500</td>
<td>320.900</td>
</tr>
</tbody>
</table>

**REMARKS:** SODAR authorized with AR109L. Email: 55OSSOSKR@offutt.af.mil

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR109L</td>
<td>(East)</td>
<td>DLH VORTAC</td>
<td>240/53</td>
<td>N46°25.00'</td>
<td>N45°48.00'</td>
<td>W85°15.00'</td>
<td>343.500</td>
<td>320.900</td>
</tr>
<tr>
<td></td>
<td>(West)</td>
<td>TVC VOR-DME</td>
<td>013/66</td>
<td>N45°45.00'</td>
<td>N45°48.00'</td>
<td>W85°15.00'</td>
<td>343.500</td>
<td>320.900</td>
</tr>
</tbody>
</table>

**REMARKS:** SODAR authorized with AR109H. Email: 55OSSOSKR@offutt.af.mil
### AR ROUTES

#### AR110

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR110</td>
<td>SGF VORTAC</td>
<td>SGF VORTAC</td>
<td>ENL VORTAC 256/109 N38°47.00' W91°25.00'</td>
<td>ENL VORTAC 073/8 N38°27.00' W89°00.00'</td>
<td>a. 327.600</td>
<td>FL240/FL270</td>
<td>509 OSS/OSOS</td>
<td>Kansas City ARCP-277.4E</td>
</tr>
<tr>
<td>(East)</td>
<td>039/23</td>
<td>N37°38.50' W93°00.00'</td>
<td>ENL VORTAC 256/109 N38°47.00' W91°25.00'</td>
<td>ENL VORTAC 073/8 N38°27.00' W89°00.00'</td>
<td>a. 327.600</td>
<td>FL240/FL270</td>
<td>509 OSS/OSOS</td>
<td>Kansas City ARCP-277.4E</td>
</tr>
<tr>
<td>AR111</td>
<td>SGF VORTAC</td>
<td>SGF VORTAC</td>
<td>ENL VORTAC 256/109 N38°47.00' W91°25.00'</td>
<td>ENL VORTAC 073/8 N38°27.00' W89°00.00'</td>
<td>a. 327.600</td>
<td>FL240/FL270</td>
<td>509 OSS/OSOS</td>
<td>Kansas City ARCP-277.4E</td>
</tr>
<tr>
<td>(West)</td>
<td>039/23</td>
<td>N37°38.50' W93°00.00'</td>
<td>ENL VORTAC 256/109 N38°47.00' W91°25.00'</td>
<td>ENL VORTAC 073/8 N38°27.00' W89°00.00'</td>
<td>a. 327.600</td>
<td>FL240/FL270</td>
<td>509 OSS/OSOS</td>
<td>Kansas City ARCP-277.4E</td>
</tr>
<tr>
<td>AR111</td>
<td>SGF VORTAC</td>
<td>SGF VORTAC</td>
<td>ENL VORTAC 256/109 N38°47.00' W91°25.00'</td>
<td>ENL VORTAC 073/8 N38°27.00' W89°00.00'</td>
<td>a. 327.600</td>
<td>FL240/FL270</td>
<td>509 OSS/OSOS</td>
<td>Kansas City ARCP-277.4E</td>
</tr>
<tr>
<td>(West)</td>
<td>039/23</td>
<td>N37°38.50' W93°00.00'</td>
<td>ENL VORTAC 256/109 N38°47.00' W91°25.00'</td>
<td>ENL VORTAC 073/8 N38°27.00' W89°00.00'</td>
<td>a. 327.600</td>
<td>FL240/FL270</td>
<td>509 OSS/OSOS</td>
<td>Kansas City ARCP-277.4E</td>
</tr>
<tr>
<td>AR111</td>
<td>SGF VORTAC</td>
<td>SGF VORTAC</td>
<td>ENL VORTAC 256/109 N38°47.00' W91°25.00'</td>
<td>ENL VORTAC 073/8 N38°27.00' W89°00.00'</td>
<td>a. 327.600</td>
<td>FL240/FL270</td>
<td>509 OSS/OSOS</td>
<td>Kansas City ARCP-277.4E</td>
</tr>
<tr>
<td>(West)</td>
<td>039/23</td>
<td>N37°38.50' W93°00.00'</td>
<td>ENL VORTAC 256/109 N38°47.00' W91°25.00'</td>
<td>ENL VORTAC 073/8 N38°27.00' W89°00.00'</td>
<td>a. 327.600</td>
<td>FL240/FL270</td>
<td>509 OSS/OSOS</td>
<td>Kansas City ARCP-277.4E</td>
</tr>
</tbody>
</table>

**REMARKS:** All turns to the left in tanker orbit pattern. Intended for use by 509BW aircraft. Other units and aircraft permitted on non-interference basis. The scheduling unit retains pre-emption authority.

1. After duty hours contact C660-563-1035 or Cmd Post DSN 975-3778.

### AR111

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR111</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td>PXV VORTAC 020°65 N36°15.00' W92°10.00'</td>
<td>N36°42.00' W88°28.00'</td>
<td>a. 348.900</td>
<td>FL250/FL290</td>
<td>552 OSS/OSOS</td>
<td>Memphis ARCP-257.6E/132.37E</td>
</tr>
<tr>
<td>(East)</td>
<td>274/59</td>
<td>N36°15.00' W92°10.00'</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR111</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td>PXV VORTAC 020°65 N36°15.00' W92°10.00'</td>
<td>N36°42.00' W88°28.00'</td>
<td>a. 348.900</td>
<td>FL250/FL290</td>
<td>552 OSS/OSOS</td>
<td>Memphis ARCP-257.6E/132.37E</td>
</tr>
<tr>
<td>(West)</td>
<td>56°56.00' W23°30.00'</td>
<td>W88°28.00'</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR111</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td>PXV VORTAC 020°65 N36°15.00' W92°10.00'</td>
<td>N36°42.00' W88°28.00'</td>
<td>a. 348.900</td>
<td>FL250/FL290</td>
<td>552 OSS/OSOS</td>
<td>Memphis ARCP-257.6E/132.37E</td>
</tr>
<tr>
<td>(West)</td>
<td>56°56.00' W23°30.00'</td>
<td>W88°28.00'</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR111</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td>PXV VORTAC 020°65 N36°15.00' W92°10.00'</td>
<td>N36°42.00' W88°28.00'</td>
<td>a. 348.900</td>
<td>FL250/FL290</td>
<td>552 OSS/OSOS</td>
<td>Memphis ARCP-257.6E/132.37E</td>
</tr>
<tr>
<td>(West)</td>
<td>56°56.00' W23°30.00'</td>
<td>W88°28.00'</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td>ARG VORTAC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Restricted for use by the 552 ACW aircraft and support tankers only. Tanker Orbit Pattern (NONRADAR): Holding point ARCP; Left Turns; 14 Mile Legs. Tankers shall remain clear of the Lindbergh 'D' ATCAA when active and is defined as follows: Beginning at 36 38 00N - 90 58 00W to 36 38 00N - 91 50 00W to 36 16 00N - 91 18 00W to 36 16 00N - 91 03 00W to beginning. FL180 to FL500.
### AR ROUTES

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR112H</td>
<td>IRW VORTAC</td>
<td>TUL VORTAC</td>
<td>TUL VORTAC</td>
<td>ARG VORTAC</td>
<td>a. 235.100</td>
<td>FL240/FL310</td>
<td>VQ3 Tinker AFB, OK</td>
<td>Fort Worth</td>
</tr>
<tr>
<td></td>
<td>223/41</td>
<td>190/62</td>
<td>137/44</td>
<td>283/74</td>
<td>b. 260.200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N34°55.00’</td>
<td>N35°13.00’</td>
<td>N35°35.37’</td>
<td>N36°28.00’</td>
<td>c. N/R</td>
<td>DSN 339-3911 (After duty hours 884-9928)</td>
<td>ARCP-363.1E Memphis</td>
<td>EXIT-353.8E</td>
</tr>
<tr>
<td></td>
<td>W98°15.00’</td>
<td>W96°10.00’</td>
<td>W95°16.00’</td>
<td>W92°25.00’</td>
<td>d. N/R</td>
<td>C405-739-3911 (After duty hours 405-734-9928)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RZC VORTAC</td>
<td>092/36</td>
<td>e. 33/96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>200/25</td>
<td>N36°11.00’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W94°20.00’</td>
<td>W93°23.00’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IRW VORTAC</td>
<td>223/41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>137/44</td>
<td>N35°35.37’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W95°16.00’</td>
<td>N34°55.00’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TUL VORTAC</td>
<td>190/62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>190/62</td>
<td>N35°13.00’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W96°10.00’</td>
<td>W98°15.00’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IRW VORTAC</td>
<td>124/24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>124/24</td>
<td>N35°06.00’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W97°15.00’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### REMARKS:
All air refueling prohibited during the following hours: 1500-1630Z++ and 1900-2100Z++ Mon-Fri. While maneuvering/orbiting on AR112, aircrews are reminded to avoid R5601A and R5601C.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITIDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR112L (East)</td>
<td>IRW VORTAC</td>
<td>TUL VORTAC</td>
<td>TUL VORTAC</td>
<td>ARG VORTAC</td>
<td>283/74</td>
<td>N3°56.00'</td>
<td>W9°25.00'</td>
<td>FL190/FL230</td>
</tr>
<tr>
<td>124/24</td>
<td>N3°56.00'</td>
<td>W9°25.00'</td>
<td>RZC VORTAC</td>
<td>200/25</td>
<td>N3°52.00'</td>
<td>W9°20.00'</td>
<td>113/113</td>
<td>Fort Worth ARCP-363.1E Memphis EXIT-353.8E</td>
</tr>
<tr>
<td>(West)</td>
<td>ARG VORTAC</td>
<td>RZC VORTAC</td>
<td>TUL VORTAC</td>
<td>IRW VORTAC</td>
<td>124/24</td>
<td>N3°56.00'</td>
<td>W9°25.00'</td>
<td>FL190/FL230</td>
</tr>
<tr>
<td>283/74</td>
<td>N3°56.00'</td>
<td>W9°25.00'</td>
<td>TUL VORTAC</td>
<td>283/74</td>
<td>N3°56.00'</td>
<td>W9°25.00'</td>
<td>113/113</td>
<td>Fort Worth ARCP-363.1E Memphis EXIT-353.8E</td>
</tr>
<tr>
<td>FST VORTAC</td>
<td>LLO VORTAC</td>
<td>JCT VORTAC</td>
<td>LLO VORTAC</td>
<td>240/25</td>
<td>N3°38.27'</td>
<td>W9°14.21'</td>
<td>N3°55.00'</td>
<td>Fort Worth ARCP-363.1E Memphis EXIT-353.8E</td>
</tr>
<tr>
<td>265/57</td>
<td>N3°46.12'</td>
<td>W10°00.35'</td>
<td>JCT VORTAC</td>
<td>240/25</td>
<td>W9°14.21'</td>
<td>124°27</td>
<td>N3°38.27'</td>
<td>113/113</td>
</tr>
<tr>
<td>FST VORTAC</td>
<td>JCT VORTAC</td>
<td>FST VORTAC</td>
<td>JCT VORTAC</td>
<td>240/25</td>
<td>N3°46.12'</td>
<td>W10°00.35'</td>
<td>N3°38.27'</td>
<td>113/113</td>
</tr>
<tr>
<td>N3°52.00'</td>
<td>W9°14.21'</td>
<td>N3°55.00'</td>
<td>JCT VORTAC</td>
<td>240/25</td>
<td>N3°52.00'</td>
<td>W9°14.21'</td>
<td>N3°38.27'</td>
<td>113/113</td>
</tr>
<tr>
<td>ABI VORTAC</td>
<td>ABI VORTAC</td>
<td>ABI VORTAC</td>
<td>ABI VORTAC</td>
<td>162°34</td>
<td>124°27</td>
<td>113/113</td>
<td>113/113</td>
<td>113/113</td>
</tr>
<tr>
<td>194/26</td>
<td>N3°39.52'</td>
<td>W10°01.35'</td>
<td>ABI VORTAC</td>
<td>162°34</td>
<td>124°27</td>
<td>113/113</td>
<td>113/113</td>
<td>113/113</td>
</tr>
<tr>
<td>N3°39.52'</td>
<td>W10°01.35'</td>
<td>N3°55.00'</td>
<td>ABI VORTAC</td>
<td>162°34</td>
<td>124°27</td>
<td>113/113</td>
<td>113/113</td>
<td>113/113</td>
</tr>
<tr>
<td>W10°01.35'</td>
<td>162°34</td>
<td>124°27</td>
<td>ABI VORTAC</td>
<td>162°34</td>
<td>124°27</td>
<td>113/113</td>
<td>113/113</td>
<td>113/113</td>
</tr>
<tr>
<td>REMARKS:</td>
<td>Restricted for use by the AFRC, 307 Bomb Wing aircraft and supporting tankers only. All air refueling prohibited during the following hours: 1500-1630Z++ and 1900-2100Z++ Mon-Fri. While maneuvering/orbiting on AR112, aircrews are reminded to avoid R5601A and R5601C. Aircrews should be aware of AR313 heading North-South and deconflict with the AR313 scheduling unit, 97OSS/OSOS, DSN: 866-7849/7848.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Aircraft when reversing the track at the Navigation Check Point 1 will make a 15 degrees bank left turn and roll out with approximately a 15 degrees intercept to course centerline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER</td>
<td>ARIP</td>
<td>ARCP</td>
<td>NAVIGATION CHECK POINTS</td>
<td>EXIT</td>
<td>CR PLAN</td>
<td>REFueling ALTITUDES</td>
<td>SCHEDULING UNIT</td>
<td>ASSIGNED ARTCC</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>------</td>
<td>-------------------------</td>
<td>------</td>
<td>---------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>AR115</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>a. N/R</td>
<td>08000/09000</td>
<td>58 OSS/DOO</td>
<td>Albuquerque</td>
</tr>
<tr>
<td></td>
<td>333/30</td>
<td>334/24</td>
<td>N34°20.33'</td>
<td>W106°49.23'</td>
<td>b. N/R</td>
<td></td>
<td>Kirtland AFB, NM</td>
<td>ARCP-128.8E</td>
</tr>
<tr>
<td></td>
<td>N34°49.00'</td>
<td>N34°43.70'</td>
<td>W106°57.80'</td>
<td>W106°55.90'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 263-5979/5888/5701</td>
<td>ARCP-307.2E</td>
</tr>
<tr>
<td></td>
<td>W106°57.80'</td>
<td>W106°55.90'</td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td>C505-853-5979/5888/5701</td>
<td>EXIT-128.8E</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. N/R</td>
<td></td>
<td>EXIT-307.2E</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Restricted to 58 SOW use only. Protected airspace is 4 NM either side of centerline. Air refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR116</td>
<td>GCK VORTAC</td>
<td>GCK VORTAC</td>
<td>SLN VORTAC</td>
<td>MCI VORTAC</td>
<td>a. 366.300</td>
<td>12000/FL220</td>
<td>2OSS/OSOS</td>
<td>Kansas City</td>
</tr>
<tr>
<td></td>
<td>235/69</td>
<td>086/34</td>
<td>196/46</td>
<td>240/48 (1)</td>
<td>b. 260.200</td>
<td></td>
<td>Barksdale AFB, LA</td>
<td>ARCP-269.4E</td>
</tr>
<tr>
<td>(East)</td>
<td>N37°26.60'</td>
<td>N37°51.03'</td>
<td>N38°13.08'</td>
<td>N38°56.86'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 781-4832/7076</td>
<td>EXIT-343.7E</td>
</tr>
<tr>
<td></td>
<td>W102°02.66'</td>
<td>W100°00.34'</td>
<td>W98°00.09'</td>
<td>W95°39.64'</td>
<td>d. N/R</td>
<td></td>
<td>C318-456-4832/7076</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 32/95</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| (West) | MCI VORTAC | SLN VORTAC | SLN VORTAC | GCK VORTAC | 209/69 | | Kansas City | ARCP-363.2W |
|        | 240/48 | 174/35 | 196/46 | 235/69 | | | | EXIT-269.4W |
|        | N38°56.86' | N38°20.48' | N38°13.08' | N37°26.60' | | | | |
|        | W95°39.64' | W97°38.06' | W98°00.09' | W102°02.66' | | | | |

**REMARKS:** (1) Primary means to schedule is through CSE. Email 2ossoso@us.af.mil with questions/concerns.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR121</td>
<td>(North)</td>
<td>HMN TACAN</td>
<td>HMN TACAN</td>
<td>HMN TACAN</td>
<td>a. 229.500</td>
<td>15000/FL290</td>
<td>49OSS/OSOS</td>
<td>Albuquerque</td>
</tr>
<tr>
<td></td>
<td></td>
<td>336/87</td>
<td>334/75</td>
<td>324/44</td>
<td>b. 258.200</td>
<td></td>
<td>Holloman AFB, NM</td>
<td>ARCP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N34°16.00'</td>
<td>N34°04.00'</td>
<td>N34°16.00'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 572-3536</td>
<td>DSO/EXIT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W106°32.00'</td>
<td>W106°31.50'</td>
<td>W106°32.00'</td>
<td>d. N/R</td>
<td></td>
<td>C575-572-3536</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HMN TACAN</td>
<td>HMN TACAN</td>
<td>HMN TACAN</td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>336/87</td>
<td>334/75</td>
<td>324/44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>N34°16.00'</td>
<td>N34°04.00'</td>
<td>N34°16.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>W106°32.00'</td>
<td>W106°31.50'</td>
<td>W106°32.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** White Sands Radar Facility (WSRF) must be operational. All aircraft must have contact with and clearance from WSRF prior to entering restricted airspace. When exiting at or above FL180 or to resume IFR clearance, all aircraft must have contact with and clearance from WSRF prior to exiting. Refueling airspace is limited to aircraft from 49 WG and can only be scheduled on a non-interference basis with White Sands Missile Range.

**TIMES OF OPERATIONS:** Continuous
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR167</td>
<td>LRD VORTAC</td>
<td>RSG VORTAC</td>
<td>341/30</td>
<td>RSG VORTAC</td>
<td>N30°00.88'</td>
<td>a. 235.100</td>
<td>FL260/FL310</td>
<td>Houston</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N27°58.00'</td>
<td>W100°17.99'</td>
<td>b. 260.200</td>
<td></td>
<td>ARCP-323.1W</td>
</tr>
<tr>
<td>(North)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>c. N/R</td>
<td></td>
<td>EXIT-380.2W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 32/95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR167</td>
<td>LRD VORTAC</td>
<td>RSG VORTAC</td>
<td>341/30</td>
<td>RSG VORTAC</td>
<td>N30°00.88'</td>
<td>a. 302.250</td>
<td>FL240/FL260</td>
<td>Houston</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N27°58.00'</td>
<td>W100°17.99'</td>
<td>b. 320.525</td>
<td></td>
<td>ARCP-323.1W</td>
</tr>
<tr>
<td>(South)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>c. N/R</td>
<td></td>
<td>EXIT-323.1E</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 58/121</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** All course reversal turns will be made to the east. Receivers may exit only at ARIP or EXIT points. When exiting at RSG, receivers should file to JCT or FST to pick up supplemental flight plans. Crystal MOA must be scheduled by users during same period of track operations. Hours of operation: Sun-Sat 1200-0400Z++.  

**AR197H**  

<table>
<thead>
<tr>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBB VORTAC</td>
<td>LBB VORTAC</td>
<td>MRF VOR-DME 180/30</td>
<td>LBB VORTAC</td>
<td>N34°11.80'</td>
<td>a. 322/47</td>
<td>FL240/FL260</td>
<td>Albuquerque Center</td>
</tr>
<tr>
<td>360/30</td>
<td>205/35</td>
<td>N29°48.38'</td>
<td></td>
<td>320°25'</td>
<td>b. 320.525</td>
<td></td>
<td>Altus AFB, OK</td>
</tr>
<tr>
<td>N33°13.89'</td>
<td>N33°13.89'</td>
<td>W104°03.87'</td>
<td></td>
<td>320°25'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 866-7849/7848</td>
</tr>
<tr>
<td>W101°47.94'</td>
<td>W101°47.94'</td>
<td>MRF VOR-DME 296°52</td>
<td></td>
<td>320°25'</td>
<td>d. N/R</td>
<td></td>
<td>C580-481-7849/7848</td>
</tr>
<tr>
<td>W102°19.37'</td>
<td>W102°19.37'</td>
<td>N29°49.20'</td>
<td></td>
<td>320°25'</td>
<td>e. 58/121</td>
<td></td>
<td>ARCP-132.07/278.8</td>
</tr>
<tr>
<td>W104°45.68'</td>
<td>W104°45.68'</td>
<td>W102°20.63'</td>
<td></td>
<td>320°25'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MRF VOR-DME 296°52</td>
<td></td>
<td>320°25'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>N29°49.20'</td>
<td></td>
<td>320°25'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>W104°45.68'</td>
<td></td>
<td>320°25'</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Intended for exclusive use of Altus AFB assigned aircraft and support tankers only. Remain at least 3 NM from Lancer MOA/ATCAA. The South Navigation Checkpoints are 20 NM from the Mexico ADIZ. In the event of pop-up conflicts with Bronco MOA ATCAAs, aircraft in the MOA/ATCAA will be altitude restricted until refueling formation passes. In the event pop-up conflicts with Valentine MOA, 97 AMW aircraft will have priority. Additional communication frequencies are available for operations on AR197L/H when there are more than four concurrent air refueling operations in progress. Additional frequencies are 327.6 and 282.7. Associated TACAN is 54/117. For day of scheduling or after normal duty hours contact 97 AMW CP DSN 866-6313, COMM 580-481-6313.
### AR 197L

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR197L</td>
<td>LBB VORTAC</td>
<td>LBB VORTAC</td>
<td>MRF VOR-DME 180/30</td>
<td>LBB VORTAC</td>
<td>322/47</td>
<td>FL200/FL220</td>
<td>97 OSS/OSOS</td>
<td>Albuquerque Center</td>
</tr>
<tr>
<td></td>
<td>360/30</td>
<td>205/35</td>
<td>N29*48.38'</td>
<td>N34*24.21'</td>
<td>343.100</td>
<td>322.850</td>
<td>EXIT-127.85/285.47</td>
<td>Fort Worth Center</td>
</tr>
<tr>
<td></td>
<td>N34*11.80'</td>
<td>N33*13.89'</td>
<td>W104*03.87'</td>
<td>W102*20.63'</td>
<td>62/125</td>
<td></td>
<td>ARCP-132.07/278.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W101*47.94'</td>
<td>W102*19.37'</td>
<td>MRF VOR-DME 296/52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N30*49.20'</td>
<td>W104*45.68'</td>
<td>HOB VORTAC 256/15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N32*37.38'</td>
<td>W103*34.09'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Intended for exclusive use of Altus AFB assigned aircraft and support tankers only. Remain at least 3 NM from Lancer MOA/ATCAA. The South Navigation Check Points are 20NM from the MEXICO ADIZ. In the event of pop-up conflicts with Bronco MOA/ATCAAs, aircraft in MOA/ATCAA will be altitude restricted until refueling formation passes. In the even of pop-up conflicts with Valentine MOA, 97 AMW aircraft will have priority. Additional communication frequencies are available for operations on AR197L/H when there are more than four (4) concurrent air refueling operations in progress. Additional frequencies are 327.6 and 282.7. Associated TACAN is 54/117. For day of scheduling or after normal duty hours contact 97 AMW CP DSN 866-66313, COMM 580-481-6631.

### AR 200

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR200</td>
<td>VUZ VORTAC</td>
<td>SZW VORTAC</td>
<td>RSW VORTAC 156/24</td>
<td>RSW VORTAC</td>
<td>235.100</td>
<td>FL240/FL260</td>
<td>6 OSS/OSO</td>
<td>Miami</td>
</tr>
<tr>
<td></td>
<td>142/70</td>
<td>325/59</td>
<td>N30*33.37'</td>
<td>N28*10.00'</td>
<td>235.100</td>
<td>235.100</td>
<td>OSS/OSO/AFB, FL</td>
<td>ARCP-307.2E</td>
</tr>
<tr>
<td></td>
<td>N32*44.00'</td>
<td>N31*23.00'</td>
<td>W84*22.44'</td>
<td>W81*35.00'</td>
<td>319.700</td>
<td>319.700</td>
<td>MacDill AFB</td>
<td>EXIT-290.5E</td>
</tr>
<tr>
<td></td>
<td>W86*05.00'</td>
<td>W85*00.00'</td>
<td>PIE VORTAC 336/85</td>
<td>PIE VORTAC</td>
<td>30/93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N29*09.00'</td>
<td>N27*54.47'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W83*28.00'</td>
<td>W82*41.06'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PIE VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** AR200 is intended for use by 6 AMW aircraft. All other units and aircraft are permitted use on non-interference basis. The 6 AMW retains preemption authority for these purposes. The track is closed 1230-1630Z++ by request of Atlanta and Jacksonville ARTCCs due to heavy civilian traffic during this time.

### AR 201

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR201</td>
<td>HVE VORTAC</td>
<td>DVC VORTAC</td>
<td>ALS VORTAC 264/59</td>
<td>ALS VORTAC</td>
<td>336.100</td>
<td>FL190/FL230</td>
<td>7 OSS/OSR</td>
<td>Denver</td>
</tr>
<tr>
<td>(East)</td>
<td>224/38</td>
<td>259/27</td>
<td>N37*50.00'</td>
<td>N37*28.00'</td>
<td>336.100</td>
<td>336.100</td>
<td>OSS/OSR</td>
<td>EXCEPT-343.7E Salt</td>
</tr>
<tr>
<td></td>
<td>N38*05.00'</td>
<td>N37*50.00'</td>
<td>W109*30.00'</td>
<td>W107*03.00'</td>
<td>319.500</td>
<td>319.500</td>
<td>Lake City</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W111*23.00'</td>
<td>W109*30.00'</td>
<td>DVC VORTAC</td>
<td>DVC VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>259/27</td>
<td>259/27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>264/59</td>
<td>155/4</td>
<td>HVE VORTAC 224/38</td>
<td>HVE VORTAC</td>
<td>51/114</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37*28.00'</td>
<td>N37*50.00'</td>
<td>N38*05.00'</td>
<td>N38*05.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W107*03.00'</td>
<td>W108*55.00'</td>
<td>W111*23.00'</td>
<td>W111*23.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>ALS VORTAC</td>
<td>DVC VORTAC</td>
<td>HVE VORTAC 224/38</td>
<td>HVE VORTAC</td>
<td>51/114</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>264/59</td>
<td>155/4</td>
<td>N37*45.00'</td>
<td>N38*05.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37*28.00'</td>
<td>N37*45.00'</td>
<td>W108*55.00'</td>
<td>W111*23.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W107*03.00'</td>
<td>W108*55.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Intended for use by B-1 aircraft and support tankers. Other aircraft permitted on non-interference basis. The 7 OSS/OSR retains preemption authority. Contact/Scheduling units: DSN 461-3665/3666 or C325-96-3665/3666.
### AR ROUTES

#### AR202

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR202</td>
<td>TRV VORTAC</td>
<td>TRV VORTAC</td>
<td>N32°16.00'</td>
<td>ILM VORTAC</td>
<td>N34°21.10'</td>
<td>FL250/FL280 or as assigned</td>
<td>437 OSS/OSO</td>
<td>Jacksonville</td>
</tr>
<tr>
<td>(North)</td>
<td>087/142</td>
<td>055/186</td>
<td>W77°51.00'</td>
<td>OLDEY</td>
<td>W77°52.46'</td>
<td></td>
<td>Charleston AFB, SC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N28°05.00'</td>
<td>N29°45.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DSN 673-5554 (After duty hours 628 ABW Comd Post 673-8400)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W77°52.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C843-963-5554</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** AR202N is the North track. End northbound refueling operations no later than N32-30-00. Scheduled reverse course from north to south, refueling operations turn point is N33-15-00. Anticipate intermittent UHF reception at southern half of track. When W497B is in use southern limit of track is N30-19-00 W77-52-00. If radio contact is lost with Jacksonville ARTCC, request tanker or receiver attempt to establish communication with Miami ARTCC when crossing N30-00-00 southbound on the following frequencies: 123.675/343.7 or 135.07/379.25. AR202S is the South track. Scheduled reverse course from south to north, refueling operations turn point is N30-19-00. Anticipate intermittent UHF reception at southern half of track. When W497B is in use southern limit of track is N30-19-00 W77-52-00. If radio contact is lost with Jacksonville ARTCC, request tanker or receiver attempt to establish communication with Miami ARTCC when crossing N30-00-00 southbound on the following frequencies: 123.675/343.7 or 135.07/379.25.

| AR202A  | ILM VORTAC | ILM VORTAC | N32°16.00' | ILM VORTAC | N34°21.10' | FL250/FL280 or as assigned | 437 OSS/OSO | Jacksonville |
| (North) | | | W77°51.00' | | W77°52.46' | | Charleston AFB, SC |
| | | | OLDEY | | OLDEY | | DSN 673-5554 (After duty hours 628 ABW Comd Post 673-8400) |
| | | | | | | | C843-963-5554 |

| AR202A  | ILM VORTAC | ILM VORTAC | N32°16.00' | ILM VORTAC | N34°21.10' | FL250/FL280 or as assigned | 437 OSS/OSO | Jacksonville |
| (South) | ILM VORTAC | | | TRV VORTAC | | | Charleston AFB, SC |
| | 187/100 | | | 087/142 | | | DSN 673-5554 (After duty hours 628 ABW Comd Post 673-8400) |
| | N32°41.00' | | | N28°05.00' | | | C843-963-5554 |
| | W77°52.00' | | | W77°52.00' | | | |

**REMARKS:** AR202AN is the Alternate North track. End northbound refueling operations no later than N32-30-00. Scheduled reverse course from north to south, refueling operations turn point is N33-15-00. Anticipate intermittent UHF reception at southern half of track. When W497B is in use southern limit of track is N30-19-00 W77-52-00. If radio contact is lost with Jacksonville ARTCC, request tanker or receiver attempt to establish communication with Miami ARTCC when crossing N30-00-00 southbound on the following frequencies: 123.675/343.7 or 135.07/379.25. AR202AS is the Alternate South track. Scheduled reverse course from south to north, refueling operations turn point is N30-19-00. Anticipate intermittent UHF reception at southern half of track. If radio contact is lost with Jacksonville ARTCC, request tanker or receiver attempt to establish communication with Miami ARTCC when crossing N30-00-00 southbound on the following frequencies: 123.675/343.7 or 135.07/379.25.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR203</td>
<td>MEM VORTAC</td>
<td>BNA VORTAC</td>
<td>BNA VORTAC 014/20 N36°28.00' W86°36.00'</td>
<td>HVQ VOR-DME 210/41 N37°44.00' W82°09.50'</td>
<td>a. 238.900 b. 319.700 c. N/R d. N/R e. 32/95</td>
<td>FL270/FL310</td>
<td>2OSS/OSOS Barksdale AFB, LA DSN 781-4832/7076 C318-456-4832/7076</td>
<td>Memphis ARCP-354.0E EXIT-338.3E</td>
</tr>
<tr>
<td>(Northeast)</td>
<td></td>
<td></td>
<td>BNA VORTAC 055/65 N36°47.00' W85°37.00' IIU VORTAC 123/85 N37°18.00' W84°06.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Southwest)</td>
<td>HVQ VOR-DME 210/41 N37°44.00' W82°09.50'</td>
<td>IIU VORTAC 123/85 N37°18.00' W84°06.00'</td>
<td>BNA VORTAC 055/65 N36°47.00' W85°37.00'</td>
<td>MEM VORTAC 046/46 N35°32.50' W89°18.00'</td>
<td></td>
<td></td>
<td>Memphis ARCP-338.3W EXIT-354.0W</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:**
1. Primary means of scheduling track reservation requests through CSE. Email 2ossoso@us.af.mil for questions.
2. Refueling restricted to three flight levels. All air refueling prohibited during the following hours: 1530-1730Z++ and 0030-0230Z++. 

5.31
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR204</td>
<td>ALB VORTAC</td>
<td>MPV VOR-DME</td>
<td>AUG VOR-DME 345/58 N45°08.00' W70°32.00' MLT VOR-DME 319/53 N46°00.00' W69°37.00'</td>
<td>PQI VOR-DME 342/24 N47°05.00' W73°42.00'</td>
<td>a. 324.600 b. 282.700 c. N/R d. N/R e. 30/93</td>
<td>FL240/FL260</td>
<td>305 OSS/OSEO Joint Base McGuire-Dix-Lakehurst, NJ DSN 650-3726/3076 C609-754-3726/3076</td>
<td>Boston ARCP-282.2E EXIT-319.1E</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PQI VOR-DME 342/24 MLT VOR-DME 319/53</td>
<td>AUG VOR-DME 345/58 N45°08.00' W70°32.00' MPV VOR-DME 042/33 N44°35.00' W69°37.00'</td>
<td>ALB VORTAC 017/67 N44°35.00' W69°37.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS**: AR204 (Northeast) - aircraft should plan right turns after end A/R.

| AR205  | PQI VOR-DME 342/24 MLT VOR-DME 319/53 | AUG VOR-DME 345/58 N45°08.00' W70°32.00' MPV VOR-DME 042/33 N44°35.00' W69°37.00' | ALB VORTAC 017/67 N44°35.00' W69°37.00' | a. 327.600 b. 282.700 c. N/R d. N/R e. 31/94 | FL280/FL310 | 305 OSS/OSEO Joint Base McGuire-Dix-Lakehurst, NJ DSN 650-3726/3076 C609-754-3726/3076 | Boston ARCP-319.1W EXIT-380.3W |

**REMARKS**: Receiver aircraft contact Cleveland ARTCC for further clearance 3 minutes prior to planned exit point. Refueling prohibited between 1130-1500Z++ and between 1900-0000Z++. All tankers make a left turn at exit. All tankers make a left turn at exit.
### AR207NE (Northeast)

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR207NE</td>
<td>AMG VORTAC</td>
<td>AMG VORTAC</td>
<td>SSC TACAN</td>
<td>RDU VORTAC</td>
<td>N35°52.35'</td>
<td>N35°26.00'</td>
<td>FL260/FL280</td>
<td>437 OSS/OSO</td>
</tr>
<tr>
<td></td>
<td>035/30</td>
<td>035/130</td>
<td>N33°58.67'</td>
<td>N35°52.35'</td>
<td>W80°27.97'</td>
<td>W82°10.00'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:** Track manager will resolve conflicts with R5311 and AR600. Simultaneous use of AR207 and AR600 is prohibited. Track cannot be used during ESMC launches that close Atlantic routes. Track is prohibited to fighter type aircraft. Track authorized for use at all times except 1530-1700Z++. User contact scheduling unit during normal duty hours 1300-2200Z++ Mon-Fri except holidays. Scheduled reverse course refueling operations must complete turn prior to end of track.

### AR207SW (Southwest)

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR207SW</td>
<td>SAC VORTAC</td>
<td>SAC VORTAC</td>
<td>HNW VOR/DME</td>
<td>SAC VORTAC</td>
<td>083°38'</td>
<td>028°26.00'</td>
<td>FL260/FL280</td>
<td>437 OSS/OSO</td>
</tr>
<tr>
<td></td>
<td>019/38</td>
<td>028/35</td>
<td>181/14</td>
<td>083°38'</td>
<td>N38°50.00'</td>
<td>N38°20.00'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:** Track manager will resolve conflicts with R5311 and AR600. Simultaneous use of AR207 and AR600 is prohibited. Track cannot be used during ESMC launches that close Atlantic routes. Track is prohibited to fighter type aircraft. Track authorized for use at all times except 1530-1700Z++. User contact scheduling unit during normal duty hours 1300-2200Z++ Mon-Fri except holidays. Scheduled reverse course refueling operations must complete turn prior to end of track.

### AR208

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR208</td>
<td>SAC VORTAC</td>
<td>SAC VORTAC</td>
<td>HNW VOR-DME</td>
<td>SAC VORTAC</td>
<td>181/14</td>
<td>181/14</td>
<td>06000/08000</td>
<td>129 RQW</td>
</tr>
<tr>
<td></td>
<td>019/38</td>
<td>028/35</td>
<td>181/14</td>
<td>083°38'</td>
<td>N38°50.00'</td>
<td>N38°20.00'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:** Restricted to 129 RQW Helicopter/C-130 air refueling. Refueling is prohibited between 1400-0500Z++. Protected airspace is 5 NM either side of centerline. Air refueling may be conducted in either direction. All turns to the west of centerline.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR209</td>
<td>N30°15.60’</td>
<td>N30°42.00’</td>
<td>N31°07.90’</td>
<td>W129°32.80’</td>
<td>N31°56.50’</td>
<td>FL230</td>
<td>452AMWOSS/DOOA March AFB, CA DSN 447-5614/2297</td>
<td>Los Angeles ARCP EXIT</td>
</tr>
<tr>
<td>(East)</td>
<td>W127°17.50’</td>
<td>W125°26.00’</td>
<td>W120°16.10’</td>
<td>N30°15.60’</td>
<td>W127°17.50’</td>
<td>and below consisting of a 3000’ block</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N30°33.50’</td>
<td>W121°23.50’</td>
<td>FICKY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N30°42.00’</td>
<td>W125°26.00’</td>
<td>FOOTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N31°07.90’</td>
<td>W123°32.80’</td>
<td>N31°33.50’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W123°23.50’</td>
<td>N31°15.60’</td>
<td>W127°17.50’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** (1) Aircraft will establish AF communications with San Francisco ARINC (frequency to be provided) prior to receiving clearance into AR209. Aircraft operating in AR209 will be VHF and HF equipped. (2) Aircraft will remain on their assigned Mode 3 transponder code, even after radar service termination, to assist in radar identification on the inbound route for AMIS purposes. (3) Aircraft will provide estimated times for the planned turn around point, inbound (FICKY), and exit (ROSIN) to the center prior to radar service termination and then normal oceanic reporting procedures apply. (4) When reversing course, maneuvering orbiting for rendezvous, all turns shall be made south of the published AR209 track.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Northeast)</td>
<td>N43°52.00’</td>
<td>N44°35.00’</td>
<td>N45°08.00’</td>
<td>W70°32.00’</td>
<td>MLT VOR-DME 319/53</td>
<td>N46°00.00’</td>
<td>W69°37.00’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W73°42.00’</td>
<td>W72°07.00’</td>
<td>W70°32.00’</td>
<td>W68°28.00’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Aircraft should plan right turn after end A/R.

<table>
<thead>
<tr>
<th>AR214</th>
<th>NFL TACAN 164/6</th>
<th>NFL TACAN 006/5</th>
<th>NFL TACAN 020/6</th>
<th>NFL TACAN 15000/17000</th>
<th>NSAWC Range Scheduling, NV</th>
<th>Oakland ARCP EXIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Southwest)</td>
<td>N39°19.00’</td>
<td>N39°20.00’</td>
<td>N39°30.00’</td>
<td>N39°30.00’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W118°42.00’</td>
<td>W118°44.00’</td>
<td>W118°40.00’</td>
<td>W118°38.00’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Continuous refueling authorized throughout track. Restricted use for Navy tactical aircraft only. For entry and exit contact Navy Fallon 263.6.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR216</td>
<td>VUZ VORTAC</td>
<td>RMG VORTAC</td>
<td>VXV VORTAC</td>
<td>PSK VORTAC</td>
<td>a. 276.500</td>
<td>FL260/FL280</td>
<td>437 OSS/OSO</td>
<td>Atlanta</td>
</tr>
<tr>
<td>(Northeast)</td>
<td>111/47</td>
<td>N34°09.75' W85°07.16'</td>
<td>195/28</td>
<td>N35°27.00'</td>
<td>b. 343.250</td>
<td></td>
<td>Charleston AFB, SC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N33°22.00' W86°02.00'</td>
<td>W84°01.00'</td>
<td>VXV VORTAC</td>
<td>W81°42.00'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 673-5554 (After duty hours 628 ABW Comd Post)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N35°47.00' W83°30.00'</td>
<td>VXV VORTAC</td>
<td>114/21</td>
<td>N33°22.00'</td>
<td>d. N/R</td>
<td></td>
<td>DSN 673-8400</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N33°22.00' W86°02.00'</td>
<td>RMG VORTAC</td>
<td>N34°09.75' W85°07.16'</td>
<td>N86°02.00'</td>
<td>e. 31/94</td>
<td></td>
<td>C843-963-5554</td>
<td></td>
</tr>
<tr>
<td>(Southwest)</td>
<td>PSK VORTAC</td>
<td>VXV VORTAC</td>
<td>247/55</td>
<td>N36°38.00'</td>
<td>a. 276.500</td>
<td>FL260/FL280</td>
<td>171 OSF/OSA</td>
<td>Cleveland</td>
</tr>
<tr>
<td></td>
<td>111/47</td>
<td>N34°09.75' W85°07.16'</td>
<td>195/28</td>
<td>W81°42.00'</td>
<td>b. 343.250</td>
<td></td>
<td>Pittsburgh ANG, PA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N36°38.00'</td>
<td>N35°47.00'</td>
<td>VXV VORTAC</td>
<td>W81°42.00'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 294-7347 or 7428</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W83°30.00'</td>
<td>VXV VORTAC</td>
<td>114/21</td>
<td>N35°47.00'</td>
<td>d. N/R</td>
<td></td>
<td>C412-776-7347/7428</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W83°30.00'</td>
<td>RMG VORTAC</td>
<td>N34°09.75' W85°07.16'</td>
<td>N86°02.00'</td>
<td>e. 31/94</td>
<td></td>
<td>C412-776-7347/7428</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Refueling/Holding not permitted 1845-2115Z++; 2300-0200Z++; 1330-1630Z++.

<table>
<thead>
<tr>
<th>AR217</th>
<th>CXR VOR-DME</th>
<th>CXR VOR-DME</th>
<th>ETG VORTAC</th>
<th>ETG VORTAC</th>
<th>a. 283.900</th>
<th>16000/FL220</th>
<th>171 OSF/OSA</th>
<th>Pittsburgh ANG, PA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>284/96</td>
<td>284/96</td>
<td>288/78</td>
<td>288/33</td>
<td>b. 282.700</td>
<td></td>
<td></td>
<td>DSN 294-7347 or 7428</td>
</tr>
<tr>
<td></td>
<td>N41°44.90'</td>
<td>N41°44.90'</td>
<td>N41°23.00'</td>
<td>N41°17.40'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>C412-776-7347/7428</td>
</tr>
<tr>
<td></td>
<td>W83°16.50'</td>
<td>W81°09.79'</td>
<td>W79°51.50'</td>
<td>W78°52.10'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W83°16.50'</td>
<td>W81°09.79'</td>
<td>W79°51.50'</td>
<td>W78°52.10'</td>
<td>e. 50/113</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** No simultaneous refueling with AR218, AR219, AR220. Refueling block restricted to 3 thousand feet. In flight coordination necessary to use NAV Check Point as exit. Confirm track reservation the day of use with 171st Base Ops (DSN 294-7347/7428 or C412-776-7347/7428).

<table>
<thead>
<tr>
<th>AR218</th>
<th>PSB VORTAC</th>
<th>EWC VOR-DME</th>
<th>BSV VOR-DME</th>
<th>BSV VOR-DME</th>
<th>a. 276.500</th>
<th>FL190/FL220</th>
<th>171 OSF/OSA</th>
<th>Pittsburgh ANG, PA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>224/25</td>
<td>104/28</td>
<td>141/20</td>
<td>141/20</td>
<td>b. 282.700</td>
<td></td>
<td></td>
<td>DSN 294-7347 or 7428</td>
</tr>
<tr>
<td></td>
<td>N40°34.00'</td>
<td>N40°36.00'</td>
<td>N40°34.00'</td>
<td>N40°34.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>C412-776-7347/7428</td>
</tr>
<tr>
<td></td>
<td>W78°18.00'</td>
<td>W79°54.00'</td>
<td>W81°25.93'</td>
<td>W81°25.93'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W78°18.00'</td>
<td>W79°54.00'</td>
<td>W81°25.93'</td>
<td>W81°25.93'</td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** No simultaneous refueling with AR217, AR219, AR220. Refueling block restricted to 3 thousand feet. In flight coordination necessary to use NAV Check Point as exit. Confirm track reservation the day of use with 171st Base Ops (DSN 294-7347/7428 or C412-776-7347/7428).

<table>
<thead>
<tr>
<th>AR219</th>
<th>EWC VOR-DME</th>
<th>EWC VOR-DME</th>
<th>EWC VOR-DME</th>
<th>FWA VORTAC</th>
<th>a. 305.500</th>
<th>FL260/FL290</th>
<th>171 OSF/OSA</th>
<th>Pittsburgh ANG, PA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>104/89</td>
<td>104/28</td>
<td>104/28</td>
<td>091/65</td>
<td>b. 282.700</td>
<td></td>
<td></td>
<td>DSN 294-7347 or 7428</td>
</tr>
<tr>
<td></td>
<td>N40°39.50'</td>
<td>N40°46.50'</td>
<td>N40°49.50'</td>
<td>N40°57.25'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>C412-776-7347/7428</td>
</tr>
<tr>
<td></td>
<td>W78°16.50'</td>
<td>W79°36.25'</td>
<td>W80°12.69'</td>
<td>W83°45.33'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td>C412-776-7347/7428</td>
</tr>
<tr>
<td></td>
<td>W78°16.50'</td>
<td>W79°36.25'</td>
<td>W80°12.69'</td>
<td>W83°45.33'</td>
<td>e. 31/94</td>
<td></td>
<td></td>
<td>C412-776-7347/7428</td>
</tr>
</tbody>
</table>

**REMARKS:** No simultaneous refueling with AR217, AR218, AR220. Refueling block restricted to 3 thousand feet. In flight coordination necessary to use NAV Check Point as exit. Confirm track reservation the day of use with 171st Base Ops (DSN 294-7347/7428 or C412-776-7347/7428).
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR220</td>
<td>PSB VORTAC</td>
<td>EWC VOR-DME</td>
<td>BSV VOR-DME</td>
<td>ETG VORTAC</td>
<td>274.450</td>
<td>FL190/FL220</td>
<td>171OSF/OSA</td>
<td>Cleveland</td>
</tr>
<tr>
<td></td>
<td>224/25</td>
<td>141/20</td>
<td>N40°44.44'</td>
<td>288/33</td>
<td>282.700</td>
<td>N/R</td>
<td>DSN 294-7347 or 7428</td>
<td>ARCP-299.2W</td>
</tr>
<tr>
<td></td>
<td>N40°34.00'</td>
<td>N40°36.00'</td>
<td>W81°25.93'</td>
<td>N41°17.40'</td>
<td>N/R</td>
<td>S2/115</td>
<td>C412-776-7347/7428</td>
<td>EXIT-291.65E</td>
</tr>
<tr>
<td></td>
<td>W78°18.00'</td>
<td>W79°54.00'</td>
<td>BSV VOR-DME 283/95</td>
<td>W78°52.10'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N40°58.20'</td>
<td>N41°23.00'</td>
<td>W83°29.80'</td>
<td>N41°31.02'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W83°09.79'</td>
<td>W79°51.50'</td>
<td>CXR VOR-DME 284/96</td>
<td>N41°30.75'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N41°44.90'</td>
<td>N41°36.00'</td>
<td>EWC VOR-DME 288/78</td>
<td>N40°36.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W83°16.50'</td>
<td>W81°09.79'</td>
<td>EWC VOR-DME 288/78</td>
<td>N41°30.75'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N41°36.00'</td>
<td>N41°36.00'</td>
<td>EWC VOR-DME 288/78</td>
<td>N41°30.75'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W81°09.79'</td>
<td>W81°09.79'</td>
<td>EWC VOR-DME 288/78</td>
<td>N41°30.75'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N41°23.00'</td>
<td>N41°23.00'</td>
<td>EWC VOR-DME 288/78</td>
<td>N41°30.75'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W79°51.50'</td>
<td>W79°51.50'</td>
<td>EWC VOR-DME 288/78</td>
<td>N41°30.75'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** No simultaneous refueling with AR217, AR218, AR219. Refueling block restricted to 3 thousand feet. In flight coordination necessary to use NAV Check Point as exit. Confirm track reservation the day of use with 171st Base Ops (DSN 294-7347/7428 or C412-776-7347/7428).

<table>
<thead>
<tr>
<th>AR221</th>
<th>MCC VOR-DME</th>
<th>MCC VOR-DME</th>
<th>MCC VOR-DME</th>
<th>MCC VOR-DME</th>
<th>06000/10000</th>
<th>129RQW Moffett Federal Afld, CA</th>
<th>Oakland ARCP-319.9E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120/42</td>
<td>120/52</td>
<td>120/83</td>
<td>120/83</td>
<td>N/R</td>
<td>DSN 359-9356/7</td>
<td>EXIT-319.9E</td>
</tr>
<tr>
<td></td>
<td>N38°09.00'</td>
<td>N38°02.00'</td>
<td>N37°39.00'</td>
<td>N37°39.00'</td>
<td>N/R</td>
<td>C650-603-9356/7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W120°48.00'</td>
<td>W120°39.00'</td>
<td>W120°13.00'</td>
<td>W120°13.00'</td>
<td>N/R</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Restricted to 129 RQW Helicopter/C-130 air refueling. Protected airspace is 5 NM either side of centerline. Air refueling may be conducted in either direction. Hours of operation are continuous.

<table>
<thead>
<tr>
<th>AR222</th>
<th>PXN VORTAC</th>
<th>PXN VORTAC</th>
<th>PXN VORTAC</th>
<th>05000/10000</th>
<th>129RQW Moffett Federal Afld, CA</th>
<th>Oakland ARCP-263.1E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>329/56</td>
<td>327/5</td>
<td>327/5</td>
<td>327/5</td>
<td>N/R</td>
<td>C650-603-9356/7</td>
</tr>
<tr>
<td></td>
<td>N37°36.63'</td>
<td>N36°47.72'</td>
<td>N36°47.72'</td>
<td>N36°47.72'</td>
<td>N/R</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W121°05.00'</td>
<td>W120°48.53'</td>
<td>W120°48.53'</td>
<td>W120°48.53'</td>
<td>N/R</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>Use Squadron Tactical Frequencies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>Use Squadron Tactical Frequencies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>Use Squadron Tactical Frequencies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>Use Squadron Tactical Frequencies</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Restricted to 129 RQW Helicopter/C-130 air refueling. Protected airspace is 4 NM east of centerline and 5 NM west of centerline. Air refueling may be conducted in either direction. Hours of operation are continuous. Aircraft shall contact Stockton Approach Control 120.95 or 294.5 at least 5 minutes prior to conducting refueling operations.
## AR223

**ARIP**

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR223</td>
<td>PYE VOR-DME</td>
<td>305/21</td>
<td>PYE VOR-DME</td>
<td>305/90</td>
<td>N39*15.00'</td>
<td>W124*03.00'</td>
<td>05000/10000</td>
<td>129 OSS/OSK</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N38*21.00'</td>
<td>W123*08.00'</td>
<td>305/21</td>
<td>N39*10.00'</td>
<td>W122*19.00'</td>
<td>07000/09000</td>
</tr>
</tbody>
</table>

**Remarks:** Restricted to 129 RQW Helicopter/C-130 air refueling. Protected airspace is 5 NM either side of centerline. Air refueling may be conducted in either direction. Hours of operation are continuous.

## AR224

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR224</td>
<td>PYE VOR-DME</td>
<td>005/70</td>
<td>PYE VOR-DME</td>
<td>305/21</td>
<td>N39*26.00'</td>
<td>W122*49.00'</td>
<td>05000/10000</td>
<td>129 RQW</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N39*10.00'</td>
<td>W122*19.00'</td>
<td>005/70</td>
<td>N36*26.00'</td>
<td>W122*49.00'</td>
<td>07000/09000</td>
</tr>
</tbody>
</table>

**Remarks:** Restricted to 129 RQW Helicopter/C-130 air refueling. Protected airspace is 5 NM either side of centerline. Air refueling may be conducted in either direction. Hours of operation are continuous.

## AR233

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR233</td>
<td>PGS VOR-DME</td>
<td>065/45</td>
<td>PGS VOR-DME</td>
<td>064/141</td>
<td>N36*25.00'</td>
<td>W108*46.00'</td>
<td>06050.00</td>
<td>60 OSS/OSO</td>
</tr>
<tr>
<td>(East)</td>
<td></td>
<td></td>
<td>N35*45.00'</td>
<td>W112*38.00'</td>
<td>065/45</td>
<td>N36*02.00'</td>
<td>W110*42.00'</td>
<td>251.650</td>
</tr>
<tr>
<td></td>
<td>RSK VORTAC</td>
<td>225/38</td>
<td>RSK VORTAC</td>
<td>235/45</td>
<td>N36*25.00'</td>
<td>W108*46.00'</td>
<td>06050.00</td>
<td>60 OSS/OSO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N36*02.00'</td>
<td>W110*42.00'</td>
<td>225/38</td>
<td>N35*45.00'</td>
<td>W112*38.00'</td>
<td>30/93</td>
</tr>
</tbody>
</table>

**Remarks:** Tankers eastbound on the track may routinely proceed to the exit point, execute a turn north and continue refueling westbound, when annotated on the flight plan. Track cannot be scheduled simultaneously with AR3H. Availability from 1700-1900Z++ and 2100-2230Z++ is limited. Due to track proximity to ARTCC boundaries, aircrew should not request nor expect to receive amendments to flight plan routing after air refueling exit.

## AR238

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR238</td>
<td>PGS VOR-DME</td>
<td>065/45</td>
<td>PGS VOR-DME</td>
<td>064/141</td>
<td>N36*25.00'</td>
<td>W108*46.00'</td>
<td>06050.00</td>
<td>60 OSS/OSO</td>
</tr>
<tr>
<td>(East)</td>
<td></td>
<td></td>
<td>N35*45.00'</td>
<td>W112*38.00'</td>
<td>065/45</td>
<td>N36*02.00'</td>
<td>W110*42.00'</td>
<td>251.650</td>
</tr>
<tr>
<td></td>
<td>RSK VORTAC</td>
<td>225/38</td>
<td>RSK VORTAC</td>
<td>235/45</td>
<td>N36*25.00'</td>
<td>W108*46.00'</td>
<td>06050.00</td>
<td>60 OSS/OSO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N36*02.00'</td>
<td>W110*42.00'</td>
<td>225/38</td>
<td>N35*45.00'</td>
<td>W112*38.00'</td>
<td>30/93</td>
</tr>
</tbody>
</table>

**Remarks:** Tankers eastbound on the track may routinely proceed to the exit point, execute a turn north and continue refueling westbound, when annotated on the flight plan. Track cannot be scheduled simultaneously with AR3H. Availability from 1700-1900Z++ and 2100-2230Z++ is limited. Due to track proximity to ARTCC boundaries, aircrew should not request nor expect to receive amendments to flight plan routing after air refueling exit.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR255H</td>
<td>N39°23.00'</td>
<td>N39°23.00'</td>
<td>ENI VORTAC 279/38 N39°19.20' W124°00.80'</td>
<td>a. 283.900 b. 365.775 c. N/R d. N/R e. 30/93</td>
<td>FL250/FL330</td>
<td>60 OSS/OSO Travis AFB, CA DSN 837-7151 C707-424-7151</td>
<td>Oakland ARCP-306.2E EXIT-133.375E</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tankers westbound on the track may routinely proceed to the EXIT point, execute a right turn and continue refueling eastbound, when annotated on the flight plan. Flight plan remarks will state: Continuous refueling through turn and eastbound to ARCP. Simultaneous opposite direction air refueling (SODAR) authorized with AR5H and AR255H.

| AR255L | N39°23.00' | N39°23.00' | ENI VORTAC 279/38 N39°19.20' W124°00.80' | a. 327.600 b. 365.775 c. N/R d. N/R e. 31/94 | 17000/FL230 | 60 OSS/OSO Travis AFB, CA DSN 837-7151 C707-424-7151 | Oakland ARCP-387.1E EXIT-134.15E |

**REMARKS:** Tankers westbound on the track may routinely proceed to the EXIT point, execute a right turn and continue refueling eastbound, when annotated on the flight plan. Flight plan remarks will state: Continuous refueling through turn and eastbound to ARCP. Simultaneous opposite direction air refueling (SODAR) authorized with AR5H and AR255H.

| AR302A | AEX VORTAC 095/100 AEX VORTAC 318/34 BIX TACAN N31°15.40' W92°30.06' | SIJ VORTAC N3°43.56' W88°21.56' | a. 278.750 b. 260.200 c. N/R d. N/R e. 52/115 | 08000/14000 | 1 SOG/OGO Hurlbert Fld, FL DSN 579-7812/7813 CC850-884-7812/7813 | Houston ARCP-285.6/119.72 ARCP-343.95/133.5 EXIT-288.15/127.65 EXIT-322.4/125.7 |

**REMARKS:** Restricted to C-130 receivers only. Call DSN 579-7812/7813 or C850-884-7812/7813 for scheduling.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR302B</td>
<td>AEX VORTAC</td>
<td>AEX VORTAC</td>
<td>BIX TACAN 318/34</td>
<td>SJI VORTAC</td>
<td>a. 278.750</td>
<td>FL190/FL230</td>
<td>307 BW Barksdale AFB, LA DSN 331-3536/3560/3561 CC318-529-3536/3560/3561</td>
<td>Houston ARCP-285.6/119.72 ARCP-343.95/133.5 EXIT-288.15/127.65 EXIT-322.4/125.7</td>
</tr>
<tr>
<td>(East)</td>
<td>N31°15.40' W92°30.06'</td>
<td>N31°01.00' W89°22.00'</td>
<td>N30°50.00' W89°22.00'</td>
<td>N30°43.56' W88°21.56'</td>
<td>b. 260.200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>SJI VORTAC</td>
<td>SJI VORTAC</td>
<td>LSU VORTAC 336/43</td>
<td>AEX VORTAC</td>
<td>a. 278.750</td>
<td>FL250/FL310</td>
<td>2 OSS/OSO Barksdale AFB, LA DSN 781-4832/7076 CC318-456-4832/7076</td>
<td>Houston ARCP-285.6/119.72 ARCP-343.95/133.5 EXIT-299.6/120.97 EXIT-348.75/132.7</td>
</tr>
<tr>
<td></td>
<td>N30°43.56' W89°16.00'</td>
<td>N30°59.00' W89°16.00'</td>
<td>N31°10.00' W91°33.00'</td>
<td>N31°15.40' W92°30.06'</td>
<td>b. 260.200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>095/100</td>
<td>095/100</td>
<td>274/100</td>
<td>274/100</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N31°15.40' W92°30.06'</td>
<td>N31°01.00' W89°22.00'</td>
<td>N30°50.00' W89°22.00'</td>
<td>N30°59.00' W89°16.00'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>318/34</td>
<td>318/34</td>
<td>336/43</td>
<td>336/43</td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>349/20</td>
<td>349/20</td>
<td>349/20</td>
<td>349/20</td>
<td>29/92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>264.900</td>
<td>264.900</td>
<td>264.900</td>
<td>264.900</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>349/20</td>
<td>349/20</td>
<td>349/20</td>
<td>349/20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>238.900</td>
<td>238.900</td>
<td>238.900</td>
<td>238.900</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER</td>
<td>ARIP</td>
<td>ARCP</td>
<td>NAVIGATION CHECK POINTS</td>
<td>EXIT</td>
<td>CR PLAN</td>
<td>REFUELING ALTITUDES</td>
<td>SCHEDULING UNIT</td>
<td>ASSIGNED ARTCC</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>---------------</td>
<td>-------------------------</td>
<td>----------</td>
<td>---------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>AR307B (West)</td>
<td>349/50</td>
<td>DBS VORTAC</td>
<td>DBS VORTAC</td>
<td>LTJ VOR-DME 173/37</td>
<td>FL190/FL220</td>
<td>620SS/OSO</td>
<td>McChord Fld, WA DSN 382-9925 (During non-duty hours, contact McChord Command Post 382-2635) C253-982-9925 (During non-duty hours, contact McChord Command Post 253-982-2635)</td>
<td>Seattle ARCP-338.3W EXIT-257.6W</td>
</tr>
<tr>
<td></td>
<td>N44°55.20'</td>
<td>W112°07.60'</td>
<td>DBS VORTAC</td>
<td>N44°54.60'</td>
<td>N45°06.90'</td>
<td>W121°18.70'</td>
<td>a. 264.900</td>
<td>b. 238.900</td>
</tr>
<tr>
<td></td>
<td>N44°54.30'</td>
<td>W114°39.80'</td>
<td>LTJ VOR-DME</td>
<td>N44°55.20'</td>
<td>W112°07.60'</td>
<td>N45°06.90'</td>
<td>a. 264.900</td>
<td>b. 238.900</td>
</tr>
</tbody>
</table>

**REMARKS:** Refuel westbound only.

| AR307C | DSD VORTAC | DNJ VOR-DME | LTJ VOR-DME | FL190/FL220 | 620SS/OSO | McChord Fld, WA DSN 382-9925 (During non-duty hours, contact McChord Command Post 382-2635) C253-982-9925 (During non-duty hours, contact McChord Command Post 253-982-2635) | Seattle ARCP-288.1E EXIT-257.6E |
|--------|------------|-------------|-------------|------------|---------|---------------------|-----------------|----------------------|
|         | N44°15.17' | 070/80      | 140/25      | a. 264.900 | b. 238.900 | c. N/R | d. N/R | e. 29/92 |
|         | W121°18.21' | N44°17.10' | N44°23.00' | N45°06.90' | W121°18.70' | a. 264.900 | b. 238.900 | c. N/R | d. N/R | e. 29/92 |
|         | W119°26.50' | W116°00.00' | W116°00.00' | W121°18.70' | N44°58.00' | W116°00.00' | a. 264.900 | b. 238.900 | c. N/R | d. N/R | e. 29/92 |

**REMARKS:** None

<table>
<thead>
<tr>
<th>AR309 (East)</th>
<th>LBL VORTAC</th>
<th>ICT VORTAC</th>
<th>ICT VORTAC</th>
<th>BUM VORTAC</th>
<th>FL270/FL300</th>
<th>509OSS/OSOS</th>
<th>Whiteman AFB, MO DSN 975-1655/1754/1719/L55443</th>
<th>Kansas City ARCP-263.1E EXIT-279.6E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>042/35</td>
<td>254/50</td>
<td>N37°36.62'</td>
<td>N38°21.00'</td>
<td>N38°58.00'</td>
<td>a. 283.900</td>
<td>b. 260.200</td>
<td>c. N/R</td>
</tr>
<tr>
<td></td>
<td>N37°23.67'</td>
<td>W98°37.17'</td>
<td>W97°35.03'</td>
<td>W93°58.00'</td>
<td>W100°23.17'</td>
<td>N37°44.72'</td>
<td>N38°21.00'</td>
<td>W97°35.03'</td>
</tr>
<tr>
<td></td>
<td>W100°23.17'</td>
<td>W98°37.17'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** All turns to the left in tanker orbit pattern. SODAR authorized with AR330. Intended for use by 509BW aircraft. Other units and aircraft permitted on non-interference basis. The scheduling unit retains preemption authority.

1 After duty hours contact C660-563-1035 or Cmd Post DSN 975-3778.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP VORTAC</th>
<th>ARCP VORTAC</th>
<th>CHECK POINTS</th>
<th>EXIT CR</th>
<th>PLAN ALTITUDES</th>
<th>SCHEDULING</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR310</td>
<td>SJN VORTAC</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>a. 352.600</td>
<td>FL210/FL260</td>
<td>49 OSS/OSOS</td>
</tr>
<tr>
<td></td>
<td>346/12</td>
<td>296/26</td>
<td>046/32</td>
<td>064/77</td>
<td>49 OSS/OSOS</td>
<td>FL270/FL290</td>
<td>Albuquerque</td>
</tr>
<tr>
<td></td>
<td>N34°37.00'</td>
<td>N34°37.00'</td>
<td>N34°37.00'</td>
<td>N34°37.00'</td>
<td>N/R</td>
<td>DSN 572-3536</td>
<td>ARCP-307.2E</td>
</tr>
<tr>
<td></td>
<td>W10°9'09.00'</td>
<td>W10°7'14.00'</td>
<td>W10°6'16.00'</td>
<td>W10°5'18.00'</td>
<td>N/R</td>
<td>C575-572-3536</td>
<td>EXIT-284.6E</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 52/115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>SJN VORTAC</td>
<td>346/12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>064/77</td>
<td>296/26</td>
<td>271/70</td>
<td>346/12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N34°37.00'</td>
<td>N34°37.00'</td>
<td>N34°37.00'</td>
<td>N34°37.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W10°5'18.00'</td>
<td>W10°7'14.00'</td>
<td>W10°8'12.00'</td>
<td>W10°9'09.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS: Use of the High Altitude Block is not authorized between 1600-1900Z++. Use of Low Altitude Block is unrestricted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP VORTAC</th>
<th>ARCP VORTAC</th>
<th>CHECK POINTS</th>
<th>EXIT CR</th>
<th>PLAN ALTITUDES</th>
<th>SCHEDULING</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR312H</td>
<td>PUB VORTAC</td>
<td>BGD VORTAC</td>
<td>BGD VORTAC</td>
<td>BGD VORTAC</td>
<td>a. 284.075</td>
<td>FL240/FL260</td>
<td>97 OSS/OSOS</td>
</tr>
<tr>
<td></td>
<td>183/22</td>
<td>300/56</td>
<td>315/29</td>
<td>085/40</td>
<td>284.075</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°56.10'</td>
<td>N36°25.25'</td>
<td>N36°12.00'</td>
<td>N35°43.85'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W10°4'31.10'</td>
<td>W10°2'15.50'</td>
<td>W10°1'42.83'</td>
<td>W10°0'34.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>BGD VORTAC</td>
<td>BGD VORTAC</td>
<td>BGD VORTAC</td>
<td>PUB VORTAC</td>
<td>183/22</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>085/40</td>
<td>315/29</td>
<td>300/56</td>
<td>183/22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N35°43.85'</td>
<td>N36°12.00'</td>
<td>N36°25.25'</td>
<td>N37°56.10'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W10°0'34.00'</td>
<td>W10°1'42.83'</td>
<td>W10°2'15.50'</td>
<td>W10°4'31.10'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS: Intended for exclusive use by 97 AMW aircraft and support tankers only. Other aircraft permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. SODAR authorized with AR312L. For day of scheduling or after normal duty hours contact 97 AMW CP DSN 866-6313, Comm 580-481-6313.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP VORTAC</th>
<th>ARCP VORTAC</th>
<th>CHECK POINTS</th>
<th>EXIT CR</th>
<th>PLAN ALTITUDES</th>
<th>SCHEDULING</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR312L</td>
<td>PUB VORTAC</td>
<td>BGD VORTAC</td>
<td>BGD VORTAC</td>
<td>BGD VORTAC</td>
<td>a. 291.900</td>
<td>FL200/FL220</td>
<td>97 OSS/OSOS</td>
</tr>
<tr>
<td></td>
<td>183/22</td>
<td>300/56</td>
<td>315/29</td>
<td>085/40</td>
<td>291.900</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°56.10'</td>
<td>N36°25.25'</td>
<td>N36°12.00'</td>
<td>N35°43.85'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W10°4'31.10'</td>
<td>W10°2'15.50'</td>
<td>W10°1'42.83'</td>
<td>W10°0'34.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(West)</td>
<td>BGD VORTAC</td>
<td>BGD VORTAC</td>
<td>BGD VORTAC</td>
<td>PUB VORTAC</td>
<td>183/22</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>085/40</td>
<td>315/29</td>
<td>300/56</td>
<td>183/22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N35°43.85'</td>
<td>N36°12.00'</td>
<td>N36°25.25'</td>
<td>N37°56.10'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W10°0'34.00'</td>
<td>W10°1'42.83'</td>
<td>W10°2'15.50'</td>
<td>W10°4'31.10'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS: Intended for exclusive use by 97 AMW aircraft and support tankers only. Other aircraft permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. SODAR authorized with AR312L. For day of scheduling or after normal duty hours contact 97 AMW CP DSN 866-6313, Comm 580-481-6313.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### AR ROUTES

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR313</td>
<td>EIC VORTAC</td>
<td>EIC VORTAC</td>
<td>TUL VORTAC</td>
<td>TUL VORTAC</td>
<td>TUL VORTAC</td>
<td>FL180/FL220</td>
<td>97OSS/OSOS</td>
<td>Fort Worth</td>
</tr>
<tr>
<td>(North)</td>
<td>147/30</td>
<td>327/70</td>
<td>147/70</td>
<td>N35°08.20'</td>
<td>W95°11.20'</td>
<td>327/30</td>
<td>Altus AFB, OK</td>
<td>ARCP-285.5W</td>
</tr>
<tr>
<td></td>
<td>N32°19.25'</td>
<td>N33°49.00'</td>
<td>327/70</td>
<td>N36°39.00'</td>
<td>W96°03.00'</td>
<td>113</td>
<td>DSN 866-7848/7849</td>
<td>EXIT-291.7W</td>
</tr>
<tr>
<td></td>
<td>W93°33.08'</td>
<td>W94°25.00'</td>
<td>327/105</td>
<td>N31°11.50'</td>
<td>W94°25.40'</td>
<td>105</td>
<td>C580-481-7848/7849</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Intended for exclusive use by 97 AMW aircraft conducting AR training. Other aircraft permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. No simultaneous refueling with AR313A. AR313 intersects with AR112. Aircrews will ensure the AR112 scheduling unit has been contacted to ensure deconfliction. For day of scheduling or after normal duty hours contact 97 AMW CP DSN 866-6313, COMM 580-481-6313.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR313A</td>
<td>EIC VORTAC</td>
<td>EIC VORTAC</td>
<td>EIC VORTAC</td>
<td>TUL VORTAC</td>
<td>TUL VORTAC</td>
<td>FL190/FL220</td>
<td>97OSS/OSOS</td>
<td>Fort Worth</td>
</tr>
<tr>
<td>(North)</td>
<td>147/105</td>
<td>N31°11.50'</td>
<td>N32°46.28'</td>
<td>327/70</td>
<td>N35°08.20'</td>
<td>327/30</td>
<td>Altus AFB, OK</td>
<td>ARCP-291.7E</td>
</tr>
<tr>
<td></td>
<td>N33°49.20'</td>
<td>N33°49.20'</td>
<td>N36°39.00'</td>
<td>W95°11.20'</td>
<td>W95°11.20'</td>
<td>N36°39.00'</td>
<td>DSN 866-7848/7848</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W92°54.90'</td>
<td>W93°48.60'</td>
<td>W96°03.00'</td>
<td>W94°25.40'</td>
<td>W96°03.00'</td>
<td>113</td>
<td>C580-481-7848/7849</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Intended for exclusive use by 97 AMW aircraft conducting AR training. Other aircraft permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. No simultaneous refueling with AR313. AR313A intersects with AR112 Hacket ATCAA, Clairborne ATCAA and Warrior ATCAA. Aircrews will ensure the appropriate scheduling unit has been contacted to ensure deconfliction. For day of scheduling or after normal duty hours contact 97 AMW CP DSN 866-6313, COMM 580-481-6313.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR314</td>
<td>CIM VORTAC</td>
<td>CIM VORTAC</td>
<td>CIM VORTAC 089/50</td>
<td>Fl240/FL310</td>
<td>552 OSS/OSOS</td>
<td>Tinker AFB, OK</td>
<td>DSN 884-1203/1204</td>
<td>Albuquerque</td>
</tr>
<tr>
<td>(East)</td>
<td>240/100</td>
<td>N36°00.00'</td>
<td>W104°52.32'</td>
<td>W101°22.93'</td>
<td>a. 295.800</td>
<td>ARCP-239.25W</td>
<td>ARCP-346.35E</td>
<td>ARCP-351.7W</td>
</tr>
<tr>
<td></td>
<td>N36°19.00'</td>
<td>W103°52.00'</td>
<td>BGD VORTAC</td>
<td>N35°48.42'</td>
<td>b. 319.500</td>
<td>ARCP-351.7W</td>
<td>ARCP-385.65W</td>
<td>EXIT-239.25W</td>
</tr>
<tr>
<td></td>
<td>W104°52.32'</td>
<td>CIM VORTAC</td>
<td>N36°00.00'</td>
<td>W106°50.00'</td>
<td>N/R</td>
<td>(East)-ARCP 346.35</td>
<td>(East)-ARCP 351.7</td>
<td>FL 240/FL 260; 239.25 FL 270/FL 310; EXIT 351.7 FL 240/FL 260; 385.65 FL 270/FL 310</td>
</tr>
<tr>
<td></td>
<td>CIM VORTAC</td>
<td>N36°29.48'</td>
<td>W104°52.00'</td>
<td>FL 240/FL 260; 239.25 FL 270/FL 310 EXIT 346.35 FL 240/FL 260; 239.25 FL 270/FL 310</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIM VORTAC</td>
<td>N36°29.48'</td>
<td>W104°52.00'</td>
<td>FL 240/FL 260; 239.25 FL 270/FL 310 EXIT 346.35 FL 240/FL 260; 239.25 FL 270/FL 310</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Restricted to FL 260 and below, Mon-Fri, between 1600-1800Z++, other times restricted to a refueling altitude block FL 240/FL 260 or block FL 270/FL 310. Restricted for use by the 552 ACW act and support tankers only.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR315</td>
<td>PXV VORTAC</td>
<td>PXV VORTAC</td>
<td>LOZ VOR-DME</td>
<td>N37°01.99'</td>
<td>W84°06.60'</td>
<td>104/80</td>
<td>FL190/FL220</td>
<td>121 ARW</td>
</tr>
<tr>
<td></td>
<td>N37°55.70'</td>
<td>W87°45.74'</td>
<td>N37°32.00'</td>
<td>W86°09.00'</td>
<td>085/100</td>
<td>N37°15.50'</td>
<td>N/R</td>
<td>33/96</td>
</tr>
<tr>
<td>(East)</td>
<td>LOZ VOR-DME</td>
<td>PXV VORTAC</td>
<td>PXV VORTAC</td>
<td>N37°55.70'</td>
<td>W87°45.74'</td>
<td>104/80</td>
<td>343.250</td>
<td>Indianapolis</td>
</tr>
<tr>
<td>(West)</td>
<td>LOZ VOR-DME</td>
<td>PXV VORTAC</td>
<td>PXV VORTAC</td>
<td>N37°32.00'</td>
<td>W86°09.00'</td>
<td>085/100</td>
<td>236.650</td>
<td>ARCP-353.65E</td>
</tr>
<tr>
<td></td>
<td>085/100</td>
<td>N37°15.50'</td>
<td>W82°03.00'</td>
<td>N37°01.99'</td>
<td>W84°06.60'</td>
<td>104/80</td>
<td>N/R</td>
<td>EXIT-257.85E</td>
</tr>
<tr>
<td></td>
<td>N37°55.70'</td>
<td>W87°45.74'</td>
<td>N37°32.00'</td>
<td>W86°09.00'</td>
<td>085/100</td>
<td>N37°15.50'</td>
<td>N/R</td>
<td>33/96</td>
</tr>
<tr>
<td>REMARKS:</td>
<td>Refueling not permitted 1500-1600Z++ and 1930-2030Z++ Mon-Fri.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| AR318  | PWE VORTAC | LMN VOR-DME | IRK VORTAC | IRK VORTAC | W99°18.50' | N40°03.75' | N40°22.50' | W92°49.25' | FL190/FL220 | 1 ACCCS | Chicago |
|        | 183/32 | 207/38 | 318/18 | 059/84 | W94°25.75' | N40°03.75' | N40°22.50' | W92°49.25' | 240.350 | Offutt AFB, NE |
|        | N39°40.00' | N40°22.50' | N40°43.50' | W90°55.50' | 260.200 | DSN 271-5687 (STN 237) |
| (East) | IRK VORTAC | IRK VORTAC | LMN VOR-DME | PWE VORTAC | W90°55.50' | N40°43.50' | W90°55.50' | 50/113 | City |
|        | 059/84 | 207/38 | 318/18 | 183/32 | W92°49.25' | N40°22.50' | N40°43.50' | N40°43.50' | ARCP-343.7E |
| (West) | IRK VORTAC | IRK VORTAC | LMN VOR-DME | PWE VORTAC | W92°49.25' | N40°22.50' | N40°43.50' | N40°43.50' | Kansas City |
|        | 059/84 | 207/38 | 318/18 | 183/32 | W92°49.25' | N40°22.50' | N40°43.50' | N40°43.50' | ARCP-343.7E |
| REMARKS: | None |

<p>| AR321  | GRB VORTAC | GRB VORTAC | GRB VORTAC | GRB VORTAC | GRB VORTAC | GRB VORTAC | FL250/FL280 | 128th ARW, WIANG, General Mitchell Intl, Milwaukee, WI |
|        | 104/110 | 105/15 | 110/120 | 110/120 | 104/110 | 110/120 | 105/80 | Minneapolis |
|        | N44°03.00' | N44°29.00' | N44°33.31' | W88°11.69' | N44°10.00' | W86°24.00' | 282.700 | ARCP-263.0W |
|        | W85°45.00' | W87°51.00' | 300/60 | N45°03.83' | W89°24.25' | 128 ARW Comd Post | 33/96 | EXIT-263.0W |
|        | 104/110 | 105/15 | 110/120 | 110/120 | 104/110 | 110/120 | 105/80 | 276.500 |
|        | N44°03.00' | N44°29.00' | 300/60 | N45°03.83' | W89°24.25' | 128 ARW Comd Post | 33/96 | 580-8701 (After duty hr 580-8475) |
|        | W85°45.00' | W87°51.00' | 300/60 | N45°03.83' | W89°24.25' | 128 ARW Comd Post | 33/96 | 580-8475 |
|        | 104/110 | 105/15 | 110/120 | 110/120 | 104/110 | 110/120 | 105/80 | 276.500 |
|        | N44°03.00' | N44°29.00' | 300/60 | N45°03.83' | W89°24.25' | 128 ARW Comd Post | 33/96 | 580-8701 (After duty hr 580-8475) |
|        | W85°45.00' | W87°51.00' | 300/60 | N45°03.83' | W89°24.25' | 128 ARW Comd Post | 33/96 | 580-8475 |
| REMARKS: | Air refueling from GRB 104/100 to GRB 105/115 to GRB, right turn to intercept GRB 300 radial outbound to 60 DME, make a left turn to intercept GRB 285 radial inbound to GRB and fly GRB 105 radial outbound to the exit. |</p>
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING</th>
<th>ASSIGNED UNIT</th>
<th>ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR324</td>
<td>BQN VORTAC</td>
<td>BQN VORTAC</td>
<td>BQN VORTAC</td>
<td>BQN VORTAC</td>
<td>a. 327.600</td>
<td>FL200/FL250</td>
<td>156 AW (PRANG) MUNIZ</td>
<td>San Juan</td>
<td></td>
</tr>
<tr>
<td>PUERTO RICO</td>
<td>N18°55.00' W67°09.00'</td>
<td>N17°15.00' W66°57.00'</td>
<td>N15°36.00' W66°40.00'</td>
<td>W67°03.00'</td>
<td>b. 343.250</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 51/114</td>
<td></td>
</tr>
<tr>
<td></td>
<td>005/25</td>
<td>183/75</td>
<td>182/175</td>
<td>182/25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N18°05.00' W67°03.00'</td>
<td>BQN VORTAC</td>
<td>BQN VORTAC</td>
<td>BQN VORTAC</td>
<td>a. 327.600</td>
<td>FL200/FL250</td>
<td>156 AW (PRANG) MUNIZ</td>
<td>San Juan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>183/75</td>
<td>182/175</td>
<td>182/25</td>
<td></td>
<td>b. 343.250</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 51/114</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N18°05.00' W67°03.00'</td>
<td>N18°05.00' W67°03.00'</td>
<td>N18°05.00' W67°03.00'</td>
<td>N18°05.00' W67°03.00'</td>
<td>b. 343.250</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 51/114</td>
<td></td>
</tr>
<tr>
<td></td>
<td>183/75</td>
<td>182/175</td>
<td>182/25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Request pilots file distance-radii in lieu of coordinates even though distances filed may exceed the 130 NM limitation for navigational purposes.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING</th>
<th>ASSIGNED UNIT</th>
<th>ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR328</td>
<td>PSK VORTAC</td>
<td>PSK VORTAC</td>
<td>PSK VORTAC</td>
<td>PSK VORTAC</td>
<td>a. 235.100</td>
<td>FL180/FL230</td>
<td>134th ARW McGee Tyson</td>
<td>Atlanta</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°05.26' W80°42.77'</td>
<td>N36°43.00' W81°53.00'</td>
<td>N36°48.00' W81°14.00'</td>
<td>W81°14.00'</td>
<td>b. 235.100</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>255/61</td>
<td>242/100</td>
<td>225/30</td>
<td>225/30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N36°48.00' W81°14.00'</td>
<td>N36°48.00' W81°14.00'</td>
<td>N36°48.00' W81°14.00'</td>
<td>N36°48.00' W81°14.00'</td>
<td>b. 235.100</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>255/61</td>
<td>242/100</td>
<td>225/30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N36°48.00' W81°14.00'</td>
<td>N36°48.00' W81°14.00'</td>
<td>N36°48.00' W81°14.00'</td>
<td>N36°48.00' W81°14.00'</td>
<td>b. 235.100</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>255/61</td>
<td>242/100</td>
<td>225/30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Left turn at PSK VORTAC 255/100, inbound PSK VORTAC 242.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING</th>
<th>ASSIGNED UNIT</th>
<th>ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR330</td>
<td>LBL VORTAC</td>
<td>ICT VORTAC</td>
<td>ICT VORTAC</td>
<td>ICT VORTAC</td>
<td>a. 305.500</td>
<td>FL180/FL220</td>
<td>22OSS/OSOS, McConnell</td>
<td>Kansas City</td>
<td></td>
</tr>
<tr>
<td></td>
<td>042/35</td>
<td>254/50</td>
<td>254/50</td>
<td>254/50</td>
<td>b. 260.200</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/115</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°23.76' W100°23.17'</td>
<td>N37°23.76' W100°23.17'</td>
<td>N37°23.76' W100°23.17'</td>
<td>N37°23.76' W100°23.17'</td>
<td>b. 260.200</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/115</td>
<td></td>
</tr>
<tr>
<td></td>
<td>042/35</td>
<td>254/50</td>
<td>254/50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°23.76' W100°23.17'</td>
<td>N37°23.76' W100°23.17'</td>
<td>N37°23.76' W100°23.17'</td>
<td>N37°23.76' W100°23.17'</td>
<td>b. 260.200</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/115</td>
<td></td>
</tr>
<tr>
<td></td>
<td>042/35</td>
<td>254/50</td>
<td>254/50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°23.76' W100°23.17'</td>
<td>N37°23.76' W100°23.17'</td>
<td>N37°23.76' W100°23.17'</td>
<td>N37°23.76' W100°23.17'</td>
<td>b. 260.200</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/115</td>
<td></td>
</tr>
<tr>
<td></td>
<td>042/35</td>
<td>254/50</td>
<td>254/50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** When using AR330 (West), plan to avoid Truman MOA/ATCAA airspace 13 NM east of the ARIP. This airspace is potentially active up to FL 230. Contact the 509 OSS/OSOS at DSN 975-1713/1754 to determine if scheduled MOA/ATCAA operations will restrict enroute access to the ARIP. SODAR authorized with AR309.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING</th>
<th>ASSIGNED UNIT</th>
<th>ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR332</td>
<td>SJU VORTAC</td>
<td>SJU VORTAC</td>
<td>SJU VORTAC</td>
<td>SJU VORTAC</td>
<td>a. 235.100</td>
<td>FL200/FL250</td>
<td>156 AW (PRANG) MUNIZ</td>
<td>San Juan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>322/50</td>
<td>324/149</td>
<td>324/149</td>
<td>324/149</td>
<td>b. 343.250</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N19°00.00' W67°20.00'</td>
<td>N19°09.00' W67°30.00'</td>
<td>N19°09.00' W67°30.00'</td>
<td>N19°09.00' W67°30.00'</td>
<td>b. 343.250</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>322/50</td>
<td>324/149</td>
<td>324/149</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N19°00.00' W67°20.00'</td>
<td>N19°00.00' W67°20.00'</td>
<td>N19°00.00' W67°20.00'</td>
<td>N19°00.00' W67°20.00'</td>
<td>b. 343.250</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>322/50</td>
<td>324/149</td>
<td>324/149</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N19°00.00' W67°20.00'</td>
<td>N19°00.00' W67°20.00'</td>
<td>N19°00.00' W67°20.00'</td>
<td>N19°00.00' W67°20.00'</td>
<td>b. 343.250</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>322/50</td>
<td>324/149</td>
<td>324/149</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** None
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR337</td>
<td>PDT VORTAC</td>
<td>PDT VORTAC</td>
<td>LKT VOR-DME 001/54 N45°53.19' W113°46.45' BIL VORTAC 253/42 N45°46.19' W109°37.45' GTF VORTAC 091/77 N47°03.19' W119°32.02'</td>
<td>GEG VORTAC 169/22 N47°12.19' W117°43.02'</td>
<td>a. 282.000 b. 305.350 c. N/R d. N/R e. 50/113</td>
<td>FL210/FL230</td>
<td>6OSS/OSO</td>
<td>McChord Fld, WA DSN 382-9925 C253-982-9925</td>
</tr>
</tbody>
</table>

**REMARKS:** Deconflict track with AR-10 and AR610 A/B. After duty hours contact McChord Fld Command Post at DSN 382-2635 or C253-982-2635.

| AR338  | PDT VORTAC | PDT VORTAC | LKT VOR-DME 001/54 N45°53.81' W113°46.00' GTF VORTAC 243/96 N47°07.81' W113°42.00' | GEG VORTAC 169/22 N47°12.18' W117°43.00' | a. 282.000 b. 305.350 c. N/R d. N/R e. 50/113 | FL210/FL230 | 6OSS/OSO | McChord Fld, WA DSN 382-9925 C253-982-9925 | Seattle ARTCC ARCP-119.225E EXIT-119.225W |

**REMARKS:** Deconflict track with AR-10 and AR610 A/B. After duty hours contact McChord Fld Command Post at DSN 382-2635 or C253-982-2635.


**REMARKS:** Used for operational requirements only and not approved for practice or training unless prior approval is obtained from Seattle ARTCC 72 hours in advance through the scheduling facility. No simultaneous refueling with AR356. Email:5OSSOSKR@offutt.af.mil


**REMARKS:** Used for operational requirements only and not approved for practice or training unless prior approval is obtained from Seattle ARTCC 72 hours in advance through the scheduling facility. No simultaneous refueling with AR355. Email: 5OSSOSKR@offutt.af.mil

SCHEDULING UNIT: (1330-2230z++ wkd)
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR400</td>
<td>MMB VORTAC 181/14</td>
<td>GCK VORTAC 103/22</td>
<td>HCT VORTAC N40°27.24' W100°55.41'</td>
<td>HCT VORTAC 339/101</td>
<td>N42°06.05' W101°19.95'</td>
<td>a. 228.250</td>
<td>b. 364.325</td>
<td>c. N/R</td>
</tr>
<tr>
<td></td>
<td>(North)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Denver</td>
</tr>
<tr>
<td></td>
<td>MMB VORTAC 181/14</td>
<td>GCK VORTAC 103/22</td>
<td>HCT VORTAC N40°27.24' W100°55.41'</td>
<td>HCT VORTAC 339/101</td>
<td>N42°06.05' W101°19.95'</td>
<td>a. 228.250</td>
<td>b. 364.325</td>
<td>c. N/R</td>
</tr>
<tr>
<td></td>
<td>(South)</td>
<td>HCT VORTAC 339/101</td>
<td>GCK VORTAC N37°45.95' W100°17.82'</td>
<td>MMB VORTAC 181/14</td>
<td>N36°06.86' W99°56.10'</td>
<td>a. 396.200</td>
<td>b. 297.300</td>
<td>c. N/R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minneapolis</td>
</tr>
<tr>
<td></td>
<td>(West)</td>
<td>LMN VOR-DME N40°35.80' W93°58.06'</td>
<td>PWE VORTAC N40°12.02' W96°12.38'</td>
<td>PWE VORTAC 254/100</td>
<td>N39°51.80' W98°19.90'</td>
<td>a. 297.300</td>
<td>b. 396.200</td>
<td>c. N/R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minneapolis</td>
</tr>
<tr>
<td></td>
<td>(West)</td>
<td>LMN VOR-DME N40°35.80' W93°58.06'</td>
<td>PWE VORTAC N40°12.02' W96°12.38'</td>
<td>PWE VORTAC 254/100</td>
<td>N39°51.80' W98°19.90'</td>
<td>a. 297.300</td>
<td>b. 396.200</td>
<td>c. N/R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minneapolis</td>
</tr>
</tbody>
</table>

**REMARKS:**

AR406H: Hold north of the IP, right turns. Intended for exclusive use by 97 AMW aircraft and support tankers only. Others permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. For day of scheduling or after normal duty hours contact 97 AMW CP DSN 866-6313, C580-481-6313.

AR406L: SODAR authorized. All SODAR Course Reversal Turns to the North. AR406L will be scheduled solely by the 55th WG. 55th WG aircraft will have priority for use of AR406L.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR452</td>
<td>FMG VORTAC 276/47  N39°49.00' W120°36.00'</td>
<td>REO VOR-DME 159/49  N41°46.00' W117°50.00'</td>
<td>REO VOR-DME 081/47  N42°27.00' W116°49.00'</td>
<td>BOI VORTAC 158/38  N42°55.00' W116°07.00'</td>
<td>a. 361.700  b. 384.600  c. N/R  d. N/R  e. 29/92</td>
<td>FL240/FL260  366OSS/OSOS</td>
<td>Mt Home AFB, ID  DSN 728-2172  C208-828-2172</td>
<td>Oakland / Salt Lake City  ARCP-269.0E  EXIT-290.5E</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>REO VOR-DME 062/63  N43°45.00' W114°46.00'</td>
<td>BOI VORTAC 159/49  N41°46.00' W117°50.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Southwest)</td>
<td>DLN VOR-DME 171/14  N45°01.00' W112°36.00'</td>
<td>BOR VORTAC 062/63  N43°45.00' W114°46.00'</td>
<td>BOR VORTAC 158/38  N42°55.00' W116°07.00'</td>
<td>REO VOR-DME 081/47  N42°27.00' W116°49.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS: None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR453</td>
<td>FAR VOR-DME 205/46  N46°07.00' W97°28.00'</td>
<td>ABR VOR-DME 329/71  N46°30.00' W99°04.00'</td>
<td>FAR VOR-DME 206/46  N46°07.00' W97°28.00'</td>
<td>FAR VOR-DME 327/71  N46°30.00' W99°04.00'</td>
<td>a. 291.900  b. 320.900  c. N/R  d. N/R  e. 51/114</td>
<td>FL210/FL230  55WG Offutt AFB, NE</td>
<td>DSN 271-6010  C402-294-6010</td>
<td>Minneapolis  ARCP-270.3W  EXIT-270.3W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS: None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER</td>
<td>ARIP</td>
<td>ARCP</td>
<td>NAVIGATION CHECK POINTS</td>
<td>EXIT</td>
<td>CR PLAN</td>
<td>REFUELING ALTITUDES</td>
<td>SCHEDULING UNIT</td>
<td>ASSIGNED ARTCC</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>------</td>
<td>-------------------------</td>
<td>------</td>
<td>---------</td>
<td>---------------------</td>
<td>----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>AR455</td>
<td>PXV VORTAC</td>
<td>IUU VORTAC</td>
<td>HVQ VOR-DME</td>
<td>BKW VOR-DME</td>
<td>234/27</td>
<td>FL250/FL270</td>
<td>552 OSS/OSOS</td>
<td>Indianapolis ARCP-293.22E EXIT-290.55E</td>
</tr>
<tr>
<td>(East)</td>
<td>080/10</td>
<td>130/30</td>
<td>N37°56.92' W87°33.50'</td>
<td>N37°38.00' W83°12.75'</td>
<td>a. 334.100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°46.50'</td>
<td>W85°06.25'</td>
<td></td>
<td>N37°28.50' W81°32.42'</td>
<td>b. 291.900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°56.92'</td>
<td>W87°33.50'</td>
<td></td>
<td>N37°38.00' W83°12.75'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N37°28.50' W81°32.42'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N37°38.00' W83°12.75'</td>
<td>e. 29/92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR455</td>
<td>PXV VORTAC</td>
<td>IUU VORTAC</td>
<td>HVQ VOR-DME</td>
<td>BKW VOR-DME</td>
<td>234/27</td>
<td>FL250/FL270</td>
<td>552 OSS/OSOS</td>
<td>Indianapolis ARCP-293.22E EXIT-290.55E</td>
</tr>
<tr>
<td>(West)</td>
<td>BKW VOR-DME</td>
<td>HVQ VOR-DME</td>
<td>BWG VORTAC</td>
<td>PXV VORTAC</td>
<td>080/10</td>
<td>FL240/FL260</td>
<td>60 OSS/OSO</td>
<td>Oakland ARCP-134.97E/379.2 E</td>
</tr>
<tr>
<td></td>
<td>234/27</td>
<td>235/72</td>
<td>036/68</td>
<td>080/10</td>
<td>a. 318.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°28.50'</td>
<td>N37°36.18'</td>
<td>N37°49.23'</td>
<td>N37°56.92'</td>
<td>b. 384.600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W81°32.42'</td>
<td>W85°33.72'</td>
<td>W85°33.72'</td>
<td>W87°33.50'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 29/92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>Closed daily from 1400-1500Z++, 1800-1900Z++ and 2359-0059Z++. Normal scheduling will be accomplished through MASMS. Note: 552 OSS/OSOS retains exclusive bump privileges.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR462</td>
<td>SAC VORTAC</td>
<td>FMG VORTAC</td>
<td>FMG VORTAC</td>
<td>BAM VORTAC</td>
<td>322/62</td>
<td>FL240/FL260</td>
<td>60 OSS/OSO</td>
<td>Oakland ARCP-134.97E/379.2 E</td>
</tr>
<tr>
<td></td>
<td>019/50</td>
<td>267/38</td>
<td>353/81</td>
<td>322/62</td>
<td>a. 318.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N39°07.00'</td>
<td>N39°40.00'</td>
<td>N40°52.00'</td>
<td>N41°30.00'</td>
<td>b. 384.600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W120°55.00'</td>
<td>W120°27.00'</td>
<td>W119°23.00'</td>
<td>W117°30.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 29/92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR505</td>
<td>BET VORTAC</td>
<td>MCG VORTAC</td>
<td>MCG VORTAC</td>
<td>FYU VORTAC</td>
<td>230/44</td>
<td>FL240/FL260</td>
<td>168 ARS/DDO</td>
<td>Anchorage ARCP-353.8E/128.1E</td>
</tr>
<tr>
<td>(East)</td>
<td>023/85</td>
<td>255/48</td>
<td>321/36</td>
<td>230/44</td>
<td>a. 315.900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N61°54.08'</td>
<td>N63°00.00'</td>
<td>N63°31.00'</td>
<td>N66°19.00'</td>
<td>b. 265.700</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W160°01.32'</td>
<td>W157°22.00'</td>
<td>W156°05.00'</td>
<td>W147°00.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FYU VORTAC</td>
<td>ENN VORTAC</td>
<td>MCG VORTAC</td>
<td>BET VORTAC</td>
<td>023/85</td>
<td>FL240/FL260</td>
<td>168 ARS/DDO</td>
<td>Anchorage ARCP-353.8E/128.1E</td>
</tr>
<tr>
<td>(West)</td>
<td>230/44</td>
<td>305/58</td>
<td>321/36</td>
<td>023/85</td>
<td>a. 315.900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N66°19.00'</td>
<td>N65°23.00'</td>
<td>N63°31.00'</td>
<td>N61°54.00'</td>
<td>b. 265.700</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W147°00.00'</td>
<td>W150°23.00'</td>
<td>W156°05.00'</td>
<td>W160°00.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER</td>
<td>ARIP</td>
<td>ARCP</td>
<td>NAVIGATION CHECK POINTS</td>
<td>EXIT</td>
<td>CR PLAN</td>
<td>REFUELING ALTITUDES</td>
<td>SCHEDULING UNIT</td>
<td>ASSIGNED ARTCC</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>------</td>
<td>-------------------------</td>
<td>------</td>
<td>---------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>AR506</td>
<td>ORT VORTAC</td>
<td>ORT VORTAC</td>
<td>ORT VORTAC</td>
<td>ORT VORTAC</td>
<td>ORT VORTAC</td>
<td>ORT VORTAC</td>
<td>FL240/FL310</td>
<td>168ARS/DOO</td>
</tr>
<tr>
<td>(North)</td>
<td>150/118</td>
<td>194/24</td>
<td>296/48</td>
<td>N61°00.00'</td>
<td>W141°30.00'</td>
<td>280/57</td>
<td>N63°27.59'</td>
<td>Eielson AFB, AK</td>
</tr>
<tr>
<td>ALASKA</td>
<td>N61°00.00'</td>
<td>W142°27.00'</td>
<td>N63°33.56'</td>
<td>W143°03.48'</td>
<td>W142°01.00'</td>
<td>W143°03.48'</td>
<td>DSN 317-377-8812</td>
<td>EXIT-323.0W/127.1W</td>
</tr>
<tr>
<td></td>
<td>BKA VORTAC</td>
<td>BKA VORTAC</td>
<td>BKA VORTAC</td>
<td>BKA VORTAC</td>
<td>BKA VORTAC</td>
<td>BKA VORTAC</td>
<td>200/118</td>
<td>168ARS/DOO</td>
</tr>
<tr>
<td></td>
<td>194/24</td>
<td>296/48</td>
<td>150/118</td>
<td>177/61</td>
<td>157/121</td>
<td>157/121</td>
<td>N60°56.00'</td>
<td>Eielson AFB, AK</td>
</tr>
<tr>
<td></td>
<td>N62°38.00'</td>
<td>N63°33.56'</td>
<td>N61°00.00'</td>
<td>N62°00.00'</td>
<td>N60°56.00'</td>
<td>N61°00.00'</td>
<td>W143°03.48'</td>
<td>DSN 317-377-8812</td>
</tr>
<tr>
<td></td>
<td>W142°27.00'</td>
<td>W142°01.00'</td>
<td>W142°41.00'</td>
<td>W142°41.00'</td>
<td>N62°00.00'</td>
<td>W142°41.00'</td>
<td>C907-377-8812</td>
<td>EXIT-323.0W/127.1W</td>
</tr>
<tr>
<td></td>
<td>N/R</td>
<td>30/93</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>a. 288.800</td>
<td>b. 265.700</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 30/93</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>FL240</td>
<td>FL310</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**REMARKS:** Refueling restricted to three flight levels. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

<table>
<thead>
<tr>
<th>AR507</th>
<th>YAK VOR-DME</th>
<th>BKA VORTAC</th>
<th>BKA VORTAC</th>
<th>BKA VORTAC</th>
<th>BKA VORTAC</th>
<th>a. 270.025</th>
<th>FL240/FL270</th>
<th>168ARS/DOO</th>
<th>Anchorage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(East)</td>
<td>196/91</td>
<td>265/110</td>
<td>225/52</td>
<td>141/92</td>
<td>141/92</td>
<td>b. 265.700</td>
<td>e. 31/94</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ALASKA</td>
<td>N58°16.00'</td>
<td>N57°16.47'</td>
<td>N56°29.00'</td>
<td>N55°25.00'</td>
<td>N55°25.00'</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>W141°20.00'</td>
<td>W138°49.00'</td>
<td>W136°57.50'</td>
<td>W134°40.00'</td>
<td>W134°40.00'</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**REMARKS:** Times as coordinated with ARTCC. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.
**AR ROUTES**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR508E (East) ALASKA</td>
<td>N57°44.26' W174°10.08'</td>
<td>HODDY</td>
<td>W170°13.98'</td>
<td>SPY NDB-DME</td>
<td>PDN NDB-DME</td>
<td>FL240/FL290</td>
<td>168ARS/DOO</td>
<td>Anchorage</td>
</tr>
<tr>
<td>AR508W (West) ALASKA</td>
<td>N56°57.26' W158°38.85'</td>
<td>PDN NDB-DME</td>
<td>078°/78</td>
<td>N56°57.26' W158°38.85'</td>
<td>a. 288.800</td>
<td>168ARS/DOO</td>
<td>Eielson AFB, AK</td>
<td></td>
</tr>
<tr>
<td>AR509 ALASKA</td>
<td>N64°57.56' W150°07.72'</td>
<td>GAL VOR-DME</td>
<td>060°/70</td>
<td>N64°58.55' W154°06.07'</td>
<td>b. 265.700</td>
<td>168ARS/DOO</td>
<td>Anchorage</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Weather briefing support agencies should request mission forecast support from 170WS at DSN 315-449-8333 at least 8 hours prior to mission brief time. SODAR authorized with AR508W when scheduled and coordinated with the 168 ARW and ATC.

**AR508W** (West) ALASKA

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR509 ALASKA</td>
<td>N64°57.56' W150°07.72'</td>
<td>GAL VOR-DME</td>
<td>060°/70</td>
<td>N64°58.55' W154°06.07'</td>
<td>b. 265.700</td>
<td>168ARS/DOO</td>
<td>Eielson AFB, AK</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Weather briefing support agencies should request mission forecast support from 170WS at DSN 315-449-8333 at least 8 hours prior to mission brief time. SODAR authorized with AR508E when scheduled and coordinated with the 168 ARW and ATC.

**AR509** ALASKA

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR509 ALASKA</td>
<td>N64°57.56' W150°07.72'</td>
<td>GAL VOR-DME</td>
<td>060°/70</td>
<td>N64°58.55' W154°06.07'</td>
<td>b. 265.700</td>
<td>168ARS/DOO</td>
<td>Anchorage</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** AR509 and AR505 will not be used simultaneously. Weather briefing support agencies should request mission forecast support from 170WS at DSN 315-449-7924 at least 8 hours prior to mission brief time.
## REFUELING ANCHORS

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR600</td>
<td>CAE VORTAC 151/53</td>
<td>CAE VORTAC 151/53</td>
<td>CAE VORTAC 075/59</td>
<td>CAE VORTAC 075/59</td>
<td>CAE VORTAC 059/14</td>
<td>a. 348.900</td>
<td>FL240/FL280</td>
<td>20OSS/OSOS</td>
<td>Jacksonville</td>
<td>Authorized all times except 1400-1600Z++.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N33°05.85'</td>
<td>N33°05.85'</td>
<td>N34°08.42'</td>
<td>N34°08.42'</td>
<td>N33°59.07'</td>
<td>b. 319.700</td>
<td></td>
<td></td>
<td>ARCP-319.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W80°30.75'</td>
<td>W80°30.75'</td>
<td>W79°55.27'</td>
<td>W79°55.27'</td>
<td>W80°49.12'</td>
<td>c. N/R</td>
<td>or as assigned</td>
<td></td>
<td>DSN 965-1118</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAE VORTAC 059/45</td>
<td>CAE VORTAC 059/45</td>
<td>N34°15.85'</td>
<td>N34°15.85'</td>
<td></td>
<td>d. N/R</td>
<td>by ATC 3000'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N33°39.82'</td>
<td>N33°39.82'</td>
<td>W80°18.08'</td>
<td>W80°18.08'</td>
<td></td>
<td>e. 30/93</td>
<td>required.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W80°49.12'</td>
<td>W80°49.12'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** None.

**REMARKS:** Jacksonville ARTCC radar must be operational. The scheduling unit (20 OSS/OSOS) will resolve conflicts with AR207. Simultaneous use of AR600 and AR207 is prohibited. User contact scheduling unit during normal duty hours, 1230-2130Z++, Mon-Fri, except holidays.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR601</td>
<td>ILM VORTAC 218/36</td>
<td>ILM VORTAC 218/110</td>
<td>ILM VORTAC 218/110</td>
<td>ILM VORTAC 208/108/110</td>
<td>ILM VORTAC 208/108</td>
<td>CHS VORTAC 094/34</td>
<td>a. 283.900</td>
<td>16000/FL260</td>
<td>20OSS/OSOS</td>
<td>Jacksonville</td>
<td>ARCP-381.4</td>
</tr>
<tr>
<td></td>
<td>N33°50.00' W78°15.00'</td>
<td>N32°46.00' W78°59.00'</td>
<td>N32°46.00' W78°59.00'</td>
<td>N32°40.00' W78°38.00'</td>
<td>N32°40.00' W78°38.00'</td>
<td>N32°54.00' W79°22.00'</td>
<td>b. 319.700</td>
<td>c. N/R</td>
<td>as assigned by ATC 3000' required</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>218/36</td>
<td>218/110</td>
<td>218/110</td>
<td>208/110</td>
<td>208/108/110</td>
<td>094/34</td>
<td>a. 283.900</td>
<td>16000/FL260</td>
<td>20OSS/OSOS</td>
<td>as assigned by ATC 3000' required</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N33°50.00' W78°15.00'</td>
<td>N32°46.00' W78°59.00'</td>
<td>N32°46.00' W78°59.00'</td>
<td>N32°40.00' W78°38.00'</td>
<td>N32°40.00' W78°38.00'</td>
<td>N32°54.00' W79°22.00'</td>
<td>b. 319.700</td>
<td>c. N/R</td>
<td>as assigned by ATC 3000' required</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N32°51.00' W79°23.00' to N32°59.00' W79°18.00' to N33°11.00' W79°06.00' to N33°17.00' W79°04.00' to N33°20.00' W79°02.00' to N33°28.00' W78°55.00' to N33°40.00' W78°40.00' to N33°50.00' W78°24.00' to N33°50.00' W78°09.00' to N32°55.00' W78°04.00' to N32°31.00' W78°09.00' to N32°20.00' W78°36.00' to N32°34.00' W79°22.00' to beginning.

**REMARKS:** Jacksonville ARTCC radar must be operational. Expect FL 240 and above for normal operations. Operations FL 230 and below will be approved on an individual basis. User contact scheduling unit during normal duty hours, 1230-2130Z++ Mon-Fri, except holidays.

1. Or as directed by ATC
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR602</td>
<td>TXO VORTAC</td>
<td>215/51</td>
<td>TXO VORTAC</td>
<td>279/36</td>
<td>TXO VORTAC</td>
<td>279/36</td>
<td>N33°54.00'</td>
<td>N33°54.00'</td>
<td>TXO VORTAC</td>
<td>TXO VORTAC</td>
<td>a. 295.400</td>
</tr>
<tr>
<td></td>
<td>215/51</td>
<td>N33°54.00'</td>
<td>TXO VORTAC</td>
<td>N34°42.00'</td>
<td>TXO VORTAC</td>
<td>N34°42.00'</td>
<td>N34°57.60'</td>
<td>298/44</td>
<td>09000/17000</td>
<td>27th SOAOS/DOOS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W103°34.00'</td>
<td>W103°32.00'</td>
<td>TXO VORTAC</td>
<td>W103°32.00'</td>
<td>TXO VORTAC</td>
<td>W103°31.70'</td>
<td>N34°00.10'</td>
<td>Cannon AFB, NM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TXO VORTAC</td>
<td>323/33</td>
<td>TXO VORTAC</td>
<td>212/23</td>
<td>TXO VORTAC</td>
<td>200/35</td>
<td>N34°12.70'</td>
<td>DSN 681-2276/7634</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N34°59.00'</td>
<td>N34°12.70'</td>
<td>TXO VORTAC</td>
<td>TXO VORTAC</td>
<td>TXO VORTAC</td>
<td>30/93</td>
<td>N34°09.00'</td>
<td>C575-784-2276/7634</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W103°07.90'</td>
<td>W103°09.70'</td>
<td>TXO VORTAC</td>
<td>W103°09.70'</td>
<td>TXO VORTAC</td>
<td>N/Re.</td>
<td>W103°12.00'</td>
<td>EXIT-352.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TXO VORTAC</td>
<td>212/23</td>
<td>TXO VORTAC</td>
<td>N34°12.70'</td>
<td>TXO VORTAC</td>
<td>N/Re.</td>
<td>W103°32.70'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N34°59.00'</td>
<td>N34°12.70'</td>
<td>TXO VORTAC</td>
<td>N34°12.70'</td>
<td>TXO VORTAC</td>
<td>N/Re.</td>
<td>W103°32.70'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W103°07.90'</td>
<td>W103°09.70'</td>
<td>TXO VORTAC</td>
<td>N34°12.70'</td>
<td>TXO VORTAC</td>
<td>N/Re.</td>
<td>W103°32.70'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TXO VORTAC</td>
<td>234/39</td>
<td>TXO VORTAC</td>
<td>N34°13.10'</td>
<td>TXO VORTAC</td>
<td>N/Re.</td>
<td>W103°32.70'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>234/39</td>
<td>N34°13.10'</td>
<td>TXO VORTAC</td>
<td>N34°13.10'</td>
<td>TXO VORTAC</td>
<td>N/Re.</td>
<td>W103°32.70'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W103°07.90'</td>
<td>W103°09.70'</td>
<td>TXO VORTAC</td>
<td>N34°12.70'</td>
<td>TXO VORTAC</td>
<td>N/Re.</td>
<td>W103°32.70'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N34°55.70' W103°08.00' to N34°45.80' W103°05.00' to N34°09.00' W103°05.00' to N33°58.00' W103°10.00' to N33°58.00' W103°33.90' to N34°05.00' W103°36.30' to N34°45.80' W103°36.35' to N34°55.70' W103°32.70' to beginning.

**REMARKS:** Right hand patterns. Anchor intended for use by 27 SOW aircraft and supporting tankers only. Other aircraft permitted on non-interference basis. Be advised of Wind Turbine Farm north of ATCAA. Air refueling operations will be controlled by Cannon AFB RAPCON. If Cannon RAPCON’s RADAR is out of service, Albuquerque ARTCC may control AR operations in accordance with procedures stipulated in the Albuquerque ARTCC/27 SOW LOA. Do NOT hold at North ARIP due to airspace boundary proximity. Supporting ATCAA available upon pilot request and ATC approval. Be alert for strong westerly winds.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR603</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DRK VORTAC</td>
<td>243/27</td>
<td>N34°35.75' W113°00.67'</td>
<td>PXR VORTAC</td>
<td>114/35</td>
<td>N34°35.75' W113°00.67'</td>
<td>238.900</td>
<td>FL240/FL280</td>
<td>Albuquerque</td>
</tr>
<tr>
<td></td>
<td>W112°09.83'</td>
<td>306/15</td>
<td>N33°36.83' W112°09.83'</td>
<td>EED VORTAC</td>
<td>114/101</td>
<td>N33°36.83' W112°09.83'</td>
<td>319.500</td>
<td>DSN 896-7654</td>
<td>Luke AFB, AZ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR604</td>
<td>LWT VOR-DME</td>
<td>357/89</td>
<td>N48°30.00' W107°00.00'</td>
<td>LWT VOR-DME</td>
<td>357/89</td>
<td>N48°30.00' W107°00.00'</td>
<td>276.500</td>
<td>FL200/FL330</td>
<td>Salt Lake City</td>
</tr>
<tr>
<td></td>
<td>LWT VOR-DME</td>
<td>357/89</td>
<td>N48°30.00' W107°00.00'</td>
<td>LWT VOR-DME</td>
<td>357/89</td>
<td>N48°30.00' W107°00.00'</td>
<td>292.600</td>
<td>DSN 791-0186</td>
<td>Great Falls IAP, MT</td>
</tr>
<tr>
<td></td>
<td>LWT VOR-DME</td>
<td>357/89</td>
<td>N48°30.00' W107°00.00'</td>
<td>LWT VOR-DME</td>
<td>357/89</td>
<td>N48°30.00' W107°00.00'</td>
<td>N/R</td>
<td>C406-791-0186</td>
<td>Salt Lake City</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N34°40.00' W114°00.00' to N34°39.25' W113°04.18' to N34°10.10' W112°35.48' to N34°05.00' W112°31.00' to N33°38.35' W112°09.10' to N33°31.00' W112°15.00' to N33°31.00' W112°48.15' to N33°38.35' W113°09.03' to N33°56.40' W114°00.00' to beginning.

**REMARKS:** Military (GCI) and/or Albuquerque Center radar must be operational. Ensure Glenwood/Bagdad/Yarnell ATCAA's are scheduled in conjunction with AR-603. Tankers and receivers are considered MARSA within the confines of the ATCAA. Military (GCI) call sign Venom.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR603</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** Anchor is contained within the "Bearpaw" ATCAA N49°00.00' W110°00.00' to N49°00.00' W107°00.00' to N47°30.00' W107°00.00' to N47°30.00' W110°00.00' to beginning.

**REMARKS:** Military radar and/or Salt Lake City ARTCC must be operational to conduct air refueling.
### AR606

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR606</td>
<td>RDR TACAN</td>
<td>234/30</td>
<td>MIB TACAN</td>
<td>MIB TACAN</td>
<td>234/30 RDR TACAN</td>
<td>a. 366.300</td>
</tr>
<tr>
<td></td>
<td>N47°42.00' W98°03.00'</td>
<td>400/37</td>
<td>N47°40.00'</td>
<td>127/65</td>
<td>N47°42.00'</td>
<td>240/37</td>
</tr>
<tr>
<td></td>
<td>MIB TACAN</td>
<td>152/71</td>
<td>RDR TACAN</td>
<td>RDR TACAN</td>
<td>152/71 MIB TACAN</td>
<td>b. 320.900</td>
</tr>
<tr>
<td></td>
<td>N47°19.00' W100°45.00'</td>
<td>74/79</td>
<td>N47°20.00'</td>
<td>137/80</td>
<td>N47°19.00'</td>
<td>146/74</td>
</tr>
<tr>
<td></td>
<td>RDR TACAN</td>
<td>240/37</td>
<td>N47°34.00'</td>
<td>228/59</td>
<td>N47°20.00'</td>
<td>146/74</td>
</tr>
<tr>
<td></td>
<td>N47°22.00'</td>
<td>228/59</td>
<td>N47°34.00'</td>
<td>228/59</td>
<td>N47°20.00'</td>
<td>146/74</td>
</tr>
<tr>
<td></td>
<td>RDR TACAN</td>
<td>152/71</td>
<td>N47°34.00'</td>
<td>228/59</td>
<td>N47°20.00'</td>
<td>146/74</td>
</tr>
<tr>
<td></td>
<td>N47°34.00' W98°34.00'</td>
<td>228/59</td>
<td>N47°34.00'</td>
<td>228/59</td>
<td>N47°20.00'</td>
<td>146/74</td>
</tr>
<tr>
<td></td>
<td>RDR TACAN</td>
<td>152/71</td>
<td>N47°34.00'</td>
<td>228/59</td>
<td>N47°20.00'</td>
<td>146/74</td>
</tr>
<tr>
<td></td>
<td>N47°34.00' W98°34.00'</td>
<td>228/59</td>
<td>N47°34.00'</td>
<td>228/59</td>
<td>N47°20.00'</td>
<td>146/74</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** "Red River" N48°00.00' W88°00.00' to N48°00.00' W89°50.00' to N47°56.00' W98°11.00' to N47°38.00' W98°02.00' to N47°21.00' W97°38.00' to N47°00.00' W97°37.00' to N47°05.00' W99°39.00' to N47°05.00' W100°37.00' to beginning. ATCAA is divided into east and west subdivisions on a line N48°00.00' W99°50.00' (North) and N47°05.00' W99°39.00' (South).

**REMARKS:** Military radar and/or Minneapolis ARTCC radar must be operational to conduct air refueling.

### AR607

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR607</td>
<td>DLH VORTAC</td>
<td>105/35</td>
<td>IWD VOR-DME</td>
<td>IWD VOR-DME</td>
<td>112/60 IWD VOR-DME</td>
<td>a. 235.100</td>
</tr>
<tr>
<td></td>
<td>N46°36.00' W91°25.00'</td>
<td>222/22</td>
<td>N46°16.00'</td>
<td>N46°08.00'</td>
<td>N46°30.00'</td>
<td>b. 320.900</td>
</tr>
<tr>
<td></td>
<td>DLH VORTAC</td>
<td>116/91</td>
<td>IWD VOR-DME</td>
<td>IWD VOR-DME</td>
<td>120/60 IWD VOR-DME</td>
<td>c. N/R</td>
</tr>
<tr>
<td></td>
<td>N46°00.00' W90°20.00'</td>
<td>112/60</td>
<td>N46°16.00'</td>
<td>N46°08.00'</td>
<td>N46°30.00'</td>
<td>d. N/R</td>
</tr>
<tr>
<td></td>
<td>IWD VOR-DME</td>
<td>095/89</td>
<td>IWD VOR-DME</td>
<td>IWD VOR-DME</td>
<td>112/60 IWD VOR-DME</td>
<td>e. 52/115</td>
</tr>
<tr>
<td></td>
<td>N46°21.00' W88°00.00'</td>
<td>222/22</td>
<td>N46°08.00'</td>
<td>N46°30.00'</td>
<td>N46°00.00'</td>
<td>112/60</td>
</tr>
<tr>
<td></td>
<td>IWD VOR-DME</td>
<td>108/94</td>
<td>IWD VOR-DME</td>
<td>IWD VOR-DME</td>
<td>112/60 IWD VOR-DME</td>
<td>52/115</td>
</tr>
<tr>
<td></td>
<td>N46°00.00' W88°00.00'</td>
<td>222/22</td>
<td>N46°16.00'</td>
<td>N46°00.00'</td>
<td>N46°00.00'</td>
<td>112/60</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** Rhinelander Bravo N46°00.00' W88°00.00' to N46°44.00' W88°00.00' to N46°55.00' W89°28.00' to N46°55.00' W90°05.00' to N47°05.00' W90°05.00' to N47°05.00' W90°45.00' to N47°00.00' W90°00.00' to N47°25.00' to N46°36.00' W91°25.00' to N46°00.00' W90°20.00' to beginning.

**REMARKS:** Military radar or Minneapolis ARTCC radar must be operational to conduct air refueling.
### AR608

<table>
<thead>
<tr>
<th>Number</th>
<th>Entry Points</th>
<th>Arip</th>
<th>Anchor Point</th>
<th>Anchor Pattern</th>
<th>Exit Points</th>
<th>Cr Plan</th>
<th>Military Radar</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned Artcc</th>
<th>Times of Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFV VOR-DME</td>
<td>LFV VOR-DME</td>
<td>LFV VOR-DME</td>
<td>LFV VOR-DME</td>
<td>LFV VOR-DME</td>
<td>LFV VOR-DME</td>
<td>a. 343.500</td>
<td>FL180/FL230</td>
<td>NEADS/DOA</td>
<td>Boston</td>
<td>ARCP-307.3</td>
<td>Unlimited</td>
</tr>
<tr>
<td>151/51</td>
<td>151/51</td>
<td>115/106</td>
<td>115/106</td>
<td>125/43</td>
<td>N41°25.00'</td>
<td>b. 282.700</td>
<td></td>
<td>Rome, NY</td>
<td>DSN 587-6247</td>
<td>EXIST-307.3</td>
<td></td>
</tr>
<tr>
<td>N41°25.00'</td>
<td>N41°25.00'</td>
<td>N41°43.00'</td>
<td>W67°42.00'</td>
<td>N41°47.00'</td>
<td></td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W69°14.00'</td>
<td>W69°14.00'</td>
<td>W67°42.00'</td>
<td>W69°08.00'</td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>151/51</td>
<td>151/51</td>
<td>115/106</td>
<td>115/106</td>
<td>125/43</td>
<td>N41°25.00'</td>
<td>e. 32/95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N41°25.00'</td>
<td>N41°25.00'</td>
<td>N41°43.00'</td>
<td>W67°42.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W69°14.00'</td>
<td>W69°14.00'</td>
<td>W67°42.00'</td>
<td>W69°08.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC Assigned Airspace:** N41°25.00' W69°30.00' to N41°21.00' W68°27.50' to N41°52.00' W67°00.00' to N42°38.00' W67°00.00' to N42°20.00' W68°15.00' to N42°08.00' W68°30.00' to N41°48.00' W69°30.00' to beginning.

**Remarks:** Boston ARTCC radar must be operational.

### AR609

<table>
<thead>
<tr>
<th>Number</th>
<th>Entry Points</th>
<th>Arip</th>
<th>Anchor Point</th>
<th>Anchor Pattern</th>
<th>Exit Points</th>
<th>Cr Plan</th>
<th>Military Radar</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned Artcc</th>
<th>Times of Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYR VORTAC</td>
<td>SYR VORTAC</td>
<td>SYR VORTAC</td>
<td>SYR VORTAC</td>
<td>ALB VORTAC</td>
<td>a. 276.500</td>
<td>FL180/FL280</td>
<td>EADS/DOS</td>
<td>Boston</td>
<td>ARCP-323.0</td>
<td>Unlimited</td>
<td></td>
</tr>
<tr>
<td>087/75</td>
<td>045/19</td>
<td>087/75</td>
<td>087/75</td>
<td>356/43</td>
<td>b. 282.700</td>
<td></td>
<td>Rome, NY</td>
<td>DSN 587-6247</td>
<td>C317-334-6247</td>
<td>EXIST-323.0</td>
<td></td>
</tr>
<tr>
<td>N43°27.00'</td>
<td>N43°27.00'</td>
<td>N43°27.00'</td>
<td>N43°27.00'</td>
<td>N43°26.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W74°33.00'</td>
<td>W74°33.00'</td>
<td>W74°33.00'</td>
<td>W74°06.00'</td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>073/81</td>
<td>048/46</td>
<td>N43°47.00'</td>
<td>N43°46.00'</td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYR VORTAC</td>
<td>SYR VORTAC</td>
<td>W74°33.00'</td>
<td>W74°34.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>070/32</td>
<td>N43°26.00'</td>
<td>SYR VORTAC</td>
<td>W75°34.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>070/32</td>
<td>N43°35.50'</td>
<td>SYR VORTAC</td>
<td>W74°09.35'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC Assigned Airspace:** N43°26.00' W74°06.00' to N43°24.00' W74°22.00' to N43°21.00' W76°04.00' to N43°45.00' W76°02.00' to N43°51.00' W75°58.00' to N43°54.00' W75°47.00' to N43°53.50' W74°09.35' to beginning.

**Remarks:** Anchor area is located within the AKS 2 and 5 ATCAAs. Boston ARTCC radar must be operational.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR610A</td>
<td>284/68</td>
<td>DLN VOR-DME</td>
<td>N45°14.91'</td>
<td>W112°32.83'</td>
<td>103/17</td>
<td>a. 295.400</td>
<td>FL190/FL260</td>
<td>120FWANG</td>
<td>Salt Lake City</td>
<td>ARCP-338.3</td>
<td>Unlimited</td>
</tr>
<tr>
<td></td>
<td>N45°50.00'</td>
<td>N45°50.00'</td>
<td>W113°55.50'</td>
<td>N45°50.00'</td>
<td>N45°06.00'</td>
<td>b. 292.600</td>
<td></td>
<td></td>
<td>Great Falls, MT</td>
<td>DSN 791-0186/0192</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W113°55.50'</td>
<td>W112°32.83'</td>
<td></td>
<td>N46°06.90'</td>
<td>W113°41.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>DSN 791-0186/0192</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td>C406-791-0186/0192</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N45°01.50' W112°15.70' to N45°26.00' W111°54.00' to N46°10.50' W113°37.50' to N45°46.90' W113°58.00' to beginning.

**REMARKS:** None

| AR610B  | 051/26       | DLN VOR-DME | 307/55       | N45°06.00'     | 103/17      | a. 295.400 | FL190/FL260   | 120FWANG             | Salt Lake City  | ARCP-338.3     | Unlimited       |
|         | N45°24.00'   | N45°24.00'  | N45°59.90'   | N46°06.90'     | N45°14.91'  | b. 292.600 |               |                     | Great Falls, MT  | DSN 791-0186/0192|                |
|         | W111°59.00'  | W111°59.00' | W113°17.80'  | W113°41.00'    | W112°32.83' | c. N/R    |               |                     | DSN 791-0186/0192|                |
|         |              |            |              |                | N45°06.00'  | d. N/R    |               |                     | C406-791-0186/0192|                |
|         |              |            |              |                | W112°12.00' | e. 52/115 |               |                     |                  |                |

**ATC ASSIGNED AIRSPACE:** N45°01.50' W112°15.70' to N45°26.00' W111°54.00' to N46°10.50' W113°37.50' to N45°46.90' W113°58.00' to beginning.

**REMARKS:** None
### ATC ASSIGNED AIRSPACE:

- **AR611A**: B40°41.00' W117°19.00' to N41°25.00' W118°54.00' to N41°35.00' W118°15.00' to N41°06.00' W116°58.00' to beginning.
- **AR611B**: B40°41.00' W117°19.00' to N41°25.00' W118°54.00' to N41°35.00' W118°15.00' to N41°06.00' W116°58.00' to beginning.

### REMARKS:
- **None**
### ATC ASSIGNED AIRSPACE:

N32°30.03' W109°44.00' to N32°54.50' W109°34.00' to N33°54.67' W109°34.00' to N34°00.00' W108°48.00' to N33°29.66' W108°07.33' to N32°28.25' W109°19.03' to beginning.

### REMARKS:

Track lies within the Morenci and Reserve ATCAA. Receivers entering the airspace must maintain the last assigned altitude until radio contact is established with the tankers. Aircraft required to hold prior to refueling will do so on the SSO 003 radial between 33 and 43 DME, left turns (south entry), and on the SSO 358 radial between 71 and 81 DME, left turns (north entry). Tanker aircraft entering the anchor from the north shall enter via SJN direct to SSO 001/82 or TCS direct SSO 359/28, to avoid Cato MOA/ATCAA operations.

### ATC ASSIGNED AIRSPACE:

N29°44.00' W99°32.00' to N29°30.00' W99°32.00' to N28°41.50' W99°16.00' to N28°31.50' W99°08.00' to N28°37.00' W98°45.50' to N28°48.50' W98°44.50' to N29°38.00' W99°00.50' to N29°50.00' W99°09.00' to beginning.

### REMARKS:

Houston ARTCC radar must be operational. T-1 flights may operate Monday thru Friday in AR614 at FL250B270.
### AR615

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR615</td>
<td>AEX VORTAC</td>
<td>AEX</td>
<td>AEX VORTAC</td>
<td>AEX VORTAC</td>
<td>12000/16000</td>
</tr>
<tr>
<td></td>
<td>097/13</td>
<td>VORTAC</td>
<td>096/73</td>
<td>096/73</td>
<td>1SOG/OGO</td>
</tr>
<tr>
<td></td>
<td>N31°13.00'</td>
<td></td>
<td>N31°03.00'</td>
<td>N31°03.00'</td>
<td>Hurlburt Fld, FL</td>
</tr>
<tr>
<td></td>
<td>W92°15.00'</td>
<td></td>
<td>W91°06.00'</td>
<td>W91°49.00'</td>
<td>DSN 579-7812/7813</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N31°14.00' W92°12.00' to N31°53.00' to N30°59.00' W91°07.00' to N31°02.00' W90°47.00' to N31°19.00' W90°43.00' to N31°27.00' W91°02.00' to N31°34.00' W91°48.00' to N31°31.00' W92°09.00' to beginning.

**REMARKS:** Anchor and AR302 shall not be scheduled simultaneously.

### AR616A

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR616A</td>
<td>ENE VOR-DME</td>
<td>ENE</td>
<td>ENE VOR-DME</td>
<td>ENE VOR-DME</td>
<td>12000/16000</td>
</tr>
<tr>
<td></td>
<td>111/61</td>
<td>VOR-DME</td>
<td>111/61</td>
<td>096/128</td>
<td>NEADS/DOA</td>
</tr>
<tr>
<td></td>
<td>N43°21.00'</td>
<td></td>
<td>N43°21.00'</td>
<td>N43°48.00'</td>
<td>Boston</td>
</tr>
<tr>
<td></td>
<td>W69°12.75'</td>
<td></td>
<td>W69°12.75'</td>
<td>W67°43.00'</td>
<td>ARCP-269.6</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N43°44.50' W69°21.00' to N44°17.00' W67°35.00' to N43°50.00' W67°19.00' to N43°17.50' W69°06.00' to beginning.

**REMARKS:** W102 High must be released to Boston ARTCC (Controlling Agency) during scheduled times of operation. Boston ARTCC radar must be operational.
### ATC ASSIGNED AIRSPACE:
N43°44.50' W69°21.00' to N44°17.00' W67°35.00' to N43°50.00' W67°19.00' to N43°17.50' W69°06.00' to beginning.

### REMARKS:
Right hand pattern. W102 High must be released to Boston ARTCC (Controlling Agency) during scheduled times of operation. Boston ARTCC radar must be operational.
### AR617

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>ENTRY POINTS</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELLING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR617</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>a. 324.600</td>
<td>FL260/FL290</td>
<td>347 Rescue Wing, MacDill AFB, FL</td>
<td>DSN 968-4641</td>
<td>Miami</td>
<td>Restricted from use</td>
</tr>
<tr>
<td></td>
<td>084/20</td>
<td>071/70</td>
<td>073/70</td>
<td>084/20</td>
<td>N24°37.00'</td>
<td>N24°37.00'</td>
<td>b. 343.250</td>
<td></td>
<td></td>
<td></td>
<td>ARCP-281.4</td>
<td>EXIT-281.4</td>
</tr>
<tr>
<td></td>
<td>N24°37.00'</td>
<td>N24°56.00'</td>
<td>N24°56.00'</td>
<td>N24°56.00'</td>
<td>N24°56.00'</td>
<td>N24°56.00'</td>
<td>c. N/R</td>
<td>or as assigned by ATC 4000' required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N24°29.00'</td>
<td>W80°35.00'</td>
<td>W80°35.00'</td>
<td>W80°35.00'</td>
<td>W80°35.00'</td>
<td>W80°35.00'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W81°26.00'</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>e. 32/95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>057/70</td>
<td>057/70</td>
<td>057/70</td>
<td>057/70</td>
<td>N25°12.00'</td>
<td>N25°12.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0243.00'</td>
<td>N25°12.00'</td>
<td>N25°12.00'</td>
<td>N25°12.00'</td>
<td>N25°12.00'</td>
<td>N25°12.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>032/24</td>
<td>032/24</td>
<td>032/24</td>
<td>032/24</td>
<td>N24°55.00'</td>
<td>N24°55.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N24°55.00'</td>
<td>N24°55.00'</td>
<td>N24°55.00'</td>
<td>N24°55.00'</td>
<td>N24°55.00'</td>
<td>N24°55.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W81°34.00'</td>
<td>W81°34.00'</td>
<td>W81°34.00'</td>
<td>W81°34.00'</td>
<td>W81°34.00'</td>
<td>W81°34.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>084/20</td>
<td>084/20</td>
<td>084/20</td>
<td>084/20</td>
<td>N24°37.00'</td>
<td>N24°37.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N24°37.00'</td>
<td>N24°37.00'</td>
<td>N24°37.00'</td>
<td>N24°37.00'</td>
<td>N24°37.00'</td>
<td>N24°37.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N24°29.00'</td>
<td>W81°26.00'</td>
<td>W81°26.00'</td>
<td>W81°26.00'</td>
<td>W81°26.00'</td>
<td>W81°26.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W81°46.00'</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td>EYW VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N24°55.00' W80°15.00' to N25°21.50' W80°25.50' to N24°54.00' W81°34.00' to N24°27.50' W81°42.00' to beginning.

**REMARKS:** Miami ARTCC radar must be operational. Anchor will not be used when AR638 is active.

1. Tankers.
2. Receivers.
### AR618

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR618</td>
<td>SRQ VOR-DME</td>
<td>164/84</td>
<td>SRQ VOR-DME</td>
<td>212/87</td>
<td>SRQ VOR-DME</td>
<td>179/96</td>
<td>a. 348.900</td>
<td>FL260/FL290</td>
<td>347 Rescue Wing, Miami</td>
<td>ARCP-363.1</td>
<td>Unlimited</td>
</tr>
<tr>
<td></td>
<td>N26°06.00'</td>
<td>164/84</td>
<td>N26°06.00'</td>
<td>N25°49.00'</td>
<td>N25°49.00'</td>
<td>b. 343.250</td>
<td>or as assigned</td>
<td>MacDill AFB, FL</td>
<td>DSN 968-4641</td>
<td>C813-828-4641</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W82°00.00'</td>
<td></td>
<td>W83°17.00'</td>
<td>W82°22.00'</td>
<td>W82°22.00'</td>
<td>c. N/R</td>
<td>or as assigned</td>
<td>by ATC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>179/96</td>
<td></td>
<td>d. N/R</td>
<td>or as assigned</td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N25°49.00'</td>
<td></td>
<td>e. 33/96</td>
<td>or as assigned</td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N26°10.00' W82°00.00' to N26°10.00' W83°36.00' to N25°42.00' W83°36.00' to N25°46.00' W82°00.00' to beginning.

**REMARKS:** None

### AR619

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N48°21.00'</td>
<td>248/121</td>
<td>N48°27.10'</td>
<td>N48°27.10'</td>
<td>N48°30.00'</td>
<td>b. 320.900</td>
<td>or as assigned</td>
<td>DSN 362-8508</td>
<td>ARCP-270.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W100°15.00'</td>
<td></td>
<td>W98°33.00'</td>
<td>W98°33.00'</td>
<td>W98°33.00'</td>
<td>c. N/R</td>
<td>or as assigned</td>
<td>MacDill AFB, FL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HML VORTAC</td>
<td>257/42</td>
<td>HML VORTAC</td>
<td>254/120</td>
<td>HML VORTAC</td>
<td>254/120</td>
<td>d. N/R</td>
<td>by ATC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HML VORTAC</td>
<td>257/59</td>
<td>HML VORTAC</td>
<td>257/59</td>
<td>e. 33/94</td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HML VORTAC</td>
<td>N48°47.10'</td>
<td>N48°35.00'</td>
<td></td>
<td></td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HML VORTAC</td>
<td>W98°36.00'</td>
<td>W100°07.00'</td>
<td></td>
<td></td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HML VORTAC</td>
<td>W257/109</td>
<td>N48°42.00'</td>
<td></td>
<td></td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HML VORTAC</td>
<td>W99°51.00'</td>
<td>W99°48.00'</td>
<td></td>
<td></td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HML VORTAC</td>
<td>257/110</td>
<td>W99°22.10'</td>
<td></td>
<td></td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HML VORTAC</td>
<td>W99°48.00'</td>
<td>W99°48.00'</td>
<td></td>
<td></td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** *Tiger* N48°55.00' W100°15.00' to N48°55.00' W98°10.00' to N48°08.00' W98°10.00' to N48°17.00' W100°15.00' to beginning.

**REMARKS:** Military radar or Minneapolis ARTCC radar must be operational to conduct refueling.
**AR ROUTES**

**AR620**

- **LAL VORTAC 153/20**
  - N27°41.00' W81°51.00'
  - N27°18.00' W81°39.00'
  - N27°52.00' W82°09.00'
  - N27°30.00' W81°21.00'
  - N27°51.00' W81°31.00'
  - N27°41.00' W81°51.00'
  - N27°18.00' W81°39.00'
  - N27°52.00' W82°09.00'

- **LAL VORTAC 154/45**
  - N27°41.00' W81°51.00'
  - N27°18.00' W81°39.00'
  - N27°52.00' W82°09.00'

- **LAL VORTAC 153/20**
  - N27°41.00' W81°51.00'
  - N27°18.00' W81°39.00'
  - N27°52.00' W82°09.00'

**REMARKS:**

Miami ARTCC radar must be operational. Holding at ARIP for receivers not authorized, if holding necessary, proceed to LAL 154/45 for holding.

1. Tankers. To be used only by MacDill based aircraft.
2. Receivers. Placid MOA unusable refueling operations.

---

**ATC ASSIGNED AIRSPACE:**

N27°54.50' W82°03.50' to N27°01.75' W81°35.00' to N27°14.00' W81°06.50' to N28°07.00' W81°35.00' to beginning.

**AR621**

- **PYE VOR-DME 273/33**
  - N38°16.00' W123°32.00'
  - N38°16.00' W124°45.00'
  - N38°16.00' W125°00.00'

- **PYE VOR-DME 281/100**
  - N38°50.00'

- **PYE VOR-DME 257/101**
  - N38°10.00'

**REMARKS:**

(1)Do not file AR621 in route of flight on DD175. (Reference to AR621 should be noted in Remarks only). DD175 route of flight must reflect:

- a.-Last fix.
- b.-Direct OAK VORTAC 276/60.
- c.-Direct W260.
- d.-Delay time.
- e.-Direct OAK VORTAC 276/60.
- f.-Direct next fix.
- g.-Balance of route.

(2)Random refueling in W260/W513 authorized when scheduled.

(3)MRU service available when scheduled. Must be indicated in Remarks of DD175, Handoff to Big Foot, 364.2.
### Number of Entry Points

<table>
<thead>
<tr>
<th>Number</th>
<th>Entry Points</th>
<th>ARIP</th>
<th>Anchor Point</th>
<th>Anchor Pattern</th>
<th>Exit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR622</td>
<td>RBL VORTAC</td>
<td>102/67°</td>
<td>N39°32.00'</td>
<td>W121°00.00'</td>
<td>RBL VORTAC</td>
</tr>
<tr>
<td></td>
<td>016/64</td>
<td></td>
<td>N40°59.00'</td>
<td>W121°27.00'</td>
<td>RBL VORTAC</td>
</tr>
<tr>
<td></td>
<td>099/41</td>
<td></td>
<td>N40°47.00'</td>
<td>W121°00.00'</td>
<td>RBL VORTAC</td>
</tr>
</tbody>
</table>

### Time of Operation

- **AR622**
- **FL240-FL310**
- **60 OSS/OSO**
- **OAK**
- **TRAVIS AFB, CA**
- **DSN 837-7151**
- **EXIT-379.2**
- **C707-424-7151**

### Remarks

- **AR622** Block altitudes are FL240-FL310. Travis will ensure de-confliction of AR Tracks 7A/B and AR622 during the track scheduling process. A minimum of 1000' separation between assigned AR block altitudes will be maintained.

### ATC Assigned Airspace

- None.
**ATC ASSIGNED AIRSPACE:**
N35°52.00’ W102°32.00’ to N35°57.00’ W102°36.00’ to N36°01.00’ W102°42.00’ to N36°04.00’ W102°49.00’ to N36°41.00’ W105°25.00’ to N36°42.00’ W105°33.00’ to N36°42.00’ W105°41.00’ to N36°39.00’ W105°48.00’ to N36°23.00’ W105°53.00’ to N36°19.00’ W105°48.00’ to N36°15.00’ W105°42.00’ to N36°12.00’ W105°35.00’ to N35°35.00’ W103°00.00’ to N35°34.00’ W102°53.00’ to N35°35.00’ W102°53.00’ to N35°36.00’ W102°38.00’ to beginning.

**REMARKS:** Contact Cannon AFB via direct or via CSE to schedule Mt. Dora MOA/ATCAA in conjunction with AR623. Intended for use by B-1 aircraft and support tankers. Other aircraft permitted on non-interference basis. The 7 BW retains preemption authority. Anchor Pattern turns are planned at a 15 deg bank angle (11 NM radius). Pattern Length: 130 NM; Width: 22 NM. For the purpose of separation between participating and non-participating acft, ATC shall regard AR623 as a linear refueling track unless the pilot specifically requests AR623 as an anchor track prior to entering assigned airspace.

1. **Westbound (North) leg:** Tanker holding point is CIM 093/35 (Anchor Point), inbound course 277 degrees, 20 NM legs, left turns. Receiver holding point is CIM 094/93, inbound course 277 degrees, 10 NM legs, left turns. All holding pattern turns are planned at a 30 degrees bank angle (5 NM radius).
2. **Eastbound (South) leg:** Tanker holding point is PNH 282/130 (Anchor Point), inbound course 095 degrees, 20 NM legs, left turns. Receiver holding point is PNH 280/189, inbound course 095 degrees, 10 NM legs, left turns. All holding pattern turns are planned at a 30 degrees bank angle (5 NM radius).
**AR ROUTES**

**AR624**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR624</td>
<td>DRK VORTAC</td>
<td>BCE VORTAC</td>
<td>DRK VORTAC</td>
<td>DRK VORTAC</td>
<td>BCE VORTAC</td>
<td>a. 366.300</td>
<td>FL190/FL220</td>
<td>57OSS/OSSOS</td>
<td>Los Angeles</td>
<td>Unlimited</td>
<td></td>
</tr>
<tr>
<td></td>
<td>341/74</td>
<td>341/74</td>
<td>341/74</td>
<td>341/74</td>
<td>157/57</td>
<td>b. 319.500</td>
<td></td>
<td>Nellis AFB, NV</td>
<td>ARCP</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N35°56.00'</td>
<td>N35°56.00'</td>
<td>N35°56.00'</td>
<td>N35°56.00'</td>
<td>N36°45.00'</td>
<td>c. N/R</td>
<td>or as assigned by ATC</td>
<td>DSN 682-2040</td>
<td>EXIT-124.2/343.</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W112°37.00'</td>
<td>W112°37.00'</td>
<td>W112°37.00'</td>
<td>W112°09.00'</td>
<td>W112°09.00'</td>
<td>d. N/R</td>
<td></td>
<td>C702-652-2040</td>
<td>9.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DRK VORTAC</td>
<td>357/75</td>
<td>e. 32/95</td>
<td></td>
<td></td>
<td>EXIT-135.25/30</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>341/74</td>
<td>N35°56.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>341/74</td>
<td>W112°12.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BCE VORTAC</td>
<td>157/57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>157/57</td>
<td>N36°45.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BCE VORTAC</td>
<td>178/57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>178/57</td>
<td>N36°46.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W112°34.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N37°03.00' W112°38.00' to N35°39.00' W112°42.00' to N35°38.00' W112°08.00' to N37°02.00' W112°03.00' to beginning.

**REMARKS:** All aircraft should contact Los Angeles Center prior to exit.

---

**AR625H**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR625H</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>a. 295.800</td>
<td>FL230/FL250</td>
<td>57OSS/OSSOS</td>
<td>oakland</td>
<td>0600-2200 Local</td>
<td></td>
</tr>
<tr>
<td></td>
<td>163/85</td>
<td>163/85</td>
<td>163/15</td>
<td>163/15</td>
<td>149/84</td>
<td>b. 319.500</td>
<td></td>
<td>Nellis AFB, NV</td>
<td>ARCP</td>
<td>unless other-wise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°09.00'</td>
<td>N37°09.00'</td>
<td>N38°19.00'</td>
<td>N38°19.00'</td>
<td>N37°12.00'</td>
<td>c. N/R</td>
<td>or as assigned by ATC</td>
<td>DSN 682-2040</td>
<td>EXIT-319.8</td>
<td>coordinated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W118°02.00'</td>
<td>W118°02.00'</td>
<td>W118°02.00'</td>
<td>W118°02.00'</td>
<td>W117°37.00'</td>
<td>d. N/R</td>
<td></td>
<td>C702-652-2040</td>
<td>9.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>e. 50/113</td>
<td></td>
<td></td>
<td>EXIT-135.25/30</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>189/17</td>
<td>163/77</td>
<td>109/25</td>
<td>109/25</td>
<td>068/25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N38°19.00'</td>
<td>N37°17.00'</td>
<td>N38°19.00'</td>
<td>N38°19.00'</td>
<td>N38°36.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W118°11.00'</td>
<td>W118°02.00'</td>
<td>W117°36.00'</td>
<td>W117°36.00'</td>
<td>W117°30.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td>MVA VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>103/30</td>
<td>163/77</td>
<td>145/68</td>
<td>145/68</td>
<td>342/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N38°19.00'</td>
<td>N38°19.00'</td>
<td>N37°29.00'</td>
<td>N37°29.00'</td>
<td>N38°36.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W117°29.00'</td>
<td>W118°02.00'</td>
<td>W117°36.00'</td>
<td>W117°36.00'</td>
<td>W118°02.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N37°12.00' W118°06.00' to N38°36.00' W118°06.00' to N38°36.00' W117°17.42' to N38°05.00' W117°16.00' to N37°53.00' W117°05.68' to N37°26.00' W117°04.55' to N37°22.00' W117°01.00' to N37°12.00' W117°20.00' to beginning.

**REMARKS:** Right hand pattern.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR625L</td>
<td>MVA VORTAC 163/85</td>
<td>MVA VORTAC 163/85</td>
<td>MVA VORTAC 163/15</td>
<td>MVA VORTAC 163/15</td>
<td>MVA VORTAC 149/84</td>
<td>a. 291.900</td>
<td>FL180/FL210</td>
<td>NAS Whidbey Island, (N38) Oak Harbor, WA</td>
<td>Seattle ARCP-319.2</td>
<td>Exit-269.0</td>
</tr>
<tr>
<td></td>
<td>N37°09.00'</td>
<td>N37°09.00'</td>
<td>N38°19.00'</td>
<td>N38°19.00'</td>
<td>N38°19.00'</td>
<td>b. 319.500</td>
<td></td>
<td>DSN 820-2877</td>
<td>C360-257-2877</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W118°02.00'</td>
<td>W118°02.00'</td>
<td>W118°02.00'</td>
<td>N38°36.00'</td>
<td>W117°36.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>163/77</td>
<td>163/77</td>
<td>163/77</td>
<td>163/77</td>
<td>163/77</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N38°19.00'</td>
<td>N38°19.00'</td>
<td>N38°19.00'</td>
<td>N38°19.00'</td>
<td>N38°19.00'</td>
<td>e. 33/96</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W118°11.00'</td>
<td>W118°11.00'</td>
<td>W118°11.00'</td>
<td>W118°11.00'</td>
<td>W118°11.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MVA VORTAC 103/30</td>
<td>MVA VORTAC 103/30</td>
<td>MVA VORTAC 103/30</td>
<td>MVA VORTAC 103/30</td>
<td>MVA VORTAC 103/30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°29.00'</td>
<td>N37°29.00'</td>
<td>N37°29.00'</td>
<td>N37°29.00'</td>
<td>N37°29.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W118°02.00'</td>
<td>W118°02.00'</td>
<td>W118°02.00'</td>
<td>W118°02.00'</td>
<td>W118°02.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N37°12.00' W118°06.00' to N38°36.00' W118°06.00' to N38°36.00' W117°17.42' to N38°05.00' W117°16.00' to N37°53.00' W117°05.68' to N37°26.00' W117°04.55' to N37°22.00' W117°01.00' to N37°12.00' W117°20.00' to beginning.

**REMARKS:** Right hand pattern.

<table>
<thead>
<tr>
<th>AR626</th>
<th>HQM VORTAC 271/14</th>
<th>HOM VORTAC 271/14</th>
<th>TOU VORTAC 223/50</th>
<th>TOU VORTAC 223/50</th>
<th>HQM VORTAC 297/38</th>
<th>a. 235.100</th>
<th>FL250/FL270</th>
<th>NAS Whidbey Island, (N38) Oak Harbor, WA</th>
<th>Seattle ARCP-319.2</th>
<th>Exit-269.0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N47°01.50'</td>
<td>N47°01.50'</td>
<td>N47°56.50'</td>
<td>N47°56.50'</td>
<td>N47°24.00'</td>
<td>b. 292.600</td>
<td></td>
<td>DSN 820-2877</td>
<td>C360-257-2877</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W124°27.50'</td>
<td>W124°27.50'</td>
<td>W125°45.00'</td>
<td>W125°45.00'</td>
<td>W124°48.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOU VORTAC 216/69</td>
<td>TOU VORTAC 216/69</td>
<td>TOU VORTAC 216/69</td>
<td>TOU VORTAC 216/69</td>
<td>TOU VORTAC 216/69</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N47°41.00'</td>
<td>N47°41.00'</td>
<td>N47°41.00'</td>
<td>N47°41.00'</td>
<td>N47°41.00'</td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W126°04.00'</td>
<td>W126°04.00'</td>
<td>W126°04.00'</td>
<td>W126°04.00'</td>
<td>W126°04.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HQM VORTAC 268/42</td>
<td>HQM VORTAC 268/42</td>
<td>HQM VORTAC 268/42</td>
<td>HQM VORTAC 268/42</td>
<td>HQM VORTAC 268/42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N47°24.00'</td>
<td>N47°24.00'</td>
<td>N47°24.00'</td>
<td>N47°24.00'</td>
<td>N47°24.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W124°48.00'</td>
<td>W124°48.00'</td>
<td>W124°48.00'</td>
<td>W124°48.00'</td>
<td>W124°48.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** Contains W237 A-C. N48°08.59' W126°15.00' to N48°08.59' W124°48.05' thence southbound 3 miles parallel to the shoreline ending at N47°17.00' W124°20.00' to N47°05.59' W124°14.53' to N47°00.29' W124°30.05' to N46°49.59' W125°24.00' to N47°00.00' W125°28.03' to N47°00.00' W126°15.00' to beginning.

**REMARKS:** Military radar or Seattle ARTCC radar must be operational to conduct refueling.
**AR627**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N30°37.27'</td>
<td>N30°37.27'</td>
<td>N31°46.33'</td>
<td>N30°37.50'</td>
<td>TAY VORTAC 336/105</td>
<td>FL200/FL230</td>
<td>230SS/OSO</td>
<td>Moody AFB, GA</td>
<td>DSN 460-7839/7831/7832</td>
<td>Jacksonville ARCP-379.2</td>
<td>Continuous by schedule</td>
</tr>
<tr>
<td></td>
<td>W83°12.52'</td>
<td>W83°12.52'</td>
<td>W83°26.56'</td>
<td>W83°37.27'</td>
<td>TAY VORTAC 295/63</td>
<td>FL200/FL230</td>
<td>230SS/OSO</td>
<td>Moody AFB, GA</td>
<td>DSN 460-7839/7831/7832</td>
<td>Jacksonville ARCP-379.2</td>
<td>Continuous by schedule</td>
</tr>
<tr>
<td></td>
<td>N3°03.38'</td>
<td>N3°03.38'</td>
<td>N30°53.38'</td>
<td>N32°03.46'</td>
<td>TAY VORTAC 321/99</td>
<td>FL200/FL230</td>
<td>230SS/OSO</td>
<td>Moody AFB, GA</td>
<td>DSN 460-7839/7831/7832</td>
<td>Jacksonville ARCP-379.2</td>
<td>Continuous by schedule</td>
</tr>
<tr>
<td></td>
<td>W83°53.58'</td>
<td>W83°53.58'</td>
<td>W83°41.04'</td>
<td>W83°17.02'</td>
<td>TAY VORTAC 321/99</td>
<td>FL200/FL230</td>
<td>230SS/OSO</td>
<td>Moody AFB, GA</td>
<td>DSN 460-7839/7831/7832</td>
<td>Jacksonville ARCP-379.2</td>
<td>Continuous by schedule</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** None.

**REMARKS:** All non-23d Wing participating aircraft must file flight plans to indicate delay at the TAY 295/063 regardless of direction of entry.

---

**AR628**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR628</td>
<td>HQM VORTAC 199/54</td>
<td>HQM VORTAC 199/54</td>
<td>ONP VORTAC 294/49</td>
<td>249/38</td>
<td>ONP VORTAC 249/38</td>
<td>FL240/FL260</td>
<td>142FW, Portland, OR</td>
<td>Seattle ARCP-379.6</td>
<td>Unlimited</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N46°14.67'</td>
<td>N46°14.67'</td>
<td>N45°04.67'</td>
<td>N44°30.00'</td>
<td>ONP VORTAC 315/35</td>
<td>FL240/FL260</td>
<td>142FW, Portland, OR</td>
<td>Seattle ARCP-379.6</td>
<td>Unlimited</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W124°57.00'</td>
<td>W124°57.00'</td>
<td>W124°57.00'</td>
<td>W124°57.00'</td>
<td>ONP VORTAC 315/35</td>
<td>FL240/FL260</td>
<td>142FW, Portland, OR</td>
<td>Seattle ARCP-379.6</td>
<td>Unlimited</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N44°44.00'</td>
<td>N44°44.00'</td>
<td>W124°28.00'</td>
<td>W124°28.00'</td>
<td>HQM VORTAC 173/64</td>
<td>FL240/FL260</td>
<td>142FW, Portland, OR</td>
<td>Seattle ARCP-379.6</td>
<td>Unlimited</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W124°28.00'</td>
<td>W124°28.00'</td>
<td>W124°28.00'</td>
<td>W124°28.00'</td>
<td>HQM VORTAC 173/64</td>
<td>FL240/FL260</td>
<td>142FW, Portland, OR</td>
<td>Seattle ARCP-379.6</td>
<td>Unlimited</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** Bass ATCAA, altitudes are FL 180 and above. N45°11.00' W126°35.00' to N46°16.00' W125°00.00' to N46°39.00' W124°18.00' to N46°10.00' W124°20.00' to N44°53.00' W124°20.00' to N44°38.00' W124°28.00' to N44°11.00' W125°30.00' to N43°43.50' W126°28.00' to N43°55.00' W126°37.00' to N45°00.00' W126°30.00' to N43°43.50' W126°28.00' to N43°55.00' W126°37.00' to N45°00.00' W126°30.00' to

**REMARKS:** Military radar or Seattle ARTCC radar must be operational to conduct refueling.
### ATC ASSIGNED AIRSPACE:
(Minot Rapcon Airspace) N48°52.00' W102°16.00' to N48°19.00' W102°13.00' to N48°05.00' W102°24.00' to N47°38.00' W101°12.00' to N47°59.00' W100°22.00' to N48°19.00' W100°27.00' to N48°19.00' W100°13.00' to N48°57.00' W100°16.00' to beginning.

### REMARKS:
Air refueling will be conducted within the RAPCON airspace and RAPCON radar must be operational.

### ATC ASSIGNED AIRSPACE:
N44°06.50' W124°36.67' to N43°25.00' W124°38.50' to N43°23.00' W124°43.50' to N43°17.00' W124°39.00' to N43°00.00' W124°40.00' to N42°15.50' W125°27.50' to N43°14.83' W126°10.75' to N43°52.00' W125°07.00' to beginning.

### REMARKS:
None
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR631</td>
<td>ENE VOR-DME</td>
<td>ALB VORTAC</td>
<td>ENE VOR-DME</td>
<td>ENE VOR-DME</td>
<td>ENE VOR-DME</td>
<td>a. 295.800</td>
<td>FL200/FL260</td>
<td>EADS/DOS</td>
<td>Boston</td>
<td>Unlimited</td>
<td></td>
</tr>
<tr>
<td></td>
<td>271/46</td>
<td>051/43</td>
<td>271/46</td>
<td>271/46</td>
<td>261/30</td>
<td>b. 282.700</td>
<td></td>
<td>Rome, NY</td>
<td>ARCP-348.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N43°13.00'</td>
<td>N43°19.00'</td>
<td>N43°13.00'</td>
<td>N43°13.00'</td>
<td>N43°12.00'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 587-6247</td>
<td>EXIT-348.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W71°37.00'</td>
<td>W73°12.00'</td>
<td>W71°37.00'</td>
<td>W71°37.00'</td>
<td>W71°14.00'</td>
<td>d. N/R</td>
<td></td>
<td>C315-334-6247</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 51/114</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ALB VORTAC</td>
<td>N43°13.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>051/43</td>
<td>W71°37.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>W71°14.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N43°36.00' W70°56.00' to N43°38.00' W71°14.00' to N43°44.00' W72°00.00' to N43°50.00' W73°05.00' to N43°48.00' W73°08.00' to N43°25.00' W73°13.00' to N43°14.00' W73°14.00' to N43°04.00' W71°42.00' to N43°13.00' W71°02.00' to beginning.

**REMARKS:** Anchor area is located within the Laser South ATC assigned airspace area.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR632</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>a. 238.900</td>
<td>FL220/FL270</td>
<td>Alpena Combat Readiness Training Center Airspace Scheduler Alpena, MI</td>
<td>Minneapolis ARCP</td>
<td>Unlimited</td>
<td></td>
</tr>
<tr>
<td></td>
<td>112/63</td>
<td>097/59</td>
<td>052/75</td>
<td>052/75</td>
<td>113/64</td>
<td>b. 282.700</td>
<td></td>
<td>Center Airspace Scheduler Alpena, MI</td>
<td>DSN 741-6284</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N44°18.00'</td>
<td>N44°34.90'</td>
<td>N45°28.12'</td>
<td>N45°28.12'</td>
<td>N44°16.60'</td>
<td>c. N/R</td>
<td></td>
<td>DSN 847-6247</td>
<td>C-1-800-292-6583</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W84°10.00'</td>
<td>W84°10.30'</td>
<td>W84°10.92'</td>
<td>W84°10.92'</td>
<td>W84°09.80'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W84°09.30'</td>
<td>e. 52/115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td></td>
<td></td>
<td>Huntress Primary 364.2 Secondary as assigned by Huntress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>052/75</td>
<td>097/59</td>
<td>052/75</td>
<td>052/75</td>
<td>099/39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N45°27.93'</td>
<td>N44°35.32'</td>
<td>N45°36.33'</td>
<td>N45°36.33'</td>
<td>N44°16.60'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W84°39.27'</td>
<td>W84°38.22'</td>
<td>W84°38.22'</td>
<td>W84°38.22'</td>
<td>W84°09.80'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>040/61</td>
<td>036/61</td>
<td>032/76</td>
<td>032/76</td>
<td>099/39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N45°27.93'</td>
<td>N45°35.32'</td>
<td>N45°36.33'</td>
<td>N45°36.33'</td>
<td>N44°16.60'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W84°39.27'</td>
<td>W84°38.22'</td>
<td>W84°38.22'</td>
<td>W84°38.22'</td>
<td>W84°09.80'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>099/39</td>
<td>097/59</td>
<td>097/59</td>
<td>097/59</td>
<td>099/39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N44°34.90'</td>
<td>N44°34.90'</td>
<td>N44°34.90'</td>
<td>N44°34.90'</td>
<td>N44°16.60'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W84°10.92'</td>
<td>W84°10.92'</td>
<td>W84°10.92'</td>
<td>W84°10.92'</td>
<td>W84°09.80'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td>TVC VOR-DME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>099/39</td>
<td>097/59</td>
<td>097/59</td>
<td>097/59</td>
<td>099/39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N44°34.90'</td>
<td>N44°34.90'</td>
<td>N44°34.90'</td>
<td>N44°34.90'</td>
<td>N44°16.60'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W84°10.92'</td>
<td>W84°10.92'</td>
<td>W84°10.92'</td>
<td>W84°10.92'</td>
<td>W84°09.80'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N45°44.49' W84°48.09' to N45°45.00' W84°10.00' to N44°47.02' W84°06.23' to N44°41.00' W84°06.00' to N44°17.20' W83°43.00' to N44°18.26' W84°46.13' to N44°47.09' W84°46.52' to beginning. Garland North and South ATCAAs.

**REMARKS:** Contact Black Talon MOA Coordinator on 234.9 before entering SUA. Enter AR632 at or above FL 250, contact Steelgate on 385.7, 381.1, FM 40.45 or 40.65 prior to entering Garland North or South to confirm status of R4201A. AR632 must be de-conflicted with adjacent AR107. Contact Alpena CRTC Airspace Scheduler.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR633A</td>
<td>HCH VOR-DME 074/5</td>
<td>HCH VOR-DME</td>
<td>HCH VOR-DME 073/76</td>
<td>N35°48.50'</td>
<td>W84°52.50'</td>
<td>HCH VOR-DME 073/76</td>
<td>073/11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
<tr>
<td></td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>N36°11.50'</td>
<td>W83°29.50'</td>
<td>HCH VOR-DME 073/26</td>
<td>073/26</td>
<td>FL180/FL230</td>
<td>134th ARW</td>
<td>McGhee-Tyson ANGB</td>
<td>Knoxville, TN</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N35°40.50' W84°44.00' to N36°07.00' W83°05.50' to N36°39.50' W83°18.50' to N36°12.50' W84°57.50' to beginning.

**REMARKS:** None

(1) Tanker.
### AR634

**ENTRY POINTS**
- SNS VORTAC 258/77
- N36°51.00' W122°40.00'

**ANCHOR POINT**
- SNS VORTAC 258/77
- N36°51.00' W122°40.00'

**ANCHOR PATTERN**
- SNS VORTAC 246/116
- N36°24.00' W123°59.00'

**EXIT POINTS**
- SNS VORTAC 266/53
- N36°51.00' W122°40.00'

**CR PLAN**
- FL180/FL310
- Big Foot
- Primary
- 364.2 or as advised

**MILITARY RADAR**
- SNS VORTAC 266/53
- N36°51.00' W122°40.00'

**REFUELLING ALTITUDES**
- N/R

**SCHEDULING UNIT**
- FACSFAC, SD

**ASSIGNED ARTCC**
- Oakland

**TIMES OF OPERATION**
- Unlimited

---

**ATC ASSIGNED AIRSPACE:** WARNING AREA (W283 & W285A) N36°58.00' W122°55.00' to N36°33.00' W122°39.00' to N35°55.00' W124°02.00' to N36°20.00' W124°19.00' to beginning.

**REMARKS:**
1. Do not file AR634 in route of flight on DD175. (Reference to AR634 use will be noted in Remarks only). DD175 route of flight must reflect:
   - a. Last fix.
   - b. Direct entry point: BSR VORTAC 226/25 (KIGHT INT); SNS VORTAC 266/53 (TOPLE INT); or PXN VORTAC 189/84 (HONDO INT).
   - c. Direct W283/W285A.
   - d. Delay time.
   - e. Direct exit point (same as entry points).
   - f. Direct next fix.
   - g. Balance of route.
3. MRU service available when scheduled. Must be indicated in Remarks of DD175, Handoff to Big Foot, 364.2.

---

### AR635

**ENTRY POINTS**
- MLF VORTAC 259/128
- N38°31.00' W115°43.00'

**ANCHOR POINT**
- MLF VORTAC 259/128
- N38°31.00' W115°43.00'

**ANCHOR PATTERN**
- MLF VORTAC 259/128
- N38°31.00' W115°43.00'

**EXIT POINTS**
- MLF VORTAC 260/24
- N38°24.00' W113°31.00'

**CR PLAN**
- FL190/FL260
- 570SS/OSS

**MILITARY RADAR**
- MLF VORTAC 260/24
- N38°24.00' W113°31.00'

**REFUELLING ALTITUDES**
- N/R

**SCHEDULING UNIT**
- Salt Lake City

**ASSIGNED ARTCC**
- Unlimited

**TIMES OF OPERATION**
- Salt Lake City

**NUMBER**
- AR635

**ENTRY POINTS**
- MLF VORTAC 259/128
- N38°31.00' W115°43.00'

**ANCHOR POINT**
- MLF VORTAC 259/128
- N38°31.00' W115°43.00'

**ANCHOR PATTERN**
- MLF VORTAC 259/128
- N38°31.00' W115°43.00'

**EXIT POINTS**
- MLF VORTAC 260/24
- N38°24.00' W113°31.00'

**CR PLAN**
- FL190/FL260
- 570SS/OSS

**MILITARY RADAR**
- MLF VORTAC 260/24
- N38°24.00' W113°31.00'

**REFUELLING ALTITUDES**
- N/R

**SCHEDULING UNIT**
- Salt Lake City

**ASSIGNED ARTCC**
- Unlimited

**TIMES OF OPERATION**
- Salt Lake City

---

**ATC ASSIGNED AIRSPACE:** N38°54.00' W115°37.00' to N38°49.00' W113°50.00' to N38°21.00' W113°52.00' to N38°26.00' W115°39.00' to beginning.

**REMARKS:** None
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR636</td>
<td>NTU TACAN 095/78</td>
<td>NTU TACAN 095/78</td>
<td>NTU TACAN 100/146</td>
<td>N36°56.00' W74°25.00'</td>
<td>NTU TACAN 095/78</td>
<td>a. 238.900</td>
<td>FL200/FL290</td>
<td>1 FW Langley AFB, VA</td>
<td>DSN 574-2483/2559</td>
<td>Giant Killer ARCP-238.1</td>
<td>Unlimited</td>
</tr>
<tr>
<td></td>
<td>N36°56.00' W74°25.00'</td>
<td>N36°47.00' W73°00.00'</td>
<td>NTU TACAN 092/147</td>
<td>N37°07.50' W73°00.00'</td>
<td>N36°56.00' W74°25.00'</td>
<td>b. 319.700</td>
<td>3000' required as assigned by ATC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N36°47.00' W73°00.00'</td>
<td>N37°07.50' W73°00.00'</td>
<td>NTU TACAN 090/107</td>
<td>N37°06.30' W73°50.00'</td>
<td>N36°47.00' W73°00.00'</td>
<td>c. N/R</td>
<td>50/113</td>
<td>Pyramid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N36°47.00' W73°00.00'</td>
<td>N37°06.30' W73°50.00'</td>
<td>NTU TACAN 101/106</td>
<td>N36°47.00' W73°50.00'</td>
<td>N36°47.00' W74°25.00'</td>
<td>d. N/R</td>
<td>50/113</td>
<td>Primary 381.1 Sec.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N36°47.00' W73°50.00'</td>
<td>N36°47.00' W74°25.00'</td>
<td></td>
<td></td>
<td>e. 50/113</td>
<td>390.0 Oak</td>
<td>Secondary 364.2 Giant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Grove Primary as coordinated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Secondary 238.1 Giant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Killer Primary 238.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N37°05.00' W74°36.00' to N37°13.00' W72°40.00' to N36°42.00' W72°40.00' to N36°47.00' W74°36.00' to beginning.

**REMARKS:** Pyramid/Giant Killer radar must be operational. Tanker must check in/out with Giant Killer FACAFAC VACAPES 238.1 or 118.125. Simultaneous tankers only with prior approval. Use may be restricted by other operations.
ATC ASSIGNED AIRSPACE: N37°39.83' W91°53.03' to N37°51.60' W91°01.07' to N37°46.70' W90°46.10' to N37°10.38' W90°52.23' to N36°55.35' W90°54.83' to N36°38.00' W90°58.00' to N36°16.00' W91°03.00' to N36°16.00' W91°18.00' to N36°38.00' W91°50.00' to N36°45.00' W92°03.25' to N36°59.43' W92°03.25' to N37°05.47' W92°03.30' to N37°02.57' W92°26.23' to N37°02.53' W92°34.07' to N37°04.17' W92°41.75' to N37°07.55' W92°48.02' to N37°21.03' W92°50.37' to N37°25.98' W92°45.07' to N37°29.10' W92°38.27' to N37°30.38' W92°30.52' to N37°34.33' W91°56.03' to beginning.

REMARKS: Anchor is contained within West ATCAA and Lindbergh A ATCAA as described above, MARSA is applicable between refueling operations in AR637 and other simultaneous activity in Lindbergh ATCAA. Kansas City ARTCC or military radar must be operational. Receiver aircraft transiting from Lindbergh ATCAA will utilize the ARIP at FAM 252/46. Navigation during refueling will adhere to the course line described by the anchor pattern, including turn radii, unless clearance is obtained for random navigation in West ATCAA or Lindbergh A,B,C MOA/ATCAA. Clearance for navigation is described as airspace released in the Lindbergh MOA and/or ATCAA for fighter operations. When airspace is released, AAR operations may be conducted as desired throughout the released Lindbergh Airspace Complex without further coordination from Kansas City Center (KCC) or Military Radar Unit (MRU).
### AR638

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR638</td>
<td>HST TACAN</td>
<td>342/12</td>
<td>HST TACAN</td>
<td>HST TACAN</td>
<td>HST TACAN</td>
<td>a. 324.600</td>
<td>FL260/FL290</td>
<td>347 Rescue Wing, MacDill AFB, FL</td>
<td>DSN 968-4641</td>
<td>Miami</td>
<td>Unlimited</td>
</tr>
<tr>
<td></td>
<td>N25°40.00'</td>
<td>342/43</td>
<td>N25°21.00'</td>
<td>N25°20.00'</td>
<td>N25°20.00'</td>
<td>b. 343.250</td>
<td></td>
<td></td>
<td></td>
<td>ARCP-323.0</td>
<td>EXIT-323.0</td>
</tr>
<tr>
<td></td>
<td>W80°28.00'</td>
<td>116/27</td>
<td>W81°09.00'</td>
<td>W79°55.00'</td>
<td>W79°55.00'</td>
<td>c. N/R</td>
<td></td>
<td>or as assigned by ATC 4000' required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HST TACAN</td>
<td>255/26</td>
<td>N25°20.00'</td>
<td>W80°50.00'</td>
<td>N25°44.00'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HST TACAN</td>
<td>255/26</td>
<td>W81°09.00'</td>
<td>N25°18.00'</td>
<td>W80°18.00'</td>
<td>e. 51/114</td>
<td></td>
<td>400' required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HST TACAN</td>
<td>265/43</td>
<td>N25°21.00'</td>
<td>W80°45.00'</td>
<td>N25°44.00'</td>
<td>400' required</td>
<td>347 Rescue Wing, MacDill AFB, FL</td>
<td>DSN 968-4641</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HST TACAN</td>
<td>304/23</td>
<td>N25°40.00'</td>
<td>W80°28.00'</td>
<td>N25°44.00'</td>
<td>400' required</td>
<td>347 Rescue Wing, MacDill AFB, FL</td>
<td>DSN 968-4641</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HST TACAN</td>
<td>255/26</td>
<td>N25°20.00'</td>
<td>W80°50.00'</td>
<td>N25°44.00'</td>
<td>400' required</td>
<td>347 Rescue Wing, MacDill AFB, FL</td>
<td>DSN 968-4641</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HST TACAN</td>
<td>255/26</td>
<td>N25°20.00'</td>
<td>W80°50.00'</td>
<td>N25°44.00'</td>
<td>400' required</td>
<td>347 Rescue Wing, MacDill AFB, FL</td>
<td>DSN 968-4641</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N25°15.00' W79°34.00' to N25°44.00' W79°34.00' to N25°44.00' W81°08.00' to N25°15.00' W81°08.00' to beginning.

**REMARKS:** Miami ARTCC radar must be operational. Anchor will not be used when AR617 is active.

1. Tankers.
2. Receivers.
### AR639

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DUG VORTAC 257/42</td>
<td>N31°28.42' W110°24.83'</td>
<td>DUG VORTAC 07/20</td>
<td>N31°28.50' W109°22.50'</td>
<td>DUG VORTAC 257/42</td>
<td>N31°28.42' W110°24.83'</td>
<td>319.500</td>
<td>N/R</td>
<td>Davis-Monthan AFB, ARCP-127.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DUG VORTAC 056/58</td>
<td>N31°48.50' W108°32.50'</td>
<td>DUG VORTAC 056/58</td>
<td>N31°48.50' W108°32.50'</td>
<td>DUG VORTAC 056/58</td>
<td>N31°48.50' W108°32.50'</td>
<td>N/R</td>
<td>Davis-Monthan AFB, ARCP-133.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N31°48.50' W108°32.50'</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
</tbody>
</table>

### ATC ASSIGNED AIRSPACE:
None.

### REMARKS:
AR639 is located within Tombstone C MOA and ATCAA, R2303B/C and Libby ATCAA. Receiver holding point is DUG 258/30. Inbound course 078 degrees, left turns.

### AR639A

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR639A</td>
<td>DUG VORTAC 254/6</td>
<td>N31°28.00' W109°43.50'</td>
<td>DUG VORTAC 07/54</td>
<td>N31°28.42' W108°32.67'</td>
<td>DUG VORTAC 254/6</td>
<td>N31°28.00' W109°43.50'</td>
<td>291.900</td>
<td>13000/FL280</td>
<td>355th Wing</td>
<td>Albuquerque</td>
</tr>
<tr>
<td></td>
<td>DUG VORTAC 254/6</td>
<td>N31°28.00' W109°43.50'</td>
<td>DUG VORTAC 07/20</td>
<td>N31°28.50' W109°22.50'</td>
<td>DUG VORTAC 254/6</td>
<td>N31°28.00' W109°43.50'</td>
<td>319.500</td>
<td>N/R</td>
<td>Davis-Monthan AFB, ARCP-127.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N31°28.42' W110°24.83'</td>
<td>DUG VORTAC 056/58</td>
<td>N31°48.50' W108°32.50'</td>
<td>DUG VORTAC 056/58</td>
<td>N31°48.50' W108°32.50'</td>
<td>N/R</td>
<td>Davis-Monthan AFB, ARCP-133.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N31°48.50' W108°32.50'</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
</tbody>
</table>

### ATC ASSIGNED AIRSPACE:
N31°46.00' W108°12.50' to N31°30.00' W108°12.50' to N31°24.42' W108°32.67' to N31°24.00' W109°42.50' to N31°28.50' W110°00.00' to N31°47.00' W110°00.00' to N31°51.50' W109°43.00' to N31°52.50' W108°32.50' to beginning.

### REMARKS:
AR639A and AR639 will not be used simultaneously. Receiver holding point is DUG 078/10. Inbound course is 078 degrees, left turn.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>Assigned ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR640A</td>
<td>BAE VOR-DME</td>
<td>BAE VOR-DME</td>
<td>BAE VOR-DME</td>
<td>BAE VOR-DME</td>
<td>BAE VOR-DME</td>
<td>a. 305.500</td>
<td>FL180</td>
<td>ANGCRTC</td>
<td>Chicago ENTRY</td>
<td>As scheduled</td>
<td></td>
</tr>
<tr>
<td></td>
<td>015/22</td>
<td>060/73</td>
<td>357/57</td>
<td>345/39</td>
<td>015/22</td>
<td>b. 320.900</td>
<td></td>
<td></td>
<td>Volk Field ANGB, WI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N43°28.00'</td>
<td>N43°40.00'</td>
<td>N44°04.00'</td>
<td>N43°28.00'</td>
<td>N43°28.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>DSN 871-1445</td>
<td>C608-427-1445</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W88°08.00'</td>
<td>W86°48.00'</td>
<td>W88°19.00'</td>
<td>W88°08.00'</td>
<td>W88°08.00'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAE VOR-DME</td>
<td>338/61</td>
<td>N44°04.00'</td>
<td>059/44</td>
<td>338/61</td>
<td>e. 51/114</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N44°04.00'</td>
<td>N44°04.00'</td>
<td>N44°04.00'</td>
<td>N44°04.00'</td>
<td>N44°04.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W88°46.00'</td>
<td>W87°24.00'</td>
<td>W88°46.00'</td>
<td>W88°46.00'</td>
<td>W88°46.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAE VOR-DME</td>
<td>013/68</td>
<td>N44°13.00'</td>
<td>047/61</td>
<td>013/68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N44°13.00'</td>
<td>N44°13.00'</td>
<td>N44°13.00'</td>
<td>N44°13.00'</td>
<td>N44°13.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W87°52.00'</td>
<td>W87°14.00'</td>
<td>W87°52.00'</td>
<td>W87°52.00'</td>
<td>W87°52.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAE VOR-DME</td>
<td>062/80</td>
<td>N44°04.00'</td>
<td>357/57</td>
<td>062/80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N43°41.00'</td>
<td>N43°41.00'</td>
<td>N43°41.00'</td>
<td>N43°41.00'</td>
<td>N43°41.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W86°38.00'</td>
<td>W88°19.00'</td>
<td>W86°38.00'</td>
<td>W86°38.00'</td>
<td>W86°38.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N44°29.00' W89°00.00' to N44°23.00' W88°26.00' to N44°05.30' W87°29.45' to N44°01.14' W86°56.38' to N43°41.00' W86°38.00' to N43°17.00' W86°44.00' to N43°15.30' W87°14.00' to N43°19.00' W87°41.00' to N43°33.00' W88°21.00' to N43°35.00' W88°46.30' to N44°09.30' W88°45.20' to beginning.

**REMARKS:** The anchor area is located within Oshkosh, Sheboygan West, and Sheboygan East ATC Assigned Airspace. All users must check in and check out with Phoenix on 346.525. When the rendezvous is controlled by the military radar unit, 298.775/283.775 will be used after checking in with Phoenix. For tanker directed rendezvous, the C/R Plan will be used.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>Assigned ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR640B</td>
<td>BAE VOR-DME</td>
<td>BAE VOR-DME</td>
<td>BAE VOR-DME</td>
<td>BAE VOR-DME</td>
<td>BAE VOR-DME</td>
<td>a. 291.900</td>
<td>FL180</td>
<td>ANGCRTC</td>
<td>Chicago ENTRY</td>
<td>As scheduled</td>
<td></td>
</tr>
<tr>
<td></td>
<td>013/68</td>
<td>062/88</td>
<td>00010/63</td>
<td>00010/63</td>
<td>013/68</td>
<td>b. 320.900</td>
<td></td>
<td></td>
<td>Volk Field ANGB, WI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N44°13.00'</td>
<td>N43°45.00'</td>
<td>N44°09.00'</td>
<td>N44°13.00'</td>
<td>N44°13.00'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>DSN 871-1445</td>
<td>C608-427-1445</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W87°52.00'</td>
<td>W86°28.00'</td>
<td>W87°59.00'</td>
<td>W87°52.00'</td>
<td>W87°52.00'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAE VOR-DME</td>
<td>062/80</td>
<td>00010/63</td>
<td>051/75</td>
<td>062/80</td>
<td>e. 51/114</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N43°41.00'</td>
<td>N43°41.00'</td>
<td>N43°41.00'</td>
<td>N43°41.00'</td>
<td>N43°41.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W86°38.00'</td>
<td>W86°38.00'</td>
<td>W86°38.00'</td>
<td>W86°38.00'</td>
<td>W86°38.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAE VOR-DME</td>
<td>015/22</td>
<td>N43°28.00'</td>
<td>062/59</td>
<td>015/22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N43°28.00'</td>
<td>N43°28.00'</td>
<td>N43°28.00'</td>
<td>N43°28.00'</td>
<td>N43°28.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W88°08.00'</td>
<td>W88°08.00'</td>
<td>W88°08.00'</td>
<td>W88°08.00'</td>
<td>W88°08.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAE VOR-DME</td>
<td>356/56</td>
<td>N44°03.00'</td>
<td>356/56</td>
<td>N44°03.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N44°03.00'</td>
<td>N44°03.00'</td>
<td>N44°03.00'</td>
<td>N44°03.00'</td>
<td>N44°03.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W88°20.00'</td>
<td>W88°20.00'</td>
<td>W88°20.00'</td>
<td>W88°20.00'</td>
<td>W88°20.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N44°23.00' W88°26.00' to N44°05.30' W87°29.45' to N44°01.14' W86°56.38' to N43°41.00' W86°38.00' to N43°17.00' W86°44.00' to N43°15.30' W87°14.00' to N43°19.00' W87°41.00' to N43°33.00' W88°21.00' to N43°35.00' W88°46.30' to N44°09.30' W88°45.20' to beginning.

**REMARKS:** The anchor area is located within Sheboygan West and Sheboygan East ATC Assigned Airspace. All users must check in and check out with Phoenix on 346.525. When the rendezvous is controlled by the military radar unit, 298.775/283.775 will be used after checking in with Phoenix. For tanker directed rendezvous, the C/R Plan will be used.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR641A</td>
<td>a. 295.400 b. 319.500 c. N/R d. N/R e. 31/94</td>
<td></td>
<td>ILC VORTAC 192/36 N37°43.00’ W114°45.00’</td>
<td></td>
<td>ILC VORTAC 192/36 N37°43.00’ W114°45.00’</td>
<td>ILC VORTAC 141/42 N37°36.00’ W114°03.00’</td>
<td>12000/FL230</td>
<td>554 RS/RSOO</td>
<td>Los Angeles ARCP-343.6 EXIT-343.6</td>
<td>As coordinated with 554 RS/RSOO</td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** Caliente ATCAA N37°58.00’ W115°00.00’ to N37°17.00’ W114°50.25’ to N37°28.00’ W114°34.50’ to N37°28.00’ W114°00.00’ to N37°43.00’ W113°48.00’ to N38°00.00’ W114°34.50’ to beginning.

**REMARKS:** When Nellis Control (ATC) is not in operation, Los Angeles Center will provide ATC clearance for tanker and/or receivers into/out of the Caliente ATCAA only. Aircraft operating in this anchor are MARSA with aircraft operating in adjacent Special Use Airspace IAW NAFB Sup 1, ARF 50-46. Radar monitoring required to conduct air refueling. 554 RS/RSOO Nellis AFB, NV, schedules and deconflicts the airspace only. Caliente ATCAA and the Desert MOA must be scheduled to use this anchor. Requirements for tanker support must be made through appropriate units. Pattern length: 30 NM; width 17 NM. Anchor area is located within the Caliente ATCAA/Desert MOA. Airspace to be protected will in no case extend beyond the lateral confines of the Caliente ATCAA/Desert MOA.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 289.650</td>
<td>b. 319.500</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/113</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 289.650</td>
<td>b. 319.500</td>
<td>c. N/R</td>
<td>d. N/R</td>
<td>e. 50/113</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N40°36.00' W114°27.00' to N39°23.00' W114°27.00' to N39°23.00' W113°19.00' to N39°44.00' W113°08.00' to N39°49.00' W112°43.00' to N40°13.00' W112°43.00' to N40°29.00' W113°00.00' to N40°41.00' W113°00.00' to N40°39.00' W114°00.00' to N40°36.00' W114°00.00' to beginning.

**REMARKS:** Refueling operations must be scheduled in advance with 388 RANS/RST DSN 777-4401 during normal duty hours. Primary Boom frequency 305.5.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR643</td>
<td>PUB VORTAC 257/23, N38°15.50' W104°55.00'</td>
<td>ALS VORTAC 126/16, N37°09.00' W105°36.00'</td>
<td>ALS VORTAC 126/16, N37°09.00' W105°36.00'</td>
<td>PUB VORTAC 195/25, N37°55.00' W104°38.00'</td>
<td>a. 279.800 FL200/FL230</td>
<td>140 TFW, DSN 877-9470</td>
<td>Denver ARCP-335.5/31, 7.5</td>
<td>As coordinated with ARTCC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ALS VORTAC 126/16, N37°09.00' W105°36.00'</td>
<td>ALS VORTAC 126/16, N37°09.00' W105°36.00'</td>
<td>ALS VORTAC 126/16, N37°09.00' W105°36.00'</td>
<td>ALS VORTAC 126/16, N37°09.00' W105°36.00'</td>
<td>a. 279.800 FL200/FL230</td>
<td>140 TFW, DSN 877-9470</td>
<td>Denver ARCP-335.5/31, 7.5</td>
<td>As coordinated with ARTCC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N38°15.50' W104°55.00' to N38°04.00' W104°49.00' to N37°55.00' W104°38.00' to N37°24.00' W105°00.00' to N36°49.00' W105°47.00' to N37°26.00' W105°36.00' to N38°17.00' W105°19.00' to beginning.

**REMARKS:** Military radar must be operational. Denver ARTCC radar must be operational. Pattern Length: 52 NM; Width: 20 NM.

(1) Or as directed by ATC
### AR644

**Number**
- **AR644**

**Type**
- (North)

**Anchor Point**
- HMN TACAN
  - 358/74
  - N34°05.00' W105°54.80'

**Anchor Pattern**
- HMN TACAN
  - 043/30
  - N33°10.10' W105°37.80'

**Exit Point**
- HMN TACAN
  - 049/50
  - N33°17.90' W105°15.30'

**CR Plan**
- CME VORTAC
  - 278/20
  - FL200/FL260

**Military Radar**
- 49 OSS/OSOS
  - Holloman AFB, NM

**Refueling Altitudes**
- a. 324.400
  - FL200
- b. 319.500
  - FL120
- c. N/R
  - FL260
- d. N/R
  - FL100
- e. 51/114
  - FL400

**Scheduling Unit**
- 49 OSS/OSOS
  - DSN 572-3536
  - C575-572-3536

**Assigned Artcc**
- Albuquerque ARCP
- ARCP-257.6
- EXIT-257.6

**Times of Operation**
- Continuous.
- Ltd.
- use weekdays

---

### AR644

**Number**
- **AR644**

**Type**
- (South)

**Anchor Point**
- HMN TACAN
  - 066/52
  - N33°04.00' W105°07.00'

**Anchor Pattern**
- HMN TACAN
  - 015/66
  - N33°51.50' W105°32.90'

**Exit Point**
- HMN TACAN
  - 001/53
  - N33°43.50' W105°54.80'

**CR Plan**
- CME VORTAC
  - 278/20
  - FL200/FL260

**Military Radar**
- 49 OSS/OSOS
  - Holloman AFB, NM

**Refueling Altitudes**
- a. 324.400
  - FL200
- b. 319.500
  - FL120
- c. N/R
  - FL260
- d. N/R
  - FL100
- e. 51/114
  - FL400

**Scheduling Unit**
- 49 OSS/OSOS
  - DSN 572-3536
  - C575-572-3536

**Assigned Artcc**
- Albuquerque ARCP
- ARCP-284.0
- EXIT-257.6

**Times of Operation**
- Continuous.
- Ltd.
- use weekdays

---

**ATC Assigned Airspace:**
- N34°05.00' W106°04.00' to N34°05.00' W105°35.50' to N33°34.00' W105°00.00' to N32°57.00' W105°19.50' to N32°56.00' W106°04.00' to beginning.

**Remarks:**
- Track is normally closed to non-49 WG units SR-SS Mon-Fri. Anchor is scheduled on non-interference basis with 49 WG and White Sands Missile Range Operations. Cannot be scheduled if R5109A/B active or by other than 49 WG units if Beak MOA/ATCAA in use. Track use may be cancelled with little advance notice due to priority research and development operations. Specify North or South entry in request. All initial scheduling requests should be forwarded to 49 OSS/OSOS for coordination. Caution: ARIP to ARCP headings are not parallel to track orientation.
### AR ROUTES

<table>
<thead>
<tr>
<th><strong>NUMBER</strong></th>
<th><strong>ENTRY POINTS</strong></th>
<th><strong>ARIP</strong></th>
<th><strong>ANCHOR POINT</strong></th>
<th><strong>ANCHOR PATTERN</strong></th>
<th><strong>EXIT POINTS</strong></th>
<th><strong>CR PLAN</strong></th>
<th><strong>REFUELING ALTITUDES</strong></th>
<th><strong>SCHEDULING UNIT</strong></th>
<th><strong>ASSIGNED ARTCC</strong></th>
<th><strong>TIMES OF OPERATION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AR645</td>
<td>LKV VORTAC</td>
<td>118/16</td>
<td>LKV VORTAC</td>
<td>334/59</td>
<td>LKV VORTAC</td>
<td>269/14</td>
<td>FL200/FL230</td>
<td>114 FS Kingsley Field - Klamath Falls, OR DSN 830-6686</td>
<td>Seattle ARCP-351.7</td>
<td>Mon-Fri 0700-1600 hours local</td>
</tr>
<tr>
<td></td>
<td>N42°18.00'</td>
<td>N42°18.00'</td>
<td>N43°28.00'</td>
<td>N43°28.00'</td>
<td>N43°28.00'</td>
<td>N42°34.00'</td>
<td>or as assigned by ATC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W120°16.00'</td>
<td>W120°40.00'</td>
<td>W120°40.00'</td>
<td>W120°40.00'</td>
<td>W120°49.00'</td>
<td>W120°40.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LKV VORTAC</td>
<td>318/80</td>
<td>LKV VORTAC</td>
<td>269/14</td>
<td>LKV VORTAC</td>
<td>334/59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N43°43.00'</td>
<td>N42°36.00'</td>
<td>N42°34.00'</td>
<td>N43°28.00'</td>
<td>N43°28.00'</td>
<td>N42°36.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W121°14.00'</td>
<td>W120°49.00'</td>
<td>W120°49.00'</td>
<td>W120°49.00'</td>
<td>W120°49.00'</td>
<td>W120°49.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR646</td>
<td>LEV VORTAC</td>
<td>153/19</td>
<td>LEV VORTAC</td>
<td>153/19</td>
<td>LEV VORTAC</td>
<td>153/89</td>
<td>FL240/FL260</td>
<td>5520SS/OSOS</td>
<td>Houston ENTRY As coordinated with ATC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N28°53.00'</td>
<td>N28°53.00'</td>
<td>N27°49.00'</td>
<td>N27°49.00'</td>
<td>N27°49.00'</td>
<td>N28°53.00'</td>
<td>Tinker AFB, OK DSN 884-1203/1204 C405-734-1203/1204</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W89°57.00'</td>
<td>W89°24.00'</td>
<td>W89°24.00'</td>
<td>W89°24.00'</td>
<td>W89°24.00'</td>
<td>W89°24.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEV VORTAC</td>
<td>143/111</td>
<td>LEV VORTAC</td>
<td>143/111</td>
<td>LEV VORTAC</td>
<td>141/91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N28°43.00'</td>
<td>N27°39.50'</td>
<td>N28°43.00'</td>
<td>N28°43.00'</td>
<td>N28°43.00'</td>
<td>N28°43.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W89°27.00'</td>
<td>W89°54.50'</td>
<td>W89°27.00'</td>
<td>W89°27.00'</td>
<td>W89°27.00'</td>
<td>W89°27.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEV VORTAC</td>
<td>143/111</td>
<td>LEV VORTAC</td>
<td>143/111</td>
<td>LEV VORTAC</td>
<td>141/91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N43°38.00' W121°17.00' to N43°45.00' W120°40.00' to N42°24.00' W120°13.00' to N42°18.37' W120°37.43' to N42°17.00' W120°49.00' to beginning.

**REMARKS:** Military or Seattle ARTCC radar must be operational to conduct refueling.

### AR646

<table>
<thead>
<tr>
<th><strong>ENTRY POINTS</strong></th>
<th><strong>ARIP</strong></th>
<th><strong>ANCHOR POINT</strong></th>
<th><strong>ANCHOR PATTERN</strong></th>
<th><strong>EXIT POINTS</strong></th>
<th><strong>CR PLAN</strong></th>
<th><strong>REFUELING ALTITUDES</strong></th>
<th><strong>SCHEDULING UNIT</strong></th>
<th><strong>ASSIGNED ARTCC</strong></th>
<th><strong>TIMES OF OPERATION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>LEV VORTAC</td>
<td>153/19</td>
<td>LEV VORTAC</td>
<td>153/19</td>
<td>LEV VORTAC</td>
<td>153/89</td>
<td>FL240/FL260</td>
<td>5520SS/OSOS</td>
<td>Houston ENTRY As coordinated with ATC</td>
<td></td>
</tr>
<tr>
<td>N28°53.00'</td>
<td>N28°53.00'</td>
<td>N27°49.00'</td>
<td>N27°49.00'</td>
<td>N27°49.00'</td>
<td>N28°53.00'</td>
<td>Tinker AFB, OK DSN 884-1203/1204 C405-734-1203/1204</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W89°57.00'</td>
<td>W89°24.00'</td>
<td>W89°24.00'</td>
<td>W89°24.00'</td>
<td>W89°24.00'</td>
<td>W89°24.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV VORTAC</td>
<td>143/111</td>
<td>LEV VORTAC</td>
<td>143/111</td>
<td>LEV VORTAC</td>
<td>141/91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N28°43.00'</td>
<td>N27°39.50'</td>
<td>N28°43.00'</td>
<td>N28°43.00'</td>
<td>N28°43.00'</td>
<td>N28°43.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W89°27.00'</td>
<td>W89°54.50'</td>
<td>W89°27.00'</td>
<td>W89°27.00'</td>
<td>W89°27.00'</td>
<td>W89°27.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV VORTAC</td>
<td>143/111</td>
<td>LEV VORTAC</td>
<td>143/111</td>
<td>LEV VORTAC</td>
<td>141/91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td>N27°39.50'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td>W88°54.50'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N28°48.00' W89°59.50' to N27°32.00' W89°20.00' to N27°44.00' W89°51.00' to N29°00.00' W89°31.00' to beginning.

**REMARKS:** Restricted to Turbo Jet aircraft from 552 ACW. Houston ARTCC Radar must be operational.

---

1. Primary Tanker/Receiver.
2. Tanker Alternate.
3. Receiver Alternate.
### AR647

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
</table>
| AR647  | TUS VORTAC 268/39 N32°12.50' W111°40.50' | TUS VORTAC 268/100 N32°22.50' W112°51.00' | TUS VORTAC 268/100 N32°22.50' W112°51.00' | TUS VORTAC 258/102 N32°04.00' W112°55.00' TUS VORTAC 249/59 N31°56.50' W112°03.00' TUS VORTAC 268/55 N32°15.00' W111°59.00' | TUS VORTAC 268/39 N32°12.50' W111°40.50' | a. 283.900  
      |                |      |              |                |              |         |                | 10,000/FL290       | 56RMO/ASMS       |               | Albuquerque       |
|        |              |      |              |                |              |         |                | (Low Block)         |                 |               | Unlimited         |
|        |              |      |              |                |              |         |                | 10,000/17,000 (Mid Block FL 180/FL 230 (High Block FL 240/FL 290) |                 |               |                  |
|        |              |      |              |                |              |         |                | 30/93               |                 |               |                  |
|        |              |      |              |                |              |         |                | (MAIN RECORD IS FOR LOW): |                 |               |                  |
|        |              |      |              |                |              |         |                | (Mid) a.-295.4     |                 |               |                  |
|        |              |      |              |                |              |         |                | b.-319.5            |                 |               |                  |
|        |              |      |              |                |              |         |                | c.N/R               |                 |               |                  |
|        |              |      |              |                |              |         |                | d.N/R               |                 |               |                  |
|        |              |      |              |                |              |         |                | e.-52/115           |                 |               |                  |
|        |              |      |              |                |              |         |                | (High) a.-283.9    |                 |               |                  |
|        |              |      |              |                |              |         |                | b.-319.5            |                 |               |                  |
|        |              |      |              |                |              |         |                | c.N/R               |                 |               |                  |
|        |              |      |              |                |              |         |                | d.N/R               |                 |               |                  |
|        |              |      |              |                |              |         |                | e.-30/93            |                 |               |                  |
|        |              |      |              |                |              |         |                | MRU Primary High    |                 |               |                  |
|        |              |      |              |                |              |         |                | 254.5/120.5         |                 |               |                  |
|        |              |      |              |                |              |         |                | 5 Primary Mid/Low    |                 |               |                  |
|        |              |      |              |                |              |         |                | 264.7/120.5         |                 |               |                  |
|        |              |      |              |                |              |         |                | 5 or as assigned    |                 |               |                  |

**ATC ASSIGNED AIRSPACE:** N32°11.00' W111°39.00' to N32°19.50' W111°47.50' to N32°29.00' W111°05.00' to N32°24.50' W113°11.50' to N32°08.50' W113°15.00' to N32°01.50' W113°08.00' to N31°51.00' W111°55.00' to N31°52.00' W111°43.00' to beginning.

**REMARKS:** AR647 lies within the Sells MOA/ATCAA and Barry M. Goldwater Range East (BMGR-E) airspace. All aircraft operating in the Sells MOA/ATCAA, the BMGR-E and AR647 will use the Gila Bend (KGXF) altimeter setting. Normally restricted to night time refueling only, due to heavy military aerial activity within the Sells MOA/ATCAA and the BMGR-E airspace, daytime refueling in AR647 must be authorized/scheduled by the 56 RMO/ASMS. Contact Gila Bend Range Operations (C/S Snake Eye) on 264.125/122.775 prior to entering and exiting AR647. Snake Eye is not an ATC facility, an ATC clearance from Albuquerque Center will be required prior to leaving the airspace. The Low and High blocks will not be scheduled at the same time. The receiver unit must coordinate GCI operations with the 607th Air Control Squadron (C/S O'Grady) (DSN:896-3883/3880) and the scheduled tanker unit.
ATC ASSIGNED AIRSPACE:  N32°11.00' W111°39.00' to N32°19.50' W111°47.50' to N32°29.00' W113°05.00' to N32°24.50' W113°11.50' to N32°08.50' W113°15.00' to N32°01.50' W113°08.00' to N31°51.00' W111°55.00' to N31°52.00' W111°43.00' to beginning.

REMARKS:  AR647A lies entirely within the Sells MOA. All aircraft operating in the Sells MOA/ATCAA, and AR647A will use the Gila Bend AFAF (Range Operations) current altimeter setting. Unless specifically requested, approved, and scheduled by the 56 RMO/ASMS, AR647A is restricted for nighttime refueling by 355 WG A-10 aircraft only. It is restricted to two nights per week due to other training requirements in the Sells MOA. AR647A will not be scheduled when AR647 low or medium blocks are scheduled. Contact Gila Bend Range Operations on 120.55/264.125 prior to entering and exiting AR647A. Due to other training in the Sells MOA/ATCAA at 15,000' and above aircraft entering and exiting AR647A must be between 10,000' and 14,000' unless Range Operations confirms that there is no other aircraft activity in the Sells MOA/ATCAA. Tanker aircraft plan to enter/exit at the primary entry/exit point TUS 269/55. Refueling aircraft scheduled for operations on the Goldwater Range may exit at the alternate entry/exit point TUS 269/85.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR648A</td>
<td>BAM VORTAC 050/20 N40°43.20' W116°31.80'</td>
<td>BAM VORTAC 050/20 N40°43.20' W116°31.80'</td>
<td>BAM VORTAC 050/90 N41°14.20' W115°08.70'</td>
<td>BAM VORTAC 050/90 N43°14.20' W115°08.70'</td>
<td>BAM VORTAC 004/31 N41°03.90' W115°43.30'</td>
<td>FL190/FL230</td>
<td>151AREFG</td>
<td>Salt Lake City ARCP-269.0</td>
<td>Unlimited</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAM VORTAC 050/20 N40°43.20' W116°31.80'</td>
<td>BAM VORTAC 050/20 N40°43.20' W116°31.80'</td>
<td>BAM VORTAC 050/90 N41°14.20' W115°08.70'</td>
<td>BAM VORTAC 050/90 N41°14.20' W115°08.70'</td>
<td>BAM VORTAC 004/31 N41°03.90' W115°43.30'</td>
<td>FL190/FL230</td>
<td>151AREFG</td>
<td>Salt Lake City ARCP-269.0</td>
<td>Unlimited</td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N40°41.30' W116°27.90' to N41°17.40' W114°48.70' to N41°42.90' W115°04.50' to N41°06.40' W116°45.40' to beginning.

**REMARKS:** None

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR648B</td>
<td>BAM VORTAC 040/110 N41°39.50' W114°57.80'</td>
<td>BAM VORTAC 040/110 N41°39.50' W114°57.80'</td>
<td>BAM VORTAC 023/45 N41°10.60' W116°20.20'</td>
<td>BAM VORTAC 023/45 N41°10.60' W116°20.20'</td>
<td>BAM VORTAC 004/31 N41°03.90' W115°43.30'</td>
<td>FL190/FL230</td>
<td>151AREFG</td>
<td>Salt Lake City ARCP-269.0</td>
<td>Unlimited</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAM VORTAC 040/110 N41°39.50' W114°57.80'</td>
<td>BAM VORTAC 040/110 N41°39.50' W114°57.80'</td>
<td>BAM VORTAC 023/45 N41°10.60' W116°20.20'</td>
<td>BAM VORTAC 023/45 N41°10.60' W116°20.20'</td>
<td>BAM VORTAC 004/31 N41°03.90' W115°43.30'</td>
<td>FL190/FL230</td>
<td>151AREFG</td>
<td>Salt Lake City ARCP-269.0</td>
<td>Unlimited</td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N40°41.30' W116°27.90' to N41°17.40' W114°48.70' to N41°42.90' W115°04.50' to N41°06.40' W116°45.40' to beginning.

**REMARKS:** None
### AR ROUTES

#### ATC ASSIGNED AIRSPACE:

- **AR649**:
  - EED VORTAC 224/47
  - N34°22.00' W115°17.00'
  - EED VORTAC 109/23
  - N34°33.00' W114°05.00'
  - EED VORTAC 137/27
  - W115°10.00'
  - EED VORTAC 235/37
  - N34°33.00'
- **AR650**:  
  - FST VORTAC 195/74
  - 195/32
  - N30°43.90'
  - W103°05.66'
  - N30°28.28'
  - W103°14.78'
  - N30°19.55'
  - W103°14.38'
  - N30°19.55'
  - W103°14.78'

**REMARKS:**

- **AR649**: EC-130H aircraft will normally enter at EED 109/23. Turtle MOA/ATCAA must be active for track use.
- **AR650**: SODAR not authorized.

#### ATC ASSIGNED AIRSPACE:

- **AR649**: N34°42.00' W115°16.00' to N34°40.00' W114°00.00' to N34°23.00' W114°00.00' to N34°14.00' W114°30.00' to N34°14.00' W115°30.00' to N34°19.00' W115°25.00' to beginning.
- **AR650**: N30°43.90' W103°00.50' to N30°38.60' W102°47.90' to N30°17.90' W102°48.80' to N29°39.30' W103°10.40' to N29°25.70' W103°28.50' to N29°30.90' W103°41.00' to N29°51.60' W103°40.20' to N30°30.40' W103°18.70' to beginning.

**REMARKS:**

- **AR649**: 1. Tankers.
- 2. Receivers.
- 3. Receiver Holding (Non-RADAR)

**ARCP EXIT:**

- **AR649**: Los Angeles ARCP
- **AR650**: Albuquerque ARCP

**ASSIGNED ARTCC:**

- **AR649**: 755 OSS
- **AR650**: 755 OSS

**TIMES OF OPERATION:**

- **AR649**: Unlimited
- **AR650**: Unlimited

**REFERENCES:**

- [755 OSS, Davis-Monthan AFB, AZ]
- [DSN 228-5329]
- [C520-228-5329]
- [47 FTW/86 FTS, Laughlin AFB, TX, (SS-SR, 7 OSS/OSOS)]
- [EXIT]
- [C830-298-5584 (SS-SR, 325-696-3665)]
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR652</td>
<td>343/16</td>
<td>MRF VOR-DME N30°33.80' W103°59.10'</td>
<td>MRF VOR-DME 308/52 N30°57.20' W104°36.80'</td>
<td>MRF VOR-DME 308/52 N30°57.20' W104°36.80'</td>
<td>MRF VOR-DME</td>
<td>1. 249.525</td>
<td>12000/18000</td>
<td>49OSS/OSOS</td>
<td>Holloman AFB, NM</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>(North)</td>
<td>MRF VOR-DME N30°33.80' W103°59.10'</td>
<td>HUP VORTAC 140/15 N31°20.50' W105°14.10'</td>
<td>HUP VORTAC 177/30 N31°04.80' W105°28.20'</td>
<td>MRF VOR-DME 286/51 N30°40.90' W104°50.10'</td>
<td>a. 249.525</td>
<td>12000/18000</td>
<td>49OSS/OSOS</td>
<td>Holloman AFB, NM</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>HUP VORTAC 219/23</td>
<td>N31°19.60' W105°43.20'</td>
<td>HUP VORTAC 177/30 N31°04.80' W105°28.20'</td>
<td>HUP VORTAC 177/30 N31°04.80' W105°28.20'</td>
<td>MRF VOR-DME 286/51 N30°40.90' W104°50.10'</td>
<td>a. 249.525</td>
<td>12000/18000</td>
<td>49OSS/OSOS</td>
<td>Holloman AFB, NM</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HUP VORTAC 177/30 N31°04.80' W105°28.20'</td>
<td>MRF VOR-DME 286/51 N30°40.90' W104°50.10'</td>
<td>MRF VOR-DME 308/52 N30°57.20' W104°36.80'</td>
<td>MRF VOR-DME 308/52 N30°57.20' W104°36.80'</td>
<td>a. 249.525</td>
<td>12000/18000</td>
<td>49OSS/OSOS</td>
<td>Holloman AFB, NM</td>
<td>Continuous</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** None.

**REMARKS:** Anchor is scheduled on non-interference basis with Valentine MOA.
### ATC ASSIGNED AIRSPACE:

None.

### REMARKS:

For entry from the west-northwest. Track will not be used simultaneously with AR652 (North/South). Usage will be deconflicted with IR-178.

### ATC ASSIGNED AIRSPACE:

None.

### REMARKS:

For entry from the east-southeast. Track will not be used simultaneously with AR652 (North/South). Usage will be deconflicted with IR-178.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR653</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>a. 324.600</td>
<td>FL180/FL220</td>
<td>22OSS/OSOS, McCo-</td>
<td>As scheduled</td>
<td>Kansas City</td>
<td>ARCP-363.2</td>
</tr>
<tr>
<td>308/42</td>
<td>N39°25.50'</td>
<td>N39°25.50'</td>
<td>N39°25.50'</td>
<td>N39°25.50'</td>
<td>N39°25.50'</td>
<td>b. 260.200</td>
<td></td>
<td></td>
<td></td>
<td>ARCP-363.2</td>
<td>EXIT-363.2</td>
</tr>
<tr>
<td></td>
<td>W98°15.50'</td>
<td>W98°15.50'</td>
<td>W98°15.50'</td>
<td>W98°15.50'</td>
<td>W98°15.50'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033/31</td>
<td>N39°19.00'</td>
<td>N39°19.00'</td>
<td>N39°19.00'</td>
<td>N39°19.00'</td>
<td>N39°19.00'</td>
<td>e. 29/92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W97°12.00'</td>
<td>W97°12.00'</td>
<td>W97°12.00'</td>
<td>W97°12.00'</td>
<td>W97°12.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>266/53</td>
<td>N38°58.00'</td>
<td>N38°58.00'</td>
<td>N38°58.00'</td>
<td>N38°58.00'</td>
<td>N38°58.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W98°45.00'</td>
<td>W98°45.00'</td>
<td>W98°45.00'</td>
<td>W98°45.00'</td>
<td>W98°45.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td>SLN VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033/66</td>
<td>N39°46.00'</td>
<td>N39°46.00'</td>
<td>N39°46.00'</td>
<td>N39°46.00'</td>
<td>N39°46.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W96°42.00'</td>
<td>W96°42.00'</td>
<td>W96°42.00'</td>
<td>W96°42.00'</td>
<td>W96°42.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** ADA East and West ATCAA N39°01.97' W97°50.27' to N39°08.00' W98°30.00' to N39°26.00' W98°30.00' to N39°37.50' W97°39.00' to N39°46.50' W97°00.00' to N39°05.50' W97°00.00' to N39°01.43' W97°23.90' along 12NM arc SLN VORTAC to beginning.

**REMARKS:** MARSA is applicable between refueling operations in AR653 and other simultaneous activity in ADA East and West MOA/ATCAA. Kansas City ARTCC or Jayhawk military radar must be operational.

1. Tanker.
2. Receiver.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR654</td>
<td>PDT VORTAC</td>
<td>223/41</td>
<td>PDT VORTAC</td>
<td>223/41</td>
<td>PDT VORTAC</td>
<td>043/10</td>
<td>a. 341.400</td>
<td>10000/16000</td>
<td>W AD Sector</td>
<td>Seattle</td>
<td>Unlimited</td>
</tr>
<tr>
<td></td>
<td>223/41</td>
<td>N45°23.00'</td>
<td>N45°46.30'</td>
<td>099/18</td>
<td>N45°19.00'</td>
<td>260.200</td>
<td>b. 260.200</td>
<td>McChord AFB, WA</td>
<td>DSN 382-4604</td>
<td>ARCP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N45°32.60'</td>
<td>W119°48.30'</td>
<td>W119°44.00'</td>
<td>043/10</td>
<td>N45°46.30'</td>
<td>N/R</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W119°22.00'</td>
<td>W118°45.00'</td>
<td>N45°46.30'</td>
<td>043/10</td>
<td>W118°44.00'</td>
<td>d. 55/118</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** None.

**REMARKS:** This AR is restricted to aircraft deployed to WADS, Det 1 Close Air Support (CAS) Unit by FAA Letter of Agreement. Aircraft other than A-10s are required to coordinate 7 days in advance to schedule the AR654. FAA Seattle ARTCC may approve use on a case-by-case basis, contact WADS/DORS, McChord AFB for information. Anchor has right-hand pattern to expedite flow and allow tanker and receiver to hold on PDT VORTAC 223/043 radial.
### ATC ASSIGNED AIRSPACE:
N27°21.50' W83°05.00' to N27°21.50' W84°28.00' to N27°48.50' W84°28.00' to N27°48.50' W83°05.00' to beginning.

### REMARKS:
1. Tankers.
2. Receivers. a.-Receiver holdings shall be at anchor point right turns. b.-Miami ARTCC radar must be operational. c.-Operations by MRU must be individually coordinated. d.-ATC may assign altitudes below FL 240.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELLING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR655</td>
<td>SRQ VOR-DME</td>
<td>287/24</td>
<td>SRQ VOR-DME</td>
<td>276/85</td>
<td>SRQ VOR-DME</td>
<td>299/49</td>
<td>FL200/FL280</td>
<td>347 Rescue Wing, MacDill AFB, FL DSN 968-4641 C813-828-4641</td>
<td>Unlimited as coordinated with scheduling unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>289/87 1</td>
<td>N27°25.00'</td>
<td>N27°25.00'</td>
<td>W84°09.00'</td>
<td>275/45 1</td>
<td>277/24</td>
<td>N27°45.00'</td>
<td>N27°44.00'</td>
<td>Miami</td>
<td>ARCP-307.3</td>
<td>EXIT-304.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W84°09.00'</td>
<td>W84°09.00'</td>
<td>N27°25.00'</td>
<td>N27°24.00'</td>
<td>N27°24.00'</td>
<td>364.1</td>
<td>Alleycat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>275/45 2</td>
<td>N27°24.00'</td>
<td>N27°24.00'</td>
<td>W83°24.00'</td>
<td>277/24 2</td>
<td>N27°25.00'</td>
<td>52/115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER</td>
<td>ENTRY POINTS</td>
<td>ARIP</td>
<td>ANCHOR POINT</td>
<td>ANCHOR PATTERN</td>
<td>EXIT POINTS</td>
<td>CR PLAN</td>
<td>MILITARY RADAR</td>
<td>REFueling ALTITUDES</td>
<td>SCHEDULING UNIT</td>
<td>ASSIGNED ARTCC</td>
<td>TIMES OF OPERATION</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>------</td>
<td>--------------</td>
<td>----------------</td>
<td>-------------</td>
<td>---------</td>
<td>----------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>---------------</td>
<td>-------------------</td>
</tr>
</tbody>
</table>
| AR658  | FLG VOR-DME 082/29  
N35°05.50' W111°05.00' | FLG VOR-DME 125/21  
N34°53.00' W111°24.00' | FLG VOR-DME 053/75  
N35°37.00' W110°16.00' | FLG VOR-DME 053/75  
N35°37.00' W110°16.00' | FLG VOR-DME 053/75  
N35°37.00' W110°16.00' | a.- N/R  
FL180/FL290 | 56RMO/ASMS  
Albuquerque ARCP | Unlimited | DSN 896-7654  
C623-856-7654 | ARIP | FLG VOR-DME 038/21  
N35°22.00' W111°20.00' | FLG VOR-DME 038/21  
N35°22.00' W111°20.00' | FLG VOR-DME 038/21  
N35°22.00' W111°20.00' | FLG VOR-DME 038/21  
N35°22.00' W111°20.00' | a.- N/R  
(High Block)  
a.- Primary 286.2  
Back-up 347.2 | b.-384.6  
c.N/R  
d.N/R  
e.-33/96  
(Low Block)  
a.-391.8  
b.-318.0  
c.N/R  
d.N/R  
e.-29/92 |

**ATC ASSIGNED AIRSPACE:** N35°08.50' W111°34.00' to N35°22.00' W111°28.00' to N36°00.50' W110°29.00' to N36°03.00' W110°13.00' to N35°51.00' W110°01.00' to N35°38.00' W110°06.00' to N34°59.00' W111°07.00' to N34°58.00' W111°23.00' to beginning.

**REMARKS:** For the purpose of separation between participating and non-participating aircraft, ATC shall regard AR-658 as an Anchor Track unless the tanker or receiver pilot specifically request AR-658 ATC Assigned Airspace (ATCAA). Receivers will hold at the ARIP (FL 240 High Block, FL 180 Low Block or as assigned by ATC) until cleared to the entry point by the tanker aircraft.
### ATC ASSIGNED AIRSPACE:
- AR659: N40°36.00' W114°21.00' to N40°36.00' W114°56.90' to N40°22.80' W114°30.40' to N40°36.00' W114°21.00' to beginning.
- AR660: None.

### REMARKS:
- Refueling operations must be scheduled in advance with 388 RANS/RST DSN 777-4401 during normal duty hours. Primary Boom frequency 305.5.
- Boom frequency 277.15.

---

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
</table>
| AR659  | BVL VORTAC 243/28 N40°36.00' W114°21.00' | BVL VORTAC 238/58 N40°22.80' W114°56.90' | BVL VORTAC 210/82 N39°42.60' W114°56.90' | BVL VORTAC 198/70 N39°42.60' W114°30.40' | BVL VORTAC 242/27 N40°36.00' W114°20.00' | a. 289.650  
|        |              |      |              |                |             |         | FL180/FL280 | 388RANS/RST Hill AFB, UT  
|        |              |      |              |                |             |         |             | DSN 777-4401        | C801-777-4401   | Salt Lake City   | ARCP              |
|        |              |      |              |                |             |         |             | Rendezvous  
|        |              |      |              |                |             |         | 289.65      | Clover Control Primary  
|        |              |      |              |                |             |         |             | 363.5, Secondary 134.1. |
| AR660  | PAM TACAN 089/33 N30°04.80' W84°56.50' | PAM TACAN 089/33 N30°04.80' W84°56.50' | PAM TACAN 020/30 N30°32.00' W85°22.50' | PAM TACAN 342/16 N30°19.00' W85°40.50' | PAM TACAN 070/27 N30°13.80' W85°05.00' | a. 357.500  
|        |              |      |              |                |             |         | FL240/FL280 | 325OSS/OSS Tyndall AFB, FL  
<p>|        |              |      |              |                |             |         |             | DSN 523-3401        | C850-283-3401   | Jacksonville    | ARCP-379.2        |</p>
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR667</td>
<td>NLC TACAN</td>
<td>136/48</td>
<td>NLC TACAN</td>
<td>316/12</td>
<td>NLC TACAN</td>
<td>a. 318.000</td>
<td>08000/FL190</td>
<td>CSFWP Lemoore</td>
<td>NAS, CA</td>
<td>Lemoore</td>
<td>1600-0800Z++</td>
</tr>
<tr>
<td></td>
<td>N35°39.00’</td>
<td>N35°39.00’</td>
<td>N36°31.10’</td>
<td>W120°05.40’</td>
<td>NLC TACAN</td>
<td>b. 264.900</td>
<td></td>
<td>RATCF</td>
<td></td>
<td></td>
<td>Mon-Thur;</td>
</tr>
<tr>
<td></td>
<td>W119°29.00’</td>
<td>W119°29.00’</td>
<td>N36°31.10’</td>
<td>W120°05.40’</td>
<td>NLC TACAN</td>
<td>c. N/R</td>
<td></td>
<td>Lemoore NAS,</td>
<td>CA</td>
<td></td>
<td>1600-0200Z++</td>
</tr>
<tr>
<td></td>
<td>NLC TACAN</td>
<td>269/17 (1)</td>
<td>N36°24.50’</td>
<td>W120°18.40’</td>
<td>NLC TACAN</td>
<td>d. N/R</td>
<td></td>
<td>ARCP-286.0</td>
<td></td>
<td></td>
<td>Fri;</td>
</tr>
<tr>
<td></td>
<td>N35°48.90’</td>
<td>N35°48.90’</td>
<td>W119°52.50’</td>
<td>W120°18.40’</td>
<td>NLC TACAN</td>
<td>e. 55/118</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1800-0200Z++</td>
</tr>
<tr>
<td></td>
<td>W119°52.50’</td>
<td>N136/30</td>
<td>N35°54.60’</td>
<td>W119°39.50’</td>
<td>NLC TACAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sat;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N36°24.90’</td>
<td>N36°24.90’</td>
<td></td>
<td>NLC TACAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2100-0500Z++</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N36°24.90’</td>
<td>N36°24.90’</td>
<td></td>
<td>NLC TACAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sun. (Hol hr);</td>
</tr>
</tbody>
</table>

ATC ASSIGNED AIRSPACE: N36°42.00’ W119°59.00’ to N36°41.00’ W120°09.00’ to N36°32.00’ W120°30.00’ to N36°29.50’ W120°30.00’ to N35°42.50’ W119°55.00’ to N35°38.00’ W119°30.00’ to N35°49.70’ W119°22.30’ to N36°35.00’ W120°30.00’ to N35°49.70’ W119°22.30’ to N36°35.00’ W119°45.00’ to beginning.

REMARKS: Radar monitoring required to conduct air refueling. RATCF radar must be operational. Pattern length: 44 NM; width: 12 NM. To be used only by CSFWP Squadrons.

(1) Entry/Exit Point(s) for Rwy 32 departures/arrivals.
(2) Entry/Exit Point(s) for Rwy 14 departures/arrivals.
(3) Non-operational on all federal holidays as follows: a.-Closed 0200Z++ Thursday until 1600Z++ Monday if holiday is observed on Friday; b.-Closed 0200Z++ Friday until 1600Z++ Tuesday if holiday is observed on Monday; c.-Closed 0900Z++ day prior until 1600Z++ day following if holiday is observed on other days.

AR669

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMB VORTAC</td>
<td>MMB VORTAC</td>
<td>080/100</td>
<td>MMB VORTAC</td>
<td>080/100</td>
<td>MMB VORTAC</td>
<td>a. 394.900</td>
<td>FL250/FL270</td>
<td>71 OSS/OSOP, Vance</td>
<td>AFB, OK, Liberty Ops</td>
<td>Kansas City</td>
<td>Unlimited</td>
</tr>
<tr>
<td>080/100</td>
<td>080/100</td>
<td>080/40</td>
<td>080/40</td>
<td>080/40</td>
<td>MBB VORTAC</td>
<td>b. 384.600</td>
<td></td>
<td>DSN 448-7820, FAX</td>
<td></td>
<td></td>
<td>ARCP-133.2/26</td>
</tr>
<tr>
<td>N36°19.60’</td>
<td>N36°19.60’</td>
<td>N36°20.50’</td>
<td>N36°20.50’</td>
<td>N35°59.90’</td>
<td>MBB VORTAC</td>
<td>c. N/R</td>
<td></td>
<td>448-7705</td>
<td></td>
<td></td>
<td>3.1</td>
</tr>
<tr>
<td>W9°7°48.70’</td>
<td>W9°7°48.70’</td>
<td>W9°8°30.10’</td>
<td>W9°9°30.10’</td>
<td>W9°8°30.10’</td>
<td>MBB VORTAC</td>
<td>d. N/R</td>
<td></td>
<td>ARIP-133.2/263.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W9°8°30.10’</td>
<td>W9°8°30.10’</td>
<td>W9°8°13.30’</td>
<td>W9°8°13.30’</td>
<td>W9°8°13.30’</td>
<td>MBB VORTAC</td>
<td>e. 55/118</td>
<td></td>
<td>C580-213-7820</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>125/28</td>
<td>125/28</td>
<td>094/83</td>
<td>N36°00.80’</td>
<td>N35°59.90’</td>
<td>MBB VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N36°00.80’</td>
<td>N36°00.80’</td>
<td>N35°59.90’</td>
<td>N35°59.90’</td>
<td>N36°20.50’</td>
<td>MBB VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W9°8°30.10’</td>
<td>W9°8°30.10’</td>
<td>W9°8°13.30’</td>
<td>W9°8°13.30’</td>
<td>W9°8°13.30’</td>
<td>MBB VORTAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ATC ASSIGNED AIRSPACE: N36°25.00’ W9°8°30.10’ to N36°24.00’ W9°7°51.00’ to N35°58.00’ W9°7°51.00’ to N35°55.00’ W9°8°00.00’ to N35°56.00’ W9°8°24.00’ to beginning.

REMARKS: Available to all military units on a first come, first served basis. Kansas City ARTCC radar must be operational.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP ENTRY POINTS</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR672</td>
<td>CIM VORTAC 164/42</td>
<td>N35°47.20' W104°49.60'</td>
<td>CIM VORTAC 121/43</td>
<td>N35°59.50' W104°13.60'</td>
<td>CIM VORTAC 073/71</td>
<td>CIM VORTAC 087/80</td>
<td>N36°15.20' W103°14.70'</td>
<td>0.249.500</td>
<td>11000/17000</td>
<td>27SOAOS/DOOS <a href="mailto:27SOAOS.DOOS@us.af.mil">27SOAOS.DOOS@us.af.mil</a></td>
<td>Albuquerque ARCP-127.85/3 51.7</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N36°40.40' W103°20.80' to N36°40.10' W103°06.00' to N36°22.70' W102°56.50' to N36°12.40' W103°03.90' to N35°53.50' W104°16.70' to N35°54.40' W104°31.70' to N36°14.00' W104°38.50' to N36°21.70' W104°26.00' to beginning.

**REMARKS:** Supporting ATCAA available upon pilot request and ATC approval.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR674</td>
<td>GUP VORTAC</td>
<td>043/47</td>
<td>GUP VORTAC</td>
<td>263/28</td>
<td>GUP VORTAC</td>
<td>a. 341.400</td>
<td>13000/FL180</td>
<td>5BOSS/OSO</td>
<td>Kirtland AFB, NM</td>
<td>Albuquerque</td>
<td>Intermittent by NOTAM</td>
</tr>
<tr>
<td></td>
<td>046/60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>b. 260.200</td>
<td></td>
<td>DSN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N35°58.20'</td>
<td>N35°54.00'</td>
<td>N35°58.20'</td>
<td>N35°54.00'</td>
<td>255/40</td>
<td>c. N/R</td>
<td>C505-853/5979/5888/5701</td>
<td></td>
<td>7.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W107°48.00'</td>
<td>W108°04.00'</td>
<td>W107°48.00'</td>
<td>W108°04.00'</td>
<td>N35°28.00'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GUP VORTAC</td>
<td>260/26</td>
<td>GUP VORTAC</td>
<td></td>
<td>GUP VORTAC</td>
<td>e. 55/118</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>226/40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N35°08.50'</td>
<td>N35°13.00'</td>
<td>N35°08.50'</td>
<td>N35°13.00'</td>
<td>065/60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W109°34.00'</td>
<td>W109°18.50'</td>
<td>W109°34.00'</td>
<td>W109°18.50'</td>
<td>N35°39.30'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N35°23.70' W109°44.50' to N35°28.00' W109°41.00' to N35°33.00' W109°35.00' to N35°36.00' W109°28.00' to N35°38.00' W108°05.50' to N35°59.00' W107°56.00' to N35°58.30' W107°48.00' to N35°57.00' W107°43.00' to N35°43.00' W107°37.50' to N35°39.30' W107°40.00' to N35°33.50' W107°47.00' to N35°31.00' W107°54.50' to N35°09.00' W107°17.00' to N35°08.00' W109°25.00' to N35°08.50' W109°34.00' to N35°10.00' W109°39.00' to beginning.

**REMARKS:** For the purpose of separation between participating and non-participating aircraft, ATC shall regard AR674 as a linear refueling track unless the tanker or receiver pilot specifically requests AR674 as an anchor track prior to entering assigned airspace. When ATC assigns AR674 as a linear track, participating aircraft will not deviate more than 3 NM from depicted track nor reverse course without ATC clearance. Due to mountainous terrain KC-135 aircraft are restricted to a minimum base A/R altitude of 14,000'. Receiver toboggan training will be restricted to the northern leg between the GUP 043/47 and the GUP 263/28 Navigation Points. KC-135s will not descend below 13,000' during the toboggan.
### ATC ASSIGNED AIRSPACE:
None.

### REMARKS:
Must specify altitude block necessary to perform mission. Recommend tankers use South entry point. Maneuvering within orbit authorized. If the Powder River Training complex is active (including the Gateway ATCAA), tankers must stay South of the N44 latitude.

### ATC ASSIGNED AIRSPACE:
Eel ATCAA, altitudes are FL180 up to and including FL270. N46°09.59' W124°20.05' to N44°54.02' W124°20.04' to N44°50.35' W124°21.21' to N44°37.59' W124°28.04' to N45°07.00' W123°30.00' to N46°07.00' W123°30.00' to N46°20.00' W123°50.00' to N46°20.00' W124°20.00' to beginning.

### REMARKS:
Military radar or Seattle ARTCC radar must be operational to conduct refueling. Contact scheduling authority prior to conducting simultaneous AR-628 operations.
### AR685

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR685</td>
<td>GEG VORTAC</td>
<td>GEG VORTAC</td>
<td>GEG VORTAC 101/81</td>
<td>N46°51.08'</td>
<td>W117°43.07'</td>
<td>282.000</td>
<td>FL210/FL230</td>
<td>620S/OSO</td>
<td>McChord Fld, WA</td>
<td>253-982-9925</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>164/43</td>
<td>164/43</td>
<td>101/81</td>
<td>N46°51.08'</td>
<td>W117°43.07'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N46°50.26'</td>
<td>W115°57.22'</td>
<td>N46°51.08'</td>
<td>W117°43.07'</td>
<td>305.350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N47°12.31'</td>
<td>W117°43.77'</td>
<td>N46°51.08'</td>
<td>W117°43.07'</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50/113</td>
<td></td>
<td></td>
<td></td>
<td>e. 50/113</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** None.

**REMARKS:** Anchor to be used by C-17 and tanker aircraft only. After duty hours contact McChord Fld Command Post at DSN 382-2635 or C253-982-2635. Deconflict with AR337 and AR338.

### AR716

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR716</td>
<td>RSW VORTAC</td>
<td>RSW VORTAC</td>
<td>RSW VORTAC 290/119</td>
<td>N26°10.00'</td>
<td>W82°34.00'</td>
<td>283.900</td>
<td>FL220/FL280</td>
<td>347 Rescue Wing, MacDill AFB, FL</td>
<td>Miami</td>
<td>ARCP-363.1</td>
<td>Unlimited as coordinated with the scheduling unit</td>
</tr>
<tr>
<td></td>
<td>291/45</td>
<td>291/45</td>
<td>290/119</td>
<td>N26°08.00'</td>
<td>W82°34.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N27°08.00'</td>
<td>W83°54.00'</td>
<td>N26°10.00'</td>
<td>W82°34.00'</td>
<td>342.550</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W82°34.00'</td>
<td>W83°54.00'</td>
<td>N26°10.00'</td>
<td>W82°34.00'</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50/113</td>
<td></td>
<td></td>
<td></td>
<td>e. 50/113</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SRQ VOR-DME</td>
<td>SRQ VOR-DME</td>
<td>SRQ VOR-DME 198/20</td>
<td>N26°10.00'</td>
<td>W82°34.00'</td>
<td>283.900</td>
<td>FL220/FL280</td>
<td>347 Rescue Wing, MacDill AFB, FL</td>
<td>Miami</td>
<td>ARCP-363.1</td>
<td>Unlimited as coordinated with the scheduling unit</td>
</tr>
<tr>
<td></td>
<td>198/20</td>
<td>198/20</td>
<td>198/20</td>
<td>N26°10.00'</td>
<td>W82°34.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N27°08.00'</td>
<td>W83°54.00'</td>
<td>N26°10.00'</td>
<td>W82°34.00'</td>
<td>342.550</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W82°34.00'</td>
<td>W83°54.00'</td>
<td>N26°10.00'</td>
<td>W82°34.00'</td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50/113</td>
<td></td>
<td></td>
<td></td>
<td>e. 50/113</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N26°10.00' W82°17.00' to N26°10.00' W84°40.00' to N27°19.00' W84°40.00' to N27°19.00' W82°47.00' to beginning.

**REMARKS:** W168 is a joint use warning area, therefore the anchor area may only be used when W168 is released to the Using Agency, except as specified by Miami ARTCC/9th AIR FORCE Letter Of Agreement.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR717A</td>
<td>SEA VORTAC</td>
<td>042/134</td>
<td>N48°30.00' W119°23.00'</td>
<td>GEG VORTAC</td>
<td>N48°30.00' W117°33.00'</td>
<td>a. 283.900</td>
<td>FL250/FL280</td>
<td>NAS Whidbey Island, (N38) Oak Harbor, WA</td>
<td>DSN 820-2877 C360-257-2877</td>
<td>Seattle ARCP-291.6</td>
<td>Unlimited as coordinated with scheduling unit</td>
</tr>
<tr>
<td></td>
<td>033/105</td>
<td>N48°30.00'</td>
<td>W120°14.00'</td>
<td>GEG VORTAC</td>
<td>018/69</td>
<td>b. 292.600</td>
<td>or as assigned by ATC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N48°30.00' W117°33.00'</td>
<td>GEG VORTAC</td>
<td>342/76</td>
<td>N48°50.00' W119°16.50'</td>
<td>342/56</td>
<td>c. N/R</td>
<td>N/Re. 50/113</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N48°50.00' W117°31.50'</td>
<td>EPH VORTAC</td>
<td>343/88</td>
<td>N48°50.00' W119°16.00'</td>
<td>344/68</td>
<td>d. N/R</td>
<td>271.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W119°16.00'</td>
<td>EPH VORTAC</td>
<td>342/56</td>
<td>N48°30.00' W117°33.00'</td>
<td>342/76</td>
<td>e. 50/113</td>
<td>Scheduling unit hours are 0700-1700 local Mon-Fri except holidays</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N48°30.00' W117°33.00'</td>
<td>GEG VORTAC</td>
<td>342/56</td>
<td>N48°50.00' W117°31.50'</td>
<td>N48°30.00' W117°33.00'</td>
<td><strong>Big Foot (WADS)</strong></td>
<td><strong>271.0</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N49°00.00' W120°00.00' to N49°00.00' W116°48.00' to N48°22.00' W117°28.00' to N48°22.00' W118°06.00' to N48°03.50' W119°00.00' to N48°08.50' W120°27.50' to beginning.

**REMARKS:** Pattern length - 70 NM; width - 20 NM; inbound course to Anchor Point 068. Anchor area is located within ATC Assigned Airspace. Military radar or Seattle ARTCC radar must be operational to conduct refueling.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR717B</td>
<td>GEG VORTAC</td>
<td>010/86</td>
<td>N48°47.00' W116°30.50'</td>
<td>GEG VORTAC</td>
<td>N48°50.00' W117°16.00'</td>
<td>a. 283.900</td>
<td>FL250/FL280</td>
<td>NAS Whidbey Island, (N38) Oak Harbor, WA</td>
<td>DSN 820-2877 C360-257-2877</td>
<td>Seattle ARCP-291.6</td>
<td>Unlimited as coordinated with scheduling unit</td>
</tr>
<tr>
<td></td>
<td>010/86</td>
<td>N48°47.00'</td>
<td>W116°30.50'</td>
<td>GEG VORTAC</td>
<td>N48°50.00' W117°16.00'</td>
<td>b. 292.600</td>
<td>or as assigned by ATC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N48°50.00' W117°16.00'</td>
<td>EPH VORTAC</td>
<td>343/88</td>
<td>N48°48.00' W120°04.00'</td>
<td>342/88</td>
<td>c. N/R</td>
<td>N/Re. 50/113</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W116°30.50' W117°16.00'</td>
<td>EPH VORTAC</td>
<td>343/88</td>
<td>N48°30.00' W117°16.00'</td>
<td>342/88</td>
<td>d. N/R</td>
<td>271.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEG VORTAC</td>
<td>342/56</td>
<td>N48°50.00' W117°31.50'</td>
<td>GEG VORTAC</td>
<td>028/122</td>
<td>e. 50/113</td>
<td>Scheduling unit hours are 0700-1700 local Mon-Fri except holidays</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>010/86</td>
<td>N48°47.00'</td>
<td>W116°30.50'</td>
<td>GEG VORTAC</td>
<td>342/76</td>
<td>N48°30.00' W117°33.00'</td>
<td><strong>Big Foot (WADS)</strong></td>
<td><strong>271.0</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** N49°00.00' W120°00.00' to N49°00.00' W116°48.00' to N48°22.00' W117°28.00' to N48°22.00' W118°06.00' to N48°03.50' W119°00.00' to N48°08.50' W120°27.50' to beginning.

**REMARKS:** Pattern length - 70 NM; width - 20 NM; inbound course to Anchor Point 068. Anchor area is located within ATC Assigned Airspace. Military radar or Seattle ARTCC radar must be operational to conduct refueling.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR719</td>
<td>FAI VORTAC</td>
<td>048/35</td>
<td>EIL TACAN</td>
<td>EIL TACAN</td>
<td>FAI VORTAC</td>
<td>a. 270.025</td>
</tr>
<tr>
<td></td>
<td>048/35</td>
<td>035/52</td>
<td>046/121</td>
<td>046/121</td>
<td>048/35</td>
<td>14000/17000</td>
</tr>
<tr>
<td></td>
<td>N65°00.18'</td>
<td>N65°09.00'</td>
<td>N65°26.00'</td>
<td>N65°26.00'</td>
<td>N65°00.18'</td>
<td>354OSS/OSOR</td>
</tr>
<tr>
<td></td>
<td>W146°43.74'</td>
<td>W145°25.00'</td>
<td>W142°43.00'</td>
<td>W142°43.00'</td>
<td>W146°43.74'</td>
<td>Eielson AFB, AK</td>
</tr>
<tr>
<td></td>
<td>AXSEM</td>
<td></td>
<td>EIL TACAN</td>
<td>EIL TACAN</td>
<td>AXSEM</td>
<td>b. 265.700</td>
</tr>
<tr>
<td></td>
<td>FAI VORTAC</td>
<td>024/87</td>
<td>037/125</td>
<td>037/125</td>
<td>FAI VORTAC</td>
<td>c. N/R</td>
</tr>
<tr>
<td></td>
<td>024/87</td>
<td>N65°46.00'</td>
<td>N65°55.00'</td>
<td>N65°55.00'</td>
<td>N65°48.03'</td>
<td>317-377-9327</td>
</tr>
<tr>
<td></td>
<td>N65°48.03'</td>
<td>W142°15.00'</td>
<td>W145°00.00'</td>
<td>W145°00.00'</td>
<td>W145°31.49'</td>
<td>2749/2718</td>
</tr>
<tr>
<td></td>
<td>W145°31.49'</td>
<td>EIL TACAN</td>
<td>026/79</td>
<td>026/79</td>
<td>EIL TACAN</td>
<td>d. N/R</td>
</tr>
<tr>
<td></td>
<td>CABIN</td>
<td>N65°34.00'</td>
<td>N65°34.00'</td>
<td>N65°34.00'</td>
<td>N65°47.00'</td>
<td>31/94</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W144°53.00'</td>
<td>W144°53.00'</td>
<td>W144°53.00'</td>
<td>W145°47.00'</td>
<td>or as assigned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EIL TACAN</td>
<td>040/71</td>
<td>040/71</td>
<td>EIL TACAN</td>
<td>e. 31/94</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N65°14.00'</td>
<td>N65°14.00'</td>
<td>N65°14.00'</td>
<td>N65°14.00'</td>
<td>by ATC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W144°40.00'</td>
<td>W144°40.00'</td>
<td>W144°40.00'</td>
<td>W144°40.00'</td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** YUKON 2 & 4 ATCAA/MOA: N64°59.98' W146°43.72' to N65°22.98' W146°00.15' to N66°09.98' W145°05.15' to N66°09.98' W143°00.15' to N66°09.98' W141°05.00' to N64°59.98' W141°05.00' to beginning.

**REMARKS:** MOA required if refueling below FL180. ATCAA required if refueling above FL180. Tanker/Receiver must FILE to/from the ATCAA/MOA, not AR719, using the common entry/exit five letter fixes listed above. In remark line of DD-175, include remark (Example) - refueling in AR719 FL240B290. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

\(^1\) Or as assigned by ATC
AR ROUTES

AR720
FAI VORTAC 151/52
BEYAR
FAI VORTAC 164/75
WELLE
EDF TACAN 004/68
CRUZR
GKN VOR-DME 262/51
HOJOE

ALASKA
N63°56.50' W147°45.00'
W147°14.00'
N63°24.50' W147°14.00'
W147°37.00'
BIG VORTAC 191/44
W148°15.32'
N63°33.52'
W148°15.32'
BIG VORTAC 164/75

Anchorage
ARCP-279.6/32
2.5
EXIT-279.6/322.

ATC ASSIGNED AIRSPACE: FOX 1 and FOX 3 ATCAAs: N63°58.00' W148°00.00' to N63°50.82' W146°47.63' to N63°43.98' W146°30.13' to N63°42.13' W146°13.57' to N63°42.98' W145°54.15' to N63°30.00' W145°54.00' to N63°23.00' W146°00.00' to N62°26.88' W145°51.55' to N62°13.58' W148°50.83' to N62°30.00' W148°50.83' to N63°30.00' W148°16.77' to beginning.

REMARKS: Tanker/Receiver must FILE to/from the ATCAA, not AR720, using the common entry/exit five letter fixes listed above. In remark line of DD-175, include remark (Example) - refueling in AR720 FL240/FL290. Weather briefing agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time. CR PLAN MILITARY RADAR: Top Rocc Primary 234.6 Secondary 364.2/126.2 REFUELING ALTITUDES: or as assigned by ATC.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>Assigned ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR721</td>
<td>AKN VORTAC 327/60</td>
<td>N59°40.64'</td>
<td>W157°19.73'</td>
<td>AKN VORTAC 327/60</td>
<td>327/60</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER, AK</td>
<td>or as assigned by ATC</td>
<td>317-552-2406/1198</td>
<td>Anchorage ARCP-351.8 EXIT-351.8</td>
<td>As coordinated with ARTCC</td>
</tr>
<tr>
<td>ALASKA</td>
<td>N59°40.64'</td>
<td>W157°19.73'</td>
<td>N60°19.00'</td>
<td>W156°06.00'</td>
<td>AKN VORTAC 355/98</td>
<td>AKN VORTAC 355/98</td>
<td>N59°40.64'</td>
<td>W157°19.73'</td>
<td>NAKNE</td>
<td>ETHAN</td>
<td>AKN VORTAC 327/60</td>
</tr>
<tr>
<td></td>
<td>N60°06.00'</td>
<td>W158°30.00'</td>
<td>N60°19.00'</td>
<td>W156°06.00'</td>
<td>AKN VORTAC 327/60</td>
<td>327/60</td>
<td>N59°40.64'</td>
<td>W157°19.73'</td>
<td>NAKNE</td>
<td>ETHAN</td>
<td>AKN VORTAC 355/98</td>
</tr>
<tr>
<td></td>
<td>N60°06.00'</td>
<td>W158°30.00'</td>
<td>N60°19.00'</td>
<td>W156°06.00'</td>
<td>AKN VORTAC 327/60</td>
<td>327/60</td>
<td>N59°40.64'</td>
<td>W157°19.73'</td>
<td>NAKNE</td>
<td>ETHAN</td>
<td>AKN VORTAC 355/98</td>
</tr>
<tr>
<td></td>
<td>N60°10.00'</td>
<td>W157°48.00'</td>
<td>N60°10.00'</td>
<td>W157°48.00'</td>
<td>AKN VORTAC 327/60</td>
<td>327/60</td>
<td>N59°40.64'</td>
<td>W157°19.73'</td>
<td>NAKNE</td>
<td>ETHAN</td>
<td>AKN VORTAC 355/98</td>
</tr>
<tr>
<td></td>
<td>N60°06.00'</td>
<td>W157°48.00'</td>
<td>N60°06.00'</td>
<td>W157°48.00'</td>
<td>AKN VORTAC 327/60</td>
<td>327/60</td>
<td>N59°40.64'</td>
<td>W157°19.73'</td>
<td>NAKNE</td>
<td>ETHAN</td>
<td>AKN VORTAC 355/98</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** NAKNE ATCAA: N60°29.95' W159°00.13' to N60°45.95' W156°43.13' to N60°49.97' W156°00.13' to N60°51.73' W155°10.00' to N60°52.55' W154°32.25' to N60°52.97' W154°28.13' to N60°25.97' W154°13.13' to N60°18.97' W154°43.25' to N59°48.95' W156°45.13' to N59°29.95' W158°00.13' to N59°54.95' W159°00.13' to beginning.

**REMARKS:** Tanker/Receiver must FILE to/from NAKNE ATCAA, not AR721, using the common entry/exit five letter fixes listed above. In remark line of DD-175, include remark (Example) - refueling in AR721 FL240B290. Weather briefing support agencies should request mission forecast support from 17 OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR722</td>
<td>CDB VORTAC 074/65</td>
<td>CDB VORTAC 073/67</td>
<td>CDB VORTAC 050/131</td>
<td>CDB VORTAC 050/131</td>
<td>AKN VORTAC 198/142</td>
<td>a. 277.100</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER</td>
<td>Anchorage</td>
<td>ARCP-346.3E/2</td>
<td>As coordinated with ARTCC</td>
</tr>
<tr>
<td></td>
<td>N55°17.50' W160°52.70'</td>
<td>N55°19.00' W160°50.00'</td>
<td>N56°11.00' W159°17.00'</td>
<td>N56°11.00' W159°17.00'</td>
<td>N56°44.66' W159°09.20'</td>
<td>b. 265.700</td>
<td></td>
<td>AK</td>
<td>DSN</td>
<td>317-552-2406/1198</td>
<td>88.3E</td>
</tr>
<tr>
<td></td>
<td>LIYYA</td>
<td></td>
<td></td>
<td></td>
<td>KAYEF</td>
<td>c. N/R</td>
<td>or as assigned by ATC</td>
<td></td>
<td></td>
<td>Top ROCC</td>
<td>EXIT-346.3E/28</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td>Primary</td>
<td>234.6 Sec-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 32/95</td>
<td>ondary 364.2/126.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Northeast)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDB VORTAC 047/75</td>
<td>CDB VORTAC 047/75</td>
<td>CDB VORTAC 062/84</td>
<td>CDB VORTAC 062/84</td>
<td>N56°27.00' W159°43.00'</td>
<td>N56°27.00' W159°43.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
</tr>
<tr>
<td></td>
<td>N55°51.00' W160°49.00'</td>
<td>N55°51.00' W160°49.00'</td>
<td>N55°35.00' W160°23.00'</td>
<td>N55°35.00' W160°23.00'</td>
<td>CDB VORTAC 074/65</td>
<td>F</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER</td>
<td>Anchorage</td>
<td>ARCP-346.3E/2</td>
<td>As coordinated with ARTCC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>198/142</td>
<td>a. 277.100</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER</td>
<td>Anchorage</td>
<td>ARCP-346.3E/2</td>
<td>As coordinated with ARTCC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>b. 265.700</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER</td>
<td>Anchorage</td>
<td>ARCP-346.3E/2</td>
<td>As coordinated with ARTCC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>c. N/R</td>
<td>or as assigned by ATC</td>
<td></td>
<td></td>
<td>Top ROCC</td>
<td>EXIT-346.3E/28</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
<td>Primary</td>
<td>234.6 Sec-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 32/95</td>
<td>ondary 364.2/126.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Southwest)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AKN VORTAC 198/142</td>
<td>AKN VORTAC 047/75</td>
<td>AKN VORTAC 062/84</td>
<td>AKN VORTAC 062/84</td>
<td>N56°44.66' W159°09.20'</td>
<td>N56°44.66' W159°09.20'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
</tr>
<tr>
<td></td>
<td>N55°51.00' W160°49.00'</td>
<td>N55°51.00' W160°49.00'</td>
<td>N55°27.00' W159°43.00'</td>
<td>N55°27.00' W159°43.00'</td>
<td>CDB VORTAC 047/75</td>
<td>F</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER</td>
<td>Anchorage</td>
<td>ARCP-346.3E/2</td>
<td>As coordinated with ARTCC</td>
</tr>
<tr>
<td></td>
<td>W159°15.00'</td>
<td>W159°15.00'</td>
<td>W160°49.00' W159°15.00'</td>
<td>W160°49.00' W159°15.00'</td>
<td>N56°51.00' W160°49.00'</td>
<td>N56°51.00' W160°49.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
<td>N56°35.00' W160°23.00'</td>
</tr>
<tr>
<td></td>
<td>KAYEF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** SANDPOINT ATCAA: N55°43.00' W161°33.00' to N56°56.00' W159°28.00' to N56°05.00' W158°10.00' to N55°05.00' W160°34.00' to beginning.

**REMARKS:** Tanker/Receiver must FILE to/from SANDPOINT ATCAA, not AR722, using the common entry/exit five letter fixes listed above. In remark line of DD-175, include remark (Example) - refueling in AR722 FL240/FL290. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

① Or as assigned by ATC
### AR723

**ALASKA**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
</table>
| AR723  | EDF TACAN 267/85 | N61°35.44'  
                      W152°38.02' | N61°46.00'  
                      W154*00.00' | MCG VORTAC 186/56  
                      MCG VORTAC 183/78  
                      MCG VORTAC 148/88 | MCG VORTAC 186/56  
                      MCG VORTAC 183/78  
                      MCG VORTAC 148/88 | EDF TACAN 267/85  
                      N62°06.00'  
                      W156°28.00' | MCG VORTAC 172/96 | FL240/FL290 | 3 OSS/OSOS JBER, AK | Anchorage ARCP-254.3 | As coordinated with ARTCC |
|       | STOON | N61°23.01'  
                      W156°51.64' | N61°31.00'  
                      W154°55.00' | MCG VORTAC 140/71  
                      MCG VORTAC 140/71 | MCG VORTAC 140/71  
                      MCG VORTAC 140/71 | MCG VORTAC 186/56  
                      MCG VORTAC 183/78  
                      MCG VORTAC 148/88 | Top ROCC Primary | 234.6 Secondary | 364.2/126.2 | 364.2/126.2 |
|       | SLETE | N62°17.87'  
                      W154°53.90' | N61°51.00'  
                      W154°43.00' | MCG VORTAC 140/71  
                      MCG VORTAC 140/71 | MCG VORTAC 140/71  
                      MCG VORTAC 140/71 | N61°23.01'  
                      W156°51.64' | N61°17.87'  
                      W154°53.90' | CAROU |

**ATC ASSIGNED AIRSPACE:** Stony ATCAA N62°34.97' W156°00.13' to N62°31.47' W155°48.13' to N61°51.37' W153°14.73' to N61°39.97' W152°34.13' to N61°24.97'

W152°48.13' to N61°25.02' W153°38.65' to N61°24.32' W155°10.00' to N61°23.97' W155°35.13' to N61°22.97' W156°25.13' to N61°37.20' W158°14.15' to N61°38.95' W158°06.15' to beginning.

**REMARKS:** Due to frequency conflicts, AR723 will not be scheduled for use when AR724 is being utilized. Tanker/Receiver must file to/from the Stony ATCAA, not AR723, using the common entry/exit five letter fixes listed above. In remark line of DD-175, include remark (Example) - refueling in AR723 FL240/FL290. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

① Or as assigned by ATC
### AR724

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR724</td>
<td>MCG VORTAC 154/111</td>
<td>a. 278.400</td>
<td>FL200/FL250</td>
<td>3 OSS/OSOS JBER, AK</td>
<td>Anchorage</td>
<td>ARCP-351.8/37 9.9</td>
<td>EXIT-351.8/379.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALASKA</td>
<td>N61°07.00' W155°10.00' BUSRR</td>
<td>b. 265.700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>317-552-2406/1198 C907-552-2406/1198</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MCG VORTAC 188/142</td>
<td>c. N/R or as assigned by ATC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N61°10.00' W155°57.00' MCG VORTAC 171/123</td>
<td>d. 33/96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N60°56.00' W156°19.00' MCG VORTAC 173/103</td>
<td>e. 33/96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N61°16.00' W156°20.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** SPARREVOHN ATCAA: N61°16.00' W159°00.00' to N61°37.20' W158°14.15' to N61°22.97' W156°25.13' to N61°23.97' W155°35.13' to N61°24.32' W155°10.00' to N60°51.73' W155°10.00' to N60°49.97' W156°00.13' to N60°45.95' W156°43.13' to N60°29.95' W159°00.13' to beginning.

**REMARKS:** Due to frequency conflicts, AR724 will not be scheduled for use when AR723 is being utilized. Tanker/Receiver must FILE to/from the SPARREVOHN ATCAA, not AR724, using the common entry/exit five letter fixes listed above. In remark line of DD-175, include remark (Example) - refueling in AR724 FL200B250. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR725</td>
<td>281/62</td>
<td>FAI VORTAC</td>
<td>169/97</td>
<td>N65°20.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>283.800</td>
</tr>
<tr>
<td></td>
<td>291/90</td>
<td>ROJAM</td>
<td>209/109</td>
<td>N65°41.00'</td>
<td>W154°52.00'</td>
<td>BTT VOR-DME</td>
<td>205/127</td>
<td>N65°41.00'</td>
<td>205/127</td>
<td>N65°42.00'</td>
<td>265.700</td>
</tr>
<tr>
<td>ALASKA</td>
<td></td>
<td>GAL VOR-DME</td>
<td>281/62</td>
<td>N65°20.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
<tr>
<td></td>
<td>281/62</td>
<td>FAI VORTAC</td>
<td>169/97</td>
<td>N65°20.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
<tr>
<td></td>
<td>291/90</td>
<td>ROJAM</td>
<td>169/97</td>
<td>N65°20.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
<tr>
<td></td>
<td>306/40</td>
<td>LAREE</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
<tr>
<td></td>
<td>036/40</td>
<td>RUBBY</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
<tr>
<td></td>
<td>036/40</td>
<td>RUBBY</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
<tr>
<td>(Southeast)</td>
<td>291/90</td>
<td>FAI VORTAC</td>
<td>169/97</td>
<td>N65°20.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
<tr>
<td></td>
<td>281/62</td>
<td>ROJAM</td>
<td>169/97</td>
<td>N65°20.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
<tr>
<td></td>
<td>306/40</td>
<td>RUBBY</td>
<td>169/97</td>
<td>N65°20.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
<tr>
<td></td>
<td>036/40</td>
<td>RUBBY</td>
<td>169/97</td>
<td>N65°20.00'</td>
<td>W150°05.00'</td>
<td>BTT VOR-DME</td>
<td>209/109</td>
<td>N65°19.00'</td>
<td>205/127</td>
<td>N65°22.00'</td>
<td>265.700</td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** UTOPIA ATCAA: N65°19.16' W156°00.44' to N66°32.00' W155°18.46' along 40NM arc GAL VOR-DME to beginning.

**REMARKS:** Tanker/Receiver must FILE to/from the UTOPIA ATCAA, not AR725, using the common entry/exit five letter fixes listed above. In remark line of DD-175, include remark (Example) - refueling in AR725 FL240B290. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

1. Or as assigned by ATC

#
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSESSED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
</table>

**ATC ASSIGNED AIRSPACE:** PAXON ATCAA: N63°30.00' W145°54.00' to N63°37.00' W145°33.00' to N63°37.00' W144°32.37' to N63°32.37' W144°16.37' to N62°30.00' W145°00.00' to N62°26.88' W145°51.55' to N63°23.00' W146°00.00' to beginning.

**REMARKS:** Tanker/Receiver must FILE to/from the ATCAA, not AR726, using the common entry/exit five letter fixes listed above. In remark line of DD-175, include remark (Example) - refueling in AR726 FL190/FL290. Weather briefing agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR727</td>
<td>MCG VORTAC</td>
<td>066/79</td>
<td>GAL VOR-DME 116/138</td>
<td>N63°02.17' W152°43.83'</td>
<td>N63°07.00' W153°04.00'</td>
<td>MCG VORTAC 066/79</td>
<td>094/76</td>
<td>N63°02.17' W152°43.83'</td>
<td>BEVAN</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER, AK DSN 317-552-2406/1198 C907-552-2406/1198</td>
</tr>
<tr>
<td>ALASKA</td>
<td>BEVAN</td>
<td>GAL VOR-DME 094/76</td>
<td>N64°15.00' W154°04.00'</td>
<td>GAL VOR-DME 108/64</td>
<td>N64°07.00' W154°46.00'</td>
<td>GAL VOR-DME 097/40</td>
<td>N63°27.67' W155°22.24'</td>
<td>Top ROCC Primary</td>
<td>234.6 Secondary</td>
<td>364.2/126.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LATNA</td>
<td>GAL VOR-DME 122/111</td>
<td>N63°20.00' W154°04.00'</td>
<td>GAL VOR-DME 112/119</td>
<td>N63°28.00' W153°20.00'</td>
<td>MINNA</td>
<td>GAL VOR-DME 096/108</td>
<td>N63°59.29' W153°00.83'</td>
<td>VEDDA</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER, AK DSN 317-552-2406/1198 C907-552-2406/1198</td>
</tr>
<tr>
<td></td>
<td>MINNA</td>
<td>MCG VORTAC 058/33</td>
<td>N63°04.17' W154°26.00'</td>
<td>MCG VORTAC 079/85</td>
<td>N64°33.27' W153°30.68'</td>
<td>AMTEE</td>
<td>MCG VORTAC 058/33</td>
<td>N63°04.17' W154°26.00'</td>
<td>VEDDA</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER, AK DSN 317-552-2406/1198 C907-552-2406/1198</td>
</tr>
<tr>
<td></td>
<td>VEDDA</td>
<td>GAL VOR-DME 079/85</td>
<td>N64°33.27' W153°30.68'</td>
<td>MCG VORTAC 058/33</td>
<td>N63°04.17' W154°26.00'</td>
<td>VEDDA</td>
<td>MCG VORTAC 079/85</td>
<td>N64°33.27' W153°30.68'</td>
<td>VEDDA</td>
<td>FL240/FL290</td>
<td>3 OSS/OSOS JBER, AK DSN 317-552-2406/1198 C907-552-2406/1198</td>
</tr>
</tbody>
</table>

Anchorage ARCP-353.8W EXIT-353.8W

Times of Operation

3 OSS/OSOS JBER, AK DSN 317-552-2406/1198 C907-552-2406/1198

As coordinated with ARTCC
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Southeast)</td>
<td>MCG VORTAC 066/79</td>
<td>GAL VOR-DME 095/47</td>
<td>GAL VOR-DME 122/111</td>
<td>GAL VOR-DME 122/111</td>
<td>MCG VORTAC 066/79</td>
<td>N63°02.17'</td>
<td>N63°20.00'</td>
<td>W154°04.00'</td>
<td>BEVAN</td>
<td>GALENA ATCAA: N64°34.05' W155°16.75' to N64°32.97' W153°00.15' to N64°19.95' W153°00.15' to N63°59.97' W153°00.15' to N63°12.00'</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MCG VORTAC 058/33</td>
<td>GAL VOR-DME 095/47</td>
<td>GAL VOR-DME 122/111</td>
<td>GAL VOR-DME 122/111</td>
<td>MCG VORTAC 112/119</td>
<td>N63°28.00'</td>
<td>W154°04.00'</td>
<td>BEVAN</td>
<td>GALENA ATCAA: N64°34.05' W155°16.75' to N64°32.97' W153°00.15' to N64°19.95' W153°00.15' to N63°59.97' W153°00.15' to N63°12.00'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MCG VORTAC 058/33</td>
<td>GAL VOR-DME 095/47</td>
<td>GAL VOR-DME 122/111</td>
<td>GAL VOR-DME 122/111</td>
<td>MCG VORTAC 112/119</td>
<td>N63°28.00'</td>
<td>W154°04.00'</td>
<td>BEVAN</td>
<td>GALENA ATCAA: N64°34.05' W155°16.75' to N64°32.97' W153°00.15' to N64°19.95' W153°00.15' to N63°59.97' W153°00.15' to N63°12.00'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MCG VORTAC 058/33</td>
<td>GAL VOR-DME 095/47</td>
<td>GAL VOR-DME 122/111</td>
<td>GAL VOR-DME 122/111</td>
<td>MCG VORTAC 112/119</td>
<td>N63°28.00'</td>
<td>W154°04.00'</td>
<td>BEVAN</td>
<td>GALENA ATCAA: N64°34.05' W155°16.75' to N64°32.97' W153°00.15' to N64°19.95' W153°00.15' to N63°59.97' W153°00.15' to N63°12.00'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** GALENA ATCAA: N64°34.05' W155°16.75' to N64°32.97' W153°00.15' to N64°19.95' W153°00.15' to N63°59.97' W153°00.15' to N63°12.00' W151°31.00' to N63°00.00' W153°00.00' to N63°00.00' W154°20.00' to N63°16.97' W154°45.13' to N64°09.88' W156°00.02' along 40NM arc GAL VOR-DME to beginning.

**REMARKS:** Tanker/Receiver must FILE to/from the Galena ATCAA, not AR727, using the common entry/exit five letter fixes listed above. In remark line of DD-175, include remark (Example) - refueling in AR727 FL240B290. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.
## VFR HELICOPTER REFueling Tracks

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR15V</td>
<td>COF TACAN</td>
<td>COF TACAN</td>
<td></td>
<td>COF TACAN</td>
<td>a. 363.900</td>
<td>01000/04000</td>
<td>920 RGG, CO</td>
<td>PATRICK RAPCON</td>
</tr>
<tr>
<td>(North)</td>
<td>161/18</td>
<td>138/15</td>
<td></td>
<td>040/39</td>
<td>b. 252.800</td>
<td></td>
<td></td>
<td>ARCP</td>
</tr>
<tr>
<td></td>
<td>N27°58.10'</td>
<td>N28°04.70'</td>
<td></td>
<td>N28°46.50'</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W80°28.00'</td>
<td>W80°24.30'</td>
<td></td>
<td>W80°12.60'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 29/92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(South)</td>
<td>COF TACAN</td>
<td>COF TACAN</td>
<td></td>
<td>COF TACAN</td>
<td>161/18</td>
<td></td>
<td></td>
<td>PATRICK RAPCON</td>
</tr>
<tr>
<td></td>
<td>040/39</td>
<td>044/33</td>
<td></td>
<td>121/18</td>
<td></td>
<td></td>
<td></td>
<td>ARCP</td>
</tr>
<tr>
<td></td>
<td>N28°46.50'</td>
<td>N28°40.30'</td>
<td></td>
<td>N28°58.10'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W80°12.60'</td>
<td>W80°14.20'</td>
<td></td>
<td>W80°28.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting.

1. Airspace delegated to Patrick AFB RAPCON. Restricted to 1 FW and 301 RQS assigned units only. Protected airspace is 4 NM either side of centerline. Air refueling aircraft may include multiple tankers and receivers.

| AR18V  | NKT TACAN           | NKT TACAN           | NKT TACAN               | NKT TACAN      | a. 311.575| 04000/10000         | C.G. MCAS       | CHERRY POINT RATCF ARIP |
| (North)| 147/24              | 111/29              | 108/28                  | 090/39         | b. 303.125|                     | Cherry Point, NC| ARCP           |
|        | N34°36.00'          | N34°48.00'          | N34°49.50'              | N35°00.00'     | c. N/R   |                     | DSN 582-4040/4041|                |
|        | W76°33.00'          | W76°18.00'          | W76°19.00'              | W76°06.00'     | d. N/R   |                     |                 |                |
|        |                     |                     |                         |                | e. 29/92 |                     |                 |                |
| (South)| NKT TACAN           | NKT TACAN           | NKT TACAN               | NKT TACAN      | 147/24   |                     |                 | CHERRY POINT RATCF ARIP |
|        | 090/39              | 108/28              | 111/29                  | 147/24         |          |                     |                 | ARCP           |
|        | N35°00.00'          | N34°49.50'          | N34°48.00'              | N34°36.00'     |          |                     |                 |                |
|        | W76°06.00'          | W76°19.00'          | W76°18.00'              | W76°33.00'     |          |                     |                 |                |

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting.

1. Airspace delegated to Cherry Point MCAS RATCF.

| AR40V  | N31°38.00'          | N31°38.00'          | N31°38.00'              | N31°38.00'     | a. 273.750| 01000/04000         | 23 OSS/OSOS     | Jacksonville ARCP |
| (East) | W82°40.80'          | W82°36.17'          | W82°11.40'              | W82°11.40'     | b. 374.225|                     | Moody AFB, GA   | ARCP           |
|        |                     |                     |                         |                | c. N/R    |                     | DSN 460-7831    |                |
|        |                     |                     |                         |                | d. N/R    |                     | C229-257-7831   |                |
|        |                     |                     |                         |                | e. N/R    |                     |                 |                |
|        |                     |                     |                         |                |          |                     |                 |                |
| (West) | N31°38.00'          | N31°38.00'          | N31°38.00'              | N31°38.00'     |          |                     |                 | Jacksonville ARCP |
|        | W82°11.40'          | W82°16.08'          | W82°40.80'              | W82°40.80'     |          |                     |                 | ARCP           |

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 347 Wg use only. Protected airspace is 4 NM either side of centerline. Air refueling aircraft may include multiple tankers and receivers. Hours of operation: Intermittent 1400-0700Z++ daily. Other times by NOTAM. For VFR use only.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR41V</td>
<td>N28°26.50'</td>
<td>N28°31.00'</td>
<td>N28°26.50'</td>
<td>N29°02.00'</td>
<td>230.050</td>
<td>1000 AGL/4000 MSL</td>
<td>347 Wg Det 1 RO</td>
<td>Jacksonville ARCP</td>
</tr>
<tr>
<td>(North)</td>
<td>W82°55.00'</td>
<td>W82°57.00'</td>
<td>W83°09.50'</td>
<td></td>
<td>260.200</td>
<td></td>
<td>MacDill AFB, FL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td>DSN 968-4643</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td>C813-828-4643</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR42V</td>
<td>N30°15.00'</td>
<td>N30°15.00'</td>
<td>N30°15.00'</td>
<td>N30°15.00'</td>
<td>239.725</td>
<td>1000 AGL/4000 MSL</td>
<td>2305/OSOS</td>
<td>Jacksonville ARCP</td>
</tr>
<tr>
<td>(East)</td>
<td>W83°00.00'</td>
<td>W83°44.00'</td>
<td>W83°10.00'</td>
<td></td>
<td>309.950</td>
<td></td>
<td>Moody AFB, GA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td>DSN 460-7831</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td>C229-257-7831</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR44V</td>
<td>BKG VORTAC</td>
<td>BKG VORTAC</td>
<td>BKG VORTAC</td>
<td>BKG VORTAC</td>
<td>017/36</td>
<td>02500/05000</td>
<td>160th SOAR(A)</td>
<td>Indianapolis EXT Memphis ARCP</td>
</tr>
<tr>
<td>(Northeast)</td>
<td>253/33</td>
<td>259/28</td>
<td>017/36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARK</td>
<td>N36°47.00'</td>
<td>N36°51.10'</td>
<td>N37°29.60'</td>
<td>N37°29.60'</td>
<td>309.950</td>
<td></td>
<td>Campbell AAF, KY</td>
<td></td>
</tr>
<tr>
<td>HORSE EAST</td>
<td>W87°06.00'</td>
<td>W87°00.71'</td>
<td>W86°11.80'</td>
<td></td>
<td>N/R</td>
<td></td>
<td>DSN 635-1980/1757</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td>C270-798-1980/1757</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Southwest)</td>
<td>BKG VORTAC</td>
<td>BKG VORTAC</td>
<td>BKG VORTAC</td>
<td>BKG VORTAC</td>
<td>017/36</td>
<td>02500/05000</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>Indianapolis Ext Memphis ARCP</td>
</tr>
<tr>
<td></td>
<td>021/41 1</td>
<td>017/36</td>
<td>017/36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°33.79'</td>
<td>N37°29.60'</td>
<td>N36°51.18'</td>
<td>N36°51.18'</td>
<td>309.950</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W86°06.39'</td>
<td>W86°11.80'</td>
<td>W87°00.71'</td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 347 Wg use only. Protected airspace is 4 NM either side of centerline. Air refueling aircraft may include multiple tankers and receivers. Hours of operation: Intermittent 1400-0700Z++ daily. Other times by NOTAM. For VFR use only.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR44V</td>
<td>N37°29.60'</td>
<td>N36°51.10'</td>
<td>N37°29.60'</td>
<td>N37°29.60'</td>
<td>309.950</td>
<td>1000 AGL/4000 MSL</td>
<td>160th SOAR(A)</td>
<td>Indianapolis EXT Memphis ARCP</td>
</tr>
<tr>
<td>(Northeast)</td>
<td>W86°11.80'</td>
<td>W87°00.71'</td>
<td>W86°11.80'</td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARK</td>
<td>W86°06.39'</td>
<td>W86°06.39'</td>
<td>W86°06.39'</td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HORSE EAST</td>
<td>W87°00.71'</td>
<td>W87°00.71'</td>
<td>W87°00.71'</td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Southwest)</td>
<td>BKG VORTAC</td>
<td>BKG VORTAC</td>
<td>BKG VORTAC</td>
<td>BKG VORTAC</td>
<td>017/36</td>
<td>02500/05000</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>Indianapolis Ext Memphis ARCP</td>
</tr>
<tr>
<td></td>
<td>021/41 1</td>
<td>017/36</td>
<td>017/36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N37°33.79'</td>
<td>N37°29.60'</td>
<td>N36°51.18'</td>
<td>N36°51.18'</td>
<td>309.950</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W86°06.39'</td>
<td>W86°11.80'</td>
<td>W87°00.71'</td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR44V is designed to be used in either direction on a magnetic course of 049 degrees/229 degrees. The total length of the track is 54.8 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR45V</td>
<td>NWG VORTAC</td>
<td>NWG VORTAC</td>
<td>269/36 N35°56.00' W87°11.50'</td>
<td>NWG VORTAC</td>
<td>006/40 N37°35.20' W86°19.70'</td>
<td>02500/05000</td>
<td>160th SOAR(A)</td>
<td>Indianapolis</td>
</tr>
<tr>
<td>(Northeast)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Campell AAF, KY</td>
<td>EXIT Memphis</td>
</tr>
<tr>
<td>DARK</td>
<td>NWG VORTAC</td>
<td>NWG VORTAC</td>
<td>276/32 N36°59.92' W87°05.87'</td>
<td>NWG VORTAC</td>
<td>006/40 N37°35.20' W86°19.70'</td>
<td></td>
<td></td>
<td>ARCP</td>
</tr>
<tr>
<td>HORSE</td>
<td>NWG VORTAC</td>
<td>NWG VORTAC</td>
<td>276/32 N36°59.92' W87°05.87'</td>
<td>NWG VORTAC</td>
<td>006/40 N37°35.20' W86°19.70'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEST</td>
<td>NWG VORTAC</td>
<td>NWG VORTAC</td>
<td>006/40 N37°35.20' W86°19.70'</td>
<td>NWG VORTAC</td>
<td>006/40 N37°35.20' W86°19.70'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>160th SOAR(A) assigned frequencies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERATIONS - Intermittent by NOTAM, 24 hours in advance.</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR45V is designed to be used in either direction on a magnetic course of 050 degrees/230 degrees. The total length of the track is 51 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR46V</td>
<td>NWG VORTAC</td>
<td>NWG VORTAC</td>
<td>N35°18.02' W87°22.73'</td>
<td>NWG VORTAC</td>
<td>N36°14.86' W87°15.73'</td>
<td>02500/04500</td>
<td>160th SOAR(A)</td>
<td>Memphis</td>
</tr>
<tr>
<td>(North)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Campell AAF, KY</td>
<td>ARCP</td>
</tr>
<tr>
<td>NIGHT-</td>
<td>NWG VORTAC</td>
<td>NWG VORTAC</td>
<td>N35°24.00' W87°22.00'</td>
<td>NWG VORTAC</td>
<td>N36°14.86' W87°15.73'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STALKER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>160th SOAR(A) assigned frequencies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERATIONS - Intermittent by NOTAM, 24 hours in advance.</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR46V is designed to be used in either direction on a magnetic course of 009 degrees/189 degrees. The total length of the track is 51 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.
### AR47V (North) NIGHT-STALKER WEST

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR47V</td>
<td>N35°14.52'</td>
<td>N35°20.50'</td>
<td>N36°14.85'</td>
<td>W87°39.50'</td>
<td>a. N/R</td>
<td>02500/04500</td>
<td>160th SOAR(A)</td>
<td>Memphis ARCP</td>
</tr>
<tr>
<td></td>
<td>W87°40.23'</td>
<td>W87°39.50'</td>
<td>W87°32.82'</td>
<td></td>
<td>b. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR47V is designed to be used in either direction on a magnetic course of 186 degrees/006 degrees. The total length of the track is 60.5 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.

### AR48V (Northwest) GREEN EAST

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR48V</td>
<td>N36°56.00'</td>
<td>N37°01.03'</td>
<td>N37°39.50'</td>
<td>W88°28.40'</td>
<td>a. N/R</td>
<td>03000/05000</td>
<td>160th SOAR(A)</td>
<td>Memphis ARCP</td>
</tr>
<tr>
<td></td>
<td>W87°48.50'</td>
<td>W87°52.70'</td>
<td>W87°32.82'</td>
<td></td>
<td>b. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR48V is designed to be used in either direction on a magnetic course of 146 degrees/326 degrees. The total length of the track is 47.8 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.

### MEMPHIS ARCP EXIT (South)

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR48V</td>
<td>N36°20.80'</td>
<td>N36°14.52'</td>
<td>N35°20.50'</td>
<td>W87°32.82'</td>
<td>a. N/R</td>
<td>02500/04500</td>
<td>160th SOAR(A)</td>
<td>Memphis ARCP</td>
</tr>
<tr>
<td></td>
<td>W87°32.00'</td>
<td>W87°32.82'</td>
<td>W87°39.50'</td>
<td></td>
<td>b. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR48V is designed to be used in either direction on a magnetic course of 146 degrees/326 degrees. The total length of the track is 47.8 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.
### AR 53V (North) - WARDOG SOUTH

**Navigation Points:**
- SSI VORTAC 128/16, N30°54.12' W81°11.46'
- SSI VORTAC 106/15, N31°45.98' W80°59.26'
- SAV VORTAC 166/31, N31°40.00' W81°00.00'

**Exit Points:**
- SSI VORTAC 106/15, N31°00.00' W81°10.00'
- SAV VORTAC 166/31, N31°40.00' W81°00.00'

**Current Plan:**
- N/R
- N/R
- N/R
- N/R
- N/R

**Assigned Frequencies:**
- 160th SOAR(A)

**Scheduling Unit:**
- 160th SOAR(A)

**Area Covered:**
- Jacksonville

**Remarks:**
- Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR 53V is designed to be used in either direction on a magnetic course of 199 degrees/019 degrees. The total length of the track is 40.8 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.

### AR 49V (Northwest) - GREEN WEST

**Navigation Points:**
- ARCP N36°54.00' W87°54.00'
- ARCP N36°58.58' W87°58.90'

**Exit Points:**
- ARCP N37°38.00' W88°40.50'

**Current Plan:**
- N/R
- N/R
- N/R
- N/R
- N/R

**Assigned Frequencies:**
- 160th SOAR(A)

**Scheduling Unit:**
- 160th SOAR(A)

**Area Covered:**
- Memphis

**Remarks:**
- Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR 49V is designed to be used in either direction on a magnetic course of 143 degrees/323 degrees. The total length of the track is 51.5 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR54V</td>
<td>SAV VORTAC</td>
<td>SAV VORTAC</td>
<td>SAV VORTAC</td>
<td>SAV VORTAC</td>
<td>a. N/R</td>
<td>02500/04500</td>
<td>160th SOAR(A)</td>
<td>Jacksonville ARCP EXIT</td>
</tr>
<tr>
<td>(Northwest)</td>
<td>010/13</td>
<td>001/19</td>
<td>347/62</td>
<td>N3°22.00' W81°11.00'</td>
<td>N3°27.40' W81°14.00'</td>
<td>010/19</td>
<td>N3°07.00' W81°36.00'</td>
<td>001/19</td>
</tr>
<tr>
<td>WARDOG</td>
<td>N32°22.00'</td>
<td>N32°27.40'</td>
<td>N33°07.00'</td>
<td>W81°14.00'</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>02000/04000</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>Jacksonville ARCP EXIT</td>
</tr>
<tr>
<td>NORTH</td>
<td>W81°11.00'</td>
<td>W81°14.00'</td>
<td>W81°36.00'</td>
<td>W81°36.00'</td>
<td>a. N/R</td>
<td>02500/04500</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>Jacksonville ARCP EXIT</td>
</tr>
<tr>
<td></td>
<td>N3°07.00' W81°36.00'</td>
<td>N3°12.44' W81°39.05'</td>
<td>N3°22.00' W81°11.00'</td>
<td>N3°27.40' W81°14.00'</td>
<td>For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERATIONS - Intermittent by NOTAM, 24 hours in advance.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR54V is designed to be used in either direction on a magnetic course of 162 degrees/242 degrees. The total length of the track is 43.7 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR55V</td>
<td>TAY VORTAC</td>
<td>TAY VORTAC</td>
<td>SSI VORTAC</td>
<td>SSI VORTAC</td>
<td>a. N/R</td>
<td>02000/04000</td>
<td>160th SOAR(A)</td>
<td>Jacksonville ARCP EXIT</td>
</tr>
<tr>
<td>(Northeast)</td>
<td>259/26</td>
<td>263/20</td>
<td>258/24</td>
<td>N3°07.00' W81°36.00'</td>
<td>N3°12.44' W81°39.05'</td>
<td>010/19</td>
<td>N3°22.00' W81°11.00'</td>
<td>001/19</td>
</tr>
<tr>
<td>WARDOG</td>
<td>N30°23.77'</td>
<td>N30°26.70'</td>
<td>N3°07.00'</td>
<td>W81°36.00'</td>
<td>a. N/R</td>
<td>02000/04000</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>Jacksonville ARCP EXIT</td>
</tr>
<tr>
<td>WEST</td>
<td>W83°02.06'</td>
<td>W82°56.00'</td>
<td>W81°53.60'</td>
<td>W81°53.60'</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>02000/04000</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>Jacksonville ARCP EXIT</td>
</tr>
<tr>
<td></td>
<td>N3°59.00' W81°47.40'</td>
<td>N3°56.40' W81°53.60'</td>
<td>N3°56.40' W81°53.60'</td>
<td>N3°56.40' W81°53.60'</td>
<td>For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERATIONS - Intermittent by NOTAM, 24 hours in advance.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR55V is designed to be used in either direction on a magnetic course of 068 degrees/248 degrees. The total length of the track is 61.4 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR55V</td>
<td>SSI VORTAC</td>
<td>SSI VORTAC</td>
<td>TAY VORTAC</td>
<td>TAY VORTAC</td>
<td>a. N/R</td>
<td>02000/04000</td>
<td>160th SOAR(A)</td>
<td>Jacksonville ARCP EXIT</td>
</tr>
<tr>
<td>(Southwest)</td>
<td>263/18</td>
<td>258/24</td>
<td>263/20</td>
<td>N3°07.00' W81°36.00'</td>
<td>N3°12.44' W81°39.05'</td>
<td>010/19</td>
<td>N3°22.00' W81°11.00'</td>
<td>001/19</td>
</tr>
<tr>
<td>WARDOG</td>
<td>N30°59.40'</td>
<td>N30°56.40'</td>
<td>N3°07.00'</td>
<td>W81°36.00'</td>
<td>a. N/R</td>
<td>02000/04000</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>Jacksonville ARCP EXIT</td>
</tr>
<tr>
<td>WEST</td>
<td>W81°47.40'</td>
<td>W81°53.60'</td>
<td>W82°56.00'</td>
<td>W82°56.00'</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>02000/04000</td>
<td>160th SOAR(A) assigned frequencies.</td>
<td>Jacksonville ARCP EXIT</td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR55V is designed to be used in either direction on a magnetic course of 068 degrees/248 degrees. The total length of the track is 61.4 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.
### AR 68V

**(East)**

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120°6'</td>
<td>188/4</td>
<td>142/16</td>
<td>N40°37.00'</td>
<td>125°56-7320</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N40°53.32'</td>
<td>N40°50.86'</td>
<td>125°56-7320</td>
<td>e. N/R</td>
<td>125°56-7320</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W72°11.39'</td>
<td>W72°18.47'</td>
<td>N73°02.00'</td>
<td>125°56-7320</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Air refueling airspace is 1 NM North of centerline and 4 NM South of centerline. The edge of Gabreski Airport (KFOK) class D airspace lies just North of the track. Do not enter KFOK class D without permission from Gabreski Tower on 125.3 VHF/236.6 UHF. During the summer months heavy VFR traffic transits the beach areas that run just North of the entire track. Within 4 NM North of the track are KHTO (East Hampton airport) and KMTP (Montauk airport), which are non towered airports on the eastern part of Long Island. The track is for use by the 106 RQW, all others PPR. Times of Operation are Continuous.

### AR 117V

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR 117V</td>
<td>N34°49.00'</td>
<td>N34°43.17'</td>
<td>SEY VOR-DME</td>
<td>a. N/R</td>
<td>07000/09000</td>
<td>58 OSS/OSO</td>
<td>Albuquerque</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W106°57.80'</td>
<td>W106°56.04'</td>
<td>253/12</td>
<td>N40°03.50'</td>
<td>ARCP-128.8E/307.2E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N34°20.33'</td>
<td>N34°00.00'</td>
<td>W71°48.40'</td>
<td>e. N/R</td>
<td>Kirtland AFB, NM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W106°49.23'</td>
<td>W106°48.00'</td>
<td>253/12</td>
<td>N40°50.86'</td>
<td>DSN 296-5979/5888/5165</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>58 SOW</td>
<td>58 SOW</td>
<td>W71°48.40'</td>
<td>d. N/R</td>
<td>C505-853-5979/5888/5165</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 58 SOW use only. Protected airspace is 4 NM either side of centerline. Air refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers. For VFR use only.
### AR125V (North)
- **ARCP**: ABQ VORTAC
- **ARIP**: ABQ VORTAC
- **Check Points**:
  - ONM VORTAC: 272/27, N34°27.30′, W107°20.20′
  - ONM VORTAC: 231/16, N34°13.45′, W107°30.40′
- **Assigned Frequencies**: 00500/03000 500 AGL/3000 AGL
- **Assigned ARTCC**: Albuquerque ARCP

### AR126V (South)
- **ARCP**: CNX VORTAC
- **ARIP**: CNX VORTAC
- **Check Points**:
  - CNX VORTAC: 293/19, N34°33.00′, W105°59.00′
  - CNX VORTAC: 192/36, N34°49.00′, W105°59.00′
- **Assigned Frequencies**: 01000/08500 1000 AGL /8500 MSL
- **Assigned ARTCC**: Albuquerque ARCP

### Remarks:
- Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 58 SOW use only unless coordination is accomplished with 58 OSS/OSO at least two duty days prior to use. Air refueling airspace is 4 NM either side of centerline and around both entry and exit points. Air refueling may include multiple tankers and/or receivers.

---

### AR125V (South)
- **ARCP**: ONM VORTAC
- **ARIP**: ONM VORTAC
- **Check Points**:
  - ONM VORTAC: 272/27, N34°27.30′, W107°20.20′
  - ONM VORTAC: 231/16, N34°13.45′, W107°30.40′
- **Assigned Frequencies**: 00500/03000 500 AGL/3000 AGL
- **Assigned ARTCC**: Albuquerque ARCP

### AR126V (South)
- **ARCP**: CNX VORTAC
- **ARIP**: CNX VORTAC
- **Check Points**:
  - CNX VORTAC: 192/36, N33°49.00′, W105°59.00′
  - CNX VORTAC: 196/32, N33°54.00′, W105°59.00′
- **Assigned Frequencies**: 01000/08500 1000 AGL /8500 MSL
- **Assigned ARTCC**: Albuquerque ARIP-257.6

### Remarks:
- Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Air refueling airspace is 4 NM west and 3 NM east of centerline from entry to exit. Monitor 243.0. Notify Albuquerque (ABQ) ARTCC Sector 23 prior to commencement and after termination of operations. If no contact with ABQ ARTCC on 257.6, request Holloman RAPCON to notify ABQ.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELLING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR127V (North)</td>
<td>PIO VOR-DME</td>
<td>PIO VOR-DME</td>
<td>N32°08.00' W104°46.00'</td>
<td>119/36</td>
<td>N/R</td>
<td>01000/10000</td>
<td>49 OSS/OSOS</td>
<td>Albuquerque</td>
</tr>
<tr>
<td></td>
<td>115/32</td>
<td>N32°12.50' W104°48.50'</td>
<td>115/36</td>
<td>N/R</td>
<td></td>
<td>Holloman AFB, NM</td>
<td>DSN 572-3536</td>
<td>EXIT-257.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W104°20.00'</td>
<td></td>
<td></td>
<td>MSL</td>
<td>C505-572-3536</td>
<td>ARIP-257.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use 49 FW assigned frequencies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(South)</td>
<td>PIO VOR-DME</td>
<td>PIO VOR-DME</td>
<td>N32°08.00' W104°46.00'</td>
<td>119/36</td>
<td>N/R</td>
<td>01000/10000</td>
<td>49 OSS/OSOS</td>
<td>Albuquerque</td>
</tr>
<tr>
<td></td>
<td>351/20</td>
<td>N32°12.50' W104°48.50'</td>
<td>115/36</td>
<td>N/R</td>
<td></td>
<td>Holloman AFB, NM</td>
<td>DSN 572-3536</td>
<td>EXIT-257.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W104°20.00'</td>
<td></td>
<td></td>
<td>MSL</td>
<td>C505-572-3536</td>
<td>ARIP-257.6</td>
</tr>
<tr>
<td>REMARKS:</td>
<td>Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Air refueling airspace is 5 NM left and 3 NM right of centerline. Monitor 243.0. Notify Albuquerque (ABQ) ARTCC Sector 23 prior to commencement and after termination of operations. If no contact with ABQ ARTCC on 257.6, request Holloman RAPCON to notify ABQ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR131V (North)</td>
<td>TXO VORTAC</td>
<td>TXO VORTAC</td>
<td>N33°58.99' W103°16.27'</td>
<td>204/37</td>
<td>a. 143.250</td>
<td>05500/07000</td>
<td>27 OSS/OSOS</td>
<td>ALBUQUERQUE</td>
</tr>
<tr>
<td></td>
<td>205/43</td>
<td>N33°54.91' W103°20.12'</td>
<td>205/47</td>
<td>b. 318.000</td>
<td></td>
<td>DSN</td>
<td>681-7634/7635/7636/7639</td>
<td>CNTR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N33°51.81' W103°23.01'</td>
<td>112/30</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>ARCP-126.85/257.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W104°07.55'</td>
<td>N33°03.56</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td>EXIT-132.65/257.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>e. 10/73</td>
<td>W104°16.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>(Roswell North Track) Protected airspace 3 NM either side of centerline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR132V (South)</td>
<td>CME VORTAC</td>
<td>CME VORTAC</td>
<td>N33°57.38' W103°58.18'</td>
<td>113/40</td>
<td>a. 143.250</td>
<td>05500/07000</td>
<td>27 OSS/OSOS</td>
<td>ALBUQUERQUE</td>
</tr>
<tr>
<td></td>
<td>105/41</td>
<td>N33°01.48' W103°58.18'</td>
<td>100/42</td>
<td>b. 318.000</td>
<td></td>
<td>DSN</td>
<td>681-7634/7635/7636/7639</td>
<td>CNTR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N33°04.60' W103°51.51'</td>
<td>189/39</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>ARCP-126.85/257.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W103°06.81'</td>
<td>N33°52.82</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td>EXIT-132.65/257.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>e. 27/90</td>
<td>W103°54.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>(Roswell South Track) Protected airspace is 3 NM either side of centerline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR133V (North)</td>
<td>BGD VORTAC</td>
<td>BGD VORTAC</td>
<td>N35°13.33' W102°25.37'</td>
<td>259/51</td>
<td>a. 141.300</td>
<td>05000/06500</td>
<td>27 OSS/OSOS</td>
<td>ALBUQUERQUE</td>
</tr>
<tr>
<td></td>
<td>253/51</td>
<td>N35°13.33' W102°25.37'</td>
<td>254/92</td>
<td>b. 311.500</td>
<td></td>
<td>DSN</td>
<td>681-7634/7635/7636/7639</td>
<td>CNTR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W102°25.37'</td>
<td>N34°38.22</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td>EXIT-126.45/269.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>e. 7/70</td>
<td>W102°25.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>(Amarillo North Track) Protected airspace 3 NM either side of centerline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR134V (South)</td>
<td>PNH VORTAC</td>
<td>PNH VORTAC</td>
<td>N34°38.21' W102°13.08'</td>
<td>208/44</td>
<td>a. 141.300</td>
<td>05000/06500</td>
<td>27 OSS/OSOS</td>
<td>ALBUQUERQUE</td>
</tr>
<tr>
<td></td>
<td>212/40</td>
<td>N34°38.21' W102°13.08'</td>
<td>216/37</td>
<td>b. 328.450</td>
<td></td>
<td>DSN</td>
<td>681-7834/7635/7636/7639</td>
<td>CNTR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N34°47.29' W102°13.08'</td>
<td>217/51</td>
<td>c. N/R</td>
<td></td>
<td></td>
<td>EXIT-127.85/285.475</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W102°13.08'</td>
<td>N34°47.29</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td>ARIP-127.85/285.475</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>e. 29/92</td>
<td>W102°13.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>(Amarillo South Track) Protected airspace 3 NM either side of centerline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### AR135V

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR135V (East)</td>
<td>N32°38.85'</td>
<td>N32°35.49'</td>
<td>N32°35.49'</td>
<td>N32°12.30'</td>
<td>a. 268.100</td>
<td>05000</td>
<td>563 OSS/OSOS</td>
<td>Albuquerque ARCP</td>
</tr>
<tr>
<td>1</td>
<td>W112°13.26'</td>
<td>W112°07.40'</td>
<td>W111°27.00'</td>
<td>b. 326.775</td>
<td>c. N/R</td>
<td>Davis-Monthan AFB, AZ DSN 228-4160 C520-228-4160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td>e. 31/94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise Prescott Radio (122.2/255.4), 5 minutes prior to entering and upon exiting.

1. VFR use only. See and avoid is paramount.
3. Caution: La Cholla VFR recovery crosses track at 5,500 MSL from WHISKEY (TUS R-260/35) to Picacho Peak.
4. Caution: Per AP/1B, this refueling track must be deconflicted with VR223/239/241/244 scheduling activity prior to use.
5. Caution: Any maneuvering should be made to the north so as to avoid Sells Low MOA and VR223 corridor.

### AR136V

<table>
<thead>
<tr>
<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>Navigation Check Points</th>
<th>Exit</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR136V (North)</td>
<td>N32°08.17'</td>
<td>N32°13.35'</td>
<td>N32°13.35'</td>
<td>N33°00.21'</td>
<td>a. 233.725</td>
<td>06500</td>
<td>563 OSS/OSOS</td>
<td>Albuquerque ARCP</td>
</tr>
<tr>
<td>1</td>
<td>W110°13.88'</td>
<td>W110°17.38'</td>
<td>W110°17.38'</td>
<td>W110°48.76'</td>
<td>b. 238.500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>c. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. 30/93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise Prescott Radio (on 122.4 or 122.3), 5 minutes prior to entering and upon exiting.

1. AR136V is designed to be used in either direction on a magnetic course of 319.5° or 139.5°. The total length of the track is 59.7 NM, the width is 2 NM either side of centerline. VFR use only.
2. CAUTION: Rapidly rising terrain.
3. San Manuel airport (E77) may be used by fire fighting aircraft during fire season (Apr-Sep). Call Arizona State Fire Dispatch at C800-309-7081.
4. Refueling altitudes are normally below Albuquerque Center radar advisory service capabilities.
5. Continuous times of operation.
6. CAUTION: AR136V crosses numerous MTR’s. See and Avoid concept is paramount. Monitor 379.4 for VR239 deconfliction calls.
### AR 137V

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR137V (North)</td>
<td>N34°12.27'</td>
<td>W113°58.28'</td>
<td>① N34°18.23'</td>
<td>②</td>
<td>N34°52.65'</td>
<td>③</td>
<td>W114°03.47'</td>
<td>a. 233.725</td>
</tr>
<tr>
<td></td>
<td>W113°59.20'</td>
<td>④</td>
<td></td>
<td>⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise Prescott Radio (122.1R), 5 minutes prior to entering and upon exiting.

1. **AR137V** is designed to be used in either direction on a magnetic course of 341° or 161°. The total length of the track is 40.5 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers. VFR use only.

2. CAUTION: **AR137V** crosses numerous MTR’s. See and Avoid concept is paramount.

3. CAUTION: Rapidly rising terrain.

4. Refueling altitudes are normally below Albuquerque Center radar advisory service capabilities.

5. Continuous times of operations.

### AR 225V

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR225V (North)</td>
<td>N37°11.00'</td>
<td>W122°23.00'</td>
<td>①</td>
<td>②</td>
<td>N36°47.00'</td>
<td>③</td>
<td>W122°20.00'</td>
<td>a. N/R</td>
</tr>
<tr>
<td></td>
<td>W122°20.00'</td>
<td>④</td>
<td></td>
<td>⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### REMARKS:

1. Normally 6 NM downtrack of the ARIP.

2. **AR225V** is designed to be used in either direction on a magnetic course of 155 degree or 335 degree. The northern end of the track is overhead Pigeon Point Lighthouse. The southern end of the track is a geographical coordinate totally over water. The length of the route is 26 miles. The width is 2 NM either side of the centerline. WARNING: During night operations, make all turns to the west of the track centerline. This requirement assures positive terrain avoidance.

3. Air traffic and VFR weather conditions permitting air refueling pilots are requested to maintain a minimum of 2000’ AWL while conducting refueling training over the Monterey Bay National Marine Sanctuary.

4. Restricted to H-60 and C-130 refueling operations. May include multiple tankers/or receivers. Continuous times of operations.

5. Refueling altitudes are normally below Oakland Center radar advisory service capabilities. Traffic permitting, Monterey Approach Control 127.15/302.0 may provide radar advisory service.
### AR ROUTES

#### AR230V

**Check Points:**
- LAS VORTAC 026/47
- N36°40.00’ W114°31.50’
- LAS VORTAC 026/83
- N37°07.00’ W114°02.00’

**Exit Points:**
- LAS VORTAC 026/53
- N36°44.75’ W114°26.50’
- LAS VORTAC 026/02.00’
- N36°44.00’ W114°40.75’

**CR Plan:**
- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**Refueling Altitudes:**
- Use 66 ARS assigned frequencies

**Scheduling Unit:**
- 06000/08000 57 OSS/OSOS

**Assigned ARTCC:**
- Los Angeles ARIP-124.2/343.6

#### REMARKS:
Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 66 ARS use only. Protected airspace is 4 NM either side of centerline. Air refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers. For VFR use only.

1. Advise Los Angeles ARTCC on 124.2/343.6 prior to entry.

#### AR231V

**Check Points:**
- BTY VORTAC 123/44
- N36°15.00’ W116°09.50’
- BTY VORTAC 123/37
- N36°20.00’ W116°14.75’

**Exit Points:**
- BTY VORTAC 125/5
- N36°44.00’ W116°40.75’

**CR Plan:**
- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**Refueling Altitudes:**
- Use 66 ARS assigned frequencies

**Scheduling Unit:**
- 06000/08000 57 OSS/OSOS

**Assigned ARTCC:**
- Los Angeles ARCP

#### REMARKS:
Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 66 ARS use only. Protected airspace is 4 NM either side of centerline. Air refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers. For VFR use only.

1. Advise Los Angeles ARTCC on 124.2/343.6 prior to entry.

#### AR242V

**Check Points:**
- N36°56.00’ W120°56.00’
- N36°51.00’ W120°53.00’

**Exit Points:**
- N36°28.00’ W120°41.00’

**CR Plan:**
- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**Refueling Altitudes:**
- Use 129 ROW assigned frequencies

**Scheduling Unit:**
- 00500/04500 129 OSS/OSK

**Assigned ARTCC:**
- Stockton APP CON ARIP-120.95/294.5

#### REMARKS:
Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Refueling may be conducted in either direction. The northern end of the track is 9 NM south-southwest of Los Banos, CA and about 3 NM west of Interstate 5. The southern end of the track is 28 NM west of Five Pointes, CA. The total length of the route is 32 NM. Width is 2 NM either side of the centerline.

1. Refueling altitudes are normally below Stockton Approach Control radar advisory service capabilities.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR243V (North)</td>
<td>N36°23.00'</td>
<td>N36°18.00'</td>
<td>N36°40.00'</td>
<td>W121°00.00'</td>
<td>N35°40.00'</td>
<td>W120°22.00'</td>
<td>00500/05500</td>
</tr>
<tr>
<td></td>
<td>W120°56.00'</td>
<td>①</td>
<td>W120°22.00'</td>
<td>②</td>
<td>500 AGL/5500 MSL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use 129 RQW assigned frequencies

| NORTH | N36°23.00' | N36°40.00' | N35°40.00' | W121°00.00' | N35°23.00' | W120°22.00' | 03100/05000 | 129RQW | Moffett Federal Afd, CA DSN 359-9356/7 C650-603-9356/7 | Seattle ARCP |
| SOUTH | N35°40.00' | N35°45.00' | ①          | N36°23.00' | W120°26.00' | W121°00.00' |                 |                 |                 |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting.

① AR243V is designed to be used in either direction on a magnetic course of 128 degree or 308 degree. The northern end of the track is 12 NM northeast of King City, CA. The southern end of the track is 1 NM northeast of Shandon, CA. The total length of the route is 54 NM, the width is 2 NM either side of centerline.

② Restricted to H-60G and C-130 refueling operations. May include multiple tankers and/or receivers. Continuous time of operations.

③ Refueling altitudes are normally below Oakland Center radar advisory service capabilities.

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction North to South. Protected airspace is 4 NM either side of centerline. Track length is 45 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. Contact Seattle ARTCC for radar advisories and flight following. Participants will communicate with ATC during refueling operations.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR304BV</td>
<td>BTG VORTAC</td>
<td>BTG VORTAC</td>
<td>164/75 N44°30.00'N44°30.00'</td>
<td>a. N/R</td>
<td>03100/05000</td>
<td>129RQW</td>
<td>Seattle ARCP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W122°44.00'W122°44.00'</td>
<td>b. N/R</td>
<td>Moffett Federal Afd, CA</td>
<td>DSN 359-9356/7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N45°15.00'N44°36.00'</td>
<td>c. N/R</td>
<td>C650-603-9356/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W122°44.00'W122°44.00'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>a. Prim Freq</td>
<td>125.8; b. Backup Freq 291.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction South to North. Protected airspace is 4 NM either side of centerline. Track length is 45 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. Contact Seattle ARTCC for radar advisories and flight following. Participants will communicate with ATC during refueling operations.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR305AV</td>
<td>DSD VORTAC</td>
<td>DSD VORTAC</td>
<td>342/14 N44°29.18'N44°35.17'</td>
<td>a. N/R</td>
<td>01500/06000</td>
<td>129RQW</td>
<td>Seattle ARIP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W121°18.15'W121°18.15'</td>
<td>b. N/R</td>
<td>Moffett Federal Afd, CA</td>
<td>DSN 359-9356/7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N45°31.13'N45°31.13'</td>
<td>c. N/R</td>
<td>C650-603-9356/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W121°18.15'W121°18.15'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>a. Prim Freq</td>
<td>128.15; b. Backup Freq 288.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction South to North. Protected airspace is 4 NM either side of centerline. Track length is 62 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. South of lat. N45-00-00 remain at or above 4500’. Participants will contact Seattle ARTCC prior to entering Class E airspace.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR305BV</td>
<td>DSD VORTAC</td>
<td>DSD VORTAC</td>
<td>342/76 N45°31.13'N45°25.13'</td>
<td>a. N/R</td>
<td>01500/06000</td>
<td>129RQW</td>
<td>Seattle</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W121°18.15'W121°18.15'</td>
<td>b. N/R</td>
<td>Moffett Federal Afd, CA</td>
<td>DSN 359-9356/7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N45°31.13'N45°31.13'</td>
<td>c. N/R</td>
<td>C650-603-9356/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W121°18.15'W121°18.15'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>a. Prim Freq</td>
<td>128.15; b. Backup Freq 288.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction North to South. Protected airspace is 4 NM either side of centerline. Track length is 62 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. South of lat. N45-00-00 remain at or above 4500’. Participants will contact Seattle ARTCC prior to entering Class E airspace.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR306AV</td>
<td>LTJ VOR-DME</td>
<td>LTJ VOR-DME</td>
<td>LTJ VOR-DME</td>
<td>a. N/R</td>
<td>01000/05000</td>
<td>129RQW</td>
<td>Seattle ARIP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>145/10</td>
<td>145/16</td>
<td>145/47</td>
<td>b. N/R</td>
<td>Moffett Federal Afd, CA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N45°33.12'</td>
<td>N45°27.28'</td>
<td>N44°57.20'</td>
<td>c. N/R</td>
<td>DSN 359-9356/7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W121°02.53'</td>
<td>W121°00.47'</td>
<td>W120°49.92'</td>
<td>d. N/R</td>
<td>C650-603-9356/7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. N/R</td>
<td>a. Prim Freq</td>
<td>128.15; Backup</td>
<td>b. Backup Freq</td>
<td>288.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction North to South. Protected airspace is 4 NM either side of centerline. Track length is 37 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. Participants will contact Seattle ARTCC prior to entering Class E airspace.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR306BV</td>
<td>LTJ VOR-DME</td>
<td>LTJ VOR-DME</td>
<td>LTJ VOR-DME</td>
<td>a. N/R</td>
<td>01000/05000</td>
<td>129RQW</td>
<td>Seattle ARCP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>145/47</td>
<td>145/10</td>
<td>145/41</td>
<td>b. N/R</td>
<td>Moffett Federal Afd, CA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N44°57.20'</td>
<td>N45°33.12'</td>
<td>N45°03.02'</td>
<td>c. N/R</td>
<td>DSN 359-9356/7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W120°49.92'</td>
<td>W120°51.93'</td>
<td>W121°02.53'</td>
<td>d. N/R</td>
<td>C650-603-9356/7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. N/R</td>
<td>a. Prim Freq</td>
<td>128.15; b. Backup Freq</td>
<td>288.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction South to North. Protected airspace is 4 NM either side of centerline. Track length is 37 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. Participants will contact Seattle ARTCC prior to entering Class E airspace.
VFR HELICOPTER REFUELING ANCHOR

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR662V</td>
<td>N36°35.00' W120°31.00'</td>
<td>PXN VORTAC</td>
<td>PXN VORTAC</td>
<td>PXN VORTAC</td>
<td>N36°40.00' W120°25.00'</td>
<td>01200/03700</td>
<td>129RQW</td>
<td>Moffett Federal Afd, CA</td>
<td>NAS Lemoore</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>106/15</td>
<td></td>
<td>110/23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N36°35.00' W120°29.00'</td>
<td></td>
<td>N36°35.00' W120°24.00'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATC ASSIGNED AIRSPACE:** None.

**REMARKS:** Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting.

1. AR662V is designed to be used in a left-hand racetrack with a pattern length of 8 NM on an inbound magnetic course of 118 degree. The northwest end of the anchor (ARIP) is 15 NM on the 107 degree radial from the Panoche VORTAC, 12 NM southwest of Firebaugh, CA and about 1 NM east of Interstate Highway 5. The southeastern end (Anchor Point) of the track is 23 NM on the 110 degree radial from the Panoche VORTAC. The total length of the straight line part of the anchor is 8 NM.
2. The northwest leg parallels the southeast leg and is offset to the east about 7 NM. While operating on the anchor, every attempt should be made to fly over the defined centerline of the parallel tracks.
3. Restricted to H-60 helicopter and C-130 refueling operations. May include multiple tankers and/or receivers.
4. Aircraft shall contact Lemoore Approach Control on 318.8/124.1 prior to commencing/terminating refueling operations. Lemoore Approach Control shall provide radar advisory service upon request to aircraft operating in AR662V.
INTENTIONALLY LEFT BLANK
## I. NUCLEAR POWER PLANTS

<table>
<thead>
<tr>
<th>PLANTS</th>
<th>COORDINATES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CANADA</strong></td>
<td></td>
</tr>
<tr>
<td>Bruce</td>
<td>N44°22' W81°36'</td>
</tr>
<tr>
<td>Douglas Point</td>
<td>N44°20' W81°36'</td>
</tr>
<tr>
<td>Gentilly</td>
<td>N46°25' W72°22'</td>
</tr>
<tr>
<td>Nuclear Power Demonstration</td>
<td>N46°11' W77°39'</td>
</tr>
<tr>
<td>Pickering</td>
<td>N43°49' W79°04'</td>
</tr>
</tbody>
</table>

| **UNITED STATES** | |
| Arkansas 1, 2-AR | N35°18'36" W93°11'51" |
| Beaver Valley 1, 2-PA | N40°37'19" W80°26'02" |
| Bellefonte—AL | N45°21'33" W88°13'44" |
| Big Rock Point—MI | N45°21'33" W88°13'44" |
| Browns Ferry 1, 2-AL | N34°42'15" W87°07'07" |
| Brunswick 1, 2-NC | N33°57'30" W78°00'38" |
| Byron 1, 2-IL | N42°04'30" W89°16'55" |
| Callaway—MO | N38°45'40" W91°14'54" |
| Calvert Cliffs 1, 2- MD | N38°26'05" W76°26'31" |
| Catawba 1, 2-SC | N35°03'05" W81°04'10" |
| Clinton—IL | N40°10'19" W88°50'03" |
| Comanche Peak—TX | N32°17'52" W97°47'06" |
| Cook 1, 2-MI | N41°58'34" W86°33'59" |
| Cooper Station—NE | N40°21'43" W95°38'28" |
| Crystal River—FL | N28°57'26" W82°41'56" |
| Davis Besse—OH | N41°35'50" W83°05'11" |
| Diablo Canyon 1, 2-CA | N35°12'42" W120°51'08" |
| Dresden 1, 2, 3-IL | N40°21'23" W88°16'16" |
| Duane Arnold—IA | N42°06'02" W91°46'59" |
| Farley 1, 2-AL | N31°13'22" W86°06'45" |
| Fermi 1, 2-MI | N41°57'48" W83°15'31" |
| Fitzpatrick—NY | N43°31'26" W76°23'54" |
| Ft. Calhoun—NE | N41°31'15" W96°04'36" |
| GE Vallecitos—CA | N37°31'00" W121°48'30" |
| Ginna—NY | N43°16'40" W77°18'32" |
| Grand Gulf—MS | N32°00'27" W91°46'54" |
| Haddam Neck—CT | N41°28'55" W72°29'57" |
| Harris—NC | N35°38'00" W78°17'22" |
| Hatch 1,2-GA | N31°56'03" W82°20'40" |
| Hope Creek—NJ | N39°28'04" W75°32'17" |
| Humboldt Bay—CA | N40°44'31" W124°12'29" |
| Indian Point 1, 2, 3-NY | N41°16'17" W73°57'09" |
| Kewaunee—WI | N44°20'35" W87°32'10" |
| La Crosse—WI | N43°33'36" W91°13'42" |
| Lasalle County 1, 2-IL | N43°14'38" W88°40'15" |
| Limerick 1, 2-PA | N40°13'12" W75°35'24" |
| Maine Yankee—ME | N43°57'02" W69°41'46" |
| McGuire 1, 2—NC | N35°25'56" W80°56'54" |
| Millstone 1, 2, 3-CT | N41°18'31" W72°10'05" |
| Monticello—MN | N45°20'00" W93°50'54" |
| Nine Mile Point 1, 2—NY | N43°31'20" W76°24'36" |
| North Anna 1, 2-VA | N38°03'39" W77°47'26" |
| Oconee 1, 2, 3-SC | N34°47'30" W82°53'55" |
| Oyster Creek—NJ | N39°48'51" W74°12'23" |
| Palisades—MI | N42°19'20" W86°18'55" |
| Palo Verde 1, 2-AZ | N33°23'23" W112°51'43" |
| Peach Bottom 1, 2, 3-PA | N39°45'32" W76°16'09" |
| Perry—OH | N41°48'04" W81°08'36" |
| Pilgrim Station—MA | N41°56'40" W70°34'46" |
| Point Beach 1, 2—WI | N44°16'51" W87°32'10" |
| Prairie Island 1, 2—MN | N44°37'10" W92°37'59" |
| Quad Cities 1, 2—IL | N41°43'34" W90°18'36" |
| Rancho Seco—CA | N38°20'46" W121°07'08" |
| River Bend—LA | N30°45'26" W91°19'54" |
| Robinson—SC | N34°24'19" W80°09'31" |
| Salem 1, 2—NJ | N39°27'46" W75°32'09" |
| San Onofre 1, 2, 3—CA | N33°22'13" W117°33'25" |
| Seabrook—NH | N42°53'53" W70°51'05" |
| Sequoyah 1, 2—TN | N35°13'24" W85°05'16" |
| South Texas—TX | N28°47'42" W96°02'53" |
| St. Lucie 1, 2—FL | N27°20'55" W80°14'47" |
| Summer-SC | N34°17'45" W81°19'13" |
| Surry 1, 2—VA | N37°09'56" W76°41'54" |
| Susquehanna 1, 2-PA | N41°05'30" W76°08'55" |
| Three Mile Island 1, 2—PA | N40°09'11" W76°43'30" |
| Trojan—OR | N46°02'27" W122°53'04" |
| Turkey Point 3, 4—FL | N25°26'06" W80°19'53" |
| Vermont Yankee—VT | N42°46'49" W72°30'57" |
| Vogtle 1, 2—GA | N33°08'31" W81°48'53" |
| Waterford 3—LA | N29°59'42" W90°28'16" |
| Watts Bar—TN | N35°36'10" W84°47'25" |
| WPN 2—WA | N46°18'17" W119°19'59" |

## II. RADIOACTIVE WASTE SITES

- **A. West Valley, NY:** 1.5 NM radius circle centered on N42°27'00" W78°38'45".
- **B. Morris Operation, IL:** N41°22'53" W88°16'32".
- **C. Humboldt Bay, CA:** N40°42'28" W124°12'33".
- **D. LaCrosse, WI:** N43°33'30" W91°13'50".

## III. SUPERSONIC FLIGHT

In accordance with AFI 13-201, the following are designated HQ USAF Specified Critical areas and shall be avoided by one-half (1/2) NM FOR EACH 1,000 feet of flight altitude up to a maximum of 30 NM.

- **A. Fort Jefferson National Monument, Florida.**
- **B. Morris Operation, IL:** N41°22'53" W88°16'32".
- **C. Humboldt Bay, CA:** N40°42'28" W124°12'33".
- **D. LaCrosse, WI:** N43°33'30" W91°13'50".

---

**Chapter 6**

**AVOIDANCE LOCATIONS**
D.  Rainbow Bridge National Monument and Natural Bridges National Monument, Utah.

E.  Death Valley National Monument, California.