U.S. Terminal Procedures Publication
Northeast (NE) Vol 3 of 4

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25 JAN 2024

Consult the Change Notice (CN) effective 28 DEC 2023 for revised Instrument Procedure Charts for this volume

Consult NOTAMs for latest information
Consult/Subscribe to FAA Safety Alerts and Charting Notices at:
http://www.faa.gov/air_traffic/flight_info/aeronav/safety_alerts/
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**CORRECTIONS, COMMENTS AND/OR PROCUREMENT**

FOR CHARTING ERRORS, OR FOR CHANGES, ADDITIONS, RECOMMENDATIONS ON PROCEDURAL ASPECTS CONTACT:
FAA, Aeronautical Information Services
1305 East-West Highway
SSMC 4, Room 4531
Silver Spring, MD 20910-3281
Telephone: 1-800-638-8972
https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/

For inquiries regarding military charts, please contact aerohelp@nga.mil

FOR PROCUREMENT:
For digital products, visit our website at: https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/

For a list of approved FAA Print Providers, visit our website at:
https://www.faa.gov/air_traffic/flight_info/aeronav/print_providers/

Frequently asked questions (FAQ) are answered on our website at: https://www.faa.gov/go/ais
See the FAQs prior to contact via toll free number or email.

Request for the creation or revisions to Airport Diagrams should be in accordance with FAA Order 7910.4
### INOP COMPONENTS OR VISUAL AIDS TABLE

(For Civil Use Only)

Straight-in and Sidestep landing minimums published on instrument approach procedure charts are based on full operation of all components and visual aids (see exception below for ALSF 1 & 2) associated with the particular approach chart being used. Higher minimums are required with inoperative components or visual aids as indicated below. If more than one component is inoperative, each minimum is raised to the highest minimum required by any single component that is inoperative. ILS glideslope inoperative minimums are published on the instrument approach charts as localizer minimums. This table applies to approach categories A thru D and is to be used unless amended by notes on the approach chart. Such notes apply only to the particular approach category(ies) as stated. Category E inoperative notes will be specified when published on civil charts. The inoperative table does not apply to Circling minimums. See legend page for description of components indicated below.

Full Operation Exception: For ALSF 1 & 2 operated as SSALR, or when the sequenced flashing lights are inoperative, there is no effect on visibility for ILS lines of minima.

#### (1) ILS, PAR, LPV, GLS minima

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ALS types (except ODALS)</td>
<td>¼ mile</td>
</tr>
</tbody>
</table>

#### (2) ILS, LPV, GLS with visibility minima of RVR 1800 / 2000 / 2200 *

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALSF 1 &amp; 2, MALSR, SSALR</td>
<td>To RVR 4000†</td>
</tr>
<tr>
<td></td>
<td>To RVR 4500*</td>
</tr>
<tr>
<td>TDZL or RCLS</td>
<td>To RVR 2400#</td>
</tr>
<tr>
<td>RVR</td>
<td>To ½ mile</td>
</tr>
</tbody>
</table>

*For ILS, LPV, GLS procedures with a 200 foot HAT, RVR 1800 authorized with use of FD or AP or HUD to DA.

#### (3) All Approach Types and all lines of minima other than (1) & (2) above

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALSF 1 &amp; 2, MALSR, SSALR</td>
<td>½ mile</td>
</tr>
<tr>
<td>MALSF, MALS, SSALF, SSALS, SALSF, SALS</td>
<td>¼ mile</td>
</tr>
</tbody>
</table>

#### (4) Sidestep minima (CAT C-D)

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid to Sidestep Runway</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALSF 1 &amp; 2, MALSR, SSALR</td>
<td>½ mile</td>
</tr>
</tbody>
</table>

#### (5) All Approach Types, All lines of minima

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ODALS (CAT A-B)</td>
<td>¼ mile</td>
</tr>
<tr>
<td>ODALS (CAT C-D)</td>
<td>½ mile</td>
</tr>
</tbody>
</table>
TERMS/LANDING MINIMA DATA 20142

IFR LANDING MINIMA

The United States Standard for Terminal Instrument Procedures (TERPS) is the approved form for formulating instrument approach procedures. Landing minima are established for six aircraft approach categories (ABCDE and COPTER).

In the absence of COPTER MINIMA, helicopters may use the CAT A minimums of other procedures.

LANDING MINIMA FORMAT

In this example airport elevation is 1179, and runway touchdown zone elevation is 1152.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-ILS 27</td>
<td>1352/24</td>
<td>200</td>
<td>(200-1½)</td>
<td>1440/50</td>
</tr>
<tr>
<td>S-LOC 27</td>
<td>1440/24</td>
<td>288</td>
<td>(300-1½)</td>
<td>1740-2</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1540-1</td>
<td>1640-1</td>
<td>1640-1½</td>
<td>561(600-2)</td>
</tr>
</tbody>
</table>

Visibility in Statute Miles

NOTE: All weather minima, when published in parentheses, are not applicable to Civil Pilots. Military Pilots refer to appropriate regulations.

Visibility in Statute Miles

| CATEGORY | 680-½ | 363 | (400-½) |

HAT

COPPER MINIMA ONLY

NOTE: The symbol indicates outages of the WAAS vertical guidance may occur daily at this location due to initial system limitations. WAAS NOTAMS for vertical outages are not provided for this approach. Use LNAV minima for flight planning at these locations, whether as a destination or alternate. For flight operations at these locations, when the WAAS avionics indicate that LNAV/VNAV or LPV service is available, then vertical guidance may be used to complete the approach using the displayed level of service. Should an outage occur during the procedure, reversion to LNAV minima may be required.

As the WAAS coverage is expanded, the symbol will be removed.

RNAV minimums are dependent on navigation equipment capability, as stated in the applicable AFM, AFMS, or other FAA approved document. See AIM paragraph 5-4-5, AC 90-105 and AC 90-107 for detailed requirements for each line of minima.

COLD TEMPERATURE AIRPORTS

NOTE: The symbol indicates a cold temperature altitude correction is required at this airport when reported temperature is at or below the published temperature. See the following Cold Temperature Error Table to make manual corrections. Advise ATC with altitude correction. Advising ATC with altitude corrections is not required in the final segment.

See Aeronautical Information Manual (AIM), Chapter 7, for guidance and additional information. For a complete list, see the "Cold Temperature Airports" link under the Additional Resources heading at the bottom of the following page:
http://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dtpp/search/

COLD TEMPERATURE ERROR TABLE

HEIGHT ABOVE AIRPORT IN FEET

<table>
<thead>
<tr>
<th>REPORTED TEMP °C</th>
<th>200</th>
<th>300</th>
<th>400</th>
<th>500</th>
<th>600</th>
<th>700</th>
<th>800</th>
<th>900</th>
<th>1000</th>
<th>1500</th>
<th>2000</th>
<th>3000</th>
<th>4000</th>
<th>5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>20</td>
<td>20</td>
<td>30</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>90</td>
<td>90</td>
<td>120</td>
<td>200</td>
<td>240</td>
</tr>
<tr>
<td>-10</td>
<td>30</td>
<td>30</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>90</td>
<td>120</td>
<td>120</td>
<td>150</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td>-20</td>
<td>30</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>120</td>
<td>130</td>
<td>140</td>
<td>200</td>
<td>280</td>
<td>380</td>
<td>420</td>
</tr>
<tr>
<td>-30</td>
<td>30</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>150</td>
<td>170</td>
<td>170</td>
<td>200</td>
<td>280</td>
<td>380</td>
<td>420</td>
</tr>
<tr>
<td>-40</td>
<td>30</td>
<td>50</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>150</td>
<td>170</td>
<td>180</td>
<td>220</td>
<td>240</td>
<td>300</td>
<td>380</td>
<td>570</td>
</tr>
<tr>
<td>-50</td>
<td>30</td>
<td>60</td>
<td>90</td>
<td>120</td>
<td>150</td>
<td>180</td>
<td>210</td>
<td>240</td>
<td>270</td>
<td>300</td>
<td>380</td>
<td>570</td>
<td>650</td>
<td>890</td>
</tr>
</tbody>
</table>

COLD TEMPERATURE AIRPORTS

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>HAT</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

AIRCRAFT APPROACH CATEGORIES

Aircraft approach category indicates a grouping of aircraft based on a speed of VREF, if specified, or if VREF not specified, 1.3 VSO at the maximum certificated landing weight. VREF, VSO, and the maximum certificated landing weight are those values as established for the aircraft by the certification authority of the country of registry. Helicopters are Category A aircraft. An aircraft shall fit in only one category. When necessary to operate the aircraft at an airspeed in excess of the maximum airspeed of its certified aircraft approach category, pilots should use the applicable higher category minima.

For additional options and to ensure the aircraft remains within protected airspace, consult the AIM. See following category limits:

MANEUVERING TABLE

<table>
<thead>
<tr>
<th>Speed (Knots)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-90</td>
<td>91-120</td>
<td>121-140</td>
<td>141-165</td>
<td>Abv 165</td>
<td></td>
</tr>
</tbody>
</table>

TERMS/LANDING MINIMA DATA 20142
TERMS/LANDING MINIMA DATA

CIRCLING APPROACH OBSTRUCTION PROTECTED AIRSPACE

The circling MDA provides vertical obstacle clearance during a circle-to-land maneuver. The circling MDA protected area extends from the threshold of each runway authorized for landing following a circle-to-land maneuver for a distance as shown in the tables below. The resultant arcs are then connected tangentially to define the protected area.

STANDARD CIRCLING APPROACH MANEUVERING RADIUS

Circling approach protected areas developed prior to late 2012 used the radius distances shown in the following table, expressed in nautical miles (NM), dependent on aircraft approach category. The approaches using standard circling approach areas can be identified by the absence of the □ symbol on the circling line of minima.

<table>
<thead>
<tr>
<th>Circling MDA in feet MSL</th>
<th>Approach Category and Circling Radius (NM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAT A</td>
</tr>
<tr>
<td>All Altitudes</td>
<td>1.3</td>
</tr>
</tbody>
</table>

□ EXPANDED CIRCLING APPROACH MANEUVERING AIRSPACE

Circling approach protected areas developed after late 2012 use the radius distance shown in the following table, expressed in nautical miles (NM), dependent on aircraft approach category, and the altitude of the circling MDA, which accounts for true airspeed increase with altitude. The approaches using expanded circling approach areas can be identified by the presence of the □ symbol on the circling line of minima.

<table>
<thead>
<tr>
<th>Circling MDA in feet MSL</th>
<th>Approach Category and Circling Radius (NM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAT A</td>
</tr>
<tr>
<td>1000 or less</td>
<td>1.3</td>
</tr>
<tr>
<td>1001-3000</td>
<td>1.3</td>
</tr>
<tr>
<td>3001-5000</td>
<td>1.3</td>
</tr>
<tr>
<td>5001-7000</td>
<td>1.3</td>
</tr>
<tr>
<td>7001-9000</td>
<td>1.4</td>
</tr>
<tr>
<td>9001 and above</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Comparable Values of RVR and Visibility

The following table shall be used for converting RVR to ground or flight visibility. For converting RVR values that fall between listed values, use the next higher RVR value; do not interpolate. For example, when converting 4800 RVR, use 5000 RVR with the resultant visibility of 1 mile.

<table>
<thead>
<tr>
<th>RVR (feet)</th>
<th>Visibility (SM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600</td>
<td>1/4</td>
</tr>
<tr>
<td>1800</td>
<td>1/2</td>
</tr>
<tr>
<td>2000</td>
<td>5/8</td>
</tr>
<tr>
<td>2200</td>
<td>5/16</td>
</tr>
</tbody>
</table>

Radar Minima:

1. Minima shown are the lowest permitted by established criteria. Pilots should consult applicable directives for their category of aircraft.
2. The circling MDA and weather minima to be used are those for the runway to which the final approach is flown, not the landing runway. In the above RADAR MINIMA example, a category C aircraft flying a radar approach to runway 10, circling to land on runway 28, must use an MDA of 560 feet with weather minima of 500-1/4.

NOTE: Military RADAR MINIMA may be shown with communications symbology that indicates emergency frequency monitoring capability by the radar facility as follows: (E) VHF and UHF emergency frequencies monitored

Radar Minima:

1. Minima shown are the lowest permitted by established criteria. Pilots should consult applicable directives for their category of aircraft.
2. The circling MDA and weather minima to be used are those for the runway to which the final approach is flown, not the landing runway. In the above RADAR MINIMA example, a category C aircraft flying a radar approach to runway 10, circling to land on runway 28, must use an MDA of 560 feet with weather minima of 500-1/4.

NOTE: Military RADAR MINIMA may be shown with communications symbology that indicates emergency frequency monitoring capability by the radar facility as follows: (E) VHF and UHF emergency frequencies monitored

Additionally, unmonitored frequencies which are available on request from the controlling agency may be annotated with an "x".

Alternate Minimums not standard. Civil users refer to tabulation, USA/USN/USAF pilots refer to appropriate regulations.

Airport is published in the Takeoff Minimums, (Obstacle) Departure Procedures, and Diverse Vector Area (Radar Vectors) tabulation.
GENERAL INFORMATION

This publication is issued every 56 days and includes Standard Instrument Approach Procedures (SIAPS), Standard Instrument Departures (SIDs), Standard Terminal Arrivals (STARs), IFR Takeoff Minimums and (Obstacle) Departure Procedures (ODPs), IFR Alternate Minimums, and Radar Instrument Approach Minimums for use by civil and military aviation. The organization responsible for SIAPS, Radar Minimums, SIDs, STARs and graphic ODPs is identified in parentheses in the top margin of the procedure; e.g., (FAA), (FAA-O), (USA), (USAF), (USN). SIAPS with the (FAA) and (FAA-O) designation are regulated under 14 CFR, Part 97. SIAPs with the (FAA-O) designation have been developed under Other Transaction Agreement (OTA) by private providers and have been certified by the FAA. See 14 CFR, Part 91.175 (a) and the AIM for further details. 14 CFR, Part 91.175 (g) and the Special Notices section of the Chart Supplement contain information on civil operations at military airports.

The FAA uses an internal numbering system on all charts in the TPP. This Approach and Landing (AL) number is located on the top center margin of the chart followed by the organization responsible for the procedure in parentheses, e.g., AL-18 (FAA), AL-11919 (FAA-O). Military procedures do not show AL number, but do show the appropriate authority for the procedure, e.g., (USAF).

CHART CURRENCY INFORMATION

Date of Latest Revision                  09365
The Date of Latest Revision identifies the Julian date the chart was added or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest revision of any kind has been made to the chart.

FAA Procedure Amendment Number Orig 31DEC09 Procedure Amendment Effective Date 12MAR09
The FAA Procedure Amendment Number represents the most current amendment of a given procedure. The Procedure Amendment Effective Date represents the AIRAC cycle date on which the procedure amendment was incorporated into the chart. Updates to the amendment number & effective date represent procedural/criteria revisions to the charted procedure, e.g., course, fix, altitude, minima, etc. On Departure Procedures and Standard Terminal Arrivals, procedural revisions to the current chart are indicated by an upnumber to the procedure title with the procedure amendment effective date following. On Radar Minima, Takeoff Minimums and (Obstacle) Departure Procedures and Diverse Vector Areas, the FAA Procedure Amendment Number, Procedure Effective Date, and the Julian Date of Last Revision will be shown on the same line, e.g., AMDT 2 10DEC15 (15344).

MISCELLANEOUS

* Indicates a non-continuously operating facility, see Chart Supplement.

For Civil (FAA) instrument procedures, "RADAR REQUIRED" in the planview of the chart indicates that ATC radar must be available to assist the pilot when transitioning from the en route environment. "Radar required" in the pilot briefing portion of the chart indicates that ATC radar is required on portions of the procedure outside the final approach segment, including the missed approach. Some military procedures also have equipment requirements such as "Radar Required", but do not conform to the same charting application standards used by the FAA.

Distances are in nautical miles (except visibility in statute miles and Runway Visual Range in hundreds of feet). Runway dimensions are in feet. Elevations are in feet, Mean Sea Level (MSL). Ceilings are in feet above airport elevation. Radials/bearings/headings/courses are magnetic. Horizontal Datum: Unless otherwise noted on the chart, all coordinates are referenced to North American Datum 1983 (NAD 83), which for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

Terrain is scaled within the neat lines (planview boundaries) and does not accurately underlie not-to-scale distance depictions or symbols.
STANDARD TERMINAL ARRIVALS AND DEPARTURE PROCEDURES

The use of the associated codified STAR/DP and transition identifiers are requested of users when filing flight plans online. It must be noted that when filing a STAR/DP with a transition, the first three coded characters of the STAR and the last three coded characters of the DP are replaced by the transition code. Examples: ACTON SIX ARRIVAL, file (AQN.AQN6); ACTON SIX ARRIVAL, EDNAS TRANSITION, file (EDNAS.AQN6); FREEHOLD THREE DEPARTURE, file (FREH3.RBV), FREEHOLD THREE DEPARTURE, ELWOOD CITY TRANSITION, file (FREH3.EWC).

PROCEDURE PBN/EQUIPMENT REQUIREMENTS

Users will begin to see Performance-Based Navigation (PBN) Requirements and Equipment Requirements on Instrument Approach Procedures (IAPs), RNAV STARs and RNAV DPs prominently displayed in separate, standardized notes boxes. For procedures with PBN elements, the PBN box will contain the procedure’s navigation specification(s); and, if required: specific sensors or infrastructure needed for the navigation solution; any additional or advanced functional requirements; the minimum Required Navigation Performance (RNP) value and any amplifying remarks. Items listed in this PBN box are REQUIRED for the procedure’s PBN elements. The Equipment Requirements Box will list non-PBN requirements. On charts with both PBN elements and equipment requirements, the PBN requirements box will be listed first. The publication of these notes will continue incrementally until all charts have been amended to comply with the new standard.

IAP PBN/Equipment Requirements Notes Box

PBN Requirements Box

From WINRZ, UBGE: RNAV-1 GPS, RNAV-1GPS from MAP to YARKU.

Equipment Requirements Box

DME required for LOC only.

Standard Procedure Notes Box

✈ Circling to Rwy 25 NA at night.

# For inop MALSR increase S-ILS 16R all cats visibility to 2½ SM.

RNAV STAR and DP PBN/Equipment Requirements Notes Box

PBN Requirements Box

RNAV 1 - DME/DME/IRU or GPS

Equipment Requirements Box

RADAR required

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Reference the Chart Supplement for detailed information on pilot controlled lighting (PCL) systems.

Available FAA standard approach lighting systems are charted as a negative symbol to indicate pilot controlled lighting, e.g., 🚺, ☐.

Available airport lighting systems that are charted as notes, e.g. REIL, MIRL, are shown with a negative "◇" symbol beside the name to indicate pilot controlled lighting.

To activate lights, use frequency indicated in the communication section of the chart with a 📞 or the appropriate lighting system identification e.g., UNICOM 122.8 📞, ☚, ☐

KEY MIKE

- 7 times within 5 seconds: Highest intensity available
- 5 times within 5 seconds: Medium or lower intensity (Lower REIL or REIL-off)
- 3 times within 5 seconds: Lowest intensity available (Lower REIL or REIL-off)
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAUP</td>
<td>Attention All Users Page</td>
</tr>
<tr>
<td>ADF</td>
<td>Automatic Direction Finder</td>
</tr>
<tr>
<td>ADIZ</td>
<td>Air Defense Identification Zone</td>
</tr>
<tr>
<td>AFIS</td>
<td>Automatic Flight Information Service</td>
</tr>
<tr>
<td>ALS</td>
<td>Approach Light System</td>
</tr>
<tr>
<td>ALSF</td>
<td>Approach Light System with Sequenced Flashing Lights</td>
</tr>
<tr>
<td>AOB</td>
<td>At or Below</td>
</tr>
<tr>
<td>AP</td>
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<td>Approach Control</td>
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<td>Arrival</td>
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<tr>
<td>ASOS</td>
<td>Automated Surface Observing System</td>
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<tr>
<td>ASR/PAR</td>
<td>Published Radar Minimums at this Airport</td>
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<td>ASSC</td>
<td>Airport Surface Surveillance Systems</td>
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<tr>
<td>ATIS</td>
<td>Automated Terminal Information Service</td>
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<tr>
<td>AUNICOM</td>
<td>Automated UNICOM</td>
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<tr>
<td>AWOS</td>
<td>Automated Weather Observing System</td>
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<td>AZ</td>
<td>Azimuth</td>
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<td>BC</td>
<td>Back Course</td>
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<td>BND</td>
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<td>C</td>
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<tr>
<td>CCW</td>
<td>Counter Clockwise</td>
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<td>Course Deviation Indicator</td>
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<td>Coded Instrument Flight Procedures</td>
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<td>Clearance Delivery</td>
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<td>Computer Navigation Fix</td>
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<td>Controller Pilot Data Link</td>
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<td>CTAF</td>
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<td>Decision Altitude</td>
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<td>DH</td>
<td>Decision Height</td>
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<td>Diverse Vector Area</td>
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<td>Elevation</td>
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<td>Engineered Material Arresting System</td>
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<td>Final Approach Fix</td>
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<td>FD</td>
<td>Flight Director System</td>
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<td>Fan Marker</td>
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<td>FMS</td>
<td>Flight Management System</td>
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<td>GBAS</td>
<td>Ground Based Augmentation System</td>
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<td>Ground Communications Outlet</td>
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<td>Ground based Augmentation System Landing System</td>
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<td>Ground Point of Intersection</td>
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<td>GS</td>
<td>Glide Slope</td>
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<td>HAL</td>
<td>Height above Landing</td>
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<td>Height above Touchdown</td>
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<td>Height above Threshold</td>
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<td>Heads-up Guidance System</td>
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<td>High Intensity Runway Lights</td>
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<td>HUD</td>
<td>Head-up Display</td>
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<td>IAF</td>
<td>Initial Approach Fix</td>
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<td>ICAO</td>
<td>International Civil Aviation Organization</td>
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<td>KIAS</td>
<td>Knots Indicated Airspeed</td>
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<td>LAAS</td>
<td>Local Area Augmentation System</td>
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<td>Localizer Type Directional Aid</td>
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<td>Ldg</td>
<td>Landing</td>
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<td>LIRL</td>
<td>Low Intensity Runway Lights</td>
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<td>LNAV</td>
<td>Lateral Navigation</td>
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<td>LOC</td>
<td>Localizer</td>
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<tr>
<td>LP</td>
<td>Localizer Performance</td>
</tr>
<tr>
<td>LPV</td>
<td>Localizer Performance with Vertical Guidance</td>
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<tr>
<td>LR</td>
<td>Lead Radial. Provides at least 2 NM (Copter 1 NM) of lead to assist in turning onto the intermediate/final course.</td>
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<td>MAA</td>
<td>Maximum Authorized Altitude</td>
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<td>MALS</td>
<td>Medium Intensity Approach Light System</td>
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<tr>
<td>MALSF</td>
<td>Medium Approach Lighting System with Sequenced Flashers</td>
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<tr>
<td>MALSR</td>
<td>Medium Intensity Approach Light System with RAIL</td>
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<tr>
<td>MAP</td>
<td>Missed Approach Point</td>
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<tr>
<td>MDA</td>
<td>Minimum Descent Altitude</td>
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<td>MIRL</td>
<td>Minimum Intensity Runway Lights</td>
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<td>MM</td>
<td>Middle Marker</td>
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<tr>
<td>MRA</td>
<td>Minimum Reception Altitude</td>
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<td>Not Applicable</td>
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<td>Not Authorized</td>
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<td>Non-directional Radio Beacon</td>
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<tr>
<td>NM</td>
<td>Nautical Mile</td>
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<tr>
<td>NoPT</td>
<td>No Procedure Turn Required (Procedure Turn shall not be executed without ATC clearance)</td>
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---

**CLEARANCE**

Clearance executed without ATC. **(Procedure Turn shall not be executed without an ATC clearance)**
## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ODALS</td>
<td>Omnidirectional Approach Light System</td>
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<td>ODP</td>
<td>Obstacle Departure Procedure</td>
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<td>OM</td>
<td>Outer Marker</td>
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<tr>
<td>PAR</td>
<td>Precision Approach Radar</td>
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<tr>
<td>PDC</td>
<td>Pre-Departure Clearance</td>
</tr>
<tr>
<td>PRM</td>
<td>Precision Runway Monitor</td>
</tr>
<tr>
<td>R</td>
<td>Radial</td>
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<tr>
<td>RA</td>
<td>Radio Altimeter setting height</td>
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<td>RAIL</td>
<td>Runway Alignment Indicator Lights</td>
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<tr>
<td>RCLS</td>
<td>Runway Centerline Light System</td>
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<td>REIL</td>
<td>Runway End Identifier Lights</td>
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<tr>
<td>RF</td>
<td>Radius-to-Fix</td>
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<td>RLLS</td>
<td>Runway Lead-in Light System</td>
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<td>RNAV</td>
<td>Area Navigation</td>
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<td>RNP</td>
<td>Required Performance Navigation</td>
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<tr>
<td>RPI</td>
<td>Runway Point of Intercept(ion)</td>
</tr>
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<td>RRL</td>
<td>Runway Remaining Lights</td>
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<tr>
<td>Rwy</td>
<td>Runway</td>
</tr>
<tr>
<td>RVR</td>
<td>Runway Visual Range</td>
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<td>S</td>
<td>Straight-in</td>
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<tr>
<td>SALS</td>
<td>Short Approach Light System</td>
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<td>SALSF</td>
<td>Short Approach Lighting System with Sequenced Flashing Lights</td>
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<tr>
<td>SSALF</td>
<td>Simplified Short Approach Lighting System with Sequenced Flashers</td>
</tr>
<tr>
<td>SSALR</td>
<td>Simplified Short Approach Light System with RAIL</td>
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<tr>
<td>SSALS</td>
<td>Simplified Short Approach Lighting System</td>
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<td>SDF</td>
<td>Simplified Directional Facility</td>
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<td>SM</td>
<td>Statute Mile</td>
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<td>Simultaneous Offset Instrument Approach</td>
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<td>SR-SS</td>
<td>Sunrise-Sunset</td>
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<td>Terminal Arrival Area</td>
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<tr>
<td>TAC</td>
<td>TACAN</td>
</tr>
<tr>
<td>TCH</td>
<td>Threshold Crossing Height (height in feet above ground level)</td>
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<tr>
<td>TDZ</td>
<td>Touchdown Zone</td>
</tr>
<tr>
<td>TDZE</td>
<td>Touchdown Zone Elevation</td>
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<tr>
<td>TDZ/CL</td>
<td>Touchdown Zone and Runway Centerline Lighting</td>
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<td>TDZL</td>
<td>Touchdown Zone Lights</td>
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<td>THR</td>
<td>Threshold</td>
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<td>TODA</td>
<td>Takeoff Distance Available</td>
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<tr>
<td>TORA</td>
<td>Takeoff Run Available</td>
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<td>TR</td>
<td>Track</td>
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<tr>
<td>VASI</td>
<td>Visual Approach Slope Indicator</td>
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<tr>
<td>VCOA</td>
<td>Visual Climb over Airport</td>
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<td>VDA</td>
<td>Vertical Descent Angle</td>
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<td>VDP</td>
<td>Visual Descent Point</td>
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<td>VGSI</td>
<td>Visual Glide Slope Indicator</td>
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<td>Vertical Navigation</td>
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<td>WAAS</td>
<td>Wide Area Augmentation System</td>
</tr>
<tr>
<td>WP/WPT</td>
<td>Waypoint (RNAV)</td>
</tr>
</tbody>
</table>
**Planview Symbols**

- **Routes**
  - Procedure Track
  - Feeder Route
  - Missed Approach
  - Visual Flight Path

- **Minimum Route Altitude**
  - 3100 NoPT to LOM

- **Procedure Turn**
  - Type degree and point of turn optional

- **Hold-in-lieu of Procedure Turn**
  - Holding Patterns
  - Hold 10000
  - Arrival 8000

- **Fixes/ATC Reporting Requirements**
  - Reporting Point
  - Waypoint
  - MAP WP (Flyby)
  - MAP WP (Flyover)
  - Flyover Point

- **Indicated Airspeed**
  - 175K
  - 120K
  - 250K
  - 180K

- **Radio Aids to Navigation**
  - VOR
  - VORTAC
  - TACAN
  - VOR/DME
  - DME
  - NDB
  - NDB/DME
  - LOM

- **Primary NAV AID**
  - LOM
  - AKRON

- **Secondary NAV AID**
  - SCOTT
  - Chan 59
  - SKE
  - (112.2)

- **Computer Navigation Fix (CNF)**
  - No ATC Function
  - Radial line and value
  - Lead Radial
  - Lead Bearing

---

**Holding Patterns**

- Holding pattern with maximum restricted airspeed:
  - (175K) applies to all altitudes.
  - (210K) applies to altitudes above 6000' to and including 14000'.
  - Arrival Holding Pattern altitude restrictions will be indicated when they deviate from the adjacent leg.

- Timing or distance limits for Hold-in-lieu of Procedure Turn Holding Patterns will be shown. DME fixes may be shown.
LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

PROFILE VIEW

Three different methods are used to depict either electronic or vertical guidance: "GS", "GP", or "VDA".
1. "GS" indicates that an Instrument Landing System (ILS) electronic glide slope (a ground antenna) provides vertical guidance. The profile section of ILS procedures depict a GS angle and TCH in the following format: GS 3.00°.
2. "GP" on GLS and RNAV procedures indicates that either electronic vertical guidance (via Wide Area Augmentation System - WAAS or Ground Based Augmentation System - GBAS) or barometric vertical guidance is provided. GLS and RNAV procedures with a published decision altitude (DA/H) depict a GP angle and TCH in the following format: GP 3.00°.
3. An advisory vertical descent angle (VDA) is provided on non-vertically guided conventional procedures and RNAV procedures with only a minimum descent altitude (MDA) to assist in preventing controlled flight into terrain. On Civil (FAA) procedures, this information is placed above or below the procedure track following the fix it is based on. Absence of a VDA or a note that the VDA is not authorized indicates that the prescribed obstacle clearance surface is not clear and the VDA must not be used below MDA. VDA is depicted in the following format: 3.00°.

On Caper procedures this is depicted in the following format: 7.30°.

ILS or LOC APPROACH

RNAV and GLS PROCEDURES WITH VERTICAL GUIDANCE

NON-VERTICALLY GUIDED CONVENTIONAL PROCEDURES AND RNAV PROCEDURES WITH MDA ONLY

RNP APPROACH WITH TF AND RF SEGMENTS

DESCEFT FROM HOLDING PATTERN

ALTITUDES

PROFILE SYMBOLS

Note: Facilities and waypoints are depicted as a solid vertical line while fixes and intersections are depicted as a dashed vertical line.
**INSTRUMENT APPROACH PROCEDURES (CHARTS)**

**AIRPORT DIAGRAM/AIRPORT SKETCH**

**Runways**
- Hard Surface
- Other Than Hard Surface
- Stopways, Taxiways, Parking Areas
- Metal Surface
- Under Construction
- Water Runway

**ARRESTING GEAR**: Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.

**REFERENCE FEATURES**
- Displaced Threshold
- Hot Spot
- Runway Holding Position Markings
- Buildings
- Self-Serve Fuel ##
- Tanks
- Obstructions
- Airport Beacon #
- Runway Radar Reflectors
- Bridges
- Control Tower #
- Jet Barrier

**Wind Cone**: Unlit or Lit

**Landing Tee**: Unlit or Lit

**Tetrahedron**: Unlit or Lit

**ARRESTING SYSTEM**
- uni-directional
- bi-directional
- Jet Barrier

**ARRESTING SYSTEM (EMAS)**

**Runway Slip**
- 0.3% Down
- 0.8% Up

**NOTE**: Landmark features depicted on Copter Approach insets and sketches are provided for visual reference only.

**Approach light symbols are shown in the Flight Information Handbook.**

**Airport diagram scales are variable.**

**True/magnetic North orientation may vary from diagram to diagram**

**Coordinate values are shown in 1 or 1/2 minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.**

**Positional accuracy within ± 600 feet unless otherwise noted on the chart.**

**Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.**

**A ▬ symbol is shown to indicate runway declared distance information available, see appropriate Chart Supplement for distance information.**

**NOTE**: All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in DoD FLIP. (Foreign Only) The airport sketch box includes the final approach course or final approach course extended.

**Runway TDZ elevation**: TDZE 123

**NOTE**: Runway Slope measured to midpoint on runways 8000 feet or longer.

**U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.**

**Approach light symbols are shown in the Flight Information Handbook.**

**Airport diagram scales are variable.**

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**NOTE**: All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in DoD FLIP. (Foreign Only) The airport sketch box includes the final approach course or final approach course extended.

Airports diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

**LEGEND**
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, e.g., *, o, etc. A dot " • " portrayed approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g., A. Negative symbology, e.g., A, o indicates Pilot Controlled Lighting (PCL).

### Approach Lighting Systems

#### Category I Approach Lighting System

**ALSF-1**

- RED
- GREEN
- WHITE
- SEQUENCED FLASHING LIGHTS

(High Intensity)

LENGTH 2400/3000 FEET

#### Category II Approach Lighting System

**ALSF-2**

- RED
- GREEN
- WHITE
- SEQUENCED FLASHING LIGHTS

(High Intensity)

LENGTH 2400/3000 FEET

NOTE: CIVIL ALSF-2 MAY BE OPERATED AS SSALR DURING FAVORABLE WEATHER CONDITIONS

#### Short Approach Lighting System

**SALS/SALSF**

- RED
- GREEN
- WHITE

(High Intensity)

LENGTH 1500 FEET

**SSALR**

- WHITE
- RAIL
- SEQUENCED FLASHING LIGHTS

LENGTH 2400 FEET

**ODALS**

- WHITE
- OMNIDIRECTIONAL FLASHING LIGHTS

LENGTH 1500 FEET

**TDZ/CL**

- GREEN
- SEQUENCED FLASHING LIGHTS FOR TDZ/CL ONLY

LENGTH 1400 FEET

### Instrument Approach Procedures (Charts)

**Approach Lighting System - United States**

**Approach Lighting System** e.g., Negative symbology, e.g., indicates Pilot Controlled Lighting (PCL).

**Approach Lighting Systems**

- **ALSF-1**
- **ALSF-2**
- **SALS/SALSF**
- **SSALR**
- **ODALS**
- **TDZ/CL**

**Medium Intensity Approach Lighting System**

**MALS**

**MALSF**

**SALS/SALSF**

**SSALR**

**ODALS**

**TDZ/CL**

**Availability** of TDZ/CL will be shown by NOTE in SKETCH e.g. "TDZ/CL Rwy 15"
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, , etc.

A dot * * portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g., . Negative symbology, e.g., , indicates Pilot Controlled Lighting (PCL).

**LEGEND 22195**

**APPROACH LIGHTING SYSTEM - UNITED STATES**

**LEGEND**

- **APPROACH LIGHTING SYSTEM**
- **PATH INDICATOR**
- **PRECISION APPROACH PATH INDICATOR**
- **PULSATING VISUAL APPROACH SLOPE INDICATOR**
- **VISUAL APPROACH SLOPE INDICATOR**
- **VISUAL APPROACH SLOPE INDICATOR**
- **VISUAL APPROACH SLOPE INDICATOR**
- **VISUAL APPROACH SLOPE INDICATOR**
- **VISUAL APPROACH SLOPE INDICATOR**
- **ALIGNMENT OF ELEMENTS SYSTEMS**

**LEGEND 22195**

NE-3, 30 NOV 2023 to 25 JAN 2024

**INSTRUMENT APPROACH PROCEDURES (CHARTS)**

**APPROACH LIGHTING SYSTEM - UNITED STATES**

**PRECISION APPROACH PATH INDICATOR**

- **PAPI**
- **PULSATING VISUAL APPROACH SLOPE INDICATOR**

**VISUAL APPROACH SLOPE INDICATOR**

- **VASI**

**VISUAL APPROACH SLOPE INDICATOR**

- **VASI**

**VISUAL APPROACH SLOPE INDICATOR**

- **VASI**

**VISUAL APPROACH SLOPE INDICATOR**

- **VASI**

**ALIGNMENT OF ELEMENTS SYSTEMS**

- **APAP**

Painted panels which may be lighted at night. To use the system the pilot positions the aircraft so the elements are in alignment.
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<th>TACAN Channel</th>
<th>VHF Frequency</th>
<th>TACAN Channel</th>
<th>VHF Frequency</th>
<th>TACAN Channel</th>
<th>VHF Frequency</th>
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<td>40X</td>
<td>110.30</td>
<td>88Y</td>
<td>114.15</td>
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<td>20X</td>
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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR takeoff minimums other than standard, are listed below. Takeoff Minimums and Departure Procedures apply to all runways unless otherwise specified. An entry may also be listed that contains only Takeoff Obstacle Notes. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are textually described below, or published separately as a graphic procedure. If the ODP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or the applicable military volume, as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not specifically assigned an ODP, SID, or RADAR vector as part of an IFR clearance, an ODP may be required to be flown for obstacle clearance, even though not specifically stated in the IFR clearance. When doing so in this manner, ATC should be informed when the ODP being used contains a specified route to be flown, restrictions before turning, and/or altitude restrictions.

Some ODPs, which are established solely for obstacle avoidance, require a climb in visual conditions to cross the airport, a fix, or a NAVAID in a specified direction, at or above a specified altitude. These procedures are called Visual Climb Over Airport (VCOA). To ensure safe and efficient operations, the pilot must verbally request approval from ATC to fly the VCOA when requesting their IFR clearance.

At some locations where an ODP has been established, a diverse vector area (DVA) may be created to allow RADAR vectors to be used in lieu of an ODP. DVA information will state that headings will be as assigned by ATC and climb gradients, when applicable, will be published immediately following the specified departure procedure.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard takeoff rules and establishes takeoff minimums for certain operators as follows: (1) For aircraft, other than helicopters, having two engines or less – one statute mile visibility. (2) For aircraft having more than two engines – one-half statute mile visibility. (3) For helicopters – one-half statute mile visibility. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) takeoff minima are published below. For military takeoff minima, refer to appropriate service directives.

ABINGDON, VA

VIRGINIA HIGHLANDS (VJI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 03DEC20 (20338) (FAA)

TAKEOFF MINIMUMS:

Rwy 6, 300-2 w/ min. climb of 205’ per NM to 2600, or std. w/ min. climb of 415’ per NM to 2300, or 2000-3 for VCOA.

Rwy 24, std. w/ min. climb of 215’ per NM to 5500, or 2000-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 6, climb on heading 061° to intercept HMV VORTAC R-034 to 5500 before proceeding on course.

Rwy 24, climb on heading 241° to 3700 before proceeding on course.

VCOA:

Rwys 6, 24, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Virginia Highlands at or above 3900 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 6, tree 214’ from DER, 548’ right of centerline, 2111’ MSL.
Electrical system 504’ from DER, 314’ left of centerline, 19’ AGL/2122’ MSL.
Tree 2942’ from DER, 903’ right of centerline, 2240’ MSL.
Tree 4129’ from DER, 228’ left of centerline, 2202’ MSL.
Tree 1.6 NM from DER, 2617’ left of centerline, 2379’ MSL.

Rwy 24, building 12’ from DER, 496’ left of centerline, 50’ AGL/2086’ MSL.
Trees beginning 2231’ from DER, 262’ right of centerline, up to 2168’ MSL.
Tree 3591’ from DER, 14’ left of centerline, 2167’ MSL.
Trees beginning 3962’ from DER, 279’ right of centerline, up to 2200’ MSL.
NE-3, 30 NOV 2023 to 25 JAN 2024

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

ANNEPOLIS, MD

LEE (ANP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 27DEC01 (01361) (FAA)

TAKEOFF MINIMUMS:

Rwy 30, 300-1 or std. with a min. climb of 410' per NM to 400.

DEPARTURE PROCEDURE:

Rwy 12, climb runway heading to 700 before proceeding on course.

Rwy 30, climb runway heading to 1000 before proceeding right on course. Climb runway heading to 700 before proceeding left on course.

TAKEOFF OBSTACLE NOTES:

Rwy 12, cross DER at or above 35' AGL/66' MSL.

Rwy 30, trees, 1433' from DER, 85' left of centerline, 100' AGL/139' MSL.

Cross DER at or above 35' AGL/66' MSL.

BALTIMORE, MD

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 10A 21MAY20 (20142) (FAA)

TAKEOFF MINIMUMS:

Rwy 33L, std. w/min. climb of 268' per NM to 1900.

Rwy 33R, std. w/min. climb of 255' per NM to 2000.

DEPARTURE PROCEDURE:

Rwy 28, climb heading 285° to 900' before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 10, lighting 9' from DER, 54' left of centerline, 1' AGL/127' MSL.

Lighting 9' from DER, 54' right of centerline, 1' AGL/127' MSL.

Building beginning 51' from DER, 319' left of centerline, up to 10' AGL/133' MSL.

Tree 1143' from DER, 549' left of centerline, 65' AGL/157' MSL.

Trees beginning 1190' from DER, 457' left of centerline, up to 67' AGL/160' MSL.

Tree 1210' from DER, 452' left of centerline, 68' AGL/161' MSL.

Trees beginning 1230' from DER, 384' left of centerline, up to 70' AGL/163' MSL.

Rwy 15L, tree 615' from DER, 641' left of centerline, 47' AGL/131' MSL.

Trees beginning 646' from DER, 608' left of centerline, up to 52' AGL/136' MSL.

Tree 748' from DER, 624' left of centerline, 69' AGL/148' MSL.

Trees beginning 773' from DER, 647' left of centerline, up to 73' AGL/152' MSL.

Pole, tree beginning 920' from DER, 617' left of centerline, 1' AGL/127' MSL.

Lighting 9' from DER, 54' right of centerline, 1' AGL/127' MSL.

Tree 1086' from DER, 755' right of centerline, 65' AGL/169' MSL.

Trees beginning 1126' from DER, 752' right of centerline, up to 77' AGL/164' MSL.

Rwy 15R, NAVAID 1' from DER, 85' right of centerline, 2' AGL/130' MSL.

Tree 1086' from DER, 755' right of centerline, 65' AGL/173' MSL.

Trees beginning 1117' from DER, 752' right of centerline, up to 77' AGL/164' MSL.

Rwy 28, lighting 50' from DER, 6' left of centerline, 2' AGL/141' MSL.

Pole 150' from DER, 6' right of centerline, 2' AGL/141' MSL.

Lighting 50' from DER, 6' right of centerline, 2' AGL/141' MSL.

Tree 1293' from DER, 842' left of centerline, 79' AGL/174' MSL.

Trees beginning 1389' from DER, 252' left of centerline, up to 87' AGL/182' MSL.

Trees beginning 1582' from DER, 299' left of centerline, up to 96' AGL/188' MSL.

Trees beginning 1632' from DER, 264' left of centerline, up to 197' MSL.

Tree 2830' from DER, 871' right of centerline, 134' AGL/211' MSL.

Trees beginning 2834' from DER, 839' right of centerline, up to 135' AGL/212' MSL.

Rwy 33L, fence 61' from DER, 528' right of centerline, 10' AGL/145' MSL.

Fence 203' from DER, 520' right of centerline, 18' AGL/149' MSL.

Pole 516' from DER, 573' right of centerline, 33' AGL/156' MSL.

Tree 910' from DER, 595' left of centerline, 82' AGL/165' MSL.

Trees beginning 1662' from DER, 852' right of centerline, up to 41' AGL/187' MSL.

Tree 1715' from DER, 888' right of centerline, 34' AGL/186' MSL.

Trees beginning 1716' from DER, 904' right of centerline, up to 34' AGL/190' MSL.

Trees beginning 2189' from DER, 940' right of centerline, up to 63' AGL/205' MSL.

Trees beginning 2228' from DER, 877' right of centerline, up to 73' AGL/214' MSL.

Building, antenna, bldg_twr beginning 4693' from DER, 877' right of centerline, up to 146' AGL/265' MSL.

Rwy 33R, fence 400' from DER, 601' left of centerline, 1' AGL/157' MSL.

Fence 629' from DER, 600' left of centerline, 2' AGL/159' MSL.

Pole 758' from DER, 677' left of centerline, 19' AGL/176' MSL.

Building 880' from DER, 654' left of centerline, 25' AGL/181' MSL.

Building, pole beginning 951' from DER, 611' left of centerline, up to 29' AGL/184' MSL.

CON'T
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BALTIMORE, MD (CON’T)

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI) (CON’T)

TAKEOFF OBSTACLE NOTES:

Rwy 33R (CON’T), trees beginning 1072’ from DER, 518’ right of centerline, up to 54’ AGL/188’ MSL.

Trees beginning 1530’ from DER, 807’ right of centerline, 56’ AGL/202’ MSL.

Trees beginning 1535’ from DER, 916’ left of centerline, up to 42’ AGL/198’ MSL.

Tree 1565’ from DER, 849’ right of centerline, 63’ AGL/212’ MSL.

Tree 1582’ from DER, 759’ right of centerline, 64’ AGL/213’ MSL.

Trees beginning 1593’ from DER, 779’ right of centerline, up to 68’ AGL/218’ MSL.

Trees beginning 1662’ from DER, 794’ right of centerline, up to 63’ AGL/220’ MSL.

Trees beginning 1748’ from DER, 791’ right of centerline, up to 62’ AGL/223’ MSL.

Trees beginning 1785’ from DER, 846’ right of centerline, up to 64’ AGL/226’ MSL.

Tree 1866’ from DER, 849’ right of centerline, 59’ AGL/230’ MSL.

Tree 1907’ from DER, 923’ right of centerline, 60’ AGL/236’ MSL.

Trees beginning 1930’ from DER, 858’ right of centerline, up to 72’ AGL/250’ MSL.

Trees beginning 1985’ from DER, 903’ right of centerline, up to 68’ AGL/253’ MSL.

Trees beginning 2200’ from DER, 967’ right of centerline, up to 69’ AGL/260’ MSL.

Tree 2241’ from DER, 1052’ right of centerline, 75’ AGL/261’ MSL.

Tree pole beginning 2243’ from DER, 15’ right of centerline, up to 76’ AGL/265’ MSL.

Electrical system 2452’ from DER, 903’ left of centerline, 44’ AGL/204’ MSL.

Trees beginning 2574’ from DER, 685’ left of centerline, up to 49’ AGL/209’ MSL.

Tree 2894’ from DER, 902’ left of centerline, 64’ AGL/217’ MSL.

Trees beginning 2908’ from DER, 908’ left of centerline, up to 69’ AGL/220’ MSL.

Trees beginning 2949’ from DER, 348’ left of centerline, up to 65’ AGL/222’ MSL.

Trees beginning 2984’ from DER, 201’ left of centerline, up to 79’ AGL/231’ MSL.

Trees beginning 3121’ from DER, 154’ left of centerline, up to 79’ AGL/235’ MSL.

Trees beginning 3151’ from DER, 409’ left of centerline, up to 84’ AGL/237’ MSL.

Trees beginning 3165’ from DER, 89’ left of centerline, up to 73’ AGL/238’ MSL.

Trees beginning 3185’ from DER, 49’ left of centerline, up to 73’ AGL/241’ MSL.

Trees beginning 3242’ from DER, 122’ left of centerline, up to 71’ AGL/242’ MSL.

Trees beginning 3252’ from DER, 87’ left of centerline, up to 73’ AGL/244’ MSL.

Trees beginning 3283’ from DER, 50’ left of centerline, up to 65’ AGL/246’ MSL.

Trees beginning 3373’ from DER, 78’ left of centerline, up to 62’ AGL/248’ MSL.

Trees beginning 3397’ from DER, 2’ left of centerline, up to 59’ AGL/250’ MSL.

Tree, pole beginning 3791’ from DER, 20’ left of centerline, up to 80’ AGL/252’ MSL.

Trees beginning 4001’ from DER, 92’ left of centerline, up to 75’ AGL/255’ MSL.

Trees beginning 4024’ from DER, 312’ right of centerline, up to 80’ AGL/266’ MSL.

Tree, pole beginning 4032’ from DER, 55’ right of centerline, up to 66’ AGL/274’ MSL.

Trees beginning 4060’ from DER, 1206’ left of centerline, 85’ AGL/257’ MSL.

Trees beginning 4062’ from DER, 34’ left of centerline, up to 86’ AGL/264’ MSL.

Tree, pole beginning 4071’ from DER, 2’ right of centerline, up to 74’ AGL/280’ MSL.

Trees beginning 4157’ from DER, 26’ left of centerline, up to 75’ AGL/268’ MSL.

Trees beginning 4373’ from DER, 333’ left of centerline, up to 79’ AGL/272’ MSL.

Trees beginning 4384’ from DER, 82’ left of centerline, up to 68’ AGL/275’ MSL.

Trees beginning 4469’ from DER, 87’ left of centerline, up to 84’ AGL/281’ MSL.

Trees beginning 4511’ from DER, 39’ left of centerline, up to 73’ AGL/282’ MSL.

Trees beginning 4564’ from DER, 610’ right of centerline, up to 76’ AGL/281’ MSL.

Trees beginning 4600’ from DER, 843’ left of centerline, up to 65’ AGL/283’ MSL.

Trees beginning 4733’ from DER, 213’ left of centerline, up to 82’ AGL/284’ MSL.

Trees beginning 4635’ from DER, 121’ left of centerline, up to 85’ AGL/289’ MSL.

Trees beginning 5250’ from DER, 345’ left of centerline, up to 96’ AGL/291’ MSL.

Tree 1 NM from DER, 1991’ left of centerline, 88’ AGL/300’ MSL.

MARTIN STATE (MTN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 05MAR15 (15064) (FAA)

TAKEOFF MINIMUMS:

Rwy 33, std. w/min. climb of 215’ per NM to 1700 or 1300-2½ for climb in visual conditions.

VCOA:

Rwy 33, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Martin State airport at or above 1200 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 15, trees 625’ from DER, 184’ right of centerline, up to 20’ AGL/29’ MSL.

Pole and trees beginning 1689’ from DER, 580’ left of centerline, up to 89’ AGL/97’ MSL.

Trees beginning 2568’ from DER, 68’ right of centerline, up to 92’ AGL/103’ MSL.

Trees beginning 2906’ from DER, 550’ left of centerline, up to 100’ AGL/109’ MSL.

Rwy 33, terrain 91’ from DER, 482’ right of centerline, 0’ AGL/25’ MSL.

Poles 3.5’ from DER, 1170’ left of centerline, up to 84’ AGL/133’ MSL.

Poles and trees beginning 1175’ from DER, 10’ right of centerline, up to 79’ AGL/128’ MSL.

Trees beginning 3108’ from DER, 8’ left of centerline, up to 86’ AGL/145’ MSL.

Trees beginning 2843’ from DER, 14’ right of centerline, up to 96’ AGL/175’ MSL.
BLACKSBURG, VA
VIRGINIA TECH/MONTGOMERY EXEC (BCB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 10SEP20 (21280) (FAA)
TAKEOFF MINIMUMS:
Rwy 13, 400-1½ or std. w/min. climb of 460’ per NM to 2600.
DEPARTURE PROCEDURE:
Rwy 13, climbing right turn to heading 200° to 3400 before proceeding on course.
Rwy 31, climbing left turn to heading 235° to 4100 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees, lighting, sign beginning abeam DER, 71’ right of centerline, up to 2187’ MSL.
Tree, terrain beginning 82’ from DER, 209’ left of centerline, up to 2180’ MSL.
Trees, terrain beginning 261’ from DER, 216’ left of centerline, up to 2184’ MSL.
Trees beginning 775’ from DER, 294’ left of centerline, up to 2212’ MSL.
Trees, antenna beginning 891’ from DER, 256’ left of centerline, up to 2216’ MSL.
Tree 2907’ from DER, 50’ right of centerline, 2195’ MSL.
Tree 3068’ from DER, 73’ right of centerline, 2201’ MSL.
Tree 3114’ from DER, 190’ right of centerline, 2208’ MSL.
Tree 4019’ from DER, 1535’ left of centerline, 2226’ MSL.
Tree 4324’ from DER, 1403’ left of centerline, 2228’ MSL.
Tree 4362’ from DER, 1533’ left of centerline, 2233’ MSL.
Tree 4370’ from DER, 1248’ left of centerline, 2238’ MSL.
Tree 4466’ from DER, 1637’ left of centerline, 2240’ MSL.
Trees beginning 4472’ from DER, 1157’ left of centerline, up to 2260’ MSL.
Trees beginning 5031’ from DER, 1039’ left of centerline, up to 2269’ MSL.
Tree 5059’ from DER, 1538’ left of centerline, 2288’ MSL.
Trees beginning 5106’ from DER, 1256’ left of centerline, up to 2307’ MSL.
Trees beginning 5214’ from DER, 1591’ left of centerline, up to 2314’ MSL.
Trees beginning 5336’ from DER, 1199’ left of centerline, up to 2327’ MSL.
Trees beginning 5366’ from DER, 1693’ left of centerline, up to 2343’ MSL.
Trees beginning 5411’ from DER, 1149’ left of centerline, up to 2356’ MSL.
Trees beginning 5535’ from DER, 1150’ left of centerline, up to 2366’ MSL.
Trees beginning 5668’ from DER, 1097’ left of centerline, up to 2404’ MSL.
Trees beginning 5816’ from DER, 1264’ left of centerline, up to 2414’ MSL.
Trees beginning 5862’ from DER, 1018’ left of centerline, up to 2435’ MSL.
Trees beginning 5960’ from DER, 1178’ left of centerline, up to 2453’ MSL.
Trees, building, terrain, transmission line beginning 5983’ from DER, 855’ left of centerline, up to 2459’ MSL.
Tree 1,2 NM from DER, 1203’ left of centerline, 2322’ MSL.
Rwy 31, pole 22’ from DER, 168’ right of centerline, 52’ AGL/2149’ MSL.
Pole 92’ from DER, 75’ left of centerline, 40’ AGL/2140’ MSL.
Pole 139’ from DER, 61’ right of centerline, 57’ AGL/2150’ MSL.
Tree 157’ from DER, 487’ left of centerline, 2149’ MSL.
Pole 402’ from DER, 600’ right of centerline, 73’ AGL/2157’ MSL.
Poles, trees beginning 571’ from DER, 28’ right of centerline, up to 78’ AGL/2162’ MSL.

BLACKSTONE, VA
ALLEN C. PERKINSON BLACKSTONE AAF (BKT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 03APR14 (14093) (FAA)
TAKEOFF MINIMUMS:
Rwys 1, 19, NA - environmental.
DEPARTURE PROCEDURE:
Rwy 4, climb heading 044° to 1300 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 4, sign and trees beginning 12’ from DER, 177’ left of centerline, up to 100’ AGL/511’ MSL.
Trees beginning 779’ from DER, 707’ left of centerline, up to 100’ AGL/508’ MSL.
Rwy 22, terrain, trees beginning 178’ from DER, 426’ left of centerline, up to 100’ AGL/507’ MSL.
Trees beginning 2624’ from DER, 525’ right of centerline, up to 100’ AGL/607’ MSL.
NOTE: Do not overfly ammunition dump 1.1 NM south southwest of runway 4.

BLUEGRASS (9VA5)
BLUEMONT, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 08SEP22 (22251) (USN)
DEPARTURE PROCEDURE:
NA.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BOWIE, MD
FREEWAY (W00)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 22JUN17 (17173) (FAA)

TAKEOFF MINIMUMS:
- Rwy 18, 300-2 or std. w/min. climb of 391' per NM to 400.
- Rwy 36, 300-2 or std. w/min. climb of 726' per NM to 500.

TAKEOFF OBSTACLE NOTES:
- Rwy 18, tree 134' from DER, 505' right of centerline, 100' AGL/225' MSL.
- Trees beginning 174' from DER, 38' right of centerline, up to 100' AGL/228' MSL.
- Trees 254' from DER, 195' left of centerline, 100' AGL/242' MSL.
- Trees beginning 293' from DER, 144' left of centerline, up to 100' AGL/235' MSL.
- Tree 593' from DER, 378' left of centerline, 100' AGL/245' MSL.
- Tree 632' from DER, 611' left of centerline, 100' AGL/251' MSL.
- Trees beginning 812' from DER, 140' right of centerline, up to 100' AGL/245' MSL.
- Trees beginning 852' from DER, 93' left of centerline, up to 100' AGL/255' MSL.
- Tree 932' from DER, 560' left of centerline, 100' AGL/258' MSL.
- Trees beginning 1111' from DER, 8' right of centerline, up to 100' AGL/248' MSL.
- Trees beginning 1151' from DER, 42' left of centerline, up to 100' AGL/265' MSL.
- Trees beginning 1271' from DER, 123' left of centerline, up to 100' AGL/268' MSL.
- Trees beginning 1533' from DER, 30' right of centerline, up to 100' AGL/279' MSL.
- Trees beginning 2388' from DER, 72' left of centerline, up to 100' AGL/271' MSL.
- Trees beginning 2467' from DER, 20' left of centerline, up to 100' AGL/274' MSL.
- Trees beginning 2807' from DER, 203' left of centerline, up to 100' AGL/281' MSL.
- Trees beginning 3146' from DER, 152' left of centerline, up to 100' AGL/284' MSL.
- Trees beginning 3485' from DER, 1087' right of centerline, up to 100' AGL/297' MSL.
- Trees beginning 3590' from DER, 50' left of centerline, up to 100' AGL/319' MSL.

Rwy 36:
- Trees beginning 58' from DER, 190' right of centerline, up to 100' AGL/274' MSL.
- Vehicles on road beginning 112' from DER, on centerline, 15' AGL/167' MSL.
- Tree 138' from DER, 42' left of centerline, 100' AGL/265' MSL.
- Trees beginning 178' from DER, 121' left of centerline, up to 100' AGL/274' MSL.
- Trees beginning 357' from DER, 8' right of centerline, up to 100' AGL/281' MSL.
- Trees beginning 1116' from DER, 355' left of centerline, up to 100' AGL/278' MSL.
- Trees beginning 1335' from DER, 163' right of centerline, up to 100' AGL/291' MSL.
- Trees beginning 1375' from DER, 70' left of centerline, up to 100' AGL/288' MSL.
- Trees beginning 1634' from DER, 32' right of centerline, up to 100' AGL/294' MSL.
- Trees beginning 1674' from DER, 18' left of centerline, up to 100' AGL/294' MSL.
- Trees beginning 2272' from DER, 83' right of centerline, up to 100' AGL/297' MSL.
- Trees beginning 2393' from DER, 616' left of centerline, up to 100' AGL/297' MSL.
- Trees beginning 2531' from DER, 4' right of centerline, up to 100' AGL/301' MSL.
- T-L tower, trees beginning 2587' from DER, 3' left of centerline, up to 133' AGL/382' MSL.

BRIDGEWATER, VA
BRIDGEWATER AIRPARK (VBW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A 15DEC11 (11349) (FAA)

TAKEOFF MINIMUMS:
- Rwy 15, 300-2½ w/min. climb of 280'/NM to 3900, or std. w/min. climb of 440'/NM to 2600, or 2400-3 for climb in visual conditions.
- Rwy 33, 800-2½ w/min. climb of 390'/NM to 3900, or std. w/min. climb of 522' per NM to 2800, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
- Rwy 15, climb heading 152° to 3900, or for climb in visual conditions, cross Bridgewater Air Park at or above 3400 before proceeding on course.
- Rwy 33, climb heading 347° to 5000, or for climb in visual conditions, cross Bridgewater Air Park at or above 3400 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
- Rwy 15, vehicles on roadway 53' from DER, 14' right of centerline, 15' AGL/1180' MSL.
- Trees beginning 158' from DER, 259' right of centerline, up to 100' AGL/1279' MSL.
- Trees beginning 499' from DER, 628' left of centerline, up to 100' AGL/1279' MSL.
- Pole 908' from DER, 183' left of centerline, 35' AGL/1200' MSL.
- Trees beginning 3205' from DER, 1329' right of centerline, up to 100' AGL/1359' MSL.
- Rwy 33, trees beginning 318' from DER, 252' right of centerline, up to 100' AGL/1249' MSL.
- Trees beginning 470' from DER, 191' left of centerline, up to 100' AGL/1248' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BROOKNEAL, VA
BROOKNEAL/CAMPBELL COUNTY (0V4)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  17OCT13  (13290)  (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 6, multiple trees beginning 48' from DER, 314' left of centerline, up to 100' AGL/626' MSL.
Multiple trees beginning 31' from DER, 341' right of centerline, up to 100' AGL/673' MSL.
Fence beginning 162' from DER, 379' right of centerline, up to 8' AGL/607' MSL.
Rwy 24, multiple trees beginning 61' from DER, 8' left of centerline, up to 100' AGL/692' MSL.
Multiple trees beginning 1938' from DER, 27' right of centerline, up to 100' AGL/677' MSL.

BUMPASS, VA
LAKE ANNA (7W4)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  15DEC11  (11349)  (FAA)
DEPARTURE PROCEDURE:
Rwy 8, climb heading 085° to 800 before turning.
Rwy 26, climb heading 265° to 800 before turning.
TAKEOFF OBSTACLE NOTES:
Rwy 8, trees beginning 32' from DER, 114' right of centerline, up to 100' AGL/469' MSL.
Buildings beginning 162' from DER, 152' left of centerline, up to 25' AGL/384' MSL.
Rwy 26, trees beginning 31' from DER, 97' left and 119' right of centerline, up to 100' AGL/459' MSL.

CAMBRIDGE, MD
CAMBRIDGE-DORCHESTER RGNL (CGE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2  21JUL16  (16203)  (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, railroad 81' from DER, 375' right of centerline, 40' MSL.
Road 224' from DER, 397' right of centerline, 33' MSL.
Tree 1558' from DER, 346' left of centerline, 102' MSL.
Tree 1923' from DER, 298' left of centerline, 89' MSL.
Tree 1993' from DER, 380' left of centerline, 92' MSL.
Tree 2062' from DER, 575' left of centerline, 96' MSL.
Rwy 34, tree 331' from DER, 534' left of centerline, 73' MSL.
Pole 637' from DER, 323' left of centerline, 37' AGL/55' MSL.
Tree 861' from DER, 329' left of centerline, 97' MSL.
Tree 892' from DER, 340' left of centerline, 104' MSL.
Tree 953' from DER, 755' right of centerline, 98' MSL.
Tree 1151' from DER, 713' right of centerline, 113' MSL.
Tree 1286' from DER, 599' left of centerline, 106' MSL.
Tree 1517' from DER, 401' right of centerline, 97' MSL.
Tree 1981' from DER, 277' left of centerline, 124' MSL.
Tree 2178' from DER, 658' left of centerline, 116' MSL.
Tree 2824' from DER, 9' left of centerline, 96' MSL.
Tree 3106' from DER, 326' left of centerline, 108' MSL.
Tree 3178' from DER, 512' right of centerline, 103' MSL.
Tree 3204' from DER, 516' right of centerline, 109' MSL.

CAMP PEARY LNDG STRIP (KW94)
WILLIAMSBURG, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  15JUN23  (23166)  (USA)
TAKEOFF OBSTACLE NOTES:
Rwy 5, bldg 678' from DER, 333' left of centerline, 28' AGL/58' MSL.
Trees, multiple trnsmsn lines 120' from DER, 184' left of centerline, up to 95' AGL/126' MSL.
Trees, multiple trnsmsn lines 162' from DER, 257' right of centerline, up to 100' AGL/132' MSL.
Rwy 23, trees, multiple trnsmsn lines 1891' from DER, 69' left of centerline, up to 95' AGL/138' MSL.
Multiple trees, trnsmsn lines 537' from DER, 437' right of centerline, up to 110' AGL/151' MSL.
Pylon 365' from DER, 597' right of centerline, 42' AGL/77' MSL.
Pylon 354' from DER, 581' right of centerline, 28' AGL/76' MSL.
Pylon 413' from DER, 523' right of centerline, 31' AGL/75' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

CHARLOTTESVILLE, VA
CHARLOTTESVILLE-ALBEMARLE (CHO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 10 22AUG13 (13234) (FAA)
TAKEOFF MINIMUMS:
Rwy 3, std. w/min. climb of 342' per NM to 1500, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwy 3, climb on heading 030° to 1500 then climbing right turn direct GVE VORTAC before proceeding on course. For climb in visual conditions: cross Charlottesville-Albemarle airport at or above 1700 then proceed direct GVE VORTAC before proceeding on course. When executing VCOA, notify ATC prior to departure.
Rwy 21, climb on heading 210° to 1400 then climbing left turn direct GVE VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 3, trees beginning 183' from DER, left and right of centerline, up to 100' AGL/684' MSL.
Rwy 21, vehicles on road, 32' from DER, 496' right of centerline, up to 17' AGL/667' MSL.
Light support structures, 1178' from DER, 778' right of centerline, 62' AGL/670' MSL.

CHASE CITY, VA
CHASE CITY MUNI (CXE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 27SEP07 (07270) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 18, trees beginning 191' from DER, 116' left of centerline, up to 100' AGL/609' MSL.
Multiple trees beginning 327' from DER, 133' right of centerline, up to 100' AGL/599' MSL.
Rwy 36, trees beginning 164' from DER, 154' right of centerline, up to 100' AGL/649' MSL.
Trees beginning 470' from DER, 124' left of centerline, up to 100' AGL/649' MSL.

CHURCHVILLE, MD
HARFORD COUNTY (0W3)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 05NOV20 (20310) (FAA)
TAKEOFF MINIMUMS:
Rwys 1, 19, NA - Environmental.
Rwy 10, 300-2 or std. w/ min. climb of 210' per NM to 800, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to DER.

TAKEOFF OBSTACLE NOTES:
Rwy 28, trees beginning 665' from DER, left and right of centerline, up to 100' AGL/516' MSL.
Rwy 10, vehicles on road beginning 328' from DER, left and right of centerline, up to 17' AGL/416' MSL.
Trees beginning 690' from DER, 271' left of centerline, up to 100' AGL/499' MSL.
Trees beginning 2226' from DER, 454' right of centerline, up to 100' AGL/519' MSL.
Rising terrain beginning 1.6 NM from DER, 2510' left of centerline, up to 639' MSL.

CLARKSVILLE, VA
LAKE COUNTRY RGNL (W63)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 08APR10 (10098) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 4, trees beginning 5' from DER, 438' left of centerline, up to 100' AGL/539' MSL.
Building 27' from DER, 94' right of centerline, 20' AGL/449' MSL.
Vehicles on road beginning 200' from DER, from left to right of centerline, up to 15' AGL/444' MSL.
Warehouse 313' from DER, on centerline, 75' AGL/495' MSL.
Building 385' from DER, 257' right of centerline, 20' AGL/439' MSL.
Trees beginning 444' from DER, 518' right of centerline, up to 100' AGL/509' MSL.
Rwy 22, trees beginning 3' from DER from 452' left of centerline to 547' right of centerline, up to 100' AGL/422' MSL.
Trees beginning 1624' from DER, from 632' left of centerline to 535' right of centerline, up to 100' AGL/485' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

COLLEGE PARK, MD
COLLEGE PARK (CGS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4  25FEB21  (21056)  (FAA)
TAKEOFF MINIMUMS:
Rwy 15, 400-3 w/ min. climb of 270’ per NM to 700 or 1100-3 for VCOA.
Rwy 33, std. w/ min. climb of 456’ per NM to 400 or 1100-3 for VCOA.
DEPARTURE PROCEDURE:
Rwy 33, climb on heading 329° to 700 before proceeding on course.
VCOA:
Rwy 15, 33, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross College Park Airport at or above 1000 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 15, trees beginning 113’ from DER, 236’ right of centerline, up to 100’ AGL/149’ MSL.
Rwy 15, trees beginning 227’ from DER, 215’ left of centerline, up to 100’ AGL/159’ MSL.
Rwy 15, trees beginning 567’ from DER, 260’ left of centerline, up to 100’ AGL/239’ MSL.
Rwy 15, trees beginning 1206’ from DER, 695’ left of centerline, up to 100’ AGL/259’ MSL.
Rwy 15, trees beginning 3009’ from DER, 1259’ right of centerline, up to 100’ AGL/209’ MSL.
Rwy 33, tree 1.6 NM from DER, 1502’ right of centerline, 200’ AGL/429’ MSL.
Rwy 33, tree 1.6 NM from DER, 325’ right of centerline, 200’ AGL/399’ MSL.
Rwy 33, tree beginning 1.7 NM from DER, 338’ right of centerline, up to 200’ AGL/429’ MSL.
Rwy 33, tree 2.4 NM from DER, 3426’ left of centerline, 200’ AGL/409’ MSL.
Rwy 33, tree 3.7 NM from DER, 212’ right of centerline, up to 100’ AGL/169’ MSL.
Rwy 33, tree 3.9 NM from DER, 329’ left of centerline, 100’ AGL/159’ MSL.
Rwy 33, building beginning 905’ from DER, 300’ left of centerline, up to 100’ AGL/169’ MSL.
Rwy 33, tree 2688’ from DER, 1129’ right of centerline, 100’ AGL/189’ MSL.
Rwy 33, tree 2709’ from DER, 1202’ right of centerline, 100’ AGL/199’ MSL.
Rwy 33, tree 2820’ from DER, 1232’ right of centerline, 100’ AGL/209’ MSL.
Rwy 33, building 3025’ from DER, 1095’ left of centerline, 126’ AGL/198’ MSL.
Rwy 33, building 3314’ from DER, 621’ right of centerline, up to 100’ AGL/219’ MSL.
Rwy 33, building 3513’ from DER, 834’ right of centerline, up to 100’ AGL/229’ MSL.
Rwy 33, building 4251’ from DER, 329’ right of centerline, 166’ AGL/236’ MSL.
Rwy 33, building 4714’ from DER, 495’ left of centerline, 137’ AGL/201’ MSL.
Rwy 33, trees beginning 5533’ from DER, 796’ left of centerline, up to 100’ AGL/239’ MSL.
Rwy 33, trees beginning 1.2 NM from DER, 817’ left of centerline, up to 100’ AGL/299’ MSL.
Rwy 33, trees beginning 1.6 NM from DER, 346’ left of centerline, up to 200’ AGL/399’ MSL.
Rwy 33, tree 1.7 NM from DER, 1852’ left of centerline, 200’ AGL/400’ MSL.
Rwy 33, tower beginning 1.8 NM from DER, 705’ left of centerline, up to 200’ AGL/409’ MSL.
Rwy 33, tree 2.2 NM from DER, 1692’ right of centerline, 200’ AGL/439’ MSL.
Rwy 33, trees beginning 2.4 NM from DER, 773’ left of centerline, up to 200’ AGL/479’ MSL.
Rwy 33, tree 2.5 NM from DER, 132’ left of centerline, 200’ AGL/449’ MSL.

CREWE, VA
CREWE MUNI (W81)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  13JAN11  (11013)  (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 15, trees beginning 140’ from DER, 464’ left of centerline, up to 100’ AGL/449’ MSL.
Rwy 15, trees beginning 448’ right of centerline, up to 100’ AGL/509’ MSL.
Rwy 33, trees beginning 985’ from DER, 587’ left of centerline, up to 100’ AGL/539’ MSL.
Rwy 33, trees beginning 520’ from DER, 513’ right of centerline, up to 100’ AGL/529’ MSL.

CRISFIELD, MD
CRISFIELD-SOMERSET COUNTY AIRPORT (W41)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A  20AUG15  (15232)  (FAA)
TAKEOFF MINIMUMS:
Rwy 6, 24, NA-obstacles
DEPARTURE PROCEDURE:
Rwy 14, climb via heading 142° to 900 before proceeding on course.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

CULPEPER, VA
CULPEPER RGNL (CJR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20DEC07 (07354) (FAA)
DEPARTURE PROCEDURE:
Rwy 22, climb heading 218° to 1000 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 4, tree 79' from DER, 418' left of centerline, 86' AGL/337' MSL. Vehicle on road 207' from DER, 367' left of centerline, 15' AGL/330' MSL. Tree 3396' from DER, 514' right of centerline, 91' AGL/410' MSL. Rwy 22, tree 128' from DER, 332' left of centerline, 25' AGL/334' MSL. Multiple trees beginning 272' from DER, 179' right of centerline up to 22' AGL/341' MSL. Pole 1480' from DER, 68' left of centerline, 27' AGL/356' MSL.

CUMBERLAND, MD
GREATER CUMBERLAND RGNL (CBE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7 31MAR16 (16091) (FAA)
TAKEOFF MINIMUMS:
Rwy 11, 29, NA - obstacles.
Rwy 5, 700-3 w/min. climb of 310' per NM to 3200 or std. w/min. climb of 370' per NM to 2600 or 2500-3 for climb in visual conditions.
Rwy 23, 1000-3 w/min. climb of 480' per NM to 2000 or std. w/min. climb of 925' per NM to 1900 or 2500-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 5, climb heading 049° to 2900 before proceeding on course.
Rwy 23, climb heading 214° to 3400 before proceeding on course. VCOA:
Obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Greater Cumberland Rgnl Airport at or above 3100 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 5, trees beginning 146' from DER, 388' left of centerline, up to 50' AGL/798' MSL. Trees beginning 511' from DER, 466' right of centerline, up to 48' AGL/821' MSL. Trees 2.3 NM from DER, 4178' right of centerline, up to 100' AGL/1439' MSL. Rwy 23, NAVAID 169' from DER, 269' left of centerline, 22' AGL/732' MSL. Trees 53' from DER, 497' right of centerline, up to 42' AGL/751' MSL. Trees beginning 1188' from DER, 422' right of centerline, up to 67' AGL/836' MSL. Tower 2029' from DER, 757' right of centerline, 99' AGL/956' MSL. Trees 2.4 NM from DER, 729' right of centerline, up to 100' AGL/1679' MSL.

DANVILLE, VA
DANVILLE RGNL (DAN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A 28APR16 (16119) (FAA)
TAKEOFF MINIMUMS:
Rwy 13, 300-1¼ or std. w/ min. climb of 232' per NM to 800.
TAKEOFF OBSTACLE NOTES:
Rwy 2, trees beginning 285' from DER, 455' right of centerline, up to 22' AGL/587' MSL. Trees beginning 189' from DER, 90' right of centerline, up to 100' AGL/711' MSL. Building 1310' from DER, 194' left of centerline, 10' AGL/562' MSL. Pole 1496' from DER, 277' left of centerline, 29' AGL/626' MSL. Trees beginning at DER, 8' left of centerline, up to 74' AGL/613' MSL. Pole 2056' from DER, 253' left of centerline, 30' AGL/608' MSL. Sign 2196' from DER, 328' left of centerline, 30' AGL/628' MSL. Tower 1165' from DER, 416' left of centerline, 84' AGL/641' MSL. Building 568' from DER, 455' left of centerline, 37' AGL/612' MSL. Building 395' from DER, 573' left of centerline, 28' AGL/602' MSL. Trees beginning 1358' from DER, 24' right of centerline, up to 73' AGL/700' MSL. Pole 1540' from DER, 111' right of centerline, 44' AGL/613' MSL. Pole 1365' from DER, 131' right of centerline, 32' AGL/606' MSL. Pole 3042' from DER, 174' right of centerline, 75' AGL/681' MSL. Pole 2897' from DER, 284' right of centerline, 75' AGL/682' MSL. Building 2308' from DER, 584' right of centerline, 40' AGL/647' MSL. Sign 1839' from DER, 104' right of centerline, 30' AGL/636' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

DAVISON AAF (KDAA)
FORT BELVOIR, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 07SEP23 (23250) (USA)
TAKEOFF MINIMUMS:
Rwy 14, 300-1½.
Rwy 32, 400-3, or std w/min climb of 360'/NM to 600.
TAKEOFF OBSTACLE NOTES:
Rwy 14, terrain 1.2 NM from DER, 1996' left of centerline, 261' MSL.
Terrain 2334' from DER, 1034' right of centerline, 138' MSL.
Rwy 32, pole 2090' from DER, 741' right of centerline, 35' AGL/132' MSL.
Twr 2090' from DER, 741' right of centerline, 35' AGL/132' MSL.
Bldg 139' from DER, 520' right of centerline, 28' AGL/75' MSL.
Bldg 167' from DER, 521' right of centerline, 31' AGL/75' MSL.

DOVER AFB (KDOV)
DOVER, DE
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
28MAR19 (19087)
TAKEOFF OBSTACLE NOTES:
Rwy 1, possible C-5 aircraft/vehicles positioned in the DER, hammerhead just left of rwy cntrln, up to 65' AGL/89' MSL.
Rwy 14, no obstacles penetrate the obstacle departure surface.
Rwy 19, possible C-5 aircraft/vehicles positioned in the DER, hammerhead just right of rwy cntrln, up to 65' AGL/92' MSL.
Rwy 32, building 945 3739' from DER, 614' left of cntrln, 67' AGL/113' MSL.
Multiple C-5s parked on ramp beginning 2047' thru 2529' from DER, 1010' left of cntrln, up to 65' AGL/92' MSL.
Possible large aircraft 2800' from DER, on Twy G just left of cntrln, up to 65' AGL/98' MSL.
Possible taxing C-5 1091' from DER, 744' left of cntrln, 65' AGL/88' MSL.
Pylon 4876' from DER, 1755' left of cntrln, 85' AGL/120' MSL.
Pylon 5078' from DER, 724' left of cntrln, 85' AGL/124' MSL.

DOVER/CHESWOLD, DE
DELAWARE AIRPARK (33N)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 12OCT17 (17285) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 9, terrain 13' from DER, 56' right of centerline, 48' MSL.
Tree 65' from DER, 306' left of centerline, 95' AGL/132' MSL.
Tree 74' from DER, 310' right of centerline, 59' MSL.
Trees beginning 83' from DER, 333' left of centerline, up to 97' AGL/134' MSL.
Tree, traverse way, transmission line, poles beginning 131' from DER, 8' right of centerline, up to 125' MSL.
Trees, poles, transmission line beginning 356' from DER, 2' left of centerline, up to 103' AGL/138' MSL.
Trees beginning 2106' from DER, 12' left of centerline, up to 151' MSL.
Trees beginning 2285' from DER, 405' right of centerline, up to 132' MSL.
Trees, tower beginning 2320' from DER, 23' right of centerline, up to 101' AGL/133' MSL.
Rwy 27, vertical structure 14' from DER, 67' right of centerline, 5' AGL/50' MSL.
Tree 19' from DER, 314' right of centerline, 105' MSL.
Tree 37' from DER, 413' left of centerline, 72' MSL.
Trees beginning 104' from DER, 353' right of centerline, up to 130' MSL.
Tree 134' from DER, 315' left of centerline, 74' MSL.
Trees beginning 188' from DER, 303' left of centerline, up to 94' MSL.
Tree 417' from DER, 494' right of centerline, 149' MSL.
Trees beginning 418' from DER, 552' left of centerline, up to 96' MSL.
Trees beginning 420' from DER, 414' right of centerline, up to 108' AGL/154' MSL.
Tree 611' from DER, 653' left of centerline, 141' MSL.
Trees beginning 667' from DER, 19' left of centerline, up to 150' MSL.
Trees beginning 884' from DER, 8' right of centerline, up to 161' MSL.
Trees beginning 2360' from DER, 50' left of centerline, up to 102' AGL/151' MSL.
Trees beginning 2500' from DER, 6' left of centerline, up to 106' AGL/155' MSL.
Trees beginning 2634' from DER, 42' left of centerline, up to 161' MSL.
Trees beginning 2697' from DER, 15' left of centerline, up to 106' AGL/163' MSL.
Trees beginning 2972' from DER, 24' right of centerline, up to 113' AGL/165' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

DUBLIN, VA
NEW RIVER VALLEY (PSK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 12MAR09 (09071) (FAA)
TAKEOFF MINIMUMS:
Rwy 24, 200-1½ or std. w/min. climb of 310' per NM to 2400.

DEPARTURE PROCEDURE:
Rwy 24, climbing right turn heading 150° to intercept PSK VORTAC R-120 outbound to 5200 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 6, tree 321' from DER, 493' left of centerline, 100' AGL/2112' MSL.
Tree 122' from DER, up to 2105' MSL.
Rwy 24, pole 1223' from DER, 671' right of centerline, 42' AGL/2161' MSL.
Terrain 122' from DER, 460' left of centerline, up to 2105' MSL.

EASTON, MD
EASTON/NEWNAM FLD (ESN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 05MAR15 (21112) (FAA)
TAKEOFF MINIMUMS:
Rwy 22, 300-2 or std. w/min. climb of 245' per NM to 500.

TAKEOFF OBSTACLE NOTES:
Rwy 15, fence 2' from DER, 410' left of centerline, 8' AGL/57' MSL.
Poles beginning 720' from DER, 331' left of centerline, up to 36' AGL/92' MSL.
Poles beginning 816' from DER, 621' left of centerline, up to 89' AGL/148' MSL.
Poles and trees beginning 827' from DER, 514' right of centerline, up to 57' AGL/116' MSL.
Trees beginning 1924' from DER, 237' right of centerline, up to 94' AGL/153' MSL.

ELKTON, MD
CLAREMONT (58M)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 08JAN15 (15008) (FAA)
TAKEOFF MINIMUMS:
Rwy 31, 600-2½ or std. w/min. climb of 360' per NM to 900.

DEPARTURE PROCEDURE:
Rwy 31, climbing heading 308° to 900 before turning left.

TAKEOFF OBSTACLE NOTES:
Rwy 13, poles beginning 9' from DER, 39' left of centerline, up to 30' AGL/95' MSL.
Trees beginning 22' from DER, 55' left of centerline, up to 47' AGL/107' MSL.
Trees beginning 154' from DER, 145' left of centerline, up to 93' AGL/153' MSL.
Trees beginning 389' from DER, 14' left of centerline, up to 117' AGL/177' MSL.
Trees beginning 873' from DER, 56' left of centerline, up to 107' AGL/157' MSL.
Poles beginning 37' from DER, 21' right of centerline, up to 36' AGL/86' MSL.
Trees beginning 119' from DER, 34' right of centerline, up to 83' AGL/143' MSL.
Trees beginning 470' from DER, 33' right of centerline, up to 83' AGL/153' MSL.
Trees beginning 1379' from DER, 59' right of centerline, up to 92' AGL/142' MSL.
Trees beginning 2319' from DER, 231' left of centerline, up to 84' AGL/184' MSL.
Trees beginning 177' from DER, 152' left of centerline, up to 101' AGL/201' MSL.
Trees beginning 655' from DER, 8' left of centerline, up to 99' AGL/199' MSL.
Trees beginning 2214' from DER, 10' left of centerline, up to 109' AGL/189' MSL.
Antenna 1.9 NM from DER, 3436' left of centerline, 345' AGL/620' MSL.
Terrain beginning 6' from DER, 67' right of centerline, 117' MSL.
Trees beginning 256' from DER, 81' right of centerline, up to 60' AGL/170' MSL.
Trees beginning 776' from DER, 23' right of centerline, up to 91' AGL/201' MSL.
Trees beginning 1965' from DER, 15' right of centerline, up to 81' AGL/261' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

EMPORIA, VA
EMPORIA-GREENSVILLE RGNL (EMV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 03APR14 (14093) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, trees beginning 188' from DER, 433' left of centerline, up to 42' AGL/141' MSL.
Rwy 34, trees beginning 56' from DER, 489' right of centerline, up to 75' AGL/204' MSL.
Trees beginning 2290' from DER, 250' right of centerline, up to 111' AGL/230' MSL.
Trees beginning 2131' from DER, 106' left of centerline, up to 101' AGL/220' MSL.
Trees beginning 1276' from DER, 459' left of centerline, up to 66' AGL/195' MSL.
Trees beginning 1889' from DER, 9' right of centerline, up to 75' AGL/204' MSL.
Trees beginning 1804' from DER, 136' left of centerline, up to 60' AGL/189' MSL.
Trees beginning 1982' from DER, 83' left of centerline, up to 60' AGL/189' MSL.
Trees beginning 571' from DER, 5' right of centerline, up to 23' AGL/152' MSL.
Trees beginning 565' from DER, 57' left of centerline, up to 14' AGL/143' MSL.
Trees beginning 3423' from DER, 256' left of centerline, up to 105' AGL/214' MSL.
Trees beginning 3444' from DER, 140' left of centerline, up to 105' AGL/214' MSL.
Trees beginning 3508' from DER, 44' right of centerline, up to 105' AGL/214' MSL.

FARMVILLE, VA
FARMVILLE RGNL (FVX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 15SEP16 (16259) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 3, tree 35' from DER, 406' right of centerline, 436' MSL.
Trees beginning 56' from DER, 403' right of centerline, up to 437' MSL.
Trees beginning 518' from DER, 414' right of centerline, up to 467' MSL.
Trees beginning 623' from DER, 413' right of centerline, up to 468' MSL.
Trees beginning 647' from DER, 504' right of centerline, up to 476' MSL.
Trees beginning 661' from DER, 452' right of centerline, up to 480' MSL.
Trees beginning 752' from DER, 402' right of centerline, up to 495' MSL.
Trees beginning 757' from DER, 402' right of centerline, up to 498' MSL.
Trees beginning 837' from DER, 398' right of centerline, up to 502' MSL.
Trees beginning 994' from DER, 295' left of centerline, up to 506' MSL.
Trees beginning 1136' from DER, 153' left of centerline, up to 513' MSL.
Rwy 21, terrain and tree beginning abeam DER, 90' right of centerline, up to 471' MSL.
Vehicles on road beginning 2' from DER, 475' left of centerline, up to 413' MSL.
Vehicles on road beginning 116' from DER, 475' left of centerline, up to 415' MSL.
Terrain and vehicles on road beginning 163' from DER, 213' left of centerline, up to 416' MSL.
Terrain, pole, and vehicles on road beginning 199' from DER, 14' left of centerline, up to 26' AGL/429' MSL.
Trees beginning 298' from DER, 427' right of centerline, up to 478' MSL.
Trees beginning 399' from DER, 480' right of centerline, up to 479' MSL.
Tree 450' from DER, 496' right of centerline, 480' MSL.
Trees beginning 482' from DER, 454' right of centerline, up to 483' MSL.
Pole and vehicles on road beginning 506' from DER, 475' left of centerline, up to 30' AGL/438' MSL.
Tree 538' from DER, 539' left of centerline, 471' MSL.
Tree, pole, and vehicles on road beginning 553' from DER, 21' left of centerline, up to 474' MSL.
Tree and fence beginning 570' from DER, 5' right of centerline, up to 498' MSL.
Trees beginning 1798' from DER, 59' left of centerline, up to 475' MSL.
Tree 2118' from DER, 476' left of centerline, 479' MSL.
Trees beginning 2127' from DER, 258' left of centerline, up to 482' MSL.
Trees beginning 2363' from DER, 379' left of centerline, up to 483' MSL.
Trees beginning 2465' from DER, 436' left of centerline, up to 491' MSL.

FOREST, VA
NEW LONDON (W90)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 31MAY12 (12152) (FAA)
TAKEOFF MINIMUMS:
Rwy 18, 300-1 or std. w/min. climb of 511' per NM to 1000.
DEPARTURE PROCEDURE:
Rwy 18, climb heading 176° to 2200 before proceeding on course.
Rwy 36, climbing right turn heading 066° and on LYH R-005 outbound to 3500 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 18, trees beginning at DER, left and right of centerline, up to 100' AGL/919' MSL.
Rwy 36, trees beginning at DER, left and right of centerline, up to 100' AGL/979' MSL.
Vehicle on roadway, 19' from DER, 186' left of centerline, up to 15' AGL/894' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

FORT MEADE (ODENTON), MD

TIPTON (FME)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 21FEB02 (02052) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 10, cross DER at or above 17' AGL/167' MSL.
Trees 1052' right of DER, 88' AGL/238' MSL.

FRANKLIN, VA

FRANKLIN RGNL (FKN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2B 05DEC19 (19339) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 9, tree 159' from DER, 306' right of centerline, 69' MSL.
Tree 233' from DER, 315' right of centerline, 73' MSL.
Trees beginning 235' from DER, 386' right of centerline, up to 96' MSL.
Tree and vehicle on road beginning 432' from DER, 191' right of centerline, up to 102' MSL.
Trees beginning 944' from DER, 621' left of centerline, up to 106' MSL.
Trees beginning 1191' from DER, 594' left of centerline, up to 109' MSL.
Trees beginning 1279' from DER, 79' left of centerline, up to 117' MSL.
Trees beginning 1877' from DER, 178' right of centerline, up to 118' MSL.
Tree 2341' from DER, 770' right of centerline, 128' MSL.
Trees beginning 2386' from DER, 931' right of centerline, up to 139' MSL.
Trees beginning 2523' from DER, 312' right of centerline, up to 144' MSL.
Trees beginning 3122' from DER, 901' right of centerline, up to 149' MSL.
Trees beginning 3203' from DER, 415' right of centerline, up to 151' MSL.
Trees beginning 3484' from DER, 107' right of centerline, up to 159' MSL.
Tree 3573' from DER, 20' left of centerline, 131' MSL.
Tree 4245' from DER, 157' left of centerline, 149' MSL.

FREDERICK, MD

FREDERICK MUNI (FDK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A 30JAN20 (20030) (FAA)
TAKEOFF MINIMUMS:
Rwy 5, 300-2 or std. w/min. climb of 260' per NM to 600.
Rwy 12, 500-2¾ or std. w/min. climb of 410' per NM to 800.
Rwy 30, std. w/min. climb of 285' per NM to 900 or 1500-2½ for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 5, climbing left turn heading 340° and on FDK VOR R-010 to 2100 before proceeding on course.
Rwy 12, climbing heading 124° to 900 before proceeding westbound.
Rwy 23, climbing heading 229° to 1200 before turning right.
Rwy 30, climbing right turn heading 040° and on FDK R-010 to 2400 before proceeding on course.
VCOA:
Rwy 30, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Frederick Muni airport at or about 1700 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 5, light and sign beginning 44' from DER, 123' left of centerline, up to 3' AGL/286' MSL.
Trees beginning 1467' from DER, 630' right of centerline, up to 90' AGL/389' MSL.
Trees beginning 2645' from DER, 610' left of centerline, up to 75' AGL/394' MSL.
Trees beginning 4525' from DER, 597' left of centerline, up to 75' AGL/434' MSL.
Elevator and trees beginning 4824' from DER, 341' right of centerline, up to 76' AGL/435' MSL.
Trees 1.2 NM from DER, 1562' right of centerline, up to 95' AGL/514' MSL.
Trees 1.4 NM from DER, 936' right of centerline, up to 89' AGL/508' MSL.

Rwy 12, wall and trees beginning 45' from DER, 283' right of centerline, up to 14' AGL/308' MSL.
Trees beginning 1312' from DER, 228' left of centerline, up to 82' AGL/391' MSL.
Trees beginning 1667' from DER, 75' right of centerline, up to 83' AGL/362' MSL.
Building and trees beginning 3292' from DER, 45' left of centerline, up to 113' AGL/552' MSL.
Tower, pole, grain silos, and trees beginning 3365' from DER, 41' from DER, up to 101' AGL/520' MSL.
Trees 2.1 NM from DER, 1377' left of centerline, up to 90' AGL/779' MSL.
Trees 2.3 NM from DER, 271' left of centerline, up to 107' AGL/636' MSL.

Rwy 23, vehicles on road and trees beginning 134' from DER, 376' right of centerline, up to 21' AGL/327' MSL.
Pole, buildings, and trees beginning 737' from DER, 286' right of centerline, up to 47' AGL/362' MSL.
Poles and trees beginning 1477' from DER, 41' left of centerline, up to 72' AGL/411' MSL.
Trees beginning 1701' from DER, 55' right of centerline, up to 78' AGL/397' MSL.

CON'T
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

FREDERICK, MD (CON’T)
FREDERICK MUNI (FDK) (CON’T)

Rwy 30, poles and trees beginning 4’ from DER, 320’ right of centerline, up to 22’ AGL/316’ MSL.
Antenna on building and trees beginning 1255’ from DER, 750’ left of centerline, up to 56’ AGL/335’ MSL.
Trees beginning 1096’ from DER, 351’ right of centerline, up to 77’ AGL/336’ MSL.
Trees 1962’ from DER, 105’ right of centerline, up to 77’ AGL/356’ MSL.

FREDERICKSBURG, VA
SHANNON (EZF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10MAR11 (11069) (FAA)

TAKEOFF MINIMUMS:
Rwys 15,33, NA- Environmental.
Rwy 6, 300-2½ or std. w/min. climb of 270’ per NM to 500.
Rwy 24, 400-3 or std. with a min. climb of 380’ per NM to 600.

DEPARTURE PROCEDURE:
Rwy 6, climb heading 055° to 700 before turning left.
Rwy 24, climb heading 235° to 700 before turning right.

TAKEOFF OBSTACLE NOTES:
Rwy 6, hanger abeam DER, 208’ left of centerline, 25’ AGL/119’ MSL.
Power lines abeam DER, 193’ right of centerline, up to 75’ AGL/164’ MSL.
Buildings abeam DER, 237’ right of centerline, up to 25’ AGL/114’ MSL.
Vehicle on road 237’ from DER, left and right of centerline, up to 15’ AGL/104’ MSL.
Light poles beginning 439’ from DER, 162’ left of centerline, 75’ AGL/154’ MSL.
Power lines beginning 315’ from DER, 308’ left of centerline, up to 75’ AGL/154’ MSL.
Power lines beginning 613’ from DER, left and right of centerline, up to 75’ AGL/154’ MSL.
Buildings 668’ from DER, 169’ left of centerline, 25’ AGL/104’ MSL.
Tower 4876’ from DER, 1092’ left of centerline, 210’ AGL/250’ MSL.
Rwy 24, trees beginning abeam DER, left and right of centerline, up to 100’ AGL/369’ MSL.
Train 10’ from DER, left and right of centerline, 23’ AGL/112’ MSL.
Rising terrain beginning 5161’ from DER, left and right of centerline, up to 269’ MSL.
Power lines beginning 7248’ from DER, left and right of centerline, up to 125’ AGL/374’ MSL.

FRIENDLY, MD
POTOMAC AIRFIELD (VKX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 07APR11 (11097) (FAA)

TAKEOFF MINIMUMS:
Rwy 6, 500-2½ or std. w/min. climb of 290’ per NM to 700.
Rwy 24, 300-1.

TAKEOFF OBSTACLE NOTES:
Rwy 6, 50’ AGL trees 300’ left of DER, 75’ AGL trees 320’ right of DER.
Tower 1.9 NM from DER, on centerline 301’ AGL/550’ MSL.
Rwy 24, 80’ AGL trees 200’ right of DER, 75’ AGL.
Trees 200’ left of DER, 30’ AGL hanger 200’ from DER, 190’ right of centerline.

FRONT ROYAL, VA
FRONT ROYAL-WARREN COUNTY (FRR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 29JUL10 (10210) (FAA)

TAKEOFF MINIMUMS:
Rwy 10, 300-1½ or std. w/min. climb of 415’ per NM to 1100.
Rwy 28, NA-obstacles.

DEPARTURE PROCEDURE:
Rwy 10, climbing left turn direct MRB VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 10, vehicles on roadway beginning 221’ from DER, left and right of centerline, up to 17’ AGL/736’ MSL.
Power lines beginning 835’ from DER, left and right of centerline, up to 79’ AGL/828’ MSL.
Trees beginning 1060’ from DER, 51’ left of centerline, up to 100’ AGL/779’ MSL.
Trees beginning 1666’ from DER, 550’ right of centerline, up to 100’ AGL/939’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

GAITHERSBURG, MD
MONTGOMERY COUNTY AIRPARK (GAI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 05MAR15 (15064) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 14, building, pole, and trees beginning 217' from DER, 81' right of centerline, up to 52' AGL/601' MSL.
Buildings, poles, and trees beginning 244' from DER, 196' left of centerline, up to 51' AGL/610' MSL.
Trees 1323' from DER, 841' right of centerline, up to 117' AGL/656' MSL.
Trees beginning 1965' from DER, 628' left of centerline, up to 104' AGL/663' MSL.
Rwy 32, trees beginning 26' from DER, 181' left of centerline, up to 77' AGL/556' MSL.
Trees beginning 72' from DER, 202' right of centerline, up to 53' AGL/532' MSL.
Trees beginning 3350' from DER, 903' right of centerline, up to 93' AGL/592' MSL.

GALAX-HILLSVILLE, VA
TWIN COUNTY (HLX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 31MAY12 (12152) (FAA)
TAKEOFF MINIMUMS:
Rwy 1, 300-1 or std. w/min. climb of 310' per NM to 2900.
DEPARTURE PROCEDURE:
Rwy 19, climb heading 187° to 3300 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 1, vehicles on roadway beginning 122' from DER, left and right of centerline, up to 15' AGL/2674' MSL.
Tree 195' from DER, 432' right of centerline, 49' AGL/2669' MSL.
Tree 2322' from DER, 428' right of centerline, 61' AGL/109' MSL.
Tree 5161' from DER, 710' left of centerline, 180' MSL.
Rwy 19, trees beginning 135' from DER, 455' left of centerline, up to 108' AGL/2748' MSL.
Trees beginning 314' from DER, 434' right of centerline, up to 100' AGL/2760' MSL.
Tree 925' from DER, 254' left of centerline, 80' AGL/2720' MSL.
Trees beginning 1470' from DER, 248' right of centerline, up to 113' AGL/2753' MSL.

GEORGETOWN, DE
DELAWARE COASTAL (GED)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4B 10NOV16 (16315) (FAA)
TAKEOFF MINIMUMS:
Rwy 22, 200-1½ or std. w/min. climb of 201' per NM to 300, or alternatively with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1100' prior to DER.
TAKEOFF OBSTACLE NOTES:
Rwy 4, trees beginning 7' from DER, 459' left of centerline, up to 74' AGL/118' MSL.
Tree 2322' from DER, 428' right of centerline, 81' AGL/100' MSL.
Rwy 10, vehicle on road 94' from DER, 446' left of centerline, 15' AGL/59' MSL.
Trees and pole beginning 443' from DER, 87' left of centerline, up to 100' AGL/144' MSL.
Trees beginning 641' from DER, 109' right of centerline, up to 100' AGL/144' MSL.
Trees 3732' from DER, 37' left of centerline, 100' AGL/149' MSL.
Rwy 22, tree 2035' from DER, 781' left of centerline, 172' MSL.
Tower 1 NM from DER, 465' left of centerline, 215' MSL.
Rwy 28, trees beginning 358' from DER, 567' left of centerline, up to 100' AGL/149' MSL.
Trees beginning 1299' from DER, 886' right of centerline, up to 100' AGL/149' MSL.
Trees beginning 1585' from DER, 647' right of centerline, up to 100' AGL/154' MSL.
Trees beginning 1892' from DER, crossing centerline, up to 100' AGL/154' MSL.
Tank 4498' from DER, 219' right of centerline, 180' MSL.

GORDONSVILLE, VA
GORDONSVILLE MUNI (GVE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 15DEC11 (11349) (FAA)
TAKEOFF MINIMUMS:
Rwy 5, 500-2½ or std. w/min. climb of 317' per NM to 1100.
Rwy 23, 300-2½ or std. w/min. climb of 384' per NM to 700.
DEPARTURE PROCEDURE:
Rwy 5, climb heading 048° to 1500 before proceeding on course.
Rwy 23, climb heading 213° to 2000 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 5, trees beginning 341' from DER, 529' right of centerline, up to 100' AGL/699' MSL.
Rising terrain beginning 7.3 NM from DER, 2.2 NM right of centerline, up to 730’ MSL.
Rises beginning 789' from DER, 507' left of centerline, up to 100' AGL/939' MSL.
Rises beginning 1111' from DER, 255' right of centerline, up to 23' AGL/482' MSL.
Rises beginning 300' from DER, 199' right of centerline, up to 100' AGL/739' MSL.
Trees beginning 805' from DER, 423' left of centerline, up to 100' AGL/739' MSL.
Rising terrain beginning 2.9 NM from DER, 2.5 NM right of centerline, up to 2039' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

HAGERSTOWN, MD
HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6  17OCT13  (21336)  (FAA)
DEPARTURE PROCEDURE:
Rwy 9, climbing left turn to intercept HGR VOR R-084 to 2500 before proceeding on course.
Rwy 27, climb on heading 272° to 2300 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 2, pole 22' from DER, 434' right of centerline, 20' AGL/719' MSL.
Telephone pylon 98' from DER, 351' right of centerline, 30' AGL/729' MSL.
Pole 100' from DER, 352' right of centerline, 31' AGL/730' MSL.
Catenary 113' from DER, 515' right of centerline, 32' AGL/731' MSL.
Antenna 190' from DER, 392' right of centerline, 38' AGL/737' MSL.
Building 1115' from DER, 289' left of centerline, 10' AGL/749' MSL.
Road 1215' from DER, 8' right of centerline, 3' AGL/742' MSL.
Trees beginning 1295' from DER, left and right of centerline, up to 99' AGL/838' MSL.
Rwy 9, MALSR 6' from DER, 5' left of centerline, 48' AGL/687' MSL.
Tree 963' from DER, 754' left of centerline, 75' AGL/714' MSL.
Rwy 20, light and poles beginning 334' from DER, left and right of centerline, up to 40' AGL/734' MSL.
Tree 1504' from DER, 342' left of centerline, 36' AGL/735' MSL.
Silo 1590' from DER, 93' left of centerline, 34' AGL/733' MSL.
Tree 2051' from DER, 592' left of centerline, 100' AGL/739' MSL.
Tree 2540' from DER, 722' left of centerline, 100' AGL/779' MSL.
Rwy 27, trees beginning 668' from DER, 515' left of centerline, up to 80' AGL/719' MSL.
Building 1895' from DER, 510' left of centerline, 73' AGL/713' MSL.

HOT SPRINGS, VA
INGALLS FLD (HSP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4  13JAN11  (21224)  (FAA)
DEPARTURE PROCEDURE:
Rwy 25, climb heading 247° to 4400 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 7, tree 52' from DER, 395' left of centerline, 64' AGL/3784' MSL.
Rwy 25, trees, building, and terrain beginning 172' from DER, 167' left of centerline, up to 60' AGL/3860' MSL. Obstacle light
on pipe 376' from DER, 421' left of centerline, up to 28' AGL/3828' MSL.

INDIAN HEAD, MD
MARYLAND (2W5)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  24JUL14  (14205)  (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 2, trees beginning at DER, 208' right of centerline up to 100' AGL/279' MSL.
Trees beginning at DER, 366' left of centerline up to 100' AGL/279' MSL.
Trees beginning 1564' from DER, left and right of centerline up to 100' AGL/279' MSL.
Building beginning 1255' from DER, 759' right of centerline, 25' AGL/204' MSL.
Rwy 20, trees beginning 404' from DER, 25' right of centerline up to 100' AGL/259' MSL.
Trees beginning at DER, 243' left of centerline up to 100' AGL/249' MSL.
Trees beginning 1069' from DER, 316' right of centerline up to 100' AGL/279' MSL.
Trees beginning 1388' from DER, 332' left of centerline up to 100' AGL/279' MSL.
Building 1401' from DER, 744' right of centerline, 25' AGL/194' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

JOINT BASE ANDREWS (KADW)
CAMP SPRINGS, MD
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
10OCT19 (19283)
TAKEOFF OBSTACLE NOTES:
Rwy 1L, tree 3761' from DER, 1564' left of cntrln, 362' MSL.
Tree 3073' from DER, 907' right of cntrln, 352' MSL.
Tree 2960' from DER, 767' right of cntrln, 351' MSL.
Tree 2842' from DER, 1082' right of cntrln, 344' MSL.
Tree 2373' from DER, 742' left of cntrln, 335' MSL.

Rwy 1R, crane 5460' from DER, 892' right of cntrln, 381' MSL.
Stadium light 3036' from DER, 1020' right of cntrln, 361' MSL.
Tree 2879' from DER, 362' left of cntrln, 349' MSL.
Tree 2626' from DER, 1093' left of cntrln, 352' MSL.
Tree 2395' from DER, 918' left of cntrln, 344' MSL.
Tree 2355' from DER, 478' right of cntrln, 335' MSL.
Tree 1659' from DER, 507' left of cntrln, 326' MSL.
Tree 1551' from DER, 641' right of cntrln, 327' MSL.
Tree 1585' from DER, 536' right of cntrln, 322' MSL.
Tree 1665' from DER, 521' left of cntrln, 320' MSL.
Tree 1509' from DER, 857' right of cntrln, 333' MSL.

Rwy 19L, tree 3696' from DER, 499' left of cntrln, 341' MSL.
Tree 3660' from DER, 784' left of cntrln, 353' MSL.
Tree 2877' from DER, 1111' right of cntrln, 314' MSL.
Tree 2654' from DER, 944' right of cntrln, 311' MSL.
Tree 2653' from DER, 1107' right of cntrln, 314' MSL.
Tree 1706' from DER, 700' left of cntrln, 320' MSL.
Tree 1454' from DER, 852' left of cntrln, 317' MSL.
Terrain 270' from DER, 581' left of cntrln, 260' MSL.

Rwy 19R, twr 4659' from DER, 1650' right of cntrln, 355' MSL.
Twr 4624' from DER, 1663' right of cntrln, 372' MSL.
Twr 4561' from DER, 1658 right of cntrln, 359' MSL.
Twr 4529' from DER, 1590' right of cntrln, 358' MSL.
Twr 4473' from DER, 1553' right of cntrln, 360' MSL.
Twr 4386' from DER, 1659' right of cntrln, 355' MSL.
Tree 2868' from DER, 888' left of cntrln, 314' MSL.
Tree 2645' from DER, 691' left of cntrln, 314' MSL.
Tree 2645' from DER, 1054' left of cntrln, 331' MSL.
Trees beginning 2645' from DER, 1054' left of cntrln, 331' MSL.

JONESVILLE, VA
LEE COUNTY (0VG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 23NOV06 (06327) (FAA)
TAKEOFF MINIMUMS:
Rwy 7, std. w/ min. climb of 467' per NM to 3800, or 1900-3 for climb in visual conditions.
Rwy 25, std. w/ min. climb of 442' per NM to 3500, or 1900-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwys 7, 25, for climb in visual conditions cross Lee County Airport at or above 3200 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 7, terrain 116' from DER, 72' right of centerline, 1439' MSL.
Terrain 691' from DER, 53' right of centerline, 1459' MSL.
Terrain 267' from DER, 190' left of centerline, 1439' MSL.
Terrain 479' from DER, 68' left of centerline, 1459' MSL.

KENBRIDGE, VA
LUNENBURG COUNTY (W31)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 13JAN11 (11013) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 2, trees beginning 219' from DER, left and right of centerline, up to 100' AGL/639' MSL.
Vehicles on roadway, beginning 561' from DER, 519' right of centerline, up to 15' AGL/544' MSL.
Rwy 20, trees at DER, left and right of centerline, up to 100' AGL/699' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LANGLEY AFB (KLFI)
HAMPTON, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 22AUG13 (13234)
Rwy 8, 600-3*
*Or standard with minimum climb of 256 ft/NM to 800.
TAKEOFF OBSTACLE NOTES:
Rwy 8, Boat 2257' from DER, 777' left of centerline, 60' AGL/60' MSL.
Boat 2497' from DER, 57' left of centerline, 60' AGL/60' MSL.
Vehicle on road 1048' from DER, 703' right of centerline, 15' AGL/23' MSL.
Boat 1807' from DER, 552' right of centerline, 60' AGL/60' MSL.
Boat 2837' from DER, 643' right of centerline, 60' AGL/60' MSL.
Rwy 26, Terrain 0' from DER, 369' left of centerline, 11' MSL.
Tree 4052' from DER, 688' left of centerline, 100' AGL/116' MSL.
Tree 4842' from DER, 690' left of centerline, 100' AGL/116' MSL.
Tree 4093' from DER, 82' left of centerline, 99' AGL/111' MSL.
Tree 4359' from DER, 620' right of centerline, 100' AGL/109' MSL.
Tree 3807' from DER, 1181' right of centerline, 24' AGL/36' MSL.

LAUREL, DE
LAUREL (N06)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 05APR12 (12096) (FAA)
TAKEOFF MINIMUMS:
Rwy 15, 600-2¾ or std. w/min. climb of 286' per NM to 800.
DEPARTURE PROCEDURE:
Rwy 15, climb heading 148° to 1200 before proceeding on course.
Rwy 33, climb heading 328° to 1200 before preceding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 15, tower 2.4 NM from DER, 253' left of centerline, 500' AGL/542' MSL.

LAWRENCEVILLE, VA
BRUNSWICK COUNTY (LVL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 30JAN20 (21224) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 18, trees 1654' from DER, 772' left of centerline, 88' AGL/407' MSL.
Trees 200' from DER, on centerline, 22' AGL/321' MSL.
Rwy 36, trees 1487' from DER, 20' left of centerline, 88' AGL/420' MSL.
Trees 113' from DER, 372' right of centerline, 88' AGL/420' MSL.

LEESBURG, VA
LEESBURG EXEC (JYO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 23SEP10 (21112) (FAA)
DEPARTURE PROCEDURE:
Rwy 35, climb heading 351° to 1200 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 17, vehicle on roadway, 320' from DER, 565' left of centerline, up to 15' AGL/414' MSL.
Building 167' from DER, 360' left of centerline, 22' AGL/401' MSL.
Pole 958' from DER, 373' left of centerline, 32' AGL/421' MSL.
Trees beginning 138' from DER, left and right of centerline, up to 100' AGL/464' MSL.
Rwy 35, terrain 96' from DER, 453' left of centerline, 381' MSL.
Tree 1078' from DER, 525' left of centerline, up to 100' AGL/413' MSL.
Pole 638' from DER, 642' right of centerline, 49' AGL/428' MSL.

LEONARDTOWN, MD
ST MARY'S COUNTY RGNL (2W6)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 18JAN07 (07018) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 11, multiple trees beginning 88' from DER, 339' left of centerline, up to 80' AGL/205' MSL.
Multiple trees beginning 61' from DER, 193' right of centerline up to 80' AGL/205' MSL.
Rwy 29, multiple trees beginning 996' from DER, 227' left of centerline up to 79' AGL/221' MSL.
Multiple trees beginning 996' from DER, 227' right of centerline up to 71' AGL/213' MSL.
Multiple towers on buildings beginning 53' from DER, 400' right of centerline up to 26' AGL/168' MSL.
Equipment on building 223' from DER, 449' right of centerline, 15' AGL/169' MSL.
Tower 402' from DER, 399' right of centerline, 33' AGL/175' MSL.
Fence 496' from DER, 241' right of centerline, 22' AGL/164' MSL.
LOUISA, VA

LOUISA COUNTY/FREEMAN FLD (LKU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  29JUL10 (21280) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 9, trees beginning abeam DER, 316’ right of centerline, up to 100’ AGL/589’ MSL.
Trees beginning 765’ from DER, 644’ left of centerline, up to 95’ AGL/545’ MSL.
Trees beginning 889’ from DER, 150’ right of centerline, up to 59’ AGL/519’ MSL.
Rwy 27, trees beginning abeam DER, 350’ right of centerline, up to 100’ AGL/569’ MSL.
Trees beginning 212’ from DER, 133’ right of centerline, up to 100’ AGL/569’ MSL.
Trees beginning 70’ from DER, 513’ left of centerline, up to 100’ AGL/569’ MSL.
Building 148’ from DER, 440’ left of centerline, 14’ AGL/484’ MSL.
Trees beginning 587’ from DER, left and right of centerline, up to 100’ AGL/549’ MSL.

LURAY, VA

LURAY CAVERNS (LUA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A  26MAR20  (20086) (FAA)
TAKEOFF MINIMUMS:
Rwy 4,
std. w/min. climb of 400’ per NM to 3900 or 3200-3 for VCOA.
Rwy 22,
std. w/min. climb of 400’ per NM to 4000 or 3200-3 for VCOA.
DEPARTURE PROCEDURE:
Rwy 4,
climb heading 044° to intercept bearing 044° from LUA NDB to 4000 before proceeding on course.
Rwy 22,
climbing left turn heading 200° to intercept LDN VORTAC R-230 to 5000 before proceeding on course.
VCOA:
All Runways, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Luray Caverns airport at or above 4000 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 4,
trees, traverse ways, pole, antennas, and building beginning 113’ from DER, 138’ right of centerline, up to 44’ AGL/938’ MSL.
Tree 1080’ from DER, 584’ right of centerline, 941’ MSL.
Trees and poles beginning 1282’ from DER, 103’ right of centerline, up to 959’ MSL.
Trees beginning 1596’ from DER, 220’ right of centerline, up to 964’ MSL.
Trees beginning 1693’ from DER, 178’ right of centerline, up to 976’ MSL.
Trees beginning 1807’ from DER, 22’ right of centerline, up to 968’ MSL.
Trees beginning 2247’ from DER, 254’ right of centerline, up to 972’ MSL.
Tree 2306’ from DER, 88’ right of centerline, 983’ MSL.
Tree 2331’ from DER, 187’ right of centerline, 985’ MSL.
Trees beginning 2360’ from DER, 5’ left of centerline, up to 976’ MSL.
Trees beginning 24222’ from DER, 14’ right of centerline, up to 987’ MSL.
Trees beginning 2459’ from DER, 33’ right of centerline, up to 93’ AGL/995’ MSL.
Tree 68’ from DER, 304’ left of centerline, 905’ MSL.
Tree 135’ from DER, 186’ left of centerline, 910’ MSL.
Trees beginning 261’ from DER, 26’ left of centerline, up to 65’ AGL/955’ MSL.
Trees beginning 333’ from DER, 184’ right of centerline, up to 936’ MSL.

LYNCHBURG, VA

FALWELL (W24)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  05JUL07  (07186) (FAA)
TAKEOFF MINIMUMS:
Rwy 10, 1100-2½ for climb in visual conditions.
Rwy 28, NA-obstacle.
DEPARTURE PROCEDURE:
Rwy 10, for climb in visual conditions: cross Falwell Airport at or above 1900 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 10, multiple trees 9’ from DER, 87’ right of centerline, up to 100’ AGL/899’ MSL.
Multiple power lines 2896’ from DER, 1192’ right of centerline, up to 149’ AGL/968’ MSL.
LYNCHBURG, VA (CON’T)
LYNCHBURG RGNL/PRESTON GLENN FLD (LYH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 8  13MAR08  (22083)  (FAA)
TAKEOFF MINIMUMS:
Rwy 17, 300-2/4 or std. w/min. climb of 232’ per NM to 1500.
Rwy 35, std. w/min. climb of 350’ per NM to 3000, or 1700-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 4, climb heading 036° to 2200 before proceeding on course.
Rwy 17, climb heading 169° to 1800 before turning right.
Rwy 22, climb heading 216° to 1800 before turning right.
Rwy 35, climb heading 349° to 3000 before turning left, or for climb in visual conditions: cross Lynchburg Rgnl/Preston Glenn Fld at or above 2500’ MSL before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 4, trees beginning 2029’ from DER, 62’ right of centerline up to 81’ AGL/999’ MSL.
Trees beginning 1422’ from DER, 3’ left of centerline up to 76’ AGL/969’ MSL.
Obstruction light on fence beginning 2’ from DER, 500’ right of centerline up to 30’ AGL/988’ MSL.
Antenna on building 395’ from DER, 15’ left of centerline, 25’ AGL/975’ MSL.
Light 606’ from DER, 599’ right of centerline, 18’ AGL/982’ MSL.
Building 400’ from DER, 345’ right of centerline, 12’ AGL/951’ MSL.
Rwy 17, trees beginning 284’ from DER, 77’ left of centerline up to 277’ AGL/1195’ MSL.
Trees beginning 261’ from DER, 178’ right of centerline up to 44’ AGL/979’ MSL.
Poles beginning 2872’ from DER, 603’ right of centerline up to 44’ AGL/982’ MSL.
Rwy 22, trees beginning 2955’ from DER, 140’ right of centerline up to 96’ AGL/1014’ MSL.
Trees beginning 722’ from DER, 71’ left of centerline up to 119’ AGL/1037’ MSL.
Rwy 35, trees beginning 284’ from DER, 62’ right of centerline up to 81’ AGL/999’ MSL.
Trees beginning 483’ from DER, 483’ right of centerline up to 44’ AGL/1044’ MSL.
Obstruction lights on fence beginning 2’ from DER, 500’ right of centerline up to 30’ AGL/988’ MSL.
Antenna on building 395’ from DER, 15’ left of centerline, 25’ AGL/975’ MSL.
Light 606’ from DER, 599’ right of centerline, 18’ AGL/982’ MSL.
Building 400’ from DER, 345’ right of centerline, 12’ AGL/951’ MSL.

MARION/WYTHEVILLE, VA
MOUNTAIN EMPIRE (MKJ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2  26JUL12  (12208)
TAKEOFF MINIMUMS:
Rwy 8, 300-1½.
Rwy 26, std. w/min. climb of 265’ per NM to 3400 or 4600-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 8, climb heading 079° to 4100 before proceeding on course.
Rwy 26, climb heading 259° to 4400 before proceeding on course or for climb in visual conditions: cross Mountain Empire airport at or above 4600’ MSL before proceeding on course. When executing VCOA, notify ATC prior to departure.
TAKEOFF OBSTACLE NOTES:
Rwy 8, trees beginning 58’ from DER, left and right of centerline, up to 100’ AGL/2819’ MSL.
Vehicles beginning 225’ from DER, left and right of centerline, up to 17’ AGL/2540’ MSL.
Poles beginning 703’ from DER, left and right of centerline, up to 123’ AGL/2537’ MSL.
Rwy 26, trees and vehicles beginning 250’ from DER, left and right of centerline, up to 100’ AGL/3039’ MSL.

MARTINSVILLE, VA
BLUE RIDGE (MTV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A  31DEC20  (20366)  (FAA)
TAKEOFF MINIMUMS:
Rwy 13, std. w/min. climb of 249’ per NM to 2100 or 1900-3 for climb in visual conditions.
Rwy 31, std. w/min. climb of 321’ per NM to 4300 or 1900-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 13, climb heading 125° to 2200 before proceeding on course. For climb in visual conditions: cross Blue Ridge airport at or above 2700 MSL before proceeding on course.
Rwy 31, for climb in visual conditions: cross Blue Ridge airport at or above 2700 MSL before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees beginning 316’ from DER, 320’ left of centerline, up to 47’ AGL/956’ MSL.
Trees beginning 38’ from DER, 380’ right of centerline, 82’ AGL/941’ MSL.
Rwy 31, trees beginning 82’ from DER, 9’ right of centerline, up to 100’ AGL/1058’ MSL.
Vehicle on road 638’ from DER, 418’ right of centerline, 15’ AGL/974’ MSL.
Obstruction light on DME 1031’ from DER, 304’ right of centerline, 18’ AGL/977’ MSL.
Fence 947’ from DER, 400’ right of centerline, 12’ AGL/971’ MSL.
Trees beginning 102’ from DER, 94’ left of centerline, up to 77’ AGL/1047’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND
DIVERSE VECTOR AREA (RADAR VECTORS)

MELFA, VA
ACCOMACK COUNTY (MFV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  25OCT07  (07298)  (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 3, multiple trees beginning 41' from DER, 221' right of centerline, up to 84' AGL/128' MSL.
Truck on road 204' from DER, 231' left of centerline, 15' AGL/61' MSL.
Multiple trees beginning 249' from DER, 14' left of centerline, up to 106' AGL/155' MSL.
Truck on road 494' from DER, 228' left of centerline, 15' AGL/62' MSL.
Rod on obstruction light tower 862' from DER, 402' left of centerline, 55' AGL/99' MSL.
Rwy 21, multiple trees beginning 27' from DER, 395' right of centerline, up to 91' AGL/135' MSL.
Multiple trees 504' from DER, 403' left of centerline, up to 110' AGL/144' MSL.

MIDDLETOWN, DE
SUMMIT (EVY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2B  20JUN19  (19171)  (FAA)
TAKEOFF MINIMUMS:
Rwys 11, 29, NA-Environmental.
Rwy 35, 300-1/4 or std. w/min. climb of 300' per NM to 400.
TAKEOFF OBSTACLE NOTES:
Rwy 17, trees beginning 14' from DER, 474' right of centerline, up to 45' AGL/111' MSL.
Tree 1277' from DER, 395' right of centerline, 60' AGL/126' MSL.
Tree 1349' from DER, 661' right of centerline, 91' AGL/156' MSL.
Pole and catenary beginning 1379' from DER, 378' left of centerline, up to 34' AGL/101' MSL.
Tree 1627' from DER, 906' right of centerline, 97' AGL/160' MSL.
Trees beginning 1639' from DER, 384' right of centerline, up to 97' AGL/161' MSL.
Rwy 35, tree 39' from DER, 475' left of centerline, 50' AGL/115' MSL.
Traverse way 350' from DER, 404' right of centerline, 81' MSL.
Pole 357' from DER, 487' right of centerline, 43' AGL/104' MSL.
Trees beginning 381' from DER, 359' left of centerline, up to 53' AGL/119' MSL.
Poles and tree beginning 689' from DER, 28' right of centerline, up to 43' AGL/106' MSL.
Trees beginning 1380' from DER, 43' right of centerline, up to 67' AGL/127' MSL.
Trees and elevator beginning 1782' from DER, 194' right of centerline, up to 77' AGL/128' MSL.
Trees beginning 1970' from DER, 368' left of centerline, up to 61' AGL/127' MSL.
Tree 3473' from DER, 167' left of centerline, 88' AGL/157' MSL.
Transmission line 5084' from DER, 575' right of centerline, 178' AGL/243' MSL.
Tower 5086' from DER, 1066' right of centerline, 202' AGL/255' MSL.
Tower 5591' from DER, 1094' right of centerline, 169' AGL/257' MSL.
Transmission line 5734' from DER, 564' right of centerline, 170' AGL/245' MSL.

MONETA, VA
SMITH MOUNTAIN LAKE (W91)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  18SEP14  (14261)  (FAA)
TAKEOFF MINIMUMS:
Rwy 5, 400-2/4 or std. w/min. climb of 565' per NM to 1200.
DEPARTURE PROCEDURE:
Rwy 5, climb heading 054° to 2600 before proceeding on course.
Rwy 23, climb heading 234° to 1900 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 5, trees beginning abeam DER, 144' right of centerline, up to 100' AGL/1019' MSL.
Vehicles on road beginning 3' from DER, left and right of centerline, up to 15' AGL/1034' MSL.
Aircraft on taxiway, 132' left of centerline, up to 20' AGL/939' MSL.
Trees beginning 303' from DER, 211' left of centerline, up to 100' AGL/1039' MSL.
Trees beginning 3234' from DER, 44' right of centerline, up to 100' AGL/1119' MSL.
Trees beginning 2954' from DER, 83' left of centerline, up to 100' AGL/1099' MSL.
Rwy 23, trees beginning 13' from DER, 149' left of centerline, up to 100' AGL/979' MSL.
Vehicles on road beginning 19' from DER, left and right of centerline, up to 15' AGL/894' MSL.
Trees beginning 622' from DER, 316' right of centerline, up to 100' AGL/979' MSL.

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND
DIVERSE VECTOR AREA (RADAR VECTORS)
NEWPORT NEWS, VA
NEWPORT NEWS/WILLIAMSBURG INTL (PHF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 26MAY16 (16147) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 2, REIL 15’ from DER, 150’ left of centerline, 43’ MSL.
Tree and airport sign beginning 21’ from DER, 256’ left of centerline, up to 50’ MSL.
Trees beginning 45’ from DER, 386’ right of centerline, up to 51’ MSL.
Tree and pole beginning 212’ from DER, 652’ right of centerline, 60’ MSL.
Pole 840’ from DER, 625’ left of centerline, 78’ MSL.
Poles beginning 840’ from DER, 522’ left of centerline, up to 37’ AGL/80’ MSL.
Trees beginning 896’ from DER, 723’ right of centerline, up to 124’ MSL.
Tree and pole beginning 935’ from DER, 427’ left of centerline, up to 131’ MSL.
Trees beginning 1067’ from DER, 253’ right of centerline, up to 135’ MSL.
Tree and pole beginning 1183’ from DER, 498’ right of centerline, up to 140’ MSL.
Trees beginning 1399’ from DER, 428’ left of centerline, up to 150’ MSL.
Trees beginning 1629’ from DER, 413’ right of centerline, up to 151’ MSL.
Tree and T-tower beginning 1704’ from DER, 47’ left of centerline, up to 156’ MSL.
T-towers and trees beginning 3347’ from DER, 5’ left of centerline, up to 163’ MSL.
Rwy 7, signs beginning 55’ from DER, 282’ left of centerline, up to 8’ AGL/42’ MSL.
Tree 368’ from DER, 588’ left of centerline, 73’ MSL.
Tree 1557’ from DER, 906’ right of centerline, 95’ MSL.
Trees beginning 1555’ from DER, 904’ right of centerline, up to 96’ MSL.
Tree 2279’ from DER, 932’ right of centerline, 99’ MSL.
Trees beginning 2477’ from DER, 909’ right of centerline, up to 110’ MSL.
Tree 3535’ from DER, 1395’ left of centerline, 140’ MSL.
Trees beginning 3535’ from DER, 1291’ left of centerline, up to 141’ MSL.
Trees beginning 3884’ from DER, 965’ left of centerline, up to 144’ MSL.
Trees beginning 3927’ from DER, 315’ left of centerline, up to 147’ MSL.
Trees beginning 3958’ from DER, 235’ left of centerline, up to 153’ MSL.
T-towers beginning 5621’ from DER, 1337’ left of centerline, up to 189’ MSL.
Rwy 20, airport sign 41’ from DER, 310’ right of centerline, 39’ MSL.
Bush 96’ from DER, 290’ left of centerline, 52’ MSL.
Trees beginning 1038’ from DER, 489’ left of centerline, up to 90’ MSL.
Trees beginning 2779’ from DER, 1002’ right of centerline, up to 111’ MSL.
Rwy 25, tree 357’ from DER, 563’ right of centerline, 48’ MSL.
Tree 539’ from DER, 594’ right of centerline, 59’ MSL.
Trees beginning 623’ from DER, 550’ right of centerline, up to 71’ MSL.
Tree 719’ from DER, 580’ right of centerline, 79’ MSL.
Trees beginning 776’ from DER, 581’ right of centerline, up to 86’ MSL.
Trees beginning 853’ from DER, 600’ right of centerline, up to 91’ MSL.
Trees beginning 1021’ from DER, 587’ right of centerline, up to 97’ MSL.
Tree 1046’ from DER, 672’ right of centerline, 112’ MSL.
Tree 1121’ from DER, 726’ right of centerline, 115’ MSL.
Tree 1121’ from DER, 745’ right of centerline, 119’ MSL.
Trees beginning 1126’ from DER, 335’ right of centerline, up to 123’ MSL.
Tree 3437’ from DER, 1126’ right of centerline, 139’ MSL.

NEW MARKET, VA
NEW MARKET (8W2)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 31MAY12 (12152) (FAA)
TAKEOFF MINIMUMS:
Rwy 6, 1100-3 w/min. climb of 376’ per NM to 3700 or 2600-3 for climb in visual conditions.
Rwy 24, 1100-3 w/min. climb of 290’ per NM to 3700 or 2600-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwy 6, climb heading 048° to 3700 before proceeding on course or for climb in visual conditions: cross New Market airport at or above 3400 MSL before proceeding on course. When executing VCOA, notify ATC prior to departure.
Rwy 24, climb heading 243° to 3700 before proceeding on course or for climb in visual conditions: cross New Market airport at or above 3400 MSL before proceeding on course. When executing VCOA, notify ATC prior to departure.
TAKEOFF OBSTACLE NOTES:
Rwy 6, train beginning 2’ from DER, 396’ left of centerline, up to 23’ AGL/1002’ MSL.
Vehicles on road beginning 57’ from DER, left and right of centerline, up to 15’ AGL/994’ MSL.
Trees beginning 754’ from DER, 522’ left of centerline, up to 100’ AGL/1279’ MSL.
Rwy 24, train beginning 11’ from DER, 404’ right of centerline, up to 23’ AGL/1002’ MSL.
Trees beginning 564’ from DER, 257’ right of centerline, up to 100’ AGL/1319’ MSL.
NORFOLK, VA
CHESAPEAKE RGNL (CPK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 09FEB12 (12040) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 5, trees beginning 143' from DER, left and right of centerline, up to 100' AGL/108' MSL.
Rwy 23, trees beginning 153' from DER, left and right of centerline, up to 105' AGL/122' MSL.

HAMPTON ROADS EXEC (PVG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 18SEP14 (21224) (FAA)
TAKEOFF MINIMUMS:
Rwy 10, std. w/min. climb of 210' per NM to 600, or alternatively with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to DER or 1700-2½ for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 10, climb heading 019° to 1600 before turning west.
Rwy 10, climb heading 102° to 1000 before proceeding on course, or for climb in visual conditions, cross Hampton Roads Exec airport at or above 1600 before proceeding on course. When executing VCOA, notify ATC prior to departure.
Rwy 20, climb heading 199° to 900 before turning North.
Rwy 28, climb heading 282° to 1500 before turning North.
TAKEOFF OBSTACLE NOTES:
Rwy 2, vehicles on roadway beginning 213' from DER, left and right of centerline, up to 15' AGL/39' MSL.
Trees beginning 663' from DER, left and right of centerline, up to 100' AGL/124' MSL.
Rwy 10, aircraft on taxiway beginning 9' from DER, 390' right of centerline, up to 26' AGL/49' MSL.
Bushes beginning 30' from DER, 156' right of centerline, up to 5' AGL/26' MSL.
Bushes beginning 96' from DER, 486' left of centerline, up to 12' AGL/33' MSL.
Trees beginning 2086' from DER, 19' left of centerline, up to 103' AGL/124' MSL.
Trees beginning 2103' from DER, 13' right of centerline, up to 113' AGL/134' MSL.
Rwy 20, aircraft on taxiway and buildings beginning 11' from DER, 144' right of centerline, up to 40' AGL/50' MSL.
Vehicles on roadway beginning 87' from DER, 14' left of centerline, up to 23' AGL/47' MSL.
Trains on railroad tracks beginning 333' from DER, 571' left of centerline, up to 100' AGL/124' MSL.
Trains on railroad tracks and trees beginning 796' from DER, 90' right of centerline, up to 100' AGL/124' MSL.
Rwy 28, trees beginning 2267' from DER, 1071' left of centerline, up to 100' AGL/121' MSL.
Trees beginning 3793' from DER, 408' left of centerline, up to 113' AGL/134' MSL.

NORFOLK INTL (ORF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 29MAY14 (14149) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 5, multiple trees beginning 1521' from DER, 628' right of centerline, up to 85' AGL/95' MSL.
Towers beginning 2974' from DER, 773' right of centerline, up to 127' AGL/131' MSL.
Mobile crane 4334' from DER, 1106' right of centerline, 162' AGL/163' MSL.
Sign 82' from DER, 301' left of centerline, 11' AGL/19' MSL.
Pole 2686' from DER, 1063' left of centerline, 87' AGL/91' MSL.

Rwy 14, vehicle on road 2' from DER, 450' right of centerline, up to 10' AGL/36' MSL.

Multiple trees beginning 1193' from DER, 117' right of centerline, up to 82' AGL/97' MSL.
Multiple trees beginning 1755' from DER, 413' right of centerline, up to 85' AGL/100' MSL.
Numerous trees beginning 2109' from DER, 150' right of centerline, up to 121' AGL/136' MSL.

Trees beginning 333' from DER, 308' right of centerline, 101' AGL/121' MSL.
Poles beginning 1307' from DER, 255' right of centerline, up to 43' AGL/62' MSL.
Numerous trees beginning 1230' from DER, 40' left of centerline, up to 84' AGL/104' MSL.
Pole 1567' from DER, 95' left of centerline, 42' AGL/62' MSL.

Multiple trees beginning 2347' from DER, 57' left of centerline, up to 83' AGL/103' MSL.
Multiple trees beginning 3038' from DER, 235' left of centerline, up to 101' AGL/121' MSL.

Rwy 23, trees beginning 324' from DER, 484' right of centerline, up to 28' AGL/43' MSL.
Trees beginning 1989' from DER, 26' right of centerline, up to 61' AGL/76' MSL.
Pole 1012' from DER, 650' right of centerline, 62' AGL/73' MSL.
Pole 2166' from DER, 640' right of centerline, 41' AGL/74' MSL.
Vehicle on road 128' from DER, 508' left of centerline, 10' AGL/31' MSL.

Multiple towers beginning 619' from DER, 560' left of centerline, up to 66' AGL/76' MSL.
Pole 1434' from DER, 739' left of centerline, 57' AGL/71' MSL.

Multiples beginning 1801' from DER, 46' left of centerline, up to 65' AGL/85' MSL.
Trees beginning 2797' from DER, 448' left of centerline, up to 103' AGL/113' MSL.

Rwy 32, multiple trees beginning 17' from DER, 459' right of centerline, up to 92' AGL/112' MSL.
Vehicles on road beginning 207' from DER, 231' right of centerline, up to 15' AGL/29' MSL.

Tree 317' from DER, 183' right of centerline, 24' AGL/31' MSL.

Trees 775' from DER, 54' right of centerline, up to 61' AGL/71' MSL.

Multiple trees beginning 1085' from DER, 698' right of centerline, up to 88' AGL/98' MSL.

Multiple trees beginning 1696' from DER, 1' right of centerline, up to 85' AGL/95' MSL.

Multiple trees beginning 2128' from DER, 1' right of centerline, up to 103' AGL/113' MSL.
Multiple trees beginning 3955' from DER, 936' right of centerline, up to 124' AGL/134' MSL.

Vehicles on road beginning 265' from DER, on centerline, up to 15' AGL/26' MSL.

Tree 9' from DER, 414' left of centerline, 25' AGL/35' MSL.

CON'T

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

NORFOLK, VA (CONT’)
NORFOLK INTL (ORF) (CONT’)
Rwy 32 (CONT’), tree 166’ from DER, 264’ left of centerline, 17’ AGL/27’ MSL.
Towers beginning 201’ from DER, 86’ left of centerline, 12’ AGL/27’ MSL.
Vehicle on road 217’ from DER, 81’ left of centerline, 10’ AGL/27’ MSL.
Trees beginning 677’ from DER, 568’ left of centerline, up to 60’ AGL/70’ MSL.
Trees beginning 764’ from DER, 109’ left of centerline, up to 40’ AGL/47’ MSL.
Poles beginning 846’ from DER, 223’ left of centerline, up to 41’ AGL/51’ MSL.
Multiple trees beginning 1110’ from DER, 181’ left of centerline, up to 49’ AGL/59’ MSL.
Tree 1359’ from DER, 817’ left of centerline, 93’ AGL/103’ MSL.
Trees beginning 3528’ from DER, 186’ left of centerline, up to 106’ AGL/113’ MSL.

NORFOLK, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 26JAN23 (23026) (USN)
TAKEOFF MINIMUMS:
Rwy 10, ATC restriction to de-conflict with ORF traffic, std. w/min. CG 400’ per NM to 500’ MSL, if unable advise ATC, then 300-1.
Rwy 28, 500-2¼, or std. w/min. climb of 240’ per NM to 700.
TAKEOFF OBSTACLE NOTES:
Rwy 10, trees with a maximum height of 120’ within 2500’ of DER.
Rwy 28, cranes 1.3 NM from DER, 1600’ left to 2000’ right of centerline, 215’ MSL.
Cranes 1.3 NM from DER, 2000’ to 4000’ right of centerline, 245’ MSL.
Twr 2323’ from DER, 745’ left of centerline, 70’ AGL/72’ MSL.

NORFOLK NS (CHAMBERS FLD) (KNGU)
NORFOLK, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 30NOV23 (23334) (USN)
TAKEOFF MINIMUMS:
H01, std w/min climb of 500’/NM to 500.
DEPARTURE PROCEDURE:
Diverse departures NA.

OAKLAND, MD
GARRETT COUNTY (2G4)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 10APR08 (08101) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 9, Multiple trees beginning 75’ from DER, 94’ left of centerline, up to 100’ AGL/2939’ MSL.
Multiple trees beginning 76’ from DER, 47’ right of centerline, up to 100’ AGL/2939’ MSL.
Rwy 27, Multiple trees beginning 15’ from DER, 334’ left of centerline, up to 100’ AGL/3019’ MSL.
Multiple trees beginning 19’ from DER, 107’ right of centerline, up to 100’ AGL/3019’ MSL.

OCEAN CITY, MD
OCEAN CITY MUNI (OXB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 30NOV23 (23334) (FAA)
TAKEOFF MINIMUMS:
Rwy 2, 300-1 or std w/min climb of 275’/NM to 300.
Rwy 32, 400-2 or std w/min climb of 275’/NM to 500.
TAKEOFF OBSTACLE NOTES:
Rwy 2, light poles 9’ from DER, 16’ right of centerline, 2’ AGL/13’ MSL.
Light poles 9’ from DER, 16’ left of centerline, 2’ AGL/13’ MSL.
Tree 1008’ from DER, 554’ right of centerline, 66’ MSL.
Trees beginning 1029’ from DER, 518’ left of centerline, up to 104’ MSL.
Trees, pole beginning 1096’ from DER, 442’ right of centerline, up to 77’ MSL.
Trees, pole beginning 1163’ from DER, 17’ left of centerline, up to 107’ MSL.
Trees beginning 1373’ from DER, 173’ right of centerline, up to 92’ MSL.
Tree 1633’ from DER, 389’ right of centerline, 93’ MSL.
Trees beginning 1649’ from DER, 25’ right of centerline, up to 99’ MSL.
Trees beginning 2907’ from DER, 39’ right of centerline, up to 109’ MSL.
Trees beginning 3238’ from DER, 56’ right of centerline, up to 114’ MSL.
Tank 4707’ from DER, 1598’ right of centerline, 160’ AGL/169’ MSL.
Water tower, tower beginning 4707’ from DER, 1598’ right of centerline, up to 162’ AGL/170’ MSL.
CON’T
OCEAN CITY, MD (CON’T)
OCEAN CITY MUNI (OXB) (CON’T)
Rwy 20, trees beginning at DER, 216' right of centerline, up to 52' MSL.
Tree 179' from DER, 476' left of centerline, 33' MSL.
Tree 187' from DER, 518' left of centerline, 43' MSL.
Trees beginning 332' from DER, 457' left of centerline, up to 48' MSL.
Trees beginning 596' from DER, 298' left of centerline, up to 56' MSL.
Trees beginning 604' from DER, 224' right of centerline, up to 56' MSL.
Trees beginning 1267' from DER, 620' right of centerline, up to 76' MSL.
Trees beginning 1420' from DER, 3' right of centerline, up to 80' MSL.
Tree 1722' from DER, 250' left of centerline, 63' MSL.

Rwy 32, tree 353' from DER, 550' left of centerline, 52' MSL.
Tree, pole beginning 557' from DER, 544' left of centerline, up to 58' MSL.
Poles beginning 725' from DER, 492' left of centerline, up to 50' AGL/61' MSL.
Tree 1214' from DER, 73' right of centerline, 72' MSL.
Trees beginning 1236' from DER, 139' left of centerline, up to 78' MSL.
Tree 1252' from DER, 257' right of centerline, 83' MSL.
Trees beginning 1339' from DER, 66' right of centerline, up to 100' MSL.
Trees beginning 1355' from DER, 551' left of centerline, up to 80' MSL.
Tree, pole beginning 1384' from DER, 65' left of centerline, up to 82' MSL.
Trees beginning 1432' from DER, 180' left of centerline, up to 86' MSL.
Trees beginning 1477' from DER, 53' right of centerline, up to 107' MSL.
Tree 1563' from DER, 374' left of centerline, 89' MSL.
Trees beginning 1584' from DER, 5' left of centerline, up to 92' MSL.
Trees beginning 1668' from DER, 63' left of centerline, up to 105' MSL.
Antenna, tower beginning 1.6 NM from DER, 928' right of centerline, up to 352' AGL/358' MSL.

OCEANA NAS (APOLLO SOUCEK FLD) (KNTU)
VIRGINIA BEACH, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4  27JAN22 (22083) (USN)
TAKEOFF OBSTACLE NOTES:
Rwy 5L, trees 3707' from DER, 98' right of centerline, 91' AGL/114' MSL.
Rwy 5R, trees 3706' from DER, 602' left of centerline, 91' AGL/114' MSL.
Trees 966' from DER, 598' right of centerline, 0' AGL/47' MSL.
Rwy 14R, trees 286' from DER, 527' right of centerline, 45' MSL.
Rwy 32L, terrain 0' from DER, 500' left of centerline, 20' MSL.
Trees 2792' from DER, 6' left of centerline, 89' AGL/104' MSL.
Rwy 32R, terrain 0' from DER, 484' right of centerline, 20' MSL.
Trees 2791' from DER, 709' left of centerline, 89' AGL/104' MSL.

ORANGE, VA
ORANGE COUNTY (OMH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  29MAY14 (14149) (FAA).
DEPARTURE PROCEDURE:
Rwy 8, climb heading 075° to 1500 before turning left.
Rwy 26, climb heading 255° to 2000 before turning.
TAKEOFF OBSTACLE NOTES:
Rwy 8, terrain, trees and poles beginning 103' from DER, 361' right of centerline, up to 126' AGL/576' MSL.
Terrain, trees and poles beginning 404' from DER, 600' left of centerline, up to 101' AGL/581' MSL.
Rwy 26, terrain, trees, and poles beginning 14' from DER, 429' right of centerline, up to 101' AGL/559' MSL.
Vehicle on road 378' from DER, 406' right of centerline, 17' AGL/463' MSL.
Terrain, trees, poles, building and catenary beginning 101' from DER, 888' left of centerline, up to 102' AGL/522' MSL.

PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)
PATUXENT RIVER, MD
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
02DECE21 (21336) (USN)
TAKEOFF OBSTACLE NOTES:
Rwy 2, tower 2280' from DER, 57' right of centerline, 71' AGL/92' MSL.
Twr 2315' from DER, 9' left of centerline, 62' AGL/83' MSL.
Twr 2333' from DER, 226' right of centerline, 72' AGL/92' MSL.
Twr 2370' from DER, 26' right of centerline, 72' AGL/99' MSL.
Twr 2399' from DER, 261' right of centerline, 64' AGL/83' MSL.
Twr 2343' from DER, 195' right of centerline, 72' AGL/92' MSL.
Rwy 6, pylon 1977' from DER, 979' left of centerline, 63' AGL/83' MSL.
Rwy 14, tree 271' from DER, 572'left of centerline, 79' AGL/87'MSL.
Rwy 20, pylon 3860' from DER, 1431' left of centerline, 52' AGL/103' MSL.
Pylon 4420' from DER, 772' left of centerline, 52' AGL/114' MSL.
Rwy 24, terrain 1.0 NM from DER, 1839' left of centerline, 212' MSL.
Twr, 3' from DER, 259' right of centerline, 2' AGL/47' MSL.

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)
NE-3, 30 NOV 2023 to 25 JAN 2024

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PETERSBURG, VA
TRI CITIES EXEC/DINWIDDIE COUNTY (PTB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 25APR19 (22363) (FAA)
TAKEOFF OBSTACLE NOTES:

Rwy 5, fence 160' from DER, 472' right of centerline, 13' AGL/196' MSL.
Tree 910' from DER, 705' left of centerline, 244' MSL.
Tree 1855' from DER, 551' left of centerline, 252' MSL.
Tree 2342' from DER, 600' left of centerline, 254' MSL.

Rwy 23, fence 10' from DER, 475' left of centerline, 10' AGL/199' MSL.
Tree 819' from DER, 658' left of centerline, 253' MSL.
Tree 1040' from DER, 643' left of centerline, 265' MSL.
Tree 1452' from DER, 802' left of centerline, 276' MSL.
Trees beginning 2814' from DER, 534' right of centerline, up to 276' MSL.
Trees beginning 3145' from DER, 69' right of centerline, up to 289' MSL.
Tree 3151' from DER, 527' left of centerline, 281' MSL.

PHILLIPS AAF (KAPG)
ABERDEEN PROVING GROUND, MD
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 15JUN23 (23166) (USA)
TAKEOFF OBSTACLE NOTES:

Rwy 4, vehicle on road 1059' from DER, on centerline, 10' AGL/86' MSL.

Rwy 22, vehicle on road 234' from DER, 27' right of centerline, 10' AGL/49' MSL.

QUANTICO MCAF (TURNER FLD) (KNYG)
QUANTICO, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 03NOV22 (22307) (USN)
TAKEOFF OBSTACLE NOTES:

Rwy 2, terrain 5117' from DER, 1871' left of centerline, 151' MSL.
Terrain 5470' from DER, 1723' left of centerline, 157' MSL.
Camera pole 115' from DER, 192' left of centerline, 23' MSL.
Light pole 158' from DER, 297' left of centerline, 30' MSL.
Light pole 173' from DER, 349' left of centerline, 30' MSL.
Light pole 186' from DER, 398' left of centerline, 31' MSL.
Light pole 216' from DER, 280' left of centerline, 30' MSL.
Light pole 273' from DER, 285' left of centerline, 30' MSL.
Light pole 288' from DER, 315' left of centerline, 30' MSL.
Light pole 302' from DER, 366' left of centerline, 31' MSL.
Light pole 3078' from DER, 1139' left of centerline, 116' MSL.
Light pole 2314' from DER, 876' left of centerline, 61' AGL/94' MSL.
Top of brush 1025' from DER, 96' left of centerline, 42' MSL.
Top of brush 1249' from DER, 209' left of centerline, 42' MSL.
Top of brush 909' from DER, 91' right of centerline, 43' MSL.
Top of brush 967' from DER, 123' right of centerline, 43' MSL.
Tree 806' from DER, 344' left of centerline, 52' MSL.
Tree 821' from DER, 302' left of centerline, 52' MSL.
Tree 875' from DER, 318' left of centerline, 51' MSL.
Bldg corner 101' from DER, 413' left of centerline, 22' MSL.
Bldg corner 104' from DER, 420' left of centerline, 19' MSL.
Bldg corner 115' from DER, 459' left of centerline, 19' MSL.
Bldg corner 123' from DER, 260' left of centerline, 20' MSL.
Bldg corner 161' from DER, 397' left of centerline, 20' MSL.
Bldg corner 163' from DER, 404' left of centerline, 19' MSL.
Bldg corner 174' from DER, 443' left of centerline, 19' MSL.
Bldg corner 57' from DER, 466' left of centerline, 25' MSL.
Bldg corner 64' from DER, 276' left of centerline, 22' MSL.
Bldg corner 97' from DER, 455' left of centerline, 25' MSL.
Bldg peak 135' from DER, 411' left of centerline, 26' MSL.
Bldg peak 145' from DER, 451' left of centerline, 26' MSL.
Rwy 20, terrain 0' from DER, 419' right of centerline, 39' MSL.
Terrain 0' from DER, 500' right of centerline, 40' MSL.
Camera pole 9' from DER, 457' right of centerline, 29' MSL.
Electric box 7' from DER, 283' right of centerline, 13' MSL.
Jetty 393' from DER, 273' right of centerline, 27' MSL.
Top of brush 287' from DER, 439' right of centerline, 33' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

QUANTICO MCAF (TURNER FLD) (KNYG) (CON’T)
QUANTICO, VA (CON’T)
DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1  03NOV22 (22307)  (USN)
   Rwys, hdgs as assigned by ATC; requires min. civilian climb of 301’ per NM to 500, min. military climb of 301’ per NM to 700.

QUINTON, VA
NEW KENT COUNTY (W96)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2  19SEP13 (13262)  (FAA)
TAKEOFF OBSTACLE NOTES:
   Rw 11, trees beginning abeam DER, 189’ right of centerline, up to 100’ AGL/199’ MSL.
   Trees beginning abeam DER, 113’ left of centerline, up to 100’ AGL/209’ MSL.
   Trees beginning 257’ from DER, left and right of centerline, up to 100’ AGL/189’ MSL.
   Trees beginning abeam DER, 209’ left of centerline, up to 100’ AGL/219’ MSL.
   Fence 246’ from DER, 8’ AGL/127’ MSL.
   Trees beginning 247’ from DER, 153’ right of centerline up to 100’ AGL/199’ MSL.
   Vehicles on roadway 269’ from DER, left and right of centerline, 15’ AGL/134’ MSL.
   Trees beginning 396’ from DER, 5’ right of centerline, up to 100’ AGL/239’ MSL.

RICHMONDS, VA
TAZEWELL COUNTY (JFZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  15DEC11 (11349)  (FAA)
TAKEOFF MINIMUMS:
   Rw 7, std. w/min. climb of 630’ per NM to 3200 or 300-1½ w/ min. climb of 235’ per NM to 5000 or 2000-2½ for climb in visual conditions.
   Rw 25, std. w/min. climb of 713’ per NM to 2900 or 300-1 w/ min. climb of 220’ per NM to 5000 or 2000-2½ for climb in visual conditions.
DEPARTURE PROCEDURE:
   Rw 7, climb heading 072° to 5000 before proceeding on course, or for climb in visual conditions: cross Tazewell County airport at or above 4500 before proceeding on course. When executing VCOA, notify ATC prior to departure.
   Rw 25, climb heading 252° to 5000 before proceeding on course or for climb in visual conditions: cross Tazewell County airport at or above 4500 before proceeding on course. When executing VCOA, notify ATC prior to departure.
TAKEOFF OBSTACLE NOTES:
   Rw 7, rising terrain beginning at DER, left and right of centerline, up to 2773’ MSL.
   Vehicles on road beginning at DER, 425’ right of centerline, up to 15’ AGL/2682’ MSL.
   Trees beginning at DER, left and right of centerline, up to 100’ AGL/2939’ MSL.
   Rw 25, trees beginning 116’ from DER, left and right of centerline, up to 100’ AGL/2828’ MSL.
   DME facility 176’ from DER, 256’ left of centerline, 28’ AGL/2668’ MSL.
   Fence beginning 566’ from DER, 363’ left of centerline, up to 10’ AGL/2734’ MSL.
   Rising terrain beginning 620’ from DER, 361’ left of centerline, up to 2669’ MSL.

RICHMOND, VA
RICHMOND EXEC/CHESTERFIELD COUNTY (FCI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  02MAY13 (21336)  (FAA)
DEPARTURE PROCEDURE:
   Rw 33, climb heading 316° to 2000 before turning right.
TAKEOFF OBSTACLE NOTES:
   Rw 15, vehicles on roadway and trees beginning abeam DER, 260’ right of centerline, up to 59’ AGL/260’ MSL.
   Trees beginning 99’ from DER, 266’ left of centerline, up to 57’ AGL/258’ MSL.
   Rw 33, rising terrain, trees and pole beginning 62’ from DER, 29’ right of centerline, up to 37’ AGL/278’ MSL.
   Trees beginning 1844’ from DER, 660’ left of centerline, up to 95’ AGL/306’ MSL.
RICHMOND, VA (CON’T)
RICHMOND INTL (RIC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 05DEC19 (19339) (FAA)
TAKEOFF MINIMUMS:
Rwy 2, 300-1/2 or std. w/min. climb of 230’ per NM to 400, or alternatively, with std. takeoff minimums and a normal 200’ per NM climb gradient, takeoff must occur no later than 1700’ prior to DER.
TAKEOFF OBSTACLE NOTES:
Rwy 2, lighting 40’ from DER, 115’ left of centerline, 4’ AGL/168’ MSL.
Lighting 40’ from DER, 115’ right of centerline, 3’ AGL/168’ MSL.
Sign, lighting beginning 47’ from DER, 204’ right of centerline, up to 4’ AGL/169’ MSL.
Tree 2340’ from DER, 335’ left of centerline, 224’ MSL.
Tree 2360’ from DER, 327’ left of centerline, 229’ MSL.
Trees beginning 2377’ from DER, 316’ left of centerline, up to 235’ MSL.
Tree 2460’ from DER, 813’ right of centerline, 232’ MSL.
Trees beginning 2483’ from DER, 201’ left of centerline, up to 236’ MSL.
Trees beginning 2540’ from DER, 993’ right of centerline, up to 241’ MSL.
Tree 2557’ from DER, 959’ right of centerline, 245’ MSL.
Trees beginning 2623’ from DER, 42’ right of centerline, up to 253’ MSL.
Trees beginning 2643’ from DER, 1’ left of centerline, up to 249’ MSL.
Trees beginning 2916’ from DER, 17’ right of centerline, up to 259’ MSL.
Trees beginning 3051’ from DER, 37’ left of centerline, up to 251’ MSL.
Trees beginning 3135’ from DER, 357’ right of centerline, up to 263’ MSL.
Trees beginning 3382’ from DER, 462’ right of centerline, up to 270’ MSL.
Trees beginning 3385’ from DER, 119’ right of centerline, up to 275’ MSL.
Tree 3428’ from DER, 368’ left of centerline, 252’ MSL.
Tower 5423’ from DER, 1710’ left of centerline, 157’ AGL/321’ MSL.
Rwy 16, lighting 2’ from DER, 80’ right of centerline, 2’ AGL/161’ MSL.
Lighting 2’ from DER, 80’ left of centerline, 2’ AGL/161’ MSL.
Trees beginning 1671’ from DER, 776’ right of centerline, up to 214’ MSL.
Tree 2873’ from DER, 1218’ left of centerline, 241’ MSL.
Rwy 20, lighting 3’ from DER, 5’ right of centerline, 1’ AGL/160’ MSL.
Lighting 4’ from DER, 4’ left of centerline, 1’ AGL/160’ MSL.
Building 724’ from DER, 680’ right of centerline, 35’ AGL/195’ MSL.
Building 816’ from DER, 654’ right of centerline, up to 53’ AGL/212’ MSL.
Tree 2304’ from DER, 1111’ right of centerline, 219’ MSL.
Trees beginning 2367’ from DER, 986’ left of centerline, up to 241’ MSL.
Trees beginning 2567’ from DER, 724’ right of centerline, up to 253’ MSL.
Tree 2616’ from DER, 1189’ right of centerline, 257’ MSL.
Tree, pole beginning 2637’ from DER, 281’ right of centerline, up to 264’ MSL.
Trees beginning 3013’ from DER, 1046’ left of centerline, up to 251’ MSL.
Rwy 34, lighting beginning 1’ from DER, 4’ left of centerline, up to 1’ AGL/168’ MSL.
Terrain 3’ from DER, 6’ right of centerline, 167’ MSL.
Pole 1262’ from DER, 732’ left of centerline, 41’ AGL/200’ MSL.
Tree 2256’ from DER, 1090’ right of centerline, 231’ MSL.
Trees beginning 2458’ from DER, 952’ left of centerline, up to 240’ MSL.
Tree 2602’ from DER, 998’ left of centerline, 250’ MSL.
Tree 2604’ from DER, 1172’ left of centerline, 251’ MSL.
Trees beginning 2674’ from DER, 952’ left of centerline, up to 252’ MSL.

RICHMOND/ASHLAND, VA
HANOVER COUNTY MUNI (OPF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 30JAN20 (20030) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 34, tree 410’ from DER, 567’ left of centerline, 278’ MSL.
Tree 1125’ from DER, 750’ left of centerline, 279’ MSL.
Trees beginning 1402’ from DER, 445’ right of centerline, up to 290’ MSL.
Tree 1502’ from DER, 774’ left of centerline, 292’ MSL.
Trees beginning 1836’ from DER, 739’ left of centerline, up to 293’ MSL.
Trees beginning 2731’ from DER, 487’ right of centerline, up to 304’ MSL.

RIDGELY, MD
GOODEN AIRPARK (RJD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 02AUG07 (21168) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 12, multiple trees beginning 592’ from DER, 6’ left of centerline, up to 100’ AGL/160’ MSL.
Multiple trees beginning 239’ from DER, 338’ right of centerline, up to 100’ AGL/160’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

ROANOKE, VA
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

AMDT 11A 15AUG19 (22027) (FAA)

TAKEOFF MINIMUMS:
- RWy 6, std. w/min. climb of 585’ per NM to 3000 or 2600-3 for climb in visual conditions.
- RWy 16, std. w/min. climb of 340’ per NM to 3300 or 2600-3 for climb in visual conditions.
- RWy 24, std. w/min. climb of 365’ per NM to 5100, or 2600-3 for climb in visual conditions.
- RWy 34, NA-Obstacles.

DEPARTURE PROCEDURE:
- RWy 6, climb on heading 058° to 3200 before proceeding on course.
- RWy 16, climb on heading 156° to 3000 before proceeding on course.
- RWy 24, climb on heading 238° to 3000 before proceeding on course.

VCOA:
Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Roanoke/Blacksburg Rgnl (Woodrum Fld) at or above 3600 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
- RWy 6, trees and bushes beginning 88’ from DER, 340’ right of centerline, up to 59’ AGL/1159’ MSL.
- Trees beginning 238’ from DER, 540’ right of centerline, up to 71’ AGL/1171’ MSL.
- Trees beginning 1536’ from DER, 298’ right of centerline, up to 100’ AGL/1219’ MSL.
- Trees beginning 2.7 NM from DER, 2645’ left of centerline, up to 84’ AGL/1684’ MSL.
- Trees beginning 2.8 NM from DER, 2912’ left of centerline, up to 51’ AGL/2271’ MSL.
- Towers beginning 2.9 NM from DER, 3455’ left of centerline, up to 216’ AGL/2407’ MSL.
- RWy 16, sign 40’ from DER, 252’ left of centerline, 18’ AGL/1144’ MSL.
- Trees on hilltop 1.1 NM from DER, 56’ AGL/1336’ MSL.
- RWy 24, sign 42’ from DER, 139’ left of centerline, 13’ AGL/1154’ MSL.
- Tree 2872’ from DER, 92’ AGL/1232’ MSL.

SALISBURY, MD
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

AMDT 1 18NOV10 (10322) (FAA)

TAKEOFF OBSTACLE NOTES:
- RWy 5, terrain and trees beginning 21’ from DER, right and left of centerline, up to 100’ AGL/148’ MSL.
- Poles beginning 1213’ from DER, 664’ right of centerline, up to 36’ AGL/83’ MSL.
- Antenna on building 1388’ from DER, 49’ left of centerline, 36’ AGL/86’ MSL.
- RWy 14, trees beginning 1539’ from DER, right and left of centerline, up to 100’ AGL/153’ MSL.
- RWy 23, trees beginning 22’ from DER, right and left of centerline, up to 100’ AGL/163’ MSL.
- Vehicles on road beginning 220’ from DER, right and left of centerline, up to 17’ AGL/60’ MSL.
- Antenna on building 1141’ from DER, 304’ right of centerline, 47’ AGL/83’ MSL.
- RWy 32, trees beginning 14’ from DER, right and left of centerline, up to 100’ AGL/134’ MSL.
- Hangars beginning 121’ from DER, 510’ left of centerline, up to 23’ AGL/72’ MSL.
- Trailer 396’ from DER, 126’ left of centerline, 10’ AGL/59’ MSL.

SALUDA, VA
HUMMEL FLD (W75)

AMDT 2A 15JUN23 (23166) (FAA)

TAKEOFF OBSTACLE NOTES:
- RWy 1, terrain and trees beginning 208’ from DER, right and left of centerline, up to 100’ AGL/137’ MSL.
- Trees beginning 226’ from DER, 72’ left of centerline, up to 100’ AGL/30’ MSL.
- Trees beginning 1167’ from DER, 10’ left of centerline, up to 100’ AGL/40’ MSL.
- Trees beginning 1976’ from DER, 9’ right of centerline, up to 100’ AGL/43’ MSL.
- RWy 19, terrain+veg, transmission_line beginning 29’ from DER, 72’ right of centerline, up to 100’ AGL/140’ MSL.
- Terrain+veg, building beginning 62’ from DER, 120’ left of centerline, up to 100’ AGL/137’ MSL.
- Terrain+veg, transmission_line beginning 1003’ from DER, 38’ left of centerline, up to 100’ AGL/140’ MSL.
- Terrain+veg beginning 2115’ from DER, 2’ right of centerline, up to 100’ AGL/143’ MSL.
- Terrain+veg beginning 2214’ from DER, 17’ left of centerline, up to 100’ AGL/143’ MSL.
- Terrain+veg beginning 3425’ from DER, 437’ left of centerline, up to 100’ AGL/146’ MSL.
- Terrain+veg beginning 3474’ from DER, 1160’ left of centerline, 100’ AGL/150’ MSL.
- Terrain+veg beginning 3490’ from DER, 135’ left of centerline, up to 100’ AGL/160’ MSL.
- Terrain+aao 1.5 NM from DER, 2885’ right of centerline, 279’ AGL/200’ MSL.
- Terrain+aao beginning 1.6 NM from DER, 2665’ right of centerline, up to 279’ AGL/200’ MSL.
SOUTH BOSTON, VA
WILLIAM M TUCK (W78)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3B 14JUL22 (22195) (FAA)
TAKEOFF MINIMUMS:
Rwy 1, 300-1.
Rwys 6, 24, NA.
TAKEOFF OBSTACLE NOTES:
Rwy 1, tree, terrain beginning 17’ from DER, 352’ right of centerline, up to 470’ MSL.
Tree, terrain, antenna, building beginning 52’ from DER, 359’ right of centerline, up to 484’ MSL.
Vegetation beginning 111’ from DER, 188’ left of centerline, up to 432’ MSL.
Vegetation beginning 138’ from DER, 225’ left of centerline, up to 434’ MSL.
Trees beginning 197’ from DER, 481’ right of centerline, up to 487’ MSL.
Trees, terrain, buildings beginning 240’ from DER, 115’ right of centerline, up to 496’ MSL.
Vegetation 300’ from DER, 329’ left of centerline, 435’ MSL.
Tower, trees, building, vegetation beginning 334’ from DER, 230’ left of centerline, up to 72’ AGL/501’ MSL.
Tree 536’ from DER, 537’ right of centerline, 504’ MSL.
Trees, terrain, poles, vehicles on roads, building beginning 550’ from DER, 6’ right of centerline, up to 510’ MSL.
Trees, vegetation, pole beginning 846’ from DER, 26’ left of centerline, up to 505’ MSL.
Tree, pole, vegetation, vehicles on roads beginning 921’ from DER, 7’ left of centerline, up to 518’ MSL.
Trees, poles beginning 1352’ from DER, 42’ left of centerline, up to 522’ MSL.
Trees beginning 2423’ from DER, 749’ right of centerline, up to 411’ MSL.
Trees beginning 2654’ from DER, 802’ right of centerline, up to 518’ MSL.
Tree 2679’ from DER, 832’ right of centerline, 519’ MSL.
Trees beginning 2733’ from DER, 708’ right of centerline, up to 525’ MSL.
Tree 2741’ from DER, 1163’ left of centerline, 528’ MSL.
Trees beginning 2801’ from DER, 67’ left of centerline, up to 536’ MSL.
Trees beginning 2857’ from DER, 683’ right of centerline, up to 527’ MSL.
Trees beginning 2996’ from DER, 335’ right of centerline, up to 532’ MSL.
Trees beginning 3111’ from DER, 1168’ left of centerline, up to 538’ MSL.
Trees beginning 3147’ from DER, 544’ left of centerline, up to 553’ MSL.
Trees beginning 3255’ from DER, 948’ left of centerline, up to 555’ MSL.
Trees beginning 3275’ from DER, 535’ left of centerline, up to 561’ MSL.
Rwy 19, tree 39’ from DER, 307’ right of centerline, 405’ MSL.
Trees beginning 42’ from DER, 278’ right of centerline, up to 411’ MSL.
Trees beginning 415’ from DER, 337’ left of centerline, up to 430’ MSL.
Trees beginning 457’ from DER, 337’ right of centerline, up to 433’ MSL.
Trees beginning 509’ from DER, 451’ left of centerline, up to 398’ MSL.
Tree 694’ from DER, 454’ left of centerline, 403’ MSL.
SOUTH HILL, VA
MECKLENBURG-BRUNSWICK RGNL (AVC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 29JUL10 (10210) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 1, train on tracks 118’ from DER, 514’ left of centerline, 23’ AGL/452’ MSL.
Trees beginning 181’ from DER, 408’ left of centerline, up to 80’ AGL/500’ MSL.
Trees beginning 1858’ from DER, 600’ right of centerline, up to 71’ AGL/500’ MSL.
Rwy 19, trees beginning 191’ from DER, 13’ left of centerline, up to 77’ AGL/457’ MSL.
Trees beginning 1176’ from DER, 57’ right of centerline, up to 76’ AGL/500’ MSL.
STAFFORD, VA
STAFFORD RGNL (RMN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 22AUG13 (13234) (FAA)
TAKEOFF MINIMUMS:
Rwy 33, 300-2 or std. w/min. climb of 304’ per NM to 700.
DEPARTURE PROCEDURE:
Rwy 15, climbing left turn to 2000 on BRV R-310 direct BRV VORTAC before proceeding on course.
Rwy 33, climbing left turn to 2000 on BRV R-306 direct BRV VORTAC before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 15, approach light, 8’ from DER, 9’ right of centerline, 2’ AGL/174’ MSL.
Multiple trees beginning 183’ from DER, 598’ left of centerline, up to 100’ AGL/323’ MSL.
Multiple trees beginning 2197’ from DER, 912’ right of centerline, up to 100’ AGL/274’ MSL.
Rwy 33, REIL, 40’ from DER, 123’ right of centerline, 2’ AGL/214’ MSL.
REIL, 40’ from DER, 123’ left of centerline, 2’ AGL/214’ MSL.
Tower, 9344’ from DER, 420’ left of centerline, 168’ AGL/529’ MSL.
Tower, 9312’ from DER, 357’ left of centerline, 151’ AGL/467’ MSL.
Multiple trees beginning 978’ from DER, 10’ left of centerline, up to 100’ AGL/245’ MSL.
Multiple trees, beginning 234’ from DER, 100’ right of centerline, up to 100’ AGL/384’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

STAUNTON-WAYNESBORO-HARRISONBURG, VA

SHENANDOAH VALLEY RGNL (SHD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
Amdt 6A 11AUG22 (22223) (FAA)

TAKEOFF MINIMUMS:
- Rwy 5, std. w/min. climb of 285’ per NM to 3800 or 2200-3 for VCOA.
- Rwy 23, std. or 2200-3 for VCOA.

DEPARTURE PROCEDURE:
- Rwy 5, climb heading 047° to 3400 before turning right.
- Rwy 23, climb heading 227° to 4400 before proceeding on course.

VCOA:
- Obtains ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
- Rwy 5, tree 1812' from DER, 971' right of centerline, 1247' MSL.
- Tree 1887' from DER, 893' right of centerline, 1216' MSL.
- Tree 2052' from DER, 1025' right of centerline, 1257' MSL.
- Tree 2159' from DER, 928' right of centerline, 1265' MSL.
- Rwy 23, general utility 11' from DER, 98' right of centerline, 3' AGL/1176' MSL.
- Tree 595' from DER, 647' left of centerline, 1195' MSL.
- Tree 693' from DER, 620' left of centerline, 1216' MSL.
- Tree 807' from DER, 647' left of centerline, 1222' MSL.
- Trees beginning 920' from DER, 597' left of centerline, up to 79' MSL.
- Tree 1115' from DER, 670' left of centerline, 57' AGL/1237' MSL.
- Trees beginning 1198' from DER, 497' left of centerline, up to 87' MSL.
- Tree 2141' from DER, 53' left of centerline, 90' MSL.
- Rwy 29, windsock 14' from DER, 161' left of centerline, 18' MSL.
- Trees beginning 17' from DER, 329' left of centerline, up to 46' MSL.
- Tree 93' from DER, 502' left of centerline, 52' MSL.
- Bridge 2.2 NM from DER, 3052' right of centerline, 377' AGL/377' MSL.

STEVENSEVILLE, MD

BAY BRIDGE (W29)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
Amdt 1 10NOV16 (16315) (FAA)

TAKEOFF MINIMUMS:
- Rwy 29, 400-2½ or std. w/min. climb of 220' per NM to 500.

TAKEOFF OBSTACLE NOTES:
- Rwy 11, tree 109' from DER, 513' right of centerline, 71' MSL.
- Tree, parking lot, vehicles on road, building, and sign beginning 150' from DER, 23' right of centerline, up to 79' MSL.
- Tree 193' from DER, 488' left of centerline, 25' MSL.
- Tree 221' from DER, 489' left of centerline, 27' MSL.
- Tree, pole and tree beginning 318' from DER, 157' left of centerline, up to 37' MSL.
- Tree and vehicles on road beginning 350' from DER, 541' right and 400' left of centerline, up to 44' MSL.
- Tree, pole and tree beginning 611' from DER, 120' left of centerline, up to 51' MSL.
- Pole and tree beginning 751' from DER, 334' left of centerline, up to 54' MSL.
- Pole and tree beginning 876' from DER, 445' left of centerline, up to 83' MSL.
- Pole, tree, and building beginning 1195' from DER, 22' left of centerline, up to 87' MSL.
- Trees 2141' from DER, 63' left of centerline, 90' MSL.
- Rwy 29, windsock 14' from DER, 161' left of centerline, 18' MSL.
- Trees beginning 17' from DER, 329' left of centerline, up to 46' MSL.
- Tree 93' from DER, 502' left of centerline, 52' MSL.
- Bridge 2.2 NM from DER, 3052' right of centerline, 377' AGL/377' MSL.

SUFFOLK, VA

SUFFOLK EXEC (SFQ)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
Amdt 5 02MAY13 (22083) (FAA)

TAKEOFF OBSTACLE NOTES:
- Rwy 4, trees beginning 4' from DER, 462' right and 428' left of centerline, up to 100' AGL/173' MSL.
- Trees beginning 1052' from DER, 783' right and 554' left of centerline, up to 100' AGL/173' MSL.
- Transmission poles and T-L towers beginning 1291' from DER, 600' right of centerline, up to 65' AGL/130' MSL.
- Rwy 7, trees beginning 10' from DER, 541' right and 400' left of centerline, up to 100' AGL/161' MSL.
- Trees beginning 1004' from DER 689' right of and 1280' left of centerline, up to 100' AGL/160' MSL.
- Transmission poles and T-L towers beginning 1152' from DER, right and left of centerline, up to 65' AGL/130' MSL.
- Rwy 22, trees beginning 44' from DER, 342' right and 494' left of centerline, up to 100' AGL/174' MSL.
- Trees beginning 1005' from DER, 1078' right and 481' left of centerline, up to 100' AGL/174' MSL.
- Vehicles on road beginning 483' from DER, right and left of centerline, up to 15' AGL/80' MSL.
- Rwy 25, vehicles on road beginning 199' from DER, right and left of centerline, up to 17' AGL/84' MSL.
- Trees beginning 231' from DER, right and left of centerline, up to 100' AGL/196' MSL.

NE-3, 30 NOV 2023 to 25 JAN 2024
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

TANGIER, VA
TANGIER ISLAND (TGI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 15JAN09 (09015) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 2, vehicle on road 343’ from DER, on centerline, 15’ AGL/19’ MSL.
Rwy 20, buildings beginning 7’ from DER, 206’ left of centerline, 45’ AGL/50’ MSL.
Rock wall at DER, 57’ right of centerline, 4’ AGL/8’ MSL.

TAPPAHANNOCK, VA
TAPPAHANNOCK/ESSEX COUNTY (XSA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 25OCT07 (22027) (FAA)
TAKEOFF OBSTACLE NOTES:

WALLOPS ISLAND, VA
WALLOPS FLIGHT FACILITY (WAL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 07MAY09 (09127) (FAA)
TAKEOFF OBSTACLE NOTES:

AKEFIELD, VA
AKEFIELD MUNI (AKQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 17AUG17 (17229) (FAA)
TAKEOFF OBSTACLE NOTES:

WARRENTON, VA
WARRENTON/FAUQUIER (HWY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 09APR09 (22027) (FAA)
TAKEOFF OBSTACLE NOTES:
WASHINGTON, DC
MANASSAS RGNL/HARRY P DAVIS FLD (HEF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AND DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 4A 25JUN15 (21112) (FAA)
TAKEOFF OBSTACLE NOTES:

Rwy 16L, trees beginning 124' from DER, 176' left of centerline, up to 99' AGL/268' MSL.
Trees beginning 1810' from DER, 88' right of centerline, up to 73' AGL/272' MSL.
Trees beginning 2618' from DER, 4' left of centerline, up to 84' AGL/293' MSL.
Trees beginning 3414' from DER, 14' right of centerline, up to 75' AGL/284' MSL.
Trees beginning 3703' from DER, 145' left of centerline, up to 100' AGL/299' MSL.
Trees beginning 4160' from DER, 1343' left of centerline, up to 82' AGL/311' MSL.
Trees beginning 4677' from DER, 313' right of centerline, up to 89' AGL/303' MSL.

Rwy 16R, trees beginning 119' from DER, 473' right of centerline, up to 32' AGL/221' MSL.
Trees beginning 749' from DER, on centerline, up to 29' AGL/197' MSL.
Trees beginning 745' from DER, 85' right of centerline, up to 33' AGL/212' MSL.
Trees beginning 588' from DER, 536' right of centerline, up to 37' AGL/236' MSL.

Rwy 34L, terrain and sign beginning 1' from DER, 392' right of centerline, up to 5' AGL/192' MSL.
Trees and poles beginning 877' from DER, 616' left of centerline, up to 54' AGL/247' MSL.
Building and trees beginning 1573' from DER, 249' left of centerline, up to 39' AGL/252' MSL.
Trees beginning 1752' from DER, 187' right of centerline, up to 39' AGL/238' MSL.
Tower and trees beginning 2563' from DER, 182' left of centerline, up to 64' AGL/283' MSL.
Trees beginning 2563' from DER, 250' right of centerline, up to 56' AGL/279' MSL.

Rwy 34R, terrain, airfield light, and sign beginning 25' from DER, 92' right of centerline, up to 7' AGL/196' MSL.
Airfield light and vegetation beginning 26' from DER, 78' left of centerline, up to 9' AGL/197' MSL.

Vehicles on road and poles beginning 518' from DER, 595' right of centerline, up to 24' AGL/215' MSL.
Trees beginning 1759' from DER, 448' left of centerline, up to 39' AGL/238' MSL.
Trees 1859' from DER, 828' right of centerline, up to 39' AGL/248' MSL.
Trees beginning 2548' from DER, 828' left of centerline, up to 54' AGL/283' MSL.

Trees beginning 2653' from DER, 1082' right of centerline, up to 57' AGL/280' MSL.

RONALD REAGAN WASHINGTON NTL (DCA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 8B 30JAN20 (21112) (FAA)
TAKEOFF MINIMUMS:

Rwy 1, 600-2 w/min. climb of 275' per NM to 1500 or std. w/min. climb of 460' per NM to 800.
Rwy 4, 300-2 or std. w/min. climb of 210' per NM to 400, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to DER.
Rwy 15, 300-1½ or std. w/min. climb of 215' per NM to 400, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to DER.
Rwy 19, 300-1½ or std. w/min. climb of 205' per NM to 300, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1200' prior to DER.
Rwy 22, 500-2½ or std. w/min. climb of 305' per NM to 600.
Rwy 33, std. w/min. climb of 285' per NM to 700.

DEPARTURE PROCEDURE:

Rwy 1, climbing left turn as soon as practical to intercept DCA VOR/DME R-328. Maintain 5000 or as assigned.
Rwy 4, climbing right turn as soon as practical to intercept DCA VOR/DME R-070. Maintain 2000 or as assigned.
Rwy 15, climbing left turn as soon as practical to intercept DCA VOR/DME R-328. Maintain 5000 or as assigned.
Rwy 19, climbing on heading 187° to 500 before turning right. Maintain 5000 or as assigned.
Rwy 22, climbing on heading 217° to 3000 or as assigned.
Rwy 33, climbing on DCA VOR/DME R-328. Maintain 5000 or as assigned.

TAKEOFF OBSTACLE NOTES:

Rwy 1, building beginning 118' from DER, 331' right of centerline, up to 22' AGL/23' MSL.
Fence 261' from DER, 514' left of centerline, 10' AGL/20' MSL.
Trees and pole beginning 995' from DER, 476' left of centerline, up to 47' AGL/49' MSL.
Trees beginning 1007' from DER, 152' left of centerline, up to 71' AGL/72' MSL.
Tree 1364' from DER, 333' right of centerline, 50' AGL/51' MSL.

Monument 1.8 NM from DER, 1785' right of centerline, 556' AGL/595' MSL.
Rwy 4, microwave sensor and terrain beginning 3' from DER, 334' right of centerline, up to 4' AGL/16' MSL.
Microwave sensor 206' from DER, 260' right of centerline, 7' AGL/18' MSL.
Sign 857' from DER, 681' left of centerline, 83' MSL.
Tower 860' from DER, 677' left of centerline, 72' AGL/84' MSL.
Spire 1.6 NM from DER, 206' right of centerline, 265' MSL.
Rwy 15, lighting beginning 178' from DER, 288' right of centerline, up to 11' AGL/20' MSL.
Tree 1.4 NM from DER, 12' right of centerline, up to 94' AGL/245' MSL.
Tree 1.5 NM from DER, 519' right of centerline, up to 80' AGL/239' MSL.
Rwy 19, pole 395' from DER, 549' right of centerline, 18' AGL/22' MSL.

Tree 3434' from DER, 1134' right of centerline, 105' MSL.
Building 1.1 NM from DER, 1911' right of centerline, 153' AGL/183' MSL.
Building 1.1 NM from DER, 1889' right of centerline, 172' AGL/190' MSL.
Stacks beginning 1.2 NM from DER, 1673' right of centerline, up to 162' AGL/197' MSL.
Building 1.2 NM from DER, 1691' right of centerline, 198' MSL.
Building 1.7 NM from DER, 2444' right of centerline, 272' MSL.

CON’T
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WASHINGTON, DC (CON’T)
RONALD REAGAN WASHINGTON NTL (DCA) (CON’T)

Rwy 22, pole 217’ from DER, 478’ left of centerline, 15’ AGL/23’ MSL.
Trees beginning 550’ from DER, 498’ right of centerline, up to 45’ AGL/51’ MSL.
Trees 661’ from DER, 566’ right of centerline, 56’ AGL/57’ MSL.
Tree 1325’ from DER, 586’ right of centerline, 59’ AGL/61’ MSL.
Tree 1351’ from DER, 704’ right of centerline, 67’ AGL/93’ MSL.
Tree, building, pole beginning 1411’ from DER, 19’ right of centerline, up to 82’ AGL/110’ MSL.
Tree 2989’ from DER, 605’ left of centerline, 102’ MSL.
Building 3336’ from DER, 513’ right of centerline, 114’ AGL/148’ MSL.
Building, pole beginning 3440’ from DER, 114’ right of centerline, up to 118’ AGL/153’ MSL.
Crane 1.5 NM from DER, 1913’ right of centerline, 240’ AGL/276’ MSL.
Building 2.3 NM from DER, 1067’ right of centerline, 336’ AGL/440’ MSL.
Building 2.3 NM from DER, 1008’ right of centerline, 324’ AGL/443’ MSL.

Rwy 33, sign 18’ from DER, 191’ left of centerline, 3’ AGL/15’ MSL.
Fence 27’ from DER, 332’ right of centerline, 8’ AGL/18’ MSL.
Pole 93’ from DER, 423’ right of centerline, 19’ AGL/29’ MSL.
Tree, vehicles on road beginning 365’ from DER, 344’ left of centerline, up to 70’ MSL.
Pole 580’ from DER, 481’ right of centerline, 31’ AGL/41’ MSL.
Trees beginning 669’ from DER, 78’ right of centerline, up to 56’ AGL/60’ MSL.
Trees beginning 882’ from DER, 349’ left of centerline, up to 84’ AGL/93’ MSL.
Crane, tree, pole beginning 1389’ from DER, 289’ left of centerline, up to 82’ AGL/95’ MSL.
Tree 1665’ from DER, 236’ right of centerline, 62’ AGL/62’ MSL.
Tree 1691’ from DER, 215’ right of centerline, 59’ AGL/68’ MSL.
Tree 1715’ from DER, 882’ right of centerline, 79’ MSL.
Building, pole, antenna beginning 1776’ from DER, 247’ left of centerline, up to 128’ AGL/145’ MSL.
Trees beginning 1784’ from DER, 934’ right of centerline, up to 79’ AGL/93’ MSL.
Pole 2917’ from DER, 524’ right of centerline, 102’ MSL.
Pole 2925’ from DER, 510’ right of centerline, 79’ AGL/106’ MSL.
Antenna beginning 4608’ from DER, 277’ left of centerline, up to 115’ AGL/151’ MSL.
Tree 1.5 NM from DER, 3046’ left of centerline, 81’ AGL/254’ MSL.
Pole 1.7 NM from DER, 2115’ left of centerline, 101’ AGL/308’ MSL.
Trees beginning 1.8 NM from DER, 1912’ left of centerline, up to 311’ MSL.
Building and tower beginning 2.2 NM from DER, 1374’ right of centerline, up to 353’ AGL/420’ MSL.
Building, crane, spire beginning 2.4 NM from DER, 1089’ right of centerline, up to 387’ AGL/470’ MSL.
Building 2.4 NM from DER, 3481’ left of centerline, 178’ AGL/387’ MSL.
Building 2.4 NM from DER, 3855’ left of centerline, 185’ AGL/392’ MSL.
Buildings beginning 2.4 NM from DER, 154’ left of centerline, up to 182’ AGL/416’ MSL.
Building, antenna beginning 2.4 NM from DER, 2457’ left of centerline, up to 196’ AGL/427’ MSL.

NOTE: Prohibited area P-56 1.5 NM north of airport.

WASHINGTON DULLES INTL (IAD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 26JUL12 (12208) (FAA)

DEPARTURE PROCEDURE:
Rwy 12, climb heading 121° to 700 before turning left.

TAKEOFF OBSTACLE NOTES:
Rwy 1C, trees 2815’ from DER, 1031’ left of centerline, up to 80’ AGL/345’ MSL.
Sign 64’ from DER, 303’ right of centerline, 13’ AGL/272’ MSL.
Rwy 1L, tower 1917’ from DER, 680’ left of centerline, 51’ AGL/330’ MSL.
Sign 100’ from DER, 472’ left of centerline, 4’ AGL/289’ MSL.
Vehicles on road 24’ from DER, 274’ right of centerline, up to 15’ AGL/293’ MSL.
Rwy 30, trees 2264’ from DER, 1033’ right of centerline, up to 72’ AGL/383’ MSL.

WAYNESBORO, VA
EAGLE’S NEST (W13)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 30JUN11 (11181) (FAA)

TAKEOFF MINIMUMS:
Rwy 6, std. w/min. climb of 400’ per NM to 3300, or 2100-3 for climb in visual conditions.
Rwy 24, 300-2 w/min. climb of 400’ per NM to 3800 or 2100-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwy 6, climb heading 061° to 3300 before proceeding on course, or for climb in visual conditions: cross Eagle’s Nest Airport at or above 3400 MSL before proceeding on course.
Rwy 24, climb heading 241° to 3800 before proceeding on course. Or for climb in visual conditions: cross Eagle’s Nest Airport at or above 3400 MSL before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 6, hangar at DER, 220’ left of centerline, 30’ AGL/1469’ MSL.
Trees beginning 35’ from DER, 158’ right of centerline, up to 100’ AGL/1539’ MSL.
Vehicles on road beginning 131’ from DER, 201’ left of centerline, up to 15’ AGL/1454’ MSL.
Trees beginning 265’ from DER, 189’ left of centerline, up to 100’ AGL/1539’ MSL.
Towers beginning 1.41NM from DER, 2539’ right of centerline, 300’ AGL/1670’ MSL.
Rwy 24, Trees beginning at DER left and right of centerline up to 100’ AGL/1579’ MSL.
Trees beginning 1259’ from DER, 143’ right of centerline, up to 100’ AGL/1730’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WEIDE AHP (ABERDEEN PROVING GROUNDS) (KEDG)
EDGEWOOD, MD
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10AUG23 (23222) (USA)
TAKEOFF MINIMUMS:
- Rwys 1, 19, Std. Cross XUHSO at or above 800 for obstacle clearance. Rwy 19 N/A.
DEPARTURE PROCEDURE:
- Use JIRET DEPARTURE. Departure visually to the IDF.
TAKEOFF OBSTACLE NOTES:
- Rwy 1, bldg 1715' from DER, 954' right of cntrln, 80' AGL/99' MSL.
- Pylon 3118' from DER, 934' right of cntrln, 49' AGL/93' MSL.
- Pylon 3149' from DER, 799' right of cntrln, 49' AGL/103' MSL.
- Pylon 3191' from DER, 652' right of cntrln, 49' AGL/101' MSL.
- Pylon 3215' from DER, 556' right of cntrln, 49' AGL/99' MSL.
- Pylon 3355' from DER, 568' right of cntrln, 49' AGL/104' MSL.
- Pylon 3497' from DER, 566' right of cntrln, 49' AGL/102' MSL.
- Terrain 3950' from DER, 1000' right of cntrln, 122' MSL.

WEST POINT, VA
MIDDLE PENINSULA RGNL (FYJ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 05JUN08 (08157) (FAA)
TAKEOFF OBSTACLE NOTES:
- Rwy 10, multiple trees beginning 86' from DER, left and right of centerline, up to 100' AGL/129' MSL.
- Rwy 28, multiple trees beginning 33' from DER, left and right of centerline, up to 100' AGL/119' MSL.
- Ship mast 3427' from DER, left and right of centerline, 135' AGL/135' MSL.

WESTMINSTER, MD
CARROLL COUNTY RGNL/JACK B POAGE FLD (DMW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 05MAR15 (21140) (FAA)
TAKEOFF MINIMUMS:
- Rwys 16, 400-2¾ or std. w/min. climb of 255' per NM to 1400.
TAKEOFF OBSTACLE NOTES:
- Rwys 16, trees 1995' from DER, 657' left of centerline, up to 59' AGL/838' MSL.
- Tower 2.3 NM from DER, 2042' left of centerline, 195' AGL/1144' MSL.
- Rwys 34, trees beginning 105' from DER, 423' left of centerline, up to 87' AGL/886' MSL.
- Trees beginning 967' from DER, 395' right of centerline, up to 100' AGL/864' MSL.
- Terrain and trees beginning 1851' from DER, 123' left of centerline, up to 63' AGL/902' MSL.
- Trees beginning 2603' from DER, 470' right of centerline, up to 69' AGL/868' MSL.

CLEARVIEW AIRPARK (2W2)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 27AUG09 (09239) (FAA)
TAKEOFF MINIMUMS:
- Rwys 32, 300-2½ or std. w/min. climb of 290' per NM to 1200.
TAKEOFF OBSTACLE NOTES:
- Rwys 14, vehicles and aircraft on road/taxiway 14' from DER, 47' right to left of centerline, 15' AGL/834' MSL.
- Trees beginning 35' from DER, 200' left of centerline, up to 100' AGL/939' MSL.
- Trees beginning 21' from DER, 90' right of centerline, up to 100' AGL/919' MSL.
- Rwys 32, vehicle on road 191' from DER, 516' left of centerline, 15' AGL/774' MSL.
- Trees beginning 8' from DER, 24' left of centerline, up to 100' AGL/959' MSL.
- Trees beginning 60' from DER, 50' right of centerline, up to 100' AGL/859' MSL.

WILLIAMSBURG, VA
WILLIAMSBURG-JAMESTOWN (JGG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 15DEC11 (11349) (FAA)
DEPARTURE PROCEDURE:
- Rwys 31, climb heading 311° to 700 before turning right.
TAKEOFF OBSTACLE NOTES:
- Rwys 13, boat on creek 468' from DER, 608' left of centerline, up to 35' AGL/35' MSL.
- Homes beginning 1399' from DER, 278' left of centerline, up to 25' AGL/94' MSL.
- Trees beginning 712' from DER, left and right of centerline, up to 100' AGL/189' MSL.
- Rwys 31, aircraft on tarmac 2' from DER, 209' right of centerline, up to 20' AGL/79' MSL.
- Hanger 418' from DER, 268' right of centerline, up to 25' AGL/84' MSL.
- Multiple buildings and homes beginning 320' from DER, left and right of centerline, up to 30' AGL/109' MSL.
- Multiple trees beginning 1' from DER, left and right of centerline, up to 100' AGL/199' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WILMINGTON, DE
NEW CASTLE (ILG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 15MAR07 (07074) (FAA)
TAKEOFF MINIMUMS:
Rwy 19, 300-1 or std. w/min. climb of 266' per NM to 300.

TAKEOFF OBSTACLE NOTES:
Rwy 1, multiple trees beginning 751' from DER, 32' left of centerline, up to 59' AGL/120' MSL. Tree 1219' from DER, 482' right of centerline, 57' AGL/118' MSL. Bush 118' from DER, 385' left of centerline, 4' AGL/65' MSL.

Rwy 9, multiple trees beginning 1229' from DER, 30' right of centerline up to 62' AGL/133' MSL. Tree 975' from DER, 66' left of centerline, 53' AGL/124' MSL. Light pole 948' from DER, 596' right of centerline, 44' AGL/115' MSL. Tree 1740' from DER, 458' left of centerline, 83' AGL/134' MSL. Light pole 945' from DER, 316' right of centerline, 38' AGL/109' MSL. Rod on building 916' from DER, 457' left of centerline, 29' AGL/100' MSL.

Rwy 14, obstacle light 553' from DER, 440' left of centerline, 29' AGL/103' MSL. Tree 1575' from DER, 850' right of centerline, 45' AGL/120' MSL. Obstruction light on sign 971' from DER, 448' left of centerline, 28' AGL/103' MSL.

Rwy 19, antenna on obstruction light tower 4468' from DER, 1684' right of centerline, 153' AGL/228' MSL. Tree 1575' from DER, 850' right of centerline, 45' AGL/120' MSL. Obstruction light on sign 971' from DER, 448' left of centerline, 28' AGL/103' MSL.

Rwy 27, tree 496' from DER, 587' right of centerline, 720' MSL. Tree 591' from DER, 561' left of centerline, 729' MSL. Tree 594' from DER, 566' left of centerline, 730' MSL. Tree 1490' from DER, 652' right of centerline, 739' MSL. Tree 1491' from DER, 666' right of centerline, 743' MSL. Tree 1971' from DER, 778' right of centerline, 753' MSL. Tree 2048' from DER, 882' right of centerline, 761' MSL. Trees beginning 2059' from DER, 876' right of centerline, up to 765' MSL. Tree 2169' from DER, 882' left of centerline, up to 799' MSL. Trees beginning 2255' from DER, 742' right of centerline, up to 805' MSL.

WINCHESTER, VA
WINCHESTER RGNL (OKV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 11AUG22 (22223) (FAA)
TAKEOFF MINIMUMS:
Rwy 32, std. w/min. climb of 240' per NM to 1900, or 1300-3 for VCOA.

DEPARTURE PROCEDURE:
Rwy 32, climb on heading 339° to 2500 before turning left. VCOA.
Rwy 32, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Winchester Rgnl airport at or above 1900 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 14, tree 496' from DER, 587' right of centerline, 720' MSL. Tree 591' from DER, 561' left of centerline, 729' MSL. Tree 594' from DER, 566' left of centerline, 730' MSL. Tree 1490' from DER, 652' right of centerline, 739' MSL. Tree 1491' from DER, 666' right of centerline, 743' MSL. Tree 1971' from DER, 778' right of centerline, 753' MSL. Tree 2048' from DER, 882' right of centerline, 761' MSL. Trees beginning 2059' from DER, 876' right of centerline, up to 765' MSL. Tree 2169' from DER, 882' left of centerline, up to 799' MSL. Trees beginning 2255' from DER, 742' right of centerline, up to 805' MSL.

Rwy 32, terrain beginning 2' from DER, 428' left of centerline, up to 729' MSL. Tree 86' from DER, 508' left of centerline, 762' MSL. Tree 94' from DER, 474' left of centerline, 763' MSL. Tree 102' from DER, 478' left of centerline, 764' MSL. Trees beginning 118' from DER, 209' left of centerline, up to 772' MSL. Tree 374' from DER, 596' right of centerline, 774' MSL. Trees beginning 452' from DER, 482' right of centerline, up to 776' MSL. Tree 1589' from DER, 243' left of centerline, 774' MSL. Trees beginning 1610' from DER, 248' left of centerline, up to 777' MSL. Trees beginning 1718' from DER, 269' left of centerline, up to 782' MSL. Tree 1754' from DER, 291' left of centerline, 786' MSL. Tree 1760' from DER, 754' left of centerline, 791' MSL. Trees beginning 1774' from DER, 27' left of centerline, up to 794' MSL. Trees beginning 1974' from DER, 9' right of centerline, up to 787' MSL. Trees beginning 2169' from DER, 625' right of centerline, up to 799' MSL. Trees beginning 2255' from DER, 742' right of centerline, up to 805' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WISE, VA
LONESOME PINE (LNP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3  29JUL10  (10210)  (FAA)
DEPARTURE PROCEDURE:
  Rwy 6, climb on heading 062° to 3600 before proceeding on course.
  Rwy 24, climb on heading 247° to 4900 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
  Rwy 6, trees beginning 775' from DER, left and right of centerline, up to 100' AGL/2801' MSL.
  Terrain beginning 86' from DER, left and right of centerline, up to 2728' MSL.
  Rwy 24, trees beginning 159' from DER, left and right of centerline, up to 100' AGL/2794' MSL.
  Obstruction light on LOC 308' from DER 22' left of centerline, 8' AGL/2678' MSL.
  Obstruction light on LOC/DME 306' from DER, 189' right of centerline, 15' AGL/2685' MSL.
  Terrain 159' from DER, 363' left of centerline, 2676' MSL.
### IFR Alternate Minimums

Pilots must review the IFR Alternate Minimums Notes to determine alternate airport suitability. The **NA** designation on the approach chart means that pilots may not use that approach as an alternate due to unmonitored facility, absence of weather reporting service, or lack of adequate navigation coverage. Approaches with the **NA** designation are not listed in this section. The **A** designation on the approach chart indicates that the approach procedure has non-standard minimums (for aircraft other than helicopters) or restrictions (for all users) for its use as an alternate.

#### Alternate Minima (ref: 14 CFR 91.169)

<table>
<thead>
<tr>
<th>NAME</th>
<th>ALTERNATE MINIMUMS</th>
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<td><strong>ABINGDON, VA</strong></td>
<td>VIRGINIA HIGHLANDS (VJI) .................LOC Rwy 24&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>RNAV (GPS) Rwy 6&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
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<td>RNAV (GPS) Rwy 24&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
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<td>1NA when local weather not available.</td>
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<td>2Categories A, B, 900-2, Category C, 900-2½, Category D, 1000-3.</td>
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<tr>
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<td>3Category C, 800-2½, Category D, 1000-3.</td>
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<tr>
<td><strong>BALTIMORE, MD (CON’T)</strong></td>
<td>MARTIN STATE (MTN) ...............ILS or LOC Rwy 33&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 15&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 33&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>VIRGINIA TECH/MONTGOMERY EXEC (BCB) ........RNAV (GPS) Rwy 13</td>
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<td>RNAV (GPS) Rwy 31</td>
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<td>3Category C, 900-2½.</td>
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<tr>
<td><strong>BROOKNEAL, VA</strong></td>
<td>BROOKNEAL/CAMPBELL COUNTY (0V4) ...........RNAV (GPS) Rwy 6</td>
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<td></td>
<td>RNAV (GPS) Rwy 24</td>
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#### Precision Approach

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<tr>
<th>NAME</th>
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<tr>
<td><strong>ABINGDON, VA</strong></td>
<td>VIRGINIA HIGHLANDS (VJI) .................LOC Rwy 24&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
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<td>RNAV (GPS) Rwy 6&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 24&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>MARTIN STATE (MTN) ...............ILS or LOC Rwy 33&lt;sup&gt;1&lt;/sup&gt;</td>
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#### Non-Precision Approach

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<td><strong>ABINGDON, VA</strong></td>
<td>VIRGINIA HIGHLANDS (VJI) .................LOC Rwy 24&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 6&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>MARTIN STATE (MTN) ...............ILS or LOC Rwy 33&lt;sup&gt;1&lt;/sup&gt;</td>
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#### Notes:

- For alternate airport flight planning purposes, precision approach operations include: ILS, PAR, and GLS, and Non-Precision approach operations include: NDB, VOR, LOC, TACAN, LDA, SDF, ASR, RNAV (GPS) and RNAV (RNP).

### Precision Approach Non-Precision Approach

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<th>Standard</th>
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<th>Non-Precision Approach</th>
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<td>600-2</td>
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<td>800-2</td>
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<td><strong>Non-Standard or restrictions</strong></td>
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<tr>
<th>Helicopters</th>
<th>For the selected approach: Ceiling: 200' above published ceiling Visibility: the greater of 1 SM visibility or the published visibility</th>
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<tbody>
<tr>
<td>US Military (USA/USN/USAF)</td>
<td>See Service Regulations</td>
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### Special Considerations

- For the selected approach:
  - Ceiling: 200' above published ceiling
  - Visibility: the greater of 1 SM visibility or the published visibility
- For helicopters:
  - Ceiling: 200' above published ceiling
  - Visibility: the greater of 1 SM visibility or the published visibility
- For US military:
  - Ceiling: 200' above published ceiling
  - Visibility: the greater of 1 SM visibility or the published visibility
- For the selected approach:
  - Ceiling: 200' above published ceiling
  - Visibility: the greater of 1 SM visibility or the published visibility
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<td>Lake</td>
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<td>RNAV (GPS) -A</td>
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<td>Charlottesville-</td>
<td>ILS or LOC Rwy 3</td>
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<td>RNAV (GPS) Rwy 3</td>
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<td>RNAV (GPS) Z Rwy 21</td>
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<td>¹Categories, A, B, C, D, 1000-4.</td>
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**ALTERNATE MINS**

- NE-3, 30 NOV 2023 to 25 JAN 2024
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1NA when local weather not available.  
2NA when control tower closed.  
3LO, Category C, 800-2½; Category D, 900-3.  
4Category D, 800-2½.  
5Category C, 800-2¾; Category D, 900-2¾.
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<td>²Category D, 900-2¾.</td>
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<td>¹LOC, Category D, 900-2¾.</td>
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<td>TAPPANNOCK, VA</td>
<td>EXEC (SFQ) RNAV (GPS) Rwy 7 RNAV (GPS) Rwy 22 RNAV (GPS) Rwy 25 NA when local weather not available.</td>
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<td>WASHINGTON DULLES</td>
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<td>3Category D, 800-2¾.</td>
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**RADAR MINS**

**RADAR INSTRUMENT APPROACH MINIMUMS**

**NORFOLK NS (CHAMBERS FIELD) (KNGU),** Norfolk, VA  Amdt 9

**RADAR - (E)** 119.2x 120.2x 279.525 322.525 335.8 353.55

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<tr>
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<th>GS/TCH/RPI</th>
<th>CAT</th>
<th>DH/MDA-VIS</th>
<th>HAT/HAA</th>
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<td>PAR¹</td>
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<tr>
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<tr>
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<td>406 (500-1)</td>
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<tr>
<td></td>
<td>10¹²</td>
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<td>706 (800-½)</td>
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<td>CDE</td>
<td>720-1½</td>
<td>706 (800-1½)</td>
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¹ No NOTAM MP Mon 1030-1430Z++.  
² When ALS inop, increase CAT ABCDE vis to ½ mile.  
³ PAPI RRP/TCH 669/35 not coincident with PAR RPI/TCH 1020/54.  
⁴ When ALS inop, increase CAT ABCDE vis to ½ mile.  
⁵ When ALS inop, increase CAT ABCDE vis to 1 mile.  
⁶ Helicopter vis reduction below ¾ mile not authorized.  
⁷ When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1¾ miles.  
⁸ VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 35).  
⁹ Step down fix at 3 NM from RPI, 960 min.  
¹⁰ When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1¾ miles.  
¹¹ Step down fix at 3 NM from thld, 1000 min.  
¹² When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 2 miles.  
¹³ Cir not auth south of Rwy 10-28.  
¹⁴ Norfolk NS Heliport lctd 1 NM NW, use caution in cir aprch.
### OCEANA NAS (APOLLO SOUCEK FLD) (KNTU), Virginia Beach, VA

**Amendment:** 7  30DEC21  (22083)  (USN)

**ELEV:** 22

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¹When ALS inop, increase CAT ABCDE vis to ½ mile.
²When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1¼ miles.
³Sidestep ASR only.
⁴Step Down Fix at 3 NM from thld, 1020' min.
⁵When ALS inop, increase CAT AB vis to 1 mile, CAT C vis to 1½ miles, CAT DE vis to 2 miles.
⁶No-NOTAM preventive maint 1100-1300Z++ Tue.
**RADAR INSTRUMENT APPROACH MINIMUMS**

**PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK),** Patuxent River, MD

Amdt 2 02DEC21 (22111) (USN)  

ELEV 39

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<td>680-2</td>
<td>641</td>
<td>(700-2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E</td>
<td>800-2⅘</td>
<td>761</td>
<td>(800-2⅘)</td>
</tr>
</tbody>
</table>

1 PAR No-NOTAM preventive maint period Wed 1300-1700Z++.
2 When ALS inop, increase CAT ABCDE vis to ½ mile.
3 CAUTION: TCH (46 feet) is less than the min TCH (50 feet).
4 CAUTION: TCH (44 feet) is less than the min TCH (50 feet).
5 CAUTION: TCH (41 feet) is less than the min TCH (50 feet).
6 Step Down Fix at 2NM from RPI, 640’ min.
7 When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1½ miles.
8 Step Down Fix at 2NM from thld, 680’ min.
**QUANTICO MCAF (TURNER FLD) (KNYG), Quantico, VA Amdt 8**

07SEP23 (23250) (USN)  
RADAR MINS 23250

<table>
<thead>
<tr>
<th>RWY</th>
<th>GS/TCH/RPI</th>
<th>CAT</th>
<th>DH/MDA-VIS</th>
<th>HAT/HATH/</th>
<th>CEIL-VIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASR²</td>
<td>2</td>
<td>AB</td>
<td>560-1½</td>
<td>551</td>
<td>(600-1½)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CD</td>
<td>560-1¾</td>
<td>551</td>
<td>(600-1¾)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>560-1½</td>
<td>550</td>
<td>(600-1½)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>660-1½</td>
<td>650</td>
<td>(700-1½)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>700-2</td>
<td>690</td>
<td>(700-2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D</td>
<td>740-2¼</td>
<td>730</td>
<td>(800-2¼)</td>
</tr>
</tbody>
</table>

¹GCA avbl daily during published field opr hours. Ctc twr for freq asgn.
²VGSI and final descent angle not coincident.
³Circling NA W of Rwy 2-20.
**LAND AND HOLD-SHORT OPERATIONS (LAHSO)**

LAHSO is an acronym for "Land and Hold-Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

<table>
<thead>
<tr>
<th>CITY/AIRPORT</th>
<th>LDG RWY</th>
<th>HOLD-SHORT POINT</th>
<th>AVBL LDG DIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEWPORT NEWS, VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEWPORT NEWS/WILLIAMSBURG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTL (PHF)</td>
<td>20</td>
<td>07-25</td>
<td>5,200 feet</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>02-20</td>
<td>6,550 feet</td>
</tr>
<tr>
<td>WILMINGTON, DE</td>
<td>01</td>
<td>09-27</td>
<td>4,050 feet</td>
</tr>
<tr>
<td>NEW CASTLE (ILG)</td>
<td>14</td>
<td>01-19</td>
<td>4,450 feet</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>14-32</td>
<td>5,750 feet</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>09-27</td>
<td>3,600 feet</td>
</tr>
</tbody>
</table>
**HOT SPOTS**

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

<table>
<thead>
<tr>
<th>CITY/AIRPORT</th>
<th>CITY/AIRPORT</th>
<th>CITY/AIRPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOVER, DE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOVER AFB (DOV)</td>
<td>HS 1</td>
<td>Intersecting of Rwy 01-19, Rwy 14-32 and Twy D between the runways can create confusion. Query tower if lost or need help.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Rwy 01-19 between Twy B and Twy E has had an increased number of rwy incursions.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Rwy 14-32 between C Twy has had an increased number of rwy incursions.</td>
</tr>
<tr>
<td>EASTON, MD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EASTON/NEWNAM FLD (ESN)</td>
<td>HS 1</td>
<td>Twy A and Twy B int in close proximity to the rwy.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Int of Twy A and Twy B.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Potential for inadvertent entry onto Rwy 23.</td>
</tr>
<tr>
<td>FREDERICK, MD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FREDERICK MUNI (FDK)</td>
<td>HS 1</td>
<td>Potential for inadvertent entry onto Rwy 30.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Potential for inadvertent entry onto Rwy 23.</td>
</tr>
<tr>
<td>HAGERSTOWN, MD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAGERSTOWN RGNL/ RICHARD A HENSON FLD (HGR)</td>
<td>HS 1</td>
<td>Maintain vigilance congestion area and close proximity to rwys.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Int of Rwy 07-25 and Rwy 02-20.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Rwy 07 and Rwy 02 thlds in close proximity.</td>
</tr>
<tr>
<td>NEWPORT NEWS, VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEWPORT NEWS/WILLIAMSBURG INTL (PHF)</td>
<td>HS 1</td>
<td>Wrong rwy departure risk. Frequent rwy crossings due to aircraft exiting Rwy 34.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Int of Rwy 07-25 and Rwy 02-20.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Rwy 07 and Rwy 02 thlds in close proximity.</td>
</tr>
<tr>
<td>RICHMOND, VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICHMOND INTL (RIC)</td>
<td>HS 1</td>
<td>Maintain awareness of Hold Line position for Rwy 19 from the Hold Bay and while approaching Rwy 19 on Twy J.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Maintaining awareness of Hold Line position for Rwy 19 from the Hold Bay and while approaching Rwy 19 on Twy J.</td>
</tr>
<tr>
<td>WASHINGTON, DC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANASSAS RGNL / HARRY P DAVIS FLD (HEF)</td>
<td>HS 1</td>
<td>Twy, Twy B3 and Rwy 16L-34R.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Maintain awareness of Hold Line position for Rwy 19 from the Hold Bay and while approaching Rwy 19 on Twy J.</td>
</tr>
<tr>
<td>WILMINGTON, DE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEW CASTLE (ILG)</td>
<td>HS 1</td>
<td>Twy F, Rwy 09-27 and Rwy 14-32.</td>
</tr>
</tbody>
</table>

*See appropriate Chart Supplement HOT SPOT table for additional information.
NOTE: RADAR required
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Prohibited area (P56) 1.5 NM north of DCA avoid surface to 18000 MSL.
NOTE: ARTCC will issue landing direction assignment (east or west). Potomac TRACON will issue runway assignments.

(CONTINUED ON FOLLOWING PAGES)
NOTE: RADAR required
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Prohibited area (P56) 1.5 NM north of DCA avoid surface to 18000 MSL.
NOTE: ARTCC will issue landing direction assignment (east or west). Potomac TRACON will issue runway assignments.

CAUTION: Unmarked aerostat tethered to cable within R-4001C up to 10000 MSL.
ARRIVAL ROUTE DESCRIPTION

Landing BWI:

From BUBBI on track 101° to cross SHEPH at or below 15000, then on track 101° to cross EAGLL between 12000 and 13000, then on track 102° to cross ANTHM.

LANDING EAST: RWYS 10 and 15L/R: From ANTHM on track 098° to cross ROKTT at 11000 and at 250K, then on track 098° to cross FLAAG between 6000 and 7000, then on track 180° to cross STARZ at 4000, then on track 220° to cross STRPS at 4000 and at 210K, then on track 248° to BRAYV, then on track 285° to HOIST, then on heading 285° or as assigned by ATC. Expect RADAR vectors to final approach course.

LANDING WEST: RWY 28: From ANTHM on track 104° to cross JABRR at 11000 and at 250K, then on track 104° to cross OLBAY at or below 9000 and at 250K, then on track 120° to cross CRABZ between 5000 and 6000, then on track 160° to cross FINNZ at 5000, then on track 158° to cross ASHOR at 4000, then on track 105° to GRAMZ, then on heading 105°. Expect RADAR vectors to final approach course.

LANDING WEST: RWYS 33L/R: From ANTHM on track 104° to cross JABRR at 11000 and at 250K, then on track 104° to cross OLBAY at or below 9000 and at 250K, then on track 120° to cross CRABZ between 5000 and 6000, then on track 160° to cross FINNZ at 5000, then on track 205° to cross KEEYY at 4000 and at 210K, then on track 204° to ROAPS, then on track 155° to HOOK, then on heading 155°. Expect RADAR vectors to final approach course.

LANDING MTN: From BUBBI on track 101° to cross SHEPH at or below 15000, then on track 101° to cross EAGLL between 12000 and 13000, then on track 102° to ANTHM, then on track 104° to cross JABRR at 11000 and at 250K, then on track 104° to cross OLBAY at or below 9000 and at 250K, then on track 120° to cross CRABZ between 5000 and 6000, then on track 160° to cross FINNZ at 5000, then on track 160° to cross RAAYY at 4000, then on heading 160°. Expect RADAR vectors to final approach course.
**NOTE:** BUBBI Transition ATC assigned only
LUNDY Transition for KDOV and 33N arrivals only
NOTE: DME/DME/IRU or GPS required
NOTE: RNAV 1
NOTE: RADAR required
NOTE: LUNDY Transition for KDOV and 33N arrivals only
NOTE: BUBBI Transition ATC assigned only

**LANDING KDOV/33N/KILG:** From ENO VORTAC on track 090° to ARLFT, then on heading 090° or as assigned by ATC. Expect RADAR vectors to final approach course.
PHILADELPHIA APP CON
128.4 272.575
ILG ATIS 123.95
PHL ARR D-ATIS 133.4
PNE ATIS 121.15
TTN ATIS 126.775

PHILADELPHIA, PENNSYLVANIA

NOTE: Expect to cross BUNTS at 8000.
NOTE: This STAR is for aircraft capable of 250K or greater.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

PHILIPSBURG TRANSITION (PSB.BUNTS3):

From over HAR VORTAC on HAR R-117 (V210) and LRP R-296 to LRP VOR/DME, thence on LRP R-104 (V210) to BUNTS. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

THHMP TRANSITION (THHMP.CAPSS3):
WAVES TRANSITION (WAVES.CAPSS3):

From BULII on track 025° to cross CAPSS between 10000 and 13000.

LANDING NORTH RWYS 1, 4, 33: From CAPSS on track 025° to cross HOYAS at 9000, then on track 053° to HALLL, then on track 008° to KATRN then on track 008°. Expect assigned instrument approach or radar vectors.

LANDING SOUTH RWYS 15, 19, 22: From CAPSS on track 028° to cross FLIPZ at or below 11000 and at 280K, then on track 028° to cross MOEJO at 10000 and at 250K, then on track 016° to cross SMOOT at or above 7000, then on track 338° to cross BAAAM at 6000, then on track 327° to PACKE, then on track 327°. Expect radar vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

DORRN TRANSITION (DORRN.CAVLR4)
THHMP TRANSITION (THHMP.CAVLR4)
TRSSK TRANSITION (TRSSK.CAVLR4)

From BNTLY on track 037° to cross MEEGO at or above 11000, then on track 037° to cross CAVLR at 10000 and at 250K.

LANDING RUNWAYS 1L/C/R, 30:
From CAVLR on track 026° to cross KASDY at 7000, then on track 020° to cross COINZ at 6000, then on track 010°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 19L/C/R:
From CAVLR on track 026° to cross KASDY at 7000, then on track 024° to cross BARIN at 6000, then on track 012° to cross STAYO at 4000, then on track 012° to TRING, then on track 012° to MIXNN, then on track 012°. Expect RADAR vectors to final approach course.
BRIGS TRANSITION (BRIGS.VCN9): From over BRIGS on VCN R-101 to VCN VOR/DME. Thence. . . .

SNOW HILL TRANSITION (SWL.VCN9): From over SWL VORTAC on SWL R-034 and SIE R-216 to SIE VORTAC, then on SIE R-353 and VCN R-174 to VCN VOR/DME. Thence. . . .

. . . .from over VCN VOR/DME: Turbojets expect RADAR vectors to final approach course. Non-Turbojets continue on the VCN R-301 and the OOD R-121 to OOD VORTAC; expect RADAR vectors to final approach course.
NOTE: Prohibited area (P-56) 1.5 NM north of DCA avoid surface to FL180.
COATT FIVE ARRIVAL

PLANNING INFORMATION
TURBOJET VERTICAL NAVIGATION
Expect 5000.

NOTE:  DME required.

PLANNING INFORMATION
TURBOJET VERTICAL NAVIGATION
Expect 10000 and 250K.

NOTE:  RADAR required.

FLAT ROCK TRANSITION (FAK.COATT5): From over FAK VORTAC on FAK R-031 to COATT. Thence . . . .

RICHMOND TRANSITION (RIC.COATT5): From over RIC VORTAC on RIC R-345 to COATT. Thence . . . . From over COATT on FAK R-031 to BRV VORTAC, then on BRV R-007 to BARIN. Expect radar vectors to final approach course after BARIN.
LANDING SOUTH: Rwys 15, 19, 22:
Expect approach clearance or radar vectors to final approach course after MEGGS.

NOTE: Radar required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Prohibited Area (P-56) 1.5 NM north of DCA avoid surface to FL180.

LANDING NORTH RWYS 1, 4, 33: From BILIT on track 288° to cross DEALE at 10000 and at 280K.

LAFLN TRANSITION (LAFLN.DEALE3):
RIDGY TRANSITION (RIDGY.DEALE3):

From BILIT on track 288° to cross THANE, then on track 326° to MEGGS, then on heading 327°. Expect radar vectors to final approach course.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

LANCASTER TRANSITION (LRP.DELRO5): From over LRP VOR/DME on LRP R-248 to DELRO. Thence. . . .

MODENA TRANSITION (MXE.DELRO5): From over MXE VORTAC on MXE R-283 to DELRO. Thence. . . .

. . . From DELRO on LRP R-248 to LIRCH, then on LRP R-248 to BINNS, then on LRP R-248 to HYPER, then on FDK R-031 to FDK VOR, then on heading 190° or as assigned by ATC. Expect RADAR vectors to final approach course.

NOTE: RADAR required.

NOTE: For aircraft capable of 180K or greater.
ARRIVAL ROUTE DESCRIPTION

CHARLESTON TRANSITION (HVQ.DOCCS3): From over HVQ VOR/DME on HVQ R-095 to DILNN, then on BKW R-072 to SEALZ, then on AML R-259 to DOCCS. Thence....

LANDING IAD RUNWAYS 1C, 1L, 1R, 30: From over DOCCS on LDN VORTAC R-206 to LDN VORTAC, then on LDN VORTAC R-078 to GIBBZ, then on AML VOR/DME R-286 to SUNYJ, then on MRB VORTAC R-165 to SIYOB, then fly heading 190°, expect radar vectors to final approach course.

LANDING IAD RUNWAYS 19C, 19L, 19R: From over DOCCS on LDN VORTAC R-206 to LDN VORTAC, then on LDN VORTAC R-078 to GIBBZ, then on AML VOR/DME R-286 to SUNYJ, then on CSN VORTAC R-037 to UDIYU, then fly heading 010°, expect radar vectors to final approach course.

LANDING IAD RUNWAY 12: From over DOCCS, expect radar vectors to final approach course.

LANDING JYO: From over DOCCS on LDN VORTAC R-206 to LDN VORTAC, expect radar vectors to final approach course.
NORFOLK, VIRGINIA

DRONE TWO ARRIVAL

DRONE TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance to cross at 11000.

DEENE TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance to cross at FL210.

BROZE TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance to cross at FL190.

NOTE: CHART NOT TO SCALE.
NOTE: RADAR required.
NOTE: DME required.
ARRIVAL DESCRIPTION

KINSTON TRANSITION (ISO.DRONE2): From over ISO VORTAC on ISO R-034 and CVI R-218 to CVI VORTAC, then on CVI R-055 to DRONE. Thence. . . .

RALEIGH/DURHAM TRANSITION (RDU.DRONE2): From over RDU VORTAC on RDU R-092 and TYI R-269 to TYI VORTAC, then on TYI R-064 and CVI R-249 to CVI VORTAC, then on CVI R-055 to DRONE. Thence. . . .

...from over DRONE expect radar vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

KELCE TRANSITION (KELCE.DUCXS5):
NEAVL TRANSITION (NEAVL.DUCXS5):

From THINA on track 009° to cross DUCXS at 4000, then on heading 041° or as assigned by ATC. Expect RADAR vectors to final approach course.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojets only, turboprops as assigned by ATC only.
NOTE: PROHIBITED AREA (P56) 1.5 NM north of DCA
AVOID - surface to FL180.
NOTE: Maintain last assigned altitude until cleared to "descend via" the FRDMM5. ARTCC will issue landing direction assignment (north or south) and Potomac TRACON will issue runway assignments.
LANDING DCA RWYS 1, 4, 33, and ADW RWYS 11/L/R and LANDING DAA: From ALWYZ on track 125° to cross LETZZ at 8000, then on track 130° to cross RLLLL at 6000 and at 250K, then on track 131° to VCTRY, then on track 189° to HEROO, then on track 189°. Expect radar vectors to final approach course.

LANDING DCA RWYS 15, 19, 22: From ALWYZ on track 122° to cross FRDMM at 8000 and 240K, then on track 078° to STAND, then on track 078° to TGTHR, then on track 148° to FERGI, expect LDA/DME RWY 19, RNAV (RNP) RWY 19, RIVER VISUAL RWY 19 or radar vectors to final approach course.

LANDING ADW RWYS 19L/R: From ALWYZ on track 122° to cross FRDMM at 8000 and at 240K, then on track 078° to STAND, then on track 078°. Expect radar vectors to final approach course.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Turboprop aircraft ATC assigned only.

Landing IAD Rwy 12, JYO, and HEF
(From MGW transition): Expect RADAR vectors to final approach course after IGGGY.

Landing IAD Rwy 12, JYO, and HEF
(From HVQ, and BKW transitions): Expect RADAR vectors to final approach course after IGGGY.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

LANDING RUNWAYS 1L/C/R, 30: From GIBBZ on track 108° to SUNYJ, then on track 168° to SIYOB, then on track 192° to MIKEJ, then on track 192°. Expect radar vectors to final approach course.

LANDING RUNWAYS 19L/C/R: From GIBBZ on track 108° to SUNYJ, then on track 042° to UDIYU, then on track 010° to MATTC, then on track 010°. Expect radar vectors to final approach course.

NOTE: Chart not to scale.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: For aircraft capable of 180K or greater.

CONTINUED ON FOLLOWING PAGE
NOTE: Radar required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: For aircraft capable of 180K or greater.
ARRIVAL ROUTE DESCRIPTION

IAD: From DELRO on track 249° to cross LIRCH at 14000, then on track 249° to BINNS, then on track 249° to cross HYPER at 10000 and at 250K.

Landing IAD Rwy 1C/R: From HYPER on track 211° to cross SIGBE at 7000, then on track 189° to cross MOWAT at 5000, then on track 189° to cross HUSEL at 4000, then on track 190° to YACKK, then on track 191° to TICON, then on track 191°. Expect RADAR vectors to final approach course.

Landing IAD Rwy 1L: From HYPER on track 220° to cross CRAIN at 6000, then on track 214° to cross KUKSE at 5000, then on track 191° to ELISN, then on track 191° to MIKEJ, then on track 191°. Expect RADAR vectors to final approach course.

Landing IAD Rwy 19C: From HYPER on track 219° to cross COVUR at 7000, then on track 191° to DIMKE, then on track 191° to cross HOOSR at or above 5000. Expect ILS or LOC Rwy 19C approach.

Landing IAD Rwy 19L: From HYPER on track 216° to cross OOGLE at or below 5000, then on track 217° to cross LITEY at 4000, then on track 191° to cross YYANG at 4000, then on track 191° to cross DADEY at or above 3000. Expect ILS or LOC Rwy 19L approach.

Landing IAD Rwy 19R: From HYPER on track 220° to cross CRAIN at 6000, then on track 220° to cross REXOE at 6000, then on track 191° to cross BEEZY at or above 4000. Expect ILS or LOC Rwy 19R approach.

Landing NYG/CJR/EZF/RMN/HFY/HEF: From DELRO on track 249° to cross LIRCH at 14000, then on track 249° to BINNS, then on track 249° to cross HYPER at 10000 and at 250K, then on track 211° to cross SIGBE at 7000, then on track 189° to cross MOWAT at 5000, then on track 189° to cross HUSEL at 4000, then on track 190° to YACKK, then on track 191° to TICON, then on track 191°. Expect RADAR vectors to final approach course.

Landing MRB/JYO/FRR/OKV: From DELRO on track 249° to cross LIRCH at 14000, then on track 249° to BINNS, then on track 249° to cross HYPER at 10000 and at 250K, then on track 233° to PHATT. Then on heading 230° or as assigned by ATC. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

RICHMOND TRANSITION (RIC.IRONS7): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS. Thence....

....from IRONS:
LANDING SOUTH: Then on DCA R-198 to SAMMO, then on 320° heading or assigned by ATC, expect radar vectors to final approach course.

LANDING NORTH: Expect radar vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

**BRIGS TRANSITION (BRIGS.JIIMS4):**

DASHA TRANSITION (DASHA.JIIMS4):

**ZJAAY TRANSITION (ZJAAY.JIIMS4):**

Landing PHL Rwy 9L/R: From JIIMS on track 290° to WUDRR, then on track 307° to WEVVE, then on track 268° to ERNYY, then on track 268°. Expect RADAR vectors to final approach course.

Landing PHL Rwy 17, 35: From JIIMS on track 312° to SNEDE, then on track 312°. Expect RADAR vectors to final approach.

Landing PHL Rwy 26, 27L/R: From JIIMS on track 336° to ZMRMN, then on track 019° to CHPMN, then on track 060° to PSOUT, then on track 087° to MKORD°, then on track 087°. Expect RADAR vectors to final approach course.

Landing ILG: From JIIMS on track 285° to MDOGG, then on track 287° to TRNBL, then on track 287°. Expect RADAR vectors to final approach course.

Landing MQS: From JIIMS on track 285° to MDOGG, then on track 324° to RANSM, then on track 352° to EBRLY, then on track 352°. Expect RADAR vectors to final approach course.

Landing TTN/KPNE: From JIIMS on track 336° to ZMRMN, then on track 014° to WOJIK, then on track 087° to PSOUT, then on TRACK 029° to HENYY, then on track 029°. Expect RADAR vectors to final approach course.
NOTE: Chart not to scale.

AL-5100 (FAA)
WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)
WASHINGTON, DC

LEGALG.SIX ARRIVAL (RNAV)

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: For non-turbojet aircraft capable of 180K or greater.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

WILKES-BARRE TRANSITION (LVZ.LEGGO6):
WILLIAMSPORT TRANSITION (FQM.LEGGO6):
SELINSFROVE TRANSITION (SEG.LEGGO6):

From LEGGO on track 203° to PRTZL, then on track 203° to HYPER.

LANDING RWYS 1C/R: From HYPER on track 211° to cross SIGBE at 7000, then on track 189° to cross MOWAT at 5000, then on track 189° to cross HUSEL at 4000, then on track 190° to YACKK, then on track 191° to TICON, then on track 191°. Expect RADAR vectors to final approach course.

LANDING RWY 1L: From HYPER on track 220° to cross CRAIN at 6000, then on track 214° to cross KUKSE at 5000, then on track 191° to ELISN, then on track 191° to MIKEJ, then on track 191°. Expect RADAR vectors to final approach course.

LANDING RWY 19C: From HYPER on track 219° to cross COVUR at 7000, then on track 191° to DIMKE, then on track 191° to cross HOOSR at or above 5000. Expect ILS or LOC to Rwy 19C approach.

LANDING RWY 19L: From HYPER on track 216° to cross OOGLE at or below 5000, then on track 217° to cross LITEY at 4000, then on track 191° to cross YYANG at 4000, then on track 191° to cross DADEY at or above 3000. Expect ILS or LOC to Rwy 19L approach.

LANDING RWY 19R: From HYPER on track 220° to cross CRAIN at 6000, then on track 220° to cross REXOE at 6000, then on track 191° to cross BEEZY at or above 4000. Expect ILS or LOC to Rwy 19R approach.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Maintain last assigned altitude until "cleared to descend via the MAPEL THREE STAR."

(NARRATIVE ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

PHILIPSBURG TRANSITION (PSB.MAPEL3):
WILSS TRANSITION (WILSS.MAPEL3):

From PRIVO on track 177° to cross DAFIX at 12000, then on track 178° to cross OVIEE at 10000 and at 250K, then on track 180° to cross MAPEL at 7000.

LANDING RWYS 1C/R: From MAPEL on track 153° to cross MOWAT at 5000, then on track 189° to cross HUSEL at 4000, then on track 190° to YACKK, then on track 191° to TICON, then on track 191°. Expect RADAR vectors to final approach course.

LANDING RWY 1L: From MAPEL on track 187° to cross KUKSE at 5000, then on track 191° to ELISN, then on track 191° to MIKEJ, then on track 191°. Expect RADAR vectors to final approach course.

LANDING RWY 1C: From MAPEL on track 153° to cross COVUR at 7000, then on track 191° to DIMKE, then on track 191° to cross HOOSR at or above 5000. Expect ILS or LOC Rwy 19C approach.

LANDING RWY 19L: From MAPEL on track 149° to cross MCQUE at or below 5000, then on track 149° to cross LITEY at 4000, then on track 191° to cross YYANG at 4000, then on track 191° to cross DADEY at or above 3000. Expect ILS or LOC Rwy 19L approach.

LANDING RWY 19L: From MAPEL on track 156° to cross BASYL at 6000, then on track 156° to cross REXOE at 6000, then on track 191° to cross BEEZY at or above 4000. Expect ILS or LOC Rwy 19R approach.
ARRIVAL ROUTE DESCRIPTION

LANDING KBWI RWYS 10, 15L/R: From MIDY on track 302° to cross KAPTN at or below 5000, then on track 311° to cross NAVEY at 4000, then on track 311° to ANCRR, then on track 311° to LURRL, then on track 300° to HUNNN, then on track 300°. Expect RADAR vectors to final approach course.

LANDING BWI RWY 28: From MIDY on track 008° to cross TROTZ at 3000, then on track 314° to HURTZ. Expect assigned instrument approach or RADAR vectors.

LANDING BWI RWY 33L: From MIDY on track 316° to cross SNUGI at or above 5000, then on track 323° to cross JANNS at or above 4000 and at 210K. Expect assigned instrument approach or RADAR vectors.

LANDING BWI RWY 33R: From MIDY on track 323° to cross DUDDS at or above 3000. Expect assigned instrument approach or RADAR vectors.

LANDING MTN: From MIDY on track 022° to cross JUGMO at 3000, then on heading 315°. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

BUCKO TRANSITION (BUCKO.NUMMY3): From over BUCKO on ESL R-282 to ESL VOR/DME, then on ESL R-103 to DRUZZ, then on AML R-297 to AML VOR/DME.

Landing DCA Rwys 1, 4, 33, ADW Rwys 1L, 1R, and DAA: From over AML VOR/DME on AML VOR/DME R-130 to cross NUMMY at 6000, then on heading 187°, expect radar vectors to final approach course.

Landing DCA Rwys 15, 19, 22 and ADW Rwys 19L, 19R: Depart AML VOR/DME on heading 070°, expect radar vectors to final approach course.

NOTE: DME and RADAR required.
NOTE: Turbojets only; Turboprops as assigned by ATC only.
NOTE: Aircraft use DCA, ADW, or DAA ATIS to determine direction of landing prior to ALWYZ.
NOTE: PROHIBITED AREA (P-56) north of DCA - AVOID - surface 18000.
NOTE: Maintain last ATC assigned altitude until cleared to descend via the NUMMY THREE, then comply with altitude restrictions as published.
**ARRIVAL ROUTE DESCRIPTION**

**LYNCHBURG TRANSITION (LYH.POWTN5)**

**LANDING NORTH RUNWAYS 2, 34:** From POWTN on track 111° to DUCXS, then on heading 151° or as assigned by ATC. Expect RADAR vectors to final approach course.

**LANDING SOUTH RUNWAYS 16, 20:** From POWTN on track 071° to DEEER, then on heading 081° or as assigned by ATC. Expect RADAR vectors to final approach course.

**NOTE:** Chart not to scale.

**NOTE:** RADAR required.

**NOTE:** RNAV 1.

**NOTE:** DME/DME/IRU or GPS required.

**NOTE:** Turbojet aircraft only.

**NOTE:** Maintain last ATC assigned altitude until cleared to "descend via the POWTN STAR".

ARTCC will issue landing direction assignment (north or south) and Potomac TRACON will issue runway assignments.

**NOTE:** Chart not to scale.
NOTE: Chart not to scale.

NOTE: Jet aircraft only.

NOTE: DME and RADAR required.

(NARRATIVE ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

PHILIPSBURG TRANSITION (PSB.PRIVO3): From over PSB VORTAC on PSB R-177 to PRIVO. Thence....

....from PRIVO on PSB R-177 to DAFIX, then on PSB R-177 to OVIEE, then on AML R-358 to MAPEL. Then on HGR R-141 to TWEAK. Then on heading 190° or as assigned by ATC.

LANDING RWYS 1L/C/R and 30: Expect RADAR vectors to final approach course after TWEAK.
LANDING RWYS 19L/C/R and 12: Expect RADAR vectors to final approach course after MAPEL.
LANDING KHEF and KNYG: Expect RADAR vectors to destination airport after TWEAK.
LANDING KMRB and KJYO: Expect RADAR vectors to destination airport after MAPEL.
NOTE: Radar required.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: Turbojet aircraft only.

NOTE: All part 91, 101, 103, 105, 125, 133, 135, and 137 flight operations are prohibited on the HVQ/BKW/JOOEY transitions.

BECKLEY TRANSITION (BKW.RAVNN6)

CHARLESTON TRANSITION (HVQ.RAVNN6)

HBUDA TRANSITION (HBUDA.RAVNN6): (ATC assigned only).

JOOEY TRANSITION (JOOEY.RAVNN6): (ATC assigned only).

THHMP TRANSITION (THHMP.RAVNN6)

NOTE: Chart not to scale.

Note: Chart not to scale. (Continued on following page)
ARRIVAL ROUTE DESCRIPTION

From CAPKO on track 072° to cross RAVNN at 6000.

LANDING BWI RUNWAYS 10, 15L/R: From RAVNN on track 352° to NAVEY, then on track 311° to ANCRR, then on track 311° to LURRL, then on track 300° to HUNNN, then on track 300°. Expect RADAR vectors to final approach course.

LANDING BWI RUNWAYS 28, 33L/R: From RAVNN on track 014° to JETNA, then on track 014°. Expect assigned instrument approach or RADAR vectors to final approach course.

LANDING DMW: From CAPKO on track 072° to cross RAVNN at 6000, then on track 359° to STRGL, then on track 356° to KEMMP, then on track 335° to SLOAF, then on heading 354°. Expect RADAR vectors to final approach course.

LANDING MTN: From CAPKO on track 072° to cross RAVNN at 6000, then on track 072° to AMRTN, then on track 073°. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

WILKES-BARRE TRANSITION (LVZ.SEG6):
From over LVZ VORTAC on LVZ R-246 and SEG R-075 to SEG VOR/DME. Thence....

WILLIAMSPORT TRANSITION (FQM.SEG6):
From over FQM VOR/DME on FQM R-198 and SEG R-017 to SEG VOR/DME. Thence....

....From SEG VOR/DME on SEG R-201 to LEGGO, then on SEG R-201 to PRTZL, then on SEG R-201 to HYPER, then on FDK R-031 to FDK VOR, then on heading 190° or as assigned by ATC. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

LANCASTER TRANSITION (LRP.SKILS5): PHILIPSBURG TRANSITION (PSB.SKILS5):

From SHILO on track 195° to cross SKILS, at 12000, then on track 195° to cross BAL VORTAC, at 10000 and at 250K, then on track 234° to EYESS.

LANDING RUNWAYS 1, 4, 33: From EYESS on track 230° to BRUNC, then on track 192° to FELTY, then on track 187° to HITEK, then on track 187° to CAVDI, then on heading 187°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 15, 19, 22: From EYESS on track 284° to EDDWD, then on track 328° to MEGGS, then on track 327° to NAYES, then on heading 327°. Expect RADAR vectors to final approach course.

NOTE: Chart not to scale.
**ARRIVAL ROUTE DESCRIPTION**

**MONTEBELLO TRANSITION (MOL.SPIDR4)**

**LANDING NORTH RWYS 2, 34:** From SPIDR on track 149° to DUCXS, then on heading 151° or as assigned by ATC. Expect RADAR vectors to final approach course.

**LANDING SOUTH RWYS 16, 20:** From SPIDR on track 105° to DEEER, then on heading 081° or as assigned by ATC. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

LAFLN TRANSITION (LAFLN.SPISY2)

LANDING NORTH RWYS 1L/1R: From SPISY on track 275° to CAPKO, then on track 208° to POHIK, then on track 190° to OPSIE, then on track 190°. Expect RADAR vectors to final approach course.

LANDING SOUTH RWYS 19L/19R: From SPISY on track 328° to DECON, then on track 343° to REVOE, then on track 343°. Expect RADAR vectors to final approach course.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

From over MOL VOR/DME via R-115 and FAK R-297 to FAK VORTAC, then via FAK R-101 and HCM R-282 to HCM VORTAC, then via HCM R-107 and CCV R-290 to TERKS INT. Expect radar vectors to the final approach course after the TERKS INT.
ARRIVAL ROUTE DESCRIPTION

BBONE TRANSITION (BBONE.TIKEE4):

KESSEL TRANSITION (ESL.TIKEE4):

SEALZ TRANSITION (SEALZ.TIKEE4):

All aircraft types landing HEF/NYG/RMN/HWY/CJR/EZF:
From TIKEE on track 090° to JETIS, then on heading 090° or as assigned by ATC. Expect RADAR vectors to final approach course.

Props and Turboprop aircraft landing DAA/W00/VKX/ADW/2W5/DCA: From TIKEE on track 122° to GILFF, then on track 090° to HIGPO, then on heading 090° or as assigned by ATC. Expect RADAR vectors to final approach course.

Note: Procedure available to all types of aircraft landing the following airports: CJR, HWY, HEF, RMN, EZF, NYG.

Note: Props or Turboprop aircraft only landing the following airports: DAA, 2W5, VKX, W00, DCA, ADW.
ARRIVAL ROUTE DESCRIPTION

BAINS TRANSITION (BAINS.TRISH3):
IZZEE TRANSITION (IZZEE.TRISH3):
LANCASTER TRANSITION (LRP.TRISH3):
NUGGY TRANSITION (NUGGY.TRISH3):

LANDING BWI:

LANDING RWYS 10, 15L, 15R: From TRISH on track 258° to cross STALK at or above 5000, then on track 247° to cross STARZ at 4000, then on track 220° to cross STRPS at 4000 and at 210K, then on track 248° to BRAYV, then on track 285° to HOIST, then on heading 285° or as assigned by ATC. Expect RADAR vectors to final approach course.

LANDING RWY 28: From TRISH on track 206° to cross WUUDI between 5000 and 6000, then on track 206° to cross FINNZ at 5000, then on track 158° to cross ASHOR at 4000, then on track 105° to GRAMZ, then on heading 105° or as assigned by ATC. Expect RADAR vectors to final approach course.

LANDING RWYS 33L/R: From TRISH on track 206° to cross WUUDI between 5000 and 6000, then on track 206° to cross FINNZ at 5000, then on track 205° to cross KEEYY at 4000 and at 210K, then on track 204° to ROAPS, then on track 155° to HOOK, then on track 155°. Expect RADAR vectors to final approach course.

LANDING MTN: From TRISH on track 206° to cross WUUDI between 5000 and 6000, then on track 206° to cross FINNZ at 5000, then on track 160° to cross RAAYY at 4000, then on heading 160° or as assigned by ATC. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

LORAA TRANSITION (LORAA.TRSTN3):

Landing KHEF, KHRY, KCRF: From TRSTN on track 010° to MOTIE, then
on heading 010° or as assigned by ATC. Expect radar vectors to final approach
course.

Landing KOKV, KHEF, KMAB, KJYO, KFDR, KDMW, KW50, KGAI, KFRR:
From TRSTN on track 350° to ASHLN, then on track 080° to EZZZZ, then on
track 090° to RUANE, then on heading 090° or as assigned by ATC. Expect
radar vectors to final approach course.

NOTE: Radar required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.

NOTE: Chart not to scale.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojets only; turboprops as assigned by ATC only.
NOTE: Prohibited area (P-56) north of DCA-avoid-surface to FL180.
NOTE: Maintain last assigned altitude until cleared to "descend via" the TRUPS4.
ARTCC will issue landing assignment (north or south) and Potomac TRACON will issue runway assignments.

NOTE: Chart not to scale.

**BECKLEY TRANSITION (BKW.TRUPS4):**
**CHARLESTON TRANSITION (HVQ.TRUPS4):**

(CONTINUED ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

Landing DCA Rws 1, 4, 33, and ADW Rws 11/19 and Landing DAA: From over TRUPS on track 076° to cross LETZZ at 8000, then on track 130° to cross RLLL at 6000 and at 250K, then on track 131° to VCTRY, then on track 189° to HEROO, then on track 189°. Expect radar vectors to final approach course.

Landing DCA Rws 15, 19, 22: From over TRUPS on track 061° to cross FRDMM at 8000 and 240K, then on track 078° to STAND, then on track 078° to TGTHR, then on track 148° to FERGI. Expect LDA/DME Rwy 19, RNAV/RNP Rwy 19, RIVER VISUAL Rwy 19 or radar vectors to final approach course.

Landing ADW Rws 19L/R: From over TRUPS on track 061° to cross FRDMM at 8000 and at 240K, then on track 078° to STAND, then on track 078°. Expect radar vectors to final approach course.

NOTE: Prohibited area (P-56) north of DCA-avoid surface to FL180.

NOTE: Maintain last assigned altitude until cleared to "descend via" the TRUPS4. ARTCC will issue landing assignment (north or south) and Potomac TRACON will issue runway assignments.
NOTE: Chart not to scale.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: P56 area A/B 1.5 NM north of DCA, avoid surface to 18000 MSL.

(CONTINUED ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

BEEVR TRANSITION (BEEVR.VUDO02): (ATC assigned only).
CIBAC TRANSITION (CIBAC.VUDO002)
THHMP TRANSITION (THHMP.VUDO02)
REVOE
Landing south: Rwys 19L/R:
Expect RADAR vectors to final approach course after REVOE.

FUNNY
Landing north: Rwys 1L/R:
Expect RADAR vectors to final approach course after FUNNY.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: P56 area A/B 1.5 NM north of DCA, avoid surface to 18000 MSL.

ARRIVAL ROUTE DESCRIPTION

LANDING NORTH RWYS 1L/R: From VUDO2 on track 348° to cross FUNNY at 8000, then on track 348°. Expect RADAR vectors to final approach course.

LANDING SOUTH RWYS 19L/R: From VUDO2 on track 020° to cross BEDLE at 8000, then on track 006° to cross HOLIO at 5000, then on track 006° to DECON, then on track 343° to REVOE, then on track 343°. Expect RADAR vectors to final approach course.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

BELLAIRE TRANSITION (AIR.EMI7): From over AIR VOR/DME on AIR R-111 to LUNDY, then on MRB VORTAC R-293 to MRB VORTAC. Thence . . .

KEMAN TRANSITION (KEMAN.EMI7): From over KEMAN on AIR R-111 to LUNDY, then on MRB VORTAC R-293 to MRB VORTAC. Thence . . .

MORGANTOWN TRANSITION (MGW.EMI7): From over MGW VOR/DME on MGW R-101 to LIZIO, then on MRB VORTAC R-284 to MRB VORTAC. Thence . . .

. . . from MRB on MRB R-088 to RUANE, then on EMI VORTAC R-269 to EMI. Expect vectors to final approach course after EMI.
WIGOL TWO ARRIVAL (RNAV)

ARIVAL ROUTE DESCRIPTION

CCHIP TRANSITION (CCHIP.WIGOL2):
DORRN TRANSITION (DORRN.WIGOL2):
ZUMBR TRANSITION (ZUMBR.WIGOL2):

From JOANZ on track 053° to BBILL, then on track 054° to BETEE, then on track 054° to WIGOL.

Landing Rwys 1L/C/R, 19L/C/R, 30: From WIGOL on heading 010°. Expect radar vectors to final approach course.

NOTE: Chart not to scale.
RNAV (GPS) RWY 6
ABINGDON, VIRGINIA
AL-5719 (FAA) 23110

<table>
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<tr>
<th>WAAS CH 82411</th>
<th>APP CRS 061°</th>
<th>Rwy Idg 4471</th>
<th>TDZE 2068</th>
<th>Apt Elev 2087</th>
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**RNAV (GPS) RWY 6**

**ABINGDON, VIRGINIA**

**AWOS-3**

| 128.125 |

**TRI-CITY APP CON**

| 125.25 | 349.0 |

**UNICOM**

| 122.8 (CTAF) |

**RNAV (GPS) RWY 6**

**ABINGDON, VIRGINIA**

**APM CRS 061°**

**Rwy Idg 4471**

**TDZE 2068**

**Apt Elev 2087**

**RNAV APCH.**

- **Rwy 6** helicopter visibility reduction below 1 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C.

**AWOS-3**

| 128.125 |

**TRI-CITY APP CON**

| 125.25 | 349.0 |

**UNICOM**

| 122.8 (CTAF) |

**RNAV (GPS) RWY 6**

**ABINGDON, VIRGINIA**

**APM CRS 061°**

**Rwy Idg 4471**

**TDZE 2068**

**Apt Elev 2087**

**RNAV APCH.**

- **Rwy 6** helicopter visibility reduction below 1 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C.
Inop table does not apply. GPS required. Cat D Straight-in minima NA when using Tri-Cities altimeter setting. When local altimeter setting not received, use Tri-Cities altimeter setting and increase all MDA 140 feet; and increase S-24 Cat A and B and Circling Cat B visibility ¼ mile, and S-24 Cat C and Circling Cat C visibility ½ mile. Increase BUNTE fix minimums S-24 Cat C visibility ½ mile, Circling Cats A and B visibility ¼ mile, and Circling Cat C visibility ½ mile. Helicopter visibility reduction below 1 SM NA.

AWOS: 3

TRI-CITY APP CON

UNICOM

GLADE SPRING
110.2 GZG
Chan 39

LOCALIZER 108.3
I-VJI
Chan 20

LOCALIZER 108.3
I-VJI
Chan 20

BUNTE INT
I-VJI

AKQON INT
I-VJI

One Minute Holding Pattern

VGSI and descent angles not coincident (VGSI Angle 4.00/TCH 32).

Limit missed approach to 210K

061°

240°

4300

3080-3

993 (1000-3)

3080-3

853 (900-2 ½)

853 (900-1)
**RNAV (GPS)-A**

**LEE (ANP)**

Procedure NA for arrivals at GRACO on V93 southeast bound and northeast bound and on V379 eastbound.

**BWI ASOS**
- **115.1**
- **127.8**

**POTOMAC APP CON**
- **119.7**
- **290.475**

**CTAF**
- **122.9**

**Procedure NA at night. Rwy 12, and 30 helicopter visibility reduction below 1 SM NA. Use Baltimore/Washington Intl Thurgood Marshall altimeter setting.**

**MISSED APPROACH:** Climbing left turn to 2000 direct AMRTN and hold.

**Category**
- Category A
- Category B
- Category C
- Category D

**Circling**
- 660-1
- 626 (700-1)
- NA

**38°57'N-76°34'W**

**ANNAPOULS, MARYLAND**

**AL-9806 (FAA)**

**23278**

**2000**

**AMRTN**

**4 NM Holding Pattern**

**NE-3, 30 NOV 2023 to 25 JAN 2024**
**D-ATIS**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
<td>S-ILS 15L</td>
<td>544-1 3/8</td>
<td>402 (500-1%)</td>
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<tr>
<td>S-LOC 15L</td>
<td>560/55</td>
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<td>497 (500-1)</td>
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**Radar Required**

- **GS 3.00° TCH 47**
- **KRENE BAL 12.9 RADAR**
- **MNKEY BAL 9.9 RADAR**
- **ZOWEE BAL 6.9 RADAR**
- **ADCOK BAL 3.4 RADAR**
- **BAL R 153**
- **DAL 12 RADAR**
- ***LOC only.**

**ELEV 143  TDZE 142**

- **155° 6 NM from FAF**

**FAR to MAP 6 NM**

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<th>Knots</th>
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<th>90</th>
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<td>4:00</td>
<td>3:00</td>
<td>2:24</td>
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</tbody>
</table>

**MISSED APPROACH:**

Climb to 2500 on heading 155° and BAL VORTAC R-153 to DUDDS/BAL 12 DME and hold.

**Alternate Missed Approach:**

APCH Fix only.

**Rwy Idg:** 142

**Apt Elev:** 143

**GND CON:** 121.9

**CLNC DEL:** 118.05

**BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**BALTIMORE, MARYLAND**

Amdt 4A 23APR20
DME required. DME from BAL VORTAC. Simultaneous reception of I-BWI and BAL DME required. Simultaneous approach authorized with Rwy 33L. Inoperative table does not apply to S-ILS 33R. For inoperative MALSR, increase S-LOC 33R visibility to RVR 5000. Helicopter visibility reduction below RVR 4000 NA.

MISSED APPROACH: Climb to 3000 and BAL VORTAC R-337 to KRENE/BAL 12.9 DME and hold.

ALTERNATE MISSED APCH FIX
WESTMINSTER EMI 117.9
Chan 126

D-ATIS 115.1 127.8
POTOMAC APP CON 119.0 282.275
(020°-100°) 119.7 290.475
124.55 317.425 (101°-130°) 128.7 307.9
(131°-180°) 131°

Baltimore Tower
11:49
119.4 257.8
GND CON
121.9
CNC DEL
118.05

RADAR REQUIRED

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

** ADI-3, 30 NOV 2023 to 25 JAN 2024 **
**SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

**Baltimore, Maryland**  
Amdt 21D 08SEP22

**Baltimore/Washington Intl Thurgood Marshall (BWI)**  
39°11’N-76°40’W

**ILS Rwy 10 (SA CAT I)**

**LOC I-BAL**  
109.7

**APP CRS**  
105°

**Rwy Idg**  
9953

**TDZE**  
143

**Apt Elev**  
143

**RADAR required for procedure entry. DME required.**  

**ALSF 2 A**

**MISSPAPRCH: Climb to 2500 on BAL VORTAC R-105 to HURTZ/BAL 12.1 DME/RADAR and hold.**

**D-ATIS**  
115.1 127.8

**POTOMAC APP CON**  
119.0 282.275 (020°-100°) 119.7 290.475 (131°-180°)

**HURTZ/BAL 12.1**  
5.3

**BALTIMORE TOWER**  
119.4 257.8

**GND CON**  
121.9

**CLNC DEL**  
118.105

**ALTERNATE MISSED APCH FIX**

- **WESTMINSTER**  
  EMI 117.9  
  Chan 126

**COLUM**  
11.4

**JEANS**  
5.3

**REIL Rwys 15L and 33R**

**TDZ/CL Rwys 10 and 33L**

**HIRL all Rwys**

**TDZ/CL Rwys 10 and 33L**

**Rwy ldg**  
958

**Apt Elev**  
185

**ILS RWY 10**  
(SA CAT I)

**LOCALIZER 102°Z**

**BALTIMORE**  
115.1  
Chan 98

**ILA 1549**

**ILA 1464**

**ILA 730**

**ILA 532**

**ILA 1049**

**CATEGORY**  
A B C D

**S-ILS 10**  
RA 191/14 150 DA 293

**CPDLC**

**AS CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**11**
Simultaneous approach authorized with ILS or LOC Rwy 33R. DME from BAL VORTAC. SA CAT I: Requires specific Opspec, MSPEC, or LOA approval and use of HUD to DH. SA CAT II: Reduced lighting: Requires specific Opspec, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

D-ATIS
115.1 127.8
117.1 127.8

POTOMAC APP CON
119.0 282.275 (020°-100°) 119.7 290.475 (119°-180°) 124.55 317.425 (101°-130°) 128.7 307.9 (181°-019°)

ILS RWY 33L (SA CAT I & II)

Baltimore/Washington Intl Thurgood Marshall (BWI)

MALS
117.9 EM

ALTERTED APPROACH MISSPE FIX

Baltimore Tower
119.4 257.8

GND CON
121.9

CLNC DEL
118.05

RADAR

NE-3, 30 NOV 2023 to 25 JAN 2024

TDZ/CL Rwys 10 and 33L
REIL Rwys 15L and 33R
HIRL all Rwys

BALTIMORE, MARYLAND
Amdt 12B 08SEP22
RNAV (RNP) Z RWY 10
Baltimore/Washington Intl Thurgood Marshall (BWI)

**APP CRS**

<table>
<thead>
<tr>
<th>Rwv Igd</th>
<th>TDZE</th>
<th>Apt Elev</th>
</tr>
</thead>
<tbody>
<tr>
<td>105°</td>
<td></td>
<td>143</td>
</tr>
</tbody>
</table>

**RNP**

| RNP 0.11 DA | 448/24 | 305 (400-½) |
| RNP 0.30 DA | 626/60  | 483 (500-⅓) |

**For uncompensated Baro-VNAV systems, procedure NA below -12°C or above 54°C. For inop ALS, increase RNP 0.11 all Cats visibility to RVR 4500, increase RNP 0.30 all Cats visibility to 1 ½ SM.**

**MGMT 2**

<table>
<thead>
<tr>
<th>BALTIMORE TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>119.9</td>
<td>257.8</td>
<td>118.05</td>
</tr>
</tbody>
</table>

**See planview for multiple IF locations.**

**TDZ/CL Rwvs 10 and 33L**

**REIL Rwys 15L and 33R**

**HIRL all Rwys**

**NE-3, 30 NOV 2023 to 25 JAN 2024**
RNAV (RNP) Z RWY 15R

For uncompensated Baro-VNAV systems, procedure NA below -12°C (11°F) or above 54°C (130°F). For inop MALSR, increase RNP 0.11 DA all Cats visibility to 1/4 mile, and RNP 0.30 DA all Cats visibility to 1/2 mile. GPS Required.

MISSED APPROACH: Climb to 2500 on track 155° to JANNS and hold.

Procedure NA for arrival on EMI VORTAC airway radials 151° CW 187.

AUTHORIZATION REQUIRED

Baltimore, Maryland

Category

RNP 0.11 DA

RNP 0.30 DA

A

513/38

588/52

375 (400-3/4)

450 (500-1)

B

C

D

0.5% UP

0.3% UP
RNAV (RNP) Z RWY 28
BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

For uncompensated Baro-VNAV systems, procedure NA below -12°C or above 54°C. For inop ALS, increase RNP 0.30 all Cats visibility to 1/4.

Procedure NA for arrivals at BILIT on V308 eastbound.
For uncompensated Baro-VNAV systems, procedure NA below -12°C or above 54°C. For inop ALS, increase RNP 0.30 all Cats visibility to RVR 6000.

RNAV (RNP) Z RWY 33L

Baltimore/Washington Intl Thurgood Marshall (BWI)

MAISR

MISSING APPROACH: Climb to 3000 on track 335° to BMORE and hold.

RNP AR APCH-GPS.

For uncompensated Baro-VNAV systems, procedure NA below -12°C or above 54°C. For inop ALS, increase RNP 0.30 all Cats visibility to RVR 6000.

D-ATIS

POTOMAC APP CON

(020°-100°)

(101°-130°)

(131°-180°)

(181°-019°)

119.0  282.275

124.55  317.425

119.7  290.475

128.7  307.9

Baltimore Tower

GND CON

119.4  257.8

121.9

CLNC DEL

118.05

RNAV (RNP) Z RWY 33L

Baltimore/Washington Intl Thurgood Marshall (BWI)

Category

A

B

C

D

RNP 0.30 DA

496/35

353 (400-%)

AUTHORIZATION REQUIRED

17
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -13°C (9°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below RVR 4000 NA. Simultaneous approach authorized. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations.

### POTOMAC APP CON
- **IF** KRENE
- MNKEY
- ZOWEE (FAF)
- ADCOK
- RW15L
- DUDDS

### Missed Approach
Climb to 2500 direct DUDDS and hold.

### Operational Details
- **LPV DA**
  - 544-1/3
  - 402 (500-1/3)
  - NA
- **LNAV/VNAV DA**
  - 656-1/4
  - 514 (600-1/3)
  - NA
- **LNAV MDA**
  - 600/55
  - 458 (500-1)
  - NA

### RNAV (GPS) RWY 15L
- Category A
  - 2600
- Category B
  - 3000
- Category C
  - 155° (3)
- Category D
  - 30° (5)

### Operation
- WAAS
  - CH 40108
  - W15A
- App CRS
  - 155°
- Rwy Idg
  - 5000
- TDZE
  - 142
- Apl Elev
  - 143

### RNAV (GPS) RWY 15L
- BALTIMORE/THURGOOD MARSHALL (BWI)
- BALTIMORE, MARYLAND
- BALTIMORE TOWER (BWI)
- D-ATIS
  - 119.0 282.275
  - 124.55 317.425
  - 119.7 290.475
- POTOMAC APP CON
  - 119.4 257.8
  - 121.9 118.05
- Category
  - A
  - B
  - C
  - D
- LNAV DA
  - 544-1/3
  - 402 (500-1/3)
  - NA
- LNAV/VNAV DA
  - 656-1/4
  - 514 (600-1/3)
  - NA
- LNAV MDA
  - 600/55
  - 458 (500-1)
  - NA
- LCIRCLNG
  - 640-1
  - 660-1

### Amdt
- 4A 2020-26MAY16

### Note
- RNAV (GPS) RWY 15L
- NE-3, 30 NOV 2023 to 25 JAN 2024
- BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)
- 39°11'N-76°40'W
- BALTIMORE, MARYLAND
- Amdt 4A 26MAY16
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -13°C or above 54°C. For inop MALSR, increase LNAV/VNAV all Cats visibility to RVR 5000 and LNAV all Cats visibility to RVR 5500. Simultaneous approach authorized. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations. Helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV, all Cats.

**RNAV (GPS) RWY 33R**

**Baltimore/Thurgood Marshall (BWI)**

**Radar Required**

**Amdt 4B 11AUG22**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C or above 54°C.

 AIS-2  MISSED APPROACH: Climb to 2500 direct HURTZ and hold.

D-ATIS 115.1 127.8  POTOMAC APP CON 119.0 282.275 124.55 317.425

POTOMAC APP CON 119.7 290.475 128.7 307.9

Baltimore Tower 119.4 257.8  Ground Con 121.9  Clinc Del 118.05

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

MAL RW10 25 NM

2500

VGSI and RNAV glideslope not coincident (VGSI Angle 3.00/TCH 71).  2500   HURTZ

C A B C D


For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C or above 54°C.
### RNAV (GPS) Y RWY 28

**BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)**

#### RNP APCH-GPS

- **WAAS CH 48080 W28A**
- **APP CRS 285°**
- **Rwy Idg 9803**
- **TDZE 143**
- **Apt Elev 143**

#### D-ATIS

<table>
<thead>
<tr>
<th>Category</th>
<th>Potomac App Con</th>
<th>Baltimore Tower</th>
<th>Gnd Con</th>
<th>Clnc Del</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>119.0 282.275 (020°-100°) 119.7 290.475 (131°-180°) 124.55 317.425 (101°-130°) 128.7 307.9 (181°-019°)</td>
<td>119.4 257.8</td>
<td>121.9</td>
<td>118.05</td>
</tr>
</tbody>
</table>

#### MISSED APPROACH:

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4000. **

**RVR 1800 authorized with use of FD or AP or HUD to DA.**

**MALSR: Climb to 2500 direct COLUM and hold.**

---

**ELEV 143**

**TDZE 143**

---

**TDZ/CL Rwys 10 and 33L**

**REIL Rwys 15L and 33R**

**HIRL all Rwys**

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**NE-3, 30 NOV 2023 to 25 JAN 2024**

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**BALTIMORE, MARYLAND**

Amdt 2D 08SEP22

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**AL-804 (FAA)**

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**RNAV (GPS) Y RWY 28**

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**BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)**

---

**39°11'N-76°40'W**

---
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

ASDE-X in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.

Runway Status Lights in operation.
CONLE FOUR DEPARTURE (RNAV)

Baltimore, Maryland

Top Altitude: 14000

Takeoff Minimums:
- Rwy 10, 15L/R, 28: Standard with minimum climb of 500’ per NM to 667.
- Rwy 33L: Standard with minimum climb of 500’ per NM to 900.
- Rwy 33R: Standard with minimum climb of 500’ per NM to 800.

Note: RNAV 1

Note: DME/DME/IRU or GPS required.

Note: Radar required.

Note: For turbojet aircraft only.

(Narrative on following page)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 10: Climb on heading 105° to 667, then on heading 105° or as assigned by ATC, for vectors to cross OHSSS at or above 11000....

TAKEOFF RWY 15L: Climb on heading 155° to 667, then direct GAGLR, then on track 149° to BEWEE, then on track 207° to cross OHSSS at or above 11000....

TAKEOFF RWY 15R: Climb on heading 155° to 667, then direct KEMMP, then on track 145° to BEWEE, then on track 207° to cross OHSSS at or above 11000....

TAKEOFF RWY 28: Climb on heading 285° to 667, then climb direct BOSLY, then left turn direct RAISN, then on track 149° to cross STABL at or below 13000, then on track 185° to cross OHSSS at or above 11000....

TAKEOFF RWYS 33L/R: Climb on heading 335° to 667, then on heading 335° or as assigned by ATC, for vectors to cross OHSSS at or above 11000....

....then on track 212° to cross CONLE at or below 14000. Then on assigned transition. Maintain 14000. Expect clearance to filed altitude within 10 minutes after departure.

COLIN TRANSITION (CONLE4.COLIN)

SCOOB TRANSITION (CONLE4.SCOOB)
NOTE: ATC assigned.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.

TOP ALTITUDE:
14000

TAKEOFF MINIMUMS:
Rwys 10, 15L/R, 28: Standard with minimum climb of 500’ per NM to 667.
Rwy 33L: Standard with minimum climb of 500’ per NM to 900.
Rwy 33R: Standard with minimum climb of 500’ per NM to 800.

(NARRATIVE ON FOLLOWING PAGE)
(NOTES CONTINUED ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 10: Climb on heading 105° to 667, then on heading 105°, expect RADAR vectors to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on track 267° to FIXET, thence . . . .

TAKEOFF RWY 15L: Climb on heading 155° to 667, then direct GAGLR, then on track 149° to BEWEE, then on track 207° to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on track 267° to FIXET, thence . . . .

TAKEOFF RWY 15R: Climb on heading 155° to 667, then direct KEMMP, then on track 145° to BEWEE, then on track 207° to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on track 267° to FIXET, thence . . . .

TAKEOFF RWY 28: Climb on heading 285° to 667, then direct BOSLY, then left turn direct RAISN, then on track 149° to cross STABL at or below 13000, then on track 185° to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on track 267° to FIXET, thence . . . .

TAKEOFF RWY 33L/R: Climb on heading 335° to 667, then on heading 335°, expect RADAR vectors to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on track 267° to FIXET, thence . . . .

. . . . on assigned transition. Maintain 14000. Expect clearance to filed altitude within 10 minutes after departure.

FLASK TRANSITION (FIXET3.FLASK)
GLANC TRANSITION (FIXET3.GLANC)
MAULS TRANSITION (FIXET3.MAULS)
MELTN TRANSITION (FIXET3.MELTN)
OTTTO TRANSITION (FIXET3.OTTTO)
RAMAY TRANSITION (FIXET3.RAMAY)
RRSIN TRANSITION (FIXET3.RRSIN)
PALEO THREE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF Rwy 28:
JETS: Fly runway heading until 3 DME, then turn left heading 150°. Thence . . .
PROPS: Fly runway heading. Thence . . .
TAKE-OFF ALL OTHER RUNWAYS: Fly runway heading. Thence . . .
. . . for vectors to transition or assigned route, expect clearance to filed altitude ten minutes after departure.

ATLANTIC CITY TRANSITION (PALEO3.ACY): From over BAL VORTAC via BAL R-133 to PALEO INT, then via SIE VORTAC R-276 to DONIL INT, then via ACY VORTAC R-246 to ACY VORTAC.

SEA ISLE TRANSITION (PALEO3.SIE): From over BAL VORTAC via BAL R-133 to PALEO INT, then via SIE VORTAC R-276 to SIE VORTAC.

SMYRNA TRANSITION (PALEO3.ENO): From over BAL VORTAC via BAL R-133 to PALEO INT, then via SIE VORTAC R-276 to SPEAK INT, then via ENO VORTAC R-235 to ENO VORTAC.

NOTE: Chart not to scale.

NOTE: Rwy 15L: Trees 620' left of DER, 57' AGL/172' MSL.
NOTE: Rwy 33R: Trees 914' right of DER, 124' AGL/266' MSL.
Trees 648' left of DER, 106' AGL/248' MSL.

TAKE-OFF MINIMUMS:
Rwys 4, 10, 15L, 15R, 22, 28 STANDARD.
Rwys 33L, 33R, 1400-3 or STANDARD with minimum climb of 250' per NM to 1900'.

NOTE: Rwy 15L: Trees 620' left of DER, 57' AGL/172' MSL.
NOTE: Rwy 33R: Trees 914' right of DER, 124' AGL/266' MSL.
Trees 648' left of DER, 106' AGL/248' MSL.
NOTE: Chart not to scale.

NOTE: Rwy 15L: Trees 620' left of DER, 57' AGL/172' MSL.
NOTE: Rwy 33R: Trees 914' right of DER, 124' AGL/266' MSL.

TAKEOFF MINIMUMS:
Rwys 33L, 33R: 1400-3 or standard with minimum climb of 250' per NM to 1900'.

TAKEOFF RUNWAY 28:
JETS: Fly runway heading until 3 DME, then turn left heading 150°. Thence....
PROPS: Fly runway heading. Thence....
TAKEOFF ALL OTHER RUNWAYS: Fly runway heading. Thence....
...for vectors to transition or assigned route, expect clearance to filed altitude ten minutes after departure.

DUPONT TRANSITION (SWANN3.DQO): From over BAL VORTAC via BAL R-104 to SWANN INT, then via DQO VORTAC R-233 to DQO VORTAC.
WOODSTOWN TRANSITION (SWANN3.OOD): From over BAL VORTAC via BAL R-104 to SWANN INT, then via ENO VORTAC R-271 to BROSS INT, then via OOD VORTAC R-235 to OOD VORTAC.

NOTE: Rwy 15L: Trees 620' left of DER, 57' AGL/172' MSL.
NOTE: Rwy 33R: Trees 914' right of DER, 124' AGL/266' MSL.

NOTE: Chart not to scale.
NOTE: Chart not to scale.

NE-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 10: Climb on heading 105° to 667, then on heading 105°, expect RADAR vectors to WONCE, then on track 283° to cross TERPZ at or above 11000, thence . . . .

TAKEOFF RUNWAY 15L: Climb on heading 155° to 667, then on heading 155°, expect RADAR vectors to WONCE, then on track 283° to cross TERPZ at or above 11000, thence . . . .

TAKEOFF RUNWAY 15R: Climb on heading 155° to 850, then right turn direct SARLY, then on track 288° to WONCE, then on track 283° to cross TERPZ at or above 11000, thence . . . .

TAKEOFF RUNWAY 28: Climb on heading 285° to intercept course 297° to WONCE, then on track 283° to cross TERPZ at or above 11000, thence . . . .

TAKEOFF RUNWAY 33L: Climb on heading 335° to 667, then left turn direct WONCE, then on track 283° to cross TERPZ at or above 11000, thence . . . .

TAKEOFF RUNWAY 33R: Climb on heading 335° to 667, then on heading 335°, expect RADAR vectors to WONCE, then on track 283° to cross TERPZ at or above 11000, thence . . . .

. . . on assigned transition: Departures on JERES and MCRAY transitions maintain 16000. Departures on RAMAY, OTTTO, MAULS, FLASK, MELTN, RRSIN, GLANC transitions maintain 17000, expect further clearance to filed altitude within 10 minutes after departure.

FLASK TRANSITION (TERPZ7.FLASK)
GLANC TRANSITION (TERPZ7.GLANC)
JERES TRANSITION (TERPZ7.JERES)
MAULS TRANSITION (TERPZ7.MAULS)
MCRAY TRANSITION (TERPZ7.MCRAY)
MELTN TRANSITION (TERPZ7.MELTN)
OTTTO TRANSITION (TERPZ7.OTTTO)
RAMAY TRANSITION (TERPZ7.RAMAY)
RRSIN TRANSITION (TERPZ7.RRSIN)
ILS or LOC RWY 33
MARTIN STATE (MTN)

Circling NA for Cat D northeast of Rwy 15-33. RWY 33 helicopter visibility reduction below 3/4 SM NA. VDP NA when using Baltimore/Washington Intl Thurgood Marshall altimeter setting. When local altimeter setting not received, use Baltimore/Washington Intl Thurgood Marshall altimeter setting; increase S-ILS 33 DA to 266 feet; increase all MDAs 60 feet and S-LOC 33 visibility Cat C/D 1/4 SM, and Circling visibility Cat C/D 1/4 SM.

ATIS
124.925
POTOMAC APP CON
119.0 282.275
MARTIN TOWER* 121.3(CTAF) 254.425
GND CON
121.8 253.4
UNICOM
122.95

ILS or LOC RWY 33
MARTIN STATE (MTN)

Missed Approach: Climb to 800 then climbing left turn to 2000 on heading 146° and on BAL VORTAC R-100 to JUGMO INT/I-MTN 12.3 DME and hold.

ATIS
124.925
POTOMAC APP CON
119.0 282.275
MARTIN TOWER* 121.3(CTAF) 254.425
GND CON
121.8 253.4
UNICOM
122.95

ILS or LOC RWY 33
MARTIN STATE (MTN)

Missed Approach: Climb to 800 then climbing left turn to 2000 on heading 146° and on BAL VORTAC R-100 to JUGMO INT/I-MTN 12.3 DME and hold.

ATIS
124.925
POTOMAC APP CON
119.0 282.275
MARTIN TOWER* 121.3(CTAF) 254.425
GND CON
121.8 253.4
UNICOM
122.95

ILS or LOC RWY 33
MARTIN STATE (MTN)

Missed Approach: Climb to 800 then climbing left turn to 2000 on heading 146° and on BAL VORTAC R-100 to JUGMO INT/I-MTN 12.3 DME and hold.

ATIS
124.925
POTOMAC APP CON
119.0 282.275
MARTIN TOWER* 121.3(CTAF) 254.425
GND CON
121.8 253.4
UNICOM
122.95

ILS or LOC RWY 33
MARTIN STATE (MTN)

Missed Approach: Climb to 800 then climbing left turn to 2000 on heading 146° and on BAL VORTAC R-100 to JUGMO INT/I-MTN 12.3 DME and hold.
Rwy 15 helicopter visibility reduction below 1/4 SM NA. When local altimeter setting not received, use Baltimore/Washington Intl Thurgood Marshall altimeter setting; increase all MDA 60 feet and increase LP Cats C and D visibility 1/4 SM, LNAV Cats C and D visibility 1/4 SM and Circling Cat C and D visibility 1/4 SM. Circling Cat D NA northeast of Rwy 15-33.

Procedure NA for arrivals at HERES on V419 westbound.

Holding Pattern at 6000/322° for arrivals at MEHAN on V31-33-93 southbound.

No PT for arrival at MEHAN on V419 westbound.

Holding Pattern at 3000/322° for arrivals at HERES on V31-33-93 southbound.

WOSBI 2.7 NM to RW15

154°

Odors

MEHAN 2.7 NM to RW15

154°

MEHAN

146°

LNAV MDA

550-1 478 (500-1) 550-1-3/8 478 (500-1/8)

520-1 498 (500-1) 520-1-3/8 498 (500-1/8)

600-1 538 (600-1) 680-1-3/4 740-2-1/4

658 (700-1/4) 718 (800-2-1/4)

Rwy 15-33 2.7 NM to WOSBI

Military Operations Only

Rwy 15 take-off 8100'

Military Operations Only

VGS1 and descent angles not coincident (VGS1 Angle 4.01/TCH 37).

3000 MEHAN

LNAV MDA

500-1 478 (500-1) 500-1-3/8 478 (500-1/8)

520-1 498 (500-1) 520-1-3/8 498 (500-1/8)

CIRCLING

560-1 538 (600-1) 680-1-3/4 740-2-1/4

658 (700-1/4) 718 (800-2-1/4)
Circling NA for Cat D northeast of Rwy 15-33. Baro-VNAV and VDP NA when using Baltimore/Washington Intl Thurgood Marshall altimeter setting. Rwy 33 helicopter visibility reduction below 1/4 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Baltimore/Washington Intl Thurgood Marshall altimeter setting; increase LPV DA to 266 feet; increase LNAV/VNAV DA to 356 feet and all visibilities 1/4 SM; increase all MDAs 60 feet and LNAV visibility Cat C/D 1/4 SM, and Circling visibility Cat C/D 1/4 SM.

Clearance through R-4001 A/B must be obtained before using this approach.

MISSED APPROACH: Climb to 3000 direct PUYIK and on track 328° to SKILS and hold.

Sailboats transitioning Frog Mortar Creek between 39°20'N-76°25'W obtained before using this approach.

Clearance through R-4001 A/B must be obtained before using this approach.
When local altimeter setting not received, use Baltimore/Washington Intl Thurgood Marshall altimeter setting; increase all MDA 60 feet and increase S-15 Cat A and Circling Cats C and D visibility 1/3 SM and increase JIVMI fix minimums S-15 Cats C and D visibility 1/2 SM and Circling Cat D visibility 1/4 SM. Rwy 15 helicopter visibility reduction below 1/4 SM NA. Circling Cat D NA northeast of Rwy 15-33.

MISSED APPROACH: Climbing right turn to 3000 on heading 312° and BAL VORTAC R-015 to MEHAN INT/I-BQG 14.3 DME and hold.

NoPT for arrival at MEHAN on V31-33-93 southbound.
DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading to ATC assigned altitude, for vectors to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on assigned transition. Expect filed altitude within 10 minutes after departure.

COLIN TRANSITION (CONLE4.COLIN)
SCOOP TRANSITION (CONLE4.SCOOP)
**NOTE:** Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

Fly heading and maintain altitude assigned by ATC, expect RADAR vectors to WONCE, then on track 283° to cross TERPZ at or above 11000, thence. . . .

. . . on assigned transition: Departures on JERES and MCRAy transitions maintain 16000. Departures on RAMAY, OTTTO, MAULS, FLASK, MELTN, RRSIN, GLANC transitions maintain 17000, expect further clearance to filed altitude within 10 minutes after departure.

FLASK TRANSITION (TERPZ7.FLASK)
GLANC TRANSITION (TERPZ7.GLANC)
JERES TRANSITION (TERPZ7.JERES)
MAULS TRANSITION (TERPZ7.MAULS)
MCRAy TRANSITION (TERPZ7.MCRAy)
MELTN TRANSITION (TERPZ7.MELTN)
OTTTO TRANSITION (TERPZ7.OTTTO)
RAMAY TRANSITION (TERPZ7.RAMAY)
RRSIN TRANSITION (TERPZ7.RRSIN)
RNAV (GPS) RWY 13
VIRGINIA TECH/MONTGOMERY EXEC (BCB)

**AWOS-3**
- 133.325

**ROANOKE APP CON**
- 126.9
- 339.8

**CLNC DEL**
- 124.85

**UNICOM**
- 123.05 (CTAF)

**ODALS**
- MISSED APPROACH: Climb to 5400 direct ZASNO and hold, continue climb-in-hold to 5400.

**RNP APCH.**
- Rwy 13 helicopter visibility reduction below 1 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C. Inop table does not apply to LPV all Cats, LNAV/VNAV all Cats, and LNAV Cats A and B.

**Procedure NA for arrivals at OBERS on V140 southwest bound.**

**Procedure NA for arrivals at WILIZ on V45 southeast bound.**

**ELEV 2120**
**TDZE 2119**

**INCORPORATING Amdt 3 10SEP20**

**BLACKSBURG, VIRGINIA**

**MISSED APCH FIX**
- 4200
- 4361
- 3797
- 4080
- 3956

**125° 305°**

**ZASNO**
- 5400

**5 NM**

**Holding Pattern**
- HAWTO
- SUNNY
- ZUPAT
- RW13

**GP 3.44°**
**TCH 55**

**A**
- 270 (300-1)

**B**
- 300 (300-1)

**C**
- 401 (400-1)

**D**
- 860 (900-2½)

**Table does not apply to LPV all Cats, LNAV/VNAV all Cats, and LNAV Cats A and B.**
RNAV (GPS) RWY 31
VIRGINIA TECH/MONTGOMERY EXEC (BCB)

MISSED APPROACH: Climb to 5900 direct HAWTO and hold, continue climb-in-hold to 5900.

Procedure NA for arrivals at TABER on V136-470 eastbound and V103 southbound.
Procedure NA for arrivals at WILIZ on V45 southeast bound.

RNAV (GPS) RWY 31

**RNP APCH.**

- RwY 31 helicopter visibility reduction below ½ SM NA.
- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C.

**AWOS-3**
**133.325**

**ROANOKE APP CON**
**126.9 339.8**

**CLNC DEL**
**124.85**

**UNICOM**
**123.05 (CTAF)**

**MISSING APCH FIX**

- HAWTO
- 5 NM

**Procedure NA for arrivals at**
- **HAWTO**
- **WILIZ**
- **VIRGINIA TECH/MONTGOMERY EXEC**
- **LINE_PC**
- **ZASNO**
- **OSMSS**
- **CABID**
- **HAWTO**
- **WILIZ**

**ELEV 2120**
**TDZE 2120**

** CATEGORY**

- **A**
- **B**
- **C**
- **D**

| **LPV DA** | **2412-7/6** | **292 (300-3/6)** | **NA** |
| **LNAV/VNAV DA** | **2740-1/24** | **620 (700-1/24)** | **NA** |
| **LNAV MDA** | **2740-1** | **620 (700-1)** | **2740-1/24** | **620 (700-1/4)** | **NA** |
| **CIRCLING** | **2760-1** | **640 (700-1)** | **2820-1** | **700 (700-1)** | **2980-2/2** | **860 (900-2/4)** | **NA** |

**5900**
**HAWTO**
**WILIZ**
**5 NM**
**305°**
**305°**

**OSMSS**
**CABID**
**4900**
**305°**

**5 NM**
**305°**

**VNAV**
**LNAV/VNAV**
**LNAV**

**37°13'N - 80°25'W**
**Amdt 1 10SEP20**

**RNAV (GPS) RWY 31**
**VIRGINIA TECH/MONTGOMERY EXEC (BCB)**

**37°13'N - 80°25'W**
**Amdt 1 10SEP20**

**RNAV (GPS) RWY 31**
**VIRGINIA TECH/MONTGOMERY EXEC (BCB)**

**37°13'N - 80°25'W**
**Amdt 1 10SEP20**

**RNAV (GPS) RWY 31**
**VIRGINIA TECH/MONTGOMERY EXEC (BCB)**

**37°13'N - 80°25'W**
**Amdt 1 10SEP20**
LOC RWY 13

One Minute Holding Pattern

Holding Point: I-BCB

Procedure NA for arrivals on BCF VOR/DME

LOC RWY 13

Rwy 13 helicopter visibility reduction below 1 SM NA.

Inop table does not apply.

LOC/DME I-BCB

LOCALIZER 109.1

Chan 28

One Minute Holding Pattern

HOLD 5700

LOC RWY 13

Rwy 13 helicopter visibility reduction below 1 SM NA.

Inop table does not apply.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb heading 125° to 3000, then direct BEMAR, cross BEMAR at or above 5200, then fly heading 130° or assigned by ATC, thence...

....For radar vectors to filed route, maintain 6000, expect clearance to filed altitude/flight level 10 minutes after departure.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 31: Climb heading 305° to 2640, then left turn direct SETHY, cross SETHY at or above 4000, thence....

....On TABER transition. Maintain 6000. Expect clearance to filed altitude/flight level 10 minutes after departure.

....On AASTN transition. At AASTN fly heading 245° or assigned by ATC. Maintain 6000. RADAR vectors will be provided to filed route. Expect clearance to filed altitude/flight level within ten minutes after departure.

AASTN TRANSITION (SETHY5.AASTN):
TABER TRANSITION (SETHY5.TABER):

TAKEOFF MINIMUMS:
Rwy 13: NA-ATC.
Rwy 31: Standard with minimum climb of 300’ per NM to 2640 then minimum climb of 230’ per NM to 4000.

NOTE: Chart not to scale.
Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below 3/4 SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

AWOS-3
119.225  WASHINGTON CENTER 118.75  377.1  BLACKSTONE TOWER* 134.7 (CTAF) 292.7  GND CON 127.625

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

MISSED APCH FIX: Climb to 3000 direct YAGNU and hold.
RNAV (GPS) RWY 22
BLACKSTONE, VIRGINIA

AWOS-3 119.225
WASHINGTON CENTER 118.75 377.1
BLACKSTONE TOWER* 134.7 (CTAF) 292.7
GND CON 127.625

Use South Hill altimeter setting. DME/DME RNP-0.3 NA.
Boro' VNAV NA. Rwy 22 helicopter visibility reduction below 3/4 SM NA. Circling NA E of Rwy 4-22.

Missed Approach: Climb to 3000 direct YAKLU and hold.

Missed Approach Fix: YAKLU

Category A B C D
LPV DA 742-1 305 (400-1) NA
LNAV/VNAV DA 751-1 314 (400-1) NA
LNAV MDA 860-1 423 (500-1) 860-1 423 (500-1 1/4) NA
CIRCLING 920-1 483 (500-1) 1040-1 483 (500-1 1/4) 603 (700-1 1/4) NA

* LNAV only.

224° 044° 3000 YAKLU

30 NM to YAGNU (Northerly)

30 NM to YAGNU (Southwesterly)

3000 YAGNU Holding Pattern

224° 044° 224° 044°

ELEV 437 TDZE 437

4 NM

TWR

3 NM

224° 044° 3000

224° 044° 3000

YAKLU

YAGNU

WONEL

ZATOR

2.7 NM to RW22

2.7 NM to RW22

GP 3.00°

TCH 60

2200 MIRL Rwy 4-22

3000 2200

044° 3000

224°

224°
MISSED APPROACH: Climbing left turn 2600 direct BKT NDB and hold. Continue climb-in-hold to 2600.

Use South Hill altimeter setting. Circling NA east of Rwy 4-22.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
BLACKSTONE ONE DEPARTURE

NOTE: NUTTS TRANSITION-DME required.
NOTE: ADF required.

TAKEOFF MINIMUMS:
Rwys 1,19: NA-Environmental.
Rwy 4: Standard.
Rwy 22: Standard with minimum climb of 330' per NM to 2600.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 044° to 1300, then climbing left turn to 2600 direct BKT NDB.
TAKEOFF RWY 22: Climbing right turn to 2600 direct BKT NDB.

CARML TRANSITION (BKT1.CARML): From over BKT NDB via 023° to CARML.
MELIA TRANSITION (BKT1.MELIA): From over BKT NDB via 063° to MELIA.
NUTTS TRANSITION (BKT1.NUTTS): From over BKT NDB via 257° to NUTTS.
54

BOWIE, MARYLAND

AL-6997 (FAA)

23054

2420
APP CRS
168
TDZE
190°
Apt Elev
168
Rwy Idg

RNAV (GPS) RWY 18
FREEWAY (W00)

Rwy 18 helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA.

T
Procedure NA at night. Use Fort Meade (Odenton) altimeter setting; when not
A NA received, use College Park altimeter setting and increase all MDA 20 feet.
FME AWOS-3

UNICOM

POTOMAC APP CON

123.925

128.0

(IAF)
DATED

MISSED APPROACH: Climbing left
turn to 2000 direct DEALE and hold.

123.075 (CTAF) L

335.5

WASHINGTON DC

21
13 00
(
11 7°
.
7)

METROPOLITAN SFRA
WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

(IF)
Procedure NA for arrivals at

685
1049

1052
599

M

SA

Final approach course offset 9.99°.

QAP2
E
5
X
N
M
348

484

(MAP)
XEQAP

2600

307
479

ELEV

168

TDZE

168

190°
13
8°

8
1
P

NE-3, 30 NOV 2023 to 25 JAN 2024

(FAF)
ADACO

NE-3, 30 NOV 2023 to 25 JAN 2024

(5)

1800

190°

CATAY

DATED on V265 northbound.

4 NM

X 40
2420

2000

DEALE

DEALE

31
8°

Visual Segment - Obstacles.
CATAY

2100

ADACO
P
7% U
0.

°
0
9
1
XEQAP

1800
P

6
3

MIRL Rwy 18-36

L

4.7 NM

0.3

A

CATEGORY

LNAV MDA

760-1 592 (600-1)

C CIRCLING

760-1 592 (600-1)

BOWIE, MARYLAND
Amdt 2 22JUN17

5 NM

B

C

D

NA
NA

FREEWAY (W00)
38°56'N - 76°46'W

RNAV (GPS) RWY 18


Procedure NA at night. Rwy 36 helicopter visibility reduction below 1 SM NA. Use Fort Meade (Odenton) altimeter setting; when not received, use College Park altimeter setting and increase all MDAs 20 feet.

Final approach course offset 16.76°.

Visual Segment-Obstacles.

MISSED APPROACH: Climbing right turn to 2000 direct DEALE and hold.

WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

Category

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNAV MDA</td>
<td>700-1</td>
<td>532 (600-1)</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>700-1</td>
<td>532 (600-1)</td>
<td>760-1</td>
<td>592 (600-1)</td>
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</tbody>
</table>

BOWIE, MARYLAND
Amdt 2A 08OCT20
RNAV (GPS) RWY 15
BRIDGEWATER AIR PARK (VBW)

AWOS-3 119.55
POTOMAC APP CON 132.85 323.125
UNICOM 122.7 (CTAF)

**RNAV (GPS) RWY 15**

- **Category A**
- **RNAV MDA**
  - LNAV MDA 2080-1½
  - 915 (1000-1½)
  - NA

**RNAV (GPS) RWY 15**

- **Category A**
- **RNAV MDA**
  - LNAV MDA 2080-1½
  - 915 (1000-1½)
  - NA

**RNAV (GPS) RWY 15**

- **Category B**
- **Visual Segment - Obstacles**
  - 3 NM
  - 3 NM
  - 4.1 NM
  - 4.5 NM
  - 0.5

**RNAV (GPS) RWY 15**

- **RNAV (GPS) RWY 15**
  - **Category A**
  - **RNAV MDA**
    - LNAV MDA 2080-1½
    - 915 (1000-1½)
    - NA

**RNAV (GPS) RWY 15**

- **RNAV (GPS) RWY 15**
  - **Category A**
  - **RNAV MDA**
    - LNAV MDA 2080-1½
    - 915 (1000-1½)
    - NA
BRIDGEWATER, VIRGINIA

RNAV (GPS) RWY 33
BRIDGEWATER AIR PARK (VBW)

MISSED APPROACH: Climbing left turn to 6000 direct MOL VOR/DME and hold.

Procedure NA for arrivals at MOL VOR/DME on V143 southwest bound and on V473 westbound.

Procedure NA for arrivals at MITER on V38 southeast bound.

Category A
LNAV MDA 1860-1 695 (700-1)
CIRCLING
1860-1
695 (700-1)
57

Category B
LNAV MDA 1780-1 615 (700-1)
57

Category C
LNAV MDA 1780-1 615 (700-1)

AWOS-3 119.55
POTOMAC APP CON 132.85 323.125
UNICOM 122.7 (CTAF)
For uncompensated Baro-VNAV systems, UNAV/VNAV NA below -16°C (3°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Lynchburg Rgnl/Preston Glenn Fld altimeter setting and increase all DA 81 feet and all MDA 100 feet, increase LPV all Cats visibility 0.5 mile, and increase UNAV/VNAV all Cats visibility 0.4 mile. Rwy 6 helicopter visibility reduction below 0.3 SM NA. Baro VNAV and VDP NA when using Lynchburg Rgnl/Preston Glenn Fld altimeter setting.

MISSED APPROACH: Climb to 1100 then climbing left turn to 3000 direct WUGAD and hold.

Procedure NA for arrivals at HURTT on V143 northeast bound.

Procedure NA for arrivals at SYCAM on V469 southbound.
RNAV (GPS) RWY 24
BROOKNEAL/CAMPBELL COUNTY (0V4)

**AWOS-3**
120.575

**ROANOKE APP CON**
135.0  254.325

**UNICOM**
122.7 (CTAF)

---

When local altimeter setting not received, use Lynchburg Rgnl/Preston Glenn Fld altimeter setting and increase all MDA 100 feet.

---

**Final approach course offset 14.96°**

---

**MISSED APPROACH:** Climb to 1000 then climbing right turn to 3000 direct WUGAD and hold.
RNAV (GPS) RWY 8
LAKE ANNA (7W4)

**APP CRS**
- **085°**
  - **Rwy Idg**: 2558
  - **TDZE**: 351
  - **Apt Elev**: 351

**RNAV APCH**

- **Procedure NA at night. When local altimeter setting not received, use Louisa altimeter setting and increase all MDA 60 feet.**
- **Helicopter visibility reduction below 3 SM NA.**

**AWOS-3**
- **120.775**

**LKU AWOS-3**
- **119.475**

**POTOMAC APP CON**
- **126.75**
- **307.2**

**CTAF**
- **122.9**

**MISSED APPROACH**: Climb to 3000 direct SHLBE and hold.

**Procedure NA for arrivals on GVE VORTAC airway radials 131 CW 235.**

- **GORDONSVILLE**
  - **GVE**
    - **3000**
      - **(IF/IAF)**
      - **STPBY**

- **(IF/IAF)**
  - **BUMPP**
    - **085°**
      - **407**
        - **RW08**

**Visual Segment - Obstacles.**

- **5.1 NM**
- **6.9 NM**

**Category**

<table>
<thead>
<tr>
<th>LNAV MDA</th>
<th>CIRCLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1360-3</td>
<td>1360-3</td>
</tr>
<tr>
<td>1009 (1100-3)</td>
<td>1009 (1100-3)</td>
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<tr>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**MIRL Rwy 8-26**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**LAKE ANNA (7W4)**

**37°58'N-77°45'W**

**Orig-B 25MAR21**
RNAV (GPS) RWY 26
LAKE ANNA (7W4)

**Procedure NA at night.** When local altimeter setting not received, use Louisa altimeter setting and increase all MDA 60 feet. Helicopter visibility reduction below 3 SM NA.

**MISSED APPROACH:** Climb to 3000 direct STPBY and hold.

### Category

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LNAV MDA</td>
<td>1360-3</td>
<td>1009 (1100-3)</td>
<td>NA</td>
<td>NA</td>
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<td>CIRCLING</td>
<td>1360-3</td>
<td>1009 (1100-3)</td>
<td>NA</td>
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### Diagram

- **RNAV (GPS) RWY 26**
- **Bumpass, Virginia**
- **Apt Elev 351**
- **Rwy Idg 2558**
- **TDZE 351**
- **ELEV 351**
- **TDZE 351**
- **CTAF 122.9**
- **AWOS-3 120.775**
- **LKU AWOS 3 119.475**
- **POTOMAC APP CON 126.75 307.2**
- **Proc NA 873**
- **Procedure NA for arrivals on RIC**
- **RNAV (GPS) RWY 26**
- **VORTAC airway radials 141 CW 214.**
- **Helicopter visibility reduction below 3 SM NA.**
- **Visual Segment - Obstacles.**
- **3000 STPBY**
- **MIRL Rwy B-26**
RNAV (GPS) RWY 34
CAMBRIDGE-DORCHESTER RGNL (CGE)

Circling NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Rwy 34 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct OVAYO and hold.
RNAV (GPS)-A
CAMBRIDGE-DORCHESTER RGNL (CGE)

Circling Rwy 16 NA at night. Rwy 16 helicopter visibility reduction below 1 SM NA.

Procedural NA for arrivals at GRACO on V93 northeast bound and V379 eastbound.

HOLD 2000N 5.8W

4 NM

(AF)

GRACO

2000N 5.8W

OVAYO

ZADEP

RW16

A76

473A

Visual Segment - Obstacles:

HOLD 2000

2000N 5.8W

OVAYO

ZADEP

RW16

A76

6000

334°

154°

2000

154°

1700

2000N 1.3W

4.4 NM

6.8 NM

Directive PROFS and hold.

MISSED APPROACH: Climb to 2000

HDG 20°

PROFS

REIL Rwys 16 and 34

MIRL Rwy 16-34

Category

A

B

C

D

CIRCLING

740-1

720 (800-1)

740-2

720 (800-2)

780-2 ½

760 (800-2½)

Cambridge, Maryland

Orig A 10SEP20

38°32'N-76°02'W
When primary altimeter setting (KJGG) not received, use Newport News Williamsburg Intl (KPHF) altimeter setting.
When local altimeter setting not received, use Orange altimeter setting and increase S-ILS 3 DA to 912 and all MDA 80 feet; increase S-LOC 3 200 feet; Circling Cats C/D, JITIV fix minimums S-LOC 3 300 feet. VDP NA when using Orange altimeter setting. For inop ALS when using Orange altimeter setting increase S-ILS 3 all Cats visibility to 3/4 mile, S-LOC 3 Cats C, D visibility to 2 miles, and S-LOC 3 300 feet. VDP NA when using Orange altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV DA below 15000 feet, MDA 80 feet; increase LNAV/VNAV all Cats visibility to 1 SM, LNAV Cat C/D visibility to 1 SM, and CIRcling Cats C/D visibility to 1 SM.

Procedure NA for arrivals at MITER on V140 northeast bound.

Procedure NA for arrivals at ROMAN on V290 northwest bound.

Procedure NA for arrivals on GVE VORTAC airway radials 213 CW 337.

Procedure NA for arrivals at MSA RW03 25 NM.
Final approach course offset 14.51°.

Procedure NA for arrivals at HOODE on V140 northeast bound.

Misplaced approach: Climb to 1100 then climbing left turn to 4000 direct GVE VORTAC and hold.
RNAV (GPS) Z RWY 21
CHARLOTTESVILLE-ALBEMARLE (CHO)

RNP APCH:
- Baro-VNAV NA when using Staunton/Waynesboro/Harrisonburg altimeter setting. For uncompensated Baro-VNAV systems, procedure NA below -16°C or above 54°C.
- When local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all DA 130 feet and LPV visibility ½ mile.

ATIS
- 118.425

POTOMAC APP CON
- 132.85
- 323.125

CHARLOTTESVILLE TOWER
- 124.5 (CTAF)
- 338.275

GND CON
- 121.9
- 338.275

UNICOM
- 122.95

---

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

Boro-VNAV NA when using Staunton/Waynesboro/Harrisonburg altimeter setting. For uncompensated Baro-VNAV systems, procedure NA below -16°C or above 54°C. When local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all DA 130 feet and LPV visibility ½ mile.

MISSED APPROACH: Climb to 1100, then climbing left turn to 4000 direct GVE VORTAC and hold.

Procedure NA for arrivals at HOODE on V140 northeast bound.

Procedure NA for arrivals on GVE VORTAC airway radials 307 CW 040.

Limit missed approach to 250K.

Procedure NA for arrivals at HOODE on V140 northeast bound.

Procedure NA for arrivals on GVE VORTAC airway radials 307 CW 040.

Limit missed approach to 250K.

---

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

Limit missed approach to 250K.

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

Limit missed approach to 250K.

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

Limit missed approach to 250K.

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

Limit missed approach to 250K.

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

Limit missed approach to 250K.

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

Limit missed approach to 250K.

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

Limit missed approach to 250K.

**RNAV (GPS) Z RWY 21**

**CHARLOTTESVILLE-ALBEMARLE (CHO)**

---

Limit missed approach to 250K.
Procedure NA at night. Rwy 18 helicopter visibility reduction below 1 SM NA.

Procedure NA for arrival on SBV VORTAC airway radials 032 CW 086.

Visual Segment - Obstacles.

MISSED APPROACH: Climbing left turn to 3000 direct DOCMO and hold, continue climb-in-hold to 3000.
RNAV (GPS) RWY 36
CHASE CITY MUNI (CXE)

**Procedure NA at night.**
Rwy 36 helicopter visibility reduction below 1 SM NA.

**MISSED APPROACH:** Climbing right turn to 3000 direct FILOV and hold.

**AWOS-3**
121.225

**WASHINGTON CENTER**
118.75 377.1

**CTAF**
122.9

**Procedure NA for arrival on SBV VORTAC airway radials 032 CW 172.**

**Visual Segment - Obstacles.**

**CATEGORY**
A  B  C  D

**LNAV MDA**
1500-3  997 (1000-3)  NA
**RNAV (GPS)-B**

**HARFORD COUNTY (W3)**

**CHURCHVILLE, MARYLAND**

**AL-9277 (FAA)**

**RNP APCH:**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>CIRCLING</th>
</tr>
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<tbody>
<tr>
<td>APP CRS</td>
<td>104°</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>960-1</td>
</tr>
<tr>
<td>Rwys Igl</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>548 (600-1)</td>
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<tr>
<td>Apt Elev</td>
<td>412</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>NA</td>
</tr>
</tbody>
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**RNAV (GPS)-B**

**HARFORD COUNTY (W3)**

**CHURCHVILLE, MARYLAND**

**AL-9277 (FAA)**

**RNP APCH:**

<table>
<thead>
<tr>
<th>KAPG ATIS</th>
<th>124.425</th>
<th>POTOMAC APP CON</th>
<th>125.525</th>
<th>291.625</th>
<th>UNICOM</th>
<th>122.8 (CTAF)</th>
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</thead>
</table>

**Procedure NA for arrivals at KITHE on V499 northbound and V3-408 eastbound.**

**Procedure NA for arrivals at TAFFI on V166 westbound.**

**Procedure NA for arrivals at TAFFI on V166 westbound.**

**Procedure NA for arrivals at TAFFI on V166 westbound.**

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**Procedure NA for arrivals at TAFFI on V166 westbound.**

**Procedure NA for arrivals at TAFFI on V166 westbound.**
RNAV (GPS)-A
LAKE COUNTRY RGNL (W63)

**AWOS-3**
118.225

**WASHINGTON CENTER**
118.75 377.1

**CTAF**
122.9

**Procedure NA for arrivals at ALDAN on V136 northbound.**

**Procedure NA for arrivals at WUMVA on V454 southwest bound.**

**Procedure NA for arrivals at YITUP on V3 southbound.**

**DIVTY**
3000

**KARBY**
2000

**RW04**
3000

**HARVY**

**AWOS-3**
118.225

**WASHINGTON CENTER**
118.75 377.1

**CTAF**
122.9

**DME/DME RNP-0.3 NA.** When local altimeter setting not received, use Chase City altimeter setting and increase all MDA 40 feet. Night landing: Rwy 22 NA. Helicopter visibility reduction below ¼ SM NA.

**MISSED APPROACH:**
Climb to 3000 direct HARVY and hold.

**CLARKSVILLE, VIRGINIA**

**APP CRS**
036°

**Rwy Idg**
N/A

**TDZE**
N/A

**Apt Elev**
419

**CTAF**
122.9

**CATEGORY**

**A**
920-1

**B**
980-1

**C**
NA

**D**

**CLARKSVILLE, VIRGINIA**

**Orig 15OCT15**

**LAKE COUNTRY RGNL (W63)**

**RNAV (GPS)-A**

**36°36'N-78°34'W**

**75**
DME/DME RNP-0.3 NA. Procedure NA at night. When local altimeter setting not received, use Chose City altimeter setting and increase all MDA 40 feet. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing left turn to 3000 direct HARVY and hold.

NoPT for arrival at HARVY on V3 southwest bound and on V266 westbound.
Radar Required

Visual Segment - Obstacles.

Category: A, B, C, D

Circling: 660-1, 612 (700-1), 720-1, 672 (700-1), NA

MISSED APPROACH: Climbing left turn to 2100 direct PINEY and hold.

Category: A

Radial: 136°

Distance: 16 NM

Alignment: 2.1 NM to RW15

Tower: POTOMAC APP CON 125.65 348.725

Unicom: 122.975 (CTAF)

AWOS: 121.225

RNAV (GPS)-A
Radar Required

AWOS-3 121.225
POTOMAC APP CON 125.65 348.725
UNICOM 122.975 (CTAF)

Missed Approach: Climbing right turn to 2400 direct JAXXS and hold.
Procedure NA at night.
Rwy 15 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 3000 direct KIWCE and hold.

**Category**

<table>
<thead>
<tr>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>CIRCLING</td>
<td>1420-3</td>
<td>998 (1000-3)</td>
<td>NA</td>
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**AWOS-3**

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<tr>
<th>AWOS-3</th>
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**WASHINGTON CENTER**

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<th>118.75 377.1</th>
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**UNICOM**

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<th>122.8 (CTAF)</th>
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</thead>
</table>

**FLAT ROCK**

**FAK**

Procedure NA for arrival on FAK VORTAC airway radials 177 CW 297.

**YUDUG**

** Procedure NA for arrivals at YUDUG on V20 westbound.**

** procedure NA at night.
Rwy 15 helicopter visibility reduction below 1 SM NA.**

**Procedure NA at night.**
Rwy 15 helicopter visibility reduction below 1 SM NA.

**MISSED APPROACH: Climbing right turn to 3000 direct KIWCE and hold.**

**AWOS-3**

<table>
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**FLAT ROCK**

**FAK**

Procedure NA for arrival on FAK VORTAC airway radials 177 CW 297.

**YUDUG**

** Procedure NA for arrivals at YUDUG on V20 westbound.**

** procedure NA at night.
Rwy 15 helicopter visibility reduction below 1 SM NA.**

**Procedure NA at night.**
Rwy 15 helicopter visibility reduction below 1 SM NA.

**MISSED APPROACH: Climbing right turn to 3000 direct KIWCE and hold.**

**AWOS-3**

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**FLAT ROCK**

**FAK**

Procedure NA for arrival on FAK VORTAC airway radials 177 CW 297.

**YUDUG**

** Procedure NA for arrivals at YUDUG on V20 westbound.**

** procedure NA at night.
Rwy 15 helicopter visibility reduction below 1 SM NA.**

**Procedure NA at night.**
Rwy 15 helicopter visibility reduction below 1 SM NA.

**MISSED APPROACH: Climbing right turn to 3000 direct KIWCE and hold.**

**AWOS-3**

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**FLAT ROCK**

**FAK**

Procedure NA for arrival on FAK VORTAC airway radials 177 CW 297.

**YUDUG**

** Procedure NA for arrivals at YUDUG on V20 westbound.**

** procedure NA at night.
Rwy 15 helicopter visibility reduction below 1 SM NA.**

**Procedure NA at night.**
Rwy 15 helicopter visibility reduction below 1 SM NA.

**MISSED APPROACH: Climbing right turn to 3000 direct KIWCE and hold.**
CRISFIELD, MARYLAND

CRISFIELD-SOMERSET COUNTY (W41)

RNP APCH.

- Circling NA to Rwys 6 and 24.
- Procedure NA at night.
- Use Wallops Island altimeter setting.

MISSED APPROACH:
- Climbing right turn to 2000 direct SWL VORTAC and hold.

WAL ASOS
119.175

PATUXENT APP CON *
127.95 314.0

UNICOM
122.8 (CTAF)

RNP (GPS)-B
CRISFIELD-SOMERSET COUNTY (W41)

---

NE-3, 30 NOV 2023 to 25 JAN 2024

CRISFIELD, MARYLAND
Orig-B 05NOV20

AL-10239 (FAA)

22363

RNAV (GPS)-B
CRISFIELD-SOMERSET COUNTY (W41)
RNAV (GPS) RWY 4
CULPEPER RGNL (CJR)

When VGSI inoperative, procedure NA at night. Baro-VNAV NA when using Washington Dulles Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C.RW 4 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Washington Dulles Intl altimeter setting and increase all DAs 73 feet, all MDAs 80 feet, LPV and LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct DOYAT and hold.

WARNING -- WASHINGTON DC SFRA. CONTACT POTOMAC APP CON

Procedure NA for arrivals on CSN VORTAC airway radials 148 CW 239.

AWOS-3 119.325
POTOMAC APP CON 128.525 306.925
CLINC DEL 121.6
UNICOM 123.075 (CTAF)

MISSED APCH FIX
4 NM ~
DOYAT

Category
LPV DA
LNAV/VNAV DA
LNAV MDA

<table>
<thead>
<tr>
<th>CATEGORY</th>
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<tr>
<td>LNAV/VNAV DA</td>
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<tr>
<td>LNAV MDA</td>
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</table>

Rwy Ldg 5000
TDZE 316
Apt Elev 316

WASHINGTON DC METROPOLITAN SFRA

ELEV 316
TDZE 316

REIL Rwy 4 and 22
MIRL Rwy 4-22

CULPEPER, VIRGINIA
Orig A 07NOV19

38°32'N-77°52'W

CULPEPER RGNL (CJR)
RNAV (GPS) RWY 22
CULPEPER RGNL (CJR)

When VGSI inoperative, procedure NA at night. Baro-VNAV NA when using Washington Dulles Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 48°C. Rwy 22 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Washington Dulles Intl altimeter setting and increase all DAs/MDAs 80 feet, LPV and LNAV/VNAV all Cats visibility ⅛ mile, LNAV Cats C and D visibility ¼ mile.

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>POTOMAC APP CON</th>
<th>CLNC DEL</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>119.325</td>
<td>128.525 306.925</td>
<td>121.6</td>
<td>123.075(CTAF)</td>
</tr>
</tbody>
</table>

WARNING -- WASHINGTON DC SFRA. CONTACT POTOMAC APP CON

Procedure NA for arrivals at CSN VORTAC via V286 eastbound.

MISSING APCH FIX
FAXIK

GPH 3.00°

TCH 40

ELEV 316
TDZE 315

CULPEPER, VIRGINIA
Orig A 07NOV19

38°32'N-77°52'W

RNAV (GPS) RWY 22
CULPEPER RGNL (CJR)
**LOC RWY 4**

**CULPEPER RGNL**

**AWOS-3**
**119.325**

**POTOMAC APP CON**
**128.525**
**306.925**

**CLNC DEL**
**121.6**

**UNICOM**
**123.075 (CTAF)**

---

**MISSING APPROACH:** Climb to 800 then climb left turn to 3000 direct CSN VORTAC and hold, continue climb-in-hold to 3000.

**AFD required.**

---

**IAP NA for arrival on GVE VORTAC airway radials 337 CW 040.**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**CULPEPER, VIRGINIA**

**Orig-A 20MAY21**

---

**38°32'N-77°52'W**

---

**LOC RWY 4**

**CULPEPER RGNL (CJR)**

---

**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**CULPEPER, VIRGINIA**

**AL-5877 (FAA)**

---

**22363**
### CULPEPER, VIRGINIA

#### VOR-A

**CULPEPER RGNL (CJR)**

**VOR-TAC CSN**

- **CSN**: 116.3
- **Chan**: 110
- **APP CRS**: 184°
- **Rwy Idg**: N/A
- **TDZE**: N/A
- **Apt Elev**: 316

#### WARNING

- **WASHINGTON DC SFRA**: CONTACT POTOMAC APP CON
- **WASHINGTON DC METROPOLITAN SFRA**:

### AWOS-3

- **119.325**

### POTOMAC APP CON

- **128.525**
- **306.925**

### CLNC DEL

- **121.6**

### UNICOM

- **123.075 (CTAF)**

---

**NOTE:** When VGS is inoperative, procedure NA at night. Visibility reduction by Helicopters NA. When local altimeter setting not received, use Washington Dulles Intl altimeter setting and increase all DAs/Mdas 80 feet, Circling Cats C and D visibility 1/3 mile.

**MISSING APPROACH:** Climbing left turn to 2900 direct CSN VORTAC and hold.

**WARNING --**

WASHINGTON DC SFRA.

CONTACT POTOMAC APP CON

---

### One Minute Holding Pattern

- **2900**
  - **004°**
  - **184°**

### Category

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCLING</td>
<td>920-1</td>
<td>960-1</td>
<td>960-1½</td>
<td>1100-2½</td>
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<tr>
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<td>604 (700-1)</td>
<td>644 (700-1)</td>
<td>644 (700-1½)</td>
<td>784 (800-2½)</td>
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### FAF to MAP

- **6.6 NM**

### Knots

- 60
- 90
- 120
- 150
- 180

### Min:Sec

- 6:36
- 4:24
- 3:18
- 2:38
- 2:12

---

**Amdt 5A** 20MAY21

**38°32'N-77°52'W**
CULPEPER, VIRGINIA
AL-5877 (FAA)

NDB RWY 4
CULPEPER RGNL (CJR)

AWOS-3
119.325

POTOMAC APP CON
128.525  306.925

CLNC DEL
121.6

UNICOM
123.075 (CTAF)

MISSED APPROACH: Climbing left turn to 3000 direct CSN VORTAC and hold, continue climb-in-hold to 3000.

CULPEPER, VIRGINIA
Orig-A  20MAY21

38°32'N-77°52'W
Circling NA northwest of Rwy 5-23. Rwy 5 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 5 NA at night, Circling Rwy 5, 29 NA at night.

CUMBERLAND, MARYLAND

RNAV (GPS) RWY 5
GREATER CUMBERLAND RGNL (CBE)

CUMBERLAND, MARYLAND

AL-5263 (FAA)

REIL Rwy 23
LIRL Rwy 11-29
HIRL Rwy 5-23
Circling NA NW of Rwy 5-23. Baro-VNAV and VDP NA when using Winchester altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Winchester altimeter setting and increase all DAs/MDAs 100 feet; increase all LPV visibilities ½ SM. Rwy 5, 29 helicopter visibility reduction below 1 SM NA. Circling Rwy 5, 29 NA at night. # Missed approach requires minimum climb of 424 feet per NM to 1950.

AWOS-3
128.625

JOHNSTOWN APP CON
121.2 299.2

UNICOM
122.8 (CTAF)

TCH 55

GREAT CUMBERLAND RGNL (CBE)

REIL Rwy 23
LIRL Rwy 11-29
HRL Rwy 5-23

CUMBERLAND, MARYLAND

Amdt 1 08DEC16

39°37'N-78°46'W
When local altimeter setting not received, use Winchester altimeter setting and increase all MDA 100 feet, increase S-23 Cat B visibility 3/4 mile, Cats C and D 1/2 mile. Night landing: Rwy 5, 11, 29 NA. Circling NA northwest of Rwy 5/23. Helicopter visibility reduction below 3/4 SM NA.

AWOS-3 128.625  JOHNSTOWN APP CON* 121.2 299.2  UNICOM 122.8 (CTAF)

MISSED APPROACH: Climbing left turn to 5000 on heading 175° and on ESL VOR/DME R-046 to KEYER/ESL 18.8 DME and hold, continue climb-in-hold to 5000.

CUMBERLAND, MARYLAND

LOC/DME RWY 23

GREATER CUMBERLAND RGNL (CBE)

Amdt 7 31MAR16

CUMBERLAND, MARYLAND

AL-5263 (FAA) 23054

LOC/DME I-CBE

110.5

Rwy Ldg 5047

APP CRS 228°

Apt Elev 775

LOC/DME RWY 23

GREATER CUMBERLAND RGNL (CBE)

AL-5263 (FAA) 23054

CUMBERLAND, MARYLAND

Amdt 7 31MAR16

CUMBERLAND, MARYLAND

Awos-3 128.625  Johnstown App Con* 121.2 299.2  Unicom 122.8 (Ctaf)
For inop ALS, increase S-LOC 2 Cat C/D visibility to 1½ SM.

Procedure NA for arrival on GSO VORTAC airway radials 360 CW 108.

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct SBV VORTAC and hold.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C or above 54°C. For inop ALS increase LNAV/VNAV all Cats visibility to 1 SM. Increase LNAV Cats C/D visibility to 1/2 SM.

Procedure NA for arrival on SBV VORTAC airway radials 203 CW 252.

Procedure NA for approach on SBV VORTAC airway radials 203 CW 252.

MISSED APPROACH: Climb to 1000 then climbing right turn to 2500 direct LANTA and hold.
Baro-VNAV NA when using Roxboro, NC altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 47°C. When local altimeter setting not received, use Roxboro, NC altimeter setting and increase all DA 62 feet and all MDA 80 feet; increase LPV and LNAV/VNAV all Cats visibility ⅛ mile and LNAV Cats C and D ¼ mile. VDP NA with Roxboro, NC altimeter setting.

MISSED APPROACH: Climb to 2500 direct LANTA and hold.

Procedure NA for arrival on SBV VORTAC airway radials 252 CW 300.

* LNAV only.

Procedure Turn NA

** LPV DA 768-1 200 (200-1)

** LNAV VNAV DA 1026-1½ 458 (500-1½)

** LNAV MDA 1020-1 452 (500-1) 1020-1¼ 452 (500-1¼) 1020-1½ 452 (500-1½)

RNAV (GPS) RWY 20

DANVILLE, VIRGINIA

AL-599 (FAA)

WAAS CH 87116 W20A

APP CRS 205° Rwy Idg 5600 TDZE 568 Apt Elev 571

RNAV (GPS) RWY 20

DANVILLE RGNL (DAN)

UNICOM 123.05 (CTAF)

WASHINGTON CENTER 124.05 352.0

ASOS 128.125

MSA RW20 25 NM

3300

ELEV 571 TDZE 568

1225

RNAV (GPS) RWY 20

DANVILLE RGNL (DAN)

NE-3, 30 NOV 2023 to 25 JAN 2024

DANVILLE, VIRGINIA

Orig-C 07NOV19

92

36°34'N-79°20'W
\textit{RNAV (GPS) RWY 31}

\begin{itemize}
  \item Rwy 31 helicopter visibility reduction below ¾ SM NA.
  \item Amdt 1 10SEP20
  \item NE-3, 30 NOV 2023 to 25 JAN 2024
\end{itemize}

\begin{align*}
\text{ASOS} & \quad 128.125 \\
\text{WASHINGTON CENTER} & \quad 124.05 \ 352.0 \\
\text{UNICOM} & \quad 123.05 \ (CTAF)
\end{align*}

\begin{align*}
\text{ELEV} & \quad 571 \\
\text{TDZE} & \quad 561
\end{align*}

\begin{align*}
\text{HIRL Rwy 2-20} & \quad 1000 \\
\text{HIRL Rwy 13-31} & \quad 3300
\end{align*}
**NE-3, 30 NOV 2023 to 25 JAN 2024**

### ILS or LOC RWY 32

#### LOC/DME: I-DAAA
- **108.9**
- **26**

#### APCH CRS
- **322**

#### RWY LDG
- **4529**

#### TDZE
- **68**

#### ARPT ELEV
- **74**

#### AL-5504 (USA)

#### ÆDSON AAF (KDAA)

### MALS
- **Ignore**

### When ALS inop, increase CAT D vis to 1½ miles.
- **When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¼ miles.**

### ATIS
- **128.175**

### POTOMAC APP CON
- **118.95**
- **319.1**

### TOWER
- **124.275 (CTAF)**
- **229.4**

### GND CON
- **121.9**
- **351.8**

### CLNC DEL
- **351.8**

### PAR

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### Visibility reduction by helicopters NA.

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Inoperative table does not apply to S-32 CAT A and B. Visibility reduction by helicopters NA.
DEPARTURE ROUTE DESCRIPTION

Climb on heading assigned by ATC, expect RADAR vectors to BUTRZ, then on track 239° to CLTCH, thence....

....on assigned transition, maintain altitude assigned by ATC, expect clearance to filed altitude within ten (10) minutes after departure.

FLASK TRANSITION (CLTCH3.FLASK)
MAULS TRANSITION (CLTCH3.MAULS)

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbo-jets only.

TAKEOFF MINIMUMS:
Rwy 14: Standard.
Rwy 32: 400-2 or Standard with minimum climb of 300’ per NM to 500.

NOTE: Chart not to scale.
**JDUBB FOUR DEPARTURE (RNAV)**

**ATIS**
128.175  
CINC DEL 351.8  
GND CON 121.9 351.8

**DAVISON TOWER**  
124.275 (CTAF) 229.4

**POTOMAC DEP CON**  
118.95 257.2

**NOTE:** Chart not to scale.

**TOP ALTITUDE:**
3000

**TAKEOFF MINIMUMS:**
Rwy 14: Standard.  
Rwy 32: 400-2 or standard with minimum climb of 300’ per NM to 500.

**DEPARTURE ROUTE DESCRIPTION**

Climb on heading assigned by ATC, expect RADAR vectors to HAFNR, then on track 225° to JDUBB, thence....

....on assigned transition, maintain 3000, expect clearance to filed altitude within ten (10) minutes after departure.

**NOTE:** RNAV 1.  
**NOTE:** RADAR required.  
**NOTE:** DME/DME/IRU or GPS required.  
**NOTE:** Turbo-jets only.

**MELTN TRANSITION (JDUBB4.MELTN)**

**RRSIN TRANSITION (JDUBB4.RRSIN)**

**NOTE:** Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

Climb on heading assigned by ATC, expect RADAR vectors to POOCH, then on track 240° to SCRAM, thence....

....as depicted. Maintain 3000, expect clearance to filed altitude within ten (10) minutes after departure.

GLANC TRANSITION (SCRAM6.GLANC):

- NOTE: RNAV 1.
- NOTE: RADAR required.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: Turbo-jets only.

TAKEOFF MINIMUMS:
Rwy 14: Standard.
Rwy 32: 400-2 or standard with minimum climb of 300' per NM to 500.

NOTE: Chart not to scale.
**RNP APCH: RNAVI - GPS or RADAR required for ILS, LOC.**

- **MISSING APPROACH:** Climb to 2000 direct NOVTE and hold.
- **ALTERNATE MISSED APPROACH:** Fly runway heading, climb and maintain 2000, expect radar vectors from ATC.

### ATIS

<table>
<thead>
<tr>
<th>SBAS</th>
<th>APCH CRS</th>
<th>Rwy Ldg</th>
<th>TDZE</th>
<th>Arpl Elev</th>
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<tr>
<td>CH</td>
<td>52207</td>
<td>9602</td>
<td>25</td>
<td>29</td>
</tr>
</tbody>
</table>

### AL-562 [USAF]

**DOVER AFB (KDOV)**

**EMERG SAFE ALT 100 NM 43000**

**LOCALIZER 109.95**

**I-DOV**

**ATC RADAR required for holding at NOVTE**

**RADAR required for holding above 4000' or > 230 KIAS**
CATEGORY II ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ALTERNATE MISSED APPROACH INSTRUCTIONS:
Fly runway heading, climb and maintain 2000, expect RADAR vectors from ATC.

EMERG SAFE ALT 100 NM 4300

CATEGORIES
A  B  C  D  E
S-ILS I  RA 98/12  100  DA 125
**TACAN RWY 1**

**DOVER, DELAWARE**

**DOVER AFB (KDOV)**

**TACAN DOV**

**APCH CRS Rwy Idg Arpt Elev**

<table>
<thead>
<tr>
<th>Chain</th>
<th>008°</th>
<th>TDZE</th>
<th>9602</th>
<th>25</th>
<th>29</th>
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</thead>
</table>

**AL-562 (USAF)**

**DOVER AFB (KDOV)**

**ATIS**

127.825 273.5

**APP CON**

132.425 257.875

**TOWER**

126.35 279.625

**GND CON**

118.875 225.4

**CLNC DEL**

125.55 289.4

---

**CAUTION:** When Rwy 14 VGSi inop, circling to Rwy 14 NA at night.

**EMERG SAFE ALT 100 NM 4300**

---

**S-1**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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</thead>
<tbody>
<tr>
<td>500/24</td>
<td>475 (500-½)</td>
<td>500/50</td>
<td>475</td>
<td>(500-1)</td>
<td></td>
</tr>
</tbody>
</table>

**C**

| CIRCLING | 540-1 | 511 (600-1) | 620-1½ | 591 (600-1½) | 620-2 | 591 (600-2) | 1080-3 | 1051 (1100-3) |

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**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**TDZE 25**

**REL Rwy 32**

HILR all Rwys

**TDZL/CL Rwy 1**

---

**DOVER, DELAWARE**

Amdt 3 11AUG22

---

**22223**

---

**NE-3, 30 NOV 2023 to 25 JAN 2024**
CAUTION: When Rwy 14 VQSI inop, circling to Rwy 14 NA at night.

RADAR required for holding above 4000 or > 230 KIAS

RADAR required for holding above 7000 or > 230 KIAS

EMERG SAFE ALT 100 NM 4300

DOVER AFB (KDOV)
CANNY ONE DEPARTURE (RNAV) (CANY1 - CNY)

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RWY 1, 14, 19, 32. Climb on depicted heading until vectored by ATC, maintain 3000. Expect RADAR vectors to CANNY, thence…

... via depicted route to TERPZ, then via assigned transition. Maintain ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

FLASK TRANSITION (CANY1, FLASK)
GLANC TRANSITION (CANY1, GLANC)
JERES TRANSITION (CANY1, JERES)
MAULS TRANSITION (CANY1, MAULS)
MCRAY TRANSITION (CANY1, MCRAY)
MELTN TRANSITION (CANY1, MELTN)
OTTITO TRANSITION (CANY1, OTTITO)
RAMAY TRANSITION (CANY1, RAMAY)
RRSIN TRANSITION (CANY1, RRSIN)

NOTE: Chart not to scale
RNAV (GPS) RWY 9
DELAWARE AIRPARK (33N)

When local altimeter setting not received, use Dover AFB altimeter setting. Rwy 9 helicopter visibility reduction below ¾ SM NA.

AWOS-3 120.125 DOVER APP CON 132.425 257.875 CINC DEL 125.55 UNICOM 123.075 (CTAF)

Procedure NA for arrivals at GOLDA on V312 southwest bound.

Procedure NA for arrivals at JOSEM.

RNAV (GPS) RWY 9

DOVER/CHESWOLD, DELAWARE
Orig-B 05NOV20

DELTA AIRPARK (33N)
RNAV (GPS) RWY 9

39°13'N-75°36'W
111
RNAV (GPS) RWY 27
DELAWARE AIRPARK (33N)

**AWOS-3**
120.125

**DOVER APP CON**
132.425 257.875

**CLNC DEL**
125.55

**UNICOM**
123.075 (CTAF)

---

**DOBRO/CHESWOLD, DELAWARE**
AL-5365 (FAA)

**RNP APCH.**

- **AWOS-3**
  - **WAAS CH**
  - **78041**
  - **W27A**
  - **APP CRS**
  - **265°**
  - **Rwy Idg**
  - **4201**
  - **TDZE**
  - **55**
  - **Apt Elev**
  - **55**

**RNP APCH.**

- When local altimeter setting not received, use Dover AFB altimeter setting. RWY 27 helicopter visibility reduction below ¾ SM NA.
- **MISSPAP PRG:** Climb to 2000 direct JOSEM and hold.

**Procedure NA for arrivals at BRIEF on V16 northeast bound.**

**Procedure NA for arrivals at LEEAH on V268 eastbound, V229 northeast bound, and V1 northeast bound.**

**Procedure NA for arrivals at TACKS on V123-312 southwest bound.**

---

**DOVER/CHESWOLD, DELAWARE Orig-B 05NOV20**

**DELTA AIRPARK (33N)**

**RNAV (GPS) RWY 27**

**ELEV 55**

**TDZE 55**

**MISS APCH FIX**

- **JOSEM**
  - **085°**
  - **265°**
  - **4 NM**

**VGS I and descent angles not coincident (VGS Angle 3.00/TCH 43).**

**LOAD/MMEA**

- **440-1**
  - **385 (400-1)**
  - **440-1½**
  - **385 (400-1¼)**

**LOAD/MMEA**

- **480-1**
  - **425 (500-1)**
  - **480-1½**
  - **425 (500-1¼)**

**CIRCLING**

- **520-1**
  - **465 (500-1)**
  - **820-1**
  - **765 (800-1)**
  - **800-2¼**
  - **765 (800-2½)**
One Minute Holding Pattern

---

**VOR RWY 27**
DELAWARE AIRPARK (33N)

**DME required.**

- When local altimeter setting not received, use Dover AFB altimeter setting. Rw 27 helicopter visibility reduction below 3/4 SM NA.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>S-27</td>
<td>700-1</td>
<td>645 (700-1)</td>
<td>700-1/8</td>
<td>645 (700-1/8)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>700-1</td>
<td>645 (700-1)</td>
<td>820-1</td>
<td>820-2 1/4</td>
</tr>
</tbody>
</table>

**Missed Approach:** Climb to 2000 on ENO VORTAC R-264 to JOSEM/14.4 DME and hold.

**MAP**

- FAF to MAP 3.7 NM
- MSA ENO 25 NM

---

**AWOS-3**
120.125

**Dover App Con**
132.425 257.875

**Clnc Del**
125.55

**Unicom**
123.075 (CTAF)

**UNICOM**
DOVER APP CON
132.425 257.875

**AWOS-3**
120.125

**Dover App Con**
132.425 257.875

**Clnc Del**
125.55

**Unicom**
123.075 (CTAF)

---

**MISSED APPROACH:** Climb to 2000 on ENO VORTAC R-264 to JOSEM/14.4 DME and hold.

**NOPT for arrival on ENO VORTAC airway radials R-031, R-044, R-063 and R-095.**

---

**ENSO VORTAC**

**ENO VORTAC R-264 to JOSEM/14.4**

---

**VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 43).**

---

**One Minute Holding Pattern**

---

**AWOS-3**
120.125

**Dover App Con**
132.425 257.875

**Clnc Del**
125.55

**Unicom**
123.075 (CTAF)
Circling NA for Cat D northwest of Rwy 6-24. Inop table does not apply to S-ILS 6 all Cats and S-LOC 6 Cats A and B. For inop ALS, increase S-LOC 6 Cat C/D visibility to 1 3/4 SM.

MISSED APPROACH: Climb to 3000 then climbing right turn to 5000 direct PSK VORTAC and hold, continue climb-in-hold to 5000.
**NEW RIVER VALLEY (PSK)**

**ILS or LOC Z RWY 6**

- **AWOS-3**: 127.375
- **ROANOKE APP CON**: 126.0
- **ROANOKE CLNC DEL**: 121.7
- **UNICOM**: 122.7 (CTAF)

**LOCALIZER 110°**

<table>
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<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>S-ILS 6</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>S-LOC 6</td>
<td>2305-1</td>
<td>200 (200-1)</td>
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<tr>
<td></td>
<td>2560-1</td>
<td>455 (500-1)</td>
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</tbody>
</table>

**CIRCLING**

- 2620-1
- 2680-1
- 2780-2
- 2780-2

**MINIMUMS**

| Min:Sec | 5:06 | 3:24 | 2:33 | 2:02 | 1:42 |

**FAF to MAP 5.1 NM**

**HILR Rwy 6-24**

**ILS or LOC Z RWY 6**

**DUBLIN, VIRGINIA**

**One Minute Holding Pattern**

- **GUNTO INT PSK 110°**
- **GIPDY INT PSK 115°**

**ELEV 2105**

**TDZE 2105**

**UNICOM**

**PSK**

**> Locators**

- **UNICOM**
- **AWOS-3**

**Procedure NA for arrival on PSK VORTAC airway radials 192 CW 247.**

**Amdt 5B 25FEB21**

**NEW RIVER VALLEY (PSK)**

- **NE-3, 30 NOV 2023 to 25 JAN 2024**

**NEW RIVER VALLEY (PSK)**

**ILS or LOC Z RWY 6**

- **S-ILS 6**
- **S-LOC 6**

**Circling NA for Cat C/D visibility to 1 SM.**

**S-LOC 6 Cat C/D visibility to 1 SM.**

**Inop table does not apply to S-ILS 6 all Cats and S-LOC 6 Cat C/D visibility to 1 SM.**
RNAV (GPS) RWY 6
NEW RIVER VALLEY (PSK)

**RNP APCH.**

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 44°C. When local altimeter setting not received, use Blacksburg altimeter setting and increase all DA 36 feet, and all MDA 40 feet. VDP and Baro-VNAV NA when using Blacksburg altimeter setting. Table does not apply to LPV all Cats and LNAV Cats A and B. For Inop MALSR, increase LNAV Cat C visibility to 1½ SM. Circling NA for Cat D northwest of RWY 6-24.

**MALSR**

**AWOS-3**
127.375

**ROANOKE APP CON**
126.0 339.8

**ROANOKE CLNC DEL**
121.7

**UNICOM**
122.7 (CTAF)

**ERATH**
3798 5400

5 NM (IAF)
MAXME
5000 NoPT
068° (5.1)

5 NM Holding Pattern
GUNTO

3369

5600

OHICE

GIPDY

3900

VRGIL

5000 to GUNTO
246° (10)

Procedure NA for arrivals at PSK VORTAC via V37 northbound, V466 eastbound, and T203 northeast bound.

**ERATH**

3900

VRGIL

5000 to GUNTO
246° (10)

Procedure NA for arrivals at PSK VORTAC via V37 northbound, V466 eastbound, and T203 northeast bound.

**AWOS-3**
127.375

**ROANOKE APP CON**
126.0 339.8

**ROANOKE CLNC DEL**
121.7

**UNICOM**
122.7 (CTAF)

**ERATH**
3798 5400

5 NM (IAF)
MAXME
5000 NoPT
068° (5.1)

5 NM Holding Pattern
GUNTO

3369

5600

OHICE

GIPDY

3900

VRGIL

5000 to GUNTO
246° (10)

Procedure NA for arrivals at PSK VORTAC via V37 northbound, V466 eastbound, and T203 northeast bound.

**3369**

5600

OHICE

GIPDY

3900

VRGIL

5000 to GUNTO
246° (10)

Procedure NA for arrivals at PSK VORTAC via V37 northbound, V466 eastbound, and T203 northeast bound.

**AWOS-3**
127.375

**ROANOKE APP CON**
126.0 339.8

**ROANOKE CLNC DEL**
121.7

**UNICOM**
122.7 (CTAF)
RNAV (GPS) RWY 24  
NEW RIVER VALLEY (PSK)

**RNAV (GPS) RWY 24**

**NEW RIVER VALLEY (PSK)**

**RNAV (GPS) RWY 24**

**NEW RIVER VALLEY (PSK)**
VOR/DME RWY 6
NEW RIVER VALLEY (PSK)

AWOS-3
127.375

ROANOKE APP CON
126.0 339.8

ROANOKE CLNC DEL
121.7

UNICOM
122.7 (CTAF)

MALSR

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

Inoperative table does not apply. Visibility reduction by helicopters NA. When local altimeter setting not received, use Blacksburg altimeter setting and increase all MDA 40 feet. VDP NA when using Blacksburg altimeter setting. Circling NA for Cat D northwest of Rwy 6-24.

AWOS-3 127.375
ROANOKE APP CON 126.0 339.8
ROANOKE CLNC DEL 121.7
UNICOM 122.7 (CTAF)

MALSR

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

Inoperative table does not apply. Visibility reduction by helicopters NA. When local altimeter setting not received, use Blacksburg altimeter setting and increase all MDA 40 feet. VDP NA when using Blacksburg altimeter setting. Circling NA for Cat D northwest of Rwy 6-24.

AWOS-3 127.375
ROANOKE APP CON 126.0 339.8
ROANOKE CLNC DEL 121.7
UNICOM 122.7 (CTAF)

MALSR

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

Inoperative table does not apply. Visibility reduction by helicopters NA. When local altimeter setting not received, use Blacksburg altimeter setting and increase all MDA 40 feet. VDP NA when using Blacksburg altimeter setting. Circling NA for Cat D northwest of Rwy 6-24.

AWOS-3 127.375
ROANOKE APP CON 126.0 339.8
ROANOKE CLNC DEL 121.7
UNICOM 122.7 (CTAF)

MALSR

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

Inoperative table does not apply. Visibility reduction by helicopters NA. When local altimeter setting not received, use Blacksburg altimeter setting and increase all MDA 40 feet. VDP NA when using Blacksburg altimeter setting. Circling NA for Cat D northwest of Rwy 6-24.
RADAR and DME required for procedure entry. DME required for LOC only.

Circling Rwy 15, 33 NA at night. Autopilot coupled approach NA below 1000.

MISSED APPROACH: Climb to 2000 on heading 041° and on ATR VOR/DME R-283 to ORETE INT/ATR 31.6 DME and hold.

GS unusable below 600.

Circling Rwy 15, 33 NA at night. Autopilot coupled approach NA below 1000.

MISSED APPROACH: Climb to 2000 on heading 041° and on ATR VOR/DME R-283 to ORETE INT/ATR 31.6 DME and hold.

GS unusable below 600.
RNAV (GPS) RWY 15
EASTON/NEWNAM FLD (ESN)

Rwy 15 helicopter visibility reduction below 1 SM NA. 
Straight-in Rwy 15 NA at night, Circling Rwy 15, 33 NA at night.

ATIS 124.475
POTOMAC APP CON 133.75 254.35
EASTON TOWER 118.525 (CTAF) 0
GND CON 119.075
CLNC DEL 119.075

MISSED APPROACH: Climb to 2000 direct TUKIE and on track 052° to ORETE and hold.

Visual Segment - Obstacles.

MIRL Rwys 15-33
HIRL Rwy 4-22
REIL Rwys 15, 22 and 33
MIRL Rwys 15-33

CATEGORY A B C D
LNAV MDA 440-1 393 (400-1) 440-1 393 (400-1 393 (400-1) 408-1 568 (600-1)
CIRCLING 640-1 640-1 393 (400-1) 640-1 740-2 668 (700-2)

EASTON, MARYLAND
Orig-C 15AUG19
38°48'N - 76°04'W
RNAV (GPS) RWY 33
EASTON/NEWNAM FLD (ESN)

Straight-in Rwy 33 NA at night, Circling Rwy 15, 33 NA at night. Helicopter visibility reduction below 1 SM NA.

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNAV MDA</td>
<td>520-1</td>
<td>469 (500-1)</td>
<td>520-1½</td>
<td>469 (500-1½)</td>
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<tr>
<td>CIRCLING</td>
<td>520-1</td>
<td>448 (500-1)</td>
<td>640-1½</td>
<td>740-2</td>
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</tbody>
</table>

ELEV 72
TDZE 51

ATIS 124.475
POTOMAC APP CON 133.75 254.35
EASTON TOWER 118.525 (CTAF)
GND CON 119.075
CLNC DEL 119.075

MISSED APPROACH:
Climbing right turn to 2000 direct ORETE and hold.

EASTON, MARYLAND
Orig-B 16AUG18

38°48'N - 76°04'W

EASTON/NEWNAM FLD (ESN)
RNAV (GPS) RWY 33
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading to ATC assigned altitude, for vectors to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on assigned transition. Expect filed altitude within 10 minutes after departure.

COLIN TRANSITION (CONLE4.COLIN)
SCOOb TRANSITION (CONLE4.SCOOb)
NOTE: Chart not to scale.

TERPZ SEVEN DEPARTURE (RNAV)

TOP ALTITUDE:
RAMAY, OTTTO, MAULS, FLASK, RRSIN, GLANC, MELTN
TRANSITIONS: 17000
JERES, MCRAY TRANSITIONS:
16000

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojet traffic only.

TAKEOFF MINIMUMS:
Rwy 4, 15, 33: Standard.
Rwy 22: 300-2 or Standard with minimum climb of 245' per NM to 500.

NOTE: Chart not to scale.
TERPZ SEVEN DEPARTURE (RNAV)

TERPZ SEVEN DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

Fly heading and maintain altitude assigned by ATC, expect RADAR vectors to WONCE, then on track 283° to cross TERPZ at or above 11000, thence. . . .

. . . on assigned transition: Departures on JERES and MCRAY transitions maintain 16000. Departures on RAMAY, OTTTO, MAULS, FLASK, MELTN, RRSIN, GLANC transitions maintain 17000, expect further clearance to filed altitude within 10 minutes after departure.

FLASK TRANSITION (TERPZ7.FLASK)
GLANC TRANSITION (TERPZ7.GLANC)
JERES TRANSITION (TERPZ7.JERES)
MAULS TRANSITION (TERPZ7.MAULS)
MCRAY TRANSITION (TERPZ7.MCRAY)
MELTN TRANSITION (TERPZ7.MELTN)
OTTTO TRANSITION (TERPZ7.OTTTO)
RAMAY TRANSITION (TERPZ7.RAMAY)
RRSIN TRANSITION (TERPZ7.RRSIN)
DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA. Use Middletown, DE altimeter setting; when not received use Wilmington, DE altimeter setting and increase all MDA 20 feet.

**MISSUED APPROACH:** Climbing left turn to 2000 direct RANRE and hold.

**RNAV (GPS)-B**

**CLAREMONT (58M)**

**ELEV 106**

**APP CRS**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>CIRCLING</td>
<td>760-1</td>
<td>800-1</td>
<td>654 (700-1)</td>
<td>694 (700-1)</td>
</tr>
</tbody>
</table>

**PHILADELPHIA APP CON**

- UNICOM 122.8 (CTAF)
- 333° (3.8)
- 333° 2000 NoPT
- 333° (252° (312)
- 333° (2000
- 333° (2000

**ELE 85**

**WOODSTOWN OOD**

- Procedure NA for arrivals on OOD
- VORTAC airway radials 240 CW 336.

**ELE 85**

**WOODSTOWN OOD**

- Procedure NA for arrivals on OOD
- VORTAC airway radials 251 CW 063.

**ELE 85**

**WOODSTOWN OOD**

- Procedure NA for arrivals at UKIEY
- VORAC airway radials 213-312 southwest bound.

**ELE 85**

**WOODSTOWN OOD**

- Procedure NA for arrivals on ENO
- VORTAC airway radials 251 CW 063.

**ELE 85**

**WOODSTOWN OOD**

- Procedure NA for arrivals on OOD
- VORTAC airway radials 240 CW 336.

**ELE 85**

**WOODSTOWN OOD**

- Procedure NA for arrivals on OOD
- VORTAC airway radials 251 CW 063.

**ELE 85**

**WOODSTOWN OOD**

- Procedure NA for arrivals on OOD
- VORTAC airway radials 240 CW 336.

**ELE 85**

**WOODSTOWN OOD**

- Procedure NA for arrivals on OOD
- VORTAC airway radials 251 CW 063.
EMPORIA, VIRGINIA
AL-5534 (FAA) 22363

RNAV (GPS) RWY 16
EMPORIA-GREENSVILLE RGNL (EMV)

AWOS-3
124.175

WASHINGTON CENTER
132.025  290.425

UNICOM
123.0 (CTAF)

Rwy 16 helicopter visibility reduction below 3/4 SM NA.

EYUGO
2000

POCAB
1800

JFRSN
1700

RUSHES
920

RNAV (GPS) RWY 16

EYUGO
2000

POCAB
1800

JFRSN
1700

RUSHES
920

RNAV (GPS) RWY 16

MISSED APPROACH: Climb to 3000 direct JUSPO and hold.

AWOS-3
124.175

WASHINGTON CENTER
132.025  290.425

UNICOM
123.0 (CTAF)

Rwy 16 helicopter visibility reduction below 3/4 SM NA.

EYUGO
2000

POCAB
1800

JFRSN
1700

RUSHES
920

RNAV (GPS) RWY 16

EYUGO
2000

POCAB
1800

JFRSN
1700

RUSHES
920

RNAV (GPS) RWY 16

MISSED APPROACH: Climb to 3000 direct JUSPO and hold.
RNAV (GPS) RWY 34
EMPORIA-GRENSVILLE RGNL (EMV)

**AWOS-3**
124.175

**WASHINGTON CENTER**
132.025 290.425

**UNICOM**
123.0 (CTAF)

---

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).
DME/DME RNP-0.3 NA.

**MISSING APPROACH:** Climb to 600 then climbing right turn to 3000 direct JUSPO and hold, continue climb-in-hold to 3000.

**EMPORIA, VIRGINIA**
Amdt 2 22JUN17

**EMPIRIA-GRENSVILLE RGNL (EMV)**

**RNAV (GPS) RWY 34**

---

**CATEGORY**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>372-1</td>
<td>250 (300-1)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV/ VNAV DA</td>
<td>372-1</td>
<td>250 (300-1)</td>
<td>NA</td>
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<tr>
<td>LNAV MDA</td>
<td>480-1</td>
<td>358 (400-1)</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>580-1</td>
<td>453 (500-1)</td>
<td>680-1/2</td>
<td>NA</td>
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<td></td>
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<td>553 (600-1½)</td>
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</table>

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**EMPIRIA-GRENSVILLE RGNL (EMV)**
RNAV (GPS) RWY 34
Procedure NA for arrival on TYI VORTAC airway radials 354 CW 096.
RNAV (GPS) RWY 3
FARMVILLE RGNL (FVX)

Boro-VNAV NA when using Lynchburg Rgnl/Preston Glenn Fld altimeter setting. For uncompensated Boro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Straight-in/Circling RW 3 procedure NA at night. When local altimeter setting not received, use Lynchburg Rgnl/Preston Glenn Fld altimeter setting and increase LPV DA to 878 feet and all visibilities ½ SM. Increase LNAV/VNAV DA to 970 feet and all visibilities ½ SM. Increase all MDAs 160 feet and LNAV visibility Cat C ½ SM, and Circling visibility Cat C ½ SM. RWy 3 helicopter visibility reduction below 1 SM NA.

Missed Approach: Climb to 3000 direct BODRY and hold.

**1151**
RNAV (GPS) RWY 21
FARMVILLE RGNL (FVX)

Baro-VNAV NA when using Lynchburg Rgnl/Preston Glenn Fld altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Lynchburg Rgnl/Preston Glenn Fld altimeter setting and increase LPV DA to 854 feet and all visibilities ¾ SM, increase LNAV/VNAV DA to 1024 feet and all visibilities ¾ SM, increase all MDAs 160 feet and LNAV visibility Cat C ¾ SM. Circling Rwy 3 NA at night. Rwy 21 helicopter visibility reduction below 1 SM NA.

Procedure NA for arrivals on FAK VORTAC airway radials 263 CW 338.

<table>
<thead>
<tr>
<th>ELEV 416</th>
<th>TDZE 416</th>
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<tbody>
<tr>
<td>RW21 3.2 NM to RW21</td>
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<tr>
<td>SIBTE 3.2 NM to RW21</td>
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<tr>
<td>DEPOY</td>
<td></td>
</tr>
<tr>
<td>BODRY</td>
<td></td>
</tr>
</tbody>
</table>

MISSING APPROACH:
Climb to 3000 direct WAMPO and hold.

AWOS-3
132.725
ROANOKE APP CON
135.0 254.325
UNICOM
122.8 (CTAF)

RNAV (GPS) RWY 21
FARMVILLE RGNL (FVX)

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>ROANOKE APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>132.725</td>
<td>135.0 254.325</td>
<td>122.8 (CTAF)</td>
</tr>
</tbody>
</table>
MARCH 2018
ANNUAL RATE OF CHANGE
0.0° W

Rwy 14-32
PCN 13 F/B/Y/T
RNAV (GPS) RWY 18
NEW LONDON (W96)

**RNAV (GPS) RWY 18**

**App Crs**
- 176°
- TDZE 842
- TDZE 842

**Apt Elev**
- 842

**Category**
- A
- B
- C
- D

**LNAV MDA**
- 1860-3
- 1018 (1100-3)
- NA

**Circling**
- 1860-3
- 1018 (1100-3)
- NA

**Misssed Approach**
- Climb to 4000 direct ZOTOB and on track 239° to AYARA and hold.

**Lucl on V469 northbound and arrivals at PROSE on V375 westbound.**

**Procedure NA for arrivals at**

**Lynchburg Altimeter Setting.**

**ROANOKE APP CON**
- 135.0
- 254.325

**UNICOM**
- 122.8 (CTAF)

**LYH ASOS**
- 119.8

**NEW LONDON (W96) 30 JAN 2024**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**FOREST, VIRGINIA Orig-B 30JAN20**

**5700**

**097° (12.8)**

**3994**

**3148**

**2550**

**1909**

**1299**

**5500**

**MSA RW18 25 NM**

**176°**

**3148 X 40**

**36**

**2900**

**4000**

**3800**

**316**

**3164 X 40**

**18**

**137**
LYH ASOS 119.8
ROANOKE APP CON 135.0 254.325
UNICOM 122.8 (CTAF)

Procedure NA for arrivals at SYCAM on V469 southbound, and arrivals at AYARA on V222 southwest bound.

RNAV (GPS) RWY 36
NEW LONDON (W90)

Rwy 36 helicopter visibility reduction below 1 SM NA. Use Lynchburg altimeter setting. Procedure NA at night.

MISSED APPROACH: Climb to 4700 direct CIYAT and on track 025° to LUCLI and hold.

LNAV MDA 1840-3 1009 (1000-3) NA
CIRCLING 1860-3 1018 (1100-3) NA

FOREST, VIRGINIA
Orig-B 30JAN20

37°16'N-79°20'W
RNAV (GPS) RWY 10

Aircraft Category

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
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</thead>
<tbody>
<tr>
<td>LNAV MDA</td>
<td>820-1</td>
<td>670 (700-1)</td>
<td>960-1</td>
<td>810 (900-1)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>6.6 NM</td>
<td>4 NM</td>
<td>60-1</td>
<td>90-1</td>
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</tbody>
</table>

Aircraft Approach

- Procedure NA at night. Rwy 10 helicopter visibility reduction below 1 SM NA.
- AWOS:3 123.925
- POTOMAC APP CON 119.7 290.475
- UNICOM 123.05 (CTAF)

MISSED APPROACH: Climb to 2200 direct HORTU and on track 109° to GEEMO and hold.

- RNAV (GPS) RWY 10 track 109° to GEEMO and hold.
RNAV (GPS) RWY 28
FORT MEADE (ODENTON), MARYLAND
AL-5225 (FAA)

APP CRS
Rwy Idg 3000
TDZE 150
Apt Elev 150

RNAV APCH - GPS.

Rwy 28 helicopter visibility reduction below 1 SM NA.

AWOS-3
123.925

POTOMAC APP CON
119.7 290.475

UNICOM
123.05 (CTAF)

Procedure NA for arrivals at PALEO on V170-312 eastbound and V44 southeast bound.

MISSED APPROACH:
Climbing left turn to 2200 direct GEEMO and hold.

FATEN
1.9 NM to RW28

VGSi and descent angles not coincident (VGSi Angle 4.00/TCH 57).

GEEMO

EXCEPTIONS:

FOR MEADE (ODENTON), MARYLAND

Amde 1E 10AUG23

NE-3, 30 NOV 2023 to 25 JAN 2024

39°05’N-76°46’W
**RNAV (GPS) RWY 9**

**Franklin Rgnl (FKN)**

<table>
<thead>
<tr>
<th>WAAS CH 86327 W09A</th>
<th>APP CRS 090°</th>
<th>Rwy Idg 4977</th>
<th>TDZE 35</th>
<th>Apt Elev 40</th>
</tr>
</thead>
</table>

**RNP APCH.**

Baro-VNAV NA when using Suffolk altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Suffolk altimeter setting: increase LPV DA to 3.58 feet and visibility all Cats 1/2 SM; increase LNAV/VNAV DA to 3.57 feet and visibility all Cats 1/2 SM; increase all MDA 40 feet and LNAV Cats C/D visibility 1/2 SM.

Procedure NA at night.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>320-1</td>
<td>285 (300-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>319-1</td>
<td>284 (300-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>580-1</td>
<td>545 (600-1)</td>
<td>580-1½</td>
<td>545 (600-1½)</td>
</tr>
</tbody>
</table>

Procedure NA for arrivals at MAZON on V266 westbound.

- **JADIM**
  - Procedure NA for arrivals at GUMBE on V66 westbound and on V213 southwest bound.

**MISSING APCH FIX**

Climb to 2600 direct JADIM and hold.

**ETUME**

- **SURUE**
  - **ZIGTU**
    - 2.5 NM to RW09

**MIRL Rwy 9-27**

**RNAV (GPS) RWY 9**

**Franklin, Virginia**

Amdt 1C 05DEC19

**36°42'N-76°54'W**
RNAV (GPS) RWY 27
FRANKLIN RGNL (FKN)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.
Baro-VNAV and VDP NA when using Suffolk altimeter setting. When local altimeter setting not
received, use Suffolk altimeter setting: increase LPV DA to 404 feet and visibility all Cats
¾ SM; increase LNAV/VNAV DA to 392 feet and visibility all Cats ¾ SM; increase all MDA
40 feet and LNAV Cats C/D visibility ¾ SM. RW 27 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH:
Climb to 2600 direct ETUME and hold.

AWOS-3PT 124.675
NORFOLK APP CON 127.9 269.425
UNICOM 122.8 (CTAF)

Procedure NA for arrivals on HPW VORTAC airway radials 178 CW 215.

Procedure NA for arrivals at EDTAJ on V1 southwest bound.

MIRL Rwy 9-27

RNAV (GPS) RWY 27
FRANKLIN RGNL (FKN)
**FRIDAY, MARYLAND**

**Alabama 509 (FAA)**

**FRIDAY MUNI (FDK)**

**ILS or LOC RWY 23**

**CIRCLING RWY 30 NA at night. Rwy 23 helicopter visibility reduction below 1/2 SM NA. For inop ALS, increase S-ILS 23 Cat A/B visibility to 1/2 SM. For inop ALS, increase S-LOC 23 Cat C/D visibility to 2 1/2 SM. ZIBAT fix minimums: Inop table does not apply to S-LOC 23 Cats C/D.**

**ALTERNATE MISSED APCH FIX**

**WESTMINSTER EMI 117.9 Chan 126**

**178**

**3587-**

**R-178**

**178**

**270°**

**WESLANT FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED)**

**LOC only.**

**ZIBAT fix minimums: Inop table does not apply to S-LOC 23 Cat C/D.**

**Circling Rwy 30 NA at night. Rwy 23 helicopter visibility reduction below 1/2 SM NA. For inop ALS, increase S-ILS 23 Cat A/B visibility to 1/2 SM. For inop ALS, increase S-LOC 23 Cat C/D visibility to 2 1/2 SM. ZIBAT fix minimums: Inop table does not apply to S-LOC 23 Cats C/D.**
RNAV (GPS) Y RWY 23
FREDERICK MUNI (FDK)

Inop table does not apply to Cat C. Rw 23 helicopter visibility reduction below 3 SM NA. Circling Rw 30 NA at night.

WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

Procedure NA for arrival at EMI VORTAC on airway radials 269 CW 003.

NE-3, 30 NOV 2023 to 25 JAN 2024

RNAV (GPS) Y RWY 23
FREDERICK MUNI (FDK)
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

FREDERICK, MARYLAND

FIELD ELEV
39°25.0'N
39°24.5'N
0.3 % UP

TROOPER 3
FBO
RC&A

TWR

A 1
A 2
A 3
A 4

B

C

G
H
I

ELEV 294
ELEV 284

TERMINAL

ATIS 126.7°
306°

ANNUAL RATE OF CHANGE
JANUARY 2020
5819 X 100

5819 X 75

S-60
PCN 30 F/C/X/T

RWY 05-23
FCA 30 F/C/X/T

39°25.0'N
39°24.5'N

0.5 % UP

NE-3, 30 NOV 2023 to 25 JAN 2024

FREDERICK MUNI (FPK)
FREDERICK, MARYLAND

AL-5089 (FAA)

FREDERICK MUNI
(FDK)

124.875
ATIS

132.4
GND CON

121.975
CLNC DEL

0.0° E

(When Tower Closed) 126.9

121.975

231.2°
359°

051.2°

126.7°
306.7°

23278
FREDERICK MUNI
(FDK)

23278
(When Tower Closed) 126.9
CONOLE FOUR DEPARTURE (RNAV)

**PRE-DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RWY 5:** Climb heading 048° to 1100 before turning left.

**TAKEOFF RWY 12:** Climb heading 124° to 900 before proceeding westbound.

**TAKEOFF RWY 23:** Climb heading 229° to 1200 before turning right.

**TAKEOFF RWY 30:** Climbing right turn heading 040° to 2400 before proceeding on course.

Climb on assigned heading to ATC assigned altitude, for vectors to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on assigned transition. Expect filed altitude within 10 minutes after departure.

**COLUMN TRANSITION (CONLE4.COLIN)**

**SCOOB TRANSITION (CONLE4.SCOOB)**

---

**NOTE:** Chart not to scale.
NOTE: Turbojet traffic only.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Chart not to scale.

NOTE: NE-3, 30 Nov 2023 to 25 Jan 2024

TOP ALTITUDE:
RAMAY, OTTTO, MAULS, FLASK, RRSIN, GLANC, MELTN
TRANSITIONS: 17000
JERES, MCRA TRANSITIONS:
16000

TAKEOFF MINIMUMS:
Rwy 23: Standard.
Rwy 5: Standard with minimum climb of 260’ per NM to 1100.
Rwy 12: 500-2 3/4 or Standard with minimum climb of 395’ per NM to 1000.
Rwy 30: Standard with minimum climb of 285’ per NM to 900.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb on heading 048° to 1100 before turning left.
TAKEOFF RWY 12: Climb on heading 124° to 900 before proceeding westbound.
TAKEOFF RWY 23: Climb on heading 229° to 1200 before turning right.
TAKEOFF RWY 30: Climbing right turn heading 040° to 2400 before proceeding on course.

Fly heading and maintain altitude assigned by ATC, expect RADAR vectors to WONCE, then on track 283° to cross TERPZ at or above 11000, thence . . .

. . . on assigned transition: Departures on JERES and MCRAY transitions maintain 16000. Departures on RAMAY, OTTTO, MAULS, FLASK, MELTN, RRSIN, GLANC transitions maintain 17000, expect further clearance to filed altitude within 10 minutes after departure.

FLASK TRANSITION (TERPZ7.FLASK)
GLANC TRANSITION (TERPZ7.GLANC)
JERES TRANSITION (TERPZ7.JERES)
MAULS TRANSITION (TERPZ7.MAULS)
MCRAY TRANSITION (TERPZ7.MCRAY)
MELTN TRANSITION (TERPZ7.MELTN)
OTTTO TRANSITION (TERPZ7.OTTTO)
RAMAY TRANSITION (TERPZ7.RAMAY)
RRSIN TRANSITION (TERPZ7.RRSIN)
RNAV (GPS) RWY 24
SHANNON (EZF)

**WARNING --** WASHINGTON DC SFRA. CONTACT POTOMAC APP CON

**Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received use Stafford altimeter setting and increase all MDA 40 feet. Procedure NA at night. Circling NA to Rwy 15-33.**

### RNP APCH.

- **AWOS-3**
  - 128.125

- **QUANTICO APP CON**
  - 127.05
  - 290.375

- **GCO**
  - 135.075

- **UNICOM**
  - 122.8 (CTAF)

**Procedure NA for arrivals at BRV VORTAC on V286 northwest bound.**

**Procedure NA for arrivals at GVE VORTAC on airway radials 337 CW 133.**

**Warning:**

- **RNAV (GPS) RWY 24**
- **Rwy Idg**
  - 2964
- **TDZE**
  - 85
- **Apt Elev**
  - 85

**Category B**

**LNAV MDA**

- **1100-3**
- **1015 (1100-3)**

**NA**

**CIRCLING**

- **1100-3**
- **1015 (1100-3)**

**NA**

**MISSED APPROACH:** Climb to 2000 direct CAMIR and hold.

**Visual Segment - Obstacles.**

**Holding Pattern**

2000 to DURWO 053° (4)

**RDWO**

**ZADMN**

**RW24**

**GORDONSVILLE**

**GVE**

**TDZE 85**

**ELEV 85**

**NB, 30 NOV 2023 to 25 JAN 2024**
** Ramadan 2023 to 25 JAN 2024 **

** Heliport visibility reduction below 1 SM NA. When local altimeter setting not received use Stafford altimeter setting and increase all MDA 40 feet. Procedure NA at night. Circling NA to Rwy 15-33. **

** MISSED APPROACH: Climbing left turn to 1900 in EZF NDB holding pattern. **

** WARNING -- WASHINGTON DC SFRA. CONTACT POTOMAC APP CON **

** MDA 40 feet. Procedure NA at night. Circling NA to Rwy 15-33. **

** Remain within 10 NM **

** CATEGORY A B C D **

** S-24 1100-3 1015[1100-3] NA **

** CIRCLING 1100-3 1015[1100-3] NA **

** FREDERICKSBURG, VIRGINIA **

** AL-5172 (FAA) **

** 22363 **

** NDB RWY 24 **

** SHANNON (EZF') **

** MIRL Rwy 6-24 **

** FREDERICKSBURG, VIRGINIA **

** Amdt 3A 11DEC14 **

** 38°16'N-77°27'W **
RNAV (GPS) RWY 6
POTOMAC AIRFIELD (VKX)

Circling NA SE of Rwy 6-24. DME/DME RNP-0.3 NA. If local altimeter setting not received, use Joint Base Andrews altimeter setting and increase all MDAs 40 feet. Rwy 6 helicopter visibility reduction below 1 SM NA.

MISSING APPROACH: Climbing right turn to 1700 direct WOBUB and hold.

Direction NA for arrivals at all MDAs 40 feet. Rwy 6 helicopter visibility reduction below 1 SM NA.
RNAV (GPS) -A
FRONT ROYAL-WARREN COUNTY (FRR)

**APP CRS**
- 260°

**Rwy Ldg**
- N/A

**TDZE**
- N/A

**Apt Elev**
- 704

**RNAV (GPS) -A**

**AWOS 3**
- 121.85

**OKV AWOS 3**
- 124.85

**POTOMAC APP CON**
- 120.45

**UNICOM**
- 123.0 (CTAF)

**ELEV 704**

**MIRL Rwy 10-28**

**Category**
- A
- B
- C
- D

**Circling**
- 1820-1¼
- 1820-1½

**CAKOM**
- Holding Pattern

**Procedure NA for arrivals at JASEN on V4 southeast bound.**

**Procedure NA at night. When local altimeter setting not received, use Winchester altimeter setting and increase all MDA 40 feet.**

**MISSED APPROACH:** Climbing right turn to 3700 direct CAKOM and hold.

**3700 CAKOM**
- Holding Pattern

**DOTLE**

**CAKOM**
- 4 NM Holding Pattern

**Adjustments**
- 45°
- 1093 A

**LINDEN**
- 2393
- 934

**LDN**
- 2133

**W**
- 3008 x 75

**MIRL Rwy 10-28**

**Procedure NA for arrivals at JASEN on V4 southeast bound.**

**Procedure NA at night. When local altimeter setting not received, use Winchester altimeter setting and increase all MDA 40 feet.**

**MISSED APPROACH:** Climbing right turn to 3700 direct CAKOM and hold.
RNAV (GPS) RWY 14
MONTGOMERY COUNTY AIRPARK (GAI)

AWOS-3PT 128.275
POTOMAC APP CON 128.7 307.9
CLNC DEL 121.6
UNICOM 123.075 (CTAF)

RNP APCH.

Baro-VNAV NA when using Washington Dulles Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 36°C. When local altimeter setting not received, use Washington Dulles Intl altimeter setting and increase all DA/MDAs 80 feet and all visibilities 1/4 mile. RWy 14 helicopter visibility reduction below 3/4 SM NA.

AWOS-3PT 128.275
POTOMAC APP CON 128.7 307.9
CLNC DEL 121.6
UNICOM 123.075 (CTAF)

1569 A

(RUANE)

(BEGKA)

(RW14)

(LNAV)

(VNAV)

GAITHERSBURG, MARYLAND
Amdt 3C 18JUL19

MONTGOMERY COUNTY AIRPARK (GAI)

RNAV (GPS) RWY 14

39°10’N - 77°10’W

NE-3, 30 NOV 2023 to 25 JAN 2024
RNAV (GPS)-A
MONTGOMERY COUNTY AIRPARK (GAI)

RNP APCH.

When local altimeter setting not received use Washington Dulles Intl altimeter setting and increase all MDA 80 feet and Circling Cats C/D visibility ½ SM.

MISSING APPROACH: Climbing right turn to 3000 direct EMI VORTAC and hold.

AWOS-3PT 128.275
POTOMAC APP CON 128.7 307.9
CLNC DEL 121.6
UNICOM 123.075 (CTAF)

Procedure NA for arrival on EMI VORTAC airway radials 151 CW 269.

RNAV (GPS)-A
MONTGOMERY COUNTY AIRPARK (GAI)
CONLE FOUR DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading to ATC assigned altitude, for vectors to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on assigned transition. Expect filed altitude within 10 minutes after departure.

COLIN TRANSITION (CONLE4.COLIN)
SCOOB TRANSITION (CONLE4.SCOOB)
(TERPZ7.TERPZ) 20086
TERPZ SEVEN DEPARTURE (RNAV)

MONTGOMERY COUNTY AIRPARK (GAI)
GAITHERSBURG, MARYLAND

NOTE: Chart not to scale.

TERPZ SEVEN DEPARTURE (RNAV)

TERPZ SEVEN DEPARTURE (RNAV)

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojet traffic only.

TAKEOFF MINIMUMS:
Rwy 14, 32: Standard.
DEPARTURE ROUTE DESCRIPTION

Fly heading and maintain altitude assigned by ATC, expect RADAR vectors to WONCE, then on track 283° to cross TERPZ at or above 11000, thence . . .

. . . on assigned transition: Departures on JERES and MCRAI transitions maintain 16000. Departures on RAMAY, OTTTO, MAULS, FLASK, MELTN, RRSIN, GLANC transitions maintain 17000, expect further clearance to filed altitude within 10 minutes after departure.

FLASK TRANSITION (TERPZ7.FLASK)
GLANC TRANSITION (TERPZ7.GLANC)
JERES TRANSITION (TERPZ7.JERES)
MAULS TRANSITION (TERPZ7.MAULS)
MCRAI TRANSITION (TERPZ7.MCRAI)
MELTN TRANSITION (TERPZ7.MELTN)
OTTTO TRANSITION (TERPZ7.OTTTO)
RAMAY TRANSITION (TERPZ7.RAMAY)
RRSIN TRANSITION (TERPZ7.RRSIN)
GALAX-HILLSVILLE, VIRGINIA

**RNAV (GPS) RWY 1**
TWIN COUNTY (HLX)

**RNAV (GPS) RWY 1**
TWIN COUNTY (HLX)

**Awos-3**
118.375
**Unicom**
126.0 339.8

**Unicom**
122.8 (CTAF)

**Amdt 1C  06OCT22**

**Baro-VNAV NA when using Dublin altimeter setting. For uncompensated Baro-VNAV**

**Systems, LNAV/VNAV NA below -20°C or above 54°C. Rwy 1 helicopter visibility reduction**

**Below ½ SM NA. VDP NA with Dublin altimeter setting. When local altimeter setting not received,**

**Use Dublin altimeter setting; increase LPV DA to 3103 feet and all visibilities ½ SM; increase**

**LNAV/VNAV DA to 3154 feet and all visibilities ½ SM; increase all MDAs 140 feet and visibility**

**LNAV Cats C and D ½ SM and Circling Cat C ¼ SM and Cat D ½ SM.**

**Apt Elev**
2694

**Elev**
2694

**Rwy Idg**
4204

**TDZE**
2694

**A**
2797

**3200**
5100

**DOILY**

**VGSI and RNAV glidepath not coincident**

**(VGSI Angle 3.00/TCH 21)**

**Category**
A
B
C
D

**LNAV**

**DA**
2965-1
271 (300-1)

**LNAV/ VNAV**

**DA**
3016-1
322 (400-1)

**LNAV**

**MDA**
3100-1 406 (500-1)
3100-1½ 406 (500-1½)

**Circling**

**Mda**
3200-1 506 (600-1)
3200-1½ 506 (600-1½)
3440-2½ 746 (800-2½)

**Misssed appch fix**

**Doily**

**Uncompensated Baro-VNAV NA when using Dublin altimeter setting. For uncompensated Baro-VNAV**

**Systems, LNAV/VNAV NA below -20°C or above 54°C. Rwy 1 helicopter visibility reduction**

**Below ½ SM NA. VDP NA with Dublin altimeter setting. When local altimeter setting not received,**

**Use Dublin altimeter setting; increase LPV DA to 3103 feet and all visibilities ½ SM; increase**

**LNAV/VNAV DA to 3154 feet and all visibilities ½ SM; increase all MDAs 140 feet and visibility**

**LNAV Cats C and D ½ SM and Circling Cat C ¼ SM and Cat D ½ SM.**
RNAV (GPS) RWY 19
TWIN COUNTY (HLX)

AWOS-3
118.375

Procedure NA for arrivals on PSK airway radials 153 CW 306.

RNAV (GPS) RWY 19

AWOS-3
118.375

(IAF)
YODRU
5000
097°
(6.6)

(FAF)
MOYEG
2859±
2886
2879±
5000
277°
(7.6)

(FAF)
UGACO
3900±

(FAF)
EVMEH
5000
097°
(6.6)

(IAF)
PULASKI
PSK
5000
277°

5900

(REIL) Rwys 01 and 19
MIRL Rwy 01-19

NE-3, 30 NOV 2023 to 25 JAN 2024

Category
A
B
C
D
LP
MDA
3120-1
433 (500-1)
3120-1 1/2
433 (500-1 1/2)
LNAV MDA
3140-1
453 (500-1)
3140-1 1/2
453 (500-1 1/2)
CIRCLING
3200-1
506 (600-1)
3200-1 1/2
506 (600-1 1/2)
3440-2 1/2
746 (800-2 1/2)
RNP APCH.

\( \text{V} \) Rwy 22 helicopter visibility reduction below \( \frac{3}{4} \) NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{A} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{B} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{C} \) Rwy 22 helicopter visibility reduction below \( \frac{3}{4} \) NA.

\( \text{D} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{E} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{F} \) Rwy 22 helicopter visibility reduction below \( \frac{3}{4} \) NA.

\( \text{G} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{H} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{I} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{J} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{K} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{L} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{M} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{N} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{O} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{P} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{Q} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{R} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{S} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{T} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{U} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{V} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{W} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{X} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

\( \text{Y} \) MISSED APPROACH: Climb to 2000 direct ZARVI and hold.

\( \text{Z} \) For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.
GEORGETOWN, DELAWARE
AL-935 (FAA)

VOR RWY 4
DELAWARE COASTAL (GED)

DME required.

W - Rwy 4 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, use Salisbury altimeter setting increase all MDA 60 feet; increase S-4 Cats C/D visibility ½ mile, and Cat C Circling visibility 3/8 SM. Inop table does not apply.

ASOS
DOVER APP CON
GCO
UNICOM

118.375
132.425 257.875
125.55
123.0 (CTAF)

WATERLOO
112.6 ATR
Chan 73

 Procedure NA for arrivals at WATERLOO VOR/DME on V308 eastbound and V1 northeast bound.

2100 to WEBIX
233° (22.4)

MISSED APPROACH:
Climb to 2100 direct ATR VOR/DME and hold.

ELEV 53
TDZE 51

VOR RWY 4
DELAWARE COASTAL (GED)

Orig-A 25FEB21

38°41'N-75°22'W

DELTA COASTAL (GED)
VOR RWY 4

REIL Rwys 4, 22, 10, and 28
MIRL Rwys 4-22 and 10-28

NE-3, 30 NOV 2023 to 25 JAN 2024

NE-3, 30 NOV 2023 to 25 JAN 2024

NE-3, 30 NOV 2023 to 25 JAN 2024

NE-3, 30 NOV 2023 to 25 JAN 2024

NE-3, 30 NOV 2023 to 25 JAN 2024
Rwy 22 helicopter visibility reduction below 1 SM NA.
Rwy 22 Straight-In and Circling minimums NA at night.

VOR RWY 22
DELAWARE COASTAL (GED)

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct ATR VOR/DME and hold.

ASOS
DOVER APP CON
GCO
UNICOM

118.375
132.425 257.875
125.55
123.0 (CTAF)

OTBAE
ATR

Holding Pattern

FAF to MAP 9.7 NM

FAF

S-22

CIRCLING

OTBAE FIX MINIMUMS

165

NE-3, 30 NOV 2023 to 25 JAN 2024

38°41'N-75°22'W

165
TAKEOFF MINIMUMS:
Rwys 4, 10, 28: Standard.
Rwy 22: 200-1½ or standard with a minimum climb of 201’ per NM to 300, or alternatively with standard takeoff minimums and a normal 200’ per NM climb gradient, takeoff must occur no later than 1100’ prior to DER.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Turn right direct ATR VOR/DME, thence . . .
TAKEOFF RUNWAY 10: Turn left direct ATR VOR/DME, thence . . .
TAKEOFF RUNWAY 22: Turn right direct ATR VOR/DME, thence . . .
TAKEOFF RUNWAY 28: Turn right direct ATR VOR/DME, thence . . .
. . . maintain 2000. Expect clearance to filed altitude three (3) minutes after departure.
**RNAV (GPS)-A**

**GORDONSVILLE MUNI (GVE)**

When local altimeter setting not received, use Orange County altimeter setting and increase all MDA 20 ft. DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

**AWOS-3**

<table>
<thead>
<tr>
<th>Rwy Idg</th>
<th>TDZE</th>
<th>Apt Elev</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>454</td>
</tr>
</tbody>
</table>

**POTOMAC APP CON**

| 120.225 | 132.85 | 323.125 |

**UNICOM**

| 123.0 | (CTAF) |

**GORDONSVILLE, VIRGINIA**

**MISSED APPROACH:** Climbing right turn to 3300 direct TURCO and hold.

Radar required for arrivals at DROPN.

Procedure NA for arrivals at TURCO on V476 southwest bound.

**Visual Segment - Obstacles.**

- **AFLAT**
  - Category: C
  - 3000 ft
  - MIRL Rwy 5-23

- **OSABE**
  - 2000 ft

- **TURCO**
  - 3300 ft

**MIRL Rwy 5-23**

**GORDONSVILLE, VIRGINIA**

Orig-A 12OCT17

38°09'N-78°10'W

167
When local altimeter setting not received, use Orange County altimeter setting and increase all MDA 20 ft. DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

**AWOS-3**
- 120.225

**POTOMAC APP CON**
- 132.85
- 323.125

**UNICOM**
- 123.0 (CTAF)

**Procedure NA for arrivals at HOODE on V140 northeast bound.**

**Procedure NA for arrivals at MAZKO on V375 northeast bound.**

**RNAV (GPS)-B**

**GORDONSVILLE MUNI (GVE)**

**Awos-3, 30 NOV 2023 to 25 JAN 2024**
MISSED APPROACH: Climb to 1400 then climbing left turn to 3600 direct HGR VOR and hold, continue climb-in-hold to 3600.
HAGERSTOWN, MARYLAND
AL-5114 (FAA) 23278

ILS or LOC RWY 27
HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)

RNP APCH - GPS.

LOCALIZER 111.9
I-HGR 111.9
I-HGR 11.2
Chan 56

ASOS
POTOMAC APP CON
HAGERSTOWN TOWER *
GND CON
UNICOM

HAGERSTOWN, MARYLAND
NE-3, 30 NOV 2023 to 25 JAN 2024

NE-3, 30 NOV 2023 to 25 JAN 2024

HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)

HAGERSTOWN, MARYLAND
Amdt 12 05OCT23
39°43'N-77°44'W

LOC/DME I-HGR
111.9
Chan 56

APP CRS
272°
Rwy Idg 7000
TDZE 701
Apt Elev 703

MALSR

MISSED APPROACH: Climb to 4000 direct HGR VOR and hold, continue climb-in-hold to 4000.

ASOS
126.375
POTOMAC APP CON
126.825
239.025
HAGERSTOWN TOWER *
120.3 (CTAF) 225.4
GND CON
120.8
UNICOM
122.95

109.0  FDK
109.0  FD

 Chan 56

HAGERSTOWN 109.8 HGR

4400 to HAIGS
088° (23.3)

HOLD

4000 Nopt
227° (5.7)

HAIGS INT
I-HGR 11.5

One Minute Holding Pattern

LOCALIZER 111.9
I-HGR 111.9
I-HGR 11.21
Chan 56

NE-3, 30 NOV 2023 to 25 JAN 2024

HAIGS INT
I-HGR 11.5

MARTINSBURG
MRB

112.1
Chan 58

HAIGS INT
I-HGR 11.5

1760

1790

HAIGS INT
I-HGR 11.5

R-010

I-HGR 16.5

(IAF)

QOLPI

HOLD

4000 Nopt
227° (5.7)

HAIGS INT
I-HGR 11.5

092°

5100

4000

092°

GS 3.00°

TCH 55

CATEGORY
A
B
C
D

S-ILS 27
1091-1/2
200 (200-1/2)

S-LOC 27
1320-1/2
619 (700-1/2)
1320-1 619 (700-1)

S-LOC 27
1320-1 617 (700-1)
1320-1 617 (700-1/2)

C CIRCLING
1320-1 617 (700-1)
1320-1 617 (700-1/2)

C CIRCLING
1320-1 617 (700-1)
1320-1 617 (700-1/2)

WORUL INT
I-HGR 6.6

WORUL
I-HGR 6.6

REIL Rwys 2 and 20
REIL Rwy 9
MIRL Rwy 2-20
HIRL Rwy 9-27

FAF to MAP 6.8 NM

Knots
60
90
120
150
180
Min:Sec
6:48
4:32
3:24
2:43
2:16

HAGERSTOWN, MARYLAND
Amdt 12 05OCT23
39°43'N-77°44'W

ILS or LOC RWY 27
RNAV (GPS) RWY 9
HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C or above 54°C.

Holding Pattern

COVUK
091°
3100
FODEV
2500
HESGI
0.9 NM to RW09
RW09

3.3 NM
3.4 NM
4.7 NM
0.9 NM

As of AMDT 2 05OCT23

HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)
39°43'N-77°44'W

HAGERSTOWN, MARYLAND
AL-5114 (FAA)

RNAV (GPS) RWY 9
HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C or above 54°C.

Holding Pattern

COVUK
091°
3100
FODEV
2500
HESGI
0.9 NM to RW09
RW09

3.3 NM
3.4 NM
4.7 NM
0.9 NM

As of AMDT 2 05OCT23

HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)
39°43'N-77°44'W
RNAV (GPS) RWY 27
HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -13°C or above 54°C.

Misssed Approach: Climb to 3600, direct COVUK and hold. Continue climb-in hold to 3600.

Category

A

B

C

D

LPV DA

901-1/2

200 (200-1/2)

986-1/2

285 (300-1/2)

1060-1/2

359 (400-1/2)

1060-5/6

359 (400-5/6)

Circling

1160-1

457 (500-1)

1200-1/2

497 (500-1/2)

1300-2

597 (600-2)
Circling Rwy 20 NA at night.

MISSED APPROACH: Climb to 1300 then climbing left turn to 3600 direct HGR VOR and hold, continue climb-in-hold to 3600.

Remain within 10 NM

HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)

HAGERSTOWN, MARYLAND

Amdt 7B 05NOV20

HAGERSTOWN, MARYLAND

NE-3, 30 NOV 2023 to 25 JAN 2024

173
COPPER RNAV (GPS) RWY 9
HAGERSTOWN RGNL/RICHARD A HENSON FLD (HGR)

DME/DME RNP-0.3 NA. VDP NA with Martinsburg altimeter setting. When local altimeter setting not received, use Martinsburg altimeter setting and increase MDA 80 feet.

MISSED APPROACH: Climb to 1200 then climbing left turn to 2500 direct YIYUN and hold.

Limit initial and intermediate approach to 90K.
Limit final and missed approach to 70K.
Increase to 90K upon reaching the missed approach altitude.

Increase to 90K upon reaching the missed approach altitude.
Inop table does not apply.
DME/DME RNP-0.3 NA. VDP NA with Martinsburg altimeter setting.
When local altimeter setting not received, use Martinsburg altimeter setting and increase MDA 80 feet.

MISSED APPROACH: Climb to 1200 then climbing right turn to 2500 direct YIYUN and hold.

<table>
<thead>
<tr>
<th>ASOS</th>
<th>POTOMAC APP CON</th>
<th>HAGERSTOWN TOWER</th>
<th>GND CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>126.375</td>
<td>126.825</td>
<td>120.3 (CTAF)</td>
<td>120.8</td>
<td>122.95</td>
</tr>
</tbody>
</table>

Limit initial and intermediate approach to 90K.
Limit final and missed approach to 70K.
Increase to 90K upon reaching the missed approach altitude.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ILS or LOC RWY 25

INGALLS FLD (HSP)

NE-3, 30 NOV 2023 to 25 JAN 2024

HOT SPRINGS, VIRGINIA

AWOS-3

WASHINGTON CENTER

UNICOM

118.8

134.4 353.9

123.0 (CTAF)

Circling to Rwy 7 NA at night.
Circling NA southeast of Rwy 7-25.

MISSED APPROACH: Climb to 4360, then climbing right turn to 6200 on heading 270° and MOL R-279 to NATTS/MOL 46.3 DME and hold. (DME required).

AWOS-3

WASHINGTON CENTER

UNICOM

DME required.

SOURCE: FAA

HOT SPRINGS, VIRGINIA

AL-5246 (FAA)

DME required.

LOCALIZER 108.7

I-HSP

DURAN OM

DUMIW MOL (24.9)

MOL 24.9

DUMIW

IFAVU

IF (IAF)

247°

6000

5002

5100

3825

3784±

3797

4312

467 (500-2)

4440-1

4480-1

4480-2

4480-2/4

247°

6000

5100

247°

6000

5100

099°

279°

3793

3773

ELEV

TDZE

HOT SPRINGS, VIRGINIA

Amdt 5A 10AUG23

37°57’N-79°50’W

177
HOT SPRINGS, VIRGINIA
AL-5246 (FAA)

RNAV (GPS) RWY 7
INGALLS FLD (HSP)

AWOS-3 118.8  
WASHINGTON CENTER 134.4 353.9  
UNICOM 123.0 (CTAF)

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.

When local altimeter setting not received, procedure NA.

Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct AHLER and hold.
Circling NA SE of Rwy 7-25. Baro-VNAV NA.

When local altimeter setting not received, procedure NA.

MISSING APPROACH: Climb to 6000 direct CEXAS and via track 282° to NATTS and hold.

**APP CRS**

- **RWY IDG**: 5600
- **APT ELEV**: 3793
- **AWOS-3**: 118.8
- **WASHINGTON CENTER**: 134.4, 353.9
- **UNICOM**: 123.0 (CTAF)

**RNAV (GPS) RWY 25**

**INGALLS FLD (HSP)**

**IAF**

- BOOME (IAF)
- AHAFY (FAF)
- AHAFY (IAF)
- DAYYU (IAF)
- CEXAS (IAF)

**RNP-0.3**

- **DME/DME**: NA

**RNAV (GPS)**

- **RWY 25**
- **RNAV (GPS)**

**RNAV (GPS) RWY 25**

**INGALLS FLD (HSP)**

**AWOS-3**

**WASHINGTON CENTER**

**UNICOM**

**2.3 NM**

**LPV**

- **DA**: 4164-1½

**LNAV/ VNAV**

- **DA**: 4309-2, 536 (600-2)

- **MDA**: 4560-1, 787 (800-1½)

**CIRCLING**

- **RwY 25**
- **RNAV** only.

**6000**

**NATTS**

**AHAFY**

**5 NM**

**2.3 NM to RW25**

** Holding Pattern**

**247°**

Procedure NA for arrivals at HOBOS via V140-473 westbound and arrivals at BOOME via V469 southbound.

**HOT SPRINGS, VIRGINIA**

**Ch 53713**

**W25A**

**WAAS CH 53713 W25A**

**RNAV (GPS) RWY 25**

**INGALLS FLD (HSP)**

**21224**

**HOT SPRINGS, VIRGINIA**

**Ch 53713**

**W25A**

**RNAV (GPS) RWY 25**

**INGALLS FLD (HSP)**

**21224**

**HOT SPRINGS, VIRGINIA**

**Ch 53713**

**W25A**

**RNAV (GPS) RWY 25**

**INGALLS FLD (HSP)**

**21224**
RNAV (GPS) RWY 2
MARYLAND (2W5)

Circling Rwy 20 NA at night. Rwy 2 helicopter visibility reduction below
¾ SM NA. Use Ronald Reagan Washington Ntl altimeter setting.

HOLD 214° 034°
4 NM

2000 NoPT
024° (4.5)

Procedure NA for arrivals at
SABB on V376 southbound.

Amdt 1B 13SEP18

NE-3, 30 NOV 2023 to 25 JAN 2024
NE-3, 30 NOV 2023 to 25 JAN 2024

CAMP SPRINGS, MARYLAND

ATIS
133.675 251.05

POTOMAC APP CON
128.0 335.5

TOWER
118.4 349.0

GND CON
121.8 275.8

CLNC DEL
127.55 285.475

CPDLC

ANDREWS
113.1 ADW Chan 78

EMERG SAFE ALT 100 NM 6200

VEI and ILS glidepath not coincident (VEI Angle 3.00/TCH 61).

GS 3.00°
TCH 47°

CATEGORY A B C D E
S-ILS 1R* 465/24 200 (200-1/4)
S-LOC 1R** 640/24 375 (400-1/4) 640/35 375 (400-0)
C CIRCLING*** 780-1 500 (500-1) 780-1 500 (500-1)
720/45 455 (500-1/4)
780-1 500 (500-1)
840-2 560 (600-2)

NON-DME
S-LOC 1R**** 720/24 455 (500-1/4) 720/45 455 (500-1/4)
C CIRCLING*** 780-1 500 (500-1) 780-1 500 (500-1/4)
840-2 560 (600-2)

FAR TO MAP 4.7 NM

AMILS 4/83

KNOTS
60 90
120 150 180

MIN/SEC
1.82 2.21 1.53 1.34

CAMP SPRINGS, MARYLAND
Amid 1 18MAY23

ILS or LOC RWY 1R

JOINT BASE ANDREWS (KADW)

182
23138
NE-3, 30 NOV 2023 to 25 JAN 2024

ILS RWY 1L (CAT II & III)

JNT BASE ANDREWS (KADW)

185
CAMP SPRINGS, MARYLAND

ILS RWY 19R (CAT II & III)

LOC I-MXK 111.5 APCH CRS 190* Rwy ldg 9318 TDZE 274 Arpt Elev 280

AL-561 [USAF]

JOINT BASE ANDREWS (KADW)

RADAR or DME required

ATIS 133.675 251.05 POTOMAC APP CON 128.0 335.5 TOWER 118.4 349.0 GND CON 121.8 275.8 CLNC DEL 127.55 285.475 CPDLC

† MISSED APPROACH: Climbing to 2500, intercept ADW VORTAC R-191 to PREZZ and hold.

† For aircraft not equipped with TACAN or suitable RNAV system with GPS, fly hdg 190°, maintain 2000 expect RADAR vectors.

HOLD 2500 for holding above 4000 or > 230 KIAS

LOCALIZER 111.5 I-MXK

EMERG SAFE ALT 100 NM 6200

ELEV 280 TDZE 274

VOR/LOC and ILS glidepath not coincident (VOR/LOC Angles 3 00/TCH 71)

CATEGORY II & III ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

CAMP SPRINGS, MARYLAND

Orig 06OCT22

NE-3, 30 NOV 2023 to 25 JAN 2024
**RNAV (GPS) RWY 1R**

**CAMP SPRINGS, MARYLAND**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**JOINT BASE ANDREWS (KADW)**

**CATEGORY**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA*</td>
<td>465/24</td>
<td>200</td>
<td></td>
<td>(200-½)</td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA**</td>
<td>660/35</td>
<td>395</td>
<td></td>
<td>(400-½)</td>
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</tr>
<tr>
<td>LNAV MDA***</td>
<td>660/24 395 (400-½)</td>
<td>660/35 395 (400-½)</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**CIRCLING****

<table>
<thead>
<tr>
<th>System</th>
<th>780-1</th>
<th>780-1½</th>
<th>840-2</th>
<th>500 (500-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>500 (500-½)</td>
<td>560 (600-2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MISSING APPROACH**

- Climb to 2500 direct HULVI and hold.

**ATIS**

| 133.675 | POTOMAC APP CON | 128.0 335.5 |

**GND CON**

| 121.8 275.8 |

**CLNC DEL**

| 127.55 285.475 |

**CPDLC**

**UPLINK**

- NE-3, 30 NOV 2023 to 25 JAN 2024

**DME/DME RNP-0.3 NA**

**WAS**

| CH 52206 | W01B | 9756 |

**APCH CRS**

| 010° |

**Rwy Idg**

| TDZE | 265 |

**Arpt Elev**

| 280 |

**AL-561 (USAF)**

**MISSING APPROACH**

- Climb to 2500 direct HULVI and hold.

**EMERG SAFE ALT 100 NM 6200**

**2500 HULVI**

**2500 HULVI**

- NE-3, 30 NOV 2023 to 25 JAN 2024

**CAMP SPRINGS, MARYLAND**

**Amdt 3 18MAY23**

**38°49'N - 76°52'W**
NE-3, 30 NOV 2023 to 25 JAN 2024

**RNAV (GPS) RWY 19L**

**Category**

- **A**: LPV DA*
  - Threshold: 479/24
  - 200 ft AGL (200-½)
- **B**: LNAV/VNAV DA**
  - Threshold: 680/40
  - 401 ft AGL (400-¾)
- **C**: LNAV MDA***
  - Threshold: 680/24
  - 401 ft AGL (400-¾)
- **D**: CIRCLING****
  - Threshold: 780-1
    - 500 ft (500-½)
    - 780-½
    - 500 ft (500-½)
    - 840-2
  - 560 ft (600-2)

**CLEARED TO TAKEOFF**

- **A**: LPV RW 19L
- **B**: LNAV/VNAV RW 19L
- **C**: LNAV MDA RW 19L
- **D**: CIRCLING RW 19L

**MISSED APPROACH**

- Climb to 2500 direct BRINE and hold.
- For uncompensated Baro-VNAV systems, Procedure NA below -15°C (5°F) or above 54°C (130°F).

**EMERG SAFE ALT 100 NM 6200**

**ATIS**

- 133.675

**POTOMAC APP CON**

- 251.05

**TOWER**

- 120.8

**GND CON**

- 335.5

**CLNC DEL**

- 349.0

**CPDLC**

- 121.8

**GW 19L**

- 275.8

**GW 2500**

- 285.475

**COLLEGE PARK**

- 280.0

**HULVI**

- 280.0

**BEEMR**

- 280.0

**BRINE**

- 280.0

**ELEV**

- 280.0

**TWR 435**

- 280.0

**BCN 483**

- 280.0

**DOO Z R356**

- 280.0

**POA Z R356**

- 280.0

**DOO X R516**

- 280.0

**POA X R516**

- 280.0

**HRL all Rwyts TDZL/CL Rwyts 1L, 1R**

**2000**

**RW 19L**

- 2000

**5.2 NM**

**010°**

**190°**

**0.1 NM to RW 19L**
**RNAV (GPS) RWY 19R**

**ATIS**
133.675 251.05

**POTOMAC APP CON**
128.0 335.5

**TOWER**
118.4 349.0

**GND CON**
121.8 275.8

**CLNC DEL**
127.55 285.475

**CPDLC**

---

**EMERG SAFE ALT 100 NM 6200**

**GP 3.00°**

**TCH 55**

**HOLD 2500**

**RADAR required for holding above 4000 or > 230 KIAS.**

---

**CATEGORY**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA*</td>
<td>474/18</td>
<td>200</td>
<td>(200-½)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA**</td>
<td>697/40</td>
<td>423</td>
<td>(500-¾)</td>
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<tr>
<td>LNAV MDA***</td>
<td>700/24 426 (500-½)</td>
<td>700/40</td>
<td>426 (500-¾)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C CIRCLING****</td>
<td>780-1 500 (500-1)</td>
<td>780-1½ 500 (500-1½)</td>
<td>840-2 560 (600-2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**MISSING APPROACH**

**PREZZ**

**Radar required for holding above 4000 or > 230 KIAS.**

**RNAV and LNAV glidepath not coincident (RNAV Angle 3.00°/TCH 70.62).**

---

**ADJUST CARVING 38°49'N - 76°52'W**

**Adapt 18MAY23**
ANDREWS ONE DEPARTURE (ADW1•ADW)

113.1  ADW Fleet Channel 78

ATIS 133.675  251.05
CPDLC
GND CON
121.8  275.8
ANDREWS TOWER
118.4  349.0
POTOMAC TRACON DEP CON
125.65  348.725

RADAR VECTORS REQUIRED
WITHIN 10 NM
FROM DEPARTURE

RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1L/1R: Climbing right turn to 3000 heading 050°. Expect radar vectors to intercept ADW VORTAC R-070.
NE-3, 30 NOV 2023 to 25 JAN 2024

CAMP SPRINGS ONE DEPARTURE (CAMP1•ADW)

SL-561 [USAF]

ATIS 133.675 251.05
CPDLC
GND CON
121.8 275.8
ANDREWS TOWER
118.4 349.0
POTOMAC TRACON DEP CON
118.95 257.2

<table>
<thead>
<tr>
<th>Rwy</th>
<th>Knots</th>
<th>60</th>
<th>120</th>
<th>180</th>
<th>240</th>
<th>300</th>
<th>360</th>
</tr>
</thead>
<tbody>
<tr>
<td>1L/R</td>
<td>V/V (ft)</td>
<td>380</td>
<td>760</td>
<td>1140</td>
<td>1520</td>
<td>1900</td>
<td>2280</td>
</tr>
</tbody>
</table>

Radar Vectors Required within 10 NM from Departure

ATC Climb Rate to 3000
If unable to make published climb gradient, advise ATC prior to departure.

1149°

RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1L/1R: Turn left climb on heading 270° within 3 DME of ADW VORTAC, cross ADW 8 DME at 3000. Expect radar vectors.

TAKE-OFF RWY 19R/19L: Climb on heading 190° to 3000. Expect radar vectors to the west.

ANDREWS 113.1 ADW 113.1 Chan 78
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1L/1R: Climb on heading 010° to 800, then climbing left turn to 3000 direct FLMOR. Then via depicted route to JEFSN, thence...

TAKE-OFF RWY 19L: Climb on heading 190° direct SHAAW then via depicted route to JEFSN, thence...

TAKE-OFF RWY 19R: Climb on heading 190° direct GLVER then via depicted route to JEFSN, thence...

...on assigned transition. Maintain 3000, expect further clearance to filed alt within ten (10) minutes after departure.

FLASK TRANSITION (JEFSN1 • FLASK)
GLANC TRANSITION (JEFSN1 • GLANC)
MAULS TRANSITION (JEFSN1 • MAULS)
MELTN TRANSITION (JEFSN1 • MELTN)
RRSN TRANSITION (JEFSN1 • RRSN)
**DEPARTURE ROUTE DESCRIPTION**

**RWY 01L/R:** Climb heading 010° to 800, then climbing left turn to 3000 direct FLMOR. Then via depicted route to LINCN, thence...

**RWY 19L:** Climb heading 190° direct SHAAW then via depicted route to LINCN, thence...

**RWY 19R:** Climb heading 190° direct GLVER then via depicted route to LINCN, thence...

...on assigned transition. Maintain 3000, expect further clearance to filed alt within ten (10) minutes after departure.

**JERES TRANSITION (LINCN1·JERES)**

**MCCRAY TRANSITION (LINCN1·MCCRAY)**

**OTTTO TRANSITION (LINCN1·OTTTO)**

**RAMAY TRANSITION (LINCN1·RAMAY)**
MORNINGSIDE ONE DEPARTURE (MRNG1•ADW)

ATIS 133.675 251.05
CPDLC
GND CON
121.8 275.8
ANDREWS TOWER
118.4 349.0
POTOMAC TRACON DEP CON
125.65 348.725

andrews
113.1 ADW
Chan 78

SL-561 [USAF]

RADAR VECTORS REQUIRED
WITHIN 10 NM
FROM DEPARTURE

RADAR REQUIRED

⚠️ DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 11L/1R: Climb on heading 010° to 3000. Expect radar vectors.

TAKE-OFF RWY 19R/19L: Climb on heading 190° to 3000. Expect radar vectors
to the South or East.
**RNAV (GPS) RWY 7**

**Lee County (JVG)**

**AWOS-3**

120.125

**Atlanta Center**

127.55 269.50

**CTAF**

122.9

**JONESVILLE, VIRGINIA**

**AL-9373 (FAA)**

**22363**

**WAAS CH 78430 W07A**

APP CRS 066°

**Rwy Idg TDZE**

5003 1393

**Apt Elev**

1411

**DME/DME RNP-0.3 NA. Rwy 07 helicopter visibility reduction below ½ SM NA.**

**Missed Approach: Climb to 5600 direct OKLUH and hold, continue climb-in-hold to 5600.**

1. Missed approach requires minimum climb gradient of 240 feet per NM to 3400.

2. Missed approach requires minimum climb gradient of 240 feet per NM to 3400.

**AWOS-3**

120.125

**Atlanta Center**

127.55 269.50

**CTAF**

122.9

**JONESVILLE, VIRGINIA**

**AL-9373 (FAA)**

**22363**

**WAAS CH 78430 W07A**

APP CRS 066°

**Rwy Idg TDZE**

5003 1393

**Apt Elev**

1411

**DME/DME RNP-0.3 NA. Rwy 07 helicopter visibility reduction below ½ SM NA.**

**Missed Approach: Climb to 5600 direct OKLUH and hold, continue climb-in-hold to 5600.**

1. Missed approach requires minimum climb gradient of 240 feet per NM to 3400.

2. Missed approach requires minimum climb gradient of 240 feet per NM to 3400.
RNAV (GPS) RWY 25

JONESVILLE, VIRGINIA

AWOS-3 120.125

ATLANTA CENTER 127.55 269.50

CTAF 122.9

Helicopter visibility reduction below 3/4 SM NA.

DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 5000 direct TILYU and hold, continue climb-in-hold to 5000.

WAAS CH 82717 W25A

APP CRS 246°
Rwy Idg TDZE 1411
Apt Elev 1411

5003

JONESVILLE, VIRGINIA

1411

NE-3, 30 NOV 2023 to 25 JAN 2024

PGA Center 3.25°/TCH 44.

VGSI and RNAV glidepath not coincident

Helicopter visibility reduction below 3/4 SM NA.

DME/DME RNP-0.3 NA.

Helicopter visibility reduction below 3/4 SM NA.

DME/DME RNP-0.3 NA.
Helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA. Procedure NA at night. When local altimeter setting not received, use Blackstone altimeter setting and increase all MDA 60 feet.

**RNAV (GPS)-A**

**LUNENBURG COUNTY (W31)**

- **AWOS-3**: 123.875
- **WASHINGTON CENTER**: 118.75, 377.1
- **UNICOM**: 122.7 (CTAF)

**Helicopter Holding Pattern**

- **Category A**
  - 1000-1
  - 474 (500-1)
- **Category B**
  - 1080-1
  - 554 (600-1)
- **Category C**: NA
- **Category D**: NA

**RNAV (GPS)-A**

- **ELEV**: 526
Helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA. Procedure NA at night. When local altimeter setting not received, use Blackstone altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climbing right turn to 2100 direct JIDNO and hold.

AWOS-3
123.875

WASHINGTON CENTER
118.75 377.1

UNICOM
122.7 (CTAF)

APP CRS
214°

Rwy Idg N/A
TDZE N/A
Apt Elev 526

ELEV 526
*** When ALS inop, increase CAT A8 RVR to 55, vis to 1 mile; CAT CDE vis to 1 3/8 miles.
**** Circling NA S of RWY 8-26

Average Cold Temperature based on Standard -30.00°C ISA deviation.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -7°C or above 54°C.

NE-3, 30 NOV 2023 to 25 JAN 2024

HAMILTON, VIRGINIA

RNAV (GPS) RWY 8

LANGLEY AFB (KLCI)

AL-185 (USAF)

ATIS
NORFOLK APP CON/DEP CON
TOWER
GND CON
CLNC DEL
270.1
125.7 335.625
125.0 253.5
121.7 275.8
118.85 257.625

EMERG SAFE ALT 100 NM 4100

WUBUT

2000

077°

1600

GP 2.80°

TCH 53°

078° +1.4 NM to RW08

RW08

†LNAV only

HAMILTON, VIRGINIA

Amdt 1 11AUG22

211
**RNP APCH**

* When ALS inop, increase RVR to 60, vis to 1 3/8 miles.

** When ALS inop, increase RVR to 40, vis to 3/4 mile.

---

**ATIS**

** NORFOLK APP CON/DEP CON **

270.1 125.7 335.625

** TOWER **

270.1 125.0 253.5

** GND CON **

121.7 275.8

** CLNC DEL **

118.85 257.625

---

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -7°C or above 54°C.

**MISSING APPROACH:** Climb to 3000 on course 258° to CAGER WPT and hold.

---

*** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1 3/8 miles.

**** Circling not authorized S of Rw 8-26.

---

EMERG SAFE ALT 100 NM 4100

** CATEGORY **

A B C D E

** LPV DA**

208/24 200 (200-1/2)

** LNAV/VNAV DA**

404/35 396 (400-1/2)

** LNAV MDA**

480/24 472 (500-1/2)

** CIRCLING **

540-1 580-1 700-2 760-2½ 760-2½

(HIIR all Rwys)

---

Rw 26 258° to RW 26

---

HAMPTON, VIRGINIA

Amdt 7 11AUG22

---
**RNAV (GPS)-A**

**LAUREL (N06)**

**PATUXENT APP CON**
- ALT 127.95
- 314.0

**UNICOM**
- 122.8 (CTAF)

**Procedure NA for arrivals at ATR**
- VOR/DME on V308 eastbound.

**Procedure NA for arrivals at SBY**
- VORTAC on V29 southbound.

**RNP APCH.**
- Procedure NA at night. Use Salisbury altimeter setting; when not received, use Georgetown altimeter setting.

**Access Points**
- 1042
- 1048
- R-4006
- 1800
- 6000

**Visual Segment - Obstacles**
- 4 NM
- 4.9 NM

**Holding Pattern**
- 149°
- 6000
- 1800

**Rwy Idg**
- N/A

**Apt Elev**
- 30
Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.

**MISSED APPROACH:** Climbing left turn to 4000 direct GEPKE and hold, continue climb-in-hold to 4000.
**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**AWOS-3** 119.625  
**WASHINGTON APP CON** 118.75 377.1  
**UNICOM** 122.8 (CTAF)

**ELEV 329**

**Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use South Hill altimeter setting and increase all MDA 60 feet.**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbo-jets only.
NOTE: Takeoff Rwy 35 requires a climb to 1200 on heading 353° before proceeding on the ATC assigned heading for obstacle avoidance.

TAKING MMMNNiimuums:

 Rwys 17, 35: Standard

DePArTuRE ROUTE DEscriptiOn

Climb on heading assigned by ATC, expect RADAR vectors to BUTRZ, then on track 239° to CLTCH, thence...

... on assigned transition, maintain altitude assigned by ATC, expect clearance to filed altitude within ten (10) minutes after departure.

FLASK TRANSITION (CLTCH3.FLASK)
MAULS TRANSITION (CLTCH3.MAULS)
**JDUBB FOUR DEPARTURE (RNAV)**

**JDUBB FOUR DEPARTURE (RNAV)**

**TOP ALTITUDE:**

3000

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

Climb on heading assigned by ATC, expect RADAR vectors to HAFNR, then on track 225° to JDUBB, thence. . . .

. . . . on assigned transition, maintain 3000, expect clearance to filed altitude within ten (10) minutes after departure.

**MELTN TRANSITION (JDUBB4.MELTN)**

**RRSIN TRANSITION (JDUBB4.RRSIN)**
**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17:** Climb heading 171° to 900, then climbing right turn direct to cross PTOMC at 3000, do not exceed 210K until PTOMC, thence.

**TAKEOFF RUNWAY 35:** Climb heading 351° to 900, then climbing left turn direct to cross PTOMC at 3000, do not exceed 210K until PTOMC, thence.

...on heading 310°, maintain 3000, expect radar vectors on course. Expect filed altitude within ten (10) minutes after departure.

**TAKEOFF MINIMUMS:**

Rwy 17: Standard with minimum climb of 500' per NM to 900. Then 327' per NM to 3000.

Rwy 35: Standard with minimum climb of 500' per NM to 900. Then 370' per NM to 3000.

**TAKEOFF OBSTACLES:**

Rwy 17: Vehicle on roadway, 320' from DER, 565' left of centerline, up to 15' AGL/414' MSL. Building 167' from DER, 360' left of centerline, 22' AGL/401' MSL. Pole 958' from DER, 373' left of centerline, 32' AGL/421' MSL. Trees beginning 138' from DER, left and right of centerline, up to 100' AGL/464' MSL.

Rwy 35: Terrain 96' from DER, 453' left of centerline, 381' MSL. Tree 1078' from DER, 525' left of centerline, up to 100' AGL/413' MSL. Pole 638' from DER, 642' right of centerline, 49' AGL/428' MSL.
**SCRAM SIX DEPARTURE (RNAV)**

**TAKEOFF MINIMUMS:**
Rwys 17, 35: Standard

**NOTE:** RNAV 1.
**NOTE:** RADAR required.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** Turbo-jets only.
**NOTE:** Takeoff Rwy 35 requires a climb to 1200 on heading 353° before proceeding on the ATC assigned heading for obstacle avoidance.

**DEPARTURE ROUTE DESCRIPTION**

Climb on heading assigned by ATC, expect RADAR vectors to POOCH, then on track 240° to SCRAM, thence . . .

. . . . as depicted. Maintain 3000, expect clearance to filed altitude within ten (10) minutes after departure.

**GLANC TRANSITION (SCRAM6.GLANC):**
RNAV (GPS) RWY 29
ST MARY'S COUNTY RGNL (2W6)

AWOS-3
119.575

PATUXENT APP CON
121.0  250.3

UNICOM
123.0 (CTAF)

RWP 29:
- Helicopter visibility reduction below ¾ SM NA.
- For uncompensated Baro-VNAV systems, use LNAV/VNAV DA 750 ft.
- When local altimeter setting not received, use Patuxent River altimeter setting:
- Increase LPV DA to 750 ft and all visibilities ½ SM.
- Increase LNAV/VNAV DA to 688 ft and all visibilities ½ SM.
- Increase all MDAs 40 ft and LNAV visibility 0.5 SM.

MISSED APPROACH:
- Climb to 700 then climbing left turn to 5000.
- Continue holding until 5000.

DA
654-1
3
8
517 (600-1)
3
8

LPV
DA
441-7/8
304 (300-1/2)

LNAV/ VNAV
DA
654-1 3/4
517 (600-1/8)

LNAV MDA
620-1
483 (500-1)
620-3/8
483 (500-1/8)

CIRCLING
660-1
518 (600-1)
840-2
698 (700-2)
840-2 ¼
698 (700-2 ¼)

LEONARDTOWN, MARYLAND
Amdt 1B  10AUG23

38°19'N-76°33'W

227
**RNAV (GPS) RWY 27**

**LOUISA COUNTY/FREEMAN FLD (LKU)**

**RNP APCH.**

- **Circling NA north of Rwy 9-27.** Baro-VNAV NA when using Orange altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Orange altimeter setting and increase all DA to 780 feet and all MDA 40 feet and increase LPV and LNAV/VNAV visibility 1/8 SM.

**AWOS-3**

- 119.475

**POTOMAC APP CON**

- 132.85
- 323.125

**UNICOM**

- 122.975 (CTAF)

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**ELEV 494**

**TDZE 494**

**LOUISA, VIRGINIA**

Amdt 2 15AUG19

**AMENDMENT**

- 38°01′N - 77°58′W

**MISSED APPROACH:** Climb to 1000 then climbing right turn to 2900 direct GVE VORTAC and hold, continue climb-in-hold to 2900.

**LATITUDE:** 38°01′N

**LONGITUDE:** 77°58′W

**CIRCLING**

- NE-3, 30 NOV 2023 to 25 JAN 2024

**LOCATIONS**

- GVE VORTAC
- LUXYS
- JODKA (IF/IAF)
- JODKA
- GORDONSVILLE

**ALTITUDES**

- 2300
- 2900
- 4000

**DISTANCES**

- 2.5 NM
- 4 NM

**NORTHINGS**

- 272°
- 092°

**COORDINATES**

- 38°01′N - 77°58′W

**AIRPORTS**

- LOUISA COUNTY/FREEMAN FLD (LKU)
- LOUISA, VIRGINIA

**GEOGRAPHIC COORDINATES**

- 38°01′N - 77°58′W

**COASTAL OPERATIONS**

- LOUISA COUNTY/FREEMAN FLD (LKU)
- LOUISA, VIRGINIA

**RAILROADS**

- LOUISA COUNTY/FREEMAN FLD (LKU)
- LOUISA, VIRGINIA

**HOLDING PATTERNS**

- 4 NM

**APPROACH**

- RNAV (GPS) RWY 27
LOC RWY 27
LOUISA COUNTY/FREEMAN FLD (LKU)

DME required.

\[\text{LOCALIZER 108.55} \]
\[\text{I-LKU} \]

Circling NA north of Rwy 9-27. When local altimeter setting not received, use Orange altimeter setting and increase all MDA 40 feet. VDP NA when using Orange altimeter setting.

MISSED APPROACH: Climb to 2900 direct GVE VORTAC and hold.

AWOS-3  119.475
POTOMAC APP CON  132.85  323.125
UNICOM  122.975 (CTAF)

AWOS-3  119.475
POTOMAC APP CON  132.85  323.125
UNICOM  122.975 (CTAF)

ELEV 494  TDZE 494
DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all MDA 120 feet.

MISSED APPROACH: Climb to 5000 direct JORGI and on track 063° to LDN VORTAC and hold.
RNAV (GPS) RWY 22
LURAY CAVERNS (LUA)

DME/DME RNP-0.3 NA. Helicopter visibility reduction below 3/4 SM NA. When local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all MDA 120 feet; increase LNAV Cat B and Circling Cat B visibility 1/4 mile.

**MISSED APPROACH:** Climb to 6000 direct FIBIR and on track 213° to SAHDO and hold, continue climb-in-hold to 6000.

**Procedure NA for arrival at LDN VORTAC on V144 southeast bound.**
Visibility reduction by helicopters NA. When local altimeter setting not received, use Staunton/Waynesboro/Harrisburg altimeter setting and increase all MDA 120 feet.

**LURAY, VIRGINIA**

**AWOS-3** 118.275  **WASHINGTON CENTER** 133.2  282.2  **UNICOM** 122.8 (CTAF)

**VOR/DME-B**

**LURAY CAVERNS (LUA)**

**AMENDMENT 3B 25MAR21**

**AL-6229 (FAA)**

**ELEV 902**

**38°40'N-78°30'W**

**LURAY CAVERNS (LUA) VOR/DME-B**

**MISSED APPROACH:** Climbing left turn to 4900 on LDN VORTAC R-237 to HALPU/LDN 7.5 DME and hold, continue climb-in-hold to 4900.
**LURAY, VIRGINIA**

**AL-6229 (FAA)**

<table>
<thead>
<tr>
<th>NDB LUA</th>
<th>APP CRS</th>
<th>Rdg</th>
<th>TDZE</th>
<th>Apt Elev</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>LUA 245</td>
<td>N/A</td>
<td>223°</td>
<td>N/A</td>
<td>902</td>
<td>B</td>
</tr>
</tbody>
</table>

- **NA** Rdwy 22 helicopter visibility reduction below 1 SM NA.
- **NDB-245** LUA
- **APP CRS 223°**
- **Rwy Idg** N/A
- **TDZE** N/A
- **Apt Elev** 902

**Missed Approach:**
Climb to 2900 then climbing left turn to 5000 direct LUA NDB and hold, continue climb-in-hold to 5000.

**ADP**

- **FAF to MAP 2.1 NM**
- **CATEGORY**
  - **A**
  - **B**
  - **C**
  - **D**

**AWOS-3**
118.275

**WASHINGTON CENTER**
133.2 282.2

**UNICOM**
122.8 (CTAF)

**LURAY, VIRGINIA**

**LURAY CAVERNS (LUA)**

**ADP**

- **FAF to MAP 2.1 NM**
- **CATEGORY**
  - **A**
  - **B**
  - **C**
  - **D**

**AWOS-3**
118.275

**WASHINGTON CENTER**
133.2 282.2

**UNICOM**
122.8 (CTAF)

**LURAY, VIRGINIA**

**LURAY CAVERNS (LUA)**

**ADP**

- **FAF to MAP 2.1 NM**
- **CATEGORY**
  - **A**
  - **B**
  - **C**
  - **D**

**AWOS-3**
118.275

**WASHINGTON CENTER**
133.2 282.2

**UNICOM**
122.8 (CTAF)
LYNCHBURG, VIRGINIA  
AL-10250 (FAA)  
23278

RNAV (GPS) RWY 28  
FALWELL (W24)

APP CRS 283°  
Rwy Idg 2932  
TDZE 939  
Apt Elev 939

DME/DME RNP-0.3 NA. Use Lynchburg Regional/Preston Glenn Fld altimeter setting, when not received use Farmville altimeter setting and increase all MDA 160 feet. Procedure NA at night.

MISSED APPROACH: Climbing right turn to 3500 direct SWARM and hold.

LYH ASOS  
119.8

ROANOKE APP CON  
135.0 254.325

UNICOM  
123.0 (CTAF)

LYNCHBURG, VIRGINIA  
Orig-B 07JAN16  
37°23'N-79°07'W

MIRL Rwy 10-28  
103° 283° 3000 NoPT

NE-3, 30 NOV 2023 to 25 JAN 2024  
NE-3, 30 NOV 2023 to 25 JAN 2024
**ILS or LOC RWY 4**

**LYNCHBURG RGNL/PRESTON GLENN FLD (LYH)**

**ATIS**

**ROANOKE APP CON**

**LYNCHBURG TOWER**

**GND CON**

**UNICOM**

**MALSR**

**RVR 1800 authorized with use of FD or AP or HUD to DA.**

**Simultaneous reception of I-LYH and LYH DME required.**

**Circling Rwy 17 NA at night: DME from LYH VOR/DME.**

**Remain within 10 NM**

**GS 3.00°**

**TCH 55**

**UP**

**LOC-22 INT**

**LY 35**

**CIRCLING**

**LOC only.**

**ILS or LOC RWY 4**

**At 03010**

**LYNCHBURG, VIRGINIA**

**Amdt 17B 03JAN19**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**ELEV 938**

**D TDZE 905**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**Lynchburg Int**

**37°20'N-79°12'W**

**236**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 47°C. For inop ALS, increase LNAV Cat A and B visibility to RVR 5000. Circling Rwy 17 NA at night.

Procedure NA for arrivals at LYH VOR/DME on V470 eastbound.
Procedure NA at night.
Rwy 17 helicopter visibility reduction below 1 SM NA.

**ATIS**
119.8

**ROANOKE APP CON**
135.0 254.325

**LYNCHBURG TOWER**
127.65 (CTAF) 257.8

**GND CON**
121.9

**UNICOM**
122.95

Procedure NA for arrivals at RADIA on V469 northbound.

MISSED APPROACH: Climb to 1400 then climbing left turn to 3400 direct CONCO and hold.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 47°C. Rwy 22 helicopter visibility reduction below ¾ SM NA. Circling Rwy 17 NA at night.

ATIS
119.8

ROANOKE APP CON
135.0 254.325

LYNCHBURG TOWER*
127.65 (CTAF) 257.8

GND CON
121.9

UNICOM
122.95

Procedure NA for arrivals at LYH VOR/DME on V16-260 westbound.

For LNAV/VNAV, fly visual to airport, 216° - 3 miles.

KUCEC and track 207° to LYH VOR/DME and hold, continue climb-in hold to 3000.

MISSED APPROACH: Climb to 3000 direct KUCEC and track 207° to LYH VOR/DME and hold, continue climb-in hold to 3000.
RNAV (GPS) RWY 35
LYNCHBURG RGNL/PRESTON GLENN FLD (LYH)

Circling Rwy 17 NA at night. Rwy 35 helicopter visibility reduction below 1/2 SM NA.

MISSED APPROACH: Climb to 4900 direct RADIA and hold.

ATIS 119.8
ROANOKE APP CON 135.0 254.325
LYNCHBURG TOWER * 127.65 (CTAF) 257.8
GND CON 121.9
UNICOM 122.95

Procedure NA for arrivals at CONCO on V16-260 eastbound.

Procedure NA for arrivals at SYCAM on V469 southbound.

RNAV (GPS) RWY 35
LYNCHBURG RGNL/PRESTON GLENN FLD (LYH)

RNAV (GPS) RWY 35
LYNCHBURG RGNL/PRESTON GLENN FLD (LYH)

RNAV (GPS) RWY 35
LYNCHBURG RGNL/PRESTON GLENN FLD (LYH)
VOR RWY 22
LYNCHBURG RGNL/ PRESTON GLENN FLD (LYH)

ATIS 119.8
ROANOKE APP CON 135.0 254.325
LYNCHBURG TOWER* 127.65 (CTAF) 0 257.8
GND CON 121.9
UNICOM 122.95

2900 NePT 207° (10) 2900 NePT

VOR/DME LYH 109.2 Channel 29
APP CRS 207° Rwy Idg 7100
TDZE 938 Apt Elev 938

DME required.
Circling Rwy 17 NA at night.

MISSED APPROACH: Climb to 2900 direct LYH VOR/DME and hold.

ATIS 119.8
ROANOKE APP CON 135.0 254.325
LYNCHBURG TOWER* 127.65 (CTAF) 0 257.8
GND CON 121.9
UNICOM 122.95

2900 NePT 207° (10) 2900 NePT

VOR/DME LYH 109.2 Channel 29
APP CRS 207° Rwy Idg 7100
TDZE 938 Apt Elev 938

DME required.
Circling Rwy 17 NA at night.

MISSED APPROACH: Climb to 2900 direct LYH VOR/DME and hold.

ATIS 119.8
ROANOKE APP CON 135.0 254.325
LYNCHBURG TOWER* 127.65 (CTAF) 0 257.8
GND CON 121.9
UNICOM 122.95

2900 NePT 207° (10) 2900 NePT

VOR/DME LYH 109.2 Channel 29
APP CRS 207° Rwy Idg 7100
TDZE 938 Apt Elev 938

DME required.
Circling Rwy 17 NA at night.

MISSED APPROACH: Climb to 2900 direct LYH VOR/DME and hold.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 22: Climb heading 216° to 1440, then direct DECAF. Then on depicted route to HURTT, then on heading 214°, expect vectors on course. Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb heading 036° to 1440, then left turn direct AGLOW, then on depicted route to LIBRT, then on heading 073°, expect vectors on course. Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TAKEOFF MINIMUMS:
Rwys 17, 22, 35: NA-ATC.
Rwy 4: Standard with minimum climb of 500' per NM to 4000.

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS.
NOTE: RNAV 1.

TOP ALTITUDE:
4000
Circling NA north of Rwy 8-26.

Helicopter visibility reduction below 3/4 SM NA.

DME required.

MISSED APPROACH: Climb to 4600 then climbing left turn to 6000 on heading 070° and PSK VORTAC R-252 to WUZUR INT and hold.

Procedure NA for arrival on PSK VORTAC airway radials 192 CW 306.
Rwy 13 helicopter visibility reduction below 3/4 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 46°C.

- 17°C

**AWOS-3** 118.45  **GREENSBORO APP CON** 124.35  **CNLC DEL** 124.85  **UNICOM** 122.7 (CTAF)

**RNP APCH-GPS.**

**MISSED APPROACH:** Climb to 3000 direct ULAKE and hold.

**MISSED APCH FIX**

- 4 NM ULAKE
- 305° ULAKE

**5 NM**

- Holding Pattern: 8000 N 305° 30 NM to ALMAA, U-turn and hold 8000 N 305° 30 NM to HOCUS.

**VGSI and RNAV glidepath not coincident** (VGSI Angle 3.00/TCH 40).

- 3006 ± 2.5 NM
- 5800 N 035° ± 2.5 NM
- 3211 ± 0.3 NM
- 5800 N 305° ± 2.5 NM

**MISSED APPROACH:** Climb to 3000 direct ULAKE and hold.

**RNAV (GPS) RWY 13**

- **RNAV (GPS) RWY 13**
- **RNAV (GPS) RWY 13**

**Category:**

- LPV DA: 1301-1 360 (400-1)
- LNAV/VNAV DA: 1324-1 383 (400-1)
- LNAV MDA: 1380-1 439 (500-1)
- MIRL Rwy 13-31 859 (900-2 3/4)

**CIRCLING:**

- 1420-1 479 (500-1)
- 1440-1 499 (500-1)
- 1540-1 599 (600-1)
- 1800-2 859 (900-2 3/4)

**RNAV (GPS) RWY 13**

- **RNAV (GPS) RWY 13**

**BLUES R峰值 (MTV)**

- **RNAV (GPS) RWY 13**

**36°38′N-80°01′W**

**23110**

**207OCT21**

**NE-3, 30 NOV 2023 to 25 JAN 2024**
RNAV (GPS) RWY 31
BLUE RIDGE (MTV)

**RNAV APCH.**

- **Rwy 31** helicopter visibility reduction below ¾ SM NA. Inop table does not apply to LPV and LNAV/VNAV all Cats. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.

### APP CRS

- **CH 65802**
- **W31A**
- **305°**

### APP CRS

- **Rwy 1dg 5002**
- **TDZE 925**
- **Apt Elev 941**

### ODALS

- **MISSED APPROACH:** Climb to 1800, then climbing left turn to 3000 direct ULAKE and hold.

### WAAS

- **CH 65802**
- **W31A**

### WAAS

- **ELEV 941**
- **TDZE 925**

### LNAV/VNAV DA

- **1432-1/8**
- **507 (500-1/8)**

### CATEGORY

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td></td>
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<tr>
<td>1175-3/4</td>
<td>250 (300-3/4)</td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>1420-3/4</td>
<td>495 (500-3/4)</td>
<td></td>
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<tr>
<td>LNAV MDA</td>
<td>1420-1/4</td>
<td>1440-1</td>
<td>495 (500-1/4)</td>
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<tr>
<td>1540-1/2</td>
<td>599 (600-1/4)</td>
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<tr>
<td>1800-2/3</td>
<td>859 (900-2/3)</td>
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<tr>
<td>CIRCLING</td>
<td>1420</td>
<td>479 (500-1)</td>
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<tr>
<td>1440</td>
<td>499 (500-1)</td>
<td>1540-1/2</td>
<td>599 (600-1/4)</td>
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<tr>
<td>1800-2/3</td>
<td>859 (900-2/3)</td>
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</tbody>
</table>

### AWOS-3

- **118.45**

### GREENSBORO APP CON

- **124.35**
- **269.225**

### CLNC DEL

- **124.85**

### UNICOM

- **122.7 (CTAF)**

### WAAS

- **65802**
- **W31A**

### WAAS

- **125°**
- **125°**
- **125°**
- **305°**
- **305°**

### TCH 40

- **3000**

### LNAV only.

- **1.5 NM**
- **2.5 NM**
- **11.6 NM**

### ZAGUP

- **2.7 NM**
- **to RW31**

### UBWAY

- **2.7 NM**
- **to RW31**

### HOLD

- **14000**
- **3000**

### Holding Pattern

- **4 NM**

### RNAV (GPS) RWY 31

- **M5A RW31**
- **25 NM**

### RNAV (GPS) RWY 31

- **5200**

### RNAV (GPS) RWY 31

- **NE-3, 30 NOV 2023 to 25 JAN 2024**

### RNAV (GPS) RWY 31

- **248**

### RNAV (GPS) RWY 31

- **36°38'N-80°01'W**

### RNAV (GPS) RWY 31

- **RNAV (GPS) RWY 31**

### RNAV (GPS) RWY 31

- **BLUE RIDGE (MTV)**

### RNAV (GPS) RWY 31

- **REIL Rwys 13 and 31**

### RNAV (GPS) RWY 31

- **MARTINSVILLE, VIRGINIA**
- **Amdt 3A  22APR21**
Amdt 2 05NOV20

**MARTINSVILLE, VIRGINIA**

**LOCALIZER 111.3**

- **I-UVM**
- **Chan 50**

**APP CRS**

- **305°**

**Rwy Idg**

- **5002**
- **TDZE**
- **25**

**Apt Elev**

- **941**

**LOCALIZER 111.3**

- **I-UVM**
- **Chan 50**

**AWOS-3**

- **118.45**

**GREENSBORO APP CON**

- **124.35**
- **269.225**

**CLNC DEL**

- **124.85**

**UNICOM**

- **122.7** (CTAF)

**PIGGS**

- **LYH** [29.8]

**Procedure NA for arrivals at PIGGS on V222 northeast bound.**

**LOCALIZER 111.3**

- **I-UVM**
- **Chan 50**

**2800**

- **BALES**

**HOMGU**

- **I-UVM**
- **3.1**

**One Minute Holding Pattern**

- **125°**
- **5000**
- **2800**

**HOMGU FIX MINIMUMS**

- **S-31**
  - **1380-3/4** 455 (500-3/4)
  - **1380-1/2** 455 (500-1/2)

**CIRCLING**

- **1420-1**
  - **479 (500-1)**
  - **499 (500-1)**

**CIRCLING**

- **1440-1**
  - **1540-1 1/2**
  - **1540-1 1/2**

- **1800-2 1/4**
  - **859 (900-2 1/4)**

**MIRL Rwy 13-31**

- **REIL Rwy 13 and 31**

**FAF to MAP 5 NM**

- **Knots**
  - **60**
  - **90**
  - **120**
  - **150**
  - **180**

- **Min:Sec**
  - **5:00**
  - **3:20**
  - **2:30**
  - **2:00**
  - **1:40**

**BLUES RIDGE (MTV)**

** groundbreaking **

**MARTINSVILLE, VIRGINIA**

Amdt 2 05NOV20

**NE-3, 30 Nov 2023 to 25 Jan 2024**

**36°38'N-80°01'W**

249
RNAV (GPS) RWY 3
ACCOMACK COUNTY (MFV)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Rwy 3 helicopter visibility reduction below ½ SM NA.

**MISSED APPROACH:** Climb to 500 then climbing right turn to 2000 direct UCGEL and hold.

**AWOS 3**
- 118.175

**PATUXENT APP CON**
- 127.95 314.0

**UNICOM**
- 122.8 (CTAF) 0

---

**APPROACH**

**CH 42905**

**WAAS**

**APP CRS**
- 034°

**Rwy Idg**
- 5000

**TDZE**
- 47

**Apt Elev**
- 48

---

**UNICOM**
- 122.8 (CTAF) 0

---

**LNAV/ VNAV**

**DA**
- 297-1
- 250 (300-1)

---

**LNAV MDA**

**500-1**
- 453 (500-1)

**500-1\(\frac{1}{2}\)**
- 453 (500-1\(\frac{1}{2}\))

---

**CIRCLING**

**500-1**
- 452 (500-1)

---

**CATEGORY**

**A**
- 297-1

**B**
- 250 (300-1)

**C**
- 349-1
- 302 (400-1)

**D**
- 500-1
- 453 (500-1\(\frac{1}{2}\))

---

**TDZE**
- 47

---

**AWOS-3**
- 118.175

---

**HOLDING PATTERN**

**GP 3.00° TCH 40**

**UCGEL**
- 6.1 NM
- 3.1 NM
- 1.3 NM

**MELFA**
- 1500

---

**MELFA, VIRGINIA**

Amdt 2B 11AUG22

---

**37°39'N-75°46'W**
MELFA, VIRGINIA

APP CRS
214°

Rwy Idg 5000
TDZE 48
Apt Elev 48

RNP APCH.

RNAV (GPS) RWY 21
ACCOMACK COUNTY (MFV)

MISSED APPROACH: Climb to 2000 direct UCGEL and hold.

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>PATUXENT APP CON*</th>
<th>UNICOM</th>
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</thead>
<tbody>
<tr>
<td>118.175</td>
<td>127.95 314.0</td>
<td>122.8 (CTAF)</td>
</tr>
</tbody>
</table>

Procedure NA for arrival on CCV VORTAC airway radials 323 CW 041.

MISSED APCH FIX

Rwy 21 helicopter visibility reduction below 3/4 SM NA.

ACCOMACK COUNTY (MFV)

RNAV (GPS) RWY 21

37°39'N-75°46'W
251
DME required. Rwy 3 helicopter visibility reduction below ¾ SM NA.

**AWOS-3**
- Category: A
- 118.175

**PAXTON APP CON**
- Category: A
- 127.95 314.0

**UNICOM**
- Category: A
- 122.8 (CTAF) 0

Procedure NA for arrivals on CCV VORTAC airway radials 016 CW 041.
Procedure NA at night. Rwy 17 helicopter visibility reduction below 1 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

RNP APCH - GPS.

Procedure NA at night. Rwy 17 helicopter visibility reduction below 1 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

RNP APCH - GPS.

Procedure NA at night. Rwy 17 helicopter visibility reduction below 1 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

RNP APCH - GPS.
RNAV (GPS) Y RWY 35
SUMMIT (EYV)

MISSED APPROACH: Climbing left turn to 2000 direct WENDS and hold.

AWOS-3
132.325

PHILADELPHIA APP CON
118.35  323.1

UNICOM
122.725 (CTAF)

Final approach course offset 20°.

Procedure NA for arrival on ENO VORTAC airway radials 271 CW 063.

AIRWAY

AIRWAY

AIRWAY

AIRWAY

AIRWAY

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AIRWAY

AIRWAY

AIRWAY

AIRWAY
RNAV (GPS) Z RWY 35
SUMMIT (EVY)

AWOS-3 132.325
PHILADELPHIA APP CON 118.35 323.1
UNICOM 122.725 (CTAF) 123.5

MISSED APPROACH: Climb to 2000 direct EPKAW and hold.

Procedure NA for arrivals at ENO VORTAC airway radials 251 CW 044.

Procedure NA for arrivals at TACKS on V123-312 southwest bound.

RNAV (GPS) Z RWY 35
SUMMIT (EVY)
Circling NA to Rwys 11 and 29. Circling Rwy 17 NA at night. When local altimeter setting not received, use Wilmington altimeter setting and increase all MDAs 40 feet.

Procedure NA for arrivals at DQO VORTAC airway radials 168 CW 286.

Procedure NA for arrivals at ENO VORTAC airway radials 267 CW 025.

Procedure NA for arrivals at DQO VORTAC airway radials 180° 288°.

Procedure NA for arrivals at ENO VORTAC airway radials 025°.

MISSED APPROACH: Climbing right turn to 2000 on heading 288° and 244° bearing from HADIN LOM to USTIN INT/DQO 15.4 DME and hold, continue climb-in-hold to 2000.

Apt Elev
TDZE
Apt Elev

DME and hold, continue climb-in-hold to 2000.

Local altimeter setting not received, use Wilmington altimeter setting.

Circling NA to Rwys 11 and 29. Circling Rwy 17 NA at night. When local altimeter setting not received, use Wilmington altimeter setting and increase all MDAs 40 feet.
RNAV (GPS) RWY 23
SMITH MOUNTAIN LAKE (W91)

Apt Elev  892
TDZE  892

DME/DME RNP-0.3 NA. Use Lynchburg altimeter setting; when not received, use Roanoke altimeter setting and increase all MDA 40 feet. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 4000 direct ESISE and on track 212° to PIGGS and hold.

LYH ASOS  119.8
ROANOKE APP CON  135.0  254.325
UNICOM  122.975 (CTAF)

ESISE and on track 212° to PIGGS and hold.

Visual Segment - Obstacles.

RNAV (GPS) RWY 23
MONETA, VIRGINIA
Orig-D 04NOV21

SMITH MOUNTAIN LAKE (W91)
RNAV (GPS) RWY 23
MONETA, VIRGINIA
AL-6865 (FAA)
DME/DME RNP: 0.3 NA. Procedure NA at night. Visibility reduction by helicopters NA. When local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all MDA 100 feet.

MISSING APPROACH: Climbing left turn to 6100 direct YOSUG and hold, continue climb-in-hold to 6100.

AWOS-3 118.175

WASHINGTON CENTER 133.2 282.2

UNICOM 122.8 (CTAF)
RNAV (GPS)-B
NEW MARKET (8W2)

Procedure NA at night. When local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all MDA 100 feet.

MISSED APPROACH: Climbing right turn to 5700 direct JULNU and hold, continue climb-in-hold to 5700.

Final approach course offset 29.96°.

Final approach course offset 29.96°.

Final approach course offset 29.96°.

Final approach course offset 29.96°.

Final approach course offset 29.96°.

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Final approach course offset 29.96°.

Final approach course offset 29.96°.
**NEWPORT NEWS/WILLIAMSBURG INTL (PHF)**

**LOC/DME I-PHF**
- **110.1**
- **Channel 38**

**LOC CRS**
- **067°**
- **TDZE 40**
- **Apt Elev 42**

**MALS R**
- **MISSED APPROACH:** Climb to 2500 on heading 067° and on CCV VORTAC R-253 to RIPPS INT/CCV 17.5 DME and hold, continue climb-in-hold to 2500.

**ATIS**
- **128.65**

**HARDCUM**
- **108.8 HCM**
- **Channel 25**

**114.35 HPW**
- **Chan 90 (V)**
- **R-140**

**114.35 HPW**
- **Chan 90 (V)**
- **R-148**

**HOLD**
- **4500**
- **2000**

**JAWES INT**
- **I-PHF 13.6**

**PROCEDURE NA for arrival on CVI VORTAC airway radials 351 CW 055.**

**COFIELD**
- **114.6 CVI**
- **Channel 93**

**4500**
- **247°**
- **2000**
- **067°**

**GS 3.00°**
- **TCH 59**
- **6 NM**
- **4.8 NM**
- **1.2 NM**

**CATEGORY**
- **A**
- **B**
- **C**
- **D**

**S-ILS 7 #**
- **240/24**
- **200 (200-1/2)**

**S-LOC 7**
- **480/24**
- **440 (500-1/2)**
- **480/40**
- **440 (500-1/4)**

**CIRCLING**
- **520-1**
- **540-1**
- **760-2**
- **780-2 1/4**
- **HARDCUM**
- **HCM 108.8**
- **Channel 25**

**NEWPORT NEWS, VIRGINIA**

Amdt 35 21MAY20

**37°08’N-76°30’W**

**NEWPORT NEWS/WILLIAMSBURG INTL (PHF)**

**ILS or LOC RWY 7**

**NEWPORT NEWS, VIRGINIA**

**AL-957 (FAA)**

**23278**

**NE-3, 30 NOV 2023 to 25 JAN 2024**
MISSED APPROACH: Climb to 500 then climbing right turn to 2500 on heading 080° and CCV VORTAC R-254 to HASBA INT/I-DHY 11.6 DME and hold.

Transitions to HASBA INT may require the use of crossing radial from another transition facility or the use of the transitions facility's DME.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

MISSED APPROACH: Climb to 2000 direct PANLE and hold.

MISSED APCH FIX

ATIS 128.65
NORFOLK APP CON 125.7 335.625
NEWPORT NEWS TOWER* 118.7(CTAF) 257.9
GND CON 121.9 348.6
CLNC DEL 121.65 225.4
UNICOM 122.95

APP CRS 022°
Rwy Idg 6526
TDZE 38
Apt Elev 42

SAWS
CH 61020
W02A

NEWPORT NEWS TOWER

NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

NEWPORT NEWS, VIRGINIA

Amdt 1C 21 MAY 2023 to 25 JAN 2024

NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

RNAV (GPS) RWY 2
NE-3, 30 NOV 2023 to 25 JAN 2024
RNAV (GPS) RWY 7
NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 
-11°C or above 54°C.
For inop MALSR, increase LNAV/VNAV all Cats visibility to 1 mile.

ATIS
128.65
NORFOLK APP CON
125.7 335.625
NEWPORT NEWS TOWER
118.7 (CTAF) 257.9
GND CON
121.9 348.6
CLNC DEL
121.65 225.4
UNICOM
122.95

Procedure NA for arrivals at HCM VOR/TAC on V38 westbound.
Procedure NA for arrival on CVI VOR/TAC airway radials 351 CW 086.

ATIS
125.7 335.625
NEWPORT NEWS TOWER
118.7 (CTAF) 257.9
GND CON
121.9 348.6
CLNC DEL
121.65 225.4
UNICOM
122.95

Procedure NA for arrivals at HCM VOR/TAC on V38 westbound.
Procedure NA for arrival on CVI VOR/TAC airway radials 351 CW 086.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 
-11°C or above 54°C.
For inop MALSR, increase LNAV/VNAV all Cats visibility to 1 mile.

ATIS
128.65
NORFOLK APP CON
125.7 335.625
NEWPORT NEWS TOWER
118.7 (CTAF) 257.9
GND CON
121.9 348.6
CLNC DEL
121.65 225.4
UNICOM
122.95

Procedure NA for arrivals at HCM VOR/TAC on V38 westbound.
Procedure NA for arrival on CVI VOR/TAC airway radials 351 CW 086.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 
-11°C or above 54°C.
For inop MALSR, increase LNAV/VNAV all Cats visibility to 1 mile.

ATIS
128.65
NORFOLK APP CON
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NEWPORT NEWS TOWER
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121.9 348.6
CLNC DEL
121.65 225.4
UNICOM
122.95

Procedure NA for arrivals at HCM VOR/TAC on V38 westbound.
Procedure NA for arrival on CVI VOR/TAC airway radials 351 CW 086.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 
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For inop MALSR, increase LNAV/VNAV all Cats visibility to 1 mile.

ATIS
128.65
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NEWPORT NEWS TOWER
118.7 (CTAF) 257.9
GND CON
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CLNC DEL
121.65 225.4
UNICOM
122.95

Procedure NA for arrivals at HCM VOR/TAC on V38 westbound.
Procedure NA for arrival on CVI VOR/TAC airway radials 351 CW 086.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 
-11°C or above 54°C.
For inop MALSR, increase LNAV/VNAV all Cats visibility to 1 mile.

ATIS
128.65
NORFOLK APP CON
125.7 335.625
NEWPORT NEWS TOWER
118.7 (CTAF) 257.9
GND CON
121.9 348.6
CLNC DEL
121.65 225.4
UNICOM
122.95

Procedure NA for arrivals at HCM VOR/TAC on V38 westbound.
Procedure NA for arrival on CVI VOR/TAC airway radials 351 CW 086.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 
-11°C or above 54°C.
For inop MALSR, increase LNAV/VNAV all Cats visibility to 1 mile.

ATIS
128.65
NORFOLK APP CON
125.7 335.625
NEWPORT NEWS TOWER
118.7 (CTAF) 257.9
GND CON
121.9 348.6
CLNC DEL
121.65 225.4
UNICOM
122.95

Procedure NA for arrivals at HCM VOR/TAC on V38 westbound.
Procedure NA for arrival on CVI VOR/TAC airway radials 351 CW 086.
NEWPORT NEWS, VIRGINIA

NE-3, 30 NOV 2023 to 25 JAN 2024

NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

RNAP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.
Rwy 20 helicopter visibility reduction below ¾ SM NA.

ATIS NORFOLK APP CON NEWPORT NEWS TOWER* GND CON CLNC DEL UNICOM
128.65 125.7 335.625 118.7(CTAF) * 257.9 121.9 348.6

NEWPORT NEWS TOWER
118.7 (CTAF)

MISSED APPROACH: Climb to 2300 direct NUTIY and hold.

RNP APCH.

NEWPORT NEWS/TOWER
118.7 (CTAF)

Procedure NA for arrivals at CCV VORTAC on V286 southeast bound.

NE-3, 30 NOV 2023 to 25 JAN 2024

NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

265

MAP

NEWPORT NEWS, VIRGINIA

Amdt 2C 21 MAY 2020

MISSED APCH FIX

NUTIY

ELEV 42 TDZE 42
RNAV (GPS) RWY 25
NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

**MISSING APPROACH:** Climb to 2000 direct JAWES and hold.

**FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -11° C OR ABOVE 54° C.**

**ATIS** | **NORFOLK CON** | **NEWPORT NEWS TOWER** | **GND CON** | **CLNC DEL** | **UNICOM**  
--- | --- | --- | --- | --- | ---  
128.65 | 125.7 | 118.7 (CTAF) | 121.9 | 348.6 | 121.65  
257.9 | 225.4 | 122.95 | 122.95 | 122.95 | 122.95

**RNAV (GPS) RWY 25**

**VGSi and RNAV glidepath not coincident (VGSi Angle 3.00/TCH 71).**

**LNAV only**

**1.2 NM**

**TO RW25**

**2000**

**067°**

**247°**

**6000**

**4 NM**

**HOLDING PATTERN**

**GP 3.00°**

**TCH 55**

**CATEGORY**

<table>
<thead>
<tr>
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<td>2</td>
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</table>

**LPV DA**

241-⅓ 200 (200-⅔)

**LNAV/VNAV DA**

516-1⅛ 475 (500-1⅛)

**LNAV MDA**

480-1 439 (500-1)

**CIRCLING**

520-1 478 (500-1)

440-1 498 (500-1)

480-1 439 (500-1)

**760-2**

718 (800-2)

780-2 ¾ 738 (800-2¾)

**NE-3,** 30 NOV 2023 to 25 JAN 2024
DME required.

Rwy 20 helicopter visibility reduction below 3/4 SM NA.

MISSING APPROACH: Climb to 2000 then right turn direct HCM VORTAC and hold.

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS, VIRGINIA

NEWPORT NEWS, VIRGINIA

NE-3, 30 NOV 2023 to 25 JAN 2024

NE-3, 30 NOV 2023 to 25 JAN 2024

NEWPORT NEWS, VIRGINIA

NEWPORT NEWS, VIRGINIA

Amdt 1D  21MAY20

Amdt 1D  21MAY20

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

Rwy 20 helicopter visibility reduction below 3/4 SM NA.

MISSING APPROACH: Climb to 2000 then right turn direct HCM VORTAC and hold.

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS, VIRGINIA

NEWPORT NEWS, VIRGINIA

Amdt 1D  21MAY20

Amdt 1D  21MAY20

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

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GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

Rwy 20 helicopter visibility reduction below 3/4 SM NA.

MISSING APPROACH: Climb to 2000 then right turn direct HCM VORTAC and hold.

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS, VIRGINIA

NEWPORT NEWS, VIRGINIA

Amdt 1D  21MAY20

Amdt 1D  21MAY20

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

Rwy 20 helicopter visibility reduction below 3/4 SM NA.

MISSING APPROACH: Climb to 2000 then right turn direct HCM VORTAC and hold.

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS, VIRGINIA

NEWPORT NEWS, VIRGINIA

Amdt 1D  21MAY20

Amdt 1D  21MAY20

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

Rwy 20 helicopter visibility reduction below 3/4 SM NA.

MISSING APPROACH: Climb to 2000 then right turn direct HCM VORTAC and hold.

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS, VIRGINIA

NEWPORT NEWS, VIRGINIA

Amdt 1D  21MAY20

Amdt 1D  21MAY20

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

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GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

Rwy 20 helicopter visibility reduction below 3/4 SM NA.

MISSING APPROACH: Climb to 2000 then right turn direct HCM VORTAC and hold.

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS, VIRGINIA

NEWPORT NEWS, VIRGINIA

Amdt 1D  21MAY20

Amdt 1D  21MAY20

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

Rwy 20 helicopter visibility reduction below 3/4 SM NA.

MISSING APPROACH: Climb to 2000 then right turn direct HCM VORTAC and hold.

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS/WILLIAMSBURG INTL (PHF')

NEWPORT NEWS, VIRGINIA

NEWPORT NEWS, VIRGINIA

Amdt 1D  21MAY20

Amdt 1D  21MAY20

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

ATIS 128.65  NORFOLK APP CON 125.7 335.625  NEWPORT NEWS TOWER* 118.7 (CTAF)  257.9

GND CON 121.9 348.6  CLNC DEL 121.65 225.4  UNICOM 122.95

Rwy 20 helicopter visibility reduction below 3/4 SM NA.

MISSING APPROACH: Climb to 2000 then right turn direct HCM VORTAC and hold.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
HENRY THREE DEPARTURE
(HENRY3.PHF) 26MAY16

NEWPORT NEWS/WILLIAMSBURG INTL (PHF)
NEWPORT NEWS, VIRGINIA

ATIS
128.65
CLNC DEL
121.65 225.4
GND CON
121.9 348.6
NEWPORT NEWS TOWER ★
118.7 257.9 348.6
NORFOLK DEP CON
124.9 335.625

NOTE: RADAR required.
TAKEOFF MINIMUMS

NOTE: Chart not to scale.

TAKEOFF ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climb heading 022° to 2000, thence . . .
TAKEOFF RUNWAY 7: Climb heading 067° to 2000, thence . . .
TAKEOFF RUNWAY 20: Climbing right turn to 2000 on heading 250°, thence . . .
TAKEOFF RUNWAY 25: Climb heading 247° to 2000, thence . . .

. . . on vectors to assigned route/fix. Expect clearance to requested altitude 10 minutes after departure.
RNAV (GPS) RWY 5
CHESAPEAKE RGNL (CPK)

When local alimeter setting not received, use Norfolk Intl altimeter setting and increase all DA 36 feet and all MDA 40 feet; increase LNAV Cats C and D visibility 3/4 mile. Baro-VNAV NA when using Norfolk Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). For inoperative MALSR, increase LNAV/VNAV all Cats visibility to 3/4 mile.

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
<td>LPV DA</td>
<td>218-1/2</td>
<td>200 (200-1/2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>278-1/2</td>
<td>260 (300-1/2)</td>
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<tr>
<td>LNAV MDA</td>
<td>400-1/2</td>
<td>382 (400-1/2)</td>
<td>400-5/8</td>
<td>382 (400-5/8)</td>
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<tr>
<td>CIRCLING</td>
<td>460-1</td>
<td>480-1</td>
<td>520-1/2</td>
<td>580-2</td>
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<td></td>
<td>441 (500-1)</td>
<td>461 (500-1)</td>
<td>501 (600-1/2)</td>
<td>561 (600-2)</td>
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</table>

Procedure NA for arrivals at SUNNS on V139 southwest and northeast bound.

Procedure NA for arrivals at DRONE on V1 southwest bound.

Procedure NA for arrival on ECG VOR/DME airway radials 250 CW 265.

LVSI and RNAV glidepath not coincident (LVSI Angle 3.00/TCH 43).

MALSR

Amdt 1C 30DEC21

NE-3, 30 NOV 2023 to 25 JAN 2024
Rwy 23 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Norfolk Intl altimeter setting and increase all DA 36 feet and all MDA 40 feet. Baro-VNAV and VDP NA with Norfolk Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 43°C.

Procedure NA for arrival on ORF VORTAC airway radials 216 CW 233.

MISSED APPROACH: Climb to 2000 direct NALDE and hold.
RNAV (GPS) RWY 10
HAMPTON ROADS EXEC (PVG)

**MISSED APPROACH:** Climb to 1600 then climbing right turn to 2500 direct PSALM and hold.

- **AWOS-3PT** 118.375
- **NORFOLK APP CON** 118.9 353.7
- **UNICOM** 122.725 (CTAF)

**RNP APCH.**


**Procedure NA for arrivals at DRONE on V1 southwest bound and on V266 southeast bound.**

**Rwy 10 helicopter visibility reduction below ½ SM NA.**

For uncompensated Baro VNAV systems, LNAV/VNAV NA below -1.5°C or above 54°C.

**Amdt 1 15AUG19**

- **MIRL Rwy 2-20**
- **REIL Rwys 10 and 28**
- **HIRL Rwy 10-28**
- **HIRL Rwy 10-28**
RNAV (GPS) RWY 28

HAMPTON ROADS EXEC (PVG)

UNICOM 118.375

25° 30' 16.8" N 75° 46' 36.1" W

MISSED APPROACH: Climb to 1600 then climbing left turn to 2500 direct PSALM and hold.

Circling NA to Rwy 2 and 20.
Circling Cat C NA north of Rwy 10-28.
Rwy 28 helicopter visibility reduction below 1 SM NA.

PSALM

Visual Segment - Obstacles.

RNAV (GPS) RWY 28

RNP APCH.

Rwy 28 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 1600 then climbing left turn to 2500 direct PSALM and hold.

Circling NA to Rwy 2 and 20.
Circling Cat C NA north of Rwy 10-28.
Rwy 28 helicopter visibility reduction below 1 SM NA.

RNAV (GPS) RWY 28

HAMPTON ROADS EXEC (PVG)

NE-3, 30 NOV 2023 to 25 JAN 2024

CIRCLING

500-1

472 (500-1)

780-2

752 (800-2)

NA

HIRL Rwy 10-28

MIRL Rwy 2-20

REIL Rwy 10 and 28

NE-3, 30 NOV 2023 to 25 JAN 2024
ILS or LOC RWY 5
NORFOLK INTL (ORF)
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -9°C (16°F) or above 54°C (130°F). GPS required.

MISSED APPROACH: Climb to 2000 on track 047° to TECHI and on track 023° to OUTLA and hold.

See planview for multiple IF locations.

2000 tr 047° TECHI tr 023° OUTLA

RNP 0.10 DA 350/26 324 (400-½)
RNP 0.30 DA 454/40 428 (500-⅘)

AUTHORIZATION REQUIRED

NORFOLK, VIRGINIA
Amdt 1 01FEB18

36°54'N-76°12'W

36°54'N-76°12'W
For uncompensated Baro-VNAV systems, procedure NA below -9°C (16°F) or above 54°C (130°F). GPS required. For inop ALS, increase RNP 0.10 DA visibility all Cats to 1½ SM, increase RNP 0.30 DA visibility all Cats to 1½ SM.

MISSED APPROACH: Climb to 2000 on track 227° to CALEY and hold.

Radar Required

See planview for multiple IF locations.

Authorization Required

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>RNP 0.10 DA</td>
<td>432-⅔</td>
<td>406 (500-⅔)</td>
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<tr>
<td>RNP 0.30 DA</td>
<td>491-⅓</td>
<td>465 (500-⅓)</td>
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</table>
Procedure NA for arrivals at SUNNS on V139 southwest bound.

Visual Segment - Obstacles.
RNAV (GPS) Z RWY 23
NORFOLK INTL (ORF)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -9°C (16°F) or above 54°C (130°F).
DME/DME RNP-0.3 NA.

ATIS
127.15

NORFOLK APP CON
118.9 353.7

NORFOLK TOWER
120.8 257.8

NORFOLK TOWER
120.8

CIRCLING
480-1
454 (500-1/2)
540-1
513 (600-1/2)
900-2 3/4

GA NAV
226 1/2
200 (200 1/2)

MISSED APCH FIX
CALEY

Procedure NA for arrivals at CCV VORTAC on V1-139 northeast bound.

REIL Rwy 14 and 32
HIRL Rwy 23
MIRL Rwy 14-32
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing right turn to 2000 via ORF R-041 to JIMMY Int/11.8 DME and hold.
**Rwy 14 helicopter visibility reduction below 3/4 SM NA. DME required.**

**MISSED APPROACH:** Climbing left turn to 2000 on ORF VORTAC R-041 to JIMMY INT/ORTH 11.8 DME and hold.

### NORFOLK INTL (ORF)

**ATIS**
127.15

**NORFOLK APP CON**
118.9 353.7

**NORFOLK TOWER**
120.8 257.8

**GND CON**
121.9

**CLNC DEL**
118.5

---

**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**VOR RWY 14**

---

**NORFOLK, VIRGINIA**

**Amdt 3 01FEB18**

**36°54'N-76°12'W**

---
RIVER VISUAL RWY 5

RADAR vectors will be provided to the Lamberts Point Terminal. Proceed visually along the Elizabeth River to the extended centerline of Rwy 5. The I-ORF and MALSR are available for supplemental guidance.

Weather minimums: 2100 foot ceiling and 5 mile visibility.

Vertical Guidance Navaid and Angle: I-ORF 3.00°

RIVER VISUAL RWY 5

Radar not allowed at night.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RWY 5**: Climb heading 047°. Expect radar vectors to assigned departure route/fix. Thence . . . .

**TAKEOFF RWY 14**: Climb heading 137°. Expect radar vectors to assigned departure route/fix. Thence . . . .

**TAKEOFF RWY 23**: Climb heading 227°. Expect radar vectors to assigned departure route/fix. Thence . . . .

**TAKEOFF RWY 32**: Climb heading 317°. Expect radar vectors to assigned departure route/fix. Thence . . . .

. . . . maintain 4000 feet, expect clearance to requested altitude 10 minutes after departure.
**NORFOLK, VIRGINIA**

**LOC I-NGU 108.95**

**APCH CRS 101**

**Rwy Idg 8071**

**TDZE 14**

**Arpt Elev 15**

**AL-290 [USN]**

**NORFOLK NS (CHAMBERS FIELD) (KNGU)**

---

**TACAN required.**

- **When ALS inop, increase vis to 3/4 mile.**
- **When ALS inop, increase CAT A/B vis to 1 mile, CAT C/D vis to 1 1/2 miles.**
- **Circling not authorized S of Rwy 10-28.**

---

**ATIS**

- **118.425 338.225**

**APP CON**

- **118.9 273.475**

**CHAMBERS TOWER**

- **124.3 379.15**

**GND CON**

- **121.8 370.85**

**CINC DEL**

- **120.7 339.8**

**ASR/PAR**

---

**NORFOLK NS HELIPORT 1 NM NW**

- Use caution in circling approach.

- **CAUTION:** Do not mistake Norfolk Intl 5 NM SE for Chambers Fld. Chambers Fld has a single runway, Norfolk Intl has intersecting runways.

- **PAR RPI 1020/TCH 5d not coincident with ILS RPI 950/TCH 5o.**

- Final approach course offset 1.27° and passes 59' from rwy threshold.

---

**CHAMBERS Tower**

- **Chan 86(Y) NGU**

- **LOCALIZER 108.95**

- **LOC offset 1.27°**

---

**EMERG SAFE ALT 100 NM 4100**

**VGS and ILS glidepath not coincident (VGS Angle 3.00/TCH 35).**

---

**CATEGORY**

<table>
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<th>A</th>
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<td>264-1/2</td>
<td>250</td>
<td>(300-1/2)</td>
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<tr>
<td>440-1/2</td>
<td>426</td>
<td>(500-1/2)</td>
<td>440-3/4</td>
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**CIRCLING**

- **480-1**

- **465**

- **540-1**

- **525**

- **540-1/2**

- **525**

- **580-2**

- **565**

- **600-2**

---

**HRLG**

- **Rwy 10-28**

- **REIL Rwy 10-28**

- **TDZL/CL Rwy 10-28**

**NORFOLK NS (CHAMBERS FIELD) (KNGU)**

**Amdt 1 26JAN23**

---

**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**289**
**Circling not authorized S of Rwy 10-28**

CAUTION: Arc segment enters KNTU or KLIQ class D airspace.

**CAUTION:** Intermediate segment 5 NM less than minimum 6 NM for CAT CD.

EMERG SAFE ALT 100 NM 4100

<table>
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<td>506 (600-1)</td>
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<td>CIRCLING*</td>
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<td>540-1</td>
<td>540-1/2</td>
<td>580-2</td>
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<td>505 (600-1)</td>
<td>525 (600-1)</td>
<td>525 (600-1/2)</td>
<td>565 (600-2)</td>
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NE-3, 30 NOV 2023 to 25 JAN 2024

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NE-3, 30 NOV 2023 to 25 JAN 2024

CHAMBERS TWO DEPARTURE (OBSTACLE) (NGU2, NGU)

ATIS 118 425 338 225
CLNC DEL 120 7 339 8
GND CON 121 8 370 85
CHAMBERS TOWER 124 3 379 15
NORFOLK DEP CON 125 2 363 125
WASHINGTON CENTER 123 85 323 0

RICHMOND 114 1 RIC
Chan 88

FLAT ROCK 113 3 FAK
Chan 80

HOPEWELL 112 0 HPW
Chan 57

CHAMBERS
Chan 86Y NGU

RADAR required
Rwy Knots 60 120 180 240 300 360
†10 G V/ (V/frm) 400 800 1200 1600 2000 2400
*28 G V/ (V/frm) 240 480 720 960 1200 1440

Elevated Facilities

† Minimum
‡ to 500
†‡ to 600

N 36° 55' 06" W 75° 12' 79"
SCHOLES N 37° 10' 99" W 75° 12' 93"

R-095

NOTE chart not to scale
(NARRATIVE ON FOLLOWING PAGE)
NE-3, 30 NOV 2023 to 25 JAN 2024

CHAMBERS TWO DEPARTURE (OBSTACLE) (NGU2•NGU)

AL-290 [USN]

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 10: Climbing left turn heading 050° Thence...

TAKEOFF RWY 28: Climb heading 280° Thence...

...via RADAR vectors to assigned transition. Maintain 2000 or assigned altitude. Expect clearance to requested altitude/flight level 10 minutes after departure.

ATLIC TRANSITION (NGU2•ATLIC): Via vectors to ATLIC.

CAPE CHARLES TRANSITION (NGU2•CCV): Via vectors to CCV VORTAC. (NOTE: For altitudes 5000 and below).

ELIZABETH CITY TRANSITION (NGU2•ECG): Via vectors to SWOPE, then via ORF VORTAC R-201 to VISOW (ORF R-201/33 DME), then direct ECG VOR/DME.

FLAT ROCK TRANSITION (NGU2•FAK): Via vectors to WAIKS, then via ORF VORTAC R-290 to KELLE, then direct FAK VORTAC.

HARCUM TRANSITION (NGU2•HCM): * Via vectors to HCM VORTAC.

HOPEWELL TRANSITION (NGU2•HPW): Via vectors to HPW VORTAC.

J174 TRANSITION (NGU2•ORF): Via vectors to J174.

SALISBURY TRANSITION (NGU2•SBY): Via vectors to SCHOL, then SBY R-200 to SBY VORTAC.

SNOW HILL TRANSITION (NGU2•SWL): Via vectors to SCHOL, thence SBY R-200 to V139 to SWL VORTAC.

V139 TRANSITION (NGU2•ORF): Via vectors to V139.

* For routing to NHK/BWI/MTN/DCA METRO AREA via the following:
NHK-V33 COLIN V213 PXT. (NOTE For altitudes 7000 or 9000 only.)
BWI/MTN-V33 COLIN V213 PXT V93 GRACO. (NOTE: For altitudes 7000 or 9000 only.)
DCA/ADW/DAA-HCM R-330 V376 IRONS. (NOTE: For altitude 8000 only.)

NOTE: Transitions are part of the Preferred Departure Route (PDR) system and established as an Air Traffic flow procedure from the Norfolk Terminal Area. These fixes are to be used as the initial filing point out of NS Norfolk.
Limit all segments to 90 KIAS.
Increase to 90 KIAS (or greater) upon reaching the missed approach altitude, maintain 90 KIAS (or greater) while in holding.

Proceed VFR from PUNYI or conduct the specified missed approach
NS NORFOLK HELIPORT, NHU, 150.00/0 65.
**COPTER RNAV (GPS) 276°**

**NORFOLK, VIRGINIA**

AIRPORT CRS
- **APCH CRS 276°**
- **Rwy Idg N/A**
- **TDZE N/A**
- **Arpt Elev 10**

**RNP APCH**
- **Circling visibility reduction by helicopters NA.**

**[USN]**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**NORFOLK NS HELIPORT (KNHU)**

**CHAMBERS TOWER**
- **124.3 379.15**

**NAVY NORFOLK HEL TOWER**
- **126.375 290.5**

**GND CON**
- **298.95**

**Limit all segments to 90 KIAS.**

Increase to 90 KIAS (or greater) upon reaching the missed approach altitude; Maintain 90 KIAS (or greater) while in holding.

**Proceed VFR from OFIKU or conduct the specified missed approach NS NORFOLK HELIPORT, MHU, 275.00/0.65.**

**EMERG SAFE ALT 100 NM 4100**

**CATEGORY**
- **CIRCLING**
- **COPTER**
  - **540-1**
  - **530**
  - **500-1**

**MIRL all rwy**

**CIRCLING**

**CIRCLING**

**NORFOLK, VIRGINIA**

**36°57'N - 76°18'W**

**NORFOLK NS HELIPORT (KNHU)**

**Amdt 1 30NOV23**

**23334**

**MISSING APPROACH. Climbing right turn to 2000 direct JEFFR and hold.**
Circling not authorized S of H2

LIMIT ALL SEGMENTS TO 90 KIAS.

INCREASE TO 90 KIAS (OR GREATER) UPON REACHING THE MISSED APPROACH ALTITUDE.

MAINTAIN 90 KIAS (OR GREATER) WHILE IN HOLDING.

PROCEED EAST VISUALLY FROM MAP, OR CONDUCT THE SPECIFIED MISSED APPROACH. REMAIN NORTH OF THE PIER PENINSULA.

CATEGORIES COPERTER

CIRCLING  540-1\%  530  (600-1\%)

MIRL all rwys

NORTFOLK, VIRGINIA
Orig 30NOV23
COPPER PRIDE TWO DEPARTURE (NHU2•NHU)
NORFOLK, VIRGINIA
Orig 30NOV23

[USN]

DEPARTURE ROUTE DESCRIPTION

TAKEOFF HELIPORT WESTBOUND: Climb heading 341° then climbing left turn to JEFFR, minimum climb rate 500 ft/NM to 500, thence...

TAKEOFF HELIPORT EASTBOUND: Climb heading 341° then climbing right turn to DOTTS, minimum climb rate 500 ft/NM to 500, thence...

...via RADAR vectors to assigned transition. Maintain 2000 or assigned altitude. Expect clearance to requested altitude/flight level 10 minutes after departure.

ATLIC TRANSITION (NHU2•ATLIC): Via vectors to ATLIC.

CAPE CHARLES TRANSITION (NHU2•CCV): Via vectors to CCV VORTAC. (NOTE: For altitudes 5000 and below).

ELIZABETH CITY TRANSITION (NHU2•ECG): Via vectors to SWOPE, then via ORF VORTAC R-201 to VISOW (ORF R-201/33 DME), then direct ECG VOR/DME.

FLAT ROCK TRANSITION (NHU2•FAK): Via vectors to WAIKS, then via ORF VORTAC R-290 to KELLE, then direct FAK VORTAC.

HARCUM TRANSITION (NHU2•HCM): Via vectors to HCM VORTAC.

SALISBURY TRANSITION (NHU2•SBY): Via vectors to SCHOL, then SBY R-200 to SBY VORTAC.

SNOW HILL TRANSITION (NHU2•SWL): Via vectors to SCHOL, thence SBY R-200 to V139 to SWL VORTAC.

V139 TRANSITION (NHU2•ORF): Via vectors to V139.

* For routing to NHK/BWI/MTN/DCA METRO AREA via the following: NHK-V33 COLIN V213 PXT. (NOTE For altitudes 7000 or 9000 only.) BWI/MTN-V33 COLIN V213 PXT V93 GRACO. (NOTE: For altitudes 7000 or 9000 only.) DCA/ADW/DAA-HCM R-330 V376 IRONS. (NOTE: For altitude 8000 only.)

NOTE: Transitions are part of the Preferred Departure Route (PDR) system and established as an Air Traffic flow procedure from the Norfolk Terminal Area. These fixes are to be used as the initial filing point out of NS Norfolk.
RNAV (GPS) RWY 9

Category B

Baro-VNAV and VDP NA when using Morgantown altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20° [-4°F] or above 54°C [130°F]. Helicopter visibility reduction below ⅜ SM NA. DME/DME RNP -0.3 NA. When local altimeter setting not received, use Morgantown altimeter setting and increase all DA and MDA 300 feet.

Increase LPV and LNAV/VNAV all Cats visibility ⅝ mile, LNAV Cat C visibility ⅝ mile and Circling Cat C visibility 1 mile.

**MISSED APPROACH:**
Climb to 5600 direct HABEX and hold.

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>CLARKSBURG APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>120.125</td>
<td>119.425 284.65</td>
<td>123.0 (CTAF)</td>
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</table>

**5 NM Holding Pattern**

- PINIC
- 5700
- GP 3.00
- TCH 44

**CLINICAL**

- 3340-1
- 407 (500-1)
- 367 (400-1)

**CIRCLING**

- 3340-1
- 407 (500-1)
- 3500-1 1/2

**ELEV 2933**

**TDZE 2933**

**ICN**

- 302
RNAV (GPS) RWY 27
GARRETT COUNTY (2G4)

**Amdt 2 08JAN15**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
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<tbody>
<tr>
<td>LPV DA</td>
<td>3175-1</td>
<td>250 (300-1)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>3197-1</td>
<td>272 (300-1)</td>
<td>NA</td>
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</tr>
<tr>
<td>LNAV MDA</td>
<td>3240-1</td>
<td>315 (400-1)</td>
<td>NA</td>
<td></td>
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<tr>
<td>CIRCLING</td>
<td>3340-1</td>
<td>3400-1</td>
<td>3500-1/2</td>
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</tr>
</tbody>
</table>

**AWOS-3**

**CLARKSBURG APP CON**

**UNICOM**

**OAKLAND, MARYLAND**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**Uncompensated Baro-VNAV and VDP NA when using Morgantown altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). Helicopter visibility reduction below 3/8 SM NA. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Morgantown altimeter setting and increase all DA and all MDA 300 feet. Increase LPV and LNAV/VNAV all Cats visibility 1/2 mile, LNAV Cat C visibility 3/8 mile and Circling Cat C visibility 1 mile.**

**Climb 5700 direct PINIC and hold.**

**RNAV (GPS) RWY 27**

**OAKLAND, MARYLAND**

**RNAV (GPS) RWY 27**

**GARRETT COUNTY (2G4)**

**ELEV 2933**

**TDZE 2925**

**WAAS CH 86524 W27A**

**APP CRS 268°**

**Rwy Idg 5000**

**Apt Elev 2933**
MISSED APPROACH: Climb to 3500 then climbing right turn to 5000 direct MGW VOR/DME and hold.

Procedure NA for arrival on MGW VOR/DME airway radials 101 CW 121.

VOR/DME MGW
111.6
Chan 53

APP CRS
Rwy Idg
TDZE
Apt Elev

5000
2933
2933

DME required.

VOR RWY 9
GARRETT COUNTY (2G4)

AWOS-3
120.125

CLARKSBURG APP CON *
119.425  284.65

UNICOM
123.0 (CTAF)

OAKLAND, MARYLAND
AL-5876 (FAA)
23054
RNAV (GPS) RWY 2
OCEAN CITY MUNI (OXB)

MISSED APPROACH:
Climbing left turn to 2000 direct CIRAN and hold.

When local altimeter setting not received, use Salisbury altimeter setting and increase all MDAs 60 feet and visibility LNAV Cat C ½ SM and Circling Cat C ¼ SM. Straight-in Rwy 2 NA at night, Circling Rwy 2, 14, 20 NA at night. Rwy 2 helicopter visibility reduction below 1 SM NA.

ASOS 119.025
PATUXENT APP CON * 127.95 314.0
CLNC DEL 121.75
UNICOM 123.05 (CTAF)

Procedure NA for arrivals at SWL VORTAC on V139 southwest bound.

LNAV MDA
CIRCLING

CATEGORY A B C D
LNAV MDA 420-1 409 (500-1) 420-1¼ 409 (500-1¼) NA
CIRCLING 480-1 660-1 660-1¼ 648 (700-1¼) NA

OCEAN CITY, MARYLAND
Orig-D 17JUN21

38°19'N-75°07'W

RNAV (GPS) RWY 2
OCEAN CITY MUNI (OXB)
Rwy 14 helicopter visibility reduction below 1 SM NA.

**MISSED APPROACH:** Climbing right turn to 2000 direct PFAIR and hold.

**APP CRS**

<table>
<thead>
<tr>
<th>Category</th>
<th>LNAV MDA</th>
<th>CIRCLING</th>
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<tbody>
<tr>
<td>A</td>
<td>700-1</td>
<td>700-1</td>
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<tr>
<td>B</td>
<td>684 (700-1)</td>
<td>684 (700-1)</td>
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<td>C</td>
<td>NA</td>
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<td>D</td>
<td>NA</td>
<td>NA</td>
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</table>

**RNAV (GPS) RWY 14**

**Ocean City Muni (OXB)**

**Category:** A

**LNAV MDA:** 700-1

**CIRCLING:** 700-1

**Rwy Idg:** 4074

**TDZE:** 16

**Apt Elev:** 16

**ASOS**

119.025

**PATUXENT APP CON**

127.95 314.0

**CLNC DEL**

121.75

**UNICOM**

123.05 (CTAF)

**RNAV (GPS) RWY 14**

**Ocean City Muni (OXB)**

**Category:** A

**LNAV MDA:** 700-1

**CIRCLING:** 700-1

**Rwy Idg:** 4074

**TDZE:** 16

**Apt Elev:** 16

**ASOS**

119.025

**PATUXENT APP CON**

127.95 314.0

**CLNC DEL**

121.75

**UNICOM**

123.05 (CTAF)
RNAV (GPS) RWY 32
OCEAN CITY MUNI (OXB)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

Assateague Island National Seashore

2000 direct PFAIR and hold.

MISSED APPROACH: Climb to 2000 direct PFAIR and hold.

- VNAV
- LNAV/VNAV

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

Origin: 30 NOV 2023 to 25 JAN 2024

Note: 307

Category: A B C D

LPV DA 261-1 250 (300-1)

LNAV/ VNAV DA 289-1 278 (300-1)

LNAV MDA 380-1 369 (400-1)
LOC RWY 32
OCM 119.025
127.95
314.0
121.75
123.05 (CTAF)
WATERLOO
112.6 ATR
Chan 73
MISS APCH FIX
MISSAPRCH
2.4 NM
2.9
1.7
I-OXB
LOCALIZER 109.15
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LOCALIZER 109.15
I-OXB
Chan 28 (Y)
When local altimeter setting not received, use Salisbury altimeter setting and increase all MDAs 60 feet and visibility Circling Cat C/D 1/4 SM. Circling Rwy 2, 14, 20 NA at night.

MISSED APPROACH: Climbing left turn to 2000 on SBY R-094 to CBEAV INT/11.7 DME and hold.

- **ASOS**: 119.025
- **PATUXENT APP CON**: 127.95 314.0
- **CLNC DEL**: 121.75
- **UNICOM**: 123.05 (CTAF)

Procedure NA for arrivals at SWL VORTAC on V139 southwest bound.

Circling Cat C/D SM. When local altimeter setting not received, use Salisbury altimeter setting.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCLING</td>
<td>860-1 1/4 849 (900-1 1/4)</td>
<td>860-1 1/4 849 (900-1 1/4)</td>
<td>860-2 1/2 849 (900-2 1/2)</td>
<td>860-2 3/4 849 (900-2 3/4)</td>
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<tr>
<td>Knots</td>
<td>60</td>
<td>90</td>
<td>120</td>
<td>150</td>
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<tr>
<td>Min:Seq</td>
<td>4:48</td>
<td>3:12</td>
<td>2:24</td>
<td>1:55</td>
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</table>
**RNAV (GPS) RWY 5L**

**WAAS CH 63997**

**APCH CRS 052°**

**Rwy Idg 8000**

**TDZE 20**

**Arpt Elev 22**

**AL-934 (USN) OCEANA NAS (APOLLO SOUCEK FLD) (KNTU)**

**ATIS**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>317.6</td>
<td>123.9</td>
<td>127.075</td>
<td>119.6</td>
<td>254.4</td>
</tr>
</tbody>
</table>

**DME/DME RNP -0.3 NA**

**NORFOLK NS**

**NORFOLK INTL**

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).

**FAR/IF/IAF**

**JUGRO**

**[IF/IAF]**

**[FAR]**

**OSUTY**

**RNW TCH not coincident with PAR TCH (50ft).**

**EMERG SAFE ALT 100 NM 4100**

**4 NM Holding Pattern**

**JUGRO**

**OSUTY**

**1.1 NM to RW05L**

**RW05L**

**HOLD 5000 3000**

**ELEV 22**

**TDZE 20**

**CATEGORY**

<table>
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<tr>
<th></th>
<th>A</th>
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<td><strong>LPV DA</strong></td>
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<td>(200-3/4)</td>
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<tr>
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<td>316-7/8</td>
<td>324-7/8</td>
<td>335-7/8</td>
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<td>285 (300-7/8)</td>
<td>296 (300-7/8)</td>
<td>304 (400-7/8)</td>
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<td>430 (500-1)</td>
<td>420 (500-1)</td>
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<td><strong>CIRCLING</strong></td>
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<td>578 (600-1/2)</td>
<td>578 (600-2)</td>
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</table>

**OCEANA NAS (APOLLO SOUCEK FLD) (KNTU)**

**36°49'N - 76°02'W**

**RNAV (GPS) RWY 5L**

Amdt 4 27JAN22
**RNAV (GPS) RWY 23L**

**APCH CRS 232°**

<table>
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<tr>
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<th>TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
<th>ASR/PAR</th>
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<tbody>
<tr>
<td>317.6</td>
<td>123.9 266.8</td>
<td>127.075 360.2</td>
<td>119.6 336.4</td>
<td>254.4</td>
<td></td>
</tr>
</tbody>
</table>

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**HirL all Rwys**

**Wave-Off Lights all Rwys**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA*</td>
<td>221-1/2</td>
<td>200</td>
<td>(200-1/2)</td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA**</td>
<td>324-1/2</td>
<td>303</td>
<td>(400-1/2)</td>
<td></td>
</tr>
<tr>
<td>LNAV MDA***</td>
<td>420-1/2</td>
<td>399 (400-1/2)</td>
<td>420-1/2</td>
<td>399 (400-1/2)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>500-1</td>
<td>478 (500-1)</td>
<td>600-1/2</td>
<td>578 (600-1/2)</td>
</tr>
</tbody>
</table>

**NE-3, 30 NOV 2023 to 25 JAN 2024**
RNAV (GPS) RWY 32L/R

ATIS 317.6
APP CON/DEP CON 123.9 266.8
TOWER 127.075 360.2
GND CON 119.6 336.4
CLNC DEL 254.4
ASR/PAR

DME/DME RNP-0.3 NA

CAUTION: RWY 32L: Final approach course 326° from RWY at 3000' from thld.

CAUTION: RWY 32R: Final approach course 373° from RWY at 3000' from thld.

RNAV TCH not coincident with PAR TCH (50ft).

4 NM Holding Pattern

HUGEE

GIBIE

EGOBE to EGOBE 0.7 NM

4 NM

325°

HOLD 5000

3000

4 NM

ELEV 22

TDZE 32L 22
TDZE 32R 20

HIRL all Rwy Wave-Off Lights all Rwy

RNAV (GPS) RWY 32L/R

NE-3, 30 NOV 2023 to 25 JAN 2024

22307
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RWY 5L/R:** Climbing right turn to intercept NTU TACAN R-080 to HHOBB.

**TAKEOFF RWY 14L/R:** Climbing right turn to intercept NTU TACAN R-175 no later than 4 DME to WAPLS.

**TAKEOFF RWY 23L/R:** Climb via heading 232°, crossing NTU TACAN 3.2 DME turn left to intercept NTU R-175 no later than 7 DME to WAPLS. Cross NTU 5 DME Arc at or above 3000.

**TAKEOFF RWY 32L/R:** Climbing right turn heading 100° within NTU TACAN 2 DME, intercept NTU R-080 to HHOBB. Do not exceed 270 KIAS on initial turn.

...Thence maintain 4000 or ATC assigned altitude.
Rwy 32 departures ORF class C airspace begins 4 DME from NTU TACAN. NTU DME required for Rwy 23L/R and 32L/R.

**RADAR REQUIRED**

**DEPARTURE ROUTE DESCRIPTION**

TAKE-OFF Rwy 5L/R: Climb heading 052°. Thence...

TAKE-OFF Rwy 14L/R: Climb heading 144° to 600 then climbing right turn heading 200°. Thence...

TAKE-OFF Rwy 23L/R: Climb heading 232°, crossing NTU TACAN 3.2 DME, turn left heading 200°. Thence...

TAKE-OFF Rwy 32L/R: Climb heading 324° to assigned altitude, turn right heading 060° within NTU TACAN 2 DME. Thence...

...maintain 4000 or assigned lower altitude.

CAPE CHARLES TRANSITION (NTU5 CCV): Via RADAR vectors to CCV VORTAC.

EDDYS TRANSITION (NTU5 EDDYS): Via RADAR vectors to EDDYS.

HARCUM TRANSITION (NTU5 HCM): Via RADAR vectors to HCM VORTAC.

HOPEWELL TRANSITION (NTU5 HPW): Via RADAR vectors to HPW VORTAC.

(SUNNS TRANSITION (NTU5 SUNNS): Via RADAR vectors to SUNNS.

(WAIKS TRANSITION (NTU5 WAIKS): Via RADAR vectors to WAIKS.
**NTU TACAN REQUIRED**

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RWY 5L/R or 14L/R:** Climbing right turn to intercept NTU TACAN R-175 to CANOB. Thence...

**RALEIGH-DURHAM TRANSITION (WYNNS4-RDU):** ...via RDU VORTAC R-082 to RDU.

**WILMINGTON TRANSITION (WYNNS4-ILM):** ...via ILM VORTAC R-034 to ILM.

CAUTION: Turns off Rwy 6 and 14 and 32 must avoid Norfolk airspace. 3.5 NM West, R-6606 3.5 NM East.
**RNAV (GPS) RWY 8**

**AWOS-3**
- **118.075**

**POTOMAC APP CON**
- **132.85**
- **323.125**

**UNICOM**
- **122.8 (CTAF)**

**WITTO**
- Procedure NA for arrivals at WITTO on V140 northeast bound.

**GORDONSVILLE GVE**
- Procedure NA for arrivals on GVE VORTAC airway radials 235 CW 040.

**MIRL RW08**
- Rwy Idg: 3200
- Apt Elev: 461
- ELEV: 464
- TDZE: 461

**RNAV (GPS) RWY 8**

**WASHINGTON**
- 38°15'N-78°03'W

**CATEGORY**
- **A**
- **B**
- **C**
- **D**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>LNAV MDA</th>
<th>CIRCLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1040-1</td>
<td>1300-1¼</td>
</tr>
<tr>
<td>B</td>
<td>579 (600-1)</td>
<td>836 (900-1¼)</td>
</tr>
<tr>
<td>C</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>D</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**MISSED APPROACH:**
- CIRCLING
- Setting and increase all MDA 80 feet. Rwy 8 helicopter visibility reduction below SM NA.
RNAV (GPS) RWY 26
ORANGE COUNTY (OMH)

**Category**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNAV MDA</td>
<td>980-1</td>
<td>516 (600-1)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1300-1</td>
<td>836 (900-1)</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**MISSED APPROACH:**
Climb to 3100 direct ZAVRO and hold.

**AWOS-3**
118.075

**POTOMAC APP CON**
132.85 323.125

**UNICOM**
122.8 (CTAF)

**Procedure**
- For arrivals on CSN VORTAC airway radials 148 CW 239.
- For arrivals on BRV VORTAC airway radials 214 CW 309.

**DEMO 1 & 3 MOA**

**ORANGE, VIRGINIA**
Orig-B 10AUG23

38°15'N-78°03'W
Circling to Rwy 26 NA at night. When local altimeter setting not received, use Charlottesville altimeter setting and increase all MDA 80 feet. Helicopter visibility reduction below 1 SM NA.

**Procedure NA for arrivals on GVE VORTAC airway radials 337 CW 040.**
For uncompensated Baro-VNAV systems,
Procedure NA below -15°C
(5°F) or above 34°C (93°F).
CAUTION: WCH group
4 acft. 16 feet is less
than minimum 20 feet.
For uncompensated BARO VNA systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (129°F).

CAUTION: WCH group 4 actf: 19 feet is less than minimum 20 feet.
### TACAN NHK NE-3, 30 Nov 2023 to 25 Jan 2024

**ATIS**
- **322.425**

**APP CON/DEP CON**
- **121.0 250.3**

**TOWER**
- **123.7 343.65**

**GND CON**
- **120.6 336.4**

**CLNC DEL**
- **135.2 316.125**

**ASR/PAR**
- **197**

**CAUTION:** Short Intermediate, recommend early configuration.

**MISSING APPROACH:** Climbing right turn to 2500 and intercept NHK TACAN R-055 to SPRIG and hold.

---

**Diagram Description:**
- **NAS PATUXENT RIVER NHK NE-3, Chan 39 (Y)**
- **EMERG SAFE ALT 100 NM 5100**
- **HOLD 8000 2500**
- **R4005 (A)**
- **R4005 (B)**
- **R4005 (C)**
- **R4005 (D)**
- **FEKET NHK**
- **SPRIG NHK**
- **NPA NHK 25 NM**
- **HAF**
- **TDZE 20**

---

**TACAN Z RWY 24**

**CATAGEOR:**
- **A**
  - **440-1**
  - **420 (500-1)**
  - **440-1 1/2**
  - **420 (500-1)**
- **B**
  - **420 (500-1)**
  - **600-1**
  - **581 (600-1)**
  - **641 (700-2)**
- **C**
  - **560-1**
  - **521 (600-1)**
  - **600-1**
  - **561 (600-1)**
  - **620-1 1/2**
  - **581 (600-1/2)**
  - **680-2**
  - **641 (700-2)**
- **D**
  - **521 (600-1)**
  - **561 (600-1)**
  - **600-1**
  - **561 (600-1)**

---

**PATUXENT RIVER, MARYLAND**

**Orig:** 02DEC21

**38°17'N - 76°25'W PATUXENT RIVER NAS (TRAPNELL FLD) (KNHK)**
NE-3, 30 NOV 2023 to 25 JAN 2024

DIRECT APPROACH: Climb to 1600 ft, then climbing right turn to 2500 on NE-3 R-122 to HELEM and hold.

ATIS 322.425
APP CON/DEP CON 121.0 250.3
TOWER 123.7 343.65
GND CON 120.6 336.4
CLNC DEL 315.2 316.125
ASR/PAR

NAS PATUXENT RIVER NHK (Y)

EMERG SAFE ALT 100 NM 5100

TACAN NHK
Ch 39 (Y)

APCH CRS 302°
Rwy Idg TDZE 18
Arpt Elev 39

NGT Z RWY 32

CIRCLING

PATUXENT RIVER, MARYLAND

Orig 02DEC21

38°17'N - 76°25'W PATUXENT RIVER NAS (TRAPNELL FLD) (KNHK)
Salisbury Seven Departure (SBY7.CBEAV)

Departure Rwy 2-20 not authorized.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RWY 6:** Climb to 6000 heading 059°, thence...

**TAKEOFF RWY 14:** Climbing left turn to 6000 heading 059° within NHK TACAN 25 DME, thence...

**TAKEOFF RWY 24:** Climb on heading 239° to NHK TACAN 2 DME, then climbing right turn to 6000 heading 059°, thence...

**TAKEOFF RWY 32:** Climbing right turn to 6000 to heading 080°, thence...

Intercept SBY VORTAC R-284, then on SBY R-284 to SBY. Cross FRAND as assigned. Then on assigned route or transition.

**CBEAV TRANSITION (SBY7.CBEAV):** Then on SBY R-094 to CBEAV.
PATUXENT RIVER NAS (TRAPNELL FIELD)  (KNHK)

**ATIS** 322.425
CLNC DEL 135.2 316.125
GND CON 120.6 336.4
PATUXENT TOWER 123.7 343.65
PATUXENT APP/DEP CON 121.0 250.3

**285**

**NE-3, 30 Nov 2023 to 25 Jan 2024**

**ATC BRIEF REQUIRED**
135.2 316.125

**TACAN REQUIRED**

Note: Chart not to scale.

(Continued on next page)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 6: Climb heading 059°, at NHK TACAN 3 DME turn left direct NHK thence...

TAKEOFF RWY 14: Climbing right turn heading 267° within NHK TACAN 2.5 DME to intercept NHK R-222, thence...

TAKEOFF RWY 24: Climbing left turn to intercept NHK TACAN R-222, thence...

TAKEOFF RWY 32: Climbing left turn heading 177°, to intercept NHK TACAN R-222, thence...

Then on NHK R-222 to JUMIX. Climbing left turn to intercept 13 DME arc to ZIRAT, then turn right on R-202 to SWABY. Then on assigned transition or expect radar vectors.

GORDONSVILLE TRANSITION (SWABY9.GVE): Cross SWABY at or above 9,000, then on GVE VORTAC R-102 to GVE.

HARCUM TRANSITION (SWABY9.HCM): Cross SWABY at or above 9,000, then on HCM VORTAC R-027 to HCM.

HOPEWELL TRANSITION (SWABY9.HPW): Cross SWABY at or above 9,000, then on HPW VORTAC R-047 to HPW.

STEIN TRANSITION (SWABY9.STEIN): Cross SWABY at or above 9,000, then on NHK R-202 to UNNAC, then on CCV VORTAC R-323 to STEIN.
Baro-VNAV NA when using Richmond Exec/Chesterfield County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Richmond Exec/Chesterfield County altimeter setting: increase LPV DA to 478 feet and LNAV/VNAV DA to 517 feet and all MDA 40 feet; increase LNAV/VNAV all Cats visibility and LNAV Cat C visibility ½ mile, and increase Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2000 direct FASOS and hold.

Procedure NA for arrivals at RIC VORTAC airway radials 248 CW 283.

Procedure NA for arrivals at LVL VORTAC airway radials 042 CW 106.

Procedure NA for arrivals at HPW VORTAC airway radials 248 CW 283.

Procedure NA for arrivals at RIC VORTAC airway radials 248 CW 283.

LNAV/VNAV all Cats visibility and LNAV Cat C visibility ½ mile, and increase Circling Cat C visibility ¼ mile.

LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Richmond Exec/Chesterfield County altimeter setting: increase LPV DA to 478 feet and LNAV/VNAV DA to 517 feet and all MDA 40 feet; increase LNAV/VNAV all Cats visibility and LNAV Cat C visibility ½ mile, and increase Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2000 direct FASOS and hold.

Procedure NA for arrivals at RIC VORTAC airway radials 248 CW 283.

Procedure NA for arrivals at LVL VORTAC airway radials 042 CW 106.

Procedure NA for arrivals at HPW VORTAC airway radials 248 CW 283.

LNAV/VNAV all Cats visibility and LNAV Cat C visibility ½ mile, and increase Circling Cat C visibility ¼ mile.

LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Richmond Exec/Chesterfield County altimeter setting: increase LPV DA to 478 feet and LNAV/VNAV DA to 517 feet and all MDA 40 feet; increase LNAV/VNAV all Cats visibility and LNAV Cat C visibility ½ mile, and increase Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2000 direct FASOS and hold.

Procedure NA for arrivals at RIC VORTAC airway radials 248 CW 283.

Procedure NA for arrivals at LVL VORTAC airway radials 042 CW 106.

Procedure NA for arrivals at HPW VORTAC airway radials 248 CW 283.

LNAV/VNAV all Cats visibility and LNAV Cat C visibility ½ mile, and increase Circling Cat C visibility ¼ mile.

LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Richmond Exec/Chesterfield County altimeter setting: increase LPV DA to 478 feet and LNAV/VNAV DA to 517 feet and all MDA 40 feet; increase LNAV/VNAV all Cats visibility and LNAV Cat C visibility ½ mile, and increase Circling Cat C visibility ¼ mile.
LOC RWY 5
TRI CITIES EXEC/DINWIDDIE COUNTY (PTB)

DME required. Helicopter visibility reduction below ½ SM NA. VDP NA when using Richmond Exec/Chesterfield County altimeter setting. When local altimeter setting not received, use Richmond Exec/Chesterfield County altimeter setting and increase all MDA 40 feet; increase S-LOC 5 Cat C visibility ½ mile and Circling Cat C visibility ¼ mile. For inop ODALS, increase S-LOC 5 Cat C visibility to 1½ mile. Inop table does not apply to S-LOC 5 Cat A and B. Inop table does not apply to S-LOC Cat A and B when using Richmond Exec/Chesterfield County altimeter setting.

ODALS

LOC/DME I-JLS
110.3
APP CRS
5002
Rwy Idg
051°
TDZE
193
Apt Elev
193

AWOS-3
133.325
POTOMAC APP CON
126.75
307.2
GCO
135.075
UNICOM
122.7 (CTAF)

DME REQUIRED

One Minute Holding Pattern

2000

231°

051°

FALOS
I-JLS 11.3

RALOC
I-JLS 5.2

RIC 31.4

JOTIB
I-JLS 2.8

MIRL Rwy 5-23

REIL Rwy 23

FAF to MAP 4.3 NM

S-5

600-1

407 (500-1)

NA

CIRCLING

680-1

487 (500-1)

760-1½

567 (600-1½)

NA

PETERSBURG, VIRGINIA

AL-5664 (FAA)

PETERSBURG, VIRGINIA

LOC RWY 5

TRI CITIES EXEC/DINWIDDIE COUNTY (PTB)

37°11’N - 77°30’W

NE-3, 30 NOV 2023 to 25 JAN 2024

342
When local altimeter setting not received, use Richmond Executive-Chesterfield County altimeter setting and increase all MDA 40 feet; increase S-23 Cat C and Circling Cat C visibility 1/4 mile and YETUB fix minimums S-23 Cat C visibility 1/4 mile and Circling Cat C visibility 1/4 mile. DME required.

MISSED APPROACH: Climb to 2000 on heading 214° and HPW R-244 to FASOS/HPW 30.8 DME and hold.

AWOS-3 133.325  POTOMAC APP CON 126.75  307.2  GCO 135.075  UNICOM 122.7 (CTAF)

NE-3, 30 Nov 2023 to 25 Jan 2024

PETERSBURG, VIRGINIA

TRI CITIES EXEC/DINWIDDIE COUNTY (PTB)

VOR RWY 23

Knots 60 90 120 150 180
Min:Sec 6:06 4:04 3:03 2:26 2:02

Nearest fix minimums (dual VOR receivers or DME required):

S-23 740-1 549 (600-1) 740-1 567 (600-1) 760-1 NA

CIRCLING 740-1 547 (600-1) 760-1 567 (600-1) 760-1 NA

MIRL Rwy 5-23
REIL Rwy 23

FAF to MAP 6.1 NM

Tri Cities Exec/Dinwiddie County (PTB)

ELEV 193  TDZE 191
ILS or LOC/DME RWY 2

NE-3, 30 Nov 2023 to 25 Jan 2024

ATIS 263.15
FOTOMAC APP/DEP CON 128.525 306.925
TOWER 118.6 (CTAF) 360.2
GND CON 121.75 340.2
ASR/PAR

LOCALIZER 108.3
I-NYG
Chan 20

Final approach course offset 2.9° and passes 150° from rwy threshold.
Localizer unusable 20° left/right of course, and within 0.5 NM.

Wheel crossing height
Group 3: 15° and Group 4: 10°
(is less than the minimum height)

MISSED APPROACH: Climbing right turn to 2000 direct BRV VORTAC,
then via BRV R-244 to MAAGS and hold.

EMERG SAFE ALT 100 NM 5500
ELEV 10 TDZE 9

QS 3.0° TCH 35

CATEGORY
A
B
C
D
S-ILS 2 500-1 491 500-1
CIRCLING 500-1 680-1 760-2 800-2½
259-3 250 (300-3½)
500-1½ 491 (500-1½)
490 (500-1) 670 (700-1) 750 (800-2¼)
790 (800-2½)
**CAUTION:** Short intermediate, recommend early configuration.

Final approach course 95° from Rwy centerline at 3000' from threshold.

---

**EMERG SAFE ALT 100 NM 5500**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-2</td>
<td>560-1</td>
<td>551 (600-1)</td>
<td>560-1½</td>
<td>551 (600-1¼)</td>
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<tr>
<td>CIRCLING</td>
<td>560-1</td>
<td>660-1</td>
<td>700-2</td>
<td>740-2¼</td>
</tr>
<tr>
<td></td>
<td>550 (600-1)</td>
<td>650 (700-1)</td>
<td>690 (700-2)</td>
<td>730 (800-2½)</td>
</tr>
</tbody>
</table>

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**QUANTICO, VIRGINIA**

Amendment 4: 10AUG23

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**QUANTICO MCAF (TURNER FLD) (KNYG)**

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Missed Approach: Climbing right turn to 2000 direct BRV VORTAC, then via BRV R-244 to MAAGS and hold.
AIRPORT DIAGRAM

ATIS 263.15
TOWER 118.6 (CTAF) 360.2
GND CON 121.75 340.2

HANGAR
BASE OPS
CONTROL TOWER 84
VIP RAMP
HOT BRAKES AREA

VISITING AIRCRAFT

HANGARS
SOUTH RAMP

FIRE STATION
LZ-1A Connector

NOVEMBER 2022 ANNUAL RATE OF CHANGE 0.0˚W

Rwy 2-20
PCN 69 R/B/W/T

NE-3, 30 NOV 2023 to 25 JAN 2024
NE-3, 30 NOV 2023 to 25 JAN 2024
NE-3, 30 NOV 2023 to 25 JAN 2024
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NE-3, 30 NOV 2023 to 25 JAN 2024
NE-3, 30 NOV 2023 to 25 JAN 2024
NE-3, 30 NOV 2023 to 25 JAN 2024
NE-3, 30 NOV 2023 to 25 JAN 2024
NE-3, 30 NOV 2023 to 25 JAN 2024
RNAV (GPS) RWY 11
NEW KENT COUNTY (W96)

Use Richmond Intl altimeter setting. DME/DME RNP-0.3 NA.
Helicopter visibility reduction below 1 SM NA.
Procedure NA at night.

NoPT for arrival on RIC VORTAC airway radials 223 CW 317.

Visual Segment - Obstacles.

MIRL Rwy 11-29
REIL Rwys 11 and 29

Amdt 2B 12OCT17

37°30'N-77°08'W
Use Richmond Intl altimeter setting. DME/DME RNP-0.3 NA.
Helicopter visibility reduction below 1 SM NA.
Procedure NA at night.

Helicopter visibility reduction below 1 SM NA.
Procedure NA at night.

Missed Approach: Climb to 900 then climbing left turn to 2000 direct WINVO and hold.

Procedure NA for arrivals at HCM VORTAC on V33.

Procedure NA for arrivals at HPW VORTAC on V260 southwest bound.

Use Richmond Intl altimeter setting. DME/DME RNP-0.3 NA.
Use Richmond Intl altimeter setting. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSING APPROACH: Climbing right turn to 2000 direct HPW VORTAC and hold.

NoPT for arrival on HPW VORTAC airway radials 178, 205, and 237.

Helicopter visibility reduction below 1 SM NA. Use Richmond Intl altimeter setting. Procedure NA at night.

Use Richmond Intl altimeter setting. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSING APPROACH: Climbing right turn to 2000 direct HPW VORTAC and hold.

NoPT for arrival on HPW VORTAC airway radials 178, 205, and 237.

Helicopter visibility reduction below 1 SM NA. Use Richmond Intl altimeter setting. Procedure NA at night.

MISSING APPROACH: Climbing right turn to 2000 direct HPW VORTAC and hold.

NoPT for arrival on HPW VORTAC airway radials 178, 205, and 237.
RNAV (GPS) RWY 7
TAZEWELL COUNTY (JF'Z)
RNAV (GPS) RWY 25
TAZEWELL COUNTY (JF‘Z)

AWOS-3 118.075
ATLANTA CENTER 127.85 269.3
GCO 135.075
UNICOM 123.05 (CTAF)

LNAV/VNAV NA when using Wise altimeter setting. For uncompensated LNAV/VNAV systems, LNA/V/NVNA below -20°C (-4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Wise altimeter setting and increase all DA 86 feet and all MDA 100 feet, increase LPV and LNAV/VNAV all Cats and Circling Cat C visibility ½ mile, increase LNAV Cat C visibility ¼ mile. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. When VGSI inop, Circling Rwy 7 NA at night. Circling NA for Cat C south of Rwy 7-25.

AWOS-3 118.075
ATLANTA CENTER 127.85 269.3
GCO 135.075
UNICOM 123.05 (CTAF)

MISSED APPROACH: Climb to 3800 then climbing right turn to 6400 direct NAYIC and hold, continue climb-in-hold to 6400.
LOC/DME RWY 25
TAZEWELL COUNTY (JFZ)

AWOS-3
118.075

ATLANTA CENTER
127.85 269.3

GCO
135.075

UNICOM
123.05 (CTAF)

ALTERNATE MISSED APCH FIX
KENYA
BLF 115.05
Chan 97 (Y)

STACY
GZG 31.4

GZG 31.4

RICHLANDS, VIRGINIA

LOC/DME 1-JFZ
109.75 Chan 34 (Y)

APP CRS 252°
Rwy Idg
TDZE
Apt Elev
4299
2653
2653

MISSED APPROACH: Climbing right turn to 6000 on heading 324° and GZG R-011 to STACY INT/GZG 31.4 DME and hold.

visibility reduction by helicopters NA. When local altimeter setting not received use Wise altimeter setting and increase all MDA 100 feet, increase S-25 Cat C visibility ½ mile and Circling Cat C visibility ¾ mile. When VGSI inop, Straight-in/Circling Rwy 25 NA at night. When VGSI inop, Circling Rwy 7 NA at night. Circling NA for Cat C south of Rwy 7-25.

37°04'N-81°48'W

NE-3, 30 NOV 2023 to 25 JAN 2024
RNAV (GPS) RWY 15
RICHMOND EXEC/CHESTERFIELD COUNTY (FCI)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above +54°C. When local altimeter setting not received, use Richmond Intl altimeter setting and increase all DA 36 feet, and all MDA 40 feet, increase LNAV/VNAV all Cats visibility 1/2 mile. VDP and Baro-VNAV NA when using Richmond Intl altimeter setting.

MISSED APPROACH: Climb to 2000 direct PUBBS and hold.

Procedure NA for arrival on RIC VORTAC airway radials 248 CW 317.

Procedure NA for arrival on FAK VORTAC airway radials 001 CW 100.

RICHMOND, VIRGINIA

RICHMOND EXEC/CHESTERFIELD COUNTY (FCI)

RNAV (GPS) RWY 15

WAAS CH 63216 W15A
APP CRS 151°
5500
Rwy Ldg TDZE 236
Apt Elev 236

AWOS-3PT
128.625
POTOMAC APP CON
126.75 307.2
CLNC DEL
124.6
UNICOM
123.05 (CTAF)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above +54°C. When local altimeter setting not received, use Richmond Intl altimeter setting and increase all DA 36 feet, and all MDA 40 feet, increase LNAV/VNAV all Cats visibility 1/2 mile. VDP and Baro-VNAV NA when using Richmond Intl altimeter setting.

MISSED APPROACH: Climb to 2000 direct PUBBS and hold.

Procedure NA for arrival on RIC VORTAC airway radials 248 CW 317.

Procedure NA for arrival on FAK VORTAC airway radials 001 CW 100.

RNAV only.

1.3 NM
TCH 43
GP 3.00°

LNAV DA
692-1½ 456 (500-1¼)

LPV DA
486-1 250 (300-1)

LNAV MDA
680-1 444 (500-1)
680-1½ 444 (500-1¾)
680-1½ 444 (500-1½)

RICHMOND, VIRGINIA

Amdt 1D 07NOV19

NE-3, 30 NOV 2023 to 25 JAN 2024
ILS or LOC RWY 34
RICHMOND INTL (RIC)

DME required for LOC only.

For inop ALS, increase S-ILS 34 Cat E visibility to 2000 and S-LOC 34 Cat E visibility to 1½ SM. DME from RIC VORTAC. DME use requires simultaneous reception of I-BNE and RIC DME.

ALS-2

MISSED APPROACH: Climb to 800 then climbing right turn to 2000 on RIC VORTAC R-018 to EPICS INT/RIC 17.3 DME and hold.

ATIS
119.15  263.025

POTOMAC APP CON
126.4  282.375  [001°-185°]
126.75  307.2  [186°-360°]

RICHMOND TOWER
121.1  257.8

GND CON
121.9  348.6

CLNC DEL
127.55  348.6

ALTERNATE MISSED APCH FIX

HOPEWELL
114.35  HPW 114.35
Chan 90 (Y)

MISS APCH FIX

EPICS
114.1  RIC 17.3
Chan 88

RIC 17.3
EPICS
Chan 88

RICHMOND
114.1  RIC 17.3
Chan 88

JOMUS
RIC 5.4

JUVPO
RIC 14.3

RIC
17.3
EPICS
Chan 88

1.2 NM

3.5 NM

8.9 NM

1.9

337°

1700

800 2000

EPICS
Chan 88

RIC
Chan 88

R-018

FGSI and ILS glidepath not coincident (FGSI Angle 3.00/TCH 79).

GS 3.00°

TCH 54

S-ILS 34
361/18  200 (200-1½)

S-LOC 34
620/24  459 (500-½)

620/45  459 (500-½)

700-1½

720-2

740-2

492 (500-1)

660-1

600-2

572 (600-2)

RICHMOND, VIRGINIA
Amidt 15A  15JUN23

37°30'N-77°19'W

360

RICHMOND, VIRGINIA
AL-347 (FAA)
23278

LOC I-BNE
110.7

APP CRS
337°

Rwy Idg
9003

TDZE
161

Apt Elev
168

NE-3, 30 NOV 2023 to 25 JAN 2024

NE-3, 30 NOV 2023 to 25 JAN 2024

NE-3, 30 NOV 2023 to 25 JAN 2024
DME from RIC VORTAC. DME use requires simultaneous reception of I-BNE and RIC DME. CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

MISSING APPROACH: Climb to 800 then climbing right turn to 2000 on RIC VORTAC R-018 to EPICS INT/ RIC 17.3 DME and hold.

ALTERNATE MISSED APCH FIX

HOPEWELL
HPW
114.35
Chen 90 (Y)

ATIS
119.15 263.025

POTOMAC APP CON
126.4 282.375 [001°-185°] 307.2 [186°-360°]

RICHMOND TOWER
121.1 257.8

CLNC DEL
127.55 348.6

LOCALIZER 110.7
I-BNE

REIL Rwy 20
HIRL Rwys 2-20 and 16-34
REIL Rwy 20

RICHMOND, VIRGINIA
Amdt 15A 15JUN23

RICHMOND INTL (RIC)

CATEGORIES

S-ILS 34
CAT II RA 101/12 100 DA 261

S-ILS 34
CAT III RVR 07

CATEGORY II & III ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ILS RWY 34 (CAT II & III)

RICHMOND INTL (RIC)

37°30’N-77°19’W
RNAV (RNP) Y RWY 2
RICHMOND INTL (RIC)

AUTHORIZATION REQUIRED

RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -11°C (13°F) or above 54°C (130°F). Rwy 2 helicopter visibility reduction below ¼ SM NA. For inop ALS, increase RNP 0.11 all Cats visibility to 1 SM and RNP 0.3 all Cats visibility to 1¼ SM.

See planview for multiple IF locations.

ATIS
119.15 263.025
126.4 282.375 (001°-185°)
126.75 307.2 (186°-360°)

POTOMAC APP CON
RICHMOND TOWER
121.1 257.8
121.9 348.6
127.55 348.6

GND CON
CLNC DEL

MALSR
MISSED APPROACH:
Climb to 2100 on track 023° to IMASE and hold.

RUNWAY 02

3000
114° (9.1)

3000
117° (9.3)

023°

2600

023°

248°

2600

ELEV 168 D TDZE 161

RICHMOND, VIRGINIA
Orig-B 19JUL18

37°30’N - 77°19’W
363

RICHMOND, VIRGINIA
AL-347 (FAA)

23110

RNAV (RNP) Y RWY 2
RICHMOND INTL (RIC)
RNAV (RNP) Y RWY 20
RICHMOND INTL (RIC)

MISSED APPROACH: Climb to 2000 on track 203° CASEE and hold.

For uncompensated Baro-VNAV systems, procedure NA below -11°C or above 54°C.

MISSED APCH FIX
CASEE
See planview for multiple IF locations.

RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -11°C or above 54°C.

MISSED APPROACH: Climb to 2000 on track 203° CASEE and hold.

For uncompensated Baro-VNAV systems, procedure NA below -11°C or above 54°C.

MISSED APPROACH: Climb to 2000 on track 203° CASEE and hold.
RNAV (RNP) Y RWY 34
RICHTON INTL (RIC)

For uncompensated Baro-VNAV systems, procedure NA below -11°C or above 54°C. For inop ALS, increase RNP 0.30 all Cats visibility to 1/4 SM.

ATIS
119.15 263.025

POTOMAC APP CON
126.4 282.375 (001°-185°)
126.75 307.2 (186°-360°)

RICHMOND TOWER
121.1 257.8

GND CON
121.9 348.6

C L N C D E L
127.55 348.6

AUTHORIZATION REQUIRED

See planview for multiple IF locations. VGSi and RNAV glidepath not coincident (VGSi Angle 3.00/TCH 79).

RICHMOND, VIRGINIA
Orig-D 30JAN20

RNAV (RNP) Y RWY 34
RICHTON INTL (RIC)

AUTHORIZATION REQUIRED
RNAV (GPS) Z RWY 2
RICHMOND INTL (RIC)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). Rwy 2 helicopter visibility reduction below 3/4 SM NA.

Procedure NA for arrival on FAK VORTAC airway radials 100 CW 220.

Procedure NA for arrivals at MATOX on V157 southwest bound.

Procedure NA for arrival on HPW VORTAC airway radials 178 CW 323.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). Rwy 2 helicopter visibility reduction below 3/4 SM NA.

Procedure NA for arrival on MATOX on V157 southwest bound.

Procedure NA for arrival on HPW VORTAC airway radials 178 CW 323.

RNAV (GPS) Z RWY 2
RICHMOND INTL (RIC)

RNAV (GPS) Z RWY 2
RICHMOND INTL (RIC)
RNAV (GPS) Z RWY 16
RICHMOND INTL (RIC)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). For inop ALS increase LNAV/VNAV all Cats visibility to RVR 5400. ** RVR 1800 authorized with use of FD or AP or HUD to DA.

ATIS
119.15  263.025

RICHMOND TOWER
126.4  282.375 (001°-185°)

RICHMOND TOWER
126.75  307.2 (186°-360°)

GND CON
121.1  257.8

CLNC DEL
121.9  348.6

Procedure NA for arrivals at EPICS on V376 northbound.

Procedure NA for arrival on FAK VORTAC airway radials 338 CW 100.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 71).

* LNAV only.

** RVR 1800 authorized with use of FD or AP or HUD to DA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). For inop ALS increase LNAV/VNAV all Cats visibility to RVR 5400. ** RVR 1800 authorized with use of FD or AP or HUD to DA.

NE-3, 30 NOV 2023 to 25 JAN 2024

RNAV (GPS) Z RWY 16
RICHMOND INTL (RIC)

RNAV (GPS) Z RWY 16
RICHMOND INTL (RIC)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). For inop ALS increase LNAV/VNAV all Cats visibility to RVR 5400. ** RVR 1800 authorized with use of FD or AP or HUD to DA.

ATIS
119.15  263.025

RICHMOND TOWER
126.4  282.375 (001°-185°)

RICHMOND TOWER
126.75  307.2 (186°-360°)

GND CON
121.1  257.8

CLNC DEL
121.9  348.6

Procedure NA for arrivals at EPICS on V376 northbound.

Procedure NA for arrival on FAK VORTAC airway radials 338 CW 100.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 71).

* LNAV only.

** RVR 1800 authorized with use of FD or AP or HUD to DA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). For inop ALS increase LNAV/VNAV all Cats visibility to RVR 5400. ** RVR 1800 authorized with use of FD or AP or HUD to DA.

NE-3, 30 NOV 2023 to 25 JAN 2024

RNAV (GPS) Z RWY 16
RICHMOND INTL (RIC)
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 34°C (93°F). Rwy 20 helicopter visibility reduction below ¾ SM NA.

Procedure NA for arrivals at EPICS on V376 northbound.

Procedure NA for arrival on FAK VORTAC airway radials 338 CW 100.

Procedure NA for arrival on HPW VORTAC airway radials 323 CW 025.
RNAV (GPS) Z RWY 34

RICHMOND INTL (RIC)

Atis 119.15 263.025

POTOMAC APP CON

126.4 282.375 (001°-185°)

126.75 307.2 (186°-360°)

RICHMOND TOWER 121.1 257.8

GND CON 121.9 348.6

CLNC DEL 127.55 348.6

NE-3, 30 Nov 2023 to 25 Jan 2024

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to 1 SM and LNAV Cats C and D visibility to RVR 5500.

Procedure NA for arrival on FAK VORTAC airway radials 100 CW 220.

Procedure NA for arrival on HPW VORTAC airway radials 205 CW 323.
Rwy 2 helicopter visibility reduction below 1/4 SM NA. For inop ALS, increase S-2 Cat A/B visibility to 1 SM, and Cat C/D to 1/2 SM.

MISSED APPROACH: Climbing left turn to 2000 on RIC VORTAC R-018 to EPICS INT/RIC 17.3 DME and hold.

ATIS
119.15  263.025

POTOMAC APP CON
126.4  282.375 (001°-185°)
126.75  307.2 (186°-360°)

RICHMOND TOWER
121.1  257.8

GND CON
121.9  348.6

CLNC DEL
127.55  348.6

RICHMOND, VIRGINIA

ELEV 167  TDZE 162

108.8 HCM
Chan 25

113.3 FAK
Chan 80

1587  1002  654

400  360  270

2000  221° (6.1)

VOR RWY 2
RICHMOND INTL (RIC)

RICHMOND, VIRGINIA

ELEV 167  TDZE 162

TWR 343

RICHMOND INTL (RIC)

One Minute Holding Pattern

2000  221°

041°

2.98°

TCH 49

4.3 NM

LABUR INT
RIC 6.1

FAF to MAP 6.1 NM

S-2
640-3/4  478 (500-3/4)
640-1  478 (500-1)

CIRCLING
660-1  493 (500-1)

700-1/2
533 (600-1/2)

720-2
553 (600-2)

RICHMOND, VIRGINIA

Amdt 6B  30JAN20
DME or RADAR required. RADAR required for procedure entry.

V Rwy 16 helicopter visibility reduction below RVR 4000 NA. For inop ALS, increase S-16 Cat A/B visibility to RVR 5500, and Cat C/D to 1/2 SM.

MISSED APPROACH: Climbing left turn to 2000 direct HPW VOR/TAC and hold.

ATIS
119.15 263.025
POTOMAC APP CON
126.4 282.375 (001°-185°)
126.75 307.2 (186°-360°)
RICHMOND TOWER
121.1 257.8
GND CON
121.9 348.6
CLNC DEL
127.55 348.6

VORTAC RIC
114.1
Chan 88
APP CRS 9003
Rwy Idg 167
Apt Elev 167

REIL Rwy 20
HIRL Rwys 2-20 and 16-34
TDZ/CL Rwy 34

RICHMOND, VIRGINIA
Amdt 27C 30JAN20

NE-3, 30 NOV 2023 to 25 JAN 2024
For inop ALS, increase S-34 Cat C/D visibility to RVR 5500.

VOR RWY 34
RICHMOND INTL (RIC)

MSA RIC 25 NM

114.1 RIC
APP CRS
323°

Rwy Idg
161
Apt Elev
167

DME or RADAR required. RADAR required for procedure entry.

ALSF-2

ATIS
119.15 263.025

POTOMAC APP CON
126.4 282.375 (001°-185°)
126.75 307.2 (186°-360°)

RICHMOND TOWER
121.1 257.8

GND CON
121.9 348.6

CLNC DEL
127.55 348.6

RICHMOND, VIRGINIA

AMDT 23C 30JAN20

NE-3, 30 NOV 2023 to 25 JAN 2024

37°30’N-77°19’W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 2:** Climb heading 023° to 687, then climbing right turn heading 061° to intercept RIC VORTAC R-050 to COLIN INT/RIC 47 DME, thence . . . .

**TAKEOFF RUNWAY 16:** Climb heading 157° to 687, then climbing left turn heading 121° to cross RIC VORTAC 7 DME at or above 4000, then climbing left turn heading 041° to intercept RIC VORTAC R-074 to MODEL INT/RIC 33 DME, then on HCM VORTAC R-010 to COLIN INT/HCM 39 DME, thence . . . .

**TAKEOFF RUNWAY 20:** Climb heading 203° to 687, then climbing left turn heading 121° to cross RIC VORTAC 7 DME at or above 4000, then climbing left turn heading 041° to intercept RIC VORTAC R-074 to MODEL INT/RIC 33 DME, then on HCM VORTAC R-010 to COLIN INT/HCM 39 DME, thence . . . .

**TAKEOFF RUNWAY 34:** Climb heading 337° to 687, then climbing right turn heading 061° to intercept RIC VORTAC R-050 to COLIN INT/RIC 47 DME, thence . . . .

. . . . maintain 5000 or assigned altitude. Expect filed altitude within ten minutes after departure.
TAKEOFF MINIMUMS

Rwys 2, 16, 20, 34: Standard with minimum climb of 500' per NM to 687.

NOTE: Radar required for non-GPS equipped aircraft.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: Radar required for non-GPS equipped aircraft.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climb on heading 023° to 687, then climbing left turn direct to cross SUGGR at or above 5000, then on track 263° to KALLI, thence....

TAKEOFF RUNWAY 16: Climb on heading 157° to 687, then climbing right turn direct to cross ITTEM at or above 5000, then on track 275° to KALLI, thence....

TAKEOFF RUNWAY 20: Climb on heading 203° to 687, then climbing right turn direct to cross ITTEM at or above 5000, then on track 275° to KALLI, thence....

TAKEOFF RUNWAY 34: Climb on heading 337° to 687, then climbing left turn direct to cross SUGGR at or above 5000, then on track 263° to KALLI, thence....

....(transition). Maintain 5000, expect filed altitude ten minutes after departure.

DRAIK TRANSITION (KALLI7.DRAIK)
READE TRANSITION (KALLI7.READE)
SANNY TRANSITION (KALLI7.SANNY)
NOTE: Chart not to scale.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required for non-GPS equipped aircraft.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climb on heading 023° to 687 MSL, then climbing right turn direct to cross SJAYY at or above 5000, then on depicted route to LUCYL, thence. . . .

TAKEOFF RUNWAY 16: Climb on heading 157° to 687 MSL, then climbing left turn direct to cross KEGME at or above 4000, then on track 065° to cross BUNKK at or above 5000, then on depicted route to LUCYL, thence. . . .

TAKEOFF RUNWAY 20: Climb on heading 203° to 687 MSL, then climbing left turn direct to cross KEGME at or above 4000, then on track 065° to cross BUNKK at or above 5000, then on depicted route to LUCYL, thence. . . .

TAKEOFF RUNWAY 34: Climb on heading 337° to 687 MSL, then climbing right turn direct to cross SJAYY at or above 5000, then on depicted route to LUCYL, thence. . . .

. . . maintain 5000, expect filed altitude within ten (10) minutes after departure.
NOTE: DME required.

TAKEOFF MINIMUMS
Rwys 2, 16, 20, 34: Standard with minimum climb of 500' per NM to 687.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.
TAKEOFF RUNWAY 2: Climb heading 023° to 687, then climbing left turn heading 241°, thence . . . .
TAKEOFF RUNWAY 16: Climb heading 157° to 687, then climbing right turn heading 291°, thence . . . .
TAKEOFF RUNWAY 20: Climb heading 203° to 687, then climbing right turn heading 291°, thence . . . .
TAKEOFF RUNWAY 34: Climb heading 337° to 687, then climbing left turn heading 241°, thence . . . .

. . . . intercept RIC VORTAC R-264 to CARML INT/RIC 32 DME, then on RIC VORTAC R-264 to READE INT/RIC 50 DME, then on assigned transition, maintain 5000. Expect filed altitude within ten minutes after departure.

DRAIK TRANSITION (READE7.DRAIK): From over READE INT/RIC 50 DME on RIC R-264 to DRAIK INT.
LYNCHBURG TRANSITION (READE7.LYH): From over READE INT/RIC 50 DME on LYH R-093 to LYH VOR/DME.
MONTEBELLO TRANSITION (READE7.MOL): From over READE INT/RIC 50 DME on MOL R-140 to MOL VOR/DME.
SANNY TRANSITION (READE7.SANNY): From over READE INT/RIC 50 DME on RIC R-264 to SANNY.
RNAV (GPS) RWY 16
HANOVER COUNTY MUNI (OFP)

MISSED APPROACH:
Climb to 2000 direct BOCAB and left turn via 059° track to CALMI and left turn via 324° track to ISSIG and hold.

When local altimeter setting not received, use Richmond Intl altimeter setting and increase all DA 37 feet and all MDA 40 feet; increase LNAV/VNAV all Cats and LNAV Cats C/D visibility ¼ mile. Baro-VNAV NA when using Richmond Intl altimeter setting. For uncompensated Baro-VNAV systems LNAV/VNAV NA below -15°C or above 54°C. Rwy 16 helicopter visibility reduction below ¾ SM NA.

RNP APCH.

ASOS
POTOMAC APP CON 126.75 307.2
CLNC DEL
UNICOM 122.7 (CTAF)

37°42'N - 77°26'W

RNAV (GPS) RWY 16
HANOVER COUNTY MUNI (OFP)

RNAV (GPS) RWY 16
HANOVER COUNTY MUNI (OFP)
RNAV (GPS) RWY 34
HANOVER COUNTY MUNI (OFP)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Richmond Intl altimeter setting and increase all DA 37 feet and all MDA 40 feet; increase LNAV/VNAV all Cats and LNAV Cats C/D visibility ½ mile. Baro-VNAV and VDP NA when using Richmond Intl altimeter setting.

MISSED APPROACH: Climb to 700 then climb to 2000 direct COATT and hold.

NoPT for arrivals on RIC VORTAC airway radials 105 CW 248.

NE-3, 30 NOV 2023 to 25 JAN 2024
Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Richmond Intl altimeter setting and increase all MDAs 40 feet; increase LUKCI fix minimums S-16 Cat C visibility ¾ SM.

MISSED APPROACH: Climb to 700 then climbing left turn to 2000 via RIC VORTAC R-345 to COATT INT and hold.

1900 NoPT to BAWAW 214° (2.2) and LOC (3.7)
When local altimeter setting not received, use Richmond Intl altimeter setting and increase all MDA 40 feet. Rwy 16 helicopter visibility reduction below 3/4 SM NA.

Procedure NA for arrivals at COATT on V1.55 northeast bound.

ASOS

119.025

POTOMAC APP CON

126.75 307.2

CLNC DEL

125.4

UNICOM

122.7 (CTAF)

VGS1 and descent angles not coincident (VGS1 Angle 3.00/TCH 40).

ANNAS INT

RIC 19

FLAT ROCK

113.3 FAK

Chan 80

REIL Rwys 16 and 34

MIRL Rwy 16-34

Elev 207

TDZE 207

SM NA.

RICHMOND/ASHLAND, VIRGINIA

Amdt 2E 06DEC18

37°42'N - 77°26'W

ANNA5 INT/19 DME and hold.
RNAV (GPS) RWY 12
GOODEN AIRPARK (RJD)

DAAKEY

 Procedure NA for arrivals at PALEO on V93 northwest bound, V44 westbound, V312 southwest bound, V170-433 southwest bound.

 Procedure NA for arrivals at BROSS on V268 eastbound.

 Procedure NA for arrivals at GRACO on V379 southwest bound.

 Procedure NA for arrivals at DAAKEY on V170-433.

 Procedure NA for final approach at PEKME.

 Procedure NA for departures at PEKME.

 Procedure NA for departures at DAAKEY.

 Procedure NA for departures at GRACO.

 Procedure NA for departures at BROSS.

 Procedure NA for departures at TCH 40.

 Procedure NA for departures at RIVO.

 Procedure NA for departures at RIVO.

 Procedure NA for departures at RIVO.

 Procedure NA for departures at RIVO.

 Procedure NA for departures at RIVO.

 Procedure NA for departures at RIVO.

 Procedure NA for departures at RIVO.

 Procedure NA for departures at RIVO.

 Procedure NA for departures at RIVO.

 Procedure NA for departures at RIVO.
RINJEDY, MARYLAND

RNAV (GPS) RWY 30
GOODEN AIRPARK (RJD)

**APR CRS**
- 3214
- TDZE 64
- Apt Elev 64

**RNP APCH - GPS**

<table>
<thead>
<tr>
<th>ESN AWOS-3PT</th>
<th>DOVER APP CON</th>
<th>UNICOM</th>
</tr>
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<tbody>
<tr>
<td>124.475</td>
<td>132.425 257.875</td>
<td>122.8 (CTAF)</td>
</tr>
</tbody>
</table>

**MISSED APPROACH:** Climb to 2000 direct DAKEY and hold.

**Procedure NA** for arrivals at DONIL on V229 northeast bound, V44 eastbound.

**Procedure NA** for arrivals at LAFLN on V29 southeast bound.

**Procedure NA** for arrivals at CHOPS on T315 and T320 southwest bound.

**Category**
- A
- B
- C
- D

**RNAV MDA**
- 660-1 596 (600-1) NA
- 660-1 596 (600-1) NA

**Categories**
- Category A
- Category B
- Category C
- Category D

**Lon:** NE-3, 30 NOV 2023 to 25 JAN 2024

**UNICOM**
- 122.8 (CTAF)
RNAV (RNP) Z RWY 6
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (R.O.A.)

RNP AR APCH. RF required.

For uncompensated Baro-VNAV systems, procedure NA below -1.4°C or above 54°C.

ATIS | ROANOKE APP CON | ROANOKE TOWER | GND CON | CLNC DEL
--- | --- | --- | --- | ---
132.375 | 126.9 | 118.3 | 257.8 | 121.9 | 257.8 | 119.7

Missed Approach: (Do not exceed 240K until DEWET) Climb to 1600 then climbing right turn to 5000 direct DEWET and hold, continue climb-in-hold to 5000. *Missed approach requires minimum climb of 370 feet per NM to 2900.

Authorization Required

Category 1425-1605-430 (300-700)

RNAV (RNP) Z RWY 6
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (R.O.A.)

37°20'N-79°59'W

RNAV (RNP) Z RWY 6
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (R.O.A.)

37°20'N-79°59'W

RNAV (RNP) Z RWY 6
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (R.O.A.)

37°20'N-79°59'W
RNAV (RNP) Z RWY 24
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

**ATIS**
132.375

**ROANOKE APP CON**
126.9
339.8

**ROANOKE TOWER**
118.3
257.8

**GND CON**
121.9
257.8

**CLNC DEL**
119.7

---

**APP CRS**
238°

**Rwy Idg**
6010

**TDZE**
1170

**Apt Elev**
1175

---

**RNAV (RNP) Z RWY 24**
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

**MISSING APPROACH:** Climb to 4000 direct JAYYT and on track 149° to TPUCK and on track 107° to MONAT and hold. # Missed approach requires minimum climb of 217 feet per NM to 3200.

**ATIS**
132.375

**ROANOKE APP CON**
126.9
339.8

**ROANOKE TOWER**
118.3
257.8

**GND CON**
121.9
257.8

**CLNC DEL**
119.7

---

**APP CRS**
238°

**Rwy Idg**
6010

**TDZE**
1170

**Apt Elev**
1175
RNAV (GPS) Y RWY 6
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

ATIS 132.375  ROANOKE APP CON 126.9  339.8  ROANOKE TOWER 118.3  257.8  GND CON 121.9  257.8  CLNC DEL 119.7

ZOOMS
- 4080 Procedure NA for arrivals at ZOOMS on V140 westbound and V258 westbound.
- 3797
- 4361

SUSGE

SUSGE

Procedure NA for arrivals at PSK VORTAC on airway radials 069 CW 153.

RNAV (GPS) Y RWY 6
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

ATIS 132.375  ROANOKE APP CON 126.9  339.8  ROANOKE TOWER 118.3  257.8  GND CON 121.9  257.8  CLNC DEL 119.7

ZOOMS
- 4080 Procedure NA for arrivals at ZOOMS on V140 westbound and V258 westbound.
- 3797
- 4361

SUSGE

 Procedure NA for arrivals at PSK VORTAC on airway radials 069 CW 153.

RNAV (GPS) Y RWY 6
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

ATIS 132.375  ROANOKE APP CON 126.9  339.8  ROANOKE TOWER 118.3  257.8  GND CON 121.9  257.8  CLNC DEL 119.7

ZOOMS
- 4080 Procedure NA for arrivals at ZOOMS on V140 westbound and V258 westbound.
- 3797
- 4361

SUSGE

Procedure NA for arrivals at PSK VORTAC on airway radials 069 CW 153.

RNAV (GPS) Y RWY 6
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

ATIS 132.375  ROANOKE APP CON 126.9  339.8  ROANOKE TOWER 118.3  257.8  GND CON 121.9  257.8  CLNC DEL 119.7

ZOOMS
- 4080 Procedure NA for arrivals at ZOOMS on V140 westbound and V258 westbound.
- 3797
- 4361

SUSGE

Procedure NA for arrivals at PSK VORTAC on airway radials 069 CW 153.
RNAV (GPS) Y RWY 24

ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

Missed Approach: Climbing left turn to 4000 direct MONAT and hold.

Procedure NA for arrival at HOBOS on V140-473 westbound and V473 northeast bound.

Procedure NA for arrival on LYH VOR/DME on airway radials 235 CW 014.

Visual Segment - Obstacles.

Category

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LP MDA</td>
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<td>2500-1½</td>
<td>2500-3</td>
<td>1330 (1400-3)</td>
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<tr>
<td>LNAV MDA</td>
<td>3000-1½</td>
<td>3000-1½</td>
<td>3000-3</td>
<td>1830 (1900-3)</td>
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<tr>
<td>CIRCLING</td>
<td>3000-1½</td>
<td>3000-1½</td>
<td>3000-3</td>
<td>1825 (1900-3)</td>
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</tbody>
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ROANOKE, VIRGINIA

Amdt 2 15AUG19
RNAV (GPS) Y RWY 34
ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

ATIS 132.375
ROANOKE APP CON 126.9 339.8
ROANOKE TOWER 118.3 257.8
GND CON 121.9 257.8
CLNC DEL 119.7

MISSING APCH FIX

Procedure NA for arrival on LYH VOR/DME airway radials 192 CW 283.
Procedure NA for arrivals at PIGGS on V258 southeast bound.

**Category A**
- LPV DA #
- LPV DA
- LNAV/VNAV DA
- LNAV MDA
- CIRCLING

**Category B**
- LPV DA #
- LPV DA
- LNAV/VNAV DA
- LNAV MDA
- CIRCLING

**Category C**
- LPV DA #
- LPV DA
- LNAV/VNAV DA
- LNAV MDA
- CIRCLING

**Category D**
- LPV DA #
- LPV DA
- LNAV/VNAV DA
- LNAV MDA
- CIRCLING

Circling NA northwest of Rwy 6-24. Rwy 34 helicopter visibility reduction below 3/4 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C or above 54°C. Inop table does not apply to LPV, LNAV/VNAV or LNAV Cat C/D. For inop ALS, increase LPV# all Cats visibility to 1 1/2 SM.

MISSING APPROACH: (Do not exceed 240K until PROSE). Climb to 2800 then climbing right turn to 6000 direct PROSE and hold, continue climb-in-hold to 6000. # Missed approach requires minimum climb of 405 feet per NM to 3900.

FAF NAVBE [325° 261° 4000]
(19.8)
LYNCHBURG
LYH

PROSE

4000
261°
(19.8)

Procedure NA for arrivals at PIGGS on V258 southeast bound.
For inop MALSR, increase S-LDA/GS 6 all Cats visibility to ½ mile. Missed approach requires a minimum climb of 350 feet per NM to 3600, if unable to meet climb gradient, see LDA Y Rwy 6.

**LATITUDE/LONGITUDE**

ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (ROA)

**MISSED APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**ATIS**

ROANOKE TOWER 118.3 257.8

**GND CON**

ROANOKE APP CON 126.9 339.8

**CLNC DEL**

121.9 257.8

**LDA Z RWY 6**

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.

**LOCALIZER 111.1**

I-SZK 10

**LOC/Azimuth offset 1.45°**

**MISSING APPROACH**

Climb to 1800 then climbing right turn to 5000 on ODR VOR R-155 to PARTE INT/LYH 28.6 DME and hold, continue climb-in-hold to 5000.
VOR/DME-A

ROANOKE/BLACKSBURG RGNL (WOODRUM FLD) (R.O.A.)

RADAR required.

Circling NA northwest of Rwy 6-24. DME from I-SZK LDA. Simultaneous reception of ODR VOR and I-SZK DME required.

ATIS
ROANOKE APP CON
ROANOKE TOWER
GND CON
CLNC DEL

132.375
126.9
339.8
118.3
257.8
121.9
257.8
119.7

WOODRUM
114.9 ODR

ATIS
ROANOKE APP CON
ROANOKE TOWER
GND CON
CLNC DEL

132.375
126.9
339.8
118.3
257.8
121.9
257.8
119.7

MISSED APPROACH: Climbing left turn to 4000 on ODR VOR R-164 and LYH VOR/DME R-258 to MONAT/LYH 19.8 DME and hold.

Circling NA northwest of Rwy 6-24. DME from I-SZK LDA. Simultaneous reception of ODR VOR and I-SZK DME required.

13°C

ATIS
ROANOKE APP CON
ROANOKE TOWER
GND CON
CLNC DEL

132.375
126.9
339.8
118.3
257.8
121.9
257.8
119.7

MISSED APPROACH: Climbing left turn to 4000 on ODR VOR R-164 and LYH VOR/DME R-258 to MONAT/LYH 19.8 DME and hold.

Circling NA northwest of Rwy 6-24. DME from I-SZK LDA. Simultaneous reception of ODR VOR and I-SZK DME required.

13°C

ATIS
ROANOKE APP CON
ROANOKE TOWER
GND CON
CLNC DEL

132.375
126.9
339.8
118.3
257.8
121.9
257.8
119.7

MISSED APPROACH: Climbing left turn to 4000 on ODR VOR R-164 and LYH VOR/DME R-258 to MONAT/LYH 19.8 DME and hold.

Circling NA northwest of Rwy 6-24. DME from I-SZK LDA. Simultaneous reception of ODR VOR and I-SZK DME required.

13°C

ATIS
ROANOKE APP CON
ROANOKE TOWER
GND CON
CLNC DEL

132.375
126.9
339.8
118.3
257.8
121.9
257.8
119.7

MISSED APPROACH: Climbing left turn to 4000 on ODR VOR R-164 and LYH VOR/DME R-258 to MONAT/LYH 19.8 DME and hold.

Circling NA northwest of Rwy 6-24. DME from I-SZK LDA. Simultaneous reception of ODR VOR and I-SZK DME required.

13°C

ATIS
ROANOKE APP CON
ROANOKE TOWER
GND CON
CLNC DEL

132.375
126.9
339.8
118.3
257.8
121.9
257.8
119.7

MISSED APPROACH: Climbing left turn to 4000 on ODR VOR R-164 and LYH VOR/DME R-258 to MONAT/LYH 19.8 DME and hold.

Circling NA northwest of Rwy 6-24. DME from I-SZK LDA. Simultaneous reception of ODR VOR and I-SZK DME required.

13°C
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24: Climb heading 238° to 1675, then direct NTHEN, then on depicted route to BUFIY.

Maintain 5000 or assigned altitude by ATC; expect clearance to filed altitude within 10 minutes after departure.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24: Climb on I-SZK LDA Localizer west course to 4200 to DIXXY I-SZK 15.3 DME. Expect RADAR vectors to filed/assigned route.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb to 5000 on heading 156° to intercept ODR R-155 to HOKEE INT. Expect RADAR vectors to filed/assigned route.

TAKEOFF RUNWAY 24: Climbing left turn to 5000 to intercept ODR R-155 to HOKEE INT. Expect RADAR vectors to filed/assigned route.
**NOTE:** RNAV 1.

**NOTE:** RADAR required.

**NOTE:** DME/DME/IRU or GPS required.

**NOTE:** Chart not to scale.

---

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb heading 156° to 1675, then direct JEMES, then on track 122° to MONAT.

Maintain 5000 or assigned altitude by ATC, expect clearance to filed altitude within 10 minutes after departure.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climb heading 058° to 1680, then direct MASSY. Then on depicted route to cross SCUTA at or above 5000 on heading 075° for RADAR vectors. Maintain 5000 or assigned altitude, expect clearance to filed altitude 10 minutes after departure.

NOTE: Chart not to scale.
When local altimeter setting not received, use Georgetown altimeter setting; increase DA to 305 feet; increase all MDA 60 feet and S-LOC 32 Cat C and Circling Cat D visibility 1/2 SM.

MISSED APPROACH: Climb to 700 then climbing right turn to 2000 on heading 170° and on SBY VORTAC R-140 to COLBE INT/SBY VORTAC 6.6 DME and hold.

 procedure NA for arrivals at SWL VORTAC on V139 southwest bound.

* LOC only

When local altimeter setting not received, use Georgetown altimeter setting; increase DA to 305 feet; increase all MDA 60 feet and S-LOC 32 Cat C and Circling Cat D visibility 1/2 SM.

MISSED APPROACH: Climb to 700 then climbing right turn to 2000 on heading 170° and on SBY VORTAC R-140 to COLBE INT/SBY VORTAC 6.6 DME and hold.

Procedure NA for arrivals at SWL VORTAC on V139 southwest bound.

* LOC only
Baro-VNAV NA when using Georgetown altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 49°C. Visibility reduction by helicopters NA. When local altimeter setting not received use Georgetown altimeter setting: increase LPV DA to 394 feet and increase all Cats visibility 1/2 SM; increase LNAV/VNAV DA to 512 feet and all Cats visibility 1/4 SM; increase all MDA 60 feet and LNAV Cat C/D and Circling Cat D visibility 1/4 SM.

MISSED APPROACH: Climb to 2000 direct OKKOE and hold.

Procedure NA for arrivals at SBY VORTAC on V29 northbound.
RNAV (GPS) RWY 14
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

RNP APCH.

- Rwy 14 helicopter visibility reduction below ¾ SM NA.
- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16° C or above 54° C.

### ASOS
- SALISBURY, MARYLAND
  - 118.325

### PATUXENT APP CON
- 127.95 314.0

### SALISBURY TOWER
- 119.425 (CTAF)

### GND CON
- 123.775

### CLNL DEL
- 123.775

### UNICOM
- 122.95

### Rwy Idg
- 6400

### Apl Elev
- 53

### Holding Pattern
- HYDRS
- EWWEL
- 4 NM

### Holding Pattern
- 3400 2100

### GP 3.00°
- TCH 45

### CATEGORY
- LPV DA
  - A
  - B
  - C
  - D

### LNAV/ VNAV DA
- 453-1½
- 404 (400-1½)

### LNAV MDA
- 440-1
- 391 (400-1)
- 440-1½
- 391 (400-1½)
- 440-1¼
- 391 (400-1¼)

### CIRCLING
- 480-1
- 427 (500-1)
- 520-1
- 467 (500-1)
- 560-1½
- 507 (600-½)
- 700-2
- 647 (700-2)

**MISSED APPROACH FIX**
- FRYER 3.1 NM

### MISSED APCH FIX
- 2100 to HYDRS 318° (11.4)
- FIKLU 2.7 NM to RW14
- RW14
- 2100
- 104
- 245

### Amdt1B 30JAN20
- NE-3, 30 NOV 2023 to 25 JAN 2024
**RNAV (GPS) RWY 23**

**SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)**

- **Baro-VNAV NA when using Georgetown altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 43°C. Rwy 23 helicopter visibility reduction below 3/4 SM NA.
- **When local altimeter setting not received use Georgetown altimeter setting: increase LPV DA to 426 feet and all Cats visibility 3/4 SM; increase LNAV/VNAV DA to 503 feet; increase all MDA 60 feet and LNAV Cat C/D and Circling Cat D visibility 3/4 SM.**

**ASOS**
- 118.325

**PAXUXENT APP CON**
- 127.95 314.0

**SALISBURY TOWER**
- 119.425 (CTAF) 5000 X 100

**GND CON**
- 123.775

**CLNL DEL**
- 123.775

**UNICOM**
- 122.95

**ELEV**
- 53

**TDZE**
- 49

**LNAV only.**

**NUTPY**

**GP 3.00°**

**TCH 45**

**OKKOE**

**FEYKO**

**ZASBA**

**OKKOE**

**MISSED Approach Fix**

**VGS and RNAV glidepath not coincident**

**GND CON**

**RW23**

**SAUSBURY SBY**

**SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)**

**RNAV (GPS) RWY 23**

**SALISBURY, MARYLAND**

Amdt 1B 25MAR21

**38°20'N-75°31'W**
RNAV (GPS) RWY 32
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 49°C. When local altimeter setting not received use Georgetown altimeter setting: increase LPV DA to 305 feet; increase LNAV/VNAV DA to 510; increase all MDA 60 feet and LNAV Cat C and Circling Cat D visibility 1/2 SM. For inoperative MALSR, increase LNAV Cat D visibility to 1 1/2 SM. VDP and Baro-VNAV NA when using Georgetown altimeter setting.

Procedure NA for arrivals at SWL VORTAC on V139 southwest bound.

RNAV (GPS) RWY 32
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 49°C. When local altimeter setting not received use Georgetown altimeter setting: increase LPV DA to 305 feet; increase LNAV/VNAV DA to 510; increase all MDA 60 feet and LNAV Cat C and Circling Cat D visibility 1/2 SM. For inoperative MALSR, increase LNAV Cat D visibility to 1 1/2 SM. VDP and Baro-VNAV NA when using Georgetown altimeter setting.

Procedure NA for arrivals at SWL VORTAC on V139 southwest bound.
Rwy 5 helicopter visibility reduction below 3/4 SM NA.

MISSED APPROACH: Climb to 2000 on SBY VORTAC R-039 then left turn direct SBY VORTAC and hold.

ASOS | PATUXENT APP CON | SALISBURY TOWER | GND CON | CLNL DEL | UNICOM
--- | --- | --- | --- | --- | ---
118.325 | 127.95 | 119.425 (CTAF) | 123.775 | 123.775 | 122.95

SALISBURY, MARYLAND

VOR RWY 5

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

ELEV 53

TDZE 47
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
### RNAV (GPS) RWY 1

#### SOUTH BOSTON, VIRGINIA

**AWOS-3**

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<tr>
<th>CATEGORY</th>
<th>LPV DA</th>
<th>LNAV/VNAV DA</th>
<th>LNAV MDA</th>
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<tbody>
<tr>
<td>A</td>
<td>660-1</td>
<td>706-1</td>
<td>820-1</td>
</tr>
<tr>
<td>B</td>
<td>250 (300-1)</td>
<td>296 (300-1)</td>
<td>410 (400-1)</td>
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<tr>
<td>C</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>D</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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**ELEV**

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<tr>
<td>A</td>
<td>960-1</td>
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<tr>
<td>B</td>
<td>540 (600-1)</td>
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</table>

**Procedure NA for arrival on SBV VOR Tac airway radials 203 CW 252.**

**Procedure NA for arrival at HARVY on V3 northbound.**

**SOUTH BOSTON SBV**

**MOOEDE 1.8 NM to RW01**

**DELET 2100**

**BUSSI**

**MIRL Rwy 1-19**

**REIL Rwy 1 and 19**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**WASHINGTON CENTER**

**UNICOM**

**119.425**

<table>
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<th>CATEGORY</th>
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<td></td>
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<tr>
<td>D</td>
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</table>

**Procedure NA for uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).**

**3000 HARVY**

**LNAV only.**

**DME/DME RNP-0.3 NA.** Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Danville altimeter setting and increase LPV DA to 739 feet and LNAV/VNAV DA to 785 feet and all MDA 100 feet; increase LPV all Cats visibility ⅛ mile and LNAV/VNAV all Cats visibility and Circling Cat C visibility ½ mile and LNAV Cat C visibility ⅛ mile. Night landing: Rwy 19 NA. Baro-VNAV and VDP NA when using Danville altimeter setting. Circling NA to Rwy 6-24.

**MISSED APPROACH:**

Climbing right turn to 3000 direct HARVY and hold.

---

**Amdt 1 05JAN17**

**36°43'N-78°51'W**

**413**
### VOR-A

**WILLIAM M TUCK (W78)**

**SOUTH BOSTON, VIRGINIA**

**AL-5112 (FAA)**

**22363**

#### VORTAC SBV

<table>
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</table>

#### DICYE Fix Minimums

- **FAC to MAP 8.1 NM**
- **Knots:** 60 90 120 150 180
- **Min:Sec:** 8:06 5:24 4:03 3:14 2:42

**AWOS-3**

<table>
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<tr>
<td>CIRCLING</td>
<td>960-1</td>
<td>540 (600-1)</td>
<td>1060-1⅓</td>
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<td>640 (700-1¼)</td>
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**WASHINGTON CENTER**

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**UNICOM**

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<tbody>
<tr>
<td></td>
<td>122.8</td>
<td>(CTAF)</td>
<td></td>
<td></td>
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</table>

**Night landing:** Rwy 19 NA. Helicopter visibility reduction below 1 SM NA.

When local altimeter setting not received, use Danville altimeter setting and increase all MDA 80 feet; increase all CATC visibility and DICYE fix minimums.

Cat C visibility ¼ mile. Circling NA to Rwy 6-24.

**MISSED APPROACH:**

Climbing left turn to 3000 direct SBV VORTAC and hold.

- **MISSED APPROACH:**
- **Climbing left turn to 3000 direct SBV VORTAC and hold.**

**NoPT for arrival on SBV VORTAC airway radials 236 CW 252.**

**VOR-C**

**SOUTH BOSTON, VIRGINIA**

**Amdt 9  05JAN17**

**36°43'N-78°51'W**
RNAV (GPS) RWY 1
MECKLENBURG-BRUNSWICK RGNL (AVC)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.
Rwy 1 helicopter visibility reduction below ¾ SM NA.
For inop ALS, increase LPV all visibility to 1 ½ SM.

AWOS-3  127.525  WASHINGTON CENTER  118.75  377.1  UNICOM  122.8 (CTAF)

ODALS
MISSED APPROACH:
Climb to 900 then climbing right turn to 3000 direct BIDKY and hold.

VNAV
LNAV/LPV DA
LNAV/ VNAV DA
LNAV MDA
CIRCLING

MIRL Rwy 1-19
REIL Rwys 1 and 19

For inop ALS, increase LPV all visibility to 1 ½ SM.

SOUTH HILL, VIRGINIA
Amdt 1  27APR17

NE-3, 30 NOV 2023 to 25 JAN 2024

20198
RNAV (GPS) RWY 19
MECKLENBURG-BRUNSWICK RGNL (AVC)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Rwy 19 helicopter visibility reduction below ¾ SM NA.

<table>
<thead>
<tr>
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<th>A</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>691-1</td>
<td>250 (300-1)</td>
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<tr>
<td>LNAV/ VNAV DA</td>
<td>710-1</td>
<td>269 (300-1)</td>
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<tr>
<td>LNAV MDA</td>
<td>760-1</td>
<td>319 (400-1)</td>
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<table>
<thead>
<tr>
<th>CIRCLING</th>
<th>860-1</th>
<th>900-1</th>
<th>1060-1 ¾</th>
<th>1060-2</th>
<th>419 (500-1)</th>
<th>459 (500-1)</th>
<th>619 (700-1¾)</th>
<th>619 (700-2)</th>
</tr>
</thead>
</table>

MISSED APPROACH: Climb to 900 then climbing left turn to 3000 direct USHEE and hold.

AWOS-3 127.525
WASHINGTON CENTER 118.75 377.1
UNICOM 122.8 (CTAF)
ILS or LOC RWY 33

MISSING APPROACH: Climb to 600 then climbing left turn to 2000 direct BRV VORTAC and hold.

AWOS-3 126.325
QUANTICO APP CON 127.05 290.375
GCO 135.075
UNICOM 122.725 (CTAF)

ELEV 211
TDZE 196

If local altimeter setting not received, use Shannon, Fredericksburg, VA altimeter setting and increase all DH/MDAs 40 feet. Inoperative table does not apply to S-ILS 33 and to S-LOC Cats B and C. DME or ADF required.

329° 5.5 NM from FAF

SHANNON
EZF 237
JAVIK INT I-RMN 3.4

HILL MOA

WALOX INT I-RMN 10.4

HIGAP INT
BRV 10

600 2000 BRV VORTAC
• LOC only

JAVIK INT I-RMN 3.4

CODAC INT I-RMN 6.5

122°

329°

940* 2000

329°

∠ 980 when using Shannon, Fredericksburg, VA I altimeter setting.

CATEGORY
A
B
C
D
S-ILS 33 396-1¾ 200-1 (200-1¾)
S-LOC 33 580-1¾ 384-1¼ 840-1¾ 1040-2¼
CIRCLING 720-1 820-1 829 (900-2¾)

122°

329°

329°

GS 3.00°

143°

TCH 46

ALTERNATE MISSED APCH FIX

SHANNON
EZF 237

JAVIK INT I-RMN 3.4

HILL MOA

WALOX INT I-RMN 10.4

HIGAP INT
BRV 10

600 2000 BRV VORTAC
• LOC only

JAVIK INT I-RMN 3.4

CODAC INT I-RMN 6.5

122°

329°

940* 2000

329°

∠ 980 when using Shannon, Fredericksburg, VA I altimeter setting.

CATEGORY
A
B
C
D
S-ILS 33 396-1¾ 200-1 (200-1¾)
S-LOC 33 580-1¾ 384-1¼ 840-1¾ 1040-2¼
CIRCLING 720-1 820-1 829 (900-2¾)

122°

329°

329°

GS 3.00°

143°

TCH 46

ALTERNATE MISSED APCH FIX

SHANNON
EZF 237

JAVIK INT I-RMN 3.4

HILL MOA

WALOX INT I-RMN 10.4

HIGAP INT
BRV 10

600 2000 BRV VORTAC
• LOC only

JAVIK INT I-RMN 3.4

CODAC INT I-RMN 6.5

122°

329°

940* 2000

329°

∠ 980 when using Shannon, Fredericksburg, VA I altimeter setting.

CATEGORY
A
B
C
D
S-ILS 33 396-1¾ 200-1 (200-1¾)
S-LOC 33 580-1¾ 384-1¼ 840-1¾ 1040-2¼
CIRCLING 720-1 820-1 829 (900-2¾)
VOR RWY 33
STAFFORD RGNL (RMN)

If local altimeter setting not received, use Shannon, Fredericksburg, VA altimeter setting and increase all MDAs 40 feet. VDP NA with Shannon, Fredericksburg, VA altimeter setting. Inoperative table does not apply to Cat C.

MISSED APPROACH: Climbing left turn to 2000 direct BRV VORTAC and hold.
ILS or LOC RWY 5
SHENANDOAH VALLEY RGNL (SHD)

AWOS-3
124.925

POTOMAC APP CON
132.85

CINCL DEL
118.35

UNICOM
123.0 (CTAF)

Amdt 9B 11AUG22

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA


AWOS-3
124.925

POTOMAC APP CON
132.85

CINCL DEL
118.35

UNICOM
123.0 (CTAF)

Amdt 9B 11AUG22

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

RNAV (GPS) RWY 23
SHENANDOAH VALLEY RGNL (SHD)

**Baro-VNAV NA when using Charlottesville altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Visibility reduction by helicopters NA. When local altimeter setting not received, use Charlottesville altimeter setting and increase all DA 130 feet and all MDA 140 feet. Increase LPV and LNAV/VNAV all Cats visibility ¼ SM, LNAV Cat C visibility ¼ SM, LNAV Cat D ½ SM, Circling Cat C ½ SM and Cat D ¼ SM.**

**MISSED APPROACH:** Climb to 5300 direct GABEL and hold, continue climb-in-hold to 5300.

### RNAV (GPS) RWY 23

- **227°**
- **5300**
- **GABEL**

**Procedure NA for arrival at LURAY on V143 northeast bound.**

- **3860**
- **TTUMS**
- **3700**

**Procedure NA for arrival at TTUMS on V377 northbound.**

- **4400**
- **3 NM to DORDE**

**Procedure NA for arrival at MITER on V38 southeast bound and V140 southwest bound.**

- **227°**
- **3.2 NM**
- **4300**

**RNAV (GPS) RWY 23**

- **RNAV only**
- **DORDE 3 NM to RW23**
- **2200**
- **3900**

### Category

- **LPV DA**: 1451-2/3, 250 (300-1/2)
- **LNAV/ VNAV DA**: 1530-1, 329 (400-1)
- **LNAV MDA**: 1580-1, 379 (400-1)
- **CIRCLING**: 1660-1, 459 (500-1)
  - **459**: 459 (500-1)
  - **559**: 559 (600-1)
  - **699**: 699 (700-2)
  - **859**: 859 (900-2)

---

**STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA**

**AL-5369 (FAA)**

**RNAV (GPS) RWY 23**

**SHENANDOAH VALLEY RGNL (SHD)**

**23222**

**STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA**

** orig-B 11AUG22**

**38°16’N-78°54’W**

**423**
When local altimeter setting not received, use Charlottesville altimeter setting and increase all MDAs 140 feet and visibility S-5 and Circling Cat C 1/2 SM, Cat D 1/4 SM.

AL-5369 (FAA)

NDB RWY 5

POTOMAC APP CON
AWOS-3

CATEGORY
S-5
CIRCLING

CLNC DEL

UNICOM

FAF to MAP 4.2 NM

S-5

MISSED APPROACH: Climb to 2400 then climbing left turn to 3600 direct SH LOM and hold.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 5**: Climb heading 060° to 6000 to intercept MOL VOR/DME R-036 outbound, thence....

**TAKEOFF RUNWAY 23**: Climbing left turn to 6000 heading 200° to intercept MOL VOR/DME R-036 inbound, thence....

...expect radar vectors to filed/assigned route. Expect clearance to filed altitude/flight level 10 minutes after departure.
RNAV (GPS) RWY 11
BAY BRIDGE (W29)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

Procedure NA for arrivals at GEEMO on V123-445 eastbound.

WARNING -- WASHINGTON DC SFRA. CTC POTOMAC APP CON

AWOS-3 120.575
POTOMAC APP CON 119.0 282.275
UNICOM 122.725 (CTAF)

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 39).

MISSED APPROACH: Climb to 2100 direct ZAKLY and hold.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

Procedure NA for arrivals at GEEMO on V123-445 eastbound.

WARNING -- WASHINGTON DC SFRA. CTC POTOMAC APP CON

RNAV (GPS) RWY 11
BAY BRIDGE (W29)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

Procedure NA for arrivals at GEEMO on V123-445 eastbound.

WARNING -- WASHINGTON DC SFRA. CTC POTOMAC APP CON

RNAV (GPS) RWY 11
BAY BRIDGE (W29)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

Procedure NA for arrivals at GEEMO on V123-445 eastbound.

WARNING -- WASHINGTON DC SFRA. CTC POTOMAC APP CON

RNAV (GPS) RWY 11
BAY BRIDGE (W29)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

Procedure NA for arrivals at GEEMO on V123-445 eastbound.

WARNING -- WASHINGTON DC SFRA. CTC POTOMAC APP CON
Rwy 29 helicopter visibility reduction below 1 SM NA.

**MISSED APPROACH:**
Climbing right turn to 2100 direct ZAKLY and hold.

Procedure NA for arrivals at AGARD on V44 eastbound.

---

### RNAV (GPS) RWY 29

**BAY BRIDGE (W29)**

**AWOS-3**
- 120.575

**POTOMAC APP CON**
- 119.0 282.275

**UNICOM**
- 122.725 (CTAF)

**Category**
- A
- B
- C  NA
- D

**RNAL APCH.**

**APP CRS**
- Rwy Idg 2713
- TDZE 15
- Apt Elev 15

---

**SH29 REIL Rwys 11 and 29**

**MIRL Rwy 11-29**

**CIRCLING**
- 485 (500-1)
- 785 (800-1)

---

**ELEV 15**

**TDZE 15**

---

**38°59'N-76°20'W**

Amdt 1A 26MAR20 427

---

NE-3, 30 NOV 2023 to 25 JAN 2024
RNAV (GPS) RWY 4

**SUFFOLK EXEC (SFQ)**

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.**

**MISSED APPROACH:**
Climb to 600 then climbing left turn to 2000 direct OLUCE and hold.

**Procedure NA for arrival on ORF VORTAC airway radials 216 CW 233.**

---

**AWOS-3**
119.375

**NORFOLK APP CON**
127.9  269.425

**UNICOM**
122.7 (CTAF)

**ELEV 70**

**TDZE 66**

---

**NE-3, 30 Nov 2023 to 25 Jan 2024**

---

**Category**

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**CIRCLING**

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RNAV (GPS) RWY 7
SUFFOLK EXEC (SFQ)

DME/DME RNP-0.3 NA. Helicopter visibility reduction below ½ SM NA.
When local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDA 60 feet.

Missed Approach:
Climbing left turn to 2000
Direct LALSE and hold.

Procedure NA for arrivals on CVI
VORTAC airway radials 351 CW 086.

Amdt 1C 02MAR17
NE-3, 30 NOV 2023 to 25 JAN 2024

SUFFOLK, VIRGINIA
Amdt 1C 02MAR17

36°41'N-76°36'W
429
RNAV (GPS) RWY 22
SUFFOLK EXEC (SFQ)

OLUCE (FAF)

JOVAM
1.6 NM to RW22

WOLIB

RW22

OLUCE and hold.

Procedure NA for arrivals at VEGHE on V1 northeast bound.

UNICOM
122.7 (CTAF)

AWOS-3
119.375

NORFOLK APP CON
127.9 269.425

MISSED APPROACH:
Climb to 2000 direct OLUCE and hold.

DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. VDP NA with Norfolk Intl altimeter setting. When local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDA 60 feet, and increase LP Cats C and D visibility ¼ mile and LNAV Cats C and D visibility ½ mile.

AWOS-3
119.375

NORFOLK APP CON
127.9 269.425

UNICOM
122.7 (CTAF)

OLUCE (FAF)

JOVAM
1.6 NM to RW22

WOLIB

RW22

OLUCE and hold.

Procedure NA for arrivals at VEGHE on V1 northeast bound.

UNICOM
122.7 (CTAF)

OLUCE (FAF)

JOVAM
1.6 NM to RW22

WOLIB

RW22

OLUCE and hold.

Procedure NA for arrivals at VEGHE on V1 northeast bound.

UNICOM
122.7 (CTAF)

OLUCE (FAF)

JOVAM
1.6 NM to RW22

WOLIB

RW22

OLUCE and hold.

Procedure NA for arrivals at VEGHE on V1 northeast bound.
**RNAV (GPS) RWY 25**

**SUFFOLK EXEC (SFQ)**

**MISSED APPROACH:** Climb to 2000 direct LALSE and hold.

- **AWOS-3** 119.375
- **NORFOLK APP CON** 127.9 269.425
- **UNICOM** 122.7 (CTAF)

- **Procedure NA for arrivals on ORF VORTAC airway radials 216 CW 233.**

- **NORFOLK, VIRGINIA**

<table>
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<tr>
<th>Ebenezer SUFFOLK EXEC (SFQ)</th>
<th>22083</th>
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</table>

- **APP CRS**
  - **Rwy Idg** 3750
  - **TDZE** 69
  - **Apt Elev** 70

**DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.**

- **When local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDA 60 feet.**

**RNAV (GPS) RWY 25**

- **SUFFOLK EXEC (SFQ)**

- **LALSE**

- **2000 LALSE**

- **Visual Segment - Obstacles.**

- **4 NM Holding Pattern**

- **REIL Rwys 4 and 22**

- **HIRL Rwy 4-22**

- **MIRL Rwy 7-25**

- **AWOS-3** 119.375

- **NORFOLK APP CON** 127.9 269.425

- **UNICOM** 122.7 (CTAF)

**SUFFOLK, VIRGINIA**

**Amdt 1B 02MAR17**

**36°41’N-76°36’W**

**431**
RNAV (GPS)-B
TANGIER ISLAND (TGI)

DME/DME RNP-0.3 NA. When local altimeter setting not received, use Patuxent River NAS altimeter setting and increase all MDAs 100 feet. Specific clearance from Patuxent App Con required before proceeding northbound from CRADD. Approach is within R-6609 and underlies R-4006. Procedure NA at night.

MISSED APPROACH:
Climbing right turn to 2000 direct CRADD and hold.

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>PATUXENT APP CON</th>
<th>UNICOM</th>
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</thead>
<tbody>
<tr>
<td>119.8</td>
<td>121.0 250.3</td>
<td>122.8 (CTAF)</td>
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</table>

Procedure NA for arrival on CCV VORTAC airway radials 290 CW 041.

Approach is within R-6609 and underlies R-4006. Procedure NA at night.

River NAS altimeter setting and increase all MDAs 100 feet. Specific clearance from Patuxent App Con required before proceeding northbound from CRADD.

When local altimeter setting not received, use Patuxent River NAS altimeter setting and increase all MDAs 100 feet. Specific clearance from Patuxent App Con required before proceeding northbound from CRADD.

Approach is within R-6609 and underlies R-4006. Procedure NA at night.

Specific clearance from Patuxent App Con required before proceeding northbound from CRADD.

When local altimeter setting not received, use Patuxent River NAS altimeter setting and increase all MDAs 100 feet. Specific clearance from Patuxent App Con required before proceeding northbound from CRADD.

Approach is within R-6609 and underlies R-4006. Procedure NA at night.
RNAV (GPS) RWY 10
TAPPAHANNOCK/ESSEX COUNTY (XSA)

Misplaced Approach: Climbing right 3° 4
Rwy 10 helicopter visibility reduction below ¾ SM NA.

NoPT for arrival at DEGAY on V376 northbound.

<table>
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<th>Category</th>
<th>A</th>
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<tbody>
<tr>
<td>LNAV MDA</td>
<td>540-1</td>
<td>405 (500-1)</td>
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<td>CIRCLING</td>
<td>580-1</td>
<td>640-1</td>
<td>820-2</td>
<td>NA</td>
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</tbody>
</table>

AWOS: 3
125.775

POTOMAC APP CON
126.4 282.375

UNICOM
122.8 (CTAF)

ELEV 135
TDZE 135

REIL Rwys 10 and 28
MIRL Rwy 10-28

TAPPAHANNOCK, VIRGINIA
Amdt 2A 10AUG23
RNAV (GPS) RWY 28
TAPPAHANNOCK/ESSEX COUNTY (XSA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

AWOS-3 125.775
POTOMAC APP CON 126.4 282.375
UNICOM 122.8 (CTAF)

MISSED APPROACH: Climb to 600 then climbing left turn to 2000 direct SVILL and hold.

AWOS-3 125.775
POTOMAC APP CON 126.4 282.375
UNICOM 122.8 (CTAF)

Procedure NA for arrival on HCM VORTAC airway radials 010 CW 107.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.
RNAV (GPS) RWY 20
WAKEFIELD MUNI (AKQ)

**ASOS**
<p>| | |</p>
<table>
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<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>128.325</td>
<td></td>
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</tbody>
</table>

**NORFOLK APP CON**
|            |         |
| 127.9 269.425 |         |

**UNICOM**
|            |         |
| 122.8 (CTAF) |         |

**APP CRS**

- **Rwy Idg**: 3866
- **TDZE**: 110
- **Apt Elev**: 111

**Category B**

- DME/DME RNP-0.3 NA.
- Procedure NA at night.

**MISSING APPROACH**: Climbing left turn 2600 direct NOXEE and hold.

**ASOS**

- 128.325

**NORFOLK APP CON**

- 127.9
- 269.425

**UNICOM**

- 122.8 (CTAF)

**ELEV**

- 111

**TDZE**

- 110

**MIRL Rwy 2-20**

**Procedure NA at night.**

- Climbing left turn 2600 direct NOXEE and hold.

**RNAV (GPS) RWY 20**

- 2600
- NOXEE

**Holding Pattern**

- 4 NM
- 30 NM to NOXEE (IF/IAF)
- 118°
- 298°

**MILUE**

- 208°

**NOXEE**

- 298°
- 118°

**RW20**

- 208°
- 1700

**TCH 40**

- 2.92°

**CATEGORY**

- A
- B
- C
- D

**LNAV MDA**

- 1120-3
- 1010 [1100-3]

**CIRCLING**

- 1120-3
- 1009 [1100-3]

**Amdt 1 17AUG17**

**NE-3, 30 NOV 2023 to 25 JAN 2024**
MISSED APPROACH: Climb to 1,500 then climbing left turn to 2,000 direct AKQ NDB and hold.

Procedure NA at night.

HOPEWELL
114.35 HPW
Chan 90 (Y)

Apt Elev
TDZE
3866
110
111

ASOS
NORFOLK APP CON
UNICOM
128.325
127.9
269.425
122.8 (CTAF)

Wakefield, Virginia
Amdt 5 17AUG17
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Salisbury altimeter setting; increase LPV DA to 342 and all Cats visibility ½ mile; increase LNAV/VNAV DA to 510 and all Cats visibility ½ mile; increase all MDA 60 feet and LNAV Cats C/D and Circling Cat C visibility ½ mile. Baro-VNAV and VDP NA when using Salisbury altimeter setting.

**MISSING APPROACH:** Climb to 600 then climbing left turn to 2000 direct MAGGO and hold.

<table>
<thead>
<tr>
<th>ASOS</th>
<th>PATUXENT APP CON</th>
<th>WALLOPS TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>119.175</td>
<td>127.95</td>
<td>126.5 (CTAF)</td>
<td>127.875</td>
<td>269.325</td>
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<tr>
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<td>314.0</td>
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<td>121.7</td>
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</table>

**RNAV (GPS) RWY 4**

**WALLOPS FLIGHT FACILITY (WAL)**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>LPV DA</th>
<th>LNAV/VNAV DA</th>
<th>LNAV MDA</th>
<th>CIRCLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>287-3/4</td>
<td>455-1 3/8</td>
<td>560-1</td>
<td>600-1</td>
</tr>
<tr>
<td>B</td>
<td>250 (300-3/4)</td>
<td>418 (500-1%)</td>
<td>523 (600-1)</td>
<td>560 (600-1)</td>
</tr>
<tr>
<td>C</td>
<td>250 (300-3/4)</td>
<td>523 (600-1)</td>
<td>523 (600-1)</td>
<td>620-1/2</td>
</tr>
<tr>
<td>D</td>
<td>250 (300-3/4)</td>
<td>600-1/2</td>
<td>580 (600-1)</td>
<td>860-2 3/4</td>
</tr>
</tbody>
</table>

**HOLDING PATTERN**

- CURAB 2000
- 223° 043°
- GP 3.00°
- TCH 57°

**ELEV 40**

**TDZE 37**

**WALLOPS TOWER**

**GND CON**

**CLNC DEL**

**WALLOPS ISLAND, VIRGINIA**

Amdt 1B 21JUL16

37°56'N-75°28'W
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below 3/4 SM NA.

When local altimeter setting not received, use Salisbury altimeter setting: increase LPV DA to 372 and all Cats visibility 1/4 mile, increase LNAV/VNAV DA to 437 and all Cats visibility 1/4 mile, increase all MDA 60 feet and LNAV Cats C/D visibility 1/4 mile and Circling Cat C visibility 1/4 mile. Baro-VNAV and VDP NA when using Salisbury altimeter setting.

**MISSING APPRAISAL:** Climb to 600 then climbing right turn to 2000 direct MAGGO and hold.
RNAV (GPS) RWY 22
WALLOPS FLIGHT FACILITY (WAL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME-RNP 0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Salisbury altimeter setting; increase LPV DA to 367 and all Cats visibility ½ mile; increase LNAV/VNAV DA to 489 and all Cats visibility ½ mile; increase all MDA 60 feet and LNAV Cats C/D visibility ½ mile and Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Salisbury altimeter setting.

Heli visibility reduction below 0.5 SM NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME-RNP 0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Salisbury altimeter setting; increase LPV DA to 367 and all Cats visibility ½ mile; increase LNAV/VNAV DA to 489 and all Cats visibility ½ mile; increase all MDA 60 feet and LNAV Cats C/D visibility ½ mile and Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Salisbury altimeter setting.

Amdt 1B 21JUL16

NE-3, 30 NOV 2023 to 25 JAN 2024
RNAV (GPS) RWY 28
WALLOPS FLIGHT FACILITY (WAL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Salisbury altimeter setting: increase LPV DA to 343 and all Cats visibility ½ mile; increase LNAV/VNAV DA to 453 and all Cats visibility ¼ mile; increase all MDA 60 feet and LNAV Cats C/D and Circling Cat C visibility ½ mile. Baro-VNAV and VDP NA when using Salisbury altimeter setting.

MISSED APPROACH: Climb to 600 then climbing right turn to 2000 direct MAGGO and hold.

ASOS

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LNAV DA</td>
<td>290-3/4</td>
<td>250 (300-3/4)</td>
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<td></td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>400-1 1/8</td>
<td>360 (400-1 1/8)</td>
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<tr>
<td>LNAV MDA</td>
<td>520-1</td>
<td>480 (500-1)</td>
<td>520-1 1/8</td>
<td>480 (500-1 1/8)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>600-1</td>
<td>560 (600-1)</td>
<td>620-1 1/2</td>
<td>860-2 3/4</td>
</tr>
</tbody>
</table>

WALLOPS ISLAND, VIRGINIA

Amdt 1B 21JUL16

WALLOPS FLIGHT FACILITY (WAL)
RNAV (GPS) RWY 35
WALLOPS FLIGHT FACILITY (WAL)

WAAS CH 53732 APP CRS 349°

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Salisbury altimeter setting: increase LPV DA to 343; increase LNAV/VNAV DA to 464 and all Cats visibility ¾ mile; increase all MDA 60 feet and LNAV Cats C/D visibility ¾ mile and Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Salisbury altimeter setting. Helicopter visibility reduction below ¾ SM. Procedure NA when R-6604 active.

MISSED APPROACH: Climb to 600 then climbing left turn to 2000 direct MAGGO and hold.

ASOS
119.175

PATUXENT APP CON
127.95 314.0

WALLOPS TOWER
126.5 (CTAF) 306.975 (CTAF)

GND CON
127.875 269.325

CLNC DEL
121.7

ELEV 40
TDZE 39

REIL all Rwys
HIRL Rwys 4, 22, 10, 28 and 17-35

WALLOPS ISLAND, VIRGINIA
Orig-B 21JUL16

37°56'N 75°28'W
WALLOPS FLIGHT FACILITY (WAL)

RNAV (GPS) RWY 35

ELEV 40 TDZE 39

WALLOPS ISLAND, VIRGINIA
AL-639 (FAA) 23054

2000
ZELAP
2000
30 NM to ZELAP (Nor)
079°
079°
30 NM to ZELAP (Nor)
259°
259°

MAGGO

VGS and RNAV glidepath not coincident. VGSi Angle 3.00/TCH 59.

600 2000 MAGGO 5 NM Holding Pattern

079°
079°

LNAV only.

1.2 NM to RW35

1700 349°

1700

LGPA

600-1 560 (600-1)

LNAV MDA
460-1 421 (500-1)

CIRCLING
600-1 560 (600-1)

LNAV/ VNAV DA
410-1 41 (400-1)
When local altimeter setting not received, use Salisbury altimeter setting and increase all MDA 60 feet and S-17 Cats C/D and Circling Cat C visibility 1/4 mile. Helicopter visibility reduction below 1/2 SM NA.

VOR or TACAN RWY 17
WALLOPS FLIGHT FACILITY (WAL)

MISSED APPROACH: Climb to 600 then climbing right turn to 2000 direct SWL VORTAC and hold. (TACAN aircraft climb to 600 then climbing right turn to 2000 on heading 300° and SWL VORTAC R-219 to WAFIT/SWL 5 DME and hold SW, LT 039° inbound.)

NoPT for arrival on SWL VORTAC
airway radials 360 CW 034.

VOR or TACAN RWY 17
WALLOPS FLIGHT FACILITY (WAL)

MISSED APPROACH: Climb to 600 then climbing right turn to 2000 direct SWL VORTAC and hold. (TACAN aircraft climb to 600 then climbing right turn to 2000 on heading 300° and SWL VORTAC R-219 to WAFIT/SWL 5 DME and hold SW, LT 039° inbound.)

NoPT for arrival on SWL VORTAC
airway radials 360 CW 034.

VOR or TACAN RWY 17
WALLOPS FLIGHT FACILITY (WAL)

MISSED APPROACH: Climb to 600 then climbing right turn to 2000 direct SWL VORTAC and hold. (TACAN aircraft climb to 600 then climbing right turn to 2000 on heading 300° and SWL VORTAC R-219 to WAFIT/SWL 5 DME and hold SW, LT 039° inbound.)

NoPT for arrival on SWL VORTAC
airway radials 360 CW 034.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
LOC/DME RWY 15
WARRENTON/FAUQUIER (HWY)

AWOS-3 120.35
CIR AWOS-3 119.325
POTOMAC APP CON 128.525 306.925
UNICOM 122.7 (CTAF)

WARNING -- WASHINGTON DC SFRA. CONTACT POTOMAC APP CON.

LOCALIZER 109.75
I-HWY 13.6
Chan 110

Holding Pattern

One Minute

WARRENTON, VIRGINIA

AWOS-3
CIR AWOS-3
POTOMAC APP CON
UNICOM

3.5 NM
0.5% U P

CIRCLING

6.8 NM
3.3 NM
1.2 NM
1.3

S-15
780-1 453 (500-1)
780-1 453 (500-1)

CIRCLING
780-1 444 (500-1)
800-1 464 (500-1)
880-1 544 (600-1½)
980-2 644 (700-2)

REIL Rwys 15 and 33
HIRL Rwy 15-33

38°35'N-77°43'W

WARRENTON/FAUQUIER (HWY)
LOC/DME RWY 15

1.3 NM
1.2 NM
1.3

Category
A
B
C
D

NE-3, 30 NOV 2023 to 25 JAN 2024

NE-3, 30 NOV 2023 to 25 JAN 2024
**WARRENTON, VIRGINIA**

**AL-5747 (FAA)**

**RNAV (GPS) RWY 33**

**WARRENTON/FAUQUIER (HWY)**

**WAAS CH 70426**

<table>
<thead>
<tr>
<th>APP CRS</th>
<th>Rwy Idg</th>
<th>TDZE</th>
<th>Apt Elev</th>
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<tbody>
<tr>
<td>329°</td>
<td>5000</td>
<td>336</td>
<td>336</td>
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</tbody>
</table>

**120.35**

**CJR AWOS-3**

**119.325**

**POTOMAC APP CON**

**128.525 306.925**

**UNICOM**

**122.7 (CTAF)**

**1048**

**WARRENTON/FAUQUIER (HWY)**

**AWOS-3**

**120.35**

**TDZE**

**336**

**ELEV 336**

**CASANOVAN CSN**

**4 NM**

**Radar Required**

**WASHINGTON DC METROPOLITAN SFRA**

**AWOS-3**

**CJR AWOS-3**

**POTOMAC APP CON**

**UNICOM**

**122.7 (CTAF)**

**336**

**329°**

**336**

**ELEV 336**

**TDZE 336**

**MWA RW33 25 NM**

**4700**

** wartime**

**CSN A**

**358 A**

**RW33**

**476**

**469**

**329°**

**2.5 NM to RW33**

**LRGNT**

**2.1 NM to RW33**

**RW33**

**329°**

**1.1 NM to RW33**

**2.6 NM**

**6.5 NM**

**CRLYN**

**335°**

**ANTRY**

**335°**

**145°**

**325°**

**2000**

**4 NM**

**Holding Pattern**

**WARNING --**

**WASHINGON DC SFRA.**

**CONTACT POTOMAC APP CON**

**NePIT for arrival at ANTRY on V286 northwest bound.**

**Procedure NA when DEMO 1 MOA active.**

**800**

**3000**

**CSN**

**LRGNT**

**2.5 NM to RW33**

**RW33**

**329°**

**CRLYN**

**335°**

**ANTRY**

**335°**

**145°**

**325°**

**2000**

**4 NM**

**Holding Pattern**

**WARNING --**

**WASHINGON DC SFRA.**

**CONTACT POTOMAC APP CON**

**NePIT for arrival at ANTRY on V286 northwest bound.**

**Procedure NA when DEMO 1 MOA active.**

**LP MDA**

**720-1 384 (400-1) 720-1/8 384 (400-1/8)**

**LNAV MDA**

**740-1 404 (500-1) 740-1/2 404 (500-1/2)**

**CIRCLING**

**760-1 424 (500-1) 800-1 464 (500-1) 880-1 544 (600-1) 980-2 644 (700-2)**

**449**

**WARRENTON, VIRGINIA**

**Orig-B 15JUL21**

**38°35'N-77°43'W**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**WAAS CH 70426**

**W33A**

**APP CRS**

**329°**

**Rwy Idg**

**5000**

**TDZE**

**336**

**Apt Elev**

**336**

**AWOS-3**

**120.35**

**CJR AWOS-3**

**119.325**

**POTOMAC APP CON**

**128.525 306.925**

**UNICOM**

**122.7 (CTAF)**

**336**

**329°**

**Rwl Rs 15 and 33**

**HRL Rwy 15-33**

**WARRENTON/FAUQUIER (HWY)**

**RNAV (GPS) RWY 33**

**38°35'N-77°43'W**

**449**

**WARRENTON, VIRGINIA**

**Orig-B 15JUL21**

**38°35'N-77°43'W**

**449**
When local altimeter setting not received, use Culpeper altimeter setting and increase all MDA 40 feet; increase S-15 Cats C/D and Circling Cats C/D visibility ½ SM; increase MABEE fix minimums S-15 Cats C/D and Circling Cat D visibility ¾ SM. Helicopter visibility reduction below ¾ SM NA.

AWOS-3
120.350

CJR AWOS-3
119.325

POTOMAC APP CON
128.525 306.925

UNICOM
122.7 (CTAF)

One Minute Holding Pattern

2800

CSN

3.01°

119°

MABEE INT
CSN 5.3

3368

370°

2800

CSN VORTAC

2800

3.01°

119°

MABEE INT
CSN 5.3

3368

370°

2800

CSN VORTAC

2800

3.01°

119°

MABEE INT
CSN 5.3

3368

370°

2800

CSN VORTAC

2800

3.01°

119°

MABEE INT
CSN 5.3

3368

370°

2800

CSN VORTAC

2800

3.01°

119°

MABEE INT
CSN 5.3

3368

370°

2800

CSN VORTAC

2800

3.01°

119°

MABEE INT
CSN 5.3

3368

370°
RNAV (GPS) RWY 16L
MANASSAS RGNL/HARRY P DAVIS FLD (HEF)

ATIS 125.175
POTOMAC APP CON 128.525 306.925
MANASSAS TOWER* 133.1 (CTAF) 360.75
GND CON 121.8
CLNC DEL 120.2

Procedure NA for arrival at MANNE on V4 northwest bound.

Procedure NA for arrival at CSN VORTAC on V453 northwest bound.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. For inop ALS, increase LNAV Cat C/D visibility to 1% SM.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. For inop ALS, increase LNAV Cat C/D visibility to 1% SM.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. For inop ALS, increase LNAV Cat C/D visibility to 1% SM.
RNAV (GPS) RWY 34L
MANASSAS RGNL/HARRY P DAVIS FLD (HEF)

ATIS 125.175  POMAC APP CON 128.525  MANASSAS TOWER* 133.1 (CTAF) 0 360.75
GND CON 121.8  CLNC DEL 120.2

Misfired Approach:
Climbing left turn to 3000 direct CSN VORTAC and hold.

Category
B  C  D  A

WASHINGTON, DC
Orig 10DEC15

RNAV (GPS) RWY 34L
MANASSAS RGNL/HARRY P DAVIS FLD (HEF)

38°43'N-77°31'W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ARSENAL FIVE DEPARTURE

MANASSAS RGNL/HARRY P DAVIS FLD (HFP)
WASHINGTON, D.C.

NOTE: Chart not to scale.

NOTE: WITTO Transition is for Charlottesville traffic.
NOTE: Rwy 16L/R DME required.
NOTE: Departing Rwy 16L/R requires expeditious intercept of outbound course to ensure avoidance of R-6608 boundary.

NE-3, 30 NOV 2023 to 25 JAN 2024
ARSENAL FIVE DEPARTURE
(ARSNL5.CSN) 21112
ARSENA...
NOTE: Chart not to scale.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: Turbojets only.

TAKEOFF MINIMUMS:
Rwy 16L/R, 34L/R: Standard with minimum climb of 500’ per NM to 710.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16L/R: Climb on heading 161° to 710, then right turn direct GABBE, thence....
TAKEOFF RWY 34L/R: Climb on heading 341° to 710, then left turn direct GABBE, thence....

....on assigned transition. Maintain 3000. Expect clearance to filed altitude within 10 minutes after departure.

FLASK TRANSITION (GABBE3.FLASK):
GLANC TRANSITION (GABBE3.GLANC):
MAULS TRANSITION (GABBE3.MAULS):
MELTN TRANSITION (GABBE3.MELTN):
RRSIN TRANSITION (GABBE3.RRSIN):
HIICH TWO DEPARTURE (RNAV)

NOTE: Chart not to scale.

ATIS
125.175
CLNC DEL
120.2
GND CON
121.8
MANASSAS TOWER *
133.1 (CTAF) 360.75
POTOMAC DEP CON
128.525 306.925

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojets only.

TAKEOFF MINIMUMS:
Rwys 16L/R: Standard with minimum climb of 500’ per NM to 710.
Rwys 34L/R: Standard with minimum climb of 500’ per NM to 710, then minimum climb of 335’ per NM to 3800.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 16L/R: Climb heading 161° to 710, then right turn direct GABBE, then on track 336° to HIICH, thence . . . .
TAKEOFF RUNWAYS 34L/R: Climb heading 341° to intercept course 269° to HIICH, thence . . . .
. . . . on assigned transition. Maintain 3000. Expect clearance to filed altitude within 10 minutes after departure.

JERES TRANSITION (HIICH2.JERES)
MCRAY TRANSITION (HIICH2.MCRAY)
OTTTO TRANSITION (HIICH2.OTTTO)
RAMAY TRANSITION (HIICH2.RAMAY)
WOOLY TRANSITION (HIICH2.WOOLY)
ILS RWY 1 (SA CAT I)

Ronald Reagan Washington NTL (DCA)

Requires specific OPSPEC, MSPEC, or LOA approval.

MISSED APPROACH: Climb to 420 then climbing left turn to 2200 on DCA VOR/DME R-325 to GTN NDB/INT/DCA 5.9 DME and hold.

DME required. RADAR required for procedure entry.

WASHINGTON, DC

WASHINGTON TOWER

GND CON

CLNC DEL

CPDLC

D-ATIS

POTOMAC APP CON

(WEST/SOUTH)

119.85

239.25

124.2

360.8

WASHINGTON TOWER

119.1

257.6

121.7

257.6

128.25

464
WASHINGTON, DC

ILS RWY 1 (CAT II)
RONALD REAGAN WASHINGTON NTL (DCA)

DME required. RADAR required for procedure entry.

MISSED APPROACH: Climb to 420 then climbing left turn to 2200 on DCA VOR/DME R-325 to GTN NDB/INT/DCA 5.9 DME and hold.

Prohibited Area (P-56) 1.5 NM north of DCA. Avoid surface to 18000 MSL.

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

WASHINGTON, DC
Amdt 41D 23FEB23
MISSING APPROACH: (Do not exceed 185 KT until FIVUD) Climb to 2200 left turn to FIVUD and on track 327° to HESLO and on track 327° to GTN NDB and hold.

For uncompensated Baro-VNAV systems, procedure NA below
-10°C (14°F) or above 48°C (120°F). RF required. GPS required.
Missed approach requires RNP less than 1.0. For inop ALS, increase RNP 0.30 all Cats visibility to 1/2 mile.
RNAV (GPS) RWY 33
RONALD REAGAN WASHINGTON NTL (DCA)

MisSED APPROACH: (Do not exceed 210K until Rwy 33)
Climb to 2200 on the FMS lateral path to Rwy 33 and
direct to GTN NDB and hold, continue climb-in-hold to
2200.

Note: Prohibited Area (P-56) 1.5 NM north
of DCA - Avoid surface to 18000 MSL

ELEV 14
TDZE 13

*Check altitude

1.4 NM
0.6 NM
3 NM
5.5 NM

WAshington, DC
Orig 20APR23

RNAV (GPS) RWY 33
RONALD REAGAN WASHINGTON NTL (DCA)

38°51'N 77°02'W
469
WASHINGTON, DC
AL-443 (FAA) 23166

LDA Y RWY 19
RONALD REAGAN WASHINGTON NTL (DCA)

LOC/DME I-ASO 109.9
Chan 36

APP CRS 149°
Rwy Idg 6869
TDZE 13
Apt Elev 14

MAISF
-2-

MISSPLE APPROACH: Climb to 1800 direct DCA VOR/DME and on DCA VOR/DME R-185 to OXONN NDB/DCA 5.6 DME and hold.

D-ATIS 132.65
POTOMAC APP CON 119.85 239.25 (WEST/SOUTH)
124.2 360.8 (EAST)

WASHINGTON TOWER 119.1 257.6
GND CON 121.7 257.6
CLNC DEL 128.25
CPDLC

Prohibited Area (P-56) 1.5 NM north of DCA - Avoid Surface to 18000 MSL.

RADA R REQUIRED

WASHINGTON, DC
RONALD REAGAN WASHINGTON NTL (DCA)

Amdt 1A 29MAR18

WASHINGTON TOWER 119.1 257.6
GND CON 121.7 257.6
CLNC DEL 128.25
CPDLC

Prohibited Area (P-56) 1.5 NM north of DCA - Avoid Surface to 18000 MSL.
Inop table does not apply. Circling NA northeast of Rwy 15-33. Rwy 19 helicopter visibility reduction below 1 SM NA. DME required.

MISSED APPROACH: Climbing right turn to 3000 on DCA VOR/DME R-185 to BADDN/DCA VOR/DME 5.9 DME and hold, continue climb-in-hold to 3000.

Prohibited Area (P-56) 1.5 NM north of DCA - Avoid surface to 18000 MSL.
Weather Minimums: 3000 feet ceiling and 4 mile visibility.

Aircraft may proceed via DCA VOR/DME R-185 (inbound 005°), or via the ILS or LOC/DME RWY 1 approach to 5.9 DME, then follow the Potomac River to the airport.
RIVER VISUAL RWY 19

Aircraft may visually follow the river to the airport, or may proceed via the RNAV (RNP) RWY 19 approach to SETOC waypoint, then follow the river to the airport.

NOTE: Clearance for visual approach does not authorize penetration of P-56.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - AVOID SURFACE TO 18,000 MSL.

Airfield Diagram

Information: 132.65 Washington Tower, 121.7  GND Con, 128.25 CPDLC/CPDLC.

Terminals:
- Terminal 1 (A1-A9)
- Terminal 2 (D35-D45)
- Commuter Parking (E66-E59)

Parking:
- Commuter Parking
- General Aviation Parking
- Terminal 1 Parking

Runways:
- RWY 01-19, 04-22, 15-33

Air Traffic Control:
- Washington Tower 132.65
- Gimli Control 121.7
- CPDLC 128.25

ASDE-X is in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.
**TOP ALTITUDE:**

5000

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**NOTE:**

- RNAV 1.
- RADAR required.
- DME/DME/IRU or GPS required.
- Departing Rwy 1 requires expeditious intercept of outbound course to ensure avoidance of P-56 boundary.
- Rwy 1 departures remain clear of P-56, climb on heading 007°, turn left as soon as practical to intercept course 331° to REVGE.
- Pilots shall comply with Ronald Reagan Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures in the chart supplement special notices.
- Turbo-jets only.
- If unable to accept climb rate advice ATC on initial contact.

**TAKEOFF MINIMUMS:**

- Rwy 1: Standard with minimum climb of 825' per NM to 600.
- Rwy 4, 15, 19: Standard with minimum climb of 500' per NM to 515.
- Rwy 33: Standard with minimum climb of 540' per NM to 640.

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**NOTE:** Chart not to scale.

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**NARRATIVE ON FOLLOWING PAGE**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1:  Climb on heading 007° to intercept course 331° to REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 338° to COVTO, then on track 344° to ALEEX, then on track 050° to DOGUE, cross DOGUE at or above 4000 and at or below 250K, then on track 107° to GUCER, then on track 174° to AMEEE, cross AMEEE at or above 5000, thence....

TAKEOFF RUNWAY 4:  Climb on heading 037° to intercept course 081° to ERECA, then on track 165° to EDDGY, then on track 183° to AMEEE, cross AMEEE at or above 5000, thence....

TAKEOFF RUNWAY 15:  Climb on heading 154° to intercept course 207° to LEAVY, then on track 181° to FIMBI, cross FIMBI at or above 1500 and at or below 230K, then on track 156° to MCNAB, then on track 156° to AMEEE, cross AMEEE at or above 5000, thence....

TAKEOFF RUNWAY 19:  Climb on heading 187° to 515, then direct FIMBI, cross FIMBI at or above 1500 and at or below 230K, then on track 156° to MCNAB, then on track 156° to AMEEE, cross AMEEE at or above 5000, thence....

TAKEOFF RUNWAY 33:  Climb on heading 334° to 515, then direct REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 338° to COVTO, then on track 344° to ALEEX, then on track 050° to DOGUE, cross DOGUE at or above 4000 and at or below 250K, then on track 107° to GUCER, then on track 174° to AMEEE, cross AMEEE at or above 5000, thence....

......on assigned transition. Maintain 5000. Expect clearance to filed altitude within 10 minutes after departure.

COLIN TRANSITION (AMEEE1.COLIN):

SCOOB TRANSITION (AMEEE1.SCOOB):
NOTE: RNAV 1.
NOTE: Radar required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbo-jets only.
NOTE: Departing Rwy 1 requires expeditious intercept of outbound course to ensure avoidance of P-56 boundary.
NOTE: Rwy 1 departures remain clear of P-56. Climb on heading 007°. Turn left as soon as practical to intercept course 331° to REVGE.
NOTE: Pilots shall comply with Ronald Reagan Washington Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in the chart supplement special notices.
NOTE: If unable to accept climb rate advise ATC on initial contact.

TAKEOFF MINIMUMS
Rwy 1: Standard with minimum climb of 825' per NM to 600.
Rwys 15, 19: Standard with minimum climb of 500' per NM to 515.
Rwy 33: Standard with minimum climb of 540' per NM to 640.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 007° to intercept course 331° to REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to CUKLI, then on track 226° to BRUTL, then on track 239° to BUTRZ, cross BUTRZ at or above 3000, then on track 239° to CLTCH, thence . . . .

TAKEOFF RUNWAY 15: Climb on heading 154° to 515, then right turn direct CAPVC, then on track 277° to GAITE, then on track 256° to DMKRT, then on track 259° to BUTRZ, cross BUTRZ at or above 3000, then on track 239° to CLTCH, thence . . . .

TAKEOFF RUNWAY 19: Climb on heading 187° to 515, then direct CAPVC, then on track 277° to GAITE, then on track 256° to DMKRT, then on track 259° to BUTRZ, cross BUTRZ at or above 3000, then on track 239° to CLTCH, thence . . . .

TAKEOFF RUNWAY 33: Climb on heading 334° to 515, then direct REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to CUKLI, then on track 226° to BRUTL, then on track 239° to BUTRZ, cross BUTRZ at or above 3000, then on track 239° to CLTCH, thence . . . .

. . . . on assigned transition. Maintain 5000. Expect clearance to filed altitude within ten (10) minutes after departure.

FLASK TRANSITION (CLTCH3.FLASK)
MAULS TRANSITION (CLTCH3.MAULS)
**DOCTR FIVE DEPARTURE (RNAV)**

**NOTE:** Chart not to scale.

**TOP ALTITUDE:**

- **5000**

**TAKEOFF MINIMUMS:**

- **Rwy 1:** Standard with minimum climb of 825' per NM to 600.
- **Rwys 15, 19:** Standard with minimum climb of 500' per NM to 515.
- **Rwy 4:** Standard with minimum climb of 500’ NM to 515.
- **Rwy 33:** Standard with minimum climb of 540’ per NM to 640.

**(NARRATIVE ON FOLLOWING PAGE)**

**NOTE:** RNAV 1.
**NOTE:** RADAR required.
**NOTE:** Turbo-jets only.
**NOTE:** DQO transition ATC assigned only.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** Departing Rwy 1 requires expeditious intercept of outbound course to ensure avoidance of P-56 boundary.

- **Rwy 1 departures remain clear of P-56, climb on heading 007°, turn left as soon as practical to intercept course 331° to REVGE.**
- **Pilots shall comply with Ronald Reagan Washington Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in the Chart Supplement Special Notices.**
- **Do not exceed 220K until REVGE.**
- **NOTE:** If unable to accept climb rate, advise ATC on initial contact.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 007° to intercept course 331° to REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 338° to COVTO, then on track 344° to ALEEX, then on track 050° to DOGUE, cross DOGUE at or above 4000 and at or below 250K, then on track 106° to RIISE, then on track 101° to DOCTR, cross DOCTR at or above 5000, thence....

TAKEOFF RUNWAY 4: Climb on heading 037° to intercept course 081° to ERECA, then on track 086° to DOCTR, cross DOCTR at or above 5000, thence....

TAKEOFF RUNWAY 15: Climb on heading 154° to intercept course 207° to LEAVY, then on track 181° to FIMBI, cross FIMBI at or above 1500 and at or below 230K, then on track 102° to MOTBE, then on track 042° to GDYUP, then on track 075° to HMBGR, then on track 078° to DOCTR, cross DOCTR at or above 5000, thence....

TAKEOFF RUNWAY 19: Climb on heading 187° to 515, then direct FIMBI, cross FIMBI at or above 1500 and at or below 230 K, then on track 102° to MOTBE, then on track 042° to GDYUP, then on track 075° to HMBGR, then on track 078° to DOCTR, cross DOCTR at or above 5000, thence....

TAKEOFF RUNWAY 33: Climb on heading 334° to 515, then direct REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 339° to COVTO, then on track 344° to ALEEX, then on track 050° to DOGUE, cross DOGUE at or above 4000 and at or below 250K, then on track 106° to RIISE, then on track 101° to DOCTR, cross DOCTR at or above 5000, thence....

....on assigned transition. Maintain 5000. Expect clearance to filed altitude within ten (10) minutes after departure.

AGARD TRANSITION (DOCTR5.AGARD)
DUPONT TRANSITION (DOCTR5.DQO)
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbo-jets only.
NOTE: DME/DME/IRU or GPS required.
NOTE: Departing Rwy 1 requires expeditious intercept of outbound course to ensure avoidance of P-56 boundary.
NOTE: Rwy 1 departures remain clear of P-56, climb on heading 006°, turn left as soon as practical to intercept course 331° to REVGE.
NOTE: Pilots shall comply with Ronald Reagan Washington Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in the Chart Supplement special notices.
NOTE: If unable to accept climb rate, advise ATC on initial contact.

TAKEOFF MINIMUMS:
Rwy 1: Standard with minimum climb of 825' per NM to 600.
Rwys 15, 19: Standard with minimum climb of 500' per NM to 515.
Rwy 33: Standard with minimum climb of 540' per NM to 640.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 007° to intercept course 331° to REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to MELOE, then on track 329° to HORTO, cross HORTO at or above 5000, thence....

TAKEOFF RUNWAY 15: Climb on heading 154° to 515, then right turn direct CAPVC, then on track 277° to GAITE, then on track 277° to LBOLT, then on track 350° to RLLL, then on track 346° to HORTO, cross HORTO at or above 5000, thence....

TAKEOFF RUNWAY 19: Climb on heading 187° to 515, then direct CAPVC, then on track 277° to GAITE, then on track 277° to LBOLT, then on track 350° to RLLL, then on track 346° to HORTO, cross HORTO at or above 5000, thence....

TAKEOFF RUNWAY 33: Climb on heading 334° to 515, then direct REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to MELOE, then on track 329° to cross HORTO at or above 5000, thence....

....on assigned transition. Maintain 5000. Expect clearance to filed altitude within ten (10) minutes after departure.

BUFFR TRANSITION (HORTO4.BUFFR):

JERES TRANSITION (HORTO4.JERES):
**JDUBB FOUR DEPARTURE (RNAV)**

**NOTE:** RNAV 1.
**NOTE:** RADAR required.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** Turbo-jets only.
**NOTE:** Departing Rwy 1 requires expeditious intercept of outbound course to ensure avoidance of P-56 boundary.
**NOTE:** Rwy 1 departures remain clear of P-56, climb heading 007°, turn left as soon as practical to intercept course 331° to REVGE.
**NOTE:** Pilots shall comply with Ronald Reagan Washington Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in the Chart Supplement special notices.
**NOTE:** If unable to accept climb rate advise ATC on initial contact.

- **D-ATIS** 132.65
- **CLNC DEL** 128.25
- **GND CON** 121.7 257.6
- **WASHINGTON TOWER** 119.1 257.6
- **POTOMAC DEP CON** 118.95 257.2

**TOP ALTITUDE:** 5000

**TAKEOFF MINIMUMS**
- Rwy 1: Standard with minimum climb of 825' per NM to 600.
- Rwys 15, 19: Standard with minimum climb of 500' per NM to 515.
- Rwy 33: Standard with minimum climb of 540' per NM to 640.

**NOTE:** Chart not to scale.

**PORTAL**

**Rwand Aire**

- **CAPVC**
- **GAITE**
- **DMKRT**
- **HAFNR**
- **JDDUBB**
- **CEUL**
- **BEBLE**
- **REVGE**
- **P-56A**
- **AL-443 (FAA)**

**REPORTS**

- **JDUBB**
- **JDUBB4**
- **DCA**

**CONTACT**

- **WASHINGTON, DC**
- **RONALD REAGAN WASHINGTON NTL (DCA)**

**NOTE:** Chart not to scale.

(NE-3, 30 NOV 2023 to 25 JAN 2024)

**NOTE:** Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 007° to intercept course 331° to REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to CUKLI, then on track 212° to HAFNR, cross HAFNR at or above 3000, thence . . . .

TAKEOFF RUNWAY 15: Climb on heading 154° to 515, then right turn direct CAPVC, then on track 277° to GAITE, then on track 256° to DMKRT, then on track 232° to HAFNR, cross HAFNR at or above 3000, thence...

TAKEOFF RUNWAY 19: Climb on heading 187° to 515, then direct CAPVC, then on track 277° to GAITE, then on track 256° to DMKRT, then on track 232° to HAFNR, cross HAFNR at or above 3000, thence...

TAKEOFF RUNWAY 33: Climb on heading 334° to 515, then direct REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to CUKLI, then on track 212° to HAFNR, cross HAFNR at or above 3000, thence . . . .

. . . . thence on track 225° to JDUBB, then on assigned transition. Maintain 5000. Expect clearance to filed altitude within 10 minutes after departure.

MELTN TRANSITION (JDUBB4.MELTN)
RRSIN TRANSITION (JDUBB4.RRSIN)
NOTE: RADAR required.
NOTE: Pilots shall comply with Ronald Reagan Washington Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in Airport/Facility Directory special notices.
NOTE: ATC assigned only.

**PROHIBITED AREA P-56**
1.5 NM NORTH OF AIRPORT

**TAKEOFF MINIMUMS**
- Rwy 1: 600-2 with minimum climb of 275' per NM to 1500 or standard with minimum climb of 460' per NM to 800.
- Rwy 4: 300-2 or standard with minimum climb of 210' per NM to 400, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to DER.
- Rwy 15: 300-1½ or standard with minimum climb of 215' per NM to 400, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to DER.
- Rwy 19: 300-1½ or standard with minimum climb of 205' per NM to 300, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1200' prior to DER.
- Rwy 22: 300-2½ or standard with minimum climb of 305' per NM to 600, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1200' prior to DER.
- Rwy 33: Standard with minimum climb of 285' per NM to 700.

**NOTE:** Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climbing left turn as soon as practical to intercept DCA VOR/DME R-328 to 5000 or as assigned, thence . . . .

TAKEOFF RUNWAY 4: Climbing right turn as soon as practical to intercept DCA VOR/DME R-070 to 5000 or as assigned, thence . . . .

TAKEOFF RUNWAY 15: Climbing right turn as soon as practical to intercept DCA VOR/DME R-185 to 5000 or as assigned, thence . . . .

TAKEOFF RUNWAY 19: Climb on DCA VOR/DME R-185 to 5000 or as assigned, thence . . . .

TAKEOFF RUNWAY 22: Climbing left turn as soon as practical to intercept DCA VOR/DME R-185 to 5000 or as assigned, thence . . . .

TAKEOFF RUNWAY 33: Climb on DCA VOR/DME R-328 to 5000 or as assigned, thence . . . .

. . . . expect RADAR vectors to filed/assigned fix. Maintain 5000 or assigned altitude, expect clearance to filed altitude ten (10) minutes after departure.
TOP ALTITUDE: 5000

TAKEOFF MINIMUMS:
Rwy 1: Standard with minimum climb of 825’ per NM to 600.
Rwys 15, 19: Standard with minimum climb of 500’ per NM to 515.
Rwy 33: Standard with minimum climb of 540’ per NM to 640.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Departing Rwy 1 requires expeditious intercept of outbound course to ensure avoidance of P-56 boundary.
NOTE: Rwy 1 departures remain clear of P-56, climb heading 007°, turn left as soon as practical to intercept course 331° to REVGE.
NOTE: Pilots shall comply with Ronald Reagan Washington Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in the Chart Supplement Special Notices.
NOTE: Turbo-jets only.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 007° to intercept course 331° to REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to CULKI, then on track 259° to DUDDD, then on track 271° to REBLL, cross REBLL at or above 5000, thence....

TAKEOFF RUNWAY 15: Climb on heading 154° to 515, then right turn direct CAPVC, then on track 277° to GAITE, then on track 268 to LBOLT, then on track 297° to TEZER, then on track 288° to REBLL, cross REBLL at or above 5000, thence....

TAKEOFF RUNWAY 19: Climb on heading 187° to 515, then direct CAPVC, then on track 277° to GAITE, then on track 277° to LBOLT, then on track 297° to TEZER, then on track 288° to REBLL, cross REBLL at or above 5000, thence....

TAKEOFF RUNWAY 33: Climb on heading 334° to 515, then direct REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to CULKI, then on track 259° to DUDDD, then on track 271° to REBLL, cross REBLL at or above 5000, thence....

....on OTTTO transition. Maintain 5000. Expect filed altitude within ten (10) minutes after departure.

OTTTO TRANSITION (REBLL5.OTTTO):
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbo-jets only.
NOTE: Departing Rwy 1 requires expeditious intercept of outbound course to ensure avoidance of (P-56) boundary.
NOTE: Rwy 1 departures remain clear of (P-56), climb on heading 007°, turn left as soon as practical to intercept course 331° to REVGE.
NOTE: Pilots shall comply with Ronald Reagan Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in the chart supplement special notes.

TAKEOFF MINIMUMS
Rwy 1: Standard with minimum climb of 825’ per NM to 600.
Rwys 15, 19: Standard with minimum climb of 500’ per NM to 515.
Rwy 33: Standard with minimum climb of 540’ per NM to 640.
If unable to accept climb rate, advise ATC on initial contact.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 007° to intercept course 331° to REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to CUKLI, then on track 222° to POOCH, cross POOCH at or above 3000, thence . . . .

TAKEOFF RUNWAY 15: Climb on heading 154° to 515, then right turn direct CAPVC, then on track 277° to GAITE, then on track 256° to DMKRT, then on track 246° to POOCH, cross POOCH at or above 3000, thence . . . .

TAKEOFF RUNWAY 19: Climb on heading 187° to 515, then direct CAPVC, then on track 277° to GAITE, then on track 256° to DMKRT, then on track 246° to POOCH, cross POOCH at or above 3000, thence . . . .

TAKEOFF RUNWAY 33: Climb on heading 334° to 515, then direct REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to CUKLI, then on track 222° to POOCH, cross POOCH at or above 3000, thence . . . .

. . . . then on track 240° to SCRAM, then as depicted. Maintain 5000. Expect clearance to filed altitude within 10 minutes after departure.

GLANC TRANSITION (SCRAM6.GLANC):
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Departing Rwy 1 requires expeditious intercept of outbound course to ensure avoidance P-56 boundary.
NOTE: Rwy 1 departures remain clear of P-56, climb on heading 007°, turn left as soon as practical to intercept course 331° to REVGE.
NOTE: Pilots shall comply with Ronald Reagan Washington Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in the Chart Supplement Special Notices.
NOTE: Turbo-jets only.
NOTE: If unable to accept climb rate, advise ATC on initial contact.

TAKEOFF MINIMUMS:
Rwy 1: Standard with minimum climb of 825’ per NM to 600.
Rwys 4, 15, 19: Standard with minimum climb of 500’ per NM to 515.
Rwy 33: Standard with minimum climb of 540’ per NM to 640.
TAKING OFF RUNWAY 1:  Climbing on heading 007° to intercept course 331° to REVGE, cross REVGE at or above 1500 and at or below 220K, then track 310° to BEBLE, then on track 338° to COVTO, then on track 344° to ALEEX, then on track 050° to DOGUE, cross DOGUE at or above 4000 and at or below 250K, then on track 092° to PHERB, then on track 091° to SOOKI, cross SOOKI at or above 5000, thence,...
TAKING OFF RUNWAY 4:  Climbing on heading 037° to intercept course 081° to ERECA, then on track 063° to SOOKI, cross SOOKI at or above 5000, thence,...
TAKING OFF RUNWAY 15:  Climbing on heading 154° to intercept course 207° to LEAVY, then on track 181° to FIMBI, cross FIMBI at or above 1500 and at or below 230K, then on track 102° to MOTBE, then on track 042° to GDYUP, then on track 053° to RIISE, then on track 056° to SOOKI, cross SOOKI at or above 5000, thence,...
TAKING OFF RUNWAY 19:  Climbing on heading 187° to 515, then direct FIMBI, cross FIMBI at or above 1500 and at or below 230K, then on track 102° to MOTBE, then on track 042° to GDYUP, then on track 053° to RIISE, then on track 056° to SOOKI, cross SOOKI at or above 5000, thence,...
TAKING OFF RUNWAY 33:  Climbing on heading 334° to 515, then direct REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 338° to COVTO, then on track 344° to ALEEX, then on track 050° to DOGUE, cross DOGUE at or above 4000 and at or below 250K, then on track 092° to PHERB, then on track 091° to SOOKI, cross SOOKI at or above 5000, thence,...

...on SWANN transition. Maintain 5000. Expect files altitude within 10 minutes after departure.

SWANN TRANSITION (SOOKI5.SWANN)
TOP ALTITUDE: 5000

TAKEOFF MINIMUMS:
Rwy 1: Standard with minimum climb of 825' per NM to 600.
Rwys 15, 19: Standard with minimum climb of 500' per NM to 515.
Rwy 33: Standard with minimum climb of 540' per NM to 640.

NOTE: Chart not to scale.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Departing Rwy 1 requires expeditious intercept of outbound course to ensure avoidance of P-56 boundary.
NOTE: Rwy 1 departures remain clear of P-56, climb on heading 007°, turn left as soon as practical to intercept course 331° to REVGE.
NOTE: Pilots shall comply with Ronald Reagan Washington Ntl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in the Chart Supplement Special Notices.
NOTE: Turbo-jets only.
NOTE: If unable to accept climb rate advise ATC on initial contact.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 007° to intercept course 331° to REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to MELOE, then on track 275° to WYNGS, cross WYNGS at or above 5000, thence....

TAKEOFF RUNWAY 15: Climb on heading 154° to 515, then right turn direct CAPVC, then on track 277° to GAITE, then on track 277° to LBOLT, then on track 313° to GINYA, then on track 284° to WYNGS, cross WYNGS at or above 5000, thence....

TAKEOFF RUNWAY 19: Climb on heading 187° to 515, then direct CAPVC, then on track 277° to GAITE, then on track 277° to LBOLT, then on track 313° to GINYA, then on track 284° to WYNGS, cross WYNGS at or above 5000, thence....

TAKEOFF RUNWAY 33: Climb on heading 334° to 515, then direct REVGE, cross REVGE at or above 1500 and at or below 220K, then on track 310° to BEBLE, then on track 340° to RGIII, then on track 292° to MELOE, then on track 275° to WYNGS, cross WYNGS at or above 5000, thence....

....on RAMAY transition. Maintain 5000. Expect clearance to filed altitude within ten (10) minutes after departure.

RAMAY TRANSITION (WYNGS5.RAMAY)
Simultaneous approach authorized with Rwy 1C or 1L.

MISSED APPROACH: Climb to 800 then climbing right to 3000 via heading 060° and AML VOR/DME R-051 to BLITZ INT/AML 20 DME and hold.

POTOMAC APP CON
120.45 306.925 (241°-330°)
128.525 306.925 (091°-240°)
126.1 338.25 (331°-090°)

134.425 348.6

DULLES TOWER
120.1 317.8
120.25 348.6
134.425 348.6

GND CON
121.9 317.8
121.625 348.6

CLNC DEL
135.7 317.8

WASHINGTON, DC
International
(NE-3, 30 Nov 2023 to 25 Jan 2024)

AGONAL
201.5 339°

D-ATIS
134.85

CPDLC

WASHINGTON DULLES INTL (IAD)

ILS or LOC RWY 1R

WASHINGTON, DC
International
(NE-3, 30 Nov 2023 to 25 Jan 2024)

AGONAL
201.5 339°

D-ATIS
134.85

CPDLC

WASHINGTON DULLES INTL (IAD)

ILS or LOC RWY 1R
Simultaneous approach authorized with Rwy 19C or 19R.
**1800 RVR authorized with the use of FD or AP or HUD to DA.

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 on heading 010° and AML VOR/DME R-040 to ASPER INT/AML 14.7 DME and hold.

Procedure NA for arrivals at MRB VORTAC on airway radials 088 CW 137.

ILS or LOC RWY 19L
DME from AML VOR/DME. Simultaneous reception of I-OSZ and AML DME required. Simultaneous approach authorized with ILS or LOC/DME Rwy 1L, ILS Rwy 1L (Cat II), ILS Rwy 1L (Cat III), ILS or LOC Rwy 1R, ILS Rwy 1R (Cat II), ILS Rwy 1R (Cat III). DME required. For Inoperative MALSR, increase S-LOC Cats C/D visibility to RVR 5000. **1800 RVR authorized with the use of FD or AP or HUD to DA.

**MISSING APACHE FIX:**

**ALTERNATE MISSED APACHE FIX:** MARYLEBONE VOR/DME.

**ELEV 313 D TDZE 286**
WASHINGTON, DC
AL-5100 (FAA)

ILS or LOC/DME RWY 1L
WASHINGTON DULLES INTL (IAD)

AL-5100 (FAA)
ILS or LOC/DME RWY 1L
WASHINGTON DULLES INTL (IAD)

POTOMAC APP CON
120.45 306.925 (241°-330°)
128.525 306.925 (091°-240°)
126.1 338.25 (331°-090°)

DULLES TOWER
120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
134.425 348.6 (Rwy 1L/19R and 12/30)

GND CON
121.9 317.8 [EAST]
121.625 348.6 [WEST]
135.7 317.8

ALTERNATE MISSED APCH FIX
OLIVR
LDN 14.9
R-088 Chan 90

CASANOVA
116.3 CSN Chan 110

CPDLC

MISSED APCH FIX
OLIVR
AML 20
R-270 113.5 AML
Chan 82

ARMEL
L13.5 AML Chan 82

DME or RADAR REQUIRED

CINNA INT
I-OIU 17.5 RADAR

VGS I and MLS glidepath not coincident (VGS Angle 3.00/TCH 70°).

GS 3.00°
TCH 55

4000
011°
3000
2900
1900

800 5000
AMU R-270
OLIVR

A

1.0

4.4 NM
3.5 NM
3.1 NM
3.9 NM
0.8 NM
0.1

CATEGORY
A B C D
S-ILS 1L 496/18 200 (200-1/2)
S-LOC 1L 660/24 364 (400-1/2)
CIRCLING 940-1 627 (700-1)

TDZ/CL Rwy 1C, 1L, 1R, 12, 19C and 19R

NE-3, 30 NOV 2023 to 25 JAN 2024

ILS or LOC/DME RWY 1L
WASHINGTON DULLES INTL (IAD)

WASHINGTON, DC
Amdt 1C 15JUL21

38°57'N-77°28'W

WASHINGTON DULLES INTL (IAD)

499
WASHINGTON, DC

AMTD 25B 15JUL21

NE-3, 30 NOV 2023 to 25 JAN 2024

ILS or LOC/DME RWY 19C
WASHINGTON DULLES INTL (IAD)

DME or RADAR REQUIRED

MISSED APPROACH: Climb to 3000 via heading 191° and AML VOR/DME R-187 to ERACE INT/AML 13.3 DME and hold.

<table>
<thead>
<tr>
<th>D-ATIS</th>
<th>POTOMAC APP CON</th>
<th>DULLES TOWER</th>
<th>GND CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>134.85</td>
<td>120.45 306.925 (241°-330°)</td>
<td>120.1 317.8 (Rwy 1R/19L)</td>
<td>121.9 317.8 (EAST)</td>
</tr>
<tr>
<td></td>
<td>128.525 306.925 (091°-240°)</td>
<td>120.25 348.6 (Rwy 1C/19C)</td>
<td>121.625 348.6 (WEST)</td>
</tr>
<tr>
<td></td>
<td>126.1 338.25 (331°-090°)</td>
<td>134.425 348.6 (Rwy 1L/19R and 12/30)</td>
<td></td>
</tr>
</tbody>
</table>

WASHINGTON, DC LOCS

CLNC DEL

CPDLC

NE-3, 30 NOV 2023 to 25 JAN 2024

DULLES 25NM

WASHINGTON DULLES INTL (IAD)

38°57’N-77°28’W

WASHINGTON DULLES INTL (IAD)

ILS or LOC/DME RWY 19C

S-LOC 19C

660/40 389 (400-3/4)

S-ILS 19C

471/18 200 (200-1/2)

CIRCLING

940-1 627 (700-1)

940-1 3/4 627 (700-1-3/4)

1060-2 747 (800-2-1/2)

REIL Rwy 30

HIRL all Rwys

S-ILS 19C

471/18 200 (200-1/2)

S-LOC 19C

660/40 389 (400-3/4)

CIRCLING

940-1 627 (700-1)

940-1 3/4 627 (700-1-3/4)

1060-2 747 (800-2-1/2)

REIL Rwy 30

HIRL all Rwys

S-ILS 19C

471/18 200 (200-1/2)

S-LOC 19C

660/40 389 (400-3/4)

CIRCLING

940-1 627 (700-1)

940-1 3/4 627 (700-1-3/4)

1060-2 747 (800-2-1/2)

REIL Rwy 30

HIRL all Rwys

WASHINGTON, DC

Amdt 25B 15JUL21

501
WASHINGTON, DC

ILS or LOC/DME RWY 19R

WASHINGTON DULLES INTL (IAD)

DME or RADAR REQUIRED

ILS or LOC/DME RWY 19R

WASHINGTON DULLES INTL (IAD)

NE-3, 30 NOV 2023 to 25 JAN 2024

AL-5100 (FAA)

23334
WASHINGTON, DC

ILS RWY 1L (CAT II & III)

WASHINGTON DULLES INTL (IAD)

Simultaneous approach authorized with ILS or LOC/DME
Rwy 1C, ILS Rwy 1C (Cat II), RNAV (GPS) Y Rwy 1C,
ILS or LOC Rwy 1R, ILS Rwy 1R (Cat II), ILS Rwy 1R (Cat III),
RNAV (GPS) Y Rwy 1R.

**ALSFS-2**

**A** | **B**
---|---
**S-ILS 1L** | **Rwy Idg** | **9400** | **TDZE** | **296** | **Apt Elev** | **313**

**MISSING APPROACH**: Climb to 800 then climbing
left turn to 5000 via heading 240° and AML VOR/DME
R-270 to OLIVR INT/AML 20 DME and hold, continue
climb-in-hold to 5000.

---

**ALTERNATE MISSED APC FIX**

**DULES TOWER**

**POTOMAC APP CON**

**D-ATIS**

**134.85**

**GND CON**

**135.7 317.8**

**CLNC DEL**

**CPDLC**

**121.625 348.6 (WEST)**

**AMR 111.5 AML 20**

---

**MISSED APC FIX**

---

**CINNA INT**

**110.75**

**FAZER**

**113.5 AML 20**

**BIGGZ**

**I-OIU 9.7**

**Rwy Idg** | **97/12**
---|---
**GS 3.00°** | **TCH 70**
**800** | **5000**
**240°** | **2000**
**270°** | **2000**
**3000** | **2900**
---|---
** CATEGORY** | **A** | **B** | **C** | **D**
**S-ILS 1L** | **CAT II** | **RA 97/12** | **100** | **DA 396**
**S-ILS 1L** | **CAT IIIa** | **RVR 07** | **RVR 06** | **RVR 06**
**S-ILS 1L** | **CAT IIIb** | **RVR 06** | **RVR 06** | **RVR 06**
**S-ILS 1L** | **CAT IIIc** | **NA** | **NA** | **NA**

**CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

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**WASHINGTON, DC**

Amdt 1C 15JUL21

---

**WASHINGTON DULLES INTL (IAD)**

Apt Elev

---

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**DME or RADAR REQUIRED**

---

**WASHINGON DULLES INTL (IAD)**

Apt Elev

---

**AMR 111.5 AML 20**

---

**TCH 55**

---

**TDZ/CL Rwy 30**

**HIRL all Rwy**

---

**TDZ/CL Rwy 1C, 1L, 1R, 12, 19C and 19R**

---

**REIL Rwy 30**

---

**38°57’N-77°28’W**

503
Simultaneous approach authorized with ILS or LOC/DME Rwy 19C, ILS Rwy 19C (Cat II), ILS Rwy 19C (Cat III), Rwy 19L.

ALTERNATE MISSED APCH FIX
OLIVR
LDN 14.9
Chan 90
668
CSN 11.6
Chan 110

MISSED APCH FIX
AML R-270
090°
R-088
114.3 LDN
Chan 90
268
CSN 11.6
Chan 110

PERIOD:
- NAVIGATION AID OPERATIONAL STATUS
- WEATHER OR OPERATIONAL STATUS INFLUENCING NAVIGATION
AID OPERATIONAL STATUS
- VORTICE
- NDB
- VHF NAV
- TACAN
- ILS
- VOR
- DME
- GPS
- DME/DME
- ILS APS
- HIRL
- TWR

GRADUATION INTERVALS
- Vertical: 100 vertical feet above ground level
- Horizontal: 1000 feet

AERODYNAMIC DISTRIBUTION
- Lift: 1.15 N/A
- Drag: 0.5 N/A
- Downwash: 0.5 N/A

MISSED APPROACH: Climb to 5000 then climbing right turn to 5000 via AML VOR/DME R-270 to OLIVR INT/AML 20 DME and hold, continue climb-in-hold to 5000.

DME or RADAR REQUIRED
- Localizer
- LOC
- ILS
- VOR
- DME
- GPS
- DME/DME
- ILS APS
- HIRL
- TWR

PDH: 0.00°

TDZE: 278

LOC/DEME I-SU
110.75
Ch 44 (Y)

APP CRS
191°

Rwy Idg 9400
TDZE 278
Apt Elev 313

ALS-2

DULLES TOWER
121.9 317.8
(Rwy 1R/19L)

DULLES TOWER
135.7 317.8
(Rwsy 1L/19R and 12/30)

CINDY DEL
134.825 348.6
(Rwy 1C/19C)

CHAN DEL
120.25 348.6
(Rwy 1C/19C)

GND CON
121.625 348.6
(EAST)

GND CON
121.9 317.8
(WEST)

POTOMAC APP CON
120.45 306.925
(241°-330°)
128.525 306.925
(091°-240°)
126.1 338.25
(331°-090°)

LOCALIZER 110.75
I-156-41
Chan 44 (Y)

LOCALIZER 110.425
I-156-41
Chan 90

LOCALIZER 110.75
I-156-41
Chan 110

MARTINSBURG
112.1 MRB
Chan 58

OLIVR
ELEV
HIRL all Rwys

REIL Rwy 30

NE-3, 30 NOV 2023 to 25 JAN 2024
WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

ILS RWY 1C (SA CAT II)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

PEPRR
AML 5.8
CARRY
AML 7.7

GND CON
120.25 348.6 (Rwy 1C/19C)
120.1 317.8 (West)
121.625 348.6 (West)

MALSR

CASANOVA
116.3 CSN Chan 110

111.3

ILS RWY 1C
(SA CAT II)

WASHINGTON DULLES INTL (IAD)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

PEPRR
AML 5.8
CARRY
AML 7.7

GND CON
120.25 348.6 (Rwy 1C/19C)
120.1 317.8 (West)
121.625 348.6 (West)

MALSR

CASANOVA
116.3 CSN Chan 110

111.3

ILS RWY 1C
(SA CAT II)

WASHINGTON DULLES INTL (IAD)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

PEPRR
AML 5.8
CARRY
AML 7.7

GND CON
120.25 348.6 (Rwy 1C/19C)
120.1 317.8 (West)
121.625 348.6 (West)

MALSR

CASANOVA
116.3 CSN Chan 110

111.3

ILS RWY 1C
(SA CAT II)

WASHINGTON DULLES INTL (IAD)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

PEPRR
AML 5.8
CARRY
AML 7.7

GND CON
120.25 348.6 (Rwy 1C/19C)
120.1 317.8 (West)
121.625 348.6 (West)

MALSR

CASANOVA
116.3 CSN Chan 110

111.3

ILS RWY 1C
(SA CAT II)

WASHINGTON DULLES INTL (IAD)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

PEPRR
AML 5.8
CARRY
AML 7.7

GND CON
120.25 348.6 (Rwy 1C/19C)
120.1 317.8 (West)
121.625 348.6 (West)

MALSR

CASANOVA
116.3 CSN Chan 110

111.3

ILS RWY 1C
(SA CAT II)

WASHINGTON DULLES INTL (IAD)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

PEPRR
AML 5.8
CARRY
AML 7.7

GND CON
120.25 348.6 (Rwy 1C/19C)
120.1 317.8 (West)
121.625 348.6 (West)

MALSR

CASANOVA
116.3 CSN Chan 110

111.3

ILS RWY 1C
(SA CAT II)

WASHINGTON DULLES INTL (IAD)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

PEPRR
AML 5.8
CARRY
AML 7.7

GND CON
120.25 348.6 (Rwy 1C/19C)
120.1 317.8 (West)
121.625 348.6 (West)

MALSR

CASANOVA
116.3 CSN Chan 110

111.3

ILS RWY 1C
(SA CAT II)

WASHINGTON DULLES INTL (IAD)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

PEPRR
AML 5.8
CARRY
AML 7.7

GND CON
120.25 348.6 (Rwy 1C/19C)
120.1 317.8 (West)
121.625 348.6 (West)

MALSR

CASANOVA
116.3 CSN Chan 110

111.3

ILS RWY 1C
(SA CAT II)

WASHINGTON DULLES INTL (IAD)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

PEPRR
AML 5.8
CARRY
AML 7.7

GND CON
120.25 348.6 (Rwy 1C/19C)
120.1 317.8 (West)
121.625 348.6 (West)

MALSR

CASANOVA
116.3 CSN Chan 110

111.3

ILS RWY 1C
(SA CAT II)

WASHINGTON DULLES INTL (IAD)

MISSED APPROACH: Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.
Simultaneous approach authorized with Rwy 19C or 19R. Reduced lighting; Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown.

Reduced lighting: Requires specific OPSPEC, MSPEC, Simultaneous approach authorized with Rwy 19C or 19R.

Procedure NA for arrivals at MRB VORTAC on airway radials 088 CW 137.
**RNAV (RNP) Z RWY 1C**

**WASHINGTON DULLES INTL (IAD)**

**For uncompensated Baro-VNAV systems, procedure NA below -14°C (6°F) or above 48°C (119°F). For inoperative ALSF-2, increase RNP 0.30 visibility to 1/4 mile. GPS required. Simultaneous approach authorized with ILS or LOC Rwy 1R, ILS Rwy 1L, ILS Rwy 1C (Cat III), ILS Rwy 1R (Cat III). Use of FD or AP providing RNAV track guidance required during simultaneous operations.**

**MALSR**

**MISSED APPROACH: Climb to 5000 on track 011° to WASMA and left turn direct HARPP and hold.**

**POTOMAC APP CON**

- 120.45 306.925 (241°-330°)
- 128.525 306.925 (091°-240°)
- 126.1 338.25 (331°-090°)

**DULLES TOWER**

- 120.1 317.8 (Rwy 1R/19L)
- 120.25 348.6 (Rwy 1C/19C)
- 134.425 348.6 (Rwys 1L/19R and 12/30)

**GND CON**

- 121.9 317.8 (EAST)
- 121.625 348.6 (WEST)

**CNCL DEL**

- 135.7 317.8

**ATIS**

- 134.85

- 128.525 306.925 (091°-240°)

**RNAV (RNP) Z RWY 1C**

**WASHINGTON DULLES INTL (IAD)**

**APP CRS
011°**

**TDZE 286**

**Apt Elev 312**

**Authorization Required**

**Turn NA ERACE 4000 011° GP 3.00° TCH 54**

**Category**

- **A**
- **B**
- **C**
- **D**

**RNP 0.30 DA**

817-1/2 531 (600-1/2)

**WASHINGTON, DC**

Orig-G 26JUN14

38°57'N-77°28'W

509
Missed Approach: Climb to 5000 via track 011° to FUREE and left turn direct HARPP and hold.

Authorization Required
**RNAV (RNP) Z RWY 19C**  
**WASHINGTON DULLES INTL (IAD)**

**ALRS-2**  
**MISSING APPROACH:** Climb to 4000 via track 191° to BOPAC and via track 265° to BLUES and hold.

**POTOMAC APP CON**  
120.45 306.925 (241°-330°)  
128.525 306.925 (091°-240°)  
126.1 336.25 (331°-090°)

**DULLES TOWER**  
120.1 317.8 (Rwy 1R/19L)  
120.25 348.6 (Rwy 1C/19C)  
134.425 348.6 (Rwy 1L/19R and 12/30)

**GND CON**  
121.9 317.8 (EAST)  
121.625 348.6 (WEST)

**CLNC DEL**  
135.7 317.8

**ELEV** 312  
**TDZE** 272

**MISSAP CHC FIX**  
**BLUES**  
**BOPAC**  
**FEMKO**  
**CIREP**  
**BOYDS**

**CATEGORY**  
A  
B  
C  
D

**AUTHORIZATION REQUIRED**

**WASHINGTON DULLES INTL (IAD)**  
**RNAV (RNP) Z RWY 19C**
WASHINGTON, DC

RNAV (RNP) Z RWY 19L
WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

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RNAV (RNP) Z RWY 19L

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RNAV (RNP) Z RWY 19L

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Apt Elev 312

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WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

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APP CRS
191°

Apt Elev 312

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191°

Apt Elev 312

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RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

APP CRS
191°

Apt Elev 312

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 19L

WASHINGTON, DC

WASHINGTON DULLES INTL (IAD)
RNAV (GPS) RWY 1L
WASHINGTON DULLES INTL (IAD)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C. Simultaneous approach authorized with ILS or LOC Rwy 1R, ILS Rwy 1R (Cat II), ILS Rwy 1R (Cat III). LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

Procedure NA for arrivals at CSN VORTAC on V286 northwest bound.

VGS1 and RNAV glidepath not coincident (VGS1 Angle 3.00/TCH 72).

Procedure NA for arrivals at CSN VORTAC on V286 northwest bound.
RNAV (GPS) RWY 19R
WASHINGTON DULLES INTL (IAD)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C. Simultaneous approach authorized with ILS or LOC Rwy 19L, ILS Rwy 19L (Cat II). LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

Procedure NA for arrivals at DRUZZ on V4 westbound.

Procedure NA for arrivals at MULRR on V139-143 northeast bound.

MISSED APPROACH: Climb to 5000 direct HIMRA and on 280° track to OLIVR and hold, continue climb-in-hold to 5000.

None
**RNAV (GPS) Y RWY 1C**

**WASHINGTON DULLES INTL (IAD)**

<table>
<thead>
<tr>
<th>WAAS CH</th>
<th>APP CRS</th>
<th>Rwy Ldg</th>
<th>TDZE</th>
<th>Apt Elev</th>
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<tr>
<td>97509</td>
<td>011°</td>
<td>11500</td>
<td>286</td>
<td>313</td>
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**MISSED APPROACH:**
Climb to 3000 direct BOYDS and hold.

<table>
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<tr>
<th>D-ATIS</th>
<th>POTOMAC APP CON</th>
<th>DULLES TOWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>134.85</td>
<td>120.45 306.925 (241°-330°)</td>
<td>120.1 317.8 (Rwy 1R/19L)</td>
</tr>
<tr>
<td></td>
<td>128.525 306.925 (091°-240°)</td>
<td>120.25 348.6 (Rwy 1C/19C)</td>
</tr>
<tr>
<td></td>
<td>126.3 338.25  (331°-090°)</td>
<td>134.425 348.6 (Rwys 1L/19R and 12/30)</td>
</tr>
</tbody>
</table>

**ERASE**

- **4000**
  - Procedure Turn NA
  - GP 3.00° T54

**LNAV/VNAV**

- **801/60** 515 (600-1/4)
- **900/24** 614 (600-1/2)
- **940-1** 627 (700-1)

**MINIMUMS**

- **LNAV/MDA** 900/60 614 (600-1/4)
- **LNAV/VNAV MDA** 900-1 614 (600-1/2)
- **LNAV MDA** 900-1 614 (600-1/2)
- **LNAV MDA** 900-1 614 (600-1/2)
- **CIRCLING** 940-1 627 (700-1)

**NOTE:** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C.

Simultaneous approach authorized with ILS or LOC/DME Rwy 1L, ILS Rwy 1L (Cat II), ILS Rwy 1L (Cat III), ILS or LOC Rwy 1R, ILS Rwy 1R (Cat II), ILS Rwy 1R (Cat III). LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. **RVR 1800 authorized with use of FD or AP or HUD to DA.**
RNAV (GPS) Y RWY 1R
WASHINGTON DULLES INTL (IAD)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 48°C.

Simultaneous approach authorized with ILS or LOC/DME RWY 1L, ILS RWY 1L (Cat II), ILS RWY 1L (Cat III), LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

MISSED APPROACH: Climb to 3000 direct FUREE and on 060° track to BLITZ and hold.

Amdt 1D 15JUL21

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 48°C.

Simultaneous approach authorized with ILS or LOC/DME RWY 1L, ILS RWY 1L (Cat II), ILS RWY 1L (Cat III), LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

MISSED APPROACH: Climb to 3000 direct FUREE and on 060° track to BLITZ and hold.
WASHINGTON, DC
AL-5100 (FAA)

RNAV (GPS) Y RWY 19C
WASHINGTON DULLES INTL (IAD)

RNP APCH.

For inop ALSF-2, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 47°C. Simultaneous approach authorized with ILS or LOC Rwy 19L, ILS Rwy 19L (Cat II). LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

POTOMAC APP CON

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
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<tr>
<td>LPV DA</td>
<td>471/18 200 (200-1/2)</td>
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<td>LNAV/ VNAV DA</td>
<td>717/50 446 (500-1)</td>
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<tr>
<td>LNAV MDA</td>
<td>700/24 429 (400-1/2) 700/40 429 (400-1/4) 700/50 429 (400-1)</td>
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<td>CIRCLING</td>
<td>940-1 627 (700-1) 940-1/2 627 (700-1/4) 1060-2/1 747 (800-2/5)</td>
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</tbody>
</table>

LNAV only.

*1.1 NM to RW19C

TDZE 271

Procedure NA for arrivals at MULRR on V139-143 northeast bound.

Procedure NA for arrivals at DRUZZ on V4 westbound.

*LSF-2

MISSED APPROACH: Climb to 4000 direct BOPAC and on 242° track to CSN VORTAC and hold.

GND CON

121.9 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
121.625 348.6 (Rwys 1L/19R and 12/30)

RNAV (GPS) Y RWY 19C
WASHINGTON DULLES INTL (IAD)

WASHON RTOR 3E 1JUL21

38°57'N 77°28'W

WASHINGTON, DC

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 48°C.

Simultaneous approach authorized with ILS or LOC/DME Rwy 19R, ILS Rwy 19R (Cat II), ILS Rwy 19R (Cat III). RNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. **RVR 1800 authorized with use of FD or AP or HUD to DA.

POTOMAC APP CON

120.45 306.925 (241°-330°)
128.525 306.925 (091°-240°)
126.1 338.25 (331°-20°)

DULLES TOWER

120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
134.425 348.6 (Rwy 1L/19R and 12/30)

GND CON

121.9 317.8 (EAST)
121.625 348.6 (WEST)
135.7 317.8

CINC DEL

Procedure NA for arrivals at DRUZZ on V4 westbound.

Procedure NA for arrivals at MULRR on V139-143 northeast bound.

DRUZZ on V4 westbound.

LNAV and RNAV glidepath not coincident

(VGSI Angle 3.00/TCH 75).

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 48°C.

Simultaneous approach authorized with ILS or LOC/DME Rwy 19R, ILS Rwy 19R (Cat II), ILS Rwy 19R (Cat III). RNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. **RVR 1800 authorized with use of FD or AP or HUD to DA.

POTOMAC APP CON

120.45 306.925 (241°-330°)
128.525 306.925 (091°-240°)
126.1 338.25 (331°-090°)

DULLES TOWER

120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
134.425 348.6 (Rwy 1L/19R and 12/30)

GND CON

121.9 317.8 (EAST)
121.625 348.6 (WEST)
135.7 317.8

CINC DEL

Procedure NA for arrivals at DRUZZ on V4 westbound.

Procedure NA for arrivals at MULRR on V139-143 northeast bound.

DRUZZ on V4 westbound.

LNAV and RNAV glidepath not coincident

(VGSI Angle 3.00/TCH 75).
INSTRUCTIONS IS REQUIRED.
READBACK OF ALL RUNWAY HOLDING
RUNWAY CROSSING CLEARANCES.
CAUTION: BE ALERT TO

D-ATIS
134.85
DULLES TOWER
120.1 317.8 (RWY 01R-19L)
120.25 348.6 (RWY 01C-19C)
134.425 348.6
(RWYS 01L-19R, 12-30)
GND CON
121.9 317.8 (EAST)
121.625 348.6 (WEST)
CLNC DEL
135.7 317.8
MIDFIELD RAMP CON
129.55
CPDLC
PDC

ASDE-X in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.

Runway Status Lights in operation.

- 38°57'N
- 77°28'W

NE-3, 30 NOV 2023 to 25 JAN 2024
521
NOTE: Chart not to scale.

WASHINGTON, DC
(IAD)
WASHINGTON DULLES INTL

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1C/1L/1R: Climb heading 011° to 820, then left turn direct LOULU (or heading assigned by ATC), then on depicted course to BUNZZ, thence. . .

TAKEOFF RUNWAYS 19C/19R/19L: Climb heading 191° to 820, then right turn direct TIICE (or heading assigned by ATC), then on depicted course to BUNZZ, thence. . .

TAKEOFF RUNWAY 30: Climb heading 301° to 820, then left turn direct LOULU (or heading assigned by ATC), then on depicted course to BUNZZ, thence. . .

. . . Maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

RAMAY TRANSITION (BUNZZ3.RAMAY)

TAKEOFF MINIMUMS:
Rwy 12: NA-ATC.

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: Turbojets only.
NOTE: Radar required.
NOTE: Aircraft may be Radar vectored to LOULU, TIICE, WHYUU, BUNZZ, or RAMAY.
DEPARTURE ROUTE DESCRIPTION

TAKE OFF RUNWAYS 1C, 1L, 1R: Climb heading 011° or as assigned by ATC, Thence. . . .

TAKE OFF RUNWAY 12: Climb heading 121° or as assigned by ATC, Thence. . . .

TAKE OFF RUNWAYS 19C, 19L, 19R: Climb heading 191° or as assigned by ATC, Thence. . . .

TAKE OFF RUNWAY 30: Climb heading 301° or as assigned by ATC, Thence. . . .

. . . Expect radar vectors to filed/assigned route or depicted fix. Maintain 3000, expect clearance to filed altitude/flight level 10 minutes after departure.

SPECIAL INSTRUCTIONS: For appropriate departure control frequency, see graphic. Use frequency depicted within sector where your first Navaid/Fix/Route is located, or as assigned.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RWY 1L/C/R, 19L/C/R, 30:** Climb on heading assigned by ATC, expect RADAR vectors to BUTRZ, then on track 239° to CLTCH, thence...

...on assigned transition. Maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

**FLASK TRANSITION (CLTCH3.FLASK)**

**MAULS TRANSITION (CLTCH3.MAULS)**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 1L/C/R:** Climb on heading 011° to 820, then on heading 011° or assigned by ATC, for vectors to cross RIGNZ at or above 3000, thence....

**TAKEOFF RUNWAYS 19L/C/R:** Climb on heading 191° to 820, then turn right heading 320° or assigned by ATC, for vectors to cross RIGNZ at or above 3000, thence....

**TAKEOFF RUNWAY 30:** Climb on heading 301° to 820, then turn right heading 320° or assigned by ATC, for vectors to cross RIGNZ at or above 3000, thence....

....on track 112° to JCOBY. Then on assigned transition. Maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

**AGARD TRANSITION (JCOBY4.AGARD):**

**COLIN TRANSITION (JCOBY4.COLIN):**

**SCOOB TRANSITION (JCOBY4.SCOOB):**

**SWANN TRANSITION (JCOBY4.SWANN):**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1L/C/R, 19L/C/R, 30: Climb on heading assigned by ATC, expect RADAR vectors to HAFNR, then on track 225° to JDUBB, thence . . .

. . . on assigned transition. Maintain 3000. Expect clearance to filed altitude within 10 minutes after departure.

MELTN TRANSITION (JDUBB4.MELTN)
RRSIN TRANSITION (JDUBB4.RRSIN)
DEPARTURE ROUTE DESCRIPTION

**TAKEOFF RUNWAYS 1C/1L/1R:** Climb heading 011° to 820, then on heading 011° or as assigned by ATC, expect RADAR vectors to IDORE, thence....

**TAKEOFF RUNWAY 19L/19C/19R:** Climb heading 191° to 820, then right turn heading 320° or as assigned by ATC, expect RADAR vectors to IDORE, thence....

**TAKEOFF RUNWAY 30:** Climb heading 301° to 820, then on heading 320° or as assigned by ATC, expect RADAR vectors to IDORE, thence....

.... on track 030° to JERES, maintain 3000 or as directed by ATC. Expect clearance to filed altitude within ten (10) minutes after departure.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: Turbojets only.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1L/C/R: Climb heading 011° to 820, then on heading 340° or as assigned by ATC, expect RADAR vectors to HAYGR, thence . . . .

TAKEOFF RUNWAYS 19L/C/R: Climb heading 191° to 820, then right turn heading 320° or as assigned by ATC, expect RADAR vectors to HAYGR, thence . . . .

TAKEOFF RUNWAY 30: Climb heading 301° to 820, then on heading 320° or as assigned by ATC, expect RADAR vectors to HAYGR, thence . . . .

. . . . on track 347° to MCRAY, maintain 3000 or as directed by ATC. Expect clearance to filed altitude within ten (10) minutes after departure.

NOTE: Chart not to scale.
TOP ALTITUDE: 3000

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RWYS 1C/1L/1R:** Climb heading 011° to 820, then climbing left turn direct LOULU (or assigned ATC heading), then on track 244° to RNLDI, thence...

**TAKEOFF RWYS 19C/19R/19L:** Climb heading 191° to 820, then climbing right turn direct TIICE (or assigned ATC heading), then on depicted route to RNLDI, thence...

**TAKEOFF RWY 30:** Climb heading 301° to 820, then climbing left turn direct LOULU (or assigned ATC heading), then on track 244° to RNLDI, thence...

... maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

**OTTTO TRANSITION (RNLDI4.OTTTO):**

NOTE: Chart not to scale.

TAKEOFF MINIMUMS:
Rwy 12: NA-ATC.
Rwys 1C, 1L, 1R, 19C, 19L, 19R, 30:
Standard with minimum climb of 500' per NM to 820.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1L/C/R, 19L/C/R, 30:
Climb on heading assigned by ATC, expect RADAR vectors to POOCH, then on track 240° to SCRAM, thence... . . .

. . . .as depicted. Maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

GLANC TRANSITION (SCRAM6.GLANC):

TAKEOFF MINIMUMS:
Rwys 1L/C/R, 19L/C/R, 30:
Standard with a minimum climb of 500’ per NM to 820.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbo-jets only.

NOTE: Chart not to scale.
WOOLY TWO DEPARTURE (RNAV)

NOTE: Chart not to scale.

TAKEOFF MINIMUMS:
- Rwys 1L/C/R, 19L/C/R, 30:
  Standard with minimum climb of 500' per NM to 820.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/C/R: Climb heading 011° to 820, then on heading 011° or as assigned by ATC, expect RADAR vectors to RAZZA, thence . . . .

TAKEOFF RUNWAYS 19L/C/R: Climb heading 191° to 820, then right turn on heading 320° or as assigned by ATC, expect RADAR vectors to RAZZA, thence . . . .

TAKEOFF RUNWAY 30: Climb heading 301° to 820, then right turn on heading 320° or as assigned by ATC, expect RADAR vectors to RAZZA, thence . . . .

. . . . on track 073° to WOOLY, then on assigned transition. Maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

AGARD TRANSITION (WOOLY2.AGARD)
BALTIMORE TRANSITION (WOOLY2.BAL)
SWANN TRANSITION (WOOLY2.SWANN)
RNAV (GPS) RWY 6
EAGLE'S NEST (W13)

Rwy 6 helicopter visibility reduction below 1 SM NA. Procedure NA at night.

AWOS: 3PT
118.625

POTOMAC APP CON
132.85 323.125

UNICOM
123.05 (CTAF)

MISSED APPROACH: Climb to 6300 direct ZEDPA and hold, continue climb-in-hold to 6300.

HOLD 6700

Visual Segment - Obstacles

6300 ZEDPA

7 NM Holding Pattern

OBEPE

SOSME

WILIV 6.8 NM to RW06

RW06

MIRL Rwy 6-24

WAYNESBORO, VIRGINIA
Al-10584 (FAA)

38°05'N-78°57'W

533
RNAV (GPS) RWY 24
EAGLE’S NEST (W13)

**Category 2004 X 50**

**A** WAYNESBORO, VIRGINIA
**B** RNAV (GPS) RWY 24

**Rwy Idg** 2004
**TDZE** 1436
**Apt Elev** 1436

**APP CRS 241°**

**RNP APCH.**

**MISSED APPROACH:** Climb to 6700 direct OBEPE and hold, continue climb-in-hold to 6700.

**FAA**
**WAYNESBORO, VIRGINIA**

**RNAV (GPS) RWY 24**

**EAGLE’S NEST (W13)**

**118.625**

**POTOMAC APP CON**

**132.85 323.125**

**UNICOM**

**123.05 (CTAF)**

**AWOS-3PT**

** procedure NA at night, Rwy 24 helicopter visibility reduction below 1 SM NA.**

**Amdt 1A 10SEP20**

**NE-3, 30 NOV 2023 to 25 JAN 2024**

**ELEV 1436**

**TDZE 1436**

**WAYNESBORO, VIRGINIA**

**Amdt 1A 10SEP20**

**38°05'N-78°57'W**

**RNAV (GPS) RWY 24**

**EAGLE’S NEST (W13)**

**NE-3, 30 NOV 2023 to 25 JAN 2024**
Proceed VFR from XUHSo or conduct the specified missed approach.

For VFR missed approach exit restricted area to north expeditiously.

Limit all segments to 80 KIAS.

Use Phillips AAF altimeter setting.
Contact POTOMAC APP prior to departure.

Use Phillips AAF altimeter setting.

DEPARTURE ROUTE DESCRIPTION

**VFR SEGMENT:** From VFR climb to XUHSO, cross XUHSO at or above 800.

**IFR SEGMENT:** From XUHSO climb on track 005° to cross JIRET at or above 2500.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Newport News altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Newport News altimeter setting; increase LPV DA to 329 feet; increase LNAV/VNAV DA to 420 feet and Cts A/B visibility ¾ SM; increase all MDA 80 feet.

MISSED APPROACH: Climb to 2000 direct CIBAC and on track 147° to JUDLU and hold.

AWOS-3 132.825
POTOMAC APP CON 126.4 282.375
UNICOM 123.0 (CTAF) 0

Procedure NA for arrivals on HPW VORTAC airway radials 323 CW 025.

4 NM Holding Pattern

* VGSI and RNAV glidepath not coincident (VGSI Angle 3.50/TCH 53).

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Newport News altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Newport News altimeter setting; increase LPV DA to 329 feet; increase LNAV/VNAV DA to 420 feet and Cts A/B visibility ¾ SM; increase all MDA 80 feet.

MISSED APPROACH: Climb to 2000 direct CIBAC and on track 147° to JUDLU and hold.

AWOS-3 132.825
POTOMAC APP CON 126.4 282.375
UNICOM 123.0 (CTAF) 0

Procedure NA for arrivals on HPW VORTAC airway radials 323 CW 025.

4 NM Holding Pattern

* VGSI and RNAV glidepath not coincident (VGSI Angle 3.50/TCH 53).

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Newport News altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Newport News altimeter setting; increase LPV DA to 329 feet; increase LNAV/VNAV DA to 420 feet and Cts A/B visibility ¾ SM; increase all MDA 80 feet.

MISSED APPROACH: Climb to 2000 direct CIBAC and on track 147° to JUDLU and hold.
MISSED APPROACH: Climb to 2000 direct ICACO and hold.

- **AWOS-3**: 132.825
- **POTOMAC APP CON**: 126.4 282.375
- **UNICOM**: 123.0 (CTAF)

**MISSAP CH FIX**
- ICACO
- 097°
- 277°
- 4 NM

**ELEV** 20

**HOLD 2000**

**ICACO**

**2000**

**YINDU**
1.8 NM to RW28

**JUGPI**

**ZINAV**

**277°**

**3.50°**

**740**

**6000**

**277°**

**N/A**

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<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCLING</td>
<td>480-1</td>
<td>620-1</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>460 (500-1)</td>
<td>600 (600-1)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
When local altimeter setting not received, use Newport News altimeter setting and increase all MDA 80 feet and increase S-10 Cat B and Circling Cat B visibility 1/4 SM, VDP NA when using Newport News altimeter setting.

MISSED APPROACH: Climb to 500 then climbing right turn to 2000 direct HCM VORTAC and hold, continue climb-in-hold to 2000.

Procedure NA for arrivals on HPW VORTAC airway radials 323 CW 025.

One Minute Holding Pattern

LISPE INT I-FYJ 14.4
NEZZZ INT I-FYJ 5.2
XIPYY I-FYJ 2.4
HARCUM 108.8
LOC offset 3.00°
Chan 25

© 632

*760 when using Newport News altimeter setting.

MISSED APCH FIX
ALTERNATE
HOPEWELL
HPW 114.35
Chan 90 (Y)

UNICOM 123.0 (CTAF)

AWOS-3
132.825
POTOMAC APP CON
126.4 282.375
When local altimeter setting not received, use Newport News altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climbing right turn to 1700 direct HCM VORTAC and hold.

NoPT for arrival at HCM VORTAC on V38 westbound.
Baro-VNAV NA when using Frederick altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (-4°F) or above 54°C (130°F).

When local altimeter setting not received, use Frederick altimeter setting and increase LPV DA to 1199 feet. LNAV/VNAV DA to 1307 feet, and all MDAs 120 feet; increase LPV all Cats visibility ½ SM, LNAV Cat C visibility ¾ SM, and Circling Cat C visibility ½ SM. When VGSI inop, Straight-in/Circling Rwy 16 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

Missed Approach:
Climb to 2200 direct NABIC then climbing left turn to 3000 on track 070° to FIGID and hold.

Procedure NA for arrivals at BINNS on V265 northbound.

Amdt 2B 20 May 2021

AWOS-3 121.25
POTOMAC APP CON 125.525 291.625
GCO 121.725
UNICOM 122.7 (CTAF)

INDEX

Category

LPV DA 1081-1 292 (300-1) NA
LNAV/VNAV DA 1189-1$\frac{3}{4}$ 400 (400-1%) NA
LNAV MDA 1280-1 491 (500-1%) 1280-1$\frac{3}{4}$ 491 (500-1%) NA
Circling 1320-1 531 (600-1) 1400-1 611 (700-1) 1500-2 711 (800-2) NA

Category A B C D

Al -5533 (FAA)

_23222_

RNAV (GPS) RWY 16
CARROLL COUNTY RGNL/JACK B POAGE FLD (DMW)

WESTMINSTER, MARYLAND

Amdt 2B 20 MAY 2021

RNAV (GPS) RWY 16
CARROLL COUNTY RGNL/JACK B POAGE FLD (DMW)

541
WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

Procedure NA for arrivals at TAFFI on V166 eastbound.

Procedure NA for arrivals at SLOAF on V268 southeast bound.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F).

MISSAP CH FIX

AWOS-3 121.25
POTOMAC APP CON 125.525 291.625
GCO 121.725
UNICOM 122.7 (CTAF)

MISSAPD APPROACH: Climb to 3000 direct UNYTS and hold.

CARROLL COUNTY RGNL/JACK B POAGE FLD (DMW)

RNAV (GPS) RWY 34

WESTMINSTER, MARYLAND
AL-5533 (FAA) 23222

WASHINGTON DC METROPOLITAN SFRA

PHYSICAL LOCATIONS

ELEV 789
TDZE 788

LNAV/VNAV NA

GP 3.00°
TCH 45

 CATEGORY   A    B    C    D
LPV DA   988-1  200 (200-1)   NA
LNAV/VNAV DA  1105-1/4  317 (400-1/4)   NA
LNAV MDA  1180-1  392 (400-1)   NA
CIRCLING  1320-1  1400-1  1500-2
531 (600-1)  611 (700-1)  711 (800-2)   NA

339°

VAWAS

MIRL Rwy 16-34

TDZE 788

ELEV MIRL Rwy 16-34

METROPOLITAN SFRA
WASHINGTON DC

CARROLL COUNTY RGNL/JACK B POAGE FLD (DMW)

RNAV (GPS) RWY 34

WESTMINSTER, MARYLAND
Amdt 1C 20MAY21

ELEV 39°36’N-77°00’W

988-1, 200 (200-1)
1105-1/4, 317 (400-1/4)
1180-1, 392 (400-1)
1320-1, 1400-1, 1500-2
531 (600-1), 611 (700-1), 711 (800-2)

542
MISSED APPROACH: Climbing left turn to 2900 direct EMI VORTAC and hold.

WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

One Minute Holding Pattern

**CATEGORY** | **A** | **B** | **C** | **D**
---|---|---|---|---
**S-34** | 1480-1 692 (700-1) | 1480-2 692 (700-2) | NA | NA
**CIRCLING** | 1480-1 691 (700-1) | 1500-2 711 (800-2) | NA | NA
CONLE FOUR DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading to ATC assigned altitude, for vectors to cross OHSSS at or above 11000, then on track 212° to cross CONLE at or below 14000, then on assigned transition. Expect filed altitude within 10 minutes after departure.

COLIN TRANSITION (CONLE4.COLIN)

SCOOB TRANSITION (CONLE4.SCOOB)
TOP ALTITUDE:
RAMAY, OTTTO, MAULS, FLASK, RRSIN, GLANC, MELTN
TRANSITIONS: 17000
JERES, MCRAE TRANSITIONS:
16000

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojet traffic only.

TAKEOFF MINIMUMS
Rwy 16: 400-2 ¾ or standard with minimum climb
of 255’ per NM to 1400.
Rwy 34: Standard.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

Fly heading and maintain altitude assigned by ATC, expect RADAR vectors to WONCE, then on track 283° to cross TERPZ at or above 11000, thence....

....on assigned transition: Departures on JERES and MCRAY transitions maintain 16000. Departures on RAMAY, OTTTO, MAULS, FLASK, MELTN, RRSIN, GLANC transitions maintain 17000, expect further clearance to filed altitude within 10 minutes after departure.

FLASK TRANSITION (TERPZ7.FLASK)
GLANC TRANSITION (TERPZ7.GLANC)
JERES TRANSITION (TERPZ7.JERES)
MAULS TRANSITION (TERPZ7.MAULS)
MCRAY TRANSITION (TERPZ7.MCRAY)
MELTN TRANSITION (TERPZ7.MELTN)
OTTTO TRANSITION (TERPZ7.OTTTO)
RAMAY TRANSITION (TERPZ7.RAMAY)
RRSIN TRANSITION (TERPZ7.RRSIN)
**RNAV (GPS) RWY 14**
CLEARVIEW AIRPARK (2W2)

**RNAV APCH.**

**APP CRS** 135°
Rwy Idg 1510
TDZE 799
Apt Elev 799

**RNP APCH.**

- **V** NA
  - Procedure NA at night. Rwyy 14 helicopter visibility reduction below 1 SM NA. Use Carroll County Rgnl/Jack B. Poage Fld altimeter setting, when not received, use Gaithersburg altimeter setting and increase all MDA 60 feet.

- **MISSED APPROACH.** Climb to 1500 then climbing left turn to 3000 direct BENDI and hold.

**DMA AWOS-3** 121.25
**POTOMAC APP CON** 125.525 291.625
**UNICOM** 122.8 (CTAF)

**1724**

- **(IAF) GATHR**
- **(IF) JHONY**
- **(FAF) HAMPR**
- **BENDI**

**Visual Segment - Obstacles.**

- **136°**
- **135°**
- **2400**
- **3000**

**Category**

- **A**
- **B**
- **C**
- **D**

- **LNAV MDA**
  - 1360-1
    - 561 (600-1)
  - NA

- **CIRCLING**
  - 1360-1
    - 561 (600-1)
  - NA

**CLEARVIEW AIRPARK (2W2)**

Use Carroll County Rgnl/Jack B Poage Fld altimeter setting. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 1,500, then climbing left turn to 2600 direct EMI VOR TAC and hold.

DMW AWOS-3 121.25
POTOMAC APP CON 125.525 291.625
UNICOM 122.8 (CTAF)

EMI VOR TAC

Clearview Airpark (2W2)

Westminster, Maryland

Amdt 4B 27JAN22
**RNAV (GPS)-C**

**WILLIAMSBURG-JAMESTOWN (JGG)**

**AWOS-3**
120.625

**NORFOLK APP CON**
119.45 360.6

**GCO**
135.075

**UNICOM**
122.8 (CTAF)

---

- **TWO-DME RNP-0.3 NA. Procedure NA at night. Visibility reduction by helicopters NA. When local altimeter setting not received use Newport News altimeter setting and increase all MDA 40 feet.**

- **MISSED APPROACH:** Climbing left turn to 2000 direct HCM VORTAC and hold.

---

**Procedure NA for arrivals on HPW VORTAC airway radials 025 CW 178.**

---

**CATEGORY**
A  B  C  D

**CIRCLING**
1060-3  1011 (1100-3)  NA

---

**RNAV (GPS)-C**

**WILLIAMSBURG, VIRGINIA**

Orig 13JAN11

**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**HARCUM HCM**

**ZESMI**

**WENDU**

**JUSBO**

---

**NE-3, 30 NOV 2023 to 25 JAN 2024**

---

**Revised 25 JAN 2014**

---

**Revised 25 JAN 2014**
Procedure NA at night.

Rwy 13, 31 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 2000 direct HCM VORTAC and hold.
**ILS or LOC RWY 1**

**NEW CASTLE (ILG)**

**ADFR required.**
**Radar required to define BLARE.**

When local altimeter setting not received, use Philadelphia altimeter setting. Increase all DA to 300 feet and all MDA to 60 feet; increase S-LOC 1 Cats C/D visibility to 1/4 SM and Circling visibility Cat C to 1/2 SM, Cat D to 1 1/2 SM; increase CASTL fix minimums S-LOC 1 Cats C/D visibility to RVR 5000 and Circling Cat D to 2 1/2 SM. For inop ALS increase S-LOC 1 Cat C to 1 1/2 SM for CASTL fix minimums, increase S-LOC 1 Cats C/D visibility to 1/2 SM. For inop ALS when using Philadelphia Intl altimeter setting, increase S-LOC 1 Cat C and D visibility to 1/2 SM; CASTL fix minimums S-LOC 1 Cats C/D to 1/2 SM. **RVR 1800 authorized with use of FD or AP or HUD to DA (NA when using Philadelphia Intl altimeter setting).**

**Procedure NA for arrivals at ODESA on V170-214-433-445 southwest bound.**

**ILS or LOC RWY 1**

**NEW CASTLE (ILG)**

**ADFR required.**
**Radar required to define BLARE.**

When local altimeter setting not received, use Philadelphia altimeter setting. Increase all DA to 300 feet and all MDA to 60 feet; increase S-LOC 1 Cats C/D visibility to 1/4 SM and Circling visibility Cat C to 1/2 SM, Cat D to 1 1/2 SM; increase CASTL fix minimums S-LOC 1 Cats C/D visibility to RVR 5000 and Circling Cat D to 2 1/2 SM. For inop ALS increase S-LOC 1 Cat C to 1 1/2 SM for CASTL fix minimums, increase S-LOC 1 Cats C/D visibility to 1/2 SM. For inop ALS when using Philadelphia Intl altimeter setting, increase S-LOC 1 Cat C and D visibility to 1/2 SM; CASTL fix minimums S-LOC 1 Cats C/D to 1/2 SM. **RVR 1800 authorized with use of FD or AP or HUD to DA (NA when using Philadelphia Intl altimeter setting).**

**Procedure NA for arrivals at BAINS on V166 westbound.**

**LOCALIZER 110.3**

**I-ILG**

**BLARE**

**RADAR**

**WOODSTOWN**

**112.8 OOD**

**CH 75**

**MSA IL 25 NM**

**WILMINGTON TOWER**

**126.0 (CTAF)**

**352.05**

**121.7 275.8**

**CLNC DEL**

**GND CON**

**ATIS**

**PHILADELPHIA APP CON**

**123.95**

**118.35 323.1**

**WILMINGTON, DELAWARE**

**Amdt 24 28FEB19**

**39°41'N-75°36'W**

**551**

**LOCALIZER 110.3**

**I-ILG**

**BLARE**

**RADAR**

**WOODSTOWN**

**112.8 OOD**

**CH 75**

**MSA IL 25 NM**

**WILMINGTON TOWER**

**126.0 (CTAF)**

**352.05**

**121.7 275.8**

**CLNC DEL**

**GND CON**

**ATIS**

**PHILADELPHIA APP CON**

**123.95**

**118.35 323.1**

**WILMINGTON, DELAWARE**

**Amdt 24 28FEB19**

**39°41'N-75°36'W**

**551**
**RNAV (GPS) RWY 1**

**NEW CASTLE (ILG)**

---

**ATIS** | **PHILADELPHIA APP CON** | **WILMINGTON TOWER** | **GND CON** | **CLNC DEL** | **UNICOM**
---|---|---|---|---|---
123.95 | 118.35 | 323.1 | 126.0 (CTAF) | 352.05 | 121.7 275.8 119.95 122.95

---

**MALSR**

**MISSING APPROACH:**

Climb to 2000 direct CUBBE and left turn via track 265° to TENPY and via track 214° to ELUDE and hold.

---

**Procedure NA for arrival on OOD:**

VORTAC airways radials 212 CW 290.

---

**RNAV (GPS) RWY 1**

**NEW CASTLE (ILG)**

---

**ATIS** | **PHILADELPHIA APP CON** | **WILMINGTON TOWER** | **GND CON** | **CLNC DEL** | **UNICOM**
---|---|---|---|---|---
123.95 | 118.35 | 323.1 | 126.0 (CTAF) | 352.05 | 121.7 275.8 119.95 122.95

---

**MALSR**

**MISSING APPROACH:**

Climb to 2000 direct CUBBE and left turn via track 265° to TENPY and via track 214° to ELUDE and hold.

---

**Procedure NA for arrival on OOD:**

VORTAC airways radials 212 CW 290.

---

**RNAV (GPS) RWY 1**

**NEW CASTLE (ILG)**

---
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ½ mile NA. VDP and Baro-VNAV NA when using Philadelphia Intl altimeter setting. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 448, LNAV/VNAV DA to 568, and all MDAs 60 feet; increase LPV all Cats and Circling Cat D visibility ½ SM and LNAV/VNAV all Cats visibility ½ SM.

**MISSUED APPROACH:**

Climb to 2100 direct GUSTE and via track 124° to OOD VORTAC and hold.

**ATIS**

Philadelphia App Con 123.95

Wilmington Tower * 126.00 (CTAF) 352.05

Gnd Con 121.7 275.8

Clna Con 119.95

Unicom 122.95

Procedure NA for arrival on MXE VORTAC airway radials 177 CW 283.

Procedure NA for arrival on OOD VORTAC airway radials 212 CW 290.
Procedures for Arrival on DQO VOR TAC: 

1. **IF** (FAF) MODENA (MKE)
   - **2000** NoPT 128° (4.8)
   - **2200** to JIGUP 016° (12.2)

2. **RW19**
   - **2.4 NM to RW19**
   - **HIKPO 3.00°**
   - **CUBBE**
   - **JIGUP**

**Holding Pattern**

**Holding Pattern**

**VNAV** only:

- **MDAs 60 feet**; increase LPV DA to 425, LNAV/VNAV DA to 592, and all MDAs 60 feet; increase LPV all Cats and LNAV and Circling Cat D visibility ¼ SM.

**Procedure NA** for arrival on MUXE VOR TAC airway radials 056 CW 129.
RNAV (GPS) RWY 27
NEW CASTLE (ILG)

**Baro-VNAV NA when using Philadelphia Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV DA NA below -15°C (5°F) or above 39°C (102°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ½ SM NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 480, LNAV/VNAV DA to 584, and all MDAs 60 feet; increase LPV all Cats and LNAV Cat C/D visibility ½ SM and LNAV/VNAV all Cats and Circling Cat D visibility ¼ SM.**

**MISSUED APPROACH: Climb to 2000 direct BATRE and via track 273° to ELUDE and hold.**

<table>
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<tr>
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<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>426-1/8</td>
<td>354 (400-1/8)</td>
<td></td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>530-1/8</td>
<td>458 (500-1/8)</td>
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<tr>
<td>LNAV MDA</td>
<td>500-1</td>
<td>428 (500-1)</td>
<td>500-1/4</td>
<td>428 (500-1/4)</td>
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<tr>
<td>CIRCLING</td>
<td>540-1</td>
<td>460 (500-1)</td>
<td>560-1</td>
<td>480 (500-1)</td>
</tr>
</tbody>
</table>

**Procedure NA for arrivals at RUUTH via V123-157 northeast bound.**

**Procedure NA for arrival on OOD VORTAC airway radials 290 CW 336.**

**WILMINGTON, DELAWARE**
Orig-C 07OCT21

**RNAV (GPS) RWY 27**
NEW CASTLE (ILG)

**39°41'N-75°36'W**
555
Helicopter visibility reduction below 3/4 SM NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting and increase all MDAs 60 feet; increase S-27 Cat B and Circling Cat C/D visibility 1/4 SM and S-27 Cat C/D visibility 1/2 SM; WIROL fix minimums S-27 increase Cat C/D and Circling Cat D visibility 1/4 SM.

MISSED APPROACH: Climb to 2000 on DQO VORTAC R-274 to GLEEM INT/DQO 5.1 DME and hold.

WIROL fix minimums S-27 increase Cat C/D and Circling Cat D visibility 1/8 SM and S-27 Cat B Helicopter visibility reduction below 3/4 SM NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting and increase all MDAs 60 feet; increase S-27 Cat B and Circling Cat C/D visibility 1/4 SM and S-27 Cat C/D visibility 1/2 SM; WIROL fix minimums S-27 increase Cat C/D and Circling Cat D visibility 1/4 SM.

MISSED APPROACH: Climb to 2000 on DQO VORTAC R-274 to GLEEM INT/DQO 5.1 DME and hold.

WIROL fix minimums S-27 increase Cat C/D and Circling Cat D visibility 1/8 SM and S-27 Cat B Helicopter visibility reduction below 3/4 SM NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting and increase all MDAs 60 feet; increase S-27 Cat B and Circling Cat C/D visibility 1/4 SM and S-27 Cat C/D visibility 1/2 SM; WIROL fix minimums S-27 increase Cat C/D and Circling Cat D visibility 1/4 SM.

MISSED APPROACH: Climb to 2000 on DQO VORTAC R-274 to GLEEM INT/DQO 5.1 DME and hold.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ILS or LOC RWY 32
WINCHESTER RGNL (OKV)

Rwy 32 helicopter visibility reduction below ¾SM NA. When local altimeter setting not received, use Martinsburg altimeter setting and increase all DA 63 feet and all MDA 80 feet and Circling Cat C visibility ½ mile. For inoperative MALSR, increase S-LOC 32 Cat C visibility to 1 mile. For inoperative MALSR when using Martinsburg altimeter setting, increase S-ILS 32 Cat C visibility ½ mile. VDP NA when using Martinsburg altimeter setting.

AWOS-3
124.85

POTOMAC APP CON
120.45 306.925

CLNC DEL
126.15

UNICOM
122.975 (CTAF)

AD

NA

MISSED APPROACH: Climb to 1,400 then climbing right turn to 3700 via heading 160° and I-TZX SE course to CLADD INT/I-TZX 12.6 DME and hold.

WINCHESTER, VIRGINIA
AL-5251 (FAA)
22307

ILS or LOC RWY 32
WINCHESTER RGNL (OKV)

CIRCLING

WINCHESTER, VIRGINIA
Amdt 2A  25APR19

39°09'N - 78°09'W
559
RNAP APCH - GPS.

Rwy 14 helicopter visibility reduction below 3/4 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.

AWOS-3
124.85

POTOMAC APP CON
120.45 306.925

CLNC DEL
126.15

UNICOM
122.975 (CTAF)

Procedure NA for arrivals at CAPON on V166 westbound.

Procedure NA for arrivals at MUMSY on V44 eastbound.

Procedure NA for arrivals at SOGBE on V4 westbound.

Procedure NA for arrivals at SOGBE on V4 westbound.

WINCHESTER, VIRGINIA

RNP (GPS) RWY 14
WINCHESTER RGNL (OKV)

AWOS-3
124.85

POTOMAC APP CON
120.45 306.925

CLNC DEL
126.15

UNICOM
122.975 (CTAF)

MISSED APPROACH:
Climb to 3700 direct CLADD and hold, continue climb-in-hold to 3700.

AWOS-3
124.85

POTOMAC APP CON
120.45 306.925

CLNC DEL
126.15

UNICOM
122.975 (CTAF)

Procedure NA for arrivals at CAPON on V166 westbound.

Procedure NA for arrivals at MUMSY on V44 eastbound.

Procedure NA for arrivals at SOGBE on V4 westbound.

WINCHESTER, VIRGINIA

RNP (GPS) RWY 14
WINCHESTER RGNL (OKV)

AWOS-3
124.85

POTOMAC APP CON
120.45 306.925

CLNC DEL
126.15

UNICOM
122.975 (CTAF)

MISSED APPROACH:
Climb to 3700 direct CLADD and hold, continue climb-in-hold to 3700.
RNAV (GPS) RWY 32
WINCHESTER RGNL (OKV)

AWOS-3 124.85
POTOMAC APP CON 120.45 306.925
CLNC DEL 126.15
UNICOM 122.975 (CTAF)

RNP APCH.

Baro-VNAV NA when using Martinsburg altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 47°C.

Rwy 32 helicopter visibility reduction below 0.5 SM NA. When local altimeter setting not received, use Martinsburg altimeter setting and increase all DA 63 feet and all MDA 80 feet, and LNAV/VNAV all Cats and Circling Cat C visibility ¼ mile. For inoperative MALSR, increase LNAV Cats A, B and C visibility to 1 mile and LNAV Cat D visibility to 1½ mile. Inoperative table does not apply to LPV. For inoperative MALSR when using Martinsburg altimeter setting, increase LPV all Cats and LNAV Cats A and B visibility to 1 mile. VDP NA when using Martinsburg altimeter setting.

MISSED APPROACH:
Climb to 5000 direct IMHEM and via track 018° to MEPEW and hold, continue climb-in-hold to 5000.

WINCHESTER, VIRGINIA
Orig A 25APR19

39°09’N - 78°09’W
561
When local altimeter setting not received, use Martinsburg altimeter setting and increase all MDA 80 feet and Cat C visibility ½ mile.

**Procedure NA for arrivals on MRB VORTAC airway radials 223 CW 284.**

**When local altimeter setting not received, use Martinsburg altimeter setting and increase all MDA 80 feet and Cat C visibility ½ mile.**

**MISSED APPROACH: Climbing left turn to 3000 via MRB R-231 to CWINE/MRB 15 DME and hold, continue climb-in-hold to 3000.**
DEPARTURE ROUTE DESCRIPTION

Climb on heading assigned by ATC, expect RADAR vectors to BUTRZ, then on track 239° to CLTCH, thence.

.... on assigned transition, maintain altitude assigned by ATC, expect clearance to filed altitude within ten (10) minutes after departure.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbo-jets only.
NOTE: Takeoff Rwy 32 requires a climb to 2500 on heading 341° before proceeding on the ATC assigned heading for obstacle avoidance.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 144° or as assigned by ATC. Expect RADAR vectors to HAFNR, then on track 225° to JDUBB, thence. . . .

TAKEOFF RUNWAY 32: Climb on heading 324° or as assigned by ATC. Expect RADAR vectors to HAFNR, then on track 225° to JDUBB, thence. . . .

. . . . . on assigned transition. Maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

MELTN TRANSITION (JDUBB4.MELTN)
RRSIN TRANSITION (JDUBB4.RRSIN)

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbo-jets only.
NOTE: Takeoff Rwy 32 requires a climb to 2500 on heading 341° before proceeding on the ATC assigned heading for obstacle avoidance.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

Climb on heading assigned by ATC, expect RADAR vectors to POOCH, then on track 240° to SCRAM, thence . . .

. . . . as depicted. Maintain 3000, expect clearance to filed altitude within ten (10) minutes after departure.

GLANC TRANSITION (SCRAM6.GLANC):

NOTE: Chart not to scale.
RNAV (GPS) RWY 6
LONESOME PINE (LNP)

Procedure NA at night.
Rwy 6 helicopter visibility reduction below 1 SM NA.

AWOS-3  118.6
INDIANAPOLIS CENTER  126.575  257.85
UNICOM  123.0 (CTAF)

Final approach course offset 4.24°.

Procedure NA for arrivals at HILTO on V466-519 northeast bound.

VECON and descent angles not coincident (VGSI Angle 3.00/TCH 34).

LNAV MDA

RNP APCH.

MISSED APPROACH: Climbing left turn to 6400 direct RISTE and hold.
RNAV (GPS) RWY 24
LONESOME PINE (LNP)

Circling to Rwy 6 NA at night. Rwy 24 helicopter visibility reduction below 3/4 SM NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

TRANSITION PROVISIONS:

- For inop ALS, increase LNAV/VNAV Cat A/B visibility to 1¾ SM and LNAV Cat C/D visibility to 1¾ SM.

ODALS & LNAV/VNAV CAT A/B/ C/D:

- AL-5973 (FAA)

AWOS-3
INDIANAPOLIS CENTER
UNICOM

118.6
126.575
257.85
123.0
(CTAF)

HAZARD AZQ
(IAF) LYDIC
5 NM 8000
(5500)

JUBTO
GLADE SPRING

RNAP APCH.

Procedure NA for arrival on GZG VOR/DME airway radials 248 CW 010.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

Inop table does not apply to LPV all Cats and LNAV Cats A/B. For inop ALS, increase LNAV/VNAV Cat A/B visibility to 1¾ SM and LNAV Cat C/D visibility to 1¾ SM.

REDUCED VISIBILITY APPROACHES:

- LNAV/VNAV Cat A/B visibility to 1¾ SM and LNAV Cat C/D visibility to 1¾ SM.

LNAV/VNAV NA:

- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

Amdt 1 25FEB21

NE-3, 30 NOV 2023 to 25 JAN 2024

Circling to Rwy 6 NA at night. Rwy 24 helicopter visibility reduction below 3/4 SM NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

Inop table does not apply to LPV all Cats and LNAV Cats A/B. For inop ALS, increase LNAV/VNAV Cat A/B visibility to 1¾ SM and LNAV Cat C/D visibility to 1¾ SM.

REDUCED VISIBILITY APPROACHES:

- LNAV/VNAV Cat A/B visibility to 1¾ SM and LNAV Cat C/D visibility to 1¾ SM.

LNAV/VNAV NA:

- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

Amdt 1 25FEB21

NE-3, 30 NOV 2023 to 25 JAN 2024
LOC RWY 24
LONESOME PINE (LNP)

DME required. RNAV 1-GPS required.

WARNING: Circling to Rwy 6 NA at night. Rwy 24 helicopter visibility reduction below 3/4 SM NA.

AWOS-3
118.6

INDIANAPOLIS CENTER
126.575 257.85

UNICOM
123.0 (CTAF)

LOC I-OWN
110.7
Chan 44

APP CRS
242°
Rwy 1dg
T/DZE
Apt Elev
5280
2684
2684

ODALS

MISSAPPROACH: Climb to 3300 then climbing right turn to 4600 direct JUBTO and hold.

GLADE SPRING
110.2 GZG
Chan 39

One Minute Holding Pattern

Use I-OWN DME when on the localizer course.

MISAPPR: Climb to 3300 then climbing right turn to 4600 direct JUBTO and hold.

REIL Rwy 6
MIRL Rwy 6-24

CIRCLING
A rate of climb/descent table is provided for use in planning and executing climbs or descents under known or approximate ground speed conditions. It will be especially useful for approaches when the localizer only is used for course guidance. A best speed, power, altitude combination can be programmed which will result in a stable glide rate and altitude favorable for executing a landing if minimums exist upon breakout. Care should always be exercised so that minimum descent altitude and missed approach point are not exceeded.

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<th>GROUND SPEED (knots)</th>
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AREA OF COVERAGE

Including Puerto Rico and the Virgin Islands