Consult the Change Notice (CN) effective 04 NOV 2021 for revised Instrument Procedure Charts for this volume.
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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.
INOPERATIVE 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.

<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>
<tr>
<td>(1) ILS, PAR, LPV, GLS minima</td>
<td></td>
</tr>
<tr>
<td>(2) ILS, LPV, GLS with visibility minima of RVR 1800†/2000*/2200*</td>
<td></td>
</tr>
<tr>
<td>Inoperative Component or Visual Aid</td>
<td>Increase Visibility</td>
</tr>
<tr>
<td>ALSF 1 &amp; 2, MALSR, SSALR</td>
<td>To RVR 4000†</td>
</tr>
<tr>
<td>TDZL or RCLS</td>
<td>To RVR 4500*</td>
</tr>
<tr>
<td>RVR</td>
<td>To ½ mile</td>
</tr>
<tr>
<td>#For ILS, LPV, GLS procedures with a 200 foot HAT, RVR 1800 authorized with use of FD or AP or HUD to DA.</td>
<td></td>
</tr>
<tr>
<td>(3) All Approach Types and all lines of minima other than (1) &amp; (2) above</td>
<td></td>
</tr>
<tr>
<td>Inoperative Component or Visual Aid</td>
<td>Increase Visibility</td>
</tr>
<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>
<tr>
<td>(4) Sidestep minima (CAT C-D)</td>
<td></td>
</tr>
<tr>
<td>Inoperative Component or Visual Aid to Sidestep Runway</td>
<td>Increase Visibility</td>
</tr>
<tr>
<td>ALSF 1 &amp; 2, MALSR, SSALR</td>
<td>½ mile</td>
</tr>
<tr>
<td>(5) All Approach Types, All lines of minima</td>
<td></td>
</tr>
<tr>
<td>Inoperative Component or Visual Aid</td>
<td>Increase Visibility</td>
</tr>
<tr>
<td>ODALS (CAT A-B)</td>
<td>¼ mile</td>
</tr>
<tr>
<td>ODALS (CAT C-D)</td>
<td>⅛ 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 criteria 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 (200-½)</td>
<td>1440/50</td>
<td>288 (300-½)</td>
</tr>
<tr>
<td>S-LOC 27</td>
<td>1440/24</td>
<td>288</td>
<td>1640-1</td>
<td>1640-1½</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>361 (400-1)</td>
<td>461 (500-1)</td>
<td>461 (500-1½)</td>
<td>561 (600-2)</td>
</tr>
<tr>
<td>MDA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All weather minima in parentheses is not applicable to Civil Pilots.

Military Pilots refer to appropriate regulations.

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, if the WAAS avionics indicates that LNAV/VNAV or LPV service is available, 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 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

<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></td>
<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>
</tr>
<tr>
<td>-10</td>
<td>20</td>
<td>20</td>
<td>30</td>
<td>30</td>
<td>40</td>
<td>40</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>90</td>
<td>120</td>
<td>170</td>
<td>230</td>
<td>280</td>
</tr>
<tr>
<td>-20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>120</td>
<td>130</td>
<td>140</td>
<td>210</td>
<td>280</td>
<td>420</td>
</tr>
<tr>
<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>190</td>
<td>280</td>
<td>380</td>
<td>570</td>
<td>710</td>
<td>910</td>
</tr>
<tr>
<td>-40</td>
<td>50</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>150</td>
<td>170</td>
<td>190</td>
<td>220</td>
<td>240</td>
<td>360</td>
<td>480</td>
<td>720</td>
<td>970</td>
<td>1210</td>
</tr>
<tr>
<td>-50</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>450</td>
<td>590</td>
<td>890</td>
<td>1190</td>
<td>1500</td>
</tr>
</tbody>
</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:

<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

Approach Category A B C D E

<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>
**CIRCLING APPROACH OBSTACLE 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 `C` 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>
<th>CAT A</th>
<th>CAT B</th>
<th>CAT C</th>
<th>CAT D</th>
<th>CAT E</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Altitudes</td>
<td></td>
<td>1.3</td>
<td>1.5</td>
<td>1.7</td>
<td>2.3</td>
<td>4.5</td>
</tr>
</tbody>
</table>

**EXPANDED CIRCLING APPROACH MANEUVERING AIRSPACE RADIUS**

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 `C` 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>
<th>CAT A</th>
<th>CAT B</th>
<th>CAT C</th>
<th>CAT D</th>
<th>CAT E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 or less</td>
<td></td>
<td>1.3</td>
<td>1.7</td>
<td>2.7</td>
<td>3.6</td>
<td>4.5</td>
</tr>
<tr>
<td>1001-3000</td>
<td></td>
<td>1.3</td>
<td>1.8</td>
<td>2.8</td>
<td>3.7</td>
<td>4.6</td>
</tr>
<tr>
<td>3001-5000</td>
<td></td>
<td>1.3</td>
<td>1.8</td>
<td>2.9</td>
<td>3.8</td>
<td>4.8</td>
</tr>
<tr>
<td>5001-7000</td>
<td></td>
<td>1.3</td>
<td>1.9</td>
<td>3.0</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>7001-9000</td>
<td></td>
<td>1.4</td>
<td>2.0</td>
<td>3.2</td>
<td>4.2</td>
<td>5.3</td>
</tr>
<tr>
<td>9001 and above</td>
<td></td>
<td>1.4</td>
<td>2.1</td>
<td>3.3</td>
<td>4.4</td>
<td>5.5</td>
</tr>
</tbody>
</table>

**TERMS/LANDING MINIMA DATA 19339**

<table>
<thead>
<tr>
<th>RWY</th>
<th>GP/TCH</th>
<th>RPI</th>
<th>CAT</th>
<th>DA/ MDA-VIS</th>
<th>HAA</th>
<th>CEIL-VIS</th>
<th>CAT</th>
<th>DA/ MDA-VIS</th>
<th>HAA</th>
<th>CEIL-VIS</th>
<th>Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAR</td>
<td>10</td>
<td>2.5°/42/1000</td>
<td>ABCDE</td>
<td>195/15</td>
<td>100</td>
<td>(100-15)</td>
<td>DE</td>
<td>560/50</td>
<td>600/60</td>
<td>600/60</td>
<td>(500-15)</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>2.5°/48/1068</td>
<td>ABCDE</td>
<td>187/16</td>
<td>100</td>
<td>(100-16)</td>
<td>DE</td>
<td>560/50</td>
<td>600/60</td>
<td>600/60</td>
<td>(500-16)</td>
</tr>
<tr>
<td>ASR</td>
<td>10</td>
<td>ABC</td>
<td>560/40</td>
<td>463</td>
<td>(500-40)</td>
<td>DE</td>
<td>560/50</td>
<td>600/60</td>
<td>600/60</td>
<td>(500-15)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>AB</td>
<td>600/50</td>
<td>513</td>
<td>(600-50)</td>
<td>CDE</td>
<td>600/60</td>
<td>600/60</td>
<td>600/60</td>
<td>(600-50)</td>
<td></td>
</tr>
<tr>
<td>CIR</td>
<td>10</td>
<td>AB</td>
<td>560-1¼</td>
<td>463</td>
<td>(500-1¼)</td>
<td>CDE</td>
<td>560-1½</td>
<td>560-1½</td>
<td>560-1½</td>
<td>(500-1½)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>AB</td>
<td>600-1½</td>
<td>503</td>
<td>(600-1½)</td>
<td>CDE</td>
<td>600-1½</td>
<td>560-1½</td>
<td>560-1½</td>
<td>(500-1½)</td>
<td></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>1/2</td>
</tr>
<tr>
<td>2200</td>
<td>1/2</td>
</tr>
</tbody>
</table>

**RADAR MINIMA**

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 500-1½.

**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
- **(V)** VHF emergency frequency (121.5) monitored
- **(U)** UHF emergency frequency (243.0) monitored

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

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**TERMS/LANDING MINIMA DATA 19339**
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 91. 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-227 (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.

<table>
<thead>
<tr>
<th>FAA Procedure Amendment Number</th>
<th>Orig 31DEC09</th>
<th>Amdt 2B 12MAR09</th>
<th>Procedure Amendment Effective Date</th>
</tr>
</thead>
</table>

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 via teletype and are required for users filing flight plans via computer interface. 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, LIBGE: RNAV-1 GPS, RNAV-1GPS from MAP to YARKU. DME required for LOC only.
Equipment Requirements Box — Circling to Rwy 25 NA at night. #For inop MALSR increase S-ILS 16R all cats visibility to 2 1/2 SM.
Standard Procedure Notes Box —

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

Available pilot controlled lighting (PCL) systems are indicated as follows:

1. Approach lighting systems that bear a system identification are symbolized using negative symbology, e.g., ⚪️, ⚫️, ❌
2. Approach lighting systems that do not bear a system identification are indicated with a negative "•" beside the name. A star (*) indicates non-standard PCL, consult Chart Supplement, e.g., �✰

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 🎤, 🎤, 🎤

FUNCTION
Highest intensity available
Medium or lower intensity (Lower REIL or REIL-off)
Lowest intensity available (Lower REIL or REIL-off)

KEY MIKE
7 times within 5 seconds
5 times within 5 seconds
3 times within 5 seconds
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</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>
<td>Autopilot System</td>
</tr>
<tr>
<td>APP CON</td>
<td>Approach Control</td>
</tr>
<tr>
<td>AR</td>
<td>Authorization Required</td>
</tr>
<tr>
<td>ASOS</td>
<td>Automated Surface Observing System</td>
</tr>
<tr>
<td>ASR/PAR</td>
<td>Published Radar Minimums at this Airport</td>
</tr>
<tr>
<td>ASSC</td>
<td>Airport Surface Surveillance Systems</td>
</tr>
<tr>
<td>ATIS</td>
<td>Automated Terminal Information Service</td>
</tr>
<tr>
<td>AUNICOM</td>
<td>Automated UNICOM</td>
</tr>
<tr>
<td>AWOS</td>
<td>Automated Weather Observing System</td>
</tr>
<tr>
<td>AZ</td>
<td>Azimuth</td>
</tr>
<tr>
<td>BC</td>
<td>Back Course</td>
</tr>
<tr>
<td>BND</td>
<td>Bound</td>
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<tr>
<td>C</td>
<td>Circling</td>
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<tr>
<td>CAT</td>
<td>Category</td>
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<tr>
<td>CCW</td>
<td>Counter Clockwise</td>
</tr>
<tr>
<td>CDI</td>
<td>Course Deviation Indicator</td>
</tr>
<tr>
<td>Chan</td>
<td>Channel</td>
</tr>
<tr>
<td>CIFP</td>
<td>Coded Instrument Flight Procedures</td>
</tr>
<tr>
<td>CIR</td>
<td>Circling</td>
</tr>
<tr>
<td>CLNC DEL</td>
<td>Clearance Delivery</td>
</tr>
<tr>
<td>CNF</td>
<td>Computer Navigation Fix</td>
</tr>
<tr>
<td>CPDLC</td>
<td>Controller Pilot Data Link</td>
</tr>
<tr>
<td>CTAF</td>
<td>Common Traffic Advisory</td>
</tr>
<tr>
<td>LDA</td>
<td>Localizer Type Directional Aid</td>
</tr>
<tr>
<td>CW</td>
<td>Clockwise</td>
</tr>
<tr>
<td>D-ATIS</td>
<td>Digital-Automated Terminal Information Service</td>
</tr>
<tr>
<td>DA</td>
<td>Decision Altitude</td>
</tr>
<tr>
<td>DER</td>
<td>Decision Height</td>
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<tr>
<td>DH</td>
<td>Distance Measuring Equipment</td>
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<tr>
<td>DME</td>
<td>Displaced Threshold</td>
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<tr>
<td>DTHR</td>
<td>Diverse Vector Area</td>
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<tr>
<td>DVA</td>
<td>Engineered Material Arresting System</td>
</tr>
<tr>
<td>ELEV</td>
<td>Elevation</td>
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<tr>
<td>EMAS</td>
<td>Engineered Material Arresting System Outlet</td>
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<tr>
<td>FAF</td>
<td>Final Approach Fix</td>
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<tr>
<td>FD</td>
<td>Flight Director System</td>
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<td>FM</td>
<td>Fan Marker</td>
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<tr>
<td>FMS</td>
<td>Flight Management System</td>
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<tr>
<td>GBAS</td>
<td>Ground Based Augmentation System</td>
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<tr>
<td>GCO</td>
<td>Ground Communications Outlet</td>
</tr>
<tr>
<td>GLS</td>
<td>Ground based Augmentation System Landing System</td>
</tr>
<tr>
<td>GP</td>
<td>Glidepath</td>
</tr>
<tr>
<td>GPI</td>
<td>Ground Point of Interception</td>
</tr>
<tr>
<td>GPS</td>
<td>Global Positioning System Glide Slope</td>
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<tr>
<td>GS</td>
<td>Glide Slope</td>
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<tr>
<td>HAA</td>
<td>Height above Airport</td>
</tr>
<tr>
<td>HAL</td>
<td>Height above Landing</td>
</tr>
<tr>
<td>HAT</td>
<td>Height above Touchdown</td>
</tr>
<tr>
<td>HATh</td>
<td>Height above Threshold</td>
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<tr>
<td>HCH</td>
<td>Heliport Crossing Height</td>
</tr>
<tr>
<td>HGS</td>
<td>Heads-up Guidance System Lights</td>
</tr>
<tr>
<td>HIRL</td>
<td>Head-up Display</td>
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<tr>
<td>HUD</td>
<td>Initial Approach Fix</td>
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<tr>
<td>IAF</td>
<td>International Civil Aviation Organization</td>
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<td>ICAO</td>
<td>Interoperative</td>
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<td>IM</td>
<td>Inner Marker</td>
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<td>INOP</td>
<td>Intersection</td>
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<tr>
<td>INT</td>
<td>Knots</td>
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<tr>
<td>K</td>
<td>Knots Indicated Airspeed</td>
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<td>KIAS</td>
<td>Local Area Augmentation System</td>
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<td>LAAS</td>
<td>Localizer Type Directional Aid</td>
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<td>LDA</td>
<td>Landing</td>
</tr>
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<td>Ldg</td>
<td>Low Intensity Runway Lights</td>
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<tr>
<td>LIRL</td>
<td>Lateral Navigation</td>
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<tr>
<td>LNAV</td>
<td>Localizer</td>
</tr>
<tr>
<td>LOC</td>
<td>Localizer Performance</td>
</tr>
<tr>
<td>LP</td>
<td>Localizer Performance with Vertical Guidance</td>
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<tr>
<td>LPV</td>
<td>Lead Radial. Provides at least 2 NM (Copter 1 NM) of lead to assist in turning onto the intermediate/final course.</td>
</tr>
<tr>
<td>LR</td>
<td>Maximum Authorized Altitude</td>
</tr>
<tr>
<td>MALA</td>
<td>Medium Intensity Approach Light System</td>
</tr>
<tr>
<td>MALSF</td>
<td>Medium Intensity Approach Lighting System with Sequenced Flashers</td>
</tr>
<tr>
<td>MALSR</td>
<td>Medium Intensity Approach Light System with RAIL</td>
</tr>
<tr>
<td>MAP</td>
<td>Missed Approach Point</td>
</tr>
<tr>
<td>MDA</td>
<td>Minimum Decent Altitude</td>
</tr>
<tr>
<td>MIRL</td>
<td>Minimum Decent Altitude</td>
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<td>MM</td>
<td>Medium Intensity Runway Lights</td>
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<td>MRA</td>
<td>Middle Marker</td>
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<td>N/A</td>
<td>Minimum Reception Altitude Not Applicable</td>
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<td>NA</td>
<td>Not Authorized</td>
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<td>NDB</td>
<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>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<td>--------------</td>
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<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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<td>PDC</td>
<td>Pre-Departure Clearance</td>
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<td>PRM</td>
<td>Precision Runway Monitor</td>
</tr>
<tr>
<td>R</td>
<td>Radial</td>
</tr>
<tr>
<td>RA</td>
<td>Radio Altimeter setting height</td>
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<tr>
<td>RAIL</td>
<td>Runway Alignment Indicator Lights</td>
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<tr>
<td>RCLS</td>
<td>Runway Centerline Light System</td>
</tr>
<tr>
<td>REIL</td>
<td>Runway End Identifier Lights</td>
</tr>
<tr>
<td>RF</td>
<td>Radius-to-Fix</td>
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<tr>
<td>RLLS</td>
<td>Runway Lead-in Light System</td>
</tr>
<tr>
<td>RNAV</td>
<td>Area Navigation</td>
</tr>
<tr>
<td>RNP</td>
<td>Required Performance Navigation</td>
</tr>
<tr>
<td>RPI</td>
<td>Runway Point of Intercept(ion)</td>
</tr>
<tr>
<td>RRL</td>
<td>Runway Remaining Lights</td>
</tr>
<tr>
<td>Ry</td>
<td>Runway</td>
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<td>RVR</td>
<td>Runway Visual Range</td>
</tr>
<tr>
<td>S</td>
<td>Straight-in</td>
</tr>
<tr>
<td>SALS</td>
<td>Short Approach Light System</td>
</tr>
<tr>
<td>SALSF</td>
<td>Short Approach Lighting System with Sequenced Flashing Lights</td>
</tr>
<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>
</tr>
<tr>
<td>SSALS</td>
<td>Simplified Short Approach Lighting System</td>
</tr>
<tr>
<td>SDF</td>
<td>Simplified Directional Facility</td>
</tr>
<tr>
<td>SM</td>
<td>Statute Mile</td>
</tr>
<tr>
<td>SOIA</td>
<td>Simultaneous Offset Instrument Approach</td>
</tr>
<tr>
<td>SR-SS</td>
<td>Sunrise-Sunset</td>
</tr>
<tr>
<td>TAA</td>
<td>Terminal Arrival Area</td>
</tr>
<tr>
<td>TAC</td>
<td>TACAN</td>
</tr>
<tr>
<td>TCH</td>
<td>Threshold Crossing Height (height in feet above ground level)</td>
</tr>
<tr>
<td>TDZ</td>
<td>Touchdown Zone</td>
</tr>
<tr>
<td>TDZE</td>
<td>Touchdown Zone Elevation</td>
</tr>
<tr>
<td>TDZ/CL</td>
<td>Touchdown Zone and Runway Centerline Lighting</td>
</tr>
<tr>
<td>TDZL</td>
<td>Touchdown Zone Lights</td>
</tr>
<tr>
<td>THR</td>
<td>Threshold</td>
</tr>
<tr>
<td>TOGA</td>
<td>Takeoff Distance Available</td>
</tr>
<tr>
<td>TORA</td>
<td>Takeoff Run Available</td>
</tr>
<tr>
<td>TR</td>
<td>Track</td>
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<tr>
<td>VASI</td>
<td>Visual Approach Slope Indicator</td>
</tr>
<tr>
<td>VCOA</td>
<td>Visual Climb over Airport</td>
</tr>
<tr>
<td>VDP</td>
<td>Visual Descent Point</td>
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<tr>
<td>VGS1</td>
<td>Visual Glide Slope Indicator</td>
</tr>
<tr>
<td>VNAV</td>
<td>Vertical Navigation</td>
</tr>
<tr>
<td>WAAS</td>
<td>Wide Area Augmentation System</td>
</tr>
<tr>
<td>WP/WPT</td>
<td>Waypoint (RNAV)</td>
</tr>
</tbody>
</table>
**TERMINAL ROUTES**

- Procedure Track
- Missed Approach
- Visual Flight Path

**PROJECTION SYMBOLS**

- 165°
- 345°
- 045°
- 2000
- 15.1
- 14.2
- 090°
- 270°
- 1 min
- 4 NM

**HOLDING PATTERNS**

- Hold-in-lieu of Procedure Turn
- HOLD 8000
- Arrival 090°
- 270°

**FIXES/ATC REPORTING REQUIREMENTS**

- Reporting Point
- WAYPOINT
- FLYOVER POINT
- MAP WP
- Intersection

**ALTITUDES**

- Minimum Route Altitude
- Feeder Route Mileage

**INDICATED AIRSPEED**

<table>
<thead>
<tr>
<th>175K</th>
<th>120K</th>
<th>250K</th>
<th>180K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory Airspeed</td>
<td>Minimum Airspeed</td>
<td>Maximum Airspeed</td>
<td>Recommended Airspeed</td>
</tr>
</tbody>
</table>

**MARKER BEACON**

- Marker beacon that are not specifically part of the procedure.

**DRIA AIDS TO NAVIGATION**

- Localizer (LOC/LDA) Course
- SDF Course
- Marker Beacon

**SCOTT**

- Chan 59
- VHF Paired Frequency

**NE-3, 07 OCT 2021 to 02 DEC 2021**
**Legend**

**Instruments Approach Procedures (Charts)**

**Planview Symbols**

- **Minimum Safe Altitude (MSA)**
  - Facility Identifier
  - Airport Identifier
  - Obstacles:
    - Highest Obstacle
    - Obstacle
  - Spot Elevation
  - Doubtful accuracy
  - Group of Obstacles

- **Terminal Arrival Area (TAA)**
  - Straight-in Area
  - Right Base Area
  - Left Base Area

- **Miscellaneous**
  - VOR Changeover Point
  - End of Rwy Coordinates (DoD only)
  - Distance not to scale
  - International Boundary
  - Air Defense Identification Zone

- **Airports**
  - Primary and Secondary (named in planview)
  - Civil
  - Seaplane Base
  - Joint (Civil-Military)
  - Heliport

- **Special Use Airspace**
  - R-Restricted
  - W-Warning
  - P-Prohibited
  - A-Alert
  - MOA-Military Operations Area

- **Obstacles**
  - Spot Elevation
  - Obstacle
  - Highest Obstacle
  - Highest Spot Elevation
  - Group of Obstacles
  - Doubtful accuracy
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° TCH 55.

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° TCH 50.

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 Copter procedures this is depicted in the following format: 3.00° TCH 55.

Vertical Descent Angle (VDA) is a guidance altitude established for the descent of the aircraft along the path of the glide path or glidepath if available. It allows the pilot to establish the descent and maintain the required descent path and is depicted as a bolded line.

Altitude restrictions at stepdown fixes on final approach not applicable to Precision (ILS) Approaches.

**Legend**

- **ILS or LOC APPROACH**
  - PT Completion Altitude
  - Glide Slope Altitude at Outer Marker/FAF
  - Glide Slope Intersect Altitude (Some approaches may use a restrictive note)
  - Glide Slope Intercept Altitude

**RNAV PROCEDURES WITH VERTICAL GUIDANCE**

- RNAV and GLS procedures with vertical guidance (e.g., RNAV 12 or GPS) depict a GP angle and TCH in the following format: GS 3.00° TCH 55.

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

- Vertical Descent Angle (VDA) for 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.

**DESCENT FROM HOLDING PATTERN**

- Altitude restrictions at stepdown fixes on final approach not applicable to Precision (ILS) Approaches.

**ALTIMETERS**

- **Mandatory Altitude**
- **Recommended Altitude**
- **Maximum Altitude**

**PROFILES AND SYMBOLS**

- **Visual Descent Point (VDP)**
- **Glide Slope/Glidepath Intercept Altitude and final approach fix for vertically guided approach procedures.**
- **Visual Flight Path**

- **Note:** Facilities and waypoints are depicted as a solid vertical line while fixes and intersections are depicted as a dashed vertical line.
DEPARTURE PROCEDURE (DP) CHARTS

RADIO AIDS TO NAVIGATION

**Compulsory:**
- VOR
- VORTAC
- DME
- LOC
- NDB
- DME or TACAN
- LOC/DME
- LMM, LOM (Compass locator)
- Marker Beacon

**Non-Compulsory:**
- VOR
- VORTAC
- DME
- LOC/DME
- LMM, LOM (Compass locator)
- Marker Beacon

FIXES/ATC REPORTING REQUIREMENTS

- Reporting Points
  - N00°00.00' W00°00.00'
  - ORLANDO Chan 59 (Y)

- Fix-Compulsory
  - Position Report
  - Obvious DME (DME mileage matches route mileage)
  - DME Mileage (when not obvious)

- WAYPOINT
  - Compulsory
  - FLYOVER POINT

- Non-Compulsory

- Facility Identifier

MISCELLANEOUS

- Changeover Point
- Distance not to scale
- International Boundary
- Sector Boundary
- Air Defense Identification Zone

LEGEND

**ALTIMETRES**

- MEA-Minimum Enroute Altitude
- MOCA-Minimum Obstruction Clearance Altitude
- 270° Departure Route
- 65 Mileage between Radio Aids, Reporting Points, and Route Breaks
- R-275 Radial line and value
- V12 J80 Holding pattern with max. restricted airspeed (175K) applies to all altitudes (210K) applies to altitudes above 6000' to and including 14000'

**AIRPORTS**

- NE-3, 07 OCT 2021 to 02 DEC 2021

**INDICATED AIRSPEED**

- 175K Mandatory Airspeed
- 120K Minimum Airspeed
- 250K Maximum Airspeed

**Japan Air Defense Identification Zone**

**SPECIAL USE AIRSPACE**

- R-352 R-Prohibited
- A-Alert
- W-Warning
- MOA-Military Operations Area

**ATMouvements**

- 4500 MEA-Minimum Enroute Altitude
- 3500 MOCA-Minimum Obstruction Clearance Altitude
- 270° Departure Route
- 65 Mileage between Radio Aids, Reporting Points, and Route Breaks
- R-275 Radial line and value
- V12 J80 Holding pattern with max. restricted airspeed (175K) applies to all altitudes (210K) applies to altitudes above 6000' to and including 14000'

**MEANING**

- Fix-Compulsory
- Non-Compulsory

**AIRPORTS**

- NE-3, 07 OCT 2021 to 02 DEC 2021

**INDICATED AIRSPEED**

- 175K Mandatory Airspeed
- 120K Minimum Airspeed
- 250K Maximum Airspeed

**AIRPORTS**

- Civil
- Military
- Joint (Civil-Military)
### Instrument Approach Procedures (Charts)

#### Airports Diagram/Airport Sketch

**Legend**

- **Runways**
  - Hard Surface
  - Other Than Hard Surface
  - Stopways, Taxiways, Parking Areas
  - Metal Surface

- **Surface**
  - Closed Runway
  - Under Construction

- **ARRESTING SYSTEM**
  - EMAS

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

- **When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.**

- **ARRESTING SYSTEM (EMAS)**

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

#### Runway TDZ elevation

- Runway TZE 123
- 0.3% DOWN
- 0.8% UP

#### Runway Slope

- 0% DOWN
- 0% UP

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

#### Airports diagram scales are variable.

- True/magnetic North orientation may vary from diagram to diagram.

#### Coordinate values are shown in 1 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 D symbol is shown to indicate runway declared distance information available, see appropriate Chart Supplement for distance information.

#### 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.
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, e.g., ( ), ( ), etc.

A dot ** portrays 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).

<table>
<thead>
<tr>
<th>Approach Lighting System</th>
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**LEGEND**

15344

INSTRUMENT APPROACH PROCEDURES (CHARTS)
APPROACH LIGHTING SYSTEM - UNITED STATES

NE-3, 07 OCT 2021 to 02 DEC 2021
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).

**P** PRECISION APPROACH PATH INDICATOR

- Too low
- Slightly low
- On correct approach path
- Slightly high
- Too high

Legend: ○ White □ Red

**V** PULSATING VISUAL APPROACH SLOPE INDICATOR

- Pulsating White
- Steady White
- or Alternating Red/White
- On Glide Path
- Slightly Below Glide Path
- Steady Red
- Below Glide Path
- Pulsating Red

Threshold

CAUTION: When viewing the pulsating visual approach slope indicators in the pulsating white or pulsating red sectors, it is possible to mistake this lighting aid for another aircraft or a ground vehicle. Pilots should exercise caution when using this type of system.

**V** "T"-VISUAL APPROACH SLOPE INDICATOR

- "T" - VASI
- "T" on both sides of RWY
- All lights variable white.
- Correct approach slope: only cross bar visible.
- Upright "T": fly up.
- Inverted "T": fly down.
- Red "T": gross undershoot.

**V** TRI-COLOR VISUAL APPROACH SLOPE INDICATOR

- TRCV
- Above Glide Path
- On Glide Path
- Below Glide Path
- Green
- Amber
- Red

CAUTION: When the aircraft descends from green to red, the pilot may see a dark amber color during the transition from green to red.

**V** ALIGNMENT OF ELEMENTS SYSTEMS

- APAP
- Above glide path
- On Glide Path
- Below Glide Path

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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**Baltimore/Washington Intl Thurgood Marshall**

---SEE BALTIMORE, MD

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**NORFOLK, VA**

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**OAKLAND, MD**

**GARRET COUNTY (2G4)**

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**OCEAN CITY MUNI (OXB)**

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**ORANGE, VA**

**ORANGE COUNTY (OMH)**

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**WILLIAMSBURG, VA**

**WILLIAMSBURG-JAMESTOWN(JGG)**

**WILLIAMSBURG, VA**

---SEE CAMP PEARY LNDG STRIP
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/m. climb of 205' per NM to 2600, or std. w/m. climb of 415' per NM to 2300, or 2000-3 for VCOA.
Rwy 24, std. w/m. 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 2221' 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

ANNAPOLIS, 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 1220' 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.
Building beginning 51' from DER, 319' left of centerline, up to 10' AGL/133' MSL.
Antenna 1067' from DER, 640' left of centerline, 68' AGL/164' MSL.
Pole, tree beginning 1068' from DER, 548' left of centerline, up to 75' AGL/169' MSL.
Pole, antenna beginning 1762' from DER, 941' right of centerline, up to 61' AGL/179' MSL.
Trees beginning 1872' from DER, 750' right of centerline, up to 68' AGL/181' MSL.
Trees beginning 2237' from DER, 660' right of centerline, up to 183' MSL.
Tree 2712' from DER, 1182' right of centerline, 73' AGL/194' MSL.
Tree 2740' from DER, 1117' right of centerline, 74' AGL/198' MSL.
Trees beginning 2770' from DER, 1061' right of centerline, up to 207' 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 1126' from DER, 752' right of centerline, up to 77' AGL/184' MSL.
Rwy 28, lighting 50' from DER, 6' left of centerline, 2' AGL/141' MSL.
Lighting 50' from DER, 6' right of centerline, 2' AGL/141' MSL.
Pole 150' from DER, 40' right of centerline, 4' AGL/143' 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 161' 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
NE-3 21280

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

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

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 1556’ from DER, 916’ left of centerline, up to 42’ AGL/198’ MSL.

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

Trees beginning 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, 94’ 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, 885’ 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 3323’ 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.

Trees 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.

Trees 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.

Trees 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’ right 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, 810’ 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 4753’ 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 and trees beginning 1170’ from DER, 3’ 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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.
Terrain 69' from DER, 497' left of centerline, 2134' 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 5186' 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 5568' 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' right 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, 325' right of centerline, up to 100' AGL/507' MSL.
NOTE: Do not overfly ammunition dump 1.1 NM south southwest of runway 4.
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/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' 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/271' 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 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/1249' 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, 465’ 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, 98’ MSL.
Tree 3106’ from DER, 362’ 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
31JUL08 (08213)
TAKEOFF OBSTACLE NOTES:
Rwy 5: trees and multiple transmission lines 120’ from DER, 184’ left of centerline up to 95’ AGL/126’ MSL.
Trees and multiple transmission lines 162’ from DER, 257’ right of centerline up to 100’ AGL/132’ MSL.
Rwy 23: trees and multiple transmission lines 1891’ from DER, 69’ left of centerline up to 95’ AGL/136’ MSL.
Multiple trees and transmission lines 537’ from DER, 437’ right of centerline up to 110’ AGL/151’ MSL.
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. Light support structures, 1178’ from DER, 778’ right of centerline, 62’ AGL/670’ MSL.
Rwy 21, vehicles on road, 32’ from DER, 496’ right of centerline, up to 17’ AGL/667’ 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. Trees 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 365’ 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.
CLINTON, MD
WASHINGTON EXEC/HYDE FLD (W32)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 06MAY10 (21112) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 5, vehicle on road beginning 20’ from DER, on centerline, up to 15’ AGL/261’ MSL. Antenna on tower beginning 2333’ from DER, 556’ right of centerline, 137’ AGL/361’ MSL. Rwy 23, vehicle on road 23’ from DER, 329’ left of centerline, 15’ AGL/260’ 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:

Rwys 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.

Trees beginning 227’ from DER, 215’ left of centerline, up to 100’ AGL/159’ MSL.

Trees beginning 567’ from DER, 260’ left of centerline, up to 100’ AGL/239’ MSL.

Tree 359’ from DER, 269’ left of centerline, up to 100’ AGL/249’ MSL.

Trees beginning 3709’ from DER, 695’ left of centerline, up to 100’ AGL/259’ MSL.

Trees beginning 3800’ from DER, 1259’ right of centerline, up to 100’ AGL/209’ MSL.

Tree 4257’ from DER, 1502’ right of centerline, up to 100’ AGL/249’ MSL.

Tree 4320’ from DER, 1561’ left of centerline, up to 100’ AGL/279’ MSL.

Tree 4403’ from DER, 1665’ right of centerline, up to 100’ AGL/269’ MSL.

Trees beginning 1.6 NM from DER, 2070’ left of centerline, up to 200’ AGL/409’ MSL.

Tree 1.6 NM from DER, 2208’ left of centerline, up to 200’ AGL/429’ MSL.

Tree 1.6 NM from DER, 325’ right of centerline, up to 200’ AGL/399’ MSL.

Tree beginning 1.7 NM from DER, 338’ right of centerline, up to 200’ AGL/429’ MSL.

Tree 2.4 NM from DER, 3426’ left of centerline, up to 200’ AGL/409’ MSL.

Rwy 33, tree 287’ from DER, 212’ right of centerline, up to 100’ AGL/169’ MSL.

Tree 334’ from DER, 329’ left of centerline, up to 100’ AGL/159’ MSL.

Building beginning 905’ from DER, 300’ left of centerline, up to 100’ AGL/169’ MSL.

Tree 2688’ from DER, 1129’ right of centerline, up to 100’ AGL/189’ MSL.

Tree 2709’ from DER, 1202’ right of centerline, up to 100’ AGL/199’ MSL.

Tree 2820’ from DER, 1322’ right of centerline, up to 100’ AGL/209’ MSL.

Building 3025’ from DER, 1095’ left of centerline, up to 100’ AGL/198’ MSL.

Building beginning 3314’ from DER, 621’ right of centerline, up to 100’ AGL/219’ MSL.

Building beginning 3513’ from DER, 834’ right of centerline, up to 100’ AGL/229’ MSL.

Building 4251’ from DER, 329’ right of centerline, up to 100’ AGL/236’ MSL.

Building 4714’ from DER, 495’ left of centerline, up to 100’ AGL/201’ MSL.

Trees beginning 5533’ from DER, 796’ left of centerline, up to 100’ AGL/239’ MSL.

Trees beginning 1.2 NM from DER, 817’ left of centerline, up to 100’ AGL/299’ MSL.

Trees beginning 1.6 NM from DER, 346’ left of centerline, up to 200’ AGL/399’ MSL.

Tree 1.7 NM from DER, 1852’ left of centerline, up to 200’ AGL/400’ MSL.

Tower beginning 1.5 NM from DER, 705’ left of centerline, up to 200’ AGL/409’ MSL.

Tree 2.2 NM from DER, 1692’ right of centerline, up to 200’ AGL/439’ MSL.

Trees beginning 2.4 NM from DER, 773’ left of centerline, up to 200’ AGL/479’ MSL.

Tree 2.5 NM from DER, 132’ left of centerline, up to 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.

Trees beginning 400’ from DER, 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.

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:

Rwys 6, 24, NA-obstacles

DEPARTURE PROCEDURE:

Rwy 14, climb via heading 142° to 900 before proceeding on course.

Rwy 32, climb via heading 322° 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, 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 74’ AGL/613’ MSL.
Building 1310’ from DER, 194’ right of centerline, 10’ AGL/562’ MSL.
Pole 1496’ from DER, 277’ right of centerline, 29’ AGL/626’ MSL.
Trees beginning at DER, 8’ left of centerline, up to 74’ AGL/613’ MSL.
Rwy 31, Trees beginning 823’ from DER, 6’ left of centerline, up to 85’ AGL/699’ MSL.
Pole 1185’ from DER, 253’ left of centerline, 30’ AGL/608’ MSL.
Pole 2056’ from DER, 253 left of centerline, 38’ AGL/626’ MSL.
Sign 2196’ from DER, 328’ left of centerline, 36’ AGL/628’ MSL.
Tower 1165’ from DER, 416’ left of centerline, 84’ AGL/611’ 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 1 02MAR17 (17061)
TAKEOFF MINIMUMS:
Rwy 14, standard.
Rwy 32, 400-2, or std with min climb of 300 ft/NM to 500.
TAKEOFF OBSTACLE NOTES:
Rwy 14, trees 190' from DER, 492' left of cntrln, 129' MSL.
Trees 1126' from DER, 595' right of cntrln, 157' MSL.
Trees beginning 1318' from DER, 860' right of cntrln, up to 181' MSL.
Trees 3102' from DER, 846' right of cntrln, 192' MSL.
Rwy 32, gen utilities beginning 138' from DER, 519' right of cntrln, up to 28' AGL/75' MSL.
Trees 348' from DER, 455' right of cntrln, 100' MSL.
Trees 889' from DER, 560' left of cntrln, 141' MSL.
Trees 941' from DER, 293' left of cntrln, 142' MSL.
Trees 1899' from DER, 600' left of cntrln, 155' MSL.
Pole 2090' from DER, 741' right of cntrln, 35' AGL/132' MSL.
Trees 2100' from DER, 650' left of cntrln, 155' MSL.
T-L towers beginning 1 NM from DER, 323' right of cntrln, up to 108' AGL/243' MSL.
Trees 1.1 NM from DER, 1749' left of cntrln, 307' 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 19, no obstacles penetrate the obstacle departure surface.
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 1081' from DER, 744' left of cntrln, up to 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
DELWARE 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, 353' right of centerline, up to 130' MSL.
Tree 134' from DER, 315' left of centerline, 74' MSL.
Trees beginning 188' 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, 353' right of centerline, up to 130' MSL.
Tree 134' from DER, 315' left of centerline, 74' MSL.
Trees beginning 188' 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, 353' right of centerline, up to 130' MSL.
Tree 134' from DER, 315' left of centerline, 74' MSL.
Trees beginning 188' from DER, 353' right of centerline, up to 130' MSL.
Tree 134' from DER, 315' left of centerline, 74' MSL.

NE-3, 07 OCT 2021 to 02 DEC 2021
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 (090701) (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.

Rwy 24, climbing heading 238° to 4000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 6, pole 1223' from DER, 671' right of centerline, 42' AGL/2161' MSL.
Pole 4851' from DER, 1170' left of centerline, 32' AGL/2231' MSL.

Rwy 24, terrain 122', 460' left of centerline, up to 2105' MSL.

Trees beginning 1924' from DER, 237' right of centerline, up to 90' AGL/129' MSL.

Tower 5078' from DER, 1017' left of centerline, 101' AGL/2300' MSL.

Rwy 24, trees 226', 271' left of centerline, up to 103' AGL/2302' MSL.

Terrain 68', 281' right of centerline, up to 2116' 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:
Pole and vehicles on road beginning 199' from DER, 278' right of centerline, up to 91' AGL/158' MSL.

Trees beginning 1036' from DER, 52' left of centerline, up to 89' AGL/127' MSL.

Rwy 22, trees 1250' from DER, 785' right of centerline, up to 56' AGL/95' MSL.

Poles and trees beginning 827' from DER, 514' right of centerline, up to 57' AGL/116' MSL.

Trees beginning 2017' from DER, 182' left of centerline, up to 89' AGL/158' MSL.

Pole and trees beginning 1924' from DER, 237' right of centerline, up to 90' AGL/129' MSL.

Tower 1.6 NM from DER, 2374' left of centerline, 276' AGL/290' MSL.

Rwy 33, vehicles on road and trees beginning 9' from DER, 405' right of centerline, up to 49' AGL/88' MSL.

Trees beginning 887' from DER, 409' left of centerline, up to 36' AGL/92' 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.

Rwy 31, trees beginning 2', 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.

Terrain beginning 6' from DER, 67' right of centerline, 117' MSL.

Rwy 31, trees beginning 1337', from DER, 59' right of centerline, up to 92' AGL/142' 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:
Pole and vehicles on road 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.

Trees 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.

Rwy 31, trees beginning 2', 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.

Rwy 31, trees beginning 1337', from DER, 59' right of centerline, up to 92' AGL/142' MSL.

Trees beginning 1965', from DER, 15' right of centerline, up to 81' AGL/261' MSL.
EMPIRIA, VA
EMPIRIA-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, 106' left 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 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 56' from DER, 334' left of centerline, up to 491' MSL.
Trees beginning 66' from DER, 295' left of centerline, up to 496' MSL.
Trees beginning 148' from DER, 332' right of centerline, up to 490' MSL.
Tree 453' from DER, 561' right of centerline, 456' MSL.
Trees beginning 460' from DER, 439' right of centerline, up to 459' 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, 337' 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 414' MSL.
Trees 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 359' from DER, 480' right of centerline, up to 479' MSL.
Trees beginning 452' 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 489' 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.

FELKER AAF (KFAF)
FORT EUSTIS, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
23OCT08  (08297)
Rwy 14, 32 standard.
TAKEOFF OBSTACLE NOTES:
Rwy 14: Tree 3133' from DER, 167' left of centerline, 103' AGL/112' MSL.
Rwy 32: Crane 2938' from DER, 941' left of centerline, 114' AGL/124' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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.

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.
Tree 234' 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, 157' left of centerline, 149' MSL.
Rwy 27, trees beginning abeam DER, 362' left of centerline, up to 119' MSL.
Trees beginning 211' from DER, 121' right of centerline, up to 55' MSL.
Pole and tree beginning 559' from DER, 470' right of centerline, up to 33' AGL/63' MSL.
Pole 596' from DER, 299' right of centerline, 43' AGL/68' MSL.
Trees beginning 608' from DER, 298' right of centerline, up to 71' MSL.
Tree 946' from DER, 550' right of centerline, 96' MSL.
Trees beginning 997' from DER, 593' right of centerline, up to 107' MSL.
Trees beginning 1017' from DER, 24' right of centerline, up to 109' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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, 500-2% 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, climb heading 214° to 900 before proceeding westbound.
Rwy 23, climb 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 above 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, 610' left of centerline, up to 90' AGL/394' MSL.
Trees beginning 2645' 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, 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.
Rwy 23, vehicles on road and trees beginning 134' from DER, 376' left of centerline, up to 21' AGL/327' MSL.
Pole, buildings, and trees beginning 328' 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, 2711' left of centerline, up to 107' AGL/636' MSL.

Rwy 24, trees beginning abeam DER, 154' left of centerline, up to 100' AGL/189' MSL.
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.
Trees 1086' from DER, 351' right of centerline, up to 77' AGL/336' MSL.
Trees 105' 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, 300-2¼ 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.
Trees abeam DER, 154' right of centerline, up to 100' AGL/189' 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.
Building 449' from DER, 234' left of centerline, 25' AGL/124' MSL.
Building 382' from DER, 180' left of centerline, 25'A GL/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/144' MSL.
Building 668' from DER, 189' left of centerline, 25' AGL/104' MSL.
Tower 4876' from DER, 1092' left of centerline, 210' AGL/250' 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.

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

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 52’ AGL/601’ MSL.
Trees beginning 1660’ from DER, 550’ right of centerline, up to 100’ AGL/939’ MSL.

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.
Building, 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/666’ MSL.
Trees beginning 1965’ from DER, 628’ left of centerline, up to 104’ AGL/636’ 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 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.
Trees beginning 1215’ from DER, left and right of centerline, up to 107’ AGL/2699’ MSL.
Trees beginning 2098’ from DER, left and right of centerline, up to 105’ AGL/2768’ MSL.
Trees beginning 4071’ from DER, 1192’ left of centerline, up to 79’ AGL/2799’ 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

GEORGETOWN, DE
DELWARE COASTAL (GED)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4B 10NOV16 (16315) (FAA)
TAKEOFF MINIMUMS:
Rwy 22, 200-1/2 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, 61’ AGL/109’ MSL.
Tree 5161’ from DER, 109’ right of centerline, up to 100’ AGL/144’ MSL.
Tree 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 558’ 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 1595’ 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, climbing left turn to intercept HGR VOR R-084 to 2500 before proceeding on course.
Rwy 23, climbing 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.
Vehicles on roadway 738’ from DER, 477’ left of centerline, up to 17’ AGL/476’ MSL.
Trees beginning 789’ from DER, 507’ left of centerline, up to 100’ AGL/939’ MSL.
Railroad 1111’ from DER, 255’ right of centerline, up to 23’ AGL/739’ MSL.
Rwy 23, trees 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.

HAGERSTOWN, MD
HAGERSTOWN RGNL-RICHARD A HENSON FLD (HGR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 17OCT13 (21224) (FAA)
DEPARTURE PROCEDURE:
Rwy 9, climbing left turn to intercept HGR VOR R-084 to 2500 before proceeding on course.
Rwy 27, climbing 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 101’ 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/759’ MSL.
Tree 2540’ from DER, 722’ left of centerline, 100’ AGL/779’ MSL.
Rwy 27, trees beginning 688’ 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 1103' from DER, 366' right 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' left of centerline up to 100' AGL/279' MSL.

Building 1401' from DER, 744' right of centerline, 25' AGL/194' MSL.

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, 899' 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, 891' 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:  
Rwy 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 MINIMUMS:  
Rwy 2, std. w/min. climb of 467’ per NM to 3800, or 1900-3 for climb in visual conditions.  
Rwy 20, std. w/min. climb of 442’ per NM to 3500, or 1900-3 for climb in visual conditions.  
DEPARTURE PROCEDURE:  
Rwy 2, terrain 561’ from DER, 519’ right of centerline, up to 15’ AGL/544’ MSL.  
Rwy 20, terrain 561’ from DER, left and right of centerline, up to 100’ AGL/599’ MSL.  
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/599’ MSL.  

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 4155’ from DER, 339’ right of centerline, 100’ AGL/113’ MSL.  
Tree 4309’ from DER, 620’ right of centerline, 100’ AGL/109’ MSL.  
Tree 3807’ from DER, 1181’ right of centerline, 100’ AGL/113’ MSL.  
Building 1390’ from DER, 825’ left 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.
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 596’ from DER, 277’ 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 beginning 1099’ from DER, 280’ right of centerline, up to 942’ 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 967’ 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 2422’ 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.

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

LURAY, VA (CON’T)
LURAY CAVERNS (LUA) (CON’T)
Rwy 22, trees beginning 23' from DER, 313' right of centerline, up to 34' AGL/929' 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 RGNL/PRESTON GLENN FIELD (LYH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 8 13MAR08 (08073) (FAA)
TAKEOFF MINIMUMS:
Rwy 17, 300-2¼ 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 Field 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.
Tress beginning 1422' from DER, 3' left of centerline up to 76' AGL/995' MSL.
Poles beginning 427' 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/ 948' MSL.
Antenna on building 395' from DER, 277' right of centerline 15' AGL/954' 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 265' from DER, 178' right of centerline up to 57' AGL/969' MSL.
Obstruction on pole 932' from DER, 333' left of centerline, 270' AGL/1188MSL.
Rwy 22, trees beginning 274' from DER, 245' right of centerline up to 41' AGL/979' MSL.
Trees beginning 2616' from DER, 206' left of centerline up to 41' AGL/979' MSL.
Poles beginning 2872' from DER, 603' right of centerline up to 44' AGL/982' MSL.
Rwy 35, 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.
Pole 36' from DER 98' left of centerline, 25' AGL/ 943' MSL.

MARION/WYTHEVILLE, VA
MOUNTAIN EMPIRE (MKJ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 26JUL12 (12208)
TAKEOFF MINIMUMS:
Rwy 8, 300-1¾.
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.
Trees 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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, up to 47' 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.

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.
Rwys 35, 300-1/2 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, 506' right of centerline, 97' AGL/160' MSL.
Trees beginning 1639' from DER, 384' right of centerline, up to 97' AGL/161' 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 5086' 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° or 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.

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.
Trees and airport sign beginning 21' from DER, 258' left of centerline, up to 50' MSL.
Trees beginning 45' from DER, 386' right of centerline, up to 51' MSL.
Trees beginning 212' from DER, 375' right of centerline, up to 53' MSL.
Tree 366' from DER, 597' right of centerline, 55' MSL.
Tree 439' from DER, 487' right of centerline, 56' MSL.
Tree 689' 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 898' 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, 47' right of centerline, up to 156' MSL.
T-l 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 1557' 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.
Tree 4288' from DER, 454' right of centerline, 154' MSL.
T-l towers and trees beginning 3347' from DER, 5' left of centerline, up to 163' 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 2279' 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 653' 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 1125' from DER, 335' right of centerline, up to 123' MSL.
Tree 3437' from DER, 1126' right of centerline, 139' MSL.

NE-3, 07 OCT 2021 to 02 DEC 2021
NEW MARKET, VA
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. When executing VCOA, notify ATC prior to departure.
Rwy 24, climb heading 243° to 3700 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.
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 584' 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 2, 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 105' AGL/134' MSL.
Trees beginning 796' from DER, 13' left of centerline, up to 103' AGL/124' MSL.
Rwy 20, aircraft on taxiways and buildings beginning 11' from DER, 144' right of centerline, up to 40' AGL/50' MSL.
Vehicles on roadway beginning 97' from DER, 14' left of centerline, up to 23' AGL/47' MSL.
Trains on railroad tracks and trees beginning 333' from DER, 571' left of centerline, up to 100' AGL/124' MSL.
Multiple trees beginning 1193' from DER, 117' right of centerline, up to 85' AGL/95' MSL.
Multiple trees beginning 1755' from DER, 413' right of centerline, up to 82' AGL/97' MSL.
Numerous trees beginning 2109' from DER, 150' right of centerline, up to 121' AGL/136' MSL.
Tree 3323' from DER, 308' left of centerline, up to 43' AGL/62' 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 2696' from DER, 1063' left of centerline, 87' AGL/91' MSL.
Multiple towers beginning 2938' from DER, 927' left of centerline, up to 145' AGL/146' 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.
Tree 3323' from DER, 308' left of centerline, 101' AGL/121' MSL.
Poles beginning 1307' from DER, 255' right of centerline, up to 43' AGL/62' MSL.

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

NORFOLK INTL (ORF) (CON’T)

Rwy 14 (CON’T), 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.

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.

Rwy 266’ 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 trees 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.

Multiple trees 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, 696’ right of centerline, up to 88’ AGL/98’ MSL.

Multiple trees beginning 1686’ from DER, 1’ right of centerline, up to 85’ AGL/95’ MSL.

Numerous 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.

Tree 168’ 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.

Multiple trees located 1566’ from DER, 7’ left of centerline, up to 85’ AGL/95’ MSL.

Trees beginning 3528’ from DER, 186’ left of centerline, up to 106’ AGL/113’ MSL.

NORFOLK NS (CHAMBERS FIELD) (KNGU)

NORFOLK, VA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3  05NOV20  (20310)

TAKEOFF MINIMUMS:

H01, std. w/ min. climb of 500’ per 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

OCEAN CITY, MD
OCEAN CITY MUNI (OXB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A  25JUN15  (15176)  (FAA)
TAKEOFF MINIMUMS:
Rwy 2, 300-1½ or std. w/min. climb of 262’ per NM to 300.
Rwy 32, 400-2 or std. w/min. climb of 280’ per NM to 500.
TAKEOFF OBSTACLE NOTES:
Rwy 2, trees beginning 158’ from DER, 499’ right of centerline, up to 78’ AGL/88’ MSL.
Tower 5556’ from DER, 1981’ right of centerline, 146’ AGL/157’ MSL.
Trees beginning 679’ from DER, 523’ left of centerline, up to 64’ AGL/74’ MSL.
Pole 1535’ from DER, 79’ left of centerline, 42’ AGL/54’ MSL.
Tank 4708’ from DER, 1600’ right of centerline, 160’ AGL/169’ MSL.
Trees beginning 1141’ from DER, left and right of centerline, up to 104’ AGL/114’ MSL.

OREANA NAS (APOLLO SOUCEK FIELD) (KNTU)
VIRGINIA BEACH, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3  03JAN19  (19003)
TAKEOFF OBSTACLE NOTES:
Rwy 5L, trees 3707’ from DER, 98’ right of cntrln, 91’ AGL/114’ MSL.
Rwy 5R, trees 3706’ from DER, 602’ left of cntrln, 91’ AGL/114’ MSL.
Trees 966’ from DER, 598’ left of cntrln, 0’ AGL/47’ MSL.
Rwy 14L, trees 198’ from DER, 592’ left of cntrln, 0’ AGL/60’ MSL.
Trees 1047’ from DER, 252’ left of cntrln, 0’ AGL/47’ MSL.
Rwy 14R, trees 286’ from DER, 527’ right of cntrln, 45’ MSL.
Rwy 23L, smokestack 4243’ from DER, 1470’ right of cntrln, 70’ AGL/94’ MSL.
Rwy 32L, terrain 0’ from DER, 91’ right of cntrln, 20’ MSL.
Terrain 0’ from DER, 500’ left of cntrln, 20’ MSL.
Rwy 32R, terrain 0’ from DER, 25’ right of cntrln, 19’ MSL.
Terrain 2792’ from DER, 7’ left of cntrln, 126’ AGL/576’ 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 8L, terrain, trees and poles beginning 103’ from DER, 361’ right of cntrln, 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), MD
TAKEOFF MINIMUMS AND (OBSTACLE)DEPARTURE PROCEDURES
25MAY17  (17145)
TAKEOFF OBSTACLE NOTES:
Rwy 6, pylon 1976’ from DER, 982’ left of cntrln, 63’ AGL/83’ MSL.
Rwy 14, tree 271’ from DER, 572’ left of cntrln, 79’ AGL/87’ MSL.
Rwy 24, tower 3’ from DER, 259’ right of cntrln, 2’ AGL/47’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PETERSBURG, VA
DINWIDDIE COUNTY (PTB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 25APR19 (19115) (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.

PHILIPS AAF (KAPG)
ABERDEEN PROVING GROUND, MD
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
27SEP07 (07270)
TAKEOFF OBSTACLE NOTES:
Rwy 4, vehicle on road 1059’ from DER, on centerline, 10’ AGL/86’ MSL.
Tree 1126’ from DER, 118’ left of centerline, 29’ AGL/88’ MSL.

Rwy 22, vehicle on road 234’ from DER, 27’ right of centerline, 10’ AGL/49’ MSL.
Multiple trees beginning 398’ from DER, 311’ right of centerline, up to 50’ AGL/89’ MSL.
Tree 1094’ from DER, 49’ left of centerline, 43’ AGL/62’ MSL.

QUANTICO MCAF (TURNER FIELD) (KNYG)
QUANTICO, VA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10OCT19 (19283)
DEPARTURE PROCEDURE:
Rwy 2, diverse departures authorized only from 026° CW to 205° with min. civil climb of 298’ per NM to 600, min. military climb of 274’ per NM to 500.
TAKEOFF OBSTACLE NOTES:
Rwy 2, pylon 2457’ from DER, 799’ left of cntrln, 62’ AGL/100’ MSL.
Twr 2641’ from DER, 1221’ left of cntrln, 69’ AGL/103’ MSL.
Twr 3081’ from DER, 1139’ left of cntrln, 69’ AGL/121’ MSL.
Twr 3119’ from DER, 1346’ left of cntrln, 69’ AGL/126’ MSL.
Terrain 5117’ from DER, 1871’ left of cntrln, 151’ MSL.
Terrain 5177’ from DER, 1646’ left of cntrln, 148’ MSL.
Pole 5394’ from DER, 1625’ right of cntrln, 102’ MSL.
Terrain 5434’ from DER, 1956’ left of cntrln, 157’ MSL.
Terrain 5470’ from DER, 1723’ left of cntrln, 157’ MSL.

Rwy 20, terrain at DER, 287’ right of cntrln, 36’ MSL.
Terrain at DER, 484’ right of cntrln, 40’ MSL.
Traffic light 6’ from DER, 283’ right of cntrln, 6’ AGL/15’ MSL.
Pole 9’ from DER, 457’ right of cntrln, 30’ MSL.
Terrain 271’ from DER, 352’ right of cntrln, 33’ MSL.
Terrain 332’ from DER, 582’ right of cntrln, 43’ MSL.
Jetty 393’ from DER, 273’ right of cntrln, 27’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 10OCT19 (19283)
Rwy 2, headings as assigned by ATC; requires min. civilian climb of 298’ per NM to 700, min. military climb of 274’ per NM to 700.

QUINTON, VA
NEW KENT COUNTY (W96)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 19SEP13 (13262) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 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/199’ MSL.

Rwy 29, trees beginning abeam DER, 183’ 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.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 10OCT19 (19283)
Rwy 2, headings as assigned by ATC; requires min. civilian climb of 298’ per NM to 700, min. military climb of 274’ per NM to 700.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

RICHMOND, VA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 02MAY13 (21224) (FAA)

DEPARTURE PROCEDURE:
Rwy 33, climb heading 316° to 2000 before turning right.

TAKEOFF OBSTACLE NOTES:
Rwy 15, vehicles on roadway and trees beginning abeam DER, 260’ right of centerline, up to 59’ AGL/258’ MSL.

Rwy 33, rising terrain, trees and pole beginning 62’ from DER, 29’ right of centerline, up to 37’ AGL/278’ MSL.

RICHMOND INTL (RIC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 05DEC19 (19339) (FAA)

TAKEOFF MINIMUMS:
Rwy 2, 300-1¼ 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’ left 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.

CONT
RICHMOND, VA (CON’T)
RICHMOND INTL (RIC) (CON’T)
Rwy 20 (CON’T), tree, pole beginning 263’ 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.
Sign 40’ from DER, 413’ right of centerline, 3’ AGL/168’ MSL.
Tree 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 2604’ 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 (OFP)
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.

ROANOKE, VA
ROANOKE-BLACKSBURG RGNL/WOODRUM FLD (ROA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 11A 15AUG19 (21112) (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 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 64’ AGL/1864’ 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, 2211’ left of centerline, up to 56’ AGL/1336’ MSL.
Rwy 24, sign 42’ from DER, 248’ left of centerline, 13’ AGL/1154’ MSL. Tree 2872’ from DER, 1246’ left of centerline, 92’ AGL/1232’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SALISBURY, MD
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
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/85’ 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 1141’ from DER, 304’ right of centerline, 47’ AGL/83’ MSL.
Antenna on building 1141’ from DER, 49’ left of centerline, 36’ AGL/86’ 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, 275’ left of centerline, 10’ AGL/59’ MSL.

SALUDA, VA
HUMMEL FLD (W75)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 23APR20 (21280) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 29, 300-2 or std. w/min. climb of 295’ per NM to 500.
Rwy 1, tree 193’ from DER, 347’ right of centerline, 100’ AGL/27’ MSL.
Trees beginning 209’ from DER, 106’ right of centerline, up to 100’ AGL/30’ 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, 25’ 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, building beginning 2115’ from DER, 2’ right of centerline, up to 100’ AGL/143’ MSL.
Terrain+veg, building beginning 2214’ from DER, 17’ left of centerline, up to 100’ AGL/143’ MSL.
Terrain+veg, building beginning 3007’ from DER, 64’ right of centerline, up to 100’ AGL/150’ MSL.
Terrain+veg, building beginning 3425’ from DER, 437’ left of centerline, up to 100’ AGL/146’ MSL.
Terrain+veg, building 3474’ from DER, 1160’ left of centerline, 100’ AGL/150’ MSL.
Terrain+veg, building 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 3A 12JAN12 (12012) (FAA)
TAKEOFF MINIMUMS:
Rwy 1, 300-1.
Rwys 6, 24, NA.
TAKEOFF OBSTACLE NOTES:
Rwy 1, tower 334’ from DER, 283’ left of centerline, 72’ AGL/502’ 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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.

STAUNTON-WAYNESBORO-HARRISONBURG, VA
SHENANDOAH VALLEY RGNL (SHD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6  27AUG09  (09239)  (FAA)
TAKEOFF MINIMUMS:
Rwy 5, std. w/ min. climb of 273’ per NM to 3800, or 2200-2½ for climb in visual conditions.
Rwy 23, standard, or 2200-2½ for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 5, climb heading 047° to 3400 before turning right, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course.
Rwy 23, climb heading 227° to 4400 before proceeding on course, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 5, trees 1720’ from DER, 635’ right of centerline, up to 100’ AGL/1279’ MSL.
Rwy 23, tree 679’ from DER, 616’ left of centerline, 35’ AGL/1194’ MSL.

STEVENSVILLE, 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 and vehicle on road beginning 318’ from DER, 157’ left of centerline, up to 37’ MSL.
Tree and vehicle on road beginning 350’ from DER, 54’ left of centerline, up to 44’ MSL.
Pole, vehicles on road, 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.
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, 3062’ right of centerline, 377’ AGL/377’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SUFFOLK, VA
SUFFOLK EXECUTIVE (SFQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 02MAY13 (13122) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 4, trees beginning 4’ from DER, 462’ right and 428’ 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.
Rwy 22, trees beginning 44’ from DER, 342’ right and 494’ left of centerline, up to 100’ AGL/174’ MSL.
Transmission poles and T-L towers beginning 1152’ from DER, right and left of centerline, up to 65’ AGL/130’ MSL.
Rwy 25, vehicles on road beginning 199’ from DER, right and left of centerline, up to 17’ AGL/84’ MSL.
Transmission poles and T-L towers beginning 483’ from DER, right and left of centerline, up to 65’ AGL/80’ MSL.

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.
Boat masts 638’ from DER, 632’ right to 755’ left of centerline, up to 63’ 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 (07298) (FAA)
TAKEOFF MINIMUMS:
Rwy 10, 300-1¼ or std. w/ min. climb of 303’ per NM to 500.
Rwy 28, 300-1 or std. w/ min. climb of 366’ per NM to 500.
TAKEOFF OBSTACLE NOTES:
Rwy 10, terrain 6’ from DER, 20’ left of centerline, up to 135’ MSL.
Terrain 29’ from DER, 281’ left of centerline, up to 139’ MSL.
Rwy 28, terrain beginning 12’ from DER, 5’ right of centerline, up to 151’ MSL.

WALLOPS ISLAND, VA
WALLOPS FLIGHT FACILITY (WAL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 07MAY09 (09127) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 4, trees beginning 1254’ from DER, 741’ left of centerline, up to 100’ AGL/109’ MSL.
Rwy 10, trees beginning 1814’ from DER, 79’ right of centerline, up to 100’ AGL/134’ MSL.
Rwy 17, trees beginning 169’ from DER, 218’ left of centerline, up to 100’ AGL/119’ MSL.
Rwy 22, trees beginning 793’ from DER, 315’ left of centerline, up to 100’ AGL/129’ MSL.
Rwy 28, trees beginning 945’ from DER, 495’ right of centerline, up to 100’ AGL/139’ MSL.
Rwy 35, trees beginning 3’ from DER, 394’ left of centerline, up to 100’ AGL/124’ MSL.
Trees beginning 21’ from DER, 219’ right of centerline, up to 100’ AGL/124’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WAKEFIELD, VA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 17AUG17 (17229) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 2, tree, vehicle beginning 54' from DER, 39' left of centerline, up to 183' MSL.
Tree 277' from DER, 83' right of centerline, 119' MSL.
Trees beginning 412' from DER, 41' right of centerline, up to 188' MSL.
Tree 802' from DER, 492' left of centerline, 187' MSL.
Trees beginning 1012' from DER, 117' left of centerline, up to 197' MSL.
Tree 3117' from DER, 210' right of centerline, 191' MSL.
Tree 3203' from DER, 522' right of centerline, 192' MSL.

Rwy 20, pole 16' from DER, 408' left of centerline, 140' MSL.
Tree, building beginning 67' from DER, 18' right of centerline, up to 170' MSL.
Tree, pole, beginning 103' from DER, 72' left of centerline, up to 179' MSL.
Trees beginning 460' from DER, 26' right of centerline, up to 179' MSL.
Tree 1265' from DER, 567' right of centerline, 193' MSL.
Trees beginning 1280' from DER, 499' left of centerline, up to 191' MSL.
Tree 1299' from DER, 463' right of centerline, 198' MSL.
Tree, transmission tower, utility line beginning 1344' from DER, 13' right of centerline, up to 206' MSL.
Tree, transmission tower beginning 1398' from DER, 40' left of centerline, up to 196' MSL.

WARRENTON, VA

WARRENTON-FAUQUIER (HWY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 09APR09 (09099) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 15, trees 436' from DER, 518' right of centerline, 100' AGL/439' MSL.
Vehicle on road 647' from DER, 649' right of centerline, 15' AGL/354' MSL.
Trees 1034' from DER, 763' left of centerline, 100' AGL/449' MSL.
Trees 1924' from DER, 781' right of centerline, 100' AGL/459' MSL.
Trees beginning 2239' from DER, 41' left of centerline, up to 100' AGL/459' MSL.

Rwy 33, trees beginning 1272' from DER, 59' right of centerline, up to 41' AGL/370' MSL.

WASHINGTON, DC

MANASSAS RGNL/HARRY P DAVIS FLD (HEF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4A 25JUN15 (21112) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 16L, trees beginning 1247' from DER, 178' 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 4103' 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.

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.

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/236' MSL.
Trees beginning 1659' 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.
WASHINGTON, DC (CON’T)

RONALD REAGAN WASHINGTON NTL (DCA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8B 30JAN20 (21112) (FAA)

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

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, climb on heading 154° to 5000 or as assigned.

Rwy 19, climb on heading 187° to 500 before turning right. Maintain 5000 or as assigned.

Rwy 22, climb on heading 217° to 3000 or as assigned.

Rwy 33, climb 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.

Tree 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. Monopole 1.6 NM from DER, 1785' right of centerline, 556' AGL/695' 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, 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.

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. Tree 661' from DER, 566' right of centerline, 56' AGL/57' MSL.

Tower 26' from DER, 504' right of centerline, 127' MSL.

Rhone 1.3 NM from DER, 856' 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 2896' from DER, 605' left of centerline, 102' MSL. Building 3336' from DER, 513' right of centerline, 114' AGL/148' MSL.

Building and 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, 1088' 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.

Trees, 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 699' 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, 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/83' 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.

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

**Rwy 33 (CON’T)**, 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, 3585’ left of centerline, 185’ AGL/392’ MSL.
Buildings beginning 2.4 NM from DER, 154’ left of centerline, up to 185’ 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.
**Rwy 19C,** 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.

**Rwy 24,** trees beginning 241’ from DER, left and right of centerline, up to 100’ AGL/1730’ MSL.

WEIDE AHP (ABERDEEN PROVING GROUNDS) (KEDG)
EDGEOOOD, MD

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  20JUN19  (19171)  (FAA)

DEPARTURE PROCEDURE:

Use JIRET DEPARTURE.

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/155’ MSL.

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

WESTMINSTER, MD
CARROLL COUNTY RGNL/JACK B POAGE FLD (DMW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 05MAR15 (21140) (FAA)
TAKEOFF MINIMUMS:
Rwy 16, 400-2½ or std. w/min. climb of 255' per NM to 1400.
TAKEOFF OBSTACLE NOTES:
Rwy 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.
Rwy 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 85' 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:
Rwy 32, 300-2½ or std. w/min. climb of 290' per NM to 1200.
TAKEOFF OBSTACLE NOTES:
Rwy 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.
Rwy 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/899' MSL.

WILLIAMSBURG, VA
WILLIAMSBURG-JAMESTOWN (JGG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 15DEC11 (11349) (FAA)
DEPARTURE PROCEDURE:
Rwy 31, climb heading 311° to 700 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 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.
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.

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.
Rod on obstacle light 606' from DER, 615' left of centerline, 19' AGL/93' MSL.
Rwy 27, tree 697' from DER, 533' left of centerline, 68' AGL/147' MSL.
Tree 1110' from DER, 584' right of centerline, 38' AGL/117' MSL.
Pole 793' from DER, 615' right of centerline, 28' AGL/107' MSL.
Bushing 408' from DER, 415' left of centerline, 12' AGL/91' MSL.
Rwy 32, tree 711' from DER, 207' right of centerline, 29' AGL/104' MSL.
Tree 1162' from DER, 83' right of centerline, 32' AGL/107' MSL.
WINCHESTER, VA
WINCHESTER RGNL (OKV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 28APR16 (16119) (FAA)
TAKEOFF MINIMUMS:
  RwY 32, std. w/min. climb of 240’ per NM to 1900 or 1300-2½ for climb in visual conditions.
DEPARTURE PROCEDURE:
  RwY 32, climb 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, 566’ left of centerline, 730’ MSL.
  Tree 1490’ 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.
  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, 777’ 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.

WISE, VA
LONESOME PINE (LNP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 29JUL10 (10210) (FAA)
DEPARTURE PROCEDURE:
  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’ right of centerline, 8’ AGL/2678’ MSL.
  Obstruction light on LOC/DME 309’ from DER, 189’ right of centerline, 15’ AGL/2685’ MSL.
  Terrain 159’ from DER, 363’ left of centerline, 2676’ MSL.
## IFR Alternate Minimums

Standard alternate minimums for non-precision approaches and approaches with vertical guidance (NDB, VOR, LOC, TACAN, LDA, SDF, VOR/DME, ASR, RNAV (GPS) or RNAV (RNP)) are 800-2. Standard alternate minimums for precision approaches (ILS, PAR, or GLS) are 600-2. Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility, absence of weather reporting service, or lack of adequate navigation coverage. Civil pilots see FAR 91. IFR Alternate Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Minimums Notes for alternate airfield suitability.

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<td>BANGOR CITY AIRPORT</td>
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<tr>
<td>ANnapolis, MD</td>
<td>LEE (ANP)</td>
<td>RNAV (GPS)-A, NA when local weather not available.</td>
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<tr>
<td>BALTIMORE, MD</td>
<td>BALTIMORE-WASHINGTON INTL</td>
<td>ILS or LOC Rwy 10&lt;sup&gt;1&lt;/sup&gt;, ILS or LOC Rwy 15&lt;sup&gt;2&lt;/sup&gt;, ILS or LOC Rwy 28&lt;sup&gt;2&lt;/sup&gt;, RNAV (GPS) Y Rwy 10&lt;sup&gt;3&lt;/sup&gt;, RNAV (GPS) Y Rwy 15&lt;sup&gt;3&lt;/sup&gt;, RNAV (GPS) Y Rwy 28&lt;sup&gt;2&lt;/sup&gt;, RNAV (GPS) Y Rwy 33&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>CAMBRIDGE, MD</td>
<td>CAMBRIDGE-DORCHESTER RGNL (CGE)</td>
<td>RNAV (GPS) Rwy 34&lt;sup&gt;1&lt;/sup&gt;, RNAV (GPS)-A&lt;sup&gt;1&lt;/sup&gt;, Category D, 800-2½.</td>
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<tr>
<td>CHARLOTTESVILLE, VA</td>
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<td>RNAV (GPS) Rwy 13, RNAV (GPS) Rwy 31</td>
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**Notes:**
- <sup>1</sup>NA when control tower closed.
- <sup>2</sup>Categories A, 800-2½; Category C, 900-2½; Category D, 900-2¾.
- <sup>3</sup>Category A, 800-2½; Category B, 900-2½; Category C, 900-2½; Category D, 900-2-3.
- <sup>4</sup>NA when control tower closed.
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<td>2NA when local weather not available.</td>
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<tr>
<td>3Category D, 800-2½.</td>
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</table>

| CUMBERLAND, MD        |                                 |
| GREATER CUMBERLAND    |                                 |
| RGNL (CBE)            | LOC/DME Rwy 23                  |
| RNAV (GPS) Rwy 5      |                                 |
| RNAV (GPS) Rwy 23     |                                 |
| NA when local weather not available. | |
| 1Category A, 1000-2; Category B, 1400-2; Category C 1500-3, Category D 1600-3. | |
| 2Category A, 1100-2; Category B, 1400-2; Category C, 1500-3; Category D, 1600-3. | |
| 3Category A, 1100-2; Category B, 1400-2; Category C, 1500-3. | |
| 4NA when CBE FBO closed. | |

| DANVILLE, VA          |                                 |
| DANVILLE RGNL (DAN)   | ILS or LOC Rwy 2                 |
| RNAV (GPS) Rwy 2      |                                 |
| RNAV (GPS) Rwy 20     |                                 |
| RNAV (GPS) Rwy 31     |                                 |
| NA when local weather not available. | |

| DOVER/CHESWOLD, DE    |                                 |
| DELAWARE AIRPARK (33N)| RNAV (GPS) Rwy 9                 |
| RNAV (GPS) Rwy 27     |                                 |
| VOR Rwy 27            |                                 |
| NA when local weather not available. | |
| Category C, 800-2½; Category D, 800-2½. | |

| DUBLIN, VA            |                                 |
| NEW RIVER VALLEY (PSK)| RNAV (GPS) Rwy 6                 |
| RNAV (GPS) Rwy 24     |                                 |
| VOR/DME Rwy 6         |                                 |
| NA when local weather not available. | |

| EASTON, MD            |                                 |
| EASTON/NEWNAM FLD (ESN)| ILS or LOC Rwy 4                 |
| RNAV (GPS) Rwy 4      |                                 |
| RNAV (GPS) Rwy 22     |                                 |
| 1ILS, LOC, NA when control tower closed. | |
| 2NA when local weather not available. | |

| FARMVILLE, VA         |                                 |
| FARMVILLE RGNL (FVX)  | RNAV (GPS) Rwy 3                 |
| RNAV (GPS) Rwy 21     |                                 |
| NA when local weather not available. | |

| FELKER AAF (KFAF)     | FORT EUSTIS, VA                  |
| RNAV (GPS) Rwy 14     |                                 |
| COPTER RNAV (GPS) Rwy 14 | NA when control tower closed. |

| FORT MEADE (ODENTON), MD | TIPTON (FME)                      |
| RNAV (GPS) Rwy 10        |                                 |
| RNAV (GPS) Rwy 28        |                                 |
| NA when local weather not available. | Category B, 900-2. | |

| FRANKLIN, VA            |                                 |
| FRANKLIN RGNL (FKN)     | RNAV (GPS) Rwy 9                 |
| RNAV (GPS) Rwy 27       |                                 |
| NA when local weather not available. | |

| FREDERICK, MD           | FREDERICK MUNI (FDK)             |
| ILS or LOC Rwy 23      | RNAV (GPS) Rwy 5                 |
| RNAV (GPS) Y Rwy 23    |                                 |
| RNAV (GPS) Z Rwy 23    |                                 |
| 1NA when local weather not available. | |
| 2NA when tower closed. | |
| 3LOC, Category C, 800-2½; Category D, 900-3. | |
| 4Category D, 800-2½.  | |
| 5Category C, 800-2½; Category D, 900-2½. | |

| FREDERICKSBURG, VA     | SHANNON (EZF)                    |
| RNAV (GPS) Rwy 24      |                                 |
| Categories A, B, C, 1100-3 | NA when local weather not available. | |

| FRONT ROYAL, VA        | FRONT ROYAL-WARREN COUNTY (FRR) |
| RNAV (GPS)-A           |                                 |
| NA when local weather not available. | Categories A, B, 1200-2. | |

| GAITHERSBURG, MD       | MONTGOMERY COUNTY AIRPARK (GAI) |
| RNAV (GPS)-A           |                                 |
| RNAV (GPS) Rwy 14      |                                 |
| NA when local weather not available. | |

| GALAX/HILLSVILLE, VA   | TWIN COUNTY (HLX)               |
| RNAV (GPS) Rwy 1       |                                 |
| RNAV (GPS) Rwy 19      |                                 |
| NA when local weather not available. | |

| GEORGETOWN, DE        | DELAWARE COASTAL (GED)          |
| RNAV (GPS) Rwy 4      |                                 |
| RNAV (GPS) Rwy 22     |                                 |
| VOR Rwy 22            |                                 |
| NA when local weather not available. | |

<p>| FORT MEADE (ODENTON), MD | TIPTON (FME)                      |
| RNAV (GPS) Rwy 10        |                                 |
| RNAV (GPS) Rwy 28        |                                 |
| NA when local weather not available. | Category B, 900-2. |</p>
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<td>KENBRIDGE, VA</td>
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</tr>
<tr>
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<td>ILS or LOC/DME Rwy 1L&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
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<td>ILS or LOC/DME Rwy 19C&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>ILS or LOC/DME Rwy 19R&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 1L&lt;sup&gt;3&lt;/sup&gt;</td>
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</tr>
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<td></td>
<td>VOR/DME Rwy 12&lt;sup&gt;2&lt;/sup&gt;</td>
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<sup>1</sup>LOC, Category D, 800-2½.
<sup>2</sup>ILS, Categories A, B, C, D, 700-2.
<sup>3</sup>Category D, 800-2½.

<table>
<thead>
<tr>
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<th>ALTERNATE MINIMUMS</th>
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</thead>
<tbody>
<tr>
<td><strong>WEST POINT, VA</strong></td>
<td><strong>MIDDLE PENINSULA</strong></td>
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<tr>
<td></td>
<td>RNAV (GPS)-B</td>
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<td>RNAV (GPS) Rwy 10</td>
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<td>VOR-A</td>
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<td><strong>CARROLL COUNTY RGNL/JACK B POAGE FLD (DMW)</strong></td>
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<td>RNAV (GPS) Rwy 34</td>
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<td><strong>WILLIAMSBURG-JAMESTOWN (JGG)</strong></td>
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<td>RNAV (GPS)-C</td>
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<td>VOR-B</td>
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<td>Categories A, B, C, 1100-3.</td>
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<td><strong>NEW CASTLE (ILG)</strong></td>
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<td>RNAV (GPS) Rwy 1&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 9&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 19&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 27&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>VOR Rwy 9&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>VOR Rwy 27&lt;sup&gt;3&lt;/sup&gt;</td>
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<sup>1</sup>NA when control tower closed.
<sup>2</sup>LOC, Category D, 800-2½.
<sup>3</sup>Category D, 800-2½.

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<td>RNAV (GPS) Rwy 32</td>
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<sup>1</sup>Category D, 800-2½.
DAVISON AAF (KDAA), Ft. Belvoir, VA  Amdt 11A  16JUL20 (20198) (USA) ELEV 74

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<th>CAT</th>
<th>DH/MDA-VIS</th>
<th>HAT/MDH/HAA</th>
<th>CEIL-VIS</th>
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<tbody>
<tr>
<td></td>
<td>32</td>
<td>3.0°/34/689</td>
<td>ABCD</td>
<td>346/50</td>
<td>278</td>
<td>(300-1)</td>
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<tr>
<td></td>
<td>14</td>
<td>3.0°/59/1114</td>
<td>ABCD</td>
<td>642-2</td>
<td>582</td>
<td>(600-2)</td>
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When control tower clsd procedure NA.

'Opr 1100-0230Z++ Mon-Fri exld hol.'
## NORFOLK NS (CHAMBERS FIELD) (KNGU), Norfolk, VA

**Amendment:** 08OCT20, 20282 (USN)

**Elevation:** 15

### RADAR - (E)

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<th>GS/TCH/RPI</th>
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<th>DH/MDA-VIS</th>
<th>HAT/HATH/CEIL-VIS</th>
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<tbody>
<tr>
<td>PAR¹</td>
<td>10² 3</td>
<td>3.0°/54/1020</td>
<td>ABCDE</td>
<td>114-¼</td>
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<tr>
<td></td>
<td>28⁴</td>
<td>3.0°/37/719</td>
<td>ABCDE</td>
<td>313-¼</td>
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<tr>
<td>PAR W/O GS¹</td>
<td>28⁵</td>
<td>ABCDE</td>
<td>380-½</td>
<td>366 (400-½)</td>
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<tr>
<td></td>
<td>10¹⁰</td>
<td>AB</td>
<td>500-½</td>
<td>486 (500-½)</td>
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<td></td>
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<td>CDE</td>
<td>500-1</td>
<td>486 (500-1)</td>
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<tr>
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<td>28⁶</td>
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<td>10⁹</td>
<td>AB</td>
<td>720-½</td>
<td>706 (800-½)</td>
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<tr>
<td></td>
<td></td>
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<td>706 (800-1½)</td>
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### CIR PAR W/O GS⁷ ⁸

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<th>DH/MDA-VIS</th>
<th>HAT/HATH/CEIL-VIS</th>
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<tbody>
<tr>
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<td>ABCDE</td>
<td>500-1</td>
<td>485 (500-1)</td>
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<tr>
<td>B</td>
<td>560-1</td>
<td>ABCDE</td>
<td>560-1</td>
<td>545 (600-1)</td>
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<tr>
<td>C</td>
<td>560-1½</td>
<td>ABCDE</td>
<td>560-1½</td>
<td>545 (600-1½)</td>
</tr>
<tr>
<td>D</td>
<td>580-2</td>
<td>ABCDE</td>
<td>580-2</td>
<td>565 (600-2)</td>
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<td>E</td>
<td>700-2½</td>
<td>ABCDE</td>
<td>700-2½</td>
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### CIR ASR⁷ ⁸

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<td>500-1½</td>
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<tr>
<td>B</td>
<td>560-1½</td>
<td>ABCDE</td>
<td>560-1½</td>
<td>545 (600-1½)</td>
</tr>
<tr>
<td>C</td>
<td>560-1½</td>
<td>ABCDE</td>
<td>560-1½</td>
<td>545 (600-1½)</td>
</tr>
<tr>
<td>D</td>
<td>580-2</td>
<td>ABCDE</td>
<td>580-2</td>
<td>565 (600-2)</td>
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<tr>
<td>E</td>
<td>700-2½</td>
<td>ABCDE</td>
<td>700-2½</td>
<td>685 (700-2½)</td>
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</table>

¹No-NOTAM MP Sun 1230-1630Z++.
²When ALS inop, increase vis CAT ABCDE to ½ mile.
³PAPI RRP/TCH 669/35 not coincident with PAR RPI/TCH 1020/54.
⁴When ALS inop, increase vis CAT ABCDE to ¾ mile.
⁵When ALS inop, increase vis CAT ABCDE to 1½ miles.
⁶When ALS inop, increase vis CAT AB to 1¼ miles, CAT CDE to 1½ miles.
⁷Cir not auth south of Rwy 10-28.
⁸Norfolk NS Heliport lctd 1 NM NW, use caution in cir aprch.
⁹When ALS inop, increase vis CAT AB to 1¼ miles, CAT CDE to 2 miles.
¹⁰When ALS inop, increase vis CAT AB to 1 mile, CAT CDE to 1½ miles.
### RADAR INSTRUMENT APPROACH MINIMUMS

#### OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU), Virginia Beach, VA

**Amendment:** 6  
**Effective Date:** 20MAY21  
**(USN)**

**ELEV:** 22

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<td>100</td>
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<tr>
<td></td>
<td>23L&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3.0°/40/769</td>
<td>ABCDE</td>
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<td>100</td>
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<td>32L&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3.0°/40/762</td>
<td>ABCDE</td>
<td>122-¼</td>
<td>100</td>
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<td>ABCDE</td>
<td>120-½</td>
<td>100</td>
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<tr>
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<td>121-½</td>
<td>100</td>
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<td>SIDESTEP&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>440-1½</td>
<td>420</td>
<td>(500-1½)</td>
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<tr>
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<td>23L</td>
<td>ABCDE</td>
<td>460-1½</td>
<td>439</td>
<td>(500-1½)</td>
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<td>23R</td>
<td>ABCDE</td>
<td>460-1½</td>
<td>439</td>
<td>(500-1½)</td>
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<td>439</td>
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<td>C</td>
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<td>618</td>
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<td>900-3</td>
<td>878</td>
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<sup>1</sup>When ALS inop, increase CAT ABCDE vis to ½ mile.  
<sup>2</sup>When ALS inop, increase CAT AB vis to 1 mile, CAT CDE to 1¼ miles.  
<sup>3</sup>Sidestep ASR only.  
<sup>4</sup>Step Down Fix at 3 NM from thld, 1020’ min.
# RADAR INSTRUMENT APPROACH MINIMUMS

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

**Amend 1  10SEP20  (20254)  (USN)**

**ELEV 39**

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<th>HAT/HATH/AA</th>
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<td>6³</td>
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<td>CDE</td>
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<td>6³</td>
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<td>E</td>
<td>800-2¾</td>
<td>761</td>
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1. **PAR No-NOTAM preventive maint period Wed 1300-1700Z++.**
2. **When ALS inop, increase CAT ABCDE vis to ½ mile.**
3. **When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1¾ miles.**
4. **When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1⅜ miles.**
# RADAR INSTRUMENT APPROACH MINIMUMS

## QUANTICO MCAF (TURNER FIELD) (KNYG), Quantico, VA Amdt 6

05NOV20 (20310) (USN)  
ELEV 11

### RADAR

120.925 351.95 353.65 363.15

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<thead>
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<th>CAT</th>
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<th>HAT/HATH</th>
<th>CEIL-VIS</th>
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<tbody>
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<td>ABCD</td>
<td>260-¾</td>
<td>250</td>
<td>(300-¾)</td>
</tr>
<tr>
<td>ASR</td>
<td>2</td>
<td>AB</td>
<td>560-1½</td>
<td>549</td>
<td>(600-1½)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CD</td>
<td>560-1¾</td>
<td>550</td>
<td>(600-1¾)</td>
</tr>
<tr>
<td>CIR ASR</td>
<td>2</td>
<td>A</td>
<td>560-1½</td>
<td>549</td>
<td>(600-1½)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>640-1½</td>
<td>629</td>
<td>(700-1½)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>720-2</td>
<td>709</td>
<td>(800-2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D</td>
<td>800-2½</td>
<td>789</td>
<td>(800-2½)</td>
</tr>
</tbody>
</table>

1. GCA avbl daily during published field opr hours. Ctc twr for freq asgn.  
2. VGSI and final descent angle not coincident.  
4. WCH (Group 3: 15 ft, Group 4: 10 ft) is less than the minimum height (20 ft).
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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEW CASTLE (ILG)</td>
<td>01</td>
<td>09-27</td>
<td>4,050 feet</td>
</tr>
<tr>
<td></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>
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>HOT SPOT</th>
<th>DESCRIPTION*</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOVER, DE</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>HS 1</td>
<td>Twy A and Twy B int in close proximity to the rwy.</td>
</tr>
<tr>
<td>FREDERICK, MD</td>
<td>HS 1</td>
<td>Twy A and Twy E at Rwy 05-23.</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 30.</td>
</tr>
<tr>
<td></td>
<td>HS 4</td>
<td>Potential for inadvertent entry onto Rwy 23.</td>
</tr>
<tr>
<td>HAGERSTOWN, MD</td>
<td>HS 1</td>
<td>Maintain vigilance congestion area and close proximity to rwys.</td>
</tr>
<tr>
<td>RICHMOND, VA</td>
<td>HS 1</td>
<td>Wrong rwy departure risk. Frequent rwy crossings due to aircraft exiting Rwy 34.</td>
</tr>
<tr>
<td>WILMINGTON, DE</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.
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.

(NARRATIVE ON FOLLOWING PAGE)
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:** Chart not to scale.

**BUCCI TRANSITION (BUCCI.ARLFT2)**

**LUNDY TRANSITION (LUNDY.ARLFT2)**

**MAULS TRANSITION (MAULS.ARLFT2)**

**THHMP TRANSITION (THHMP.ARLFT2)**

**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.

**NOTE:** RADAR required
**NOTE:** RNAV 1
**NOTE:** DME/DME/IRU or GPS required
**NOTE:** LUNDY Transition for KDOV and 33N arrivals only
**NOTE:** BUCCI Transition ATC assigned only

**DOBVER APP CON**
132.425  257.875
33N AWOS-3
120.125
DOV D-ATIS
127.825  273.5
ILG ATIS
123.95

**DOVER AFB**
120.125
DOV D-ATIS
127.825  273.5
ILG ATIS
123.95
JOHNSTOWN TRANSITION (JST.BUNTS2):

PHILIPSBURG TRANSITION (PSB.BUNTS2):

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

NOTE: This STAR is for aircraft capable of 250K or greater.

NOTE: Chart not to scale.
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 028° to JILES, 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.
CAVL R FOUR ARRIVAL (RNAV)

**NOTE:** Chart not to scale.

**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.
ARRIVAL ROUTE DESCRIPTION

MODENA TRANSITION (MXE.CLIPR2):

LANDING RWY 1: From over EYESS on track 230° to BRUNC, then on track 192° to FELTY, then on track 187° to HITEK, then on track 187° to CAVDI. Depart CAVDI heading 187° for vectors to final approach course.

LANDING RWY 19: From over EYESS on track 284° to EDDWD, then on track 230° to MEGGS, then on track 328° to NAYES. Depart NAYES heading 327° for vectors to final approach course.

NOTE: Chart not to scale.
COATT FIVE ARRIVAL

**PLANNING INFORMATION**

**TURBOJET VERTICAL NAVIGATION**

**COATT**
- **N37°57.50'**
- **W77°34.61'**

**FLAT ROCK**
- **N37°31.71'**
- **W77°49.69'**

**FALKO**
- **N38°11.11'**
- **W77°26.56'**

**OGATE**
- **N38°03.48'**
- **W77°31.08'**

**BROOKE**
- **N38°20.18'**
- **W77°21.17'**

**ARMEL**
- **N38°56.08'**
- **W77°28.00'**

**EXPECTED POINTS**

- **COATT FIVE ARRIVAL**
  - **128.525 306.925**
  - **D-ATIS 134.85**

**NOTE:** Chart not to scale.

**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.

**Expect 5000.**

**Expect 10000 and 250K.**

**NOTE:** RADAR required.

**NOTE:** DME required.
ARRIVAL ROUTE DESCRIPTION

MEGGS
LANDING SOUTH: Rwys 15, 19, 22:
Expect approach clearance or radar vectors to final approach course after MEGGS.

NOTE: Radar required.
NOTE: RNAV
NOTE: DME/DME/IRU or GPS required.
NOTE: Turboprop 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 282° to cross YUCKK at 10000, then on track 266° to cross TIRZA at or below 8000, then on track 230° to cross HITEK at 7000, then on track 187° to MITFY, then on heading 187°. Expect radar vectors to final approach course.

LANDING SOUTH RWYS 15, 19, 22: From DEALE on track 284° to EDDGY, then on track 320° to 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.
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.
DRONE TWO ARRIVAL

NORFOLK, VIRGINIA

(NARRATIVE ON FOLLOWING PAGE)

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: Radar required.

NOTE: DME required.

NOTE: Chart not to scale.

(13)

FL190

E X P E C T C L E A R A N C E T O C R O S S A T 1 1 0 0 0 .

FL190

E X P E C T C L E A R A N C E T O C R O S S A T F L 2 1 0 .

FL190

E X P E C T C L E A R A N C E T O C R O S S A T F L 1 9 0 .
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: Chart not to scale.

BUCKO TRANSITION (BUCKO.FRDM5):

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 FRDM5. ARTCC will issue landing direction assignment (north or south) and Potomac TRACON will issue runway assignments.

See following page for Arrival Routes.

(CONTINUED ON FOLLOWING PAGE)
**ARRIVAL ROUTE DESCRIPTION**

**LANDING DCA RWYS 1, 4, 33, and ADW RWYS 11L/R and LANDING DAA:** From ALWYZ on track 125° 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 HERO0, 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:** Turboprops only, turboprops as assigned by ATC only.
**NOTE:** Prohibited (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.
GIBBZ FOUR ARRIVAL (RNAV) Transition Routes

MORGANTOWN MGW

BRNDN

HIROY

JIMVE

TABBE

TAGI

FL200

FL230

FL240

FL250

FL210

FL190

FL120

FL100

FL80

FL60

FL40

FL20

FL10

FL0

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.

(Continued on following page)

BECKLEY TRANSITION (BKW, GIBBZ4):
CHARLESTON TRANSITION (HVQ, GIBBZ4):
MORGANTOWN TRANSITION (MGW, GIBBZ4):

NOTE: Chart not to scale.
ARIVAL 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: 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.
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.

NOTE: Chart not to scale.
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/HWY/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.
NOTE: Chart not to scale.

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.

NOTE: Radar required.

NOTE: Aircraft use DCA ATIS to determine the direction of landing prior to IRONS.

NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA-AVOID-SURFACE TO 18000 MSL.
ARRIVAL ROUTE DESCRIPTION

BRIGS TRANSITION (BRIGS.JIIMS3):
DASHA TRANSITION (DASHA.JIIMS3):
SNOW HILL TRANSITION (SWL.JIIMS3):

Landing ILG: From over JIIMS on track 288° to TLUKS, then on heading 307°. Expect RADAR vectors to final approach course.
Landing MQS: From over JIIMS on track 288° to TLUKS, then on track 317° to RANS, then on heading 352°. Expect RADAR vectors to final approach course.
Landing PNE, TTN: From over JIIMS on track 339° to BEELZ, then on track 007° to WOJIK, then on track 087° to PSOUT, then on heading 032°. Expect RADAR vectors to final approach course.
Landing PHL Rwy 9L, 9R: From over JIIMS on track 288° to TLUKS, then on track 353° to cross CHEAZ at 190K, then on track 266° to STAYK, then on track 266°. Expect RADAR vectors to final approach course.
Landing PHL Rwy 17, 35: From over JIIMS on track 312° to SNEDE, then on track 312°. Expect RADAR vectors to final approach.
Landing PHL Rwy 26, 27L, 27R: From over JIIMS on track 339° to BEELZ, then on track 007° to cross WOJIK at 190K, then on track 087° to PSOUT, then on track 087°. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

WILKES-BARRE TRANSITION (LVZ.LEGGO6):
WILLIAMSPORT TRANSITION (FQM.LEGGO6):
SELINSGROVE 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."
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 19R: 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**

**LAFLN TRANSITION (LAFLN.MIIDY2)**

**LANDING KBWI RWYS 10, 15L/R:** From MIDY on track 302° to cross KAPTN at or below 5000, then on track 311° to cross NAVY at 4000, then on track 311° to ANCRR, then on track 311° to LURRR, 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 below 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.

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

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 DEER, then on heading 081° 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: 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.
ARRIVAL ROUTE DESCRIPTION

PHILIPSBURG TRANSITION (PSB.PRIVO2): From over PSB VORTAC on PSB R-177 to PRIVO. Thence...

WILSS TRANSITION (WILSS.PRIVO2): From over WILSS on THS R-053 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 01L/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)

Transition Routes
(Continued on following page)

(NARRATIVE 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

CASANOVA TRANSITION (CSN.RIPKN2): From over CSN VORTAC on CSN R-091 to CAPKO INT, thence....

RICHMOND TRANSITION (RIC.RIPKN2): From over RIC VORTAC on RIC R-021 to WALKN INT, then on FAK R-040 to BIRDZ INT, then on ENO R-251 to CAPKO INT, thence....

....from CAPKO INT on ENO R-251 to cross RAVNN INT at 6000.

RWY 28, 33L/R: From RAVNN on BAL R-174 to RIPKN, then on heading 354°. Expect RADAR vectors to final approach course.

RWY 10, 15L/R: From RAVNN on BAL R-174 to RIPKN, then on heading 310°. Expect RADAR vectors to final approach course.

LANDING MTN: From RAVNN on BAL R-174 to RIPKN, then on heading 050°. Expect RADAR vectors to final approach course.

LANDING DMW: From RAVNN on BAL R-174 to RIPKN, then on BAL R-174 to BAL, then on BAL R-334 to EMI, then on heading 350°. 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.SKILS4):

From over SHILO on track 195° to SKILS, then on track 195° to BAL VORTAC, then on track 234° to EYESS, then on runway transition.

LANDING RWY 1: From over EYESS on track 230° to BRUNC, then on track 192° to FELTY, then on track 187° to HITEK, then on track 187° to CAVDI. Depart CAVDI heading 187° for vectors to final approach course.

LANDING RWY 19: From over EYESS on track 284° to EDDWD, then on track 328° to MEGGS, then on track 327° to NAYES. Depart NAYES heading 327° for 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 DEER, then on heading 081° 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: Turboprop aircraft only.
NOTE: Maintain last ATC assigned altitude until cleared to "descend via the SPIDR STAR".
ARTCC will issue landing direction assignment (north or south) and Potomac TRACON will issue runway assignments.

NOTE: Chart not to scale.
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.
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.TIKEE3):
KESSEL TRANSITION (ESL.TIKEE3):
SEALZ TRANSITION (SEALZ.TIKEE3):

All aircraft types landing HEF, 2VG2, 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, W32: 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: RADAR required
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
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 HOOOK, 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):
THHMP TRANSITION (THHMP.TRSTN3):

Landing KHEF, KHGY, KCJR: 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, KHGR, KMRB, KJYO, KFDK, 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.
TRUPS FOUR ARRIVAL (RNAV) Transition Routes

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.

TRUPS FOUR ARRIVAL (RNAV) Transition Routes

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

Landing DCA Rwy 1, 4, 33, and ADW Rwy 11/R 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 VCTR, then on track 189° to HERO0, then on track 189°. Expect radar vectors to final approach course.

Landing DCA Rwy 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 Rwy 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.

VUDOO TWO ARRIVAL (RNAV) Transition Routes

THHMP TRANSITION (THHMP.VUDOO2): (ATC assigned only).
CIBAC TRANSITION (CIBAC.VUDOO2)
THHMP TRANSITION (THHMP.VUDOO2)

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.

VUDOO TWO ARRIVAL (RNAV) Transition Routes

(CONTINUED ON FOLLOWING PAGE)
(CONTINUED ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)
LANDING NORTH RWYS 1L/R: From VUDOO 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 VUDOO 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.
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.

NOTE: Chart not to scale.
ZUMBR TRANSITION (ZUMBR.WIGOL2):
DORRN TRANSITION (DORRN.WIGOL2):
CCHIP TRANSITION (CCHIP.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.

ARRIVAL 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.

ARRIVAL 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.

ARRIVAL 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

Amdt 1B  16JUL20

RNP 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.

Procedures NA for arrivals at HILTO on V53 northwest bound.

Procedures NA for arrivals at TAKEN on V16 southwest bound.

MISSED APPROACH:
- Climb to 7300 direct KURRU and hold, continue climb-in-hold to 7300.

MISR APCH: Climb to 7300 direct KURRU and hold, continue climb-in-hold to 7300.

ABINGDON, VIRGINIA

36°41'N-82°02'W

RNAV (GPS) RWY 6

VIRGINIA HIGHLANDS (VJI)

AWOS-3

128.125

TRI-CITY APP CON

125.25 349.0

UNICOM

122.8 (CTAF)

20198

RNAV (GPS) RWY 6

VIRGINIA HIGHLANDS (VJI)

ABINGDON, VIRGINIA

Amdt 1B  16JUL20

RNP 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.

Procedures NA for arrivals at HILTO on V53 northwest bound.

Procedures NA for arrivals at TAKEN on V16 southwest bound.

MISSED APPROACH:
- Climb to 7300 direct KURRU and hold, continue climb-in-hold to 7300.

MISR APCH: Climb to 7300 direct KURRU and hold, continue climb-in-hold to 7300.

ABINGDON, VIRGINIA

36°41'N-82°02'W

RNAV (GPS) RWY 6

VIRGINIA HIGHLANDS (VJI)

ABINGDON, VIRGINIA

Amdt 1B  16JUL20

36°41'N-82°02'W

RNAV (GPS) RWY 6

VIRGINIA HIGHLANDS (VJI)
**RNAV (GPS)-A**

**LEE (ANP)**

**POTOMAC APP CON**

```
119.7  290.475
```

**CTAF**

```
122.9
```

**APP CRS**

```
298°
```

**Rwy ldg**

```
N/A
```

**TDZE**

```
N/A
```

**Apt Elev**

```
34
```

**RNP APCH.**

When local altimeter setting not received, use Baltimore-Washington Intl altimeter setting and increase all MDA 60 feet. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

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

```
298°
```

**AMRTN**

```
1700
```

**VGSI and descent angles not coincident (VGSI Angle 4.25/TCH 25).**

**CATEGORY**

```
A  B  C  D
```

**CIRCLING**

```
660-1  626 (700-1)  NA
```

**ELEV**

```
34
```

**LIRL Rwy 12-30**

```
LIRL Rwy 12-30
```

**38°57'N-76°34'W**
DME from BAL VORTAC. Simultaneous reception of I-UQC and BAL DME required. DME required. Simultaneous approach authorized with Rwy 15R. Helicopter visibility reduction below RVR 4000 NA.

**ALTERNATE MISSED APCH FIX**

- WESTMINSTER
  - Chan 126
  - R-179

**AL-804 (FAA)**

**Baltimore/Washington Intl Thurgood Marshall (BWI)**

**ILS or LOC RWY 15L**

**Missed Approach:** Climb to 2500 on heading 155° and BAL VORTAC R-153 to Dudds/BAL 12 DME and hold.

**Radar Required**

- RADAR
- BAL 6.9
- MNKEY 12
- MKE 3.4
- ZOWEE 12
- BAL 12

**Approach Fix (IF)**

- BAL 12.9
- MNKEY 9.9
- ZOWEE 6.9

**APCH CRS**

- 155°

**Category**

- A
- B
- C
- D

**GS 3.00° TCH 47**

- 3000
- 2500
- 2100
- 155°

**Comparison with Previous Diagrams**

- **NE-3, 07 OCT 2021 to 02 DEC 2021**
  - BALTIMORE, MARYLAND
  - Amdt 4A 23APR20

- **ILS or LOC RWY 15L**
  - BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)
  - 39°11'N-76°40'W

**IATA Codes**

- BALTIMORE (BWI)
- BALTIMORE/WASHINGTON THURGOOD MARSHALL (BWI)

**Elevations**

- BALTIMORE TOWER 257.8
- BALTIMORE/THURGOOD MARSHALL 118.05
**NE-3, 07 OCT 2021 to 02 DEC 2021**

**BALTIMORE, MARYLAND**

**ILS or LOC Rwy 33L**

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

**CARDS**

- **DEP**
- **ALT**
- **FL**
- **TURB**
- **WINDS**
- **SIGMET**
- **AIRMET**
- **SIG WX**
- **SIG WINDS**
- **SIG WAVE**
- **SOUND**
- **FIRE**
- **FLYING**
- **DEET**
- **MOSQUITO**
- **TIM**

**ELEV 146 D TDZE 143**

**LOCS**

**APPR Locs**

- **R-187**
- **R-017**
- **115.1 BAL**

**CIRCLING**

- **R-187**
- **R-017**
- **115.1 BAL**

**D-ATIS**

- **115.1 BAL**
- **R-017**
- **115.1 BAL**

**POTOMAC APP CON**

- **119.0 282.275**
- **119.7 290.475**
- **128.7 307.9**

**MALSR**

- **111.0 DCA**
- **115.1 BAL**

**LOC**

- **LOC Rwy 33L**
- **LOC Rwy 33R**
- **LOC Rwy 33L**

**TDZ/CL**

- **Rwy 10 and 33L**
- **Rwy 15L and 33R**
- **Rwy 15L and 33R**

**HIRL**

- **Rwy 10 and 33L**
- **Rwy 15L and 33R**
- **Rwy 10 and 33L**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

- **Amdt 12A 30JAN21**
- **VGSI Angle 3.00/TCH 72**
- **VGSI and ILS glidepath not coincident**

**BALTIMORE TOWER**

- **GND CON 121.9**
- **CLNC DEL 118.05**

**ALTERNATE**

- **MESS APPROACH: Climb to 600 then climbing left turn to 2600 on heading 280° and BAL R-294 to DATED INT/BAL 14.9 DME and hold.**

**DME or RADAR required for LOC only. RADAR required for procedure entry.**

**Simultaneous approach authorized with ILS or LOC Rwy 33R. DME from BAL TOWRAC.**
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.

**ALTERNATE MISSED APCH FIX**

**WESTMINSTER EMI**

Ch 126

**MISSING PAGE**
AL-804 (FAA)  20310

Baltimore, Maryland  ILS RWY 10 (SA CAT I)

Baltimore/Washington Intl Thurgood Marshall (BWI)

Radar required for procedure entry.
DME required.

Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

D-ATIS:
115.1 127.8

POTOMAC APP CON
119.0 282.275
124.55 317.425

Baltimore Tower
119.4 257.8

Gnd Con
121.9

CLNC Del
118.05

Alternate Missed APCH Fix
Westminster

EML 117.9
Chan 126

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

SA CATEGORY 1 ILS - Special Aircrew & Aircraft Certification Required

Baltimore, Maryland
Amdt 21C 19JUL18

Baltimore/Washington Intl Thurgood Marshall (BWI)

39°11’N-76°40’W

ILS RWY 10 (SA CAT I)
Radar Required for procedure entry. DME Required.

Missed Approach: Climb to 2500 on BAL VOR/TC and hold. Radar required for procedure entry.

Amdt 21C 19JUL18

Category II & III ILS - Special Aircrew & Aircraft Certification Required

Category II ILS - RA 102/12 100 DA 243

Category III ILS - RVR 06
**RNAV (RNP) Z RWY 10**

**Baltimore/Washington Intl Thurgood Marshall (BWI)**

**MISSED APPROACH:**

Climb to 2500 on track 105° to HURTZ and hold.

**AUTHORIZATION REQUIRED**
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 1/2 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.**

**POTOMAC APP CON**
- **Rwy Idg:** 8301
- **TDZE:** 138
- **Apt Elev:** 143

**Baltimore Tower**
- **GND CON:** 119.4
- **CLNC Del:** 257.8

**Category** | A | B | C | D
---|---|---|---|---
**RNP 0.11 DA** | 513/38 | 375 (400-3/4) | | |
**RNP 0.30 DA** | 588/52 | 450 (500-1) | | |

**AUTHORIZATION REQUIRED**

**Amdt 1 16OCT14**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**RNAV (RNP) Z RWY 15R**
For uncompensated Baro-VNAV systems, procedure NA below -12°C (11°F) or above 54°C (130°F). GPS Required. For inoperative MALSR, increase RNP 0.30 all Cats visibility to 1.5.

**RNP 0.30 DA**

**MISSED APPROACH:** Climb to 2500 on track 285° to COLUM and hold.

**D-ATIS**

<table>
<thead>
<tr>
<th>Potomac APP CON</th>
<th>BALTIMORE TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
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</thead>
<tbody>
<tr>
<td>119.0 282.275</td>
<td>119.4 257.8</td>
<td>121.9</td>
<td>118.05</td>
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<td>(020°-100°)</td>
<td>(101°-130°)</td>
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<tr>
<td>124.55 317.425</td>
<td>128.7 307.9</td>
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<tr>
<td>(131°-180°)</td>
<td>(181°-019°)</td>
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**POTOMAC APP CON**

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<td>118.05</td>
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</tbody>
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**RNP 0.30 all Cats visibility to 1.5.**

** MALSR**

**TPW 0.5%  UP**

**TPW 0.3%  UP**

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

**REIL Rwys 15L and 33R**

**HIRL all rwys**

**Procedure NA for arrivals at RAVNN on V379 westbound.**

**Procedure NA for arrivals at BILIT on V308 eastbound.**

**285° to RW28**

**COLUM**

**2500**

**JURTI 2000**

**HURTZ 2000**

**ZUKBU 2000**

**MAX 250 KIAS**

**285° 2000 (5.7) 285° 2000 (6.1)**

**5.7 NM**

**5.1 NM**

**GP 3.00°**

**TCH 55**

**AUTHORIZATION REQUIRED**

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<tr>
<th>CATEGORY</th>
<th>521/45</th>
<th>378 (400-%)</th>
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**BALTIMORE, MARYLAND**

Amdt 1 04FEB16

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

**BALTIMORE, MARYLAND**

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

**39°11'N-76°40'W**
RNAV (RNP) Z RWY 33L
Baltimore/Washington Intl Thurgood Marshall (BWI)

**APP CRS**
335°

**Rwy Igd**
8301

**TDZE**
143

**Apt Elev**
146

**RNP AR APCH.**
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.

**POTOMAC APP CON**

<table>
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<tr>
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<td>119.7 290.475 (131°-180°)</td>
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<td></td>
<td>128.7 307.9 (181°-019°)</td>
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**MALSR**

**MISSP APPROACH:** Climb to 3000 on track 335° to BMWORE and hold.

**ELEV**

**TDZE**

**ASA RW33L 25 NM**

**2800**

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

**REIL Rwys 15L and 33R**

**HIRL all Rwys**

**BALTIMORE TOWER**

**GND CON**

**CLNC DEL**

**CPDLC**

**JANNS**

**IF**

**KEEYY**

**RF REQD**

**RNAV (RNP) Z RWY 33L**

<table>
<thead>
<tr>
<th><strong>3000</strong></th>
<th><strong>BMORE</strong></th>
</tr>
</thead>
</table>

**See planview for multiple IF locations.**

**VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 72).**

**AUTHORIZATION REQUIRED**

**RNP 0.30 DA**

**496/35 353 (400-%)**
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. For inoperative 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. Inoperative table does not apply to LPV, all Cats.

**MISSED APPROACH:**

1. **Category A**
   - LPV DA: 333/40, 209 (200-3/4)
   - LNAV/VNAV DA: 406/40, 282 (300-3/4)
   - LNAV MDA: 520/40, 396 (400-3/4)
2. **Category C**
   - CIRCLING: 640-1, 497 (500-1)
3. **Category D**
   - 660-1, 517 (600-1)

**LNAV only.**

*1.1 NM to RW33R*
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C (11°F) or above 54°C (130°F).

MISSED APPROACH: Climb to 2500 direct HURTZ and hold.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C (11°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct BMORE and hold.
INTERSTATE VISUAL RWY 33L

Radar vectors will be provided to the BAL 174 RADIAL. When cleared for the Interstate Visual Runway 33L Approach, aircraft will proceed via the BAL 174 radial until over I-97 (Approx. 5.5 DME). Then via I-97 to join Runway 33L final approach course. Runway 33L ILS with MALSR will be on and available for use. Noise sensitive area east of I-97. This procedure applicable to turbo-jets arriving via OTT VORTAC.
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.

JANUARY 2020
ANNUAL RATE OF CHANGE
0.0° E

DE-ICING AREA
ALTERNATE DE-ICING PAD
U.S. CUSTOMS
FIRE STATION
APRON
MID-FIELD CARGO COMPLEX

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.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
CONLE FOUR DEPARTURE (RNAV)

Do not exceed 230K
until established
on track direct RAISN.

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.

NOTE: RNAV 1
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: For turbojet aircraft only.
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 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.
NOTE: Chart not to scale.

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.

Baltimore/Washington Int'l Thurgood Marshall (BWI)
SWANN THREE DEPARTURE
BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

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.

TAKEOFF ROUTE DESCRIPTION

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.DGO): From over BAL VORTAC via BAL R-104 to SWANN INT, then via DGO 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: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojet traffic only.

TOP ALTITUDE:
RAMAY, OTTO, MAULS, FLASK, RRSIN, GLANC, MELTN
TRANSITIONS: 17000
JERES, MCRAE TRANSITIONS: 16000

TAKEOFF MINIMUMS:
Rwys 10, 15L, 28, 33L: Standard with minimum climb of 500’ per NM to 667.
Rwy 15R: Standard with minimum climb of 500’ per NM to 4000.
Rwy 33R: Standard with minimum climb of 500’ per NM to 800.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
(NOTES CONTINUED ON FOLLOWING PAGE)
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)
Rwy 15 helicopter visibility reduction below 3/4 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.

### ATIS
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<tr>
<th>124.925</th>
<th>POTOMAC APP CON</th>
<th>MARTIN TOWER</th>
<th>GND CON</th>
<th>UNICOM</th>
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<td>119.0</td>
<td>121.3 (CTAF)</td>
<td>121.8</td>
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<td>254.425</td>
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### RNAV (GPS) RWY 15

**MARTIN STATE (MTN)**

**RNP APCH.**

- Procedure NA for arrivals at HERES on V419 westbound.
- NoPT for arrival at MEHAN on V31-33-93 southbound.

**MIA RW 15 25 NM**

- 4 NM Holding Pattern
- MEHAN

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

**MEHAN**

- 3000 MEHAN
- ODORS

**3000 to RW15**

**WOSBI**

- 2.7 NM to RW15
- 1 NM to RW15

**RW15**

- 146° to MEHAN
- 146° to REIL Rwys 15 and 33

**Amdt 1C 17JUN21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**RNAV (GPS) RWY 15**

**MARTIN STATE (MTN)**

**ATIS**

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**ATIS**

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

**RNAV (GPS) RWY 15**

**MARTIN STATE (MTN)**

**Amdt 1C 17JUN21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**RNAV (GPS) RWY 15**
**RNAV (GPS) RWY 33**

**MARTIN STATE (MTN)**

---

**POTOMAC APP CON**

| BALTIMORE, MARYLAND | 121.3(CTA) | 254.425 |

**GND CON**

| BALTIMORE, MARYLAND | 121.8 | 253.4 |

**ATIS**

| BALTIMORE, MARYLAND | 124.925 |

**UNICOM**

| BALTIMORE, MARYLAND | 122.95 |

---

**MISSED APPROACH FIX**

- Sailboats transitioning Frog Mortar creek between the FAF and landing runway.

- 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.**

---

**ATIS**

- 124.925

**POTOMAC APP CON**

- 119.0

**MARTIN TOWER**

- 121.3 (CTA)

**GND CON**

- 121.8

**UNICOM**

- 122.95

---

**Missed Approach Fix**

- 4 NM to SKILS

---

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**ATIS**

- 124.925

**POTOMAC APP CON**

- 119.0

**MARTIN TOWER**

- 121.3 (CTA)

**GND CON**

- 121.8

**UNICOM**

- 122.95

---

**Missed Approach Fix**

- 4 NM to SKILS

---

**ATIS**

- 124.925

**POTOMAC APP CON**

- 119.0

**MARTIN TOWER**

- 121.3 (CTA)

**GND CON**

- 121.8

**UNICOM**

- 122.95

---

**Missed Approach Fix**

- 4 NM to SKILS

---

**ATIS**

- 124.925

**POTOMAC APP CON**

- 119.0

**MARTIN TOWER**

- 121.3 (CTA)

**GND CON**

- 121.8

**UNICOM**

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- 4 NM to SKILS

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**POTOMAC APP CON**

- 119.0

**MARTIN TOWER**

- 121.3 (CTA)

**GND CON**

- 121.8

**UNICOM**

- 122.95

---

**Missed Approach Fix**

- 4 NM to SKILS

---

**ATIS**

- 124.925

**POTOMAC APP CON**

- 119.0

**MARTIN TOWER**

- 121.3 (CTA)

**GND CON**

- 121.8

**UNICOM**

- 122.95

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**Missed Approach Fix**

- 4 NM to SKILS

---

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- 124.925

**POTOMAC APP CON**

- 119.0

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**GND CON**

- 121.8

**UNICOM**

- 122.95

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- 4 NM to SKILS

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- 124.925

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**GND CON**

- 121.8

**UNICOM**

- 122.95

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**Missed Approach Fix**

- 4 NM to SKILS

---

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- 124.925

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- 119.0

**MARTIN TOWER**

- 121.3 (CTA)

**GND CON**

- 121.8

**UNICOM**

- 122.95

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**Missed Approach Fix**

- 4 NM to SKILS

---

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- 124.925

**POTOMAC APP CON**

- 119.0

**MARTIN TOWER**

- 121.3 (CTA)

**GND CON**

- 121.8

**UNICOM**

- 122.95

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**Missed Approach Fix**

- 4 NM to SKILS

---

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- 4 NM to SKILS

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**UNICOM**

- 122.95

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- 4 NM to SKILS

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- 124.925

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- 119.0

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**GND CON**

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**UNICOM**

- 122.95

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**Missed Approach Fix**

- 4 NM to SKILS

---

**ATIS**

- 124.925

**POTOMAC APP CON**

- 119.0

**MARTIN TOWER**

- 121.3 (CTA)

**GND CON**

- 121.8

**UNICOM**

- 122.95

---

**Missed Approach Fix**

- 4 NM to SKILS
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
d and D visibility 1/3 SM and increase JIVMI fix minimums S-15 Cats C and D visibility 1/3
SM and Circling Cat C and D visibility 1/3 SM. Rwy 15 helicopter visibility reduction below
3/4 SM NA. Circling Cat D NA northeast of Rwy 15-33.

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-15</td>
<td>860-1</td>
<td>860-1</td>
<td>860-1/2</td>
<td>860-2/2</td>
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<tr>
<td></td>
<td>838 (900-1)</td>
<td>838 (900-1/4)</td>
<td>838 (900-2/2)</td>
<td>838 (900-2/2)</td>
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<tr>
<td>CIRCLING</td>
<td>860-1/4</td>
<td>838 (900-1/4)</td>
<td>838 (900-2/2)</td>
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JIVMI Fix Minimums (DUAL VOR RECEIVERS OR DME REQUIRED)

<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>S-15</td>
<td>500-1</td>
<td>500-1/3</td>
<td>500-1/3</td>
<td>500-1/3</td>
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<td>478 (500-1)</td>
<td>478 (500-1/3)</td>
<td>478 (500-1/3)</td>
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<tr>
<td>CIRCLING</td>
<td>560-1</td>
<td>538 (600-1)</td>
<td>680-1/3</td>
<td>740-2/3</td>
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<td>658 (700-1/4)</td>
<td>718 (800-2/4)</td>
<td>658 (700-1/4)</td>
<td>718 (800-2/4)</td>
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</tbody>
</table>

Procedure NA for arrival on EMI VORTAC airway radials 056 CW 151.

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

*920 when using Baltimore/Washington Intl Thurgood Marshall altimeter setting.

One Minute Holding Pattern

Visual Segment - Obstacles.

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
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<th>D</th>
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<td>FAF to MAP</td>
<td>5.6 NM</td>
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<tr>
<td>Min:Sec</td>
<td>5:36</td>
<td>3:44</td>
<td>2:48</td>
<td>1:52</td>
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</tbody>
</table>

**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.

**ATIS** | **POTOMAC APP CON** | **MARTIN TOWER** | **GND CON** | **UNICOM**
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>124.925</td>
<td>119.0 282.275</td>
<td>121.3 (CTAF) 254.425</td>
<td>121.8 253.4</td>
<td>122.95</td>
</tr>
</tbody>
</table>

**LOCALIZER**

**I-BQG**

**Rwy Idg TDZE**

**Apt Elev**

**ELEV** **TDZE**

**HRL Rwy 15 and 33**

**LOCI**

**MEHAN**

**Rwy Idg**

**RSZ DME and hold.**

**Rwy 15 take-off 8100'**

**Rwy 33 ldg 8100'**

**LOCALIZER I-BQG**

**R-015**

**R-038**

**MEHAN I-BQG**

**14.3**

**Sanitary NA. Circling Cat D NA northeast of Rwy 15-33.**

**SM and Circling Cat C and D visibility**

**SM and increase JIVMI fix minimums S-15 Cats C and D visibility**

**3/4 SM NA. Circling Cat D NA northeast of Rwy 15-33.**

**36°20'N-76°25'W**

**MARTIN STATE (MTN)**

**Rwy 33 ldg 8100'**

**Military Operations Only**

**Rwy 15 take-off 8100'**

**Military Operations Only**

**MARTIN TOWER**

**121.3 (CTAF) 254.425**

**Baltimore, Maryland**

**MARTIN TOWER**

**Chan 98**

**MIN:SEC**

**Knots**

**LOC ROWY 15**
LDA RWY 33
MARTIN STATE (MTN)

RADAR Required. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Baltimore/Washington Intl Thurgood Marshall altimeter setting; increase all MDA 60 feet and increase S-LDA 33 Cat C and Circling Cat C/D visibility ¼ SM. Circling Cat D NA northeast of Rwy 15-33.

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

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

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

VGS and glidepath not coincident (VGS Angle 2.91/TCH 44).

MISSED APPROACH: Climb to 700 then climbing left turn to 2000 on heading 146° and BAL VORTAC R-100 to JUGMO INT/12.3 DME and hold.

SMYRNA 111.4 ENO 6997
Chan 51

ELEV 22
TDZE 14

NE-3, 07 OCT 2021 to 02 DEC 2021

MISSED APPROACH: Climb to 700 then climbing left turn to 2000 on heading 146° and BAL VORTAC R-100 to JUGMO INT/12.3 DME and hold.

SMYRNA 111.4 ENO 6997
Chan 51

ELEV 22
TDZE 14

NE-3, 07 OCT 2021 to 02 DEC 2021
Baltimore, Maryland

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

Dme Required.


Missed Approach: Climbing Right Turn to 2500 on BAL Vortac R-068 and BAL 11 DME Arc clockwise to BOAST INT/BAL 11 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

Category A  B  C  D
S-15 920-1 898 (900-1) 920-2 898 (900-2)
Circling 920-1 898 (900-1) 920-2 898 (900-2)

Vor or Tacan Rwy 15
Martin State (MTN)

Baltimore, Maryland

Orig-D 17Jun21

39°20'N-76°25'W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
(CONLE4, CONLE) 21224 AL-5222 (FAA)

CONLE FOUR DEPARTURE (RNAV)

ATIS
124.925
GND CON
121.8 253.4
MARTIN TOWER
121.3 (CTAF) 254.425
UNICOM
122.95
POTOMAC DEP CON
119.7 290.475

NOTE: Chart not to scale.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: For turbojet aircraft only.

TAKEOFF MINIMUMS:
Rwy 15: Standard.
Rwy 33: 300-1 1/2 or standard with minimum climb of 215' per NM to 1100.

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)

NE-3, 07 OCT 2021 to 02 DEC 2021
TERPZ SEVEN DEPARTURE (RNAV)

Note: Chart not to scale.

**TOP ALTITUDE:**
RAMAY, OTTTO, MAULS, FLASK, RRSIN, GLANC, MELTN
TRANSITIONS: 17000
JERES, MCRAY TRANSITIONS: 16000

**TAKEOFF MINIMUMS:**
Rwy 15: Standard.
Rwy 33: Standard with minimum climb of 215’ per NM to 1700.

**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** RNAV 1.
**NOTE:** RADAR required.
**NOTE:** Turbojet traffic only.
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)
RNP APCH.

Procedure NA for arrivals at OBERS on V140 southwest bound.

Procedure NA for arrivals at WILIZ on V45 southeast bound.

MISSING APPROACH: Climb to 5400 direct ZASNO and hold, continue climb-in-hold to 5400.

Table does not apply to LPV all Cats, LNAV/VNAV all Cats, and LNAV Cats A and B.

MISSED APCH FIX

5 NM

5400 ZASNO

* LNAV only

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.
LOC RWY 13

LOD/DME I-BCB
109.1
Chan 28

AWOS-3
133.325

ROANOKE APP CON
126.9 339.8

CLNC DEL
124.85

UNICOM
123.05 (CTAF)

LOC RWY 13
VIRGINIA TECH/MONTGOMERY EXEC (BCB)

ADF and DME required.

Rwy 13 helicopter visibility reduction below 1 SM NA.
Inop table does not apply.

Procedure NA for arrival on BLF VOR/DME
airway radials 074-122 CW.

One Minute
Holding Pattern

HAWTO
I-BCB
13.5

JUBOP
I-BCB
9.6

SUNNY
I-BCB
6.6

ZUPAT
I-BCB
4.4

TECH
I-BCB
1.1

BLUEFIELD
110.0 BLF
Chan 37

M5A TEC 25 NM

5600 Nm

5100

3380

305°

4200

2119

305°

4361

3797

3956

4080

2239±

125°

5700 NoPT
093°
(26)

2120

4328

3.9 NM

2.9 NM

2.9 NM

2.5 NM

0.8

CATEGORY

S-13

CIRCLING

2480-1

2760-1

2820-1

2980-2½

640 (700-1)

700 (700-1)

860 (900-2½)

NA

NA

NA

NA

VAIRGINIA TECH/MONTGOMERY EXEC (BCB)

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021
NOTE: GPS required.
NOTE: RNAV-1.
NOTE: RADAR required.

TAKEOFF MINIMUMS:
Rwy 31: NA-ATC.
Rwy 13: Standard with minimum climb of 500’ per NM to 3000.

NOTE: Chart not to scale.

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):

NOTE:  When in RADAR contact, vectors will be provided to filed/assigned route.

NOTE:  GPS Required.
NOTE:  RNAV-1.
NOTE:  RADAR Required.
NOTE:  RADAR Required.

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.
Baro-VNAV NA. Rwy 4 helicopter visibility reduction below ¾ SM NA.
Circling NA E of Rwy 4-22.

MISSED APPROACH: Climb to 3000 direct YAGNU and hold.

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>WASHINGTON CENTER</th>
<th>BLACKSTONE TOWER</th>
<th>CTAF</th>
</tr>
</thead>
<tbody>
<tr>
<td>119.225</td>
<td>118.75 377.1</td>
<td>126.2 292.7</td>
<td>126.2</td>
</tr>
</tbody>
</table>

MISSED APCH FIX

AWOS-3: 119.225  WASHINGTON CENTER: 118.75  BLACKSTONE TOWER: 126.2  CTAF: 126.2

3000 YAGNU

3000

510 TWR

496±

483

447

533°11'50"W 07°23'28"N

37°04'N 77°57'W

RNAV (GPS) RWY 4

ALLEN C PERKINSON BLACKSTONE AAF (BKT)

BLKSTNE, VIRGINIA

Almdt 1A 22JUN17

ALLEN C PERKINSON BLACKSTONE AAF (BKT)

RNAV (GPS) RWY 4

BLKSTNE, VIRGINIA

Almdt 1A 22JUN17

37°04'N 77°57'W

BLACKSTONE, VIRGINIA
ALLEN C PERKISON BLACKSTONE AAF (BKT)

RNAV (GPS) RWY 22

AWOS-3 119.225
WASHINGTON CENTER 118.75 377.1
BLACKSTONE TOWER* 126.2 292.7
CTAF 126.2

Use South Hill altimeter setting. DME/DME RNP-0.3 NA. Baro-VNAV NA, Rwy 22 helicopter visibility reduction below 1/2 SM NA. Circling NA E of Rwy 4-22.

MISSED APPROACH: Climb to 3000 ft directed YAGNU and hold.

3000 YAKLU
3000 YAGNU
3000 YAGNU
3000 YAGNU

224° to RW22

ZATOR
2.7 NM to RW22

WONEL

MIRL Rwy 4-22

CIRCLING

860-1  423 (500-1)
860-1¼ 423 (500-1¼)
1040-1½ 603 (700-1¼)

4 NM

YAKLU

YAGNU

YAGNU

30 NM to YAGNU (Nor)
314°
314°
314°

134°
134°
134°

3000

TP
P
O
N
U
G
A
Y
G
O
T
M
N
O
3
73
YAGNU

134°
134°
134°

134°
134°
134°

3000

NE-3, 07 OCT 2021 to 02 DEC 2021

3000 direct YAKLU and hold.
 Use South Hill altimeter setting. Circling NA east of Rwy 4-22.

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
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<tr>
<td>Circling</td>
<td>1040-2½ 603 (700-2½)</td>
<td>NA</td>
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FAF to MAP 2.9 NM

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<tr>
<th>Knots</th>
<th>60</th>
<th>90</th>
<th>120</th>
<th>150</th>
<th>180</th>
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<td>Min:Sec</td>
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<td>1:27</td>
<td>1:10</td>
<td>0:58</td>
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AWOS-3
119.225

WASHINGTON CENTER
118.75 377.1

BLACKSTONE TOWER
126.2 292.7

CTAF
126.2

NDB-BKT
326

APP CRS
135°

Rwy Idg TDZE
Apt Elev
N/A 437

MISSED APPROACH: Climbing left turn 2600 direct BKT NDB and hold. Continue climb-in-hold to 2600.

BLACKSTONE, VIRGINIA
ALLEN C PERKINSON BLACKSTONE AAF (BKT)

Amdt 12 24JUL14

37°04'N-77°57'W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF MINIMUMS:
Rwys 1,19: NA-Environmental.
Rwy 4: Standard.
Rwy 22: Standard with minimum climb of 330’ per NM to 2600.

TAKEOFF RWY 4: Climb heading 044° to 1300, then climbing left turn to 2600 direct to 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.

NOTE: Chart not to scale.
Circling not authorized. Visibility reduction by helicopter NA.

FEMA SPECIAL FACILITY (Bluegrass) normal opr hrs 0745-1630L Mon-Fri. Phone 540-542-3014 for PPR.

Obtain local altimeter on Bluegrass Advsy, when not rcvd use DULLES Intl altimeter.

CAUTION: 20.1 visual area penetrated by building 500’ prior to ldg area on final approach course.

WLCAT - spoken as WILDCAT
ASHGP - spoken as ASHBY GAP

EMERG SAFE ALT 100 NM 6200

2 NM holding pattern

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>COPTER</th>
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<tr>
<td>H-056</td>
<td>2380-1 673 (700-1)</td>
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<tr>
<td></td>
<td>DULLES INTL ALTIMETER SETTING</td>
</tr>
<tr>
<td></td>
<td>2640-1¼ 933 (1000-1¼)</td>
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</tbody>
</table>

BLUEGRASS ADVISORY *

126.2 241.0

Restricted
Not for public use

BLUEMONT, VIRGINIA

Amdt 5 22APR21

BLUEGRASS (9VA5)
Procedure NA at night. Use Fort Meade (Odenton) altimeter setting; when not received, use College Park altimeter setting and increase all MDA 20 feet.

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

WASHINGTON DC METROPOLITAN SFRA

WARNING -- WASHINGTON DC SFRA.

CTC POTOMAC APP CON

Procedure NA for arrivals at DATED on V265 northbound.

MEDICAL 0.3

4.7 NM

5 NM

Visual Segment - Obstacles.

CATEGORY

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNAV MDA</td>
<td>760-1 592 (600-1)</td>
<td>NA</td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>760-1 592 (600-1)</td>
<td>NA</td>
<td></td>
<td>NA</td>
</tr>
</tbody>
</table>

APP CRS

190°

Rwy Idg

2420

TDZE

168

Apt Elev

168

RNAV (GPS) RWY 18

FREEWAY (W00)

FME AWOS-3

123.925

POTOMAC APP CON

128.0 335.5

UNICOM

123.075 (CTAF)
RNAV (GPS) RWY 36
FREEWAY (W00)

Amdt 2A 08OCT20

FME AWOS-3
123.925

POTOMAC APP CON
128.0 335.5

UNICOM
123.075 (CTAF)

Warning -- Washington DC SFRA. CTC POTOMAC APP CON

RNAV (GPS) RWY 36

Uniform Segments - Obstacles.

Final approach course offset 16.76°.

Visual Segment - Obstacles.

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.

Warning -- Washington DC SFRA.

MISSED APPROACH: Climbing right turn to 2000 direct DEALE and hold.

Category

LNAV MDA

CIRCLING

NA

NA

NA

NA

RNAV (GPS) RWY 36

FREEWAY (W00)

BOWIE, MARYLAND

METROPOLITAN SFRA

WASHINGTON DC

警告 -- 华盛顿特区 SFRA.

CTC POTOMAC APP CON

RNAV (GPS) RWY 36

FREEWAY (W00)

BOWIE, MARYLAND

Amdt 2A 08OCT20

38°56'N-76°46'W
RNAV (GPS) RWY 15
BRIDGEWATER AIR PARK (VBW)

**RNAV (GPS) RWY 15**

**BRIDGEWATER AIR PARK (VBW)**

- **AWOS-3** 119.55
- **POTOMAC APP CON** 132.85 323.125
- **UNICOM** 122.7 (CTAF)

**Amdt 1  15SEP16**

**Visual Segment - Obstacles.**

- **ACOSA**
- **COSDU**
- **BEGBE**
- **WELSU**
- **JAPMI**

**Category**

- **A** 3 NM
- **B** 3 NM
- **C** 4.1 NM
- **D** 4.5 NM
- **M** 0.5 NM

**Category Definitions:**

- **A** LNAV MDA (MCP)
- **B** LNAV MDA (MCP) + 100 feet
- **C** LNAV MDA (MCP) + 200 feet
- **D** LNAV MDA (MCP) + 300 feet

**Minimums:**

- **LNAV MDA** 2080-1/4
- **CIRCLING** 2080-1/4

**MISSED APPROACH:**

- Climb to 5000 direct SONRY and on track 136° to RFLAT and hold, continue climb-in-hold to 5000.

- Procedure NA for arrivals at TEAKK on V377 northbound.

- Procedure NA for arrivals at LURAY on V128 eastbound and V143 northeast bound.

- Final approach course offset 14.95 degrees.

**LNAV MDA 2080-1/4**

**CIRCLING 2080-1/4**

**AWOS-3** 119.55

**POTOMAC APP CON** 132.85 323.125

**UNICOM** 122.7 (CTAF)

**ELEV 1165**

**TDZE 1165**
RNAV (GPS) RWY 33

BRIDGEWATER AIR PARK (VBW)

**MISSED APPROACH:** Climbing left turn to 6000 direct MOL VOR/DME and hold.

**RNAV (GPS) RWY 33**

<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>LNAV MDA</td>
<td>1780-1</td>
<td>615 (700-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>695 (700-1)</td>
<td>855 (900-1 1⁄4)</td>
<td></td>
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</table>

**BRIDGEWATER, VIRGINIA**

Amdt 1 15SEP16

38°22’N-78°58’W

**RNAV (GPS) RWY 33**

**BRIDGEWATER AIR PARK (VBW)**

**AWOS-3**

119.55

**POTOMAC APP CON**

132.85 323.125

**UNICOM**

122.7 (CTAF)
**RNAV (GPS) RWY 6**

**BROOKNEAL/CAMPBELL COUNTY (0V4)**

<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>868-1</td>
<td>272 (300-1)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>1031-1½</td>
<td>435 (500-1½)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>1040-1</td>
<td>444 (500-1)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1120-1</td>
<td>523 (600-1)</td>
<td>1180-1</td>
<td>583 (600-1)</td>
</tr>
</tbody>
</table>

For uncompensated Baro-VNAV systems, LNAV/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 Field altimeter setting and increase all DA 81 feet and all MDA 100 feet, increase LPV all Cats visibility 1/4 mile, and increase LNAV/VNAV all Cats visibility 1/4 mile. RWy 6 helicopter visibility reduction below 3/4 SM NA. Baro VNAV and VDP NA when using Lynchburg Rgnl/Preston Glenn Field altimeter setting.

**MISSED APPROACH:** Climb to 1100 then climbing left turn to 3000 direct WUGAD and hold.

**AWOS-3**

**ROANOKE APP CON**

**UNICOM**

**AWOS-3**

**120.575**

**135.0 254.325**

**122.7 (CTAF)**

**ELEV 597**

**TDZE 596**

Procedure NA for arrivals at HURT on V143 northeast bound.

Procedure NA for arrivals at SYCAM on V469 southbound.

**LNAV MDA**

**VNAV**

**LNAV/DA**

**LPV**

**MIRL Rwys 6-24**

**REIL Rwys 6 and 24**

**37°09'N-79°01'W**
When local altimeter setting not received, use Lynchburg Rgnl/Preston Glenn Field altimeter setting and increase all MDA 100 feet.

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 directed WUGAD and hold.

AWOS-3
120.575

ROANOKE APP CON
135.0 254.325

UNICOM
122.7 (CTAF)
RNAV (GPS) RWY 8
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.

Procedure NA for arrivals on GVE VORTAC airway radials 131 CW 235.

4 NM Holding Pattern

Visual Segment - Obstacles.

HELIPORT

BUMPASS, VIRGINIA
Orig B 25MAR21

37°58'N-77°45'W

RNAV (GPS) RWY 8
LAKE ANNA (7W4)

AWOS-3
120.775

LKU AWOS-3
119.475

POTOMAC APP CON
126.75 307.2

CTAF
122.9 0
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.

PROCEDURE NA FOR ARRIVALS ON RIC
VORTAC airway radials 283 CW 048.

PROCEDURE NA FOR ARRIVALS ON BRV
VORTAC airway radials 141 CW 214.

Helicopter visibility reduction below 3 SM NA.

Procedure NA for arrivals on RIC
VORTAC airway radials 351 CW 1100-3.

Procedure NA at night. When local altimeter setting not received, use Louisa altimeter setting and increase all MDA 60 feet.
**RNAV (GPS) RWY 34**

**CAMBRIDGE-DORCHESTER RGNL (CGE)**

**Circling NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).** Rw 34 helicopter visibility reduction below 3/4 SM NA. DME/DME RNP-0.3 NA.

**AWOS-3**

**120.675**

**PATUXENT APP CON**

**121.0**

**250.3**

**UNICOM**

**122.7** (CTAF)

**121.9** 0

**AWOS-3**

**120.675**

**PATUXENT APP CON**

**121.0**

**250.3**

**UNICOM**

**122.7** (CTAF)

**121.9** 0

**Procedure NA for arrival on SBY VORTAC airway radials 218 CW 012.**

**LNAV only.**

**VGS and RNAV glidepath not coincident (VGS Angle 3.25/TCH 35).**

**3.5°**

**334°**

**4 NM**

**MIRL RW34 25 NM**

**2100**

**SAWS-3**

**RNAV (GPS) RWY 34**

**CAMBRIDGE-DORCHESTER RGNL (CGE)**

**Amdt 1 29MAR18**

**38°32'N-76°02'W**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
**RNAV (GPS)-A**

**CAMBRIDGE-DORCHESTER RGNL (CGE)**

**AWOS-3**

<table>
<thead>
<tr>
<th></th>
<th>120.675</th>
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</table>

<table>
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<tr>
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<table>
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<th>250.3</th>
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<th>122.7</th>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>121.9</th>
</tr>
</thead>
</table>

**PAXCEND APP CON** *(CTAF)*

**UNICOM**

**ELEV**

**RNAV (GPS)-A**

**CAMBRIDGE, MARYLAND**

**Category A**

- **AWOS-3**
- **PAXCEND APP CON** *(CTAF)*
- **UNICOM**
- **ELEV**

**Holding Pattern**

**4 NM**

**Visual Segment-Obstacles**

**MISSED APCH FIX**

**Circling Rwy 16 NA at night.**

**Rwy 16 helicopter visibility reduction below 1 SM NA.**

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

**MISSED APPROACH: Climb to 2000 direct PROFS and hold.**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**CAMBRIDGE, MARYLAND**

**Orig-A 10SEP20**

**38°32'N-76°02'W**
WILLIAMSBURG, VIRGINIA

RNAV (GPS) RWY 5

APCH CRS
RWy Idg 5018
TDZE 41
Arpt Elev 41
AL-3214 [USA]
CAMP PEARY LNDG STRIP (KW94)

NE-3, 07 OCT 2021 to 02 DEC 2021

Restricted airfield, PPR. Contact Camp Peary Ops prior to landing.

MISSED APPROACH: Climb to 2000 direct ITARE and hold.

WILLIAMSBURG-JAMESTOWN AWOS-3
120.625

NORFOLK APP CON
125.7 335.625

DME/DME RNP-0.3 NA
Procedure NA for arrivals at HPW VORTAC
via V189-260 northbound.
Visibility reduction by helicopters NA.
Procedure NA at night.

HARCUM
580

ITARE
NEW QUARTER

2000  ITARE

GAGVE
DASYA
RW05

230°
050°

3.04°
TCH 43

5.0 NM

CATEGORY A B C D
LNAV MDA 560-1 519 (600-1) 560-1½ 519 (600-1½) 560-1¾ 519 (600-1¾)
CIRCLING 560-1 519 (600-1) 560-1½ 519 (600-1½) 620-2 579 (600-2)

NEWPORT NEWS / WILLIAMSBURG INTL ALTIMETER SETTING

LNAV MDA 580-1 539 (600-1) 580-1¾ 539 (600-1¾) 580-2 539 (600-2)
CIRCLING 580-1 539 (600-1) 580-1½ 539 (600-1½) 640-2 599 (600-2)

CAMP PEARY LNDG STRIP (KW94)

37°18'N-76°38'W

WILLIAMSBURG, VIRGINIA
Orig A 18200

65
**NE-3, 07 OCT 2021 to 02 DEC 2021**

**VOR-A**

**WILLIAMSBURG, VIRGINIA**

**VORTAC HCM**

- **108.8** Chan 25
- **APCH CRS 164°**
- **5018** Ryw Ldg
- **N/A** TDZE
- **41** Arpt Elev

**AL-3214 [USA]**

**CAMP PEARY LNDG STRIP** (KW94)

- **MISSED APPROACH**: Climbing left turn to 2000 direct HCM VORTAC and hold.

**NEWMARKET-JAMESTOWN AWOS-3**

- **120.625**

**NORFOLK APP CON**

- **125.7 335.625**

---

**Newport News / Williamsburg Int'l Altimeter Setting**

<table>
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<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>CIRCLING</td>
<td>620-1</td>
<td>579 (600-1)</td>
<td>620-1½ (600-1½)</td>
<td>620-2 (600-2)</td>
</tr>
<tr>
<td></td>
<td>640-1</td>
<td>599 (600-1)</td>
<td>640-1½ (600-1½)</td>
<td>640-2 (600-2)</td>
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**NE-3, 07 OCT 2021 to 02 DEC 2021**
RNAV (GPS) Y RWY 21
CHARLOTTESVILLE-ALBEMARLE (CHO)

When local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all MDA 140 feet, and increase LP Cats C/D visibility to 1 3/4 SM, LNAV Cats C/D to 1 1/2 SM, and Circling Cat C/D to 3 SM.

<table>
<thead>
<tr>
<th>ATIS</th>
<th>POTOMAC APP CON</th>
<th>CHARLOTTESVILLE TOWER</th>
<th>GND CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>118.425</td>
<td>132.85</td>
<td>323.125</td>
<td>121.9</td>
<td>338.275</td>
</tr>
</tbody>
</table>

Final approach course offset 14.5°.

Holding Pattern

RNAV (GPS) Y RWY 21
CHARLOTTESVILLE-ALBEMARLE (CHO)

Amdt 2C  26MAR20

38°08’N-78°27’W
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°F. When local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all DA 130 feet and LPV visibility ¼ mile.

MISSED APPROACH: Climb to 1100, then climbing left turn to 4000 direct GVE VORTAC and hold.

ATIS POTOMAC APP CON CHARLOTTESVILLE TOWER* GND CON UNICOM

118.425 132.85 323.125 124.5 (CTAF) 0 338.275 121.9 338.275 122.95

3640 3640 2593

Procedure NA for arrivals at HOODE on V140 northeast bound.

2741 3587 1669

3374 2491 1378 1580 3290

Limit missed approach to 250K.

Procedure NA for arrivals on GVE VORTAC airway radials 307 CW 040.

1100 4000 GVE APUSE FOMIV

RW21 2600 3500

Category A B C D

LPV DA 826-1 200 (200-1)

LNAV/ VNAV DA 1588-4 962 (1000-4)

Amdt 1B 28FEB19

Charlottesville, Virginia

ATIS POTOMAC APP CON CHARLOTTESVILLE TOWER* GND CON UNICOM

118.425 132.85 323.125 124.5 (CTAF) 0 338.275 121.9 338.275 122.95

3640 3640 2593

Procedure NA for arrivals at HOODE on V140 northeast bound.

2741 3587 1669

3374 2491 1378 1580 3290

Limit missed approach to 250K.

Procedure NA for arrivals on GVE VORTAC airway radials 307 CW 040.

1100 4000 GVE APUSE FOMIV

RW21 2600 3500

Category A B C D

LPV DA 826-1 200 (200-1)

LNAV/ VNAV DA 1588-4 962 (1000-4)

Amdt 1B 28FEB19

Charlottesville, Virginia

ATIS POTOMAC APP CON CHARLOTTESVILLE TOWER* GND CON UNICOM

118.425 132.85 323.125 124.5 (CTAF) 0 338.275 121.9 338.275 122.95

3640 3640 2593

Procedure NA for arrivals at HOODE on V140 northeast bound.

2741 3587 1669

3374 2491 1378 1580 3290

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Procedure NA for arrivals on GVE VORTAC airway radials 307 CW 040.

1100 4000 GVE APUSE FOMIV

RW21 2600 3500

Category A B C D

LPV DA 826-1 200 (200-1)

LNAV/ VNAV DA 1588-4 962 (1000-4)

Amdt 1B 28FEB19

Charlottesville, Virginia
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RNAV (GPS) RWY 18
CHASE CITY MUNI (CXE)

APP CRS
184°

Rwy Ldg
3400
TDZE
503
Apt Elev
503

RNP APCH.

Use South Hill altimeter setting, when not received use Danville altimeter setting and increase all MDA 60 feet. Procedure NA at night. RWY 18 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing left turn to 3000 direct DOCMO and hold, continue climb-in-hold to 3000.

AWOS-3 121.225
WASHINGTON CENTER 118.75 353.9
UNICOM 122.9 (CTAF)

Procedure NA for arrivals at SBV VORTAC on airway radials 032 CW 086.

VGSI and descent angles not coincident.

NE-3, 07 OCT 2021 to 02 DEC 2021

CHASE CITY, VIRGINIA
AL-6263 (FAA)

19311

RNAV (GPS) RWY 18
CHASE CITY MUNI (CXE)

NE-3, 07 OCT 2021 to 02 DEC 2021
Procedure NA for arrivals at SBV VORTAC on airway radials 032 CW 172.

Amdt 1B  07NOV19
RNAV (GPS)-B
HARFORD COUNTY (0W3)

CHURCHVILLE, MARYLAND
AL-9277 (FAA)

RNP APCH.

APG ATIS
POTOMAC APP CON
UNICOM

124.425
125.525
122.8 (CTAF)

CHURCHVILLE, MARYLAND
RNAV (GPS)-B
HARFORD COUNTY (0W3)

1.4 %  U P
0.3%

104°

ELEV
412

KITHÉ

Procedure NA for arrivals at KITHE on V499 northbound and V3-408 eastbound.

Procedure NA for arrivals at TAFFI on V166 westbound.

PROCEDURE NA at night.

INTL Thurgood Marshall altimeter setting and increase MDA 60 feet. Use Phillips AAF altimeter setting; when not received use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

MISSING APPROACH: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.

misck: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.

RNAV (GPS)-B
HARFORD COUNTY (0W3)

CHURCHVILLE, MARYLAND
AL-9277 (FAA)

RNP APCH.

APG ATIS
POTOMAC APP CON
UNICOM

124.425
125.525
122.8 (CTAF)

CHURCHVILLE, MARYLAND
RNAV (GPS)-B
HARFORD COUNTY (0W3)

1.4 %  U P
0.3%

104°

ELEV
412

KITHÉ

Procedure NA for arrivals at KITHE on V499 northbound and V3-408 eastbound.

Procedure NA for arrivals at TAFFI on V166 westbound.

PROCEDURE NA at night.

INTL Thurgood Marshall altimeter setting and increase MDA 60 feet. Use Phillips AAF altimeter setting; when not received use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

MISSING APPROACH: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.

misck: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.

RNAV (GPS)-B
HARFORD COUNTY (0W3)

CHURCHVILLE, MARYLAND
AL-9277 (FAA)

RNP APCH.

APG ATIS
POTOMAC APP CON
UNICOM

124.425
125.525
122.8 (CTAF)

CHURCHVILLE, MARYLAND
RNAV (GPS)-B
HARFORD COUNTY (0W3)

1.4 %  U P
0.3%

104°

ELEV
412

KITHÉ

Procedure NA for arrivals at KITHE on V499 northbound and V3-408 eastbound.

Procedure NA for arrivals at TAFFI on V166 westbound.

PROCEDURE NA at night.

INTL Thurgood Marshall altimeter setting and increase MDA 60 feet. Use Phillips AAF altimeter setting; when not received use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

MISSING APPROACH: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.

misck: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.

RNAV (GPS)-B
HARFORD COUNTY (0W3)

CHURCHVILLE, MARYLAND
AL-9277 (FAA)

RNP APCH.

APG ATIS
POTOMAC APP CON
UNICOM

124.425
125.525
122.8 (CTAF)

CHURCHVILLE, MARYLAND
RNAV (GPS)-B
HARFORD COUNTY (0W3)

1.4 %  U P
0.3%

104°

ELEV
412

KITHÉ

Procedure NA for arrivals at KITHE on V499 northbound and V3-408 eastbound.

Procedure NA for arrivals at TAFFI on V166 westbound.

PROCEDURE NA at night.

INTL Thurgood Marshall altimeter setting and increase MDA 60 feet. Use Phillips AAF altimeter setting; when not received use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

MISSING APPROACH: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.

misck: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.

RNAV (GPS)-B
HARFORD COUNTY (0W3)

CHURCHVILLE, MARYLAND
AL-9277 (FAA)

RNP APCH.

APG ATIS
POTOMAC APP CON
UNICOM

124.425
125.525
122.8 (CTAF)

CHURCHVILLE, MARYLAND
RNAV (GPS)-B
HARFORD COUNTY (0W3)

1.4 %  U P
0.3%

104°

ELEV
412

KITHÉ

Procedure NA for arrivals at KITHE on V499 northbound and V3-408 eastbound.

Procedure NA for arrivals at TAFFI on V166 westbound.

PROCEDURE NA at night.

INTL Thurgood Marshall altimeter setting and increase MDA 60 feet. Use Phillips AAF altimeter setting; when not received use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

MISSING APPROACH: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.

misck: Climb to 3000 direct ILINE and on track 068° to CURVY and hold, continue climb-in-hold to 3000.
RNAV (GPS)-A
LAKE COUNTRY RGNL (W63)

DME/DME RNP-0.3 NA. When local altimeter setting not received, use Chase City altitude and increase all MDA 40 feet. Night landing: Rwy 22 NA. Helicopter visibility reduction below 1/2 SM NA.

MISSED APPROACH: Climb to 3000 direct HARVY and hold.

**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.

**1517**
571

**3000**

**HARVY**

**KARBY**

**RW04**

**Divinity**

**3000**

**036°**

**KARBY**

**RW04**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**36°36'N-78°34'W**

**3000**

**HARVY**

**KARBY**

**RW04**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**36°36'N-78°34'W**

**3000**

**HARVY**

**KARBY**

**RW04**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**36°36'N-78°34'W**

**3000**

**HARVY**

**KARBY**

**RW04**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**36°36'N-78°34'W**

**3000**

**HARVY**

**KARBY**

**RW04**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**36°36'N-78°34'W**
RNAV (GPS)-B
LAKE COUNTRY RGNL (W63)

MISSED APPROACH: Climbing left turn to 3000 direct HARVY and hold.

NoPT for arrival at HARVY on V3 southwest bound and on V266 westbound.

RNAV (GPS)-B

CLARKSVILLE, VIRGINIA
AL-9200 (FAA)

AWOS-3 118.225
WASHINGTON CENTER 118.75 377.1
CTAF 122.9

APP CRS 216°
Rwy Idg N/A
TDZE N/A
Apt Elev 419

DME/DME RNP-0.3 NA. Procedure NA at night. When local altimeter setting not received, use Chase City altimeter setting and increase all MDA 40 feet. Helicopter visibility reduction below 1 SM NA.

ELEV 419

CLARKSVILLE, VIRGINIA Orig 15OCT15
LAKE COUNTRY RGNL (W63) 36°36'N-78°34'W
RNAV (GPS)-B

NE-3, 07 OCT 2021 to 02 DEC 2021
**RNAV (GPS) RWY 5**

**WASHINGTON EXEC/HYDE FLD (W32)**

**APP CRS**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
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<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNAV MDA</td>
<td>660-1</td>
<td>411 (500-1)</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>680-1</td>
<td>860-1</td>
<td>611 (700-1)</td>
<td>NA</td>
</tr>
</tbody>
</table>

**RNP APCH.**

- Use Joint Base Andrews altimeter setting.
- Circling NW Rwy 5-23 NA.

**ADW ATIS**

- 133.675
- 251.05

**POTOMAC APP CON**

- 124.7
- 338.2

**UNICOM**

- 122.8 (CTAF)

**MISSED APPROACH:** Climbing right turn to 2000 direct EVIPE WP and hold.

**Procedure**

- Turn NA
- EVIPE

**VGS I and descent angles not coincident**

- (VGS I Angle 3.50/TCH 19)
- CAPAL

**2000**

- 025° (5.2)
- 052°
- 4 NM

**EVIPE**

- 2000 NoPT
- 2000
- 3.05°
- TCH 40
- RW05
- 052° to RW05

- LIRL Rwy 5-23

- REIL Rwy 5

**CLINTON, MARYLAND**

**Orig-C 08OCT20**

**WASHINGTON EXEC/HYDE FLD (W32)**

**RNAV (GPS) RWY 5**

**38°45'N-76°56'W**

**ADW ATIS**

- 133.675
- 251.05

**POTOMAC APP CON**

- 124.7
- 338.2

**UNICOM**

- 122.8 (CTAF)

**MISSED APPROACH:** Climbing right turn to 2000 direct EVIPE WP and hold.

**Procedure**

- Turn NA
- EVIPE

**VGS I and descent angles not coincident**

- (VGS I Angle 3.50/TCH 19)
- CAPAL

**2000**

- 025° (5.2)
- 052°
- 4 NM

**EVIPE**

- 2000 NoPT
- 2000
- 3.05°
- TCH 40
- RW05
- 052° to RW05

- LIRL Rwy 5-23

- REIL Rwy 5

**CLINTON, MARYLAND**

**Orig-C 08OCT20**

**WASHINGTON EXEC/HYDE FLD (W32)**

**RNAV (GPS) RWY 5**

**38°45'N-76°56'W**
DME/DME RNP-0.3 NA.

AWOS:3 121.225
POTOMAC APP CON 125.65 348.725
UNICOM 122.975 (CTAF)

RADAR REQUIRED

DME/DME RNP-0.3 NA.

AWOS:3 121.225
POTOMAC APP CON 125.65 348.725
UNICOM 122.975 (CTAF)

RADAR REQUIRED

DME/DME RNP-0.3 NA.

AWOS:3 121.225
POTOMAC APP CON 125.65 348.725
UNICOM 122.975 (CTAF)

RADAR REQUIRED

DME/DME RNP-0.3 NA.

AWOS:3 121.225
POTOMAC APP CON 125.65 348.725
UNICOM 122.975 (CTAF)

RADAR REQUIRED

DME/DME RNP-0.3 NA.

AWOS:3 121.225
POTOMAC APP CON 125.65 348.725
UNICOM 122.975 (CTAF)
**RNAV (GPS)-A**

**CREWE MUNI (W81)**

**AWOS-3**

<table>
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<tr>
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<th>D</th>
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</thead>
<tbody>
<tr>
<td><strong>CIRCLING</strong></td>
<td>1420-3</td>
<td>998 (1000-3)</td>
<td>NA</td>
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</table>

**WASHINGTON CENTER**

118.75 377.1

**UNICOM**

122.8 (CTAF)

**MALP**

<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><strong>CIRCLING</strong></td>
<td>1420-3</td>
<td>998 (1000-3)</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

**RNP APCH - GPS**

- **APP CRS** 150°
- **Rwy Idfg** N/A
- **TDZE** N/A
- **Apt Elev** 422

**Procedure NA at night.**

**Rwy 15 helicopter visibility reduction below 1 SM NA.**

**MISSED APPROACH:**

- Climbing right turn to 3000 direct KIWCE and hold.

**FLAT ROCK FAK**

- Procedure NA for arrival on FAK VORTAC airway radials 177 CW 297.

**R-6602 A, B & C**

**Procedure NA for arrivals at YUDUG on V20 westbound.**

**ELEV 422**

**MISSING DATA**

- **MIRL Rwy 15-33**

---

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**AL-10445 (FAA)**

**CREWE, VIRGINIA**

**Orig-A 07OCT21**

**37°11'N-78°06'W**

**81**
**RNAV (GPS)-B**

**CREWE MUNI (W81)**

**AWOS-3**

119.05

**WASHINGTON CENTER**

118.75 377.1

**UNICOM**

122.8 (CTAF)

**MISSED APPROACH:** Climb to 3000 direct HESUV and on track 335° to KIWCE and hold.

Procedure NA at night.

Rwy 15 helicopter visibility reduction below 1 SM NA.

**Procedures:**

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

**RNP APCH - GPS.**

**Category:**

- A
- B
- C
- D

**Airport Information:**

- CREWE, VIRGINIA
- AL-10445 (FAA)

**Amdt 1 07OCT21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**ELEV 422**

3000 HESUV 335°

3000 KIWCE 335°

3000 EHEKY 335°

3000

12280

**RNAV (GPS)-B**

**CREWE MUNI (W81)**

**AWOS-3**

119.05

**WASHINGTON CENTER**

118.75 377.1

**UNICOM**

122.8 (CTAF)

**MISSED APPROACH:** Climb to 3000 direct HESUV and on track 335° to KIWCE and hold.

Procedure NA at night.

Rwy 15 helicopter visibility reduction below 1 SM NA.

**Procedures:**

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

**RNP APCH - GPS.**

**Category:**

- A
- B
- C
- D

**Airport Information:**

- CREWE, VIRGINIA
- AL-10445 (FAA)

**Amdt 1 07OCT21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**ELEV 422**

3000 HESUV 335°

3000 KIWCE 335°

3000 EHEKY 335°

3000

12280

**RNAV (GPS)-B**

**CREWE MUNI (W81)**

**AWOS-3**

119.05

**WASHINGTON CENTER**

118.75 377.1

**UNICOM**

122.8 (CTAF)

**MISSED APPROACH:** Climb to 3000 direct HESUV and on track 335° to KIWCE and hold.

Procedure NA at night.

Rwy 15 helicopter visibility reduction below 1 SM NA.

**Procedures:**

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

**RNP APCH - GPS.**

**Category:**

- A
- B
- C
- D

**Airport Information:**

- CREWE, VIRGINIA
- AL-10445 (FAA)

**Amdt 1 07OCT21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**ELEV 422**

3000 HESUV 335°

3000 KIWCE 335°

3000 EHEKY 335°

3000

12280

**RNAV (GPS)-B**

**CREWE MUNI (W81)**

**AWOS-3**

119.05

**WASHINGTON CENTER**

118.75 377.1

**UNICOM**

122.8 (CTAF)

**MISSED APPROACH:** Climb to 3000 direct HESUV and on track 335° to KIWCE and hold.

Procedure NA at night.

Rwy 15 helicopter visibility reduction below 1 SM NA.

**Procedures:**

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

**RNP APCH - GPS.**

**Category:**

- A
- B
- C
- D

**Airport Information:**

- CREWE, VIRGINIA
- AL-10445 (FAA)

**Amdt 1 07OCT21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**ELEV 422**

3000 HESUV 335°

3000 KIWCE 335°

3000 EHEKY 335°

3000

12280

**RNAV (GPS)-B**

**CREWE MUNI (W81)**

**AWOS-3**

119.05

**WASHINGTON CENTER**

118.75 377.1

**UNICOM**

122.8 (CTAF)

**MISSED APPROACH:** Climb to 3000 direct HESUV and on track 335° to KIWCE and hold.

Procedure NA at night.

Rwy 15 helicopter visibility reduction below 1 SM NA.

**Procedures:**

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

**RNP APCH - GPS.**

**Category:**

- A
- B
- C
- D

**Airport Information:**

- CREWE, VIRGINIA
- AL-10445 (FAA)

**Amdt 1 07OCT21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**ELEV 422**

3000 HESUV 335°

3000 KIWCE 335°

3000 EHEKY 335°

3000

12280

**RNAV (GPS)-B**

**CREWE MUNI (W81)**

**AWOS-3**

119.05

**WASHINGTON CENTER**

118.75 377.1

**UNICOM**

122.8 (CTAF)

**MISSED APPROACH:** Climb to 3000 direct HESUV and on track 335° to KIWCE and hold.

Procedure NA at night.

Rwy 15 helicopter visibility reduction below 1 SM NA.

**Procedures:**

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

- Procedure NA for arrivals at MELIA on V155 northbound and V20 eastbound.

**RNP APCH - GPS.**

**Category:**

- A
- B
- C
- D

**Airport Information:**

- CREWE, VIRGINIA
- AL-10445 (FAA)

**Amdt 1 07OCT21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**ELEV 422**

3000 HESUV 335°

3000 KIWCE 335°

3000 EHEKY 335°

3000

12280
CRISFIELD, MARYLAND

APP CRS 322°
W-386
Rwy ldg N/A
TDZE N/A
Apt Elev 4

CRISFIELD-SOMERSET COUNTY (W41)

RNP APCH.

- CRISFIELD, MARYLAND
- AL-10239 (FAA)
- 20310

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]

Visual Segment - Obstacles.

CRISFIELD-SOMERSET COUNTY (W41)
RNP APCH.

ELEV 4

2000 SWL

HIMBA

MIRL Rwy 14-32
REIL Rwy 14 and 32

CRISFIELD, MARYLAND

Orig-B 05NOV20

38°01'N-75°50'W
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. Rwy 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 ½ mile, LNAV Cat D visibility ¼ mile.

Missed Approach: Climb to 3000 direct DOYAT and hold.

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)

WARNING -- WASHINGTON DC SFRA. CONTACT POTOMAC APP CON
WASHINGTON DC METROPOLITAN SFRA

CULPEPER RGNL (CJR)

RNP APCH.

WARNING

Category
LPV DA
LNAV/ VNAV DA
LNAV MDA

3000 to FAFIK
3000 NoPT
3000 direct DOYAT and hold.

AWOS-3 119.325
LNAV/VNAV NA below -15°C or above 48°C.

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. Rwy 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 ½ mile, LNAV Cat D visibility ¼ mile.

Apt Elev
RW04
3000 to FAFIK
3000 NoPT
3000 direct DOYAT and hold.

AWOS-3 119.325
LNAV/VNAV NA below -15°C or above 48°C.
RNAV (GPS) RWY 22
CULPEPER RGNL (CJR)

Category
A
B
C
D
LPV DA
657-1¼ 342 (400-1¼)
LNAV/VNAV DA
703-1½ 388 (400-1½)
LNAV MDA
800-1 485 (500-1)
800-1½ 485 (500-1½)

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 ½ mile, LNAV Cats C and D visibility ¼ mile.

AWOS-3 POTOMAC APP CON CLINC DEL UNICOM
119.325 128.525 306.925 121.6 123.075 (CTAF) 0

MISSED APPROACH: Climb to 3000 direct FAXIK and hold.

WARNING --
WASHINGTON DC SFRA.
CONTACT POTOMAC APP CON

Procedures NA for arrivals at CSN.
VORTAC via V286 eastbound.

CULPEPER, VIRGINIA
Orig-A 07NOV19

38°32'N-77°52'W
LOC RWY 4
CULPEPER RGNL (CJR)

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct CSN VORTAC and hold, continue climb-in-hold to 3000.

AWOS-3 119.325
POTOMAC APP CON 128.525 306.925
CLNC DEL 121.6
UNICOM 123.075 (CTAF)

Procedure NA for arrival on GVE VORTAC airway radials 337 CW 040.

One Minute Holding Pattern

NISAE
GVE 22.9

MSQ NDB

TCH 40

1800 3.12°

038° 4.4 NM from FAF

FAF to MAP 4.4 NM

Knots 60 90 120 150 180
Min:Sec 4:24 2:56 2:12 1:46 1:28

CULPEPER, VIRGINIA
Orig-A 20MAY21

38°32'N-77°52'W
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 3/4 mile.

MISSING APPROACH: Climbing left turn to 2900 direct CSN VORTAC and hold.

WARNING -- WASHINGTON DC SFRA. CONTACT POTOMAC APP CON
WASHINGTON DC METROPOLITAN SFRA

AWOS-3  POTOMAC APP CON  CLNC DEL  UNICOM
119.325  128.525  306.925  121.6  123.075 (CTAF)

CULPEPER, VIRGINIA
Amdt 5A  20MAY21

CATEGORY | A | B | C | D | FAF to MAP 6.6 NM
---|---|---|---|---|---
CIRCLING | 920-1 | 960-1 | 960-1¾ | 1100-2½ | Knots 60 90 120 150 180
| 604 (700-1) | 644 (700-1) | 644 (700-1¾) | 784 (800-2½) | Min:Sec 6:36 4:24 3:18 2:38 2:12

CULPEPER RGNL (CJR)
VOR-A

38°32'N-77°52'W
87
MISSED APPROACH: Climbing left turn to 3000 direct
CSN VORTAC and hold, continue climb-in-hold to 3000.

AWOS-3  119.325
POTOMAC APP CON  128.525  306.925
CLNC DEL  121.6
UNICOM  123.075 (CTAF)

---

REIL Rwy 4 and 22
MIRL Rwy 4-22

---

VGSI and descent angles not coincident
(VGSI Angle 3.00/TCH 40).
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.

\[ -15{}^\circ C \]

AWOS-3 128.625

JOHNSTOWN APP CON * 121.2 299.2

UNICOM 122.8 (CTAF)

MISSP APCH FIX

HEKPA

Final approach course offset 20.00

\[ \triangle \]

LIDVE

KAGPE 3.1 NM to LIDVE

(HAF) JIRMO

\[ \triangle \]

HOLOE

\[ \triangle \]

CUMBERLAND, MARYLAND

AL-5263 (FAA)

RNAV (GPS) RWY 5

GREATER CUMBERLAND RGNL (CBE)

AMDT 3 25FEB21

GREATER CUMBERLAND RGNL (CBE)

RNAV (GPS) RWY 5

CUMBERLAND, MARYLAND

AMDT 3 25FEB21

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 ½ mile, Cats C and D ½ mile. Night landing: Rwy 5, 11, 29 NA. Circling NA northwest of Rwy 5/23. Helicopter visibility reduction below 3/4 SM NA.

**MISSING 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.

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<tr>
<th>AWOS-3</th>
<th>JOHNSTOWN APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>128.625</td>
<td>121.2 299.2</td>
<td>122.8 (CTAF)</td>
</tr>
</tbody>
</table>

**DME REQUIRED**

- **LOC/KLA I-CBE 110.8**
- **JUKLA I-CBE 10.2**
- **HOLOE I-CBE 7.9**
- **KEYER I-CBE 18.8**
- **WAKIB I-CBE 0.9**

**LOCALIZER 110.8**
- I-CBE
- Chan 42

**KEYER 1870**
- ESL 18.8
- Chan 45

**HOLOE (IAF)**
- ESL 033° (33)
- Chan 42
- LOC offset 1.57°

**VGSI and descent angles not coincident (VGSI Angle 3.59/TCH 29).**

**Use I-CBE DME when on the localizer course.**

**Cat A B C D**
- **S-23**
  - 1680-1/4 905 (1000-1/4) 1680-2/1 905 (1000-2/1)
- **CIRCLING**
  - 1680-1/4 905 (1000-1/4) 2140-1/2 1365 (1400-1/2) 2260-3 1485 (1500-3) 2360-3 1585 (1600-3)

**CUMBERLAND, MARYLAND**

**AMT 7 31MAR16**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**LOC/DMR WRY 23 GREATE R CUMBERLAND RGNL (CBE)**

**GREATR CUMBERLAND RGNL (CBE)**

**LOC/DME WRY 23**
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.

One Minute Holding Pattern

GS 3.00°
TCH 54°

CATEGORY | A | B | C | D
---|---|---|---|---
S-ILS 2 | 759-½ | 200 (200-½) |
S-LOC 2 | 1020-½ | 461 (500-½) | 1020-1 | 461 (500-1) |
CIRCLING | 1120-1 | 549 (600-1) | 1120-1½ | 549 (600-1½) | 1200-2 | 629 (700-2) |
RNAV (GPS) RWY 2
DANVILLE RGNL (DAN)

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 1½ SM.

Procedure NA for arrival on SBV VORTAC airway radials 203 CW 252.

MALSR: Climb to 1000 then climbing right turn to 2500 direct LANTA and hold.

ASOS
128.125

WASHINGTON CENTER
124.05 307.0

UNICOM
123.05 (CTAF)

MISSED APPROACH: Climb to 1000 then climbing right turn to 2500 direct LANTA and hold.

WASHINGTON CENTER
124.05 307.0

UNICOM
123.05 (CTAF)

SOUTH BOSTON
SBV

2500 to LANTA
236° (262)

Procedure NA for arrival on SBV VORTAC airway radials 203 CW 252.

RNAV (GPS) RWY 2
DANVILLE RGNL (DAN)
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 ¼ 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.
RNAV (GPS) RWY 31
DANVILLE RGNL (DAN)

Amdt 1 10SEP20

Category A

LP MDA 920-1 359 (400-1) NA
LNAV MDA 1060-1 499 (500-1) NA

36°34'N-79°20'W

RNAV (GPS) RWY 31
Rwy 31 helicopter visibility reduction below ½ SM NA.

ASOS 128.125
WASHINGTON CENTER 124.05 307.0
UNICOM 123.05 (CTAF)

WASHINGTON CENTER
124.05 307.0

UNICOM
123.05 (CTAF)

MISSED APPROACH: Climb to 1000 then climbing right turn to 3300 direct ENTUK and hold.

ELEV 571
TDZE 561

WAAS
CH 93631
W31A

APP CRS 314°
Rwy Idg 3910
Apt Elev 561

_HIRL Rwy 2-20
_MIRL Rwy 13-31
_REIL Rwy 13, 20 and 31

314° to RW31

-category A

360°

ENTUK

Visual Segment - Obstacles.

WAAS
CH 93631
W31A

APP CRS 314°
Rwy Idg 3910
Apt Elev 561

314°

2100

Holding Pattern

134°

6000

2500

1360

314°

314°

2500

2100

134°

6000

2500

1360

314°

2500

2100

134°

6000

2500

1360

314°

2500

2100

134°

6000

2500

1360

314°

2500

2100

134°

6000

2500

1360

314°

2500

2100

134°

6000

2500
RNAV (GPS) RWY 32

**ATIS** 128.175
**POTOMAC APP CON** 118.95 319.1
**TOWER** 126.3 (CTAF)  @ 229.4
**GND CON** 121.9 351.8
**CLNC DEL** 351.8
**PAR**  

**ATIS** 128.175
**POTOMAC APP CON** 118.95 319.1
**TOWER** 126.3 (CTAF)  @ 229.4
**GND CON** 121.9 351.8
**CLNC DEL** 351.8
**PAR**

**RWP APCH**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

If local altimeter setting not received, use Ronald Reagan Washington National altimeter setting.


Visibility reduction by helicopters NA.

**CATEGORY** A B C D
LPV DA* 351/40 283 (300-½)
LNAV/VNAV DA** 481/50 413 (500-1)
LNAV MDA**** 540/40 472 (500-½) 540/60 472 (500-½)
CIRCLING 700-1 740-1 800-2 1000-3 626 (700-1) 666 (700-1) 726 (800-2) 926 (1000-3)

**RONALD REAGAN WASHINGTON NATIONAL ALTIMETER MINIMUMS**
LPV DA* 384/40 316 (400-¾)
LNAV/VNAV DA*** 514/55 446 (500-1)
LNAV MDA**** 580/40 512 (600-¾) 580-1½ 512 (600-1½)
CIRCLING 720-1 780-1 820-2½ 1040-3 646 (700-1) 706 (800-1) 746 (800-2½) 966 (1000-3)

**HILH all Rwy's**
Inoperative table does not apply to S-32 CAT A and B.

Visibility reduction by helicopters NA.
ATIS 128.175
CLNC DEL 351.8
GND CON 121.9 351.8
DAVISON TOWER 126.3 (CTAF) 229.4
POTOMAC DEP CON 118.95 257.2

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbo-jets only.

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: Chart not to scale.

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.

NE-3, 07 OCT 2021 to 02 DEC 2021
JDUBB FOUR DEPARTURE (RNAV)

**ATIS**
128.175
CINC DEL
351.8
GND CON
121.9 351.8
DAVISON TOWER *
126.3 (CTAF) 229.4
POTOMAC DEP CON
118.95 257.2

**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.

**TOP ALTITUDE:**
3000

**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:** Turbo-jets only.

**NOTE:** RNAV 1.
**NOTE:** RADAR required.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** Turb-jets only.

**JDUBB FOUR DEPARTURE (RNAV)**

**JDUBB4.JDUBB** 20366

**DAVISON AAF (DAA)**
FORT BELVOIR, VIRGINIA

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**JDUBB FOUR DEPARTURE (RNAV)**

**JDUBB4.JDUBB** 31DEC20

**DAVISON AAF (DAA)**
FORT BELVOIR, VIRGINIA

**AL-5504 (FAA)**
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):

DATE: NE-3, 07 OCT 2021 to 02 DEC 2021

NOTE: Chart not to scale.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbo-jets only.

TOP ALTITUDE: 3000
When ALS inop, increase RVR to 40, vis to 3/4 mile. When TDZL/CL lights inop, increase RVR to 24.
** When ALS inop, increase CAT A34 RVR to 45, vis to 7/8 mile; CAT CD RVR to 50, vis to 1 mile.
*** When ALS inop, increase CAT A8 RVR to 55, vis to 1 mile; CAT CD vis to 1 1/4 miles.

** Recommendation:**
- Increase RVR to 40 when ALS inop, visitable to 3/4 mile.
- Increase RVR to 24 when TDZL/CL lights inoperable.
- Increase RVR to 45 when CAT A34 inop, visitable to 7/8 mile.
- Increase RVR to 50 when CAT CD inop, visitable to 1 mile.
- Increase RVR to 55 when CAT A8 inop, visitable to 1 1/4 mile.
- Use CAT CD when appropriate.

**CAUTION:**
- When Rwy 14 VGSi inop, circling to Rwy 14 not authorized at night.
- Average Cold Temperature reduction based on standard -30.00°C ISA deviation.

**EMERG SAFE ALT 100 NM 4300**

**VGSi and RNAV glideslope not coincident (VGSi Angle 3.00/TCH 75).**
**RNAV (GPS) RWY 19**

**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

**DME/DME RNP - 0.3 NA**
For uncompensated Baro-VNAV systems, procedure NA below -15°C (5°F) or above 52°C (127°F).

**CAUTION:** When Rwy 14 VGSi inop, circling to Rwy 14 NA at night.
Circling visibility reduction by helicopters NA.

**EMERG SAFE ALT 100 NM 4300**

**2000**

**LERSE**

†LNAV only

**RW19†**
1.1 NM to RW19

**DEREE**

**NOVTE**
015°
195°
2000

**GP 3.00° TCH 75**

**ELEV 29**

**TDZE 23**

**Rwy 14 lidg 8652'**

**TWR**

**BCN 198**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**DOVER, DELAWARE**

Amdt 2 05DEC19
**DOVER, DELAWARE**

**RNAV (GPS) RWY 32**

**ATIS**

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**APP CON**

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**TOWER**

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**GND CON**

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**CLNC DEL**

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**DME/DME RNP-0.3 NA**

For uncompensated Baro-VNAV systems, procedure NA below -1.5°C (5°F) or above 54°C (130°F).

Circling visibility reduction by helicopters NA.

---

**EMERG SAFE ALT 100 NM 4300**

5 NM holding pattern

**2000 DEREER**

**LATNAV only**

**REIL Rwy 32**

**HIRL all Rwyts TDZL/CL Rwy 1**

**CIRCLING**

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<td>(500-1)</td>
<td>D</td>
<td>580-2</td>
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**DOVER, DELAWARE**

Amrt 4 05DEC19

**DOVER AFB (KDOV)**

39°08'N - 75°28'W

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**20366**
CAUTION: When Rwy 14 VGS is in op, 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

MIN holding alt 2000

NE-3, 07 OCT 2021 to 02 DEC 2021

DOVER, DELAWARE

N39°08'N - W75°28'W

DOVER AFB (KDOV)

TACAN RWY 32

TACAN DOV
Chan 37
APCH CRS
324°
Rwy Idg
12,903
TDZE
26
Arpt Elev
29
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

MISSED APPROACH: Climbing right turn to 2000, intercept DOV TACAN R-017 to DEREE/DOV 6.7 DME and hold.

EMERG SAFE ALT 100 NM 4300

2000
DEREE
DOV
R-017

6.7

DEREE
DOV

516

RADAR required for holding above 7000 or > 230 KIAS

RADAR required for holding above 4000 or > 230 KIAS

DUTSE
1.5

2.4

3.3

TACAN

CIRCLING

324°

324°

5.5 NM

5.5 NM

3.12°

TCH 50

CATEGORY

A
B
C
D
E

S-32
460-1
434
(500-1)
460-1¼
434
(500-1¼)

CIRCLING

500-1
540-1
580-1½
620-2
1080-3
(500-1)
(500-1)
(500-1)
(500-1)

198

324° 5.8NM

DOVER, DELAWARE

Amdt 4 05DEC19

NE-3, 07 OCT 2021 to 02 DEC 2021
**DEPARTURE ROUTE DESCRIPTION**

**TAKE-OFF RWY 1, 14, 19:** Climb on runway heading to 3000, expect RADAR vectors to CANNY, thence...

**TAKE-OFF RWY 32:** Climb on heading 350° to 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 (CANNY1, FLASK)**
**GLANC TRANSITION (CANNY1, GLANC)**
**JERES TRANSITION (CANNY1, JERES)**
**MAULS TRANSITION (CANNY1, MAULS)**
**MCRAY TRANSITION (CANNY1, MCRAY)**
**MELTN TRANSITION (CANNY1, MELTN)**
**OTTO TRANSITION (CANNY1, OTTO)**
**RAMAY TRANSITION (CANNY1, RAMAY)**
**RRSIN TRANSITION (CANNY1, RRSIN)**
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1: Climb on a track of 013° for RADAR vectors to SIE VORTAC. Thence...

TAKE-OFF RWY 14: Climb on a track of 136° for RADAR vectors to SIE VORTAC. Thence...

TAKE-OFF RWY 19: Climb on a track of 193° for RADAR vectors to SIE VORTAC. Thence...

TAKE-OFF RWY 32: Climb on a track of 350° for RADAR vectors to SIE VORTAC. Thence...

Via (Transition) or (Assigned Route)

HAMPTON TRANSITION: (SIE5•HTO) Via SIE R-059 and HTO VORTAC R-236 to HTO.

NANTUCKET TRANSITION: (HIGH ALT ONLY) (SIE5•ACK) Via SIE R-059, HTO VORTAC R-236 and J62 to ACK VOR/DME.
RNAV (GPS) RWY 27
DELAWARE AIRPARK (33N)

When local altimeter setting not received, use Dover AFB altimeter setting. Rw 27 helicopter visibility reduction below ¾ SM NA.

AWOS-3
120.125

DOVER APP CON
132.425  257.875

CLNC DEL
125.55

UNICOM
123.075 (CTAF)

Procedure NA for arrivals at BRIEF on V16 northeast bound.

Procedure NA for arrivals at BLARE on V29 northbound.

Procedure NA for arrivals at TACKS on V123-312 southwest bound.

Procedure NA for arrivals at LEEAH on V268 eastbound, V229 northeast bound, and V1 northeast bound.

AWOS-3
120.125

DOVER APP CON
132.425  257.875

CLNC DEL
125.55

UNICOM
123.075 (CTAF)

RNAV (GPS) RWY 27
DELAWARE AIRPARK (33N)

When local altimeter setting not received, use Dover AFB altimeter setting. Rw 27 helicopter visibility reduction below ¾ SM NA.

AWOS-3
120.125

DOVER APP CON
132.425  257.875

CLNC DEL
125.55

UNICOM
123.075 (CTAF)

Procedure NA for arrivals at BRIEF on V16 northeast bound.

Procedure NA for arrivals at BLARE on V29 northbound.

Procedure NA for arrivals at TACKS on V123-312 southwest bound.

Procedure NA for arrivals at LEEAH on V268 eastbound, V229 northeast bound, and V1 northeast bound.
DOVER/CHESWOLD, DELAWARE

VOR RWY 27
DELTAER AIRPARK (33N)

When local altimeter setting not received, use Dover AFB altimeter setting. Rwy 27 helicopter visibility reduction below 3/4 SM NA.

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.

One Minute Holding Pattern

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 43).

When local altimeter setting not received, use Dover AFB altimeter setting. Rwy 27 helicopter visibility reduction below 3/4 SM NA.

Reader Instructions

NE-3, 07 OCT 2021 to 02 DEC 2021
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 1/2 SM.

DME required.

MISSED APPROACH: Climb to 3000 then climbing right turn to 5000 direc PSK VORTAC and hold, continue climb-in-hold to 5000.

AWOS-3
127.375

ROANOKE APP CON
126.0 339.8

ROANOKE CLNC DEL
121.7

UNICOM
122.7 [CTAF]

LOCALIZER 110.9
PSK:

DUBLIN, VIRGINIA
Orig-B 25FEB21

37°08'N-80°41'W

NEW RIVER VALLEY (PSK)

NE-3, 07 OCT 2021 to 02 DEC 2021
ILS or LOC Z RWY 6
NEW RIVER VALLEY (PSK)

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 1/4 SM.
Circling NA for Cat D northwest of Rwy 6-24.

MISSED APPROACH: Climb to 3000 then climbing right turn to 5000
direct PSK VORTAC and hold, continue climb-in-hold to 5000.

AWOS-3
127.375

ROANOKE APP CON
126.0 339.8

ROANOKE CLNC DEL
121.7

UNICOM
122.7 (CTAF)

LOCALIZER 110.9
I-PSK

I-PSK VORTAC airway
Procedure NA for arrival
on PSK VORTAC airway
radials 192 CW 247.

One Minute
Holding Pattern
GUNTO INT
PSK [10]
GIPDY INT
PSK [6.2]
JESTA
OM

3000
5000
PSK

6000
5000
238°
058°

058°
5000
5000

3000
5000
3.6 NM

5.1 NM

HRI Rwy 6-24
REIL Rwy 24

NE-3, 07 OCT 2021 to 02 DEC 2021

DUBLIN, VIRGINIA
AL-5084 (FAA) 21056

CIRCLING
2620-1
515 (600-1)

2680-1
575 (600-1)

2780-2
675 (700-2)

2780-2 1/4
675 (700-2 1/4)

HRI Rwy 6-24

NE-3, 07 OCT 2021 to 02 DEC 2021

DUBLIN, VIRGINIA
Amdt 5B 25FEB21

37°08'N-80°41'W

NEW RIVER VALLEY (PSK)
ILS or LOC Z RWY 6
RNAV (GPS) RWY 6
NEW RIVER VALLEY (PSK)

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. Inop table does not apply to LPV all Cats and LNAV Cats A and B. For inop MALSR, increase LNAV Cat C visibility to 1 1/2 SM.

Procedure NA for arrivals at PSK VORTAC via V37 northbound, V466 eastbound, and T203 northeast bound.

Category A: 2305-1 200 (200-1)
Category B: 2597-1 492 (500-1¾)
Category C: 2560-1 455 (500-1)
Category D: 2620-1 515 (600-1)

ERATH ERATH
58° 0.01°

5.1 NM

GUNTO GUNTO

3900 MDA 2305-1 200 (200-1)

LNAV/ VNAV DA

LNAV MDA

CIRCLING 2620-1 515 (600-1) 2620-1½ 515 (600-1½) 2680-2 575 (600-2)

MALSR

HDG to 6000 direct OHICE and right turn via track 171° to FAPOM and via track 186° to WILIZ and hold.
RNAV (GPS) RWY 24
NEW RIVER VALLEY (PSK)

Amdt 1A  20JUN19

RNAV (GPS) RWY 24
NEW RIVER VALLEY (PSK)

Procedure NA for arrivals at ROA VORTAC via V136-470 westbound.

Procedure NA for arrivals at ROA VORTAC via V260 southeast bound.

Baro-VNAV NA when using Blacksburg altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 45°C. When local altimeter setting not received, use Blacksburg altimeter setting and increase all DA 36 feet, and all MDA 40 feet; increase LNAV/VNAV all Cats and LNAV Cat C visibility 1/4 SM.

Baro-VNAV NA when using Blacksburg altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 45°C. When local altimeter setting not received, use Blacksburg altimeter setting and increase all DA 36 feet, and all MDA 40 feet; increase LNAV/VNAV all Cats and LNAV Cat C visibility 1/4 SM.

Baro-VNAV NA when using Blacksburg altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 45°C. When local altimeter setting not received, use Blacksburg altimeter setting and increase all DA 36 feet, and all MDA 40 feet; increase LNAV/VNAV all Cats and LNAV Cat C visibility 1/4 SM.
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.

AWOS-3
127.375

ROANOKE APP CON
126.0 339.8

ROANOKE CLNC DEL
121.7

UNICOM
122.7 (CTAF)

PSK VORTAC
116.8 PSK 031° (IF)
Chan 115

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

PSK VORTAC
116.8 PSK 031° (IF)
Chan 115

AWOS-3
127.375

ROANOKE APP CON
126.0 339.8

ROANOKE CLNC DEL
121.7

UNICOM
122.7 (CTAF)

4328

PSK VORTAC
116.8 PSK 031° (IF)
Chan 115

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

PSK VORTAC
116.8 PSK 031° (IF)
Chan 115

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

PSK VORTAC
116.8 PSK 031° (IF)
Chan 115

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

PSK VORTAC
116.8 PSK 031° (IF)
Chan 115

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

PSK VORTAC
116.8 PSK 031° (IF)
Chan 115

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

PSK VORTAC
116.8 PSK 031° (IF)
Chan 115

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.

PSK VORTAC
116.8 PSK 031° (IF)
Chan 115

MISSED APPROACH: Climbing right turn to 4200 via heading 120° then climb to 5000 direct PSK VORTAC and hold.
RNAV (GPS) RWY 4
EASTON/NEWNAM FLD (ESN)

**MISSED APPROACH:**
Climb to 700 then climbing right turn to 2000 direct ORETE and hold.

**ATIS**
124.475

**POTOMAC APP CON**
133.75 254.35

**EASTON TOWER**
118.525 (CTAF)

**GND CON**
119.075

**CLNC DEL**
119.075

**NE-3, 07 OCT 2021 to 02 DEC 2021**

- LPV DA
- LNAV/VNAV DA
- LNAV MDA
- CIRCLING

**ELEV 72**

**TDZE 58**

**WAAS**

**CH 86905**

**W04A**

**APP CRS 040°**

**Rwy Idg 4775**

**TDZE 58**

**Apt Elev 72**

**DME/DME RNP-0.3 NA. When local altimeter setting not received, use Cambridge altimeter setting; increase LPV DA to 303 feet, LNAV/VNAV DA to 391 feet and all MDA 60 feet; increase LPV and LNAV/VNAV all Cats visibility and LNAV Cat C/D visibility ¼ SM and increase Circling Cat C/D visibility ¼ SM. VDP and Baro-VNAV NA when using Cambridge altimeter setting. Circling Rwy 15, 33 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).**

**NOTE:**

- LPV DA
- LNAV/VNAV DA
- LNAV MDA
- CIRCLING
RNAP APCH.

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)

GND CON
119.075

CLNC DEL
119.075

Visual Segment - Obstacles.

- **Hivar**
- **Cerav**
- **2000**
- **147°**
- **1600**

MISSED APPROACH: Climb to 2000 direct Tukie and on track 052° to Orete and hold.

**RNAV (GPS) RWY 15**

**EASTON/NEWMAN FLD (ESN)**

**EASTON, MARYLAND**

**AL-5596 (FAA)**

**RNP CRs**

APP CRS
148°

Rwy Idg
4003

TDZE
47

Apt Elev
72

**Category**

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<th>B</th>
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<td>668 (700-2)</td>
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RNAV (GPS) RWY 22
EASTON/NEWNAM FLD (ESN)

RNP APCH.

Baro-VNAV NA when using Baltimore altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 43°C. Rwy 22 helicopter visibility reduction below 1/4 SM NA. When local altimeter setting not received, use Baltimore altimeter setting and increase all DA 93 feet and all MDA 100 feet; increase LPV all Cats visibility 1/4 SM, increase LNAV/VNAV all Cats visibility 1/4 SM, and increase LNAV Cats C and D 1/4 SM.

MISSED APPROACH: Climb to 2000 direct RIKME and hold.

Procedure NA for arrivals at AGARD on V44 westbound.

Procedure NA for arrivals at RIDGY on V16-157-213 northeast bound.

ATIS
124.475

POTOMAC APP CON
133.75  254.35

EASTON TOWER *
118.525 (CTAF) 0

GND CON
119.075

CLNC DEL
119.075
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: Chart not to scale.

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, 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 300.

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)
MCRY TRANSITION (TERPZ7.MCRY)
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.

Procedures NA for arrivals on OOD VORTAC airway radials 240 CW 336.

Procedures NA for arrivals at UKIEY on V123-312 southwest bound.

Procedures NA for arrivals on ENO VORTAC airway radials 251 CW 063.

Procedure NA for arrivals on UUKEY on V123-312 southwest bound.
Use Middletown, DE altimeter setting; when not received, use Wilmington, DE altimeter setting. Helicopter visibility reduction below 1 SM NA. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 2000 on heading 110° and ENO R 331 to RANRE/ENO 16 DME and hold.
Rwy 16 helicopter visibility reduction below ¾ SM NA.

**MISSED APPROACH:** Climb to 3000 direct JUSPO and hold.

**RNAV (GPS) RWY 16**

**AWOS-3**

124.175

**WASHINGTON CENTER**

132.025 269.4

**UNICOM**

123.0 (CTAF)

**EMPIRIA-GREENSVILLE RGNL (EMV)**

**APP CRS**

155°

**Rwy Idg**

5010

**TDZE**

127

**Apt Elev**

127

**EMPORIA, VIRGINIA**

AL-5534 (FAA) 20198

**RNAV (GPS) RWY 16**

EMPORIA-GREENSVILLE RGNL (EMV)

**RNP APCH.**

**W**

1.1 NM to RW16

1.3 NM to RW16

**EYUGO**

2000 155° 1800

**POCAB**

1700 155° (2.2) RUSHES

**JFRSN**

2.4 NM to RW16

**RW16**

920

**Visual Segment - Obstacles.**

**CATEGORY**

A  B  C  D

**LNAV MDA**

520-1 393 (400-1) NA

**CIRCLING**

580-1 453 (500-1) 680-1½ 553 (600-1½) NA

**EMPIRIA, VIRGINIA**

Amdt 2B 08NOV18

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**36°41' N - 77° 29' W**
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.

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct JUSPO and hold, continue climb-in-hold to 3000.

AWOS-3
124.175

WASHINGTON CENTER
132.025 269.4

UNICOM
123.0 (CTAF)

CIRCLING
580-1 453 (500-1)
680-1/2 553 (600-1 1/2) NA

EMPORIA, VIRGINIA
Amdt 2 22JUN17
36°41’N 77°29’W

RNAV (GPS) RWY 34
EMPORIA-GREENSVILLE RGNL (EMV)

WAAS CH 63226 W34A
APP CRS 335°
Rwy Idg 5010
TDZE 122
Apt Elev 127

ELEVATION
776

MIA RWY 34 25 NM
1900

EMPORIA, VIRGINIA
AL-5534 (FAA)
MISSED APPROACH: Climb to 600 then climbing right turn to 5000 on HPW VORTAC R-215 to GEPKE/HPW 38.2 DME and hold, continue climb-in-hold to 5000.
RNAV (GPS) RWY 3
FARMVILLE RGNL (FVX)

Boro-VNAV NA when using Lynchburg altimeter setting. For uncompensated Boro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Straight-in/Circling Rwy 3 procedure NA at night. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Lynchburg altimeter setting and increase all DA 158 feet and all MDA 160 feet. Increase LPV and LNAV/VNAV visibility ½ mile all Cats; LNAV Cat C visibility ¾ mile and Circling Cat C visibility ¾ mile. Helicopter visibility reduction below 1 SM NA.

MISSED APCH FIX

- LPV 720-1 310 (400-1)
- LNAV DA 812-1¾ 402 (400-1¾)
- LNAV MDA 880-1 470 (500-1)
- Circling 900-1 484 (500-1)

NE-3, 07 OCT 2021 to 02 DEC 2021
RNAV (GPS) RWY 21

FARMVILLE, VIRGINIA

ELEV 416

TDZE 416

AWOS-3
132.725

ROANOKE APP CON
135.0 254.325

GCO
135.075

UNICOM
122.8 (CTAF)

Baro-VNAV NA when using Lynchburg 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 Lynchburg altimeter setting and increase all DA 158 feet and all MDA 160 feet. Increase LPV all Cats ½ mile; increase LNAV/VNAV visibility all Cats and Circling Cat C visibility ⅓ mile, increase LNAV Cat C visibility ⅓ mile. Helicopter visibility reduction below 1 SM NA.

Procedure NA for arrivals on FAK VORTAC airway radials 263 CW 338.

Missed Approach:
Climb to 3000 direct WAMPO and hold.

AWOS-3 132.725

ROANOKE APP CON 135.0 254.325

GCO 135.075

UNICOM 122.8 (CTAF)

WAAS
CH 70517
W21A

APP CRS 209°

Rwy Idg 4400

TDZE 416

Apt Elev 416

FARMVILLE RGNL (FVX)

RNAV (GPS) RWY 21

ELEV 416

FARMVILLE RGNL (FVX)

RNAV (GPS) RWY 21

FARMVILLE, VIRGINIA

Orig-B 14NOV13

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021
RNAV (GPS) RWY 18
NEW LONDON (W96)

**Category**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>LNAV MDA</td>
<td>1860-3</td>
<td>1018 (1100-3)</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>1860-3</td>
<td>1018 (1100-3)</td>
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**APP CRS**

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<th>Rwy Idg</th>
<th>TDZE</th>
<th>Apt Elev</th>
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<tr>
<td>176°</td>
<td>3049</td>
<td>842</td>
<td>842</td>
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**ELEV**

<table>
<thead>
<tr>
<th></th>
<th>Rpwy 18 helipcopter visibility reduction below 1 SM NA. Procedure NA at night. Use Lynchburg altimeter setting.</th>
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<tbody>
<tr>
<td>LYH ASOS</td>
<td>ROANOKE APP CON</td>
</tr>
<tr>
<td>119.8</td>
<td>135.0 254.325</td>
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</table>

**UNICOM**

<table>
<thead>
<tr>
<th></th>
<th>Unicom</th>
</tr>
</thead>
<tbody>
<tr>
<td>122.8</td>
<td>(CTAF)</td>
</tr>
</tbody>
</table>

**RNAV (GPS) RWY 18**

**Missed Approach:** Climb to 4000 direct to ZOTOB and on track 239° to AYARA and hold.

- Procedure NA for arrivals at LUCI on V469 northbound and arrivals at PROSE on on V375 westbound.

**New London (W96)**

**AL-10610 (FAA)**

**Forest, Virginia**

**Orig-B 30JAN20**

37°16'N-79°20'W
RNAV (GPS) RWY 36
NEW LONDON (W9)

LYH ASOS 119.8

ROANOKE APP CON 135.0 254.325

UNICOM 122.8 [CTAF]

LNAV MDA 1840-3 1009 (1000-3) NA

CIRCLING 1860-3 1018 (1100-3) NA

RNAV (GPS) RWY 36
NEW LONDON (W9)

Procedure NA for arrivals at SYCAM on V469 southbound, and arrivals at AYARA on V222 southwest bound.

Rwy 36 helicopter visibility reduction below 1 SM NA. Use Lynchburg altimeter setting. Procedure NA at night.

LYH ASOS 119.8

ROANOKE APP CON 135.0 254.325

UNICOM 122.8 [CTAF]

LNAV MDA 1840-3 1009 (1000-3) NA

CIRCLING 1860-3 1018 (1100-3) NA

RNAV (GPS) RWY 36
NEW LONDON (W9)

Procedure NA for arrivals at SYCAM on V469 southbound, and arrivals at AYARA on V222 southwest bound.

Rwy 36 helicopter visibility reduction below 1 SM NA. Use Lynchburg altimeter setting. Procedure NA at night.
RNAP APCH.

1. Procedure NA at night. Rwy 10 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2200 direct HORTU and on track 109° to GEEMO and hold.

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>POTOMAC APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>123.925</td>
<td>119.7 290.475</td>
<td>123.05 (CTAF)</td>
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**ELEV 150**

**TDZE 150**

**REIL Rwy 10 and 28**

**MIRL Rwy 10-28**

**CATEGORY**

<table>
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<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNAV MDA</td>
<td>780-1</td>
<td>630 (700-1)</td>
<td>NA</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>820-1</td>
<td>670 (700-1)</td>
<td>960-1</td>
</tr>
</tbody>
</table>
RNAV (GPS) RWY 28
TIPTON (FME)

Procedure NA at night. 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 V433 northeast bound, V170 312 east bound, V44-93 southeast bound, V93 northwest bound.

MISSED APPROACH:
Climbing left turn to 2200 direct GEEMO and hold.

RNAV (GPS) RWY 28
TIPTON (FME)

Category

LNAV MDA
620-1 470 (500-1)

CIRCLING
820-1 670 (700-1) 960-1

960-1 810 (900-1)

NA

NA

NA

NA

1.9 NM 4.3 NM 5.5 NM

Rwy Idg: 3000
TDZE: 150
Apt Elev: 150

MIRL Rwy 10-28

REIL Rwys 10 and 28

MIRL Rwy 10-28

39°05'N - 76°46'W

FORT MEADE (ODENTON), MARYLAND
Amdt 1C 22APR21

NE-3, 07 OCT 2021 to 02 DEC 2021
**RNAV (GPS) RWY 9**
FRANKLIN RGNL (FKN)

### 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 358 feet and visibility all Cats ½ SM; increase LNAV/VNAV DA to 357 feet and visibility all Cats ¼ SM; increase all MDA 40 feet and LNAV Cats C/D visibility ½ SM. Rwy 9 helicopter visibility reduction below 1 SM NA. Procedure NA at night.

### MISSED APPROACH:
Climb to 2600 direct and hold.

### AWOS-3PT
**124.675**

### NORFOLK APP CON
**127.9**
**269.425**

### UNICOM
**122.8** (CTAF)

---

**Procedure NA for arrivals at MAZON on V266 westbound.**

![Diagram](image-url)

**([IAF] MAZON)**

**([IAF] GUMBE)** Procedure NA for arrivals at GUMBE on V66 westbound and on V213 southwest bound.

---

**4 NM Holding Pattern**

<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>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>580-1.5%</td>
<td>545 (600-1%)</td>
</tr>
</tbody>
</table>

**FRANKLIN, VIRGINIA**
Amdt 1C 05DEC19

---

**RNAV (GPS) RWY 9**
FRANKLIN RGNL (FKN)

---

**AWOS-3PT**
**124.675**

**NORFOLK APP CON**
**127.9**
**269.425**

**UNICOM**
**122.8** (CTAF)
RNAV (GPS) RWY 27

FRANKLIN RGNL (FKN)

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.

MISSED APPROACH:
Climb to 2600 direct ETUME and hold.

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 1/8 SM; increase LNAV/VNAV DA to 392 feet and visibility all Cats 1/4 SM; increase all MDA 40 feet and LNAV Cats C/D visibility 1/8 SM. Rwy 27 helicopter visibility reduction below 1/4 SM NA.

LNAV/ VNAV DA
354-1 314 (400-1)

LNAV MDA
440-1 400 (400-1) 440-1/8 400 (400-1/8)
Circling Rwy 30 NA at night. Rwy 23 helicopter visibility reduction below ½ NA. For inop ALS, increase S-ILS 23 Cat A/B visibility to 1½ SM. For inop ALS, increase S-LOC 23 Cat C/D visibility to 2½ 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°**
  - **358°**
  - **238°**
  - **97°**
  - **270°**
  - **260°**
  - **120°**
  - **300°**
  - **340°**
  - **270°**
  - **230°**
  - **170°**
  - **130°**
  - **90°**

**LOCALIZER 110.3 I-FDK**

**1179**

**ZIBAT**

**R-048**

**LOCALIZER 109.0 FDK**

**WESTMINSTER EMI, 117.9, Chan 126**

Procedure NA for arrival on EMI VORTAC airway radials 269 CW 295.

**WASHINGTON DC METROPOLITAN SFRA WARNING -- WASHINGTON DC SFRA.**

ZIBAT fix minimums: Inop table does not apply to S-LOC 23 Cats C/D. 1 SM. For inop ALS, increase S-LOC 23 Cat C/D visibility to 2 SM. Circling Rwy 30 NA at night. Rwy 23 helicopter visibility reduction below ½ NA. For inop ALS, increase S-ILS 23 Cat A/B visibility to 1½ SM. For inop ALS, increase S-LOC 23 Cat C/D visibility to 2½ SM. ZIBAT fix minimums: Inop table does not apply to S-LOC 23 Cats C/D.

**MISSING APCH FIX**

- **WESTMINSTER EMI, 117.9, Chan 126**
  - **178°**
  - **358°**
  - **238°**
  - **97°**
  - **270°**
  - **260°**
  - **120°**
  - **300°**
  - **340°**
  - **270°**
  - **230°**
  - **170°**
  - **130°**
  - **90°**

**LOCALIZER 110.3 I-FDK**

**1179**

**ZIBAT**

**R-048**

**LOCALIZER 109.0 FDK**

**WESTMINSTER EMI, 117.9, Chan 126**

Procedure NA for arrival on EMI VORTAC airway radials 269 CW 295.

**WASHINGTON DC METROPOLITAN SFRA WARNING -- WASHINGTON DC SFRA.**

ZIBAT fix minimums: Inop table does not apply to S-LOC 23 Cats C/D. 1 SM. For inop ALS, increase S-LOC 23 Cat C/D visibility to 2 SM. Circling Rwy 30 NA at night. Rwy 23 helicopter visibility reduction below ½ NA. For inop ALS, increase S-ILS 23 Cat A/B visibility to 1½ SM. For inop ALS, increase S-LOC 23 Cat C/D visibility to 2½ SM. ZIBAT fix minimums: Inop table does not apply to S-LOC 23 Cats C/D.

**MISSING APCH FIX**

- **WESTMINSTER EMI, 117.9, Chan 126**
  - **178°**
  - **358°**
  - **238°**
  - **97°**
  - **270°**
  - **260°**
  - **120°**
  - **300°**
  - **340°**
  - **270°**
  - **230°**
  - **170°**
  - **130°**
  - **90°**

**LOCALIZER 110.3 I-FDK**

**1179**

**ZIBAT**

**R-048**

**LOCALIZER 109.0 FDK**

**WESTMINSTER EMI, 117.9, Chan 126**

Procedure NA for arrival on EMI VORTAC airway radials 269 CW 295.

**WASHINGTON DC METROPOLITAN SFRA WARNING -- WASHINGTON DC SFRA.**

ZIBAT fix minimums: Inop table does not apply to S-LOC 23 Cats C/D. 1 SM. For inop ALS, increase S-LOC 23 Cat C/D visibility to 2 SM. Circling Rwy 30 NA at night. Rwy 23 helicopter visibility reduction below ½ NA. For inop ALS, increase S-ILS 23 Cat A/B visibility to 1½ SM. For inop ALS, increase S-LOC 23 Cat C/D visibility to 2½ SM. ZIBAT fix minimums: Inop table does not apply to S-LOC 23 Cats C/D.
RNAV (GPS) RWY 5
FREDERICK MUNI (FDK)

When local altimeter setting not received, use Leesburg altimeter setting and increase all MDA 80 feet; increase LNAV Cat D visibility ½ SM.
Rwy 5 helicopter visibility reduction below ½ SM NA.

ATIS 124.875
POTOMAC APP CON 126.1 338.25
FREDERICK TOWER * 132.4 (CTAF) 0
GND CON 121.975
CLNC DEL 126.9 (When twr closed) 122.95
UNICOM

Procedure NA for arrivals on MRB
VORTAC airway radials 065 CW 137.

Turn NA Procedure

RNP APCH.

LNAV MDA

CATEGORY
A
B
C
D

RNAV MDA

780-1 474 (500-1)
780-1 474 (500-1)
RNAV (GPS) Y RWY 23
FREDERICK MUNI (FDK)

RNAV (GPS) Y RWY 23
FREDERICK MUNI (FDK)

Inop table does not apply to Cat C. Rw 23 helicopter visibility reduction below 1/2 SM NA. Circling Rw 30 NA at night.

ATIS 124.875
POTOMAC APP CON 126.1 338.25
FREDERICK TOWER * 132.4 [CTAF] •
GND CON 121.975
CLNC DEL 121.975
CLNC DEL 126.9
(When twr closed) 122.95

WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

Procedure NA for arrival at EMI VORTAC on airway radials 269 CW 003.

Missed Approach: Climbing left turn to 3000 direct EMI VORTAC and hold.

Inop table does not apply to Cat C. Rw 23 helicopter visibility reduction below 1/2 SM NA. Circling Rw 30 NA at night.

124.875
126.1 338.25
132.4 [CTAF] •
121.975
121.975
126.9
122.95

WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

Procedure NA for arrival at EMI VORTAC on airway radials 269 CW 003.

Missed Approach: Climbing left turn to 3000 direct EMI VORTAC and hold.

Inop table does not apply to Cat C. Rw 23 helicopter visibility reduction below 1/2 SM NA. Circling Rw 30 NA at night.

124.875
126.1 338.25
132.4 [CTAF] •
121.975
121.975
126.9
122.95
RNAV (GPS) Z RWY 23
FREDERICK MUNI (FDK)

Rwy 23 helicopter visibility reduction below 1/4 SM NA. Circling Rwy 30 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Inop table does not apply to LPV, LNAV/VNAV all Cats, and LNAV Cat C.

Procedure NA for arrival at EMI VORTAC on airway radials 269 CW 299.

WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 54).

LNAV only. 2.2 NM to RW23

*LNAV only.

2.2 NM to RW23

GPS 3.00°
TCH 50°

2.2
2.7 NM to RW23

6.2 NM

229° to RW23

229°

ELEV 306
TDZE 296

WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

LNAV only. 2.2 NM to RW23

GPS 3.00°
TCH 50°

2.2
2.7 NM to RW23

6.2 NM

229° to RW23

229°

ELEV 306
TDZE 296

REIL Rwy 5
REIL Rwy 12, 23 and 30 ©
HIRL Rwy 5-23 ©
HIRL Rwy 12-30 ©

39°25'N-77°22'W

FREDERICK MUNI (FDK)
Orig-G 30JAN20

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
CONLE FOUR DEPARTURE (RNAV)

ATIS
124.875
CLNC DEL
121.975
GND CON
121.975
FREDERICK TOWER *
132.4 (CTAF)
UNICOM
122.95
POTOMAC DEP CON
126.1  338.25

NOTE: Chart not to scale.

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.

COLIN TRANSITION (CONLE4.COLIN)
SCOOB TRANSITION (CONLE4.SCOOB)

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: For turbojet aircraft only.
NOTE: Chart not to scale.

TAKEOFF MINIMUMS:
Rwy 23: Standard.
Rwy 5: Standard with minimum climb of 260’ per NM to 1100.
Rwy 12: 500-2 ¾ or Standard with minimum climb of 395’ per NM to 1000.
Rwy 30: Standard with minimum climb of 285’ per NM to 900.

NOTE: NE-3, 07 OCT 2021 to 02 DEC 2021

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojet traffic only.
TERPZ SEVEN DEPARTURE (RNAV)

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 (TERPZ. FLASK)
GLANC TRANSITION (TERPZ. GLANC)
JERES TRANSITION (TERPZ. JERES)
MAULS TRANSITION (TERPZ. MAULS)
MCRAY TRANSITION (TERPZ. MCRAY)
MELTN TRANSITION (TERPZ. MELTN)
OTTTO TRANSITION (TERPZ. OTTTO)
RAMAY TRANSITION (TERPZ. RAMAY)
RRSIN TRANSITION (TERPZ. RRSIN)
RNAV (GPS) RWY 24

SHANNON (EZF)

Category A

Elev 85

TDZE 85

AWOS-3

128.125

QUANTICO APP CON

127.05 290.375

GCO 135.075

UNICOM 122.8 (CTAF)

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.

Procedure NA for arrivals at BRV VORTAC on V286 northwest bound.

Procedure NA for arrivals at GVE VORTAC on airway radials 337 CW 133.

MISSED APPROACH: Climb to 2000 direct CAMIR and hold.

WARNING -- WASHINGTON DC SFRA. CONTACT POTOMAC APP CON

RNAV (GPS) RWY 24

APP CRS

235°

Rwy Idg 2964

TDZE 85

Apt Elev 85

GORDONSVILLE

GVE

873

235° to RW24

MIRL Rwy 6-24

2000

CAMIR

Visual Segment - Obstacles.

236° 235° 2000

DURWO

4 NM

4 NM Holding Pattern

ZADMN

251

305°

RW24

2000

1700

236°

METROPOLITAN SFRA

WASHINGTON DC

2000

CAMIR

5 NM

5 NM

LNAV MDA

1100-3 1015 (1100-3 )

NA

CIRCLING

1100-3 1015 (1100-3 )

NA

MIRL Rwy 6-24
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.

MISSED APPROACH: Climbing left turn to 1900 in EZF NDB holding pattern.

<table>
<thead>
<tr>
<th>CATEGORY</th>
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<th>B</th>
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<th>D</th>
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<tbody>
<tr>
<td>S-24</td>
<td>1100-3</td>
<td>1015</td>
<td>(1100-3)</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>1100-3</td>
<td>1015</td>
<td>(1100-3)</td>
<td>NA</td>
</tr>
</tbody>
</table>

FREDERICKSBURG, VIRGINIA

Amdt 3A, 11DEC14

38°16'N-77°27'W
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.

Procedure NA for arrivals at IRONS on V376 southbound.

Visual Segment - Obstacles.

1700 WOBUB

1700

239°

059°

4 NM

Holding Pattern

WOBUB

CRROL

1500

059° (6.2)

Visual Segment - Obstacles.

1700

WOBUB

239°

059°

4 NM

Holding Pattern

WOBUB

CRROL

1500

059° (6.2)

Joint Base Andrews

WASHINGTON EXEC/HYDE FLD

RADIO RANGE

2200

MSA RW06 25 NM

WASHINGTON, D.C.

1049

978

POTOMAC APP CON

124.7 338.2

UNICOM

122.8 (CTAF)

MISSING APPROACH: Climbing right turn to 1700 direct WOBUB and hold.

RNAP (GPS) RWY 6

POTOMAC AIRFIELD (VKX)

RNAV (GPS) RWY 6

POTOMAC AIRFIELD (VKX)

RNAV (GPS) RWY 6
Procedure NA at night. When local altimeter setting not received, use Winchester altimeter setting and increase all MDA 40 feet.

**MISSING APPROACH:** Climbing right turn to 3700 direct CAKOM and hold.

**AWOS-3** 121.85  
**OKV AWOS-3** 124.85  
**POTOMAC APP CON** 120.45  
**UNICOM** 123.0 (CTAF)

Procedure NA for arrivals at JASEN on V4 southeast bound.
VOR-B
FRONT ROYAL-WARREN COUNTY (FRR)

VORTAC LDN 114.3
Chan 90

APP CRS 335°

Rwy Idg N/A
TDZE N/A
Apt Elev 704

AWOS-3 121.85
FRONT ROYAL, VIRGINIA

OKV AWOS-3 124.85
FRONT ROYAL-WARREN COUNTY

POTOMAC APP CON 120.45

UNICOM 123.0 (CTAF)

---

Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Winchester altimeter setting and increase all MDA 40 feet.

Missed Approach: Climbing right turn to 5000 direct LDN VORTAC and hold, continue climb-in-hold to 5000.

NoPT for arrival on LDN VORTAC airway radial 135.

Category A

Circling

3300-1/4 3300-1/2
2596 (2600-1/4) 2596 (2600-1/2)

---

FRONT ROYAL, VIRGINIA

Orig B 18AUG16

38°55'N - 78°15'W

161
RNAV (GPS)-A

MONTGOMERY COUNTY AIRPARK (GAI)

When local altimeter setting is not received use Washington Dulles Intl altimeter setting and increase all MDA 80 feet and visibility Cat C ½ SM.

Procedure NA for arrival on EMI VORTAC airway radials 151 CW 269.

MISSED APPROACH: Climbing right turn to 3000 direct EMI VORTAC and hold.

AWOS-3PT | POTOMAC APP CON | CLNC DEL | UNICOM
---|---|---|---
128.275 | 128.7 307.9 | 121.6 | 123.075 (CTAF)
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)
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)
Baro-VNAV NA when using Dublin altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP NA with Dublin altimeter setting. When local altimeter setting not received, use Dublin altimeter setting and increase all DA 137 feet and all MDA 140 feet, increase LPV all Cats visibility, LNAV/VNAV all Cats visibility and LNAV Cats C/D visibility 1/4 mile, and increase Circling Cats C/D visibility 1/2 mile.

### MISSED APPROACH:
Climb to 3200 then climbing right turn to 5100 direct DOILY and hold, continue climb-in-hold to 5100.

---

### AWOS-3
118.375

### ROANOKE APP CON
126.0 339.8

### UNICOM
122.8 (CTAF)
RNAV (GPS) RWY 19
TWIN COUNTY (HLX)

**AWOS-3**
118.375

**ROANOKE APP CON**
126.0 339.8

**UNICOM**
122.8 (CTAF)

**Procedure NA for arrivals on PSK airway radials 153 CW 306.**

**Missed Approach:** Climb to 3200 then climbing left turn to 5000 direct EVMEH and hold.

**Amdt 1A 18SEP14**
RNAV (GPS) RWY 4
DELAWARE COASTAL (GED)

MISSED APPROACH: Climb to 2000 direct HUVOX and hold.

ASOS
118.375

DOVER APP CON
132.425 257.875

UNICOM
123.0 (CTAF)

AIRPORT commander

GEORGETOWN, DELAWARE

38°41'N-75°22'W

MALS

Cat D 1/2 mile. Night Landing: Rwy 10, 28 NA.

Baro-VNAV systems, LNAV/VNAV NA below 13°C (55°F) or above 34°C (93°F). For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 13°C (55°F) or above 34°C (93°F).

For inoperative MALS Baro-VNAV systems, LNAV/VNAV NA below 13°C (55°F) or above 34°C (93°F).

Increase LNAV/VNAV all Cats visibility to 1 1/2 mile, LNAV Cats C/D visibility to 1 1/4 mile and increase Circling Cat C visibility to 2 miles and Cat D visibility to 2 1/4 miles. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 13°C (55°F) or above 34°C (93°F).

For inoperative MALS Baro-VNAV systems, LNAV/VNAV NA below 13°C (55°F) or above 34°C (93°F).

Increase LNAV/VNAV all Cats visibility to 1 1/2 mile, LNAV Cats C/D visibility to 1 1/4 mile and increase Circling Cat C visibility to 2 miles and Cat D visibility to 2 1/4 miles. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 13°C (55°F) or above 34°C (93°F).
REIL Rwys 4, 22, 10, and 28
MIRL Rwys 4-22 and 10-28

ATM 112.6 ATR 22.4 WEBIX

MISSED APPROACH:
Climb to 2100 direct ATR VOR/DME and hold.

One Minute Holding Pattern
WEBIX ATR 22.4

WATERLOO VOR/DME on V308 eastbound and V1 northeast bound.
When local altimeter setting not received, use Salisbury altimeter setting and increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility ¼ mile; OTBAE fix minimums increase S-22 and Circling Cats C/D visibility ¼ mile. Circling Rwy 10, 28 NA at night.

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct ATR VOR/DME and hold.

OTBAE fix minimums increase S-22 and Circling Cats C/D visibility 1 mile; increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility 1 mile; When local altimeter setting not received, use Salisbury altimeter setting and hold.

When local altimeter setting not received, use Salisbury altimeter setting and increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility ¼ mile; OTBAE fix minimums increase S-22 and Circling Cats C/D visibility ¼ mile. Circling Rwy 10, 28 NA at night.

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct ATR VOR/DME and hold.

OTBAE fix minimums increase S-22 and Circling Cats C/D visibility 1 mile; increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility 1 mile; When local altimeter setting not received, use Salisbury altimeter setting and hold.

When local altimeter setting not received, use Salisbury altimeter setting and increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility ¼ mile; OTBAE fix minimums increase S-22 and Circling Cats C/D visibility ¼ mile. Circling Rwy 10, 28 NA at night.

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct ATR VOR/DME and hold.

OTBAE fix minimums increase S-22 and Circling Cats C/D visibility 1 mile; increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility 1 mile; When local altimeter setting not received, use Salisbury altimeter setting and hold.

When local altimeter setting not received, use Salisbury altimeter setting and increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility ¼ mile; OTBAE fix minimums increase S-22 and Circling Cats C/D visibility ¼ mile. Circling Rwy 10, 28 NA at night.

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct ATR VOR/DME and hold.

OTBAE fix minimums increase S-22 and Circling Cats C/D visibility 1 mile; increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility 1 mile; When local altimeter setting not received, use Salisbury altimeter setting and hold.

When local altimeter setting not received, use Salisbury altimeter setting and increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility ¼ mile; OTBAE fix minimums increase S-22 and Circling Cats C/D visibility ¼ mile. Circling Rwy 10, 28 NA at night.

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct ATR VOR/DME and hold.

OTBAE fix minimums increase S-22 and Circling Cats C/D visibility 1 mile; increase all MDA 60 feet; increase S-22 and Circling Cats C/D visibility 1 mile; When local altimeter setting not received, use Salisbury altimeter setting and hold.
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.

TOP ALTITUDE: 2000

NOTE: Chart not to scale.
### RNAV (GPS)-A

**GORDONSVILLE MUNI (GVE)**

**AWOS-3**
- 120.225

**POTOMAC APP CON**
- 132.85
- 323.125

**UNICOM**
- 123.0 (CTAF)

**Procedure NA for arrivals at TURCO**

**Procedure NA for arrivals at DROPN.**

**RNAV (GPS)-A**

**AFLAT**
- 3000

**OSABE**
- 3300

**TURCO**
- 3000

**Radar required for arrivals at DROPN.**

**Procedure NA for arrivals at TURCO on V476 southwest bound.**

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

**CIRCLING**
- 1520-3
- 1066 (1100-3)
- NA

**ELEV 454**

**MIRL Rwy 5-23**

**Visual Segment - Obstacles.**

**POTOMAC APP CON**
- 3300

**TURCO**
- 3000

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**Orig-A 12OCT17**

**38°09'N-78°10'W**
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)

---

**RNAV (GPS)-B**  
GORDONSVILLE MUNI (GVE)  

---

**NA**
ILS or LOC RWY 9

HAGERSTOWN RGNL-RICHARD A HENSON FLD (HGR)

Amdt 1A 22JUN17

HAGERSTOWN, MARYLAND

CATEGORY B/C/D visibility and Circling Cat D ½ mile.

CIRCLING

S-ILS 9
980-1 285 (300-1) 1200-1½ 1320-2
497 (500-1½) 617 (700-2)

S-LOC 9
980-7/8 285 (300-5/8) 1200-2 1320-2

 knots
Min:Sec 5:06 3:24 2:33 2:02 1:42

FAF to MAP 5.1 NM

ELEV 703 D TDZE 695

092° 5.6 NM from FAF

TWR 777°

NE-3, 07 OCT 2021 to 02 DEC 2021
RNAV (GPS) RWY 9

**HAGERSTOWN RGNL-RICHARD A HENSON FLD (HGR)**

**Category B**

<table>
<thead>
<tr>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNAV/ VNAV DA</td>
<td>1020-1 325 (400-1)</td>
<td>1020-1 325 (400-1)</td>
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<td></td>
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<tr>
<td>LNAV MDA</td>
<td>1160-1 457 (500-1)</td>
<td>1200-1 457 (500-1)</td>
<td>1320-2 617 (700-2)</td>
<td></td>
</tr>
</tbody>
</table>

**Holding Pattern**

- COVUK
- FODEV
- HESGI
- RW09

**MISSED APPROACH:**

Climb to 4000 direct H/DS and hold.

**Procedure NA for arrivals at ASUTE on V474 westbound.**

**ASOS**

<table>
<thead>
<tr>
<th>HAGERSTOWN TOWER</th>
<th>POTOMAC APP CON</th>
<th>ASOS</th>
<th>GND CON</th>
<th>UNICOM</th>
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<tr>
<td>120.3 (CTAF)</td>
<td>0225.4</td>
<td>126.375</td>
<td>120.8</td>
<td>122.95</td>
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<tr>
<td>2411</td>
<td>239.025</td>
<td>126.825</td>
<td></td>
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</tr>
</tbody>
</table>

**ELEV 703 D**

- TDZE 695

- POTOMAC APP CON
- HAGERSTOWN TOWER
- ASOS
- GND CON
- UNICOM

- 3700
- 4000
- 2500
- 3100
- 3600
- 1760
- 2177

**HAIGS and Hold.**

- 2500
- 3100
- 3600
- 271°
- 091°

- 4.7 NM
- 2.8 NM
- 0.9 NM

- 1020-1 325 (400-1)
- 1160-1 457 (500-1)
- 1200-1 457 (500-1)
- 1320-2 617 (700-2)

**Rwy Idg**

- TDZE
- Apt Elev

- 695
- 895
- 954
- 325 (400-1)
- 1160-1 457 (500-1)

- 39°43'N-77°44'W

- NE-3, 07 OCT 2021 to 02 DEC 2021

- Amdt 1A 22JUN17
RNAV (GPS) RWY 27

HAGERSTOWN RGNL-RICHARD A HENSON FLD (HGR)

Rwy 20 helicopter visibility reduction below 1 SM NA. Circling Rwy 20 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.4°C (7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Martinsburg altimeter setting and increase all DA 70 feet and all MDA 80 feet; increase LNAV/VNAV all Cats, LNAV Cats C-D and Circling Cat D visibility 1/4 mile. VDP and Baro-VNAV NA with Martinsburg altimeter setting.

ASOS
126.375

POTOMAC APP CON
126.825

HAGERSTOWN TOWER
120.3 (CTAF) 225.4

GND CON
120.8

UNICOM
122.95

MISSED APPROACH: Climb to 3600 direct COVUK and hold.

Procedure NA for arrivals at THS VORTAC on airway radials 068 CW 170.
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.

ASOS
126.375

POTOMAC APP CON
126.825 239.025

HAGERSTOWN TOWER
120.3 (CTAF) 225.4

GND CON
120.8

UNICOM
122.95

HAGERSTOWN, MARYLAND

HAGERSTOWN RGNL-RICHARD A HENSON FLD (HGR)

HAGERSTOWN RGNL-RICHARD A HENSON FLD (HGR)

S-9
1080-1 385 (400-1)

1080-1/8 385 (400-1/8)

1200-1 1320-2

497 (500-1½) 617 (700-2)

CIRCLING
1160-1 457 (500-1)

109° 2500

HGR VOR

3600

091° 246°

246° 066°

3.0° TCH 55

3.07°

HAGR VOR

5.5 NM

FAF to MAP 5.5 NM

Knots
60 90 120 150 180

Min:Sec
6:30 3:40 2:45 2:12 1:50

39°43'N-77°44'W
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.

**MISSING 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.

**MISSED APPROACH:** Climb to 1200 then climbing left turn to 2500 direct YIYUN and hold.

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Increase to 90K upon reaching the missed approach altitude.

**MISSING 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.

**MISSING 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.

**MISSING APPROACH:** Climb to 1200 then climbing left turn to 2500 direct YIYUN and hold.

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Limit final and missed approach to 70K.
Increase to 90K upon reaching the missed approach altitude.

**MISSING 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.
COPPER RNAV (GPS) RHWY 27
HAGERSTOWN RGNL-RICHARD A HENSON FLD (HGR)

Limit initial and intermediate approach to 90K.
Limit final and missed approach to 70K.
Increase to 90K upon reaching the missed approach altitude.

VGSI and descent angles not coincident
(VGSI Angle 3.00/CHC 55).

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.

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

Circling to Rwy 7 NA at night. Circling NA southeast of Rwy 7-25.
RNAV (GPS) RWY 7
INGALLS FLD (HSP)

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.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling NA southeast of Rwy 7-25. Baro-VNAV NA.

Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.
**RNAV (GPS) RWY 25**

**INGALLS FLD (HSP)**

**HOT SPRINGS, VIRGINIA**

**WAAS CH 53713 W25A**

<table>
<thead>
<tr>
<th>APP CRS</th>
<th>Rwy Idg</th>
<th>TDZE</th>
<th>Apt Elev</th>
</tr>
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<tbody>
<tr>
<td>247°</td>
<td>5600</td>
<td>3773</td>
<td>3793</td>
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</tbody>
</table>

- **Circling NA SE of Rwy 7-25. Baro-VNAV NA.**
- **When local altimeter setting not received, procedure NA.**

- **AWOS-3** 118.8
- **WASHINGTON CENTER** 134.4 353.9
- **UNICOM** 123.0 (CTAF)

**Procedure NA for arrivals at HOBOS via V1 40-473 westbound and arrivals at BOOME via V469 southbound.**

**Orig-A 26MAR20**

**37°57’N 79°50’W**
RNAP APCH

Circling Rwy 20 NA at night. Rwy 2 helicopter visibility reduction below ¾ SM NA. Use Ronald Reagan Washington Intl altimeter setting.

Procedure NA for arrivals at SABBI on V376 southbound.

MISSED APPROACH: Climbing right turn to 2000 direct JAAAK and hold.

INDIAN HEAD, MARYLAND

Amdt 1B 13SEP18
38°36'N-77°04'W
**ILS or LOC RWY 1L**

**CAMP SPRINGS, MARYLAND**

**LOC I-RWS**

**APCH CRS**

**Rwy Idg**

**TDZE**

**Arpt Elev**

**AL-561 (USAF)**

**JOINT BASE ANDREWS (KADW)**

* When ALS inop increase RVR to 40, vis to 3/4 mile. When TDZE/CL inop, increase RVR to 24.
** When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE RVR to 60, vis to 1 1/8 miles.
*** Circling not authorized W of Rwy 1L-19R.

<table>
<thead>
<tr>
<th>ATIS</th>
<th>POTOMAC APP CON</th>
<th>TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
<th>CPDLC</th>
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</thead>
<tbody>
<tr>
<td>133.675</td>
<td>251.05</td>
<td>128.0</td>
<td>335.5</td>
<td>118.4</td>
<td>349.0</td>
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</tbody>
</table>

Localizer unusable beyond the runway threshold.

† For aircraft not equipped with TACAN or suitable RNAV system with GPS: Climbing right turn to 2000 hdg 050°, expect RADAR vectors.

**MISSED APPROACH:** Climbing to 2500, intercept ADW VORTAC R-009 to EGUDE and hold.

**Baltimore**

TACAN unusable for feeder route (from BALTIMORE VORTAC).

**RADAR or DME REQUIRED**

**EMERG SAFE ALT 100 NM 6100**

**ELEV 280**

**TDZE 261**

**NE-3, 30 OCT 2021 to 02 DEC 2021**

Amdt 4 15AUG19

CAMP SPRINGS, MARYLAND

38°49'N - 76°52'W
**ATC RADAR REQUIRED**

**EMERG SAFE ALT 100 NM 6100**

**2500 ADW R-183**

**DOKME ADW**

**IF**

**HOPEE**

**ISILE**

**VORTAC**

**CATEGORY**

<table>
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<tr>
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<th>C</th>
<th>D</th>
<th>E</th>
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<tbody>
<tr>
<td>S-19L*</td>
<td>740/24</td>
<td>461 (500-½)</td>
<td>740/50</td>
<td>461 (500-1)</td>
<td></td>
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<tr>
<td>CIRCLING**</td>
<td>780-1</td>
<td>501 (600-1)</td>
<td>780-1½</td>
<td>501 (600-1½)</td>
<td>840-2</td>
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**NE-3, 07 OCT 2021 to 02 DEC 2021**

**CAMP SPRINGS, MARYLAND**

**JOINT BASE ANDREWS (KADW)**

**38°49'N - 76°52'W**

**Amrdt 2 02MAR17**
Radar vectors required within 10 NM from departure

Radar required

**Departure Route Description**

Take-off RWY 11L/1R: Climbing right turn to 3000 heading 050°. Expect radar vectors to intercept ADW VORTAC R-070.
Radar vectors required within 10 NM from departure.

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.
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)
JEFSN ONE DEPARTURE (RNAV) (JEFSN1 • JEFSN)

TOP ALTITUDE: 3000

RNAV1

MAULS

FLASK

GLANC

TURBOJETS ONLY
GPS REQUIRED
RADAR REQUIRED

NOTE: Chart not to scale

JEFSN ONE DEPARTURE (RNAV) (JEFSN1 • JEFSN)

CAMP SPRINGS, MARYLAND

Amdt 3 26MAR20

211
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)
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

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.
MISSED APPROACH: Climb to 5600 and direct OKLUH and hold, continue climb-in-hold to 5600.

AWOS-3  120.125
ATLANTA CENTER  127.55  269.50
CTAF  122.9  

** Missed approach requires minimum climb gradient of 240 feet per NM to 3400.

** 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 ½ SM NA.
DME/DME RNP 0.3 NA.

MISSED APPROACH: Climb to 5000 direct TILYU and hold, continue climb-in-hold to 5000.

AWOS-3 120.125

ATLANTA CENTER 127.55 269.50

CTAF 122.9
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 left turn to 2400 direct OGSOF and hold.

AWOS-3  
123.875

WASHINGTON CENTER  
118.75  377.1

UNICOM  
122.7  (CTAF)

ELEV 526

LUNENBURG COUNTY (W31)
KENBRIDGE, VIRGINIA
APP CRS  
034°  
Rwy Idg  
N/A  
TDZE  
N/A  
Apt Elev  
526

RNAV (GPS)-A

PRECAUTIONARY

CATEGORY  
A  
B  
C  
D  

CIRCLING  
1000-1  
1080-1  
NA  

474 (500-1)  
554 (600-1)

NE-3, 07 OCT 2021 to 02 DEC 2021
LIRL Rwy 2-20

KENBRIDGE, VIRGINIA
Orig 02MAR17

36°58'N-78°11'W
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.

<table>
<thead>
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<tbody>
<tr>
<td>CIRCLING</td>
<td>1540-3</td>
<td>1014</td>
<td>[1100-3]</td>
<td>NA</td>
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</table>

**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
HAMPTON, VIRGINIA

LOC I-LFI 109.9 APCH CRS 078º
Rwy Idg 10,002 TDZE 8
Arpt Elev 8 AL-185 [USAFA]
LANGLEY AFB (KLFI)

Radar or DME Required

** When ALS inop, increase RVR to 40 and vis to ½ mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile.
CAT CDE vis to 1½ miles.

ATIS* 270.1
NORFOLK APP CON 125.7 335.625
LANGLEY TOWER* 125.0 253.5
GND CON 121.7 275.8
CLNC DEL 118.85 257.625

** Circling S of Rwy 8-26 not authorized.

Expect RADAR vectors to IAF or Final Approach course.
Gladeslope unusable for coupled approach below 750' MSL.

EMERG SAFE ALT 100 NM 4100

HILW Rwy 8-26

CATEGORY
S-ILS 8*
S-LOC 8**
C CIRCLING

A 208/24 200 (200-½)
B 480/24 472 (500-½)
C 540-1 580-1 660-1½ 760-2½ 760-2¾
D 532-1 572-1 652-3/8 752-1¾ 752-8/¾
E 532-600-1 572-600-1 652-700-1 752-800-2 752-800-2

HAMILTON, VIRGINIA

37°05’N-76°21’W

Amdt 6 08OCT20
Procedure NA at night. Use Salisbury altimeter setting; when not received, use Georgetown altimeter setting.

MISSED APPROACH: Climbing right turn to 1800 direct NEIDA and hold.

Procedure NA for arrivals at ATR VOR/DME on V308 eastbound.

Procedure NA for arrivals at SBY SALISBURY SBY (IAF) on V29 southbound.

Procedure NA for arrivals at SBY SALISBURY SBY (IAF) on V29 southbound.
**RNAV (GPS)-A**

**BRUNSWICK COUNTY (LVL)**

---

**APP CRS**

<table>
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**Rwy Idg**

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**Apt Elev**

<table>
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</table>

**RNP APCH.**

- 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.

**AWOS-3**

| 119.625 |

**WASHINGTON APP CON**

| 118.75 |

**UNICOM**

| 122.8 (CTAF) |

**ER**

| 329 |

---

**APYON**

| 2000 |

**BINAC**

| 3600 |

**RW18**

| 1600 |

**MISSED APPROACH:** Climbing left turn to 4000 direct GEPKE and hold, continue climb-in-hold to 4000.

**MIRL Rwy 18-36**

| 36 |

---

**CATEGORY**

| CIRCLING | 1340-3 | 1011 (1100-3) | NA |

---

**LAWRENCEVILLE, VIRGINIA**

Orig-A 30JAN20

36°46'N 77°48'W

**BRUNSWICK COUNTY (LVL)**

RNAV (GPS)-A
**RNAV (GPS)-B**

**BRUNSWICK COUNTY (LVL)**

**MISSED APPROACH:**
Climbing left turn to 3000 direct FITIK and hold.

**AWOS-3**
119.625

**WASHINGTON APP CON**
118.75 377.1

**UNICOM**
122.8 (CTAF)

---

**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.**

---

**ELEV 329**

**Visual Segment - Obstacles.**

**FITIK Holding Pattern**

**Category**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>4.9 NM</td>
<td>6 NM</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**RNAV (GPS)-B BRUNSWICK COUNTY (LVL)**

**36°46'N 77°48'W**

**227**

**Lawrenceville, Virginia** Orig-A 30JAN20

**Lawrenceville, Virginia** AL-5359 (FAA)

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**BRUNSWICK COUNTY**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**AWOS-3**
119.625

**WASHINGTON APP CON**
118.75 377.1

**UNICOM**
122.8 (CTAF)

---

**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.**

---

**ELEV 329**

**Visual Segment - Obstacles.**

**FITIK Holding Pattern**

**Category**

<table>
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<th>A</th>
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<tr>
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<td>6 NM</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**RNAV (GPS)-B BRUNSWICK COUNTY (LVL)**

**36°46'N 77°48'W**

**227**

**Lawrenceville, Virginia** Orig-A 30JAN20

**Lawrenceville, Virginia** AL-5359 (FAA)

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**AWOS-3**
119.625

**WASHINGTON APP CON**
118.75 377.1

**UNICOM**
122.8 (CTAF)

---

**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.**

---

**ELEV 329**

**Visual Segment - Obstacles.**

**FITIK Holding Pattern**

**Category**

<table>
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<th>A</th>
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<th>D</th>
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<tbody>
<tr>
<td>4.9 NM</td>
<td>6 NM</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
LEESBURG, VIRGINIA

RNAV (GPS) RWY 17

LEESBURG EXEC (JYO)

When VGSI inop, Straight-in/Circling RWy 17 procedure NA at night. DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 41°C (105°F). Inoperative table does not apply to LNAV Cats A/B.

For inoperative ODALS, increase LNAV/VNAV all Cats visibility to 1/2 and LNAV Cats C/D visibility to 1. When local altimeter setting not received, use Washington Dulles Intl altimeter setting: increase all DA 32 feet and LNAV/VNAV all Cats visibility 1/4 mile; increase all MDA 40 feet and LNAV Cats C/D and Circling Cat C visibility 1/4 mile and Circling Cat D visibility 1/2 mile. When using Washington Dulles Intl altimeter setting, inoperative table does not apply to LNAV Cats A/B. For inoperative ODALS when using Washington Dulles Intl altimeter setting: increase LNAV/VNAV all Cats visibility to 1/2 and LNAV Cats C/D visibility to 1 1/2. Baro-VNAV NA when using Washington Dulles Intl altimeter setting.

Procedure NA for arrivals on MRB VORTAC airway radials 065 CW 223.

Procedure NA for arrivals at HOAGE on V4-92 northwesbound.

Procedure NA for arrivals at HOAGE on V4-92 northwesbound.

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Procedure NA for arrivals at HOAGE on V4-92 northwesbound.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: Chart not to scale.

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)

AWOS-3
125.225
CLNC DEL
120.5
118.55 (When twr closed)
GND CON
120.5
LEESBURG TOWER*
127.5 (CTAF)
UNICOM
122.975
POTOMAC DEP CON
125.05 350.2

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 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)
PTOMC TWO DEPARTURE (RNAV)

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.

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

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′ AGL. 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.

NOTE: Chart not to scale.
TOP ALTITUDE: 3000

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.
NOTE: Takeoff Rwy 35 requires a climb to 1200 on heading 353° before proceeding on the ATC assigned heading for obstacle avoidance.

TAKEOFF MINIMUMS:
Rwys 17, 35: Standard

POTOMAC DEP CON
125.05 350.2

GND CON
120.5

LEESBURG TOWER ★
127.5 (CTAF)

UNICOM
122.975

AWOS-3
125.225

CLNC DEL
120.5

118.55 (When twr closed)

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.

125.225

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.

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):
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Rwy 11 helicopter visibility reduction below ¾ SM NA. DME/DME RNP 0.3 NA.

**MISSED APPROACH:** Climb to 620 then climbing left turn to 2000 direct GOFER and hold.

### ATC Frequencies

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>PATUXENT APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>119.575</td>
<td>121.0 250.3</td>
<td>123.0 (CTAF)</td>
</tr>
</tbody>
</table>

### RNAV (GPS) RWY 11

**WASHINGTON DC ADIZ, CTC POTOMAC APP CON**

**WASHINGTON DC METROPOLITAN ADIZ**

### RNAV (GPS) RWY 11

**Levin 2000**

**CIRCLING**

** categories **

<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>419-1</td>
<td>277 (300-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV/ VNAV DA</td>
<td>503-1</td>
<td>361 (400-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>520-1</td>
<td>378 (400-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>660-1</td>
<td>518 (600-1)</td>
<td>840-2</td>
<td>840-2½</td>
</tr>
</tbody>
</table>

### RNAV (GPS) RWY 11

**LEONARDTOWN, MARYLAND**

**Am: 29MAR18**

**ST MARY’S COUNTY RGNL (2W6)**

**RNAV (GPS) RWY 11**

### RNAV (GPS) RWY 11

**AWOS-3**

**PATUXENT APP CON**

**UNICOM**

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>PATUXENT APP CON</th>
<th>UNICOM</th>
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<td>119.575</td>
<td>121.0 250.3</td>
<td>123.0 (CTAF)</td>
</tr>
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### RNAV (GPS) RWY 11

**WASHINGTON DC ADIZ, CTC POTOMAC APP CON**

**WASHINGTON DC METROPOLITAN ADIZ**

### RNAV (GPS) RWY 11

**Levin 2000**

**CIRCLING**

### RNAV (GPS) RWY 11

**categories**

<table>
<thead>
<tr>
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<th>D</th>
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</tr>
<tr>
<td>CIRCLING</td>
<td>660-1</td>
<td>518 (600-1)</td>
<td>840-2</td>
<td>840-2½</td>
</tr>
</tbody>
</table>
Baro-VNAV and VDP NA when using Patuxent River altimeter setting. Rwy 29 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Patuxent River altimeter setting and increase all LPV DA to 475, LNAV/VNAV DA to 688 and all MDAs 40 feet, increase LNAV/VNAV all Cats visibility ½ SM, and LNAV Cats C and D visibility ⅓ SM.

Procedure NA for arrivals at GOFER on V16-157-213-229 northeast bound.

Procedure NA for arrivals at COLIN on V16-157-213 southwest bound and V20-33 southbound.

VSI and RNAV glidepath not coincident (VSI angle 3.00°/TCH 32).

MISSED APPROACH: Climbing left turn to 5000 direct COLIN and hold, continue climb in hold to 5000.

LEONARDTOWN, MARYLAND

Amdt 1A 07OCT21

38°19’N-76°33’W

RNAV (GPS) RWY 29

ST MARY’S COUNTY RGNL (2W6)

LEONARDTOWN, MARYLAND

AL-6344 (FAA)

RNAV (GPS) RWY 29

ST MARY’S COUNTY RGNL (2W6)
RNAV (GPS) RWY 9
LOUISA COUNTY/FREEMAN FLD (LKU)

AWOS-3
119.475

POTOMAC APP CON
132.85 323.125

UNICOM
122.975 (CTAF)

Category

A
B
C
D

LPV DA
739-3/4
250 (300-3/4)
NA
NA

LNAV/VNAV DA
748-3/4
259 (300-3/4)
NA
NA

LNAV MDA
840-1
351 (400-1)
NA
NA

CIRCLING
900-1
960-1
NA
NA

HOLD 3000

TURCO 3300

GP 3.00° TCH 40

 CATEGORY  A  B  C  D
 LPV DA  739-3/4  250 (300-3/4)  NA  NA
 LNAV/ VNAV DA  748-3/4  259 (300-3/4)  NA  NA
 LNAV MDA  840-1  351 (400-1)  NA  NA
 CIRCLING  900-1  960-1  NA  NA
**LOC RWY 27**

**LOUISA COUNTY/FREEMAN FLD (LKU)**

**AWOS-3**

| 119.475 |

**POTOMAC APP CON**

| 132.85 | 323.125 |

**UNICOM**

| 122.975 (CTAF) |

---

**DME required.**

- **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.

---

**LOCALIZER 108.55**

I-LKU

---

**ELEV 494**

**TDZE 494**

---

**GORDONSVILLE**

115.6 GVE

Chan 103

---

**LOUISA COUNTY/FREEMAN FLD (LKU)**

**Andt 4 15AUG19**

---

**38°01'N-77°58'W**

239
**RNAV (GPS) RWY 4**

**LURAY, VIRGINIA (LUA)**

- ** Category:** B
- ** APP CRS: 044°**
- ** Rwy Idg: 3126**
- ** TDZE: 903**
- ** Apt Elev: 902**

---

**AWOS-3**
118.275

**WASHINGTON CENTER**
133.2 282.2

**UNICOM**
122.8 [CTAF]

** Local Altimeter Setting**
- **AWOS-3:** 118.275
- **WASHINGTON CENTER:** 133.2 282.2
- **UNICOM:** 122.8 [CTAF]

**MISSED APPROACH:** Climb to

**HIRL Rwy 4-22**

**REIL Rwy 4 and 22**

**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.

**RNAV (GPS) RWY 4**

**LURAY CAVERNS (LUA)**

- ** AL-6229 (FAA) **

---

**Missed Approach Fix:**
- **5.0 NM**
- **020° to 200°**

**5300**

**5000**

**JORGI**

**TDZE 903**

**LINDEN**

**LDN**

**REIL Rwy 4 and 22**

---

** orig-c25mar21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

---

**LURAY, VIRGINIA**

**Orig-C 25MAR21**

**38°40'N-78°30'W**

---

**LURAY CAVERNS (LUA)**

**RNAV (GPS) RWY 4**

---

**240**
**RNAV (GPS) RWY 22**

**LURAY CAVENDS (LUA)**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP MDA</td>
<td>1460-1</td>
<td>557 (600-1)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>1820-1</td>
<td>917 (1000-1¼)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1820-1¼</td>
<td>918 (1000-1¼)</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**AWOS-3**

| 118.275 |

**WASHINGTON CENTER**

| 133.2 | 282.2 |

**UNICOM**

| 122.8 (CTAF) |

**Procedure NA for arrival at LDN VORTAC on V144 southeast bound.**

**MISSED APPROACH:**

- Climb to 6000 direct FIBIR and on track 213° to SAHDO and hold, continue climb-in-hold to 6000.
- Visibility reduction below 3/4 SM.
- Increase LNAV Cat B and Circling Cat B visibility 1/2 mile.

**Amdt 1C 25MAR21**

**38°40'N-78°30'W**

**LURAY, VIRGINIA**
VOR/DME-B
LURAY CAVENRS (LUA)

Visibility reduction by helicopters NA. When local altimeter setting not received, use Staunton/Waynesboro/Harrisburg altimeter setting and increase all MDA 120 feet.

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.

AWOS-3
118.275

WASHINGTON CENTER
133.2 282.2

UNICOM
122.8 (CTAF)

3266

ELEV 902

237° 5 NM from FAF

2890

4077

4900

HALPU LDN 7.5

CUNNY LDN 12

3304

4050 3268

4000

5.13° TCH 40

5.0 NM

4.5 NM

7.5 NM

CATEGORY A B C D
CIRCLING 2200-1¼ 2200-1½ NA NA

LURAY CAVERNS (LUA)
VOR/DME-B

AL-6229 (FAA)

LURAY, VIRGINIA

Amdt 3B 25MAR21

38°40'N-78°30'W

NE-3, 07 OCT 2021 to 02 DEC 2021
When local altimeter setting not received, use Staunton/Waynesboro/Harrisburg altimeter setting.

Missed approach: Climb to 2500 then climbing left turn to 5000 direct LUA NDB and hold, continue climb-in-hold to 5000.

AWOS-3  118.275
WASHINGTON CENTER  133.2  282.2
UNICOM  122.8 (CTAF)

FAF to MAP  2.1 NM
Knots
Min:Sec
60  1:24
90  1:03
120  0:50
150  0:42
180

Circling
2360-1  1458 (1500-1  1/4)
2360-1  1/2  1458 (1500-1  1/4)
NA
NA
### RNAV (GPS) RWY 28

**FALWELL (W24)**

- **APP CRS**: 283°
- **Rwy Idg**: 2932
- **TDZE**: 939
- **Apt Elev**: 939

#### V
**NA**
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.

<table>
<thead>
<tr>
<th>Location</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYH ASOS</td>
<td>119.8</td>
</tr>
<tr>
<td>ROANOKE APP CON</td>
<td>135.0</td>
</tr>
<tr>
<td>UNICOM</td>
<td>123.0 (CTAF)</td>
</tr>
</tbody>
</table>

### Lynchburg, Virginia

**AL-10250 (FAA)**

**RNAV (GPS) RWY 28**

- **ELEV**: 939
- **TDZE**: 939
- **MRL Rwy 10-28**

**SWARM**

- **3500**
- **Visual Segment - Obstacles**
- **CALVN**

**RW28**

**LARNC**

- **2700**
- **283°**
- **5 NM**

**Holding Pattern**

- **5 NM**
- **103°**
- **3000**

### Category

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

<table>
<thead>
<tr>
<th>Category</th>
<th>LNAV MDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1460-1</td>
</tr>
<tr>
<td>B</td>
<td>521</td>
</tr>
<tr>
<td>C</td>
<td>(600-1)</td>
</tr>
<tr>
<td>D</td>
<td>NA</td>
</tr>
</tbody>
</table>

**LYNCHBURG, VIRGINIA**

**Orig-B 07JAN16**

**37°23'N-79°07'W**

**FALWELL (W24)**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
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.

RNP APCH.

- 5 NM Holding Pattern
- GP 3.00° TCH 58
- Category A
- LNAV/DA 1175/40 270 (300-3½)
- LNAV/MDA 1400/50 495 (500-3½)
- LNAV/MDA 1400/60 489 (500-1¼)
- LNAV/VNAV 1394/60 489 (500-1¼)
- LPV DA 1175/40 270 (300-3½)
- CIRCLING 1660-1 1780-1¼ 1800-2 1800-2³⁄₄
- 3500 to JIXOX fr 075° to SWARM
- 5 NM to SWARM and hold.

SWARM JIXOX 3500 direct JIXOX and track 075° to SWARM and hold.

Procedure NA for arrivals at LYH VOR/DME on V470 eastbound.

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.

NE-3, 07 OCT 2021 to 02 DEC 2021
**RNAV (GPS) RWY 17**

**LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)**

**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.

169° to RW17

**Minimum Memory**

WOPIT 3.00° to CONCO and hold.

**Procedures NA at night.**

**Rwy 17** helicopter visibility reduction below 1 SM NA.

**MISSED APPROACH:** Climb to 1400 then climbing left turn to 3400 direct CONCO and hold.
RNAV (GPS) RWY 22
LYNCHBURG RGNL/ PRESTON GLENN FIELD (LYH)

ATIS 119.8  ROANOKE APP CON 135.0  254.325  LYNCHBURG TOWER 127.65 (CTAF)  GND CON 121.9  UNICOM 122.95

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 47°C. Rwy 22 helicopter visibility reduction below 3/4 SM NA. Circling Rwy 17 NA at night.

ATIS

MISSED APPROACH: Climb to 3000 direct KUCEC and track 207° to LYH VOR/DME and hold, continue climb-in hold to 3000.

3683

3051

For LNAV/VNAV, fly visual to airport, 216° - 3 miles.

Procedure NA for arrivals at LYH VOR/DME on V16-260 westbound.

3000 KUCEC 207° LHY 3

1469

1442

216° 3051

216° 216°

5 NM

HOLD

4400

5500

1130 KUCEC 1188

1659

1188

207°

207°

207°

4400 to KUJUM 034° (15.7)

216°

KUJUM

LYH

JIXOX

For LNAV/VNAV, fly visual to airport, 216° - 3 miles.

LGSI and RNAV glidepath not coincident (LGSI Angle 3.00°/TCH 45).

MIRL Rwy 17-35

HIRL Rwy 4-22

Holding Pattern

5 NM

034° (15.7)

216°

3000

KUCEC

LYH

VGSI and RNAV glidepath not coincident

(VGSI Angle 3.00°/TCH 45).

KUJUM

LYH

JIXOX

216°

216°

036°

216°

4400

030°

4400

4400

5 NM

HOLD

4400

5500

1659

1130 KUCEC 1188

1659

1130 KUCEC 1188

For LNAV/VNAV, fly visual to airport, 216° - 3 miles.

Procedure NA for arrivals at LYH VOR/DME on V16-260 westbound.

3000 KUCEC 207° LHY 3

1469

1442

216° 3051

216° 216°

5 NM

HOLD

4400

5500

1130 KUCEC 1188

1659

1130 KUCEC 1188

For LNAV/VNAV, fly visual to airport, 216° - 3 miles.

Procedure NA for arrivals at LYH VOR/DME on V16-260 westbound.

3000 KUCEC 207° LHY 3
**RNAV (GPS) RWY 35**

**LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)**

**ATIS** | **ROANOKE APP CON** | **LYNCHBURG TOWER** | **GND CON** | **UNICOM**
---|---|---|---|---
119.8 | 135.0 254.325 | 127.65 (CTAF) 257.8 | 121.9 | 122.95

---

**CIRCLING**

- **Rwy 17** NA at night.
- **Rwy 35** helicopter visibility reduction below 3/4 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

---

**MISSED APCH FIX**

- **RADIA**
  - 5 NM

**4900**

**RADIA**

- **VGS1 and descent angles not coincident**
  - (VGS1 Angle 4.00/1CH 17).

**RW35**

- **1.3 NM to RW35**
  - **3.00° TCH 40**

**CIPL1**

- **1.3 NM**
  - **3.5 NM**
  - **5 NM**

**CATEGORY** | **A** | **B** | **C** | **D**
---|---|---|---|---
**LP MDA** | 1480-1 547 (600-1) | NA | | 
**LNAV MDA** | 1500-1 567 (600-1) | NA | | 
**CIRCLING** | 1660-1 722 (800-1) 1780-1 842 (900-1 14) | NA | | 

---

**Procedure NA for arrivals at SYCAM on V469 southbound.**

**HIRL Rwy 4-22**

**HIRL Rwy 17-35**

**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

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**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

**HIRL Rwy 4-22**

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**LYNCHBURG, VIRGINIA**

Orig-B 06DEC18

**RNAV (GPS) RWY 35**

**LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)**

**37°20'N-79°12'W**

249
VOR RWY 22
LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)

DME required.

MISSED APPROACH: Climb to 2900 direct LYH VOR/DME and hold.

LYNCHBURG TOWER
127.65 (CTAF) 0 257.8

GND CON
121.9

UNICOM
122.95

ATIS
119.8

ROANOKE APP CON
135.0 254.325

CATEGORY A B C D
S-22 1740-1 1740-1¼ 1740-2¼ 1740-2½
CIRCLING 1740-1 1780-1¼ 1800-2½ 1800-2¾

REMAIN within 10 NM

VEFIS and descent angles not coincident (VEFIS Angle 3.00/TCH 45).

LYNCHBURG, VIRGINIA
Amdt 8D 03JAN19

Lynchburg, Virginia

VOR/DME LYH
109.2
APP CRS 207°
Rwy Idg 7100
TDZE 938
Apt Elev 938

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

109.2
207°

LYH

3051A

WIVSO
LYH [5.1]

1130A

1188A

027° (11)

VOR/DME LYH
109.2
APP CRS 207°
Rwy Idg 7100
TDZE 938
Apt Elev 938

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

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.
HURTT FOUR DEPARTURE (RNAV)

NOTE: Chart not to scale.

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

HURTT RGNL/PRESTON GLENN FIELD (LYH)
LYNCHBURG, VA

ROANOKE ROA

TOP ALTITUDE: 4000

DEPARTURE MINIMUMS:
Rwys 4, 17, 35: NA-ATC.
Rwy 22: Standard with minimum climb of 500’ per NM to 1440.
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.
RNAV (GPS) RWY 26
MOUNTAIN EMPIRE (MKJ)

For uncompensated Baro-VNAV systems, UNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). Circling NA north of Rwy 8-26. Rwy 26 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

MISSSED APPROACH: Climb to 6200 direct CICAG and hold, continue climb-in-hold to 6200.

AWOS-3 123.875
ATLANTA CENTER 127.85 269.3
UNICOM 122.7 (CTAF)

Procedure NA for arrival at PSK VORTAC on airway radials 192 CW 306.

CICAG

5700 to WUZUR

MINTS

5700 North

NE-3, 07 OCT 2021 to 02 DEC 2021

CATEGORY

B

C

D
LOC RWY 26
MOUNTAIN EMPIRE (MKJ)

Circling NA north of Rwy 8-26.
Helicopter visibility reduction below 3/4 SM NA.
DME required.

MISSING APPROACH: Climb to 4600 then climbing
left turn to 6000 on heading 070° and PSK VORTAC
R-252 to WUZUR INT and hold.

AWOS-3 123.875
ATLANTA CENTER 127.85 269.3
UNICOM 122.7 CTAF

ALTERNATE MISSED APCH FIX

LOCALIZER 110.5
I-MKJ
Chan 42

V - 4710

I-MKJ  7

MINTS 110.5
Chan 37

R - 252
PSK  18.4
WUZUR INT (IF/IAF)

 Procedure NA for arrival on PSK VORTAC airway
radials 192 CW 306.

4.6 NM
I-MKJ  7
BAYYA (3.9)

1.5 NM
I-MKJ  7
BAYYA

5700 NoPT
252° (18.4).

36°54'N-81°21'W

REIL Rwys 8 and 26
MIIR Rw 8-26

MIN. DISTANCE 6.1 NM

CIRCLING

MIRL Rwy 8-26

GART T 2/6

MINTS

NO PT

WUZUR INT

PSK

89.4

VGSI and descent angles not coincident
(VGSI Angle 3.75°/TCH 47).

One Minute Holding Pattern

DIVERT TO WUZUR INT

DME required.

Helicopter visibility reduction below 3/4 SM NA.

Circling NA north of Rwy 8-26.

NAVIGATION AIDS

AL-6416 (FAA) 20086

MARION/WYTHEVILLE, VIRGINIA

LOC/DME I-MKJ
110.5
Chan 42

APP CRS
259°
Rwy Idg
TDZE
Apt Elev
5252
2519
2558

ELEV 2558
TDZE 2519

VAAT 3 22JUN17

36°54'N-81°21'W

255
Rwy 13 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 46°C.

MISSED APPROACH: Climb to 3000 direct ULAKE and hold.

AWOS-3  118.45  GREENSBORO APP CON  124.35  269.225  CLNC DEL  124.85  UNICOM  122.7 (CTAF)

MISSED APCH FIX

RNAV (GPS) RWY 13
BLUE RIDGE (MTV)

HUSIR (IAF)

125° to RW13

APR CRS

TDZE

941

125°

RNAV (GPS) RWY 13
BLUE RIDGE (MTV)

HUSIR (IF/IAF)

125°

RNAV (GPS) RWY 13
BLUE RIDGE (MTV)

HUSIR (IF/IAF)

125°

RNAV (GPS) RWY 13
BLUE RIDGE (MTV)

HUSIR (IF/IAF)

125°

RNAV (GPS) RWY 13
BLUE RIDGE (MTV)

HUSIR (IF/IAF)

125°
RNAV (GPS) RWY 31
BLUE RIDGE (MTV)

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.

AWOS-3 118.45  GREENSBORO APP CON 124.35  269.225  CINC DEL 124.85  UNICOM 122.7 (CTAF)

HOLD 14000

14000-1 499 (500-1¾)
1420-1¾  495 (500-¾)
1432-1½  507 (500-1¼)
1440-1  599 (600-1½)
1540-1½  859 (900-2¾)

1.5 NM to RW31
2.5 NM
11.6 NM

Holding Pattern

LPV DA 1175-¾ 250 (300-¾)
LNAV/VNAV DA
LNAV MDA
CIRCLING

MIRL Rwy 13-31
REIL Rwy 13 and 31

36°38'N-80°01'W
ADF or DME required for procedure entry.

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)

Procedure NA for arrivals at PIGGS on V222 northeast bound.

PROCEED IN HOLD TO 2800.

LOC RWY 31
BLUE RIDGE (MTV)

LOC/DME
I-UVM
111.3
Chan 50
APP CRS
Rwy Idg
TDZE
925
Apt Elev
941

LOCALIZER 111.3
I-UVM
Chan 50

MISSED APPROACH: Climbing right turn to 2800 direct BALES IOM/I-UVM 6 DME and hold, continue climb in hold to 2800.

Locale NA for arrivals at PLEXI on V103 south bound.

S-31
1620-¾ 695 (700-¾)
1620-1½ 695 (700-1½)
1620-1 679 (700-1)
1800-2¾ 859 (900-2½)

CIRCLING
1620-1 679 (700-1)
1540-1½ 599 (600-1½)
1800-2¾ 859 (900-2½)

HOMGU FIX MINIMUMS
S-31
1380-¾ 455 (500-¾)
1380-1½ 455 (500-1½)
1420-1 479 (500-1)
1440-1 499 (500-1)

CIRCLING
1420-1 479 (500-1)
1440-1 499 (500-1)
1540-1½ 599 (600-1½)
1800-2¾ 859 (900-2½)

REIL Rwys 13 and 31
MIRL Rwy 13-31

258
36°38'N 80°01'W

MARSHALL, VIRGINIA
AL-5648 (FAA)
20310

MARTINSVILLE, VIRGINIA
Amdt 2 05NOV20

0.6% UP

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021
RNAV (GPS) RWY 3
ACCOMACK COUNTY (MFV)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

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)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

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For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.
MISSED APPROACH: Climbing right turn to 2000 on heading 220° and CCV VORTAC R-052 to UCGEL/CCV 10.6 DME and hold.

Procedure NA for arrival on CCV VORTAC airway radials 016 CW 041.

One Minute Holding Pattern

2000

034°

214°

034°

I-NAV 360°

034°

1500

034°

TCH 40

1.0 NM

3.1 NM

6.1 NM

MELFA, VIRGINIA

AMdt 1A 06DEC18

37°39'N-75°46'W

LOC Rwy 3

ACCOMACK COUNTY (MFV)
VOR RWY 3
ACCOMACK COUNTY (MFV)

MISSED APPROACH: Climb to 460 then climbing right turn to 1900 on heading 240° and CCV VORTAC R-042 to EXMOR to CCV VORTAC airway and hold.

AWOS-3 118.175
PAXUXTEN APP CON 127.95 314.0
UNICOM 122.8 (CTAF)

Procedure NA for arrivals on CCV VORTAC airway
radials 016 CW 041.

VOR RWY 3
ACCOMACK COUNTY (MFV)

AWOS-3 118.175
PAXUXTEN APP CON 127.95 314.0
UNICOM 122.8 (CTAF)

Procedure NA for arrivals on CCV VORTAC airway
radials 016 CW 041.

MISSED APPROACH: Climb to 460 then climbing right turn to 1900 on heading 240° and CCV VORTAC R-042 to EXMOR to CCV VORTAC airway and hold.

AWOS-3 118.175
PAXUXTEN APP CON 127.95 314.0
UNICOM 122.8 (CTAF)

Procedure NA for arrivals on CCV VORTAC airway
radials 016 CW 041.
RNAV (GPS) RWY 17
SUMMIT (EYV)

Procedure NA at night. RWY 17 helicopter visibility reduction below 1 SM NA.
Baro-VNAV NA when using Wilmington altimeter setting. For uncompensated
Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 47°C. When
local altimeter setting not received, use Wilmington altimeter setting and increase
all DA 27 feet, all MDA 40 feet and LNAV Cat C visibility 1/8 SM.

Procedure NA for arrival at DQO VORTAC
on airway radials 271 CW 358.

RNAV (GPS) RWY 17
SUMMIT (EYV)

Procedure NA for arrival at DQO VORTAC
on airway radials 271 CW 358.
RNAV (GPS) Y RWY 35
SUMMIT (EVY)

RNP APCH - GPS.

Final approach course offset 20°.

Procedure NA for arrival on ENO VORTAC airway radials 271 CW 063.
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.

RNAV (GPS) Z RWY 35

SUMMIT (EVY)

MISSED APPROACH: Climb to 2000 direct EPKAW and hold.

RNAV (GPS) Z RWY 35

SUMMIT (EVY)

MISSED APPROACH: Climb to 2000 direct EPKAW and hold.

RNAV (GPS) Z RWY 35

SUMMIT (EVY)

MISSED APPROACH: Climb to 2000 direct EPKAW and hold.
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.

MISSED APPROACH: Climbing right turn to 2000 on heading 288° and 244° bearing from HADIN LOM to USTIN INT/DGO 15.4 DME and hold, continue climb-in-hold to 2000.

Procedure NA for arrivals at DGO VORTAC airway radials 168 CW 286.

Procedure NA for arrivals at ENO VORTAC airway radials 267 CW 025.

One Minute Holding Pattern

<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>660-1</td>
<td>700-1</td>
<td>700-1¾</td>
<td>700-2</td>
</tr>
<tr>
<td></td>
<td>590 (600-1)</td>
<td>630 (700-1)</td>
<td>630 (700-1¼)</td>
<td>630 (700-2)</td>
</tr>
</tbody>
</table>
RNAV (GPS) RWY 23
SMITH MOUNTAIN LAKE (W91)

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.

ROANOKE APP CON
135.0 254.325

UNICOM
122.975 (CTAF)

MISSED APPROACH: Climb to 4000 direct ESISE and on track 212° to PIGGS and hold.

RNAV (GPS) RWY 23
MONETA, VIRGINIA (AL-6865 (FAA))

ELEV 892
TDZE 892

234° to RW23

212° to PIGGS and hold.

Visual Segment - Obstacles.

4 NM Holding Pattern

SMITH MOUNTAIN LAKE (W91)
37°06'N-79°36'W

RNAV (GPS) RWY 23
RNAV (GPS)-A
NEW MARKET (8W2)

**General Information**
- **Category:** A
- **App CRS:** 063°
- **TDZE:** NA
- **Apt Elev:** 963
- **AWOS-3:** 118.175
- **WASHINGTON CENTER:** 133.2 282.2
- **UNICOM:** 122.8 (CTAF)
- **WASHINGTON CENTER:** 118.175
- **AWOS-3:** 118.175
- **WASHINGTON CENTER:** 133.2 282.2
- **UNICOM:** 122.8 (CTAF)
- **WASHINGTON CENTER:** 118.175
- **AWOS-3:** 118.175
- **WASHINGTON CENTER:** 133.2 282.2
- **UNICOM:** 122.8 (CTAF)

**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.

**MISSED APPROACH:** Climbing left turn to 6100 direct YOSUG and hold, continue climb-in-hold to 6100.

**5 NM Holding Pattern**
- **YOSUG:** 5200 063° 243°
- **WIVUK:** 063° 3300
- **RW06:** 063° to RW06

**UNICOM**
- **WASHINGTON CENTER:** 118.175
- **AWOS-3:** 118.175
- **WASHINGTON CENTER:** 133.2 282.2
- **UNICOM:** 122.8 (CTAF)

**New Market, Virginia**
Orig 18SEP14

**New Market, Virginia**
Orig 18SEP14
RNAV (GPS)-B

NEW MARKET (8W2)

Final approach course offset 29.96°.

T A

1193
970
2363
3013
1595
2890
3304

3293

5700
JULNU

303°
213°

213°
5700

Unicom
122.8 (CTAF)

AWOS-3
118.175

WASHINGTON CENTER
133.2 282.2

UNICOM
122.8 (CTAF)

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.

UNICOM 122.8 (CTAF)

RNAV (GPS)-B

NEW MARKET (8W2)

NEW MARKET, VIRGINIA

 Orig A 28FEB19

38°39’N-78°43’W

269
TRANSITIONS TO HASBA INT MAY REQUIRE THE USE OF CROSSING RADIAL FROM ANOTHER TRANSITION FACILITY OR THE USE OF THE TRANSITIONS FACILITY'S DME.

NE-3, 07 OCT 2021 to 02 DEC 2021

NEWPORT NEWS, VIRGINIA

Amdt 2A 20JUN19

NEWPORT NEWS/ WILLIAMSBURG INTL (PHF)

ILS or LOC RWY 25

ELEV 42  TDZE 41

CIRCLING

568°

438°

230°

196°

142°

247° 6 NM from FAF

TWR 198° 142°

HI RL Rwys 2-20 and 7-25

REIL Rwys 20 and 25

TDZE 41

LOC/DME I-DHY

110.1

Chan 38

APP CRS

247°

Rwy Ldg

8003

TDZE

41

Apt Elev

42

NEWPORT NEWS TOWER*

118.7 (CTAF) 257.9

ATIS

128.65

NORFOLK APP CON

125.7

NEWPORT NEWS/WILLIAMSBURG INTL

оро 2-20 and 7-25

37°08'N-76°30'W

NEWPORT NEWS, VIRGINIA

Amdt 2A 20JUN19
RNAV (GPS) RWY 2
NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

**Amdt 1C 21MAY20**

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.**

**MISSED APPROACH:** Climb to 2000 direct PANLE and hold.

**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

---

**MISSING APCH FIX**

**BMOAT**
- 241-1
- 203 (200-1)
- 438 (500-1)
- 422 (500-1)

**GPS 3.00° TCH 60**
- 2300 to 202°
- 022° to 1700
- 660

**CIRCLING**
- 2000 PANLE only

**NEWPORT NEWS TOWER**
- 121.65
- 348.6 (PHF)

**ATIS**
- 118.7
- 257.9

**REIL Rlys 20 and 25**
- 489 (500-1)
- 718 (800-2)
- 738 (800-2¼)

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**REIL Rwys 20 and 25**
- 487 (500-1)
- 718 (800-2)
- 738 (800-2¼)

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**NEWPORT NEWS, VIRGINIA**

**Ammdt 1C 21MAY20**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

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**NEWPORT NEWS, VIRGINIA**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

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**NEWPORT NEWS, VIRGINIA**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

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**NEWPORT NEWS, VIRGINIA**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

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**NEWPORT NEWS, VIRGINIA**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
RNAV (GPS) RWY 7
NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

RNP APCH:

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 ½.

ATIS NORFOLK APP CON NEWPORT NEWS TOWER* GND CON CLNC DEL UNICOM
128.65 125.7 335.625 118.7 (CAF) 257.9 121.9 348.6 121.65 225.4 122.95

Procedure NA for arrivals at HCM VORTAC on V38 westbound.
Procedure NA for arrival on CVI VORTAC airway radials 351 CW 086.

MALSR
MISSED APPROACH:
Climb to 2500 direct RIPPS and hold.

ATIS NORFOLK APP CON NEWPORT NEWS TOWER* GND CON CLNC DEL UNICOM
128.65 125.7 335.625 118.7 (CAF) 257.9 121.9 348.6 121.65 225.4 122.95

RNP APCH:

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 ½.

ATIS NORFOLK APP CON NEWPORT NEWS TOWER* GND CON CLNC DEL UNICOM
128.65 125.7 335.625 118.7 (CAF) 257.9 121.9 348.6 121.65 225.4 122.95

Procedure NA for arrivals at HCM VORTAC on V38 westbound.
Procedure NA for arrival on CVI VORTAC airway radials 351 CW 086.
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: 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

**AIRPORTS:**
- NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

**RNP APCH:**
- **MISSED APPROACH:**
  - Climbing to 2300 direct NUTIY and hold.
- Procedure NA for arrivals at CCV VORTAC on V286 southeast bound.

**Aerodrome Reference Points:**
- NEWPORT NEWS TOWER: 125.7 335.625
- NORFOLK APP CON: 125.7 335.625

**ELEV**
- 42

**TDZE**
- 42

**NEWPORT NEWS/WILLIAMSBURG INTL (PHF)**

**Nearest**
- NEWPORT NEWS TOWER 128.65
- NORFOLK APP CON 125.7 335.625
- NEWPORT NEWS TOWER 128.65

**Aerodrome Frequencies:**
- ATIS 128.65
- NORFOLK APP CON 125.7 335.625
- NEWPORT NEWS TOWER 128.65
- GND CON 121.9 348.6
- UNICOM 122.95

**ARPC CRS**
- 202°

**TDZE**
- 42

**Apt Elev**
- 42

**LNAV only**
- 202° to RW20

**Circling**
- 450°

**LNAV/VNAV DA**
- 474-1/2

**LNAV MDA**
- 440-1

**LPV DA**
- 379-1/6

**Miscellaneous:**
- NE-3, 07 OCT 2021 to 02 DEC 2021
- NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

**VNAV**
- LNAV/DA

**NE-3, 07 OCT 2021 to 02 DEC 2021**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
HENRY THREE DEPARTURE

ATIS 128.65
CLNC DEL 121.65 225.4
GND CON 121.9 348.6
NEWPORT NEWS TOWER * 119.7 257.9 348.6
NORFOLK DEP CON 124.9 335.625

FLAT ROCK 113.3 FAK  Channel 80
N37°31.71' - W77°49.69'
L-36, H-10-12

HARCUM 108.8 HCM  Channel 25
N37°26.92' - W76°42.68'
L-34-36, H-10-12

SALISBURY 111.2 SBY  Channel 49
N38°20.70' - W75°30.63'
L-34-36, H-10-12

JAMIE 112.4 SWL  Channel 71
N38°03.40' - W75°27.83'
L-36, H-10-12

CAPE CHARLES 112.2 CCV  Channel 59
N37°20.85' - W75°59.86'
L-36

HOPEWELL 112.0 HPW  Channel 57
N37°19.73' - W77°06.96'
L-34-36, H-10-12

WAIKS  N37°03.03' - W77°04.13'
L-36, H-10-12

NORFOLK 116.9 ORF  Channel 116
N36°53.51' - W76°12.02'
L-35-36, H-10-12

NOTE: Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF MINIMUMS**

NOTE: RADAR required.

NOTE: Chart not to scale.

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.
When local altimeter setting not received, use Norfolk Intl altimeter setting and increase all DA 36 feet and all MDA 40 feet; increase CEKADFix.

Minimums S-LOC 5 Cat C and D visibility ½ mile. For inoperative MALSR, increase S-LOC 5 Cat C and D visibility to 1½ mile.

MISSED APPROACH: Climb to 500 then climbing left turn to 2000 on ORF VORTAC R:216 to NALDE INT/I-EYK 12.3 DME and hold.

Procedure NA for arrival on CVI VORTAC airway radial 055.

Procedure NA for arrival on ECG VOR/DME airway radial 265 CW 311.

VGSi and ILS glidepath not coincident (VGSi Angle 3.00°/TCH 43).

One Minute Holding Pattern

MALSR

MALSR, increase S-LOC 5 Cats C and D visibility to 1½ mile.

When local altimeter setting not received, use Norfolk Intl altimeter setting and increase all DA 36 feet and all MDA 40 feet; increase CEKAD Fix.

Minimums S-LOC 5 Cat C and D visibility ½ mile. For inoperative MALSR, increase S-LOC 5 Cat C and D visibility to 1½ mile.

MISSED APPROACH: Climb to 500 then climbing left turn to 2000 on ORF VORTAC R:216 to NALDE INT/I-EYK 12.3 DME and hold.
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.

NE-3, 07 OCT 2021 to 02 DEC 2021
NE-3, 07 OCT 2021 to 02 DEC 2021
NE-3, 07 OCT 2021 to 02 DEC 2021
NE-3, 07 OCT 2021 to 02 DEC 2021
281
ILS or LOC RWY 10
HAMPTON ROADS EXEC (PVG)

AWOS-3PT 118.375

UNICOM 122.725 (CTAF)

Procedure NA for arrival on HPW VORTAC airway radials 178 CW 237.

Procedure NA for arrival on ECG VOR/DME airway radials 250 CW 311.

MISSED APPROACH: Climb to 1600 then climbing right turn to 2500 on ORF VORTAC R-233 to PSALM/ORF 19.3 DME/RADAR and hold.


RNAV (GPS) RWY 10
HAMPSON ROADS EXEC (PVG)

**MISSED APPROACH:** Climb to 1,600 then climbing right turn to 2,500 direct PSALM and hold.

**Circling NA to Rwy 2 and 20:** Circling Cat C NA north of Rwy 10-28. Rwy 10 helicopter visibility reduction below \( \frac{3}{4} \) SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

**RNP APCH.**

**AWOS-3PT**
**NORFOLK APP CON**
**UNICOM**

- **AWOS-3PT:** 118.375
- **NORFOLK APP CON:** 118.9 353.7
- **UNICOM:** 122.725 (CTAF)

**CATEGORY**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>228-( \frac{3}{4} )</td>
<td>200 (200-( \frac{3}{4} ))</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>338-7( \frac{7}{8} )</td>
<td>310 (400-7( \frac{7}{8} ))</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>420-1</td>
<td>392 (400-1)</td>
<td>420-1( \frac{1}{8} )</td>
<td>392 (400-1( \frac{1}{8} ))</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>500-1</td>
<td>472 (500-1)</td>
<td>780-2( \frac{1}{4} )</td>
<td>752 (800-2( \frac{1}{4} ))</td>
</tr>
</tbody>
</table>

Properly NA for arrivals at DRONE on V1 southwest bound and on V266 southeast bound.

**ELEV 28**
**TDZE 28**

**HOLD**

- **SEZJY**
- **GP 3.00°**
- **TCH 45°**

**1600**
**2500**
**PSALM**

- **LNAV only.**

**HUMIV**
1.5 NM to RW10

**RONKKE (IF/IAF)**

**PSALM**

**2100**

**524°**

**200°**

**0°**

**102° to RW10**

**30°**

**36°47’N-76°27’W**

MISSED APPROACH: Climb to 1600 then climbing left turn to 2500 direct PSALM and hold.

Category

- **LNAV**
  - MDA: 460-1
  - 435 (500-1)

- **CIRCLING**
  - MDA: 500-1
  - 472 (500-1)

Visual Segment - Obstacles:

- 1.2 NM to RW28
- 2.4 NM to RW28
- 6.2 NM
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.
Rwy 14 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

Procedure NA for arrivals at CCV VORTAC on V1-139 northeast bound.

Procedure NA for arrivals at DEEMS on V1 southwest bound.

Rwy 14 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

Procedure NA for arrivals at CCV VORTAC on V1-139 northeast bound.

Procedure NA for arrivals at DEEMS on V1 southwest bound.

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

RNAV (GPS) RWY 14
Procedure NA for arrivals at SUNNS on V139 southwest bound.
RNAV (GPS) Z RWY 23
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

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.

MISSED APPROACH: Climb to 2000 direct CALEY and hold.

Procedure NA for arrivals at CCV VORTAC on V1-139 northeast bound.

CATEGORY
A
B
C
D
LPV DA
226 1/2 200 (200-1/2)
LNAV/ VNAV DA
403 3/4 377 (400-3/4)
LNAV MDA
480 1/2 454 (500-1/2) 480 7/8 454 (500-7/8)
CIRCLING
480-1 453 (500-1) 540-1 513 (600-1) 540-1 1/2 513 (600-1 1/2) 873 (900-2 3/4)
D NORFOLK, VIRGINIA
AL-291 (FAA)

VOR/DME RWY 32
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

Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing right turn to 2000 via ORF R-041 to JIMMY Int/11.8 DME and hold.

NORFOLK INTL (ORF')
Chan 25

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021
RIVER VISUAL RWY 5

PROCEDURE NOT AUTHORIZED AT NIGHT

Vertical Guidance Navoid
and Angle: I-ORF 3.00°

Weather minimums: 2100 foot ceiling and 5 mile visibility.

ATIS 127.15
NORFOLK APP CON
118.9 353.7
NORFOLK TOWER
120.8 257.8
GND CON
121.9
CLNC DEL
118.5
UNICOM
122.95
ASOS

LOCALIZER 109.1
I-ORF
Chan 28

LOM INGLE
329 OR

NORFOLK
116.9 ORF
Chan 116

NS
Norfolk

LAMBERTS POINT TERMINAL
2500 Recommended

140°
ELIZABETH RIVER

553

09015
RIVER VISUAL RWY 5
36°54'N-76°12'W
NORFOLK, VIRGINIA
NORFOLK INTL (ORF)
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ATIS 127.15
CLNC DEL 118.5
GND CON 121.9
NORFOLK TOWER 120.8 257.8
NORFOLK DEP CON 125.2 363.125 379.1

FLAT ROCK
113.3  FAK
Chan 80
N37°31.71'-W77°49.69'
L-36, H-10-12

HARCUM
108.8  HCM
Chan 25
N37°26.92'-W76°42.68'
L-34-36, H-10-12

DUNFE
N37°53.31'
W75°35.49'
L-36, H-10-12

HOPEWELL
112.0  HPW
Chan 57
N38°19.73'-W77°06.96'
L-34-36, H-10-12

CAPE CHARLES
112.2  CCV
Chan 59
N37°20.85'-W75°59.86'
L-34-36, H-10-12

SWOPE
N36°31.11'
W76°18.94'
L-35, H-12

NOTE: RADAR required.
NOTE: Chart not to scale.

TAKEOFF MINIMUMS:
Rwys 5, 14, 23, 32: Standard.

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 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 Ldg 8071 TDZE 14 Arpt Elev 15 AL-290 [USN] NORFOLK NS (CHAMBERS FIELD) (KNGU)

TACAN required.

\[\text{When ALS inop, increase vis to } \frac{3}{4} \text{ mile.}\]

\[\text{When ALS inop, increase CAT A8 vis to 1 mile, CAT CDE vis to } \frac{3}{4} \text{ miles.}\]

\[\text{*** Circling not authorized S of Rwy 10-28}\]

ATIS 118.425 342.0 NORFOLK APP CON 118.9 353.7 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 750/TCH 50.

Final approach course offset 1.27° and passes 59° from rwy threshold.

EMERG SAFE ALT 100 NM 4100

VGS and ILS glidepath not coincident (VGS Angle 3.00/TCH 35).

5 NM Holding pattern

CATEGORY

S-ILS 10

S-LOC 10

CIRCLING

A

B

C

D

E

264-1/2

250

(300-1/2)

466

466

466

466

466

545

545

545

545

545

545

700-2/1

685

685

685

685

685

HRLR 10-28

REIL Rwy 10-28

TDZL/CL Rwy 10-28

NORFOLK, VIRGINIA

Orig 17JUN21

ILS or LOC/DME RWY 10
EMERG SAFE ALT 100 NM 4100

VGS and RNAV GP not coincident with VGS/3 00/TCH 35.

† LNAV only

† LNAV only

Max holding alt 4000
Min holding alt 2300

CAUTION: Do not mistake Norfolk Intl S NM SE for Chambers Fld. Chambers Fld has a single runway, Norfolk Intl has intersecting runways.
DEPARTURE ROUTE DESCRIPTION
(Continued)

TAKE-OFF RWY 10: Climbing left turn heading 050°. Thence...

TAKE-OFF 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 (NGU1•ATLIC): Via vectors to ATLIC.

CAPE CHARLES TRANSITION (NGU1•CCV): Via vectors to CCV VORTAC. (NOTE: For altitudes 5000 and below).

ELIZABETH CITY TRANSITION (NGU1•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 (NGU1•FAK): Via vectors to WAIKS, then via ORF VORTAC R-290 to KELLE, then direct FAK VORTAC.

HARCUM TRANSITION (NGU1•HCM): * Via vectors to HCM VORTAC.

HOPEWELL TRANSITION (NGU1•HPW): Via vectors to HPW VORTAC.

J174 TRANSITION (NGU1•ORF): Via vectors to J174.

SALISBURY TRANSITION (NGU1•SBY): Via vectors to SCHOL, then SBY R-200 to SBY VORTAC.

SNOW HILL TRANSITION (NGU1•SWL): Via vectors to SCHOL, thence SBY R-200 to V139 to SWL VORTAC.

V139 TRANSITION (NGU1•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.
### NE-3, 07 OCT 2021 to 02 DEC 2021

**RNP APCH**

- *Circling to Rwy H01 NA at night. Circling visibility reduction by helicopters NA.*

**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 PUNYI or conduct the specified missed approach.

- NS NORFOLK HELIPORT, NHU, 150.00/0 65.

---

**EMERG SAFE ALT 100 NM 4100**

**CATEGORY**

<table>
<thead>
<tr>
<th>COPTER</th>
<th>560-1 550 600-1</th>
</tr>
</thead>
</table>

**AL-11771 [USN]**

**NORFOLK NS HELIPORT (KNHU)**

---

**NORFOLK, VIRGINIA**

**Orig 25FEB21**
**COPTER RNAV (GPS) 276°**

**APCH CRS**
- **Rwy Idg**: N/A
- **TDZE**: N/A
- **Arpl Elev**: 10

**NORFOLK NS HELIPORT**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**RNP APCH**
- **Circling visibility reduction by helicopters NA.**

**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, NHU, 275.00/0.65.**

---

**EMERG SAFE ALT**
- **100 NM 4100**

---

**CATEGORY**
- **CIRCLING**

**COPTER**
- **560-1**
- **550**
- **(600-1)**

**ORIG**
- **25FEB21**

---

**AL-11771 [USN]**

**NORFOLK NS HELIPORT**

**(KNHU)**

---

**Circling visibility reduction by helicopters**

**MISSED APPROACH. Climbing right turn to 2000 direct JEFFR and hold.**
NE-3, 07 OCT 2021 to 02 DEC 2021

**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 (NHU1•ATLIC):** Via vectors to ATLIC.

**CAPE CHARLES TRANSITION (NHU1•CCV):** Via vectors to CCV VORTAC. (NOTE: For altitudes 5000 and below.)

**ELIZABETH CITY TRANSITION (NHU1•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 (NHU1•FAK):** Via vectors to WAIKS, then via ORF VORTAC R-290 to KELLE, then direct FAK VORTAC.

**HARCUM TRANSITION (NHU1•HCM):** * Via vectors to HCM VORTAC.

**HOPEWELL TRANSITION (NHU1•HPW):** Via vectors to HPW VORTAC.

**J174 TRANSITION (NHU1•ORF):** Via vectors to J174.

**SALISBURY TRANSITION (NHU1•SBY):** Via vectors to SCHOL, then SBY R-200 to SBY VORTAC.

**SNOW HILL TRANSITION (NHU1•SWL):** Via vectors to SCHOL, thence SBY R-200 to V139 to SWL VORTAC.

**V139 TRANSITION (NHU1•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.
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 1/2 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 1/8 mile, LNAV Cat C visibility 1/2 mile and Circling Cat C visibility 1 mile.

MISSED APPROACH: Climb to 5600 direct HABEX and hold.
RNAV (GPS) RWY 27
GARRETT COUNTY (2G4)

AWOS-3 120.125
CLARKSBURG APP CON * 119.425 284.65
UNICOM 123.0 (CTAF)

MISSED APPROACH:
Climb 5700 direct PINIC and hold.

RW27

 CATEGORY

A

B

C

D

LPV DA 3175-1 250 (300-1) NA
LNAV/ VNAV DA 3197-1 272 (300-1) NA
LNAV MDA 3240-1 315 (400-1) NA
CIRCLING 3340-1 407 (500-1) 467 (500-1) 567 (600-1 1/2) NA
VOR RWY 9
GARRETT COUNTY (2G4)

DME required:
- Rwy 09 helicopter visibility reduction below 3/4 SM NA. When local altimeter setting not received, use Morgantown altimeter setting and increase all MDA 300 feet; increase S-09 Cat B and Circling Cat A and B visibility 3/4 SM and S-09 and Circling Cat C visibility 1 SM.

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.

Category A B C D
S-09 3460-1 527 (600-1) 3460-1 1/2 527 (600-1 1/2) NA
CIRCLING 3460-1 527 (600-1) 3500-1 1/2 567 (600-1 1/2) NA

NE-3, 07 OCT 2021 to 02 DEC 2021
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 ½ 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.

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 ½ 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.

Procedure NA for arrivals at SWL VORTAC on V139 southwest bound.

Final approach course offset 9.88°.
Straight-in Rwy 14 NA at night, Circling Rwy 2, 14, 20 NA at night. When local altimeter setting not received, use Salisbury altimeter setting and increase all MDAs 60 feet and visibility LNAV Cat B and Circling Cat C/D ¼ SM. Rwy 14 helicopter visibility reduction below 1 SM NA.

Climbing right turn to 2000 on 325° course to PFAIR and hold.

Procedure NA for arrivals at ATR VOR/DME on V308 eastbound.

Procedure NA for arrivals at SBY VORTAC on V29 southbound.

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 47).

LPV DA NA

LNAV/ VNAV DA NA

LNAV MDA 700-1 689 (700-1) 700-2 689 (700-2) 700-2¼ 689 (700-2¼)

CIRCLING 700-1 688 (700-1) 700-2 688 (700-2) 780-2½ 768 (800-2½)

Cat B and Circling Cat C/D SM. Rwy 14 helicopter visibility reduction below 1 SM NA.
RNAV (GPS) RWY 32
OCEAN CITY MUNI (OXB)

**RNAV APCH.**

- **MISSED APPROACH:** Climb to 2000 direct PFAIR and hold.

- **LNAV/VNAV DA** to 309 feet, LNAV/VNAV DA to 337 feet; increase all MDAs 60 feet and visibility Cat C ½ SM.

- **LPV DA** to 337 feet; increase all MDAs 60 feet and visibility Cat C ½ SM.

- **Baro-VNAV and VDP NA** when using Salisbury altimeter setting.

- **Uncompensated Baro-VNAV systems, LNAV/VNAV NA** below -15°C or above 48°C. Baro-VNAV and VDP NA when using Salisbury altimeter setting. When local altimeter setting not received, use Salisbury altimeter setting: increase LPV DA to 309 feet, LNAV/VNAV DA to 337 feet; increase all MDAs 60 feet and visibility Cat C ½ SM.

- **LNAV DA** to 2000 direct PFAIR and hold.

**ASOS**

- 119.025

**PATUXENT APP CON**

- * 127.95

- **314.0**

**CLNC DEL**

- 121.75

**UNICOM**

- 123.05 (CTAF)

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**SAWAS**

- CH 40413

**APP CRS**

- 325°

**Rwy ldg**

- 4074

**TDZE**

- 11

**Apt Elev**

- 11

**NE-3, 07 OCT 2021 to 02 DEC 2021**
LOC RWY 32
OCEAN CITY MUNI (OXB)

MISSED APPROACH:
Climb to 2000 then climbing right turn direct ATR VOR/DME and hold.

ASOS
119.025

PATUXENT APP CON
127.95 314.0

CLNC DEL
121.75

UNICOM
123.05 (CTAF)

DME required.

NA Circling to Rwy 14, 20 NA at night.

CIRCLING

S-LOC 32
340-1
329 (400-1)

LOC SBY 25 NM
2100

MISS APCH FIX

WATERLOO 112.6 ATR
Chan 73

MISS APCH FIX

ASSUMED MISSION POINT

0.9 1.2 NM 2.4 NM 6.1 NM

WATERLOO 112.6
Chan 73

MISA SBY 25 NM
2100

MISSED APPROACH

AL-5284 (FAA)

OCEAN CITY, MARYLAND

21168

OCEAN CITY, MARYLAND

Orig 17JUN21
When local altimeter setting not received, use Salisbury altimeter setting and increase all MDAs 60 feet and visibility Circling Cat C/D ¼ SM.

Circling Rwy 2, 14, 20 NA at night.

Procedure NA for arrivals at SWL VORTAC on V139.

Circling Rwy 2, 14, 20 NA at night. and increase all MDAs 60 feet and visibility Circling Cat C/D ¼ SM.

MISSED APPROACH: Climbing left turn to 2000 on SBY R-094 to CBEAV INT/11.7 DME and hold.

When local altimeter setting not received, use Salisbury altimeter setting and increase all MDAs 60 feet and visibility Circling Cat C/D ¼ SM.

Circling Rwy 2, 14, 20 NA at night.

Procedure NA for arrivals at SWL VORTAC on V139.

Circling Rwy 2, 14, 20 NA at night. and increase all MDAs 60 feet and visibility Circling Cat C/D ¼ SM.

When local altimeter setting not received, use Salisbury altimeter setting and increase all MDAs 60 feet and visibility Circling Cat C/D ¼ SM.

Circling Rwy 2, 14, 20 NA at night.

Procedure NA for arrivals at SWL VORTAC on V139.

Circling Rwy 2, 14, 20 NA at night. and increase all MDAs 60 feet and visibility Circling Cat C/D ¼ SM.

When local altimeter setting not received, use Salisbury altimeter setting and increase all MDAs 60 feet and visibility Circling Cat C/D ¼ SM.

Circling Rwy 2, 14, 20 NA at night.

Procedure NA for arrivals at SWL VORTAC on V139.
**RNAV (GPS) RWY 23L**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**ATIS** 317.6  
**OCEANA APP CON** 123.9 266.8  
**TOWER** 127.075 360.2  
**GND CON** 119.6 336.4  
**CLNC DEL** 254.4  
**ASR/PAR**  

**DMÈ/DMÈ RNP-0.3 NA**  
For uncompensated  
Baro-VNAV systems,  
LNAV/VNAV NA below -1.5°C  
(5°F) or above 54°C (130°F).  

**Norfolk Intl**  
**Norfolk NS**  

**Zoken**  
**Glidepath not coincident with PAR.**

**ELEV 22**  
**TDZE 21**  

**NEAR RWY 23L 25 NM**

**HGL all Rwys**  
**Wave-Off Lights all Rwys**

**Virginia Beach, Virginia**  
**Amdt 3 03JAN19**
RNAV (GPS) RWY 32L/R

ATIS 317.6  OCEANA APP 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
Final approach offset 326 ft rgt of RWY 32L and 374 ft of RWY 32R. Not coincident with PAR.
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 (NTU4 CCV)**: Via Radar vectors to CCV VORTAC.

**Eddys Transition (NTU4 EDDYS)**: Via Radar vectors to EDDYS.

**Harcum Transition (NTU4 HCM)**: Via Radar vectors to HCM VORTAC.

**Hopewell Transition (NTU4 HPW)**: Via Radar vectors to HPW VORTAC.

(At or below 17,000 only)

**Sunns Transition (NTU4 Sunns)**: Via Radar vectors to SUNNS.

(At or below 17,000 only)

**Waiks Transition (NTU4 Waiks)**: Via Radar vectors to WAiKS.

**Oceana-Four Departure (NTU4 • NTU)**

**Orig 03JAN19**
Procedure NA for arrivals at WITTO on V140 northeast bound.

Procedure NA for arrivals on GVE VORTAC airway radials 235° CW 040.

Procedure NA for arrivals at WITTO

VGSI and descent angles not coincident (VGSI Angle 4.00/TCH 42).

3000 OTTTR

4 NM Holding Pattern

Visual Segment - Obstacles.

CATEGORY

A

B

C

D

LNAV MDA

1040-1 579 (600-1) NA

CIRCLING

1300-1 836 (900-1) NA

MIRL Rwy 8-26

OTTTR and hold.

Circling Rwy 26 NA at night. DME/DME RNP-0.3 NA. VDP NA with Charlottesville altimeter setting. When local altimeter setting not received, use Charlottesville altimeter setting and increase all MDA 80 feet. Rwy 8 helicopter visibility reduction below 3/4 SM NA. Rwy 26 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH:
Climb to 3000 direct OTTTR and hold.

LNAV and descent angles not coincident (VGSI Angle 4.00/TCH 42).

3000 OTTTR
RNAV (GPS) RWY 26
ORANGE COUNTY (OMH)

**APP CRS**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>516 (600-1)</td>
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<td>1300-1½</td>
<td>836 (900-1½)</td>
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</tbody>
</table>

**AWOS-3** 118.075

**POTOMAC APP CON** 132.85 323.125

**UNICOM** 122.8 (CTAF)

**Procedure NA for arrivals** on CSN VORTAC airway radials 148 CW 239.

**Procedure NA for arrivals** on BRV VORTAC airway radials 214 CW 239.

**DEMO 1 & 3 MOA**

**ZAVRO and hold.**

Climb to 3100 direct ZAVRO and hold.

When local altimeter setting not received, use Charlottesville altimeter setting and increase all MDA 80 feet. Rwy 26 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 26 NA at night, Circling Rwy 26 NA at night.

**RNAV (GPS) RWY 26**

**AWOS-3** 118.075

**POTOMAC APP CON** 132.85 323.125

**UNICOM** 122.8 (CTAF)

**Procedure NA for arrivals** on CSN VORTAC airway radials 148 CW 239.

**Procedure NA for arrivals** on BRV VORTAC airway radials 214 CW 239.

When local altimeter setting not received, use Charlottesville altimeter setting and increase all MDA 80 feet. Rwy 26 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 26 NA at night, Circling Rwy 26 NA at night.

**DEMO 1 & 3 MOA**

**ZAVRO and hold.**

Climb to 3100 direct ZAVRO and hold.

When local altimeter setting not received, use Charlottesville altimeter setting and increase all MDA 80 feet. Rwy 26 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 26 NA at night, Circling Rwy 26 NA at night.

**RNAV (GPS) RWY 26**

**AWOS-3** 118.075

**POTOMAC APP CON** 132.85 323.125

**UNICOM** 122.8 (CTAF)

**Procedure NA for arrivals** on CSN VORTAC airway radials 148 CW 239.

**Procedure NA for arrivals** on BRV VORTAC airway radials 214 CW 239.

When local altimeter setting not received, use Charlottesville altimeter setting and increase all MDA 80 feet. Rwy 26 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 26 NA at night, Circling Rwy 26 NA at night.

**DEMO 1 & 3 MOA**

**ZAVRO and hold.**

Climb to 3100 direct ZAVRO and hold.

When local altimeter setting not received, use Charlottesville altimeter setting and increase all MDA 80 feet. Rwy 26 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 26 NA at night, Circling Rwy 26 NA at night.
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.

MISSED APPROACH: Climbing right turn to 3500 direct GVE VORTAC and hold.

1. Procedure NA for arrivals on GVE VORTAC airway radials 337 CW 040.

2. Helicopter visibility reduction below 1 SM NA.

3. Use Charlottesville altimeter setting and increase all MDA 80 feet.
RNAV (GPS) RWY 14

ATIS 322.425
App Con/Dep Con 121.0 250.3
Tower 123.7 343.65
Gnd Con 120.6 336.4
Clnce Del 135.2 316.125
ASR/Par

DME/DME RNP-0.3 NA
For uncompensated
Baro-VNAV systems,
Procedure NA below -15°C
(5°F) or above 54.5°C (130°F).

CAUTION: WCH group
4 aclt: 18 feet is less
than minimum 20 feet.

ST MARYS COUNTY RGNL
(STAF) KOSSE

RADAR REQUIRED
EMERG SAFE ALT 100 NM 5100

*RNAV only
*1.4 NM to RW14

RNAV (GPS) RWY 14

PATUXENT RIVER, MARYLAND

Amdt 1 09NOV17

38°17'N - 76°25'W PATUXENT RIVER NAS (TRAPNELL FLD) (KNNH)
RNAV (GPS) RWY 24

PATUXENT RIVER, MARYLAND

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

RNAV (GPS) RWY 24

38°17'N - 76°25'W PATUXENT RIVER NAS (TRAPPNELL FLD) (KNHK)

NE-3, 07 OCT 2021 to 02 DEC 2021

PATUXENT RIVER, MARYLAND
Amdt 1 09NOV17

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

PATUXENT RIVER, MARYLAND

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021

RNAV (GPS) RWY 24

NE-3, 07 OCT 2021 to 02 DEC 2021
NE-3, 07 OCT 2021 to 02 DEC 2021

**PATUXENT RIVER NAS (TRAPNELL FLD) (KNHK)**

**MISSING APPROACH:** Climb to 500, then climbing left turn to 2500 on NHK TACAN R-055 to SPRIG 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** 135.2 316.125

**ASR/PAR**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
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

TACAN NHK
Chan 39 (Y)
APCH CRS 302°
Rwy Idg TDZE 18
Arpt Elev 39

PATUXENT RIVER, MARYLAND

AL-314 (USN) PATUXENT RIVER NAS (TRAPNELL FLD) (KNHK)

MISSING APPROACH: Climb to 500, then climbing right turn to 2500 on NHK TACAN R-122 to HELEM and hold.

EMERG SAFE ALT 100 NM 5100
R4005 (D)

TACAN Rwy 6
HRL Rwy 5-24, 14-32

PATUXENT RIVER, MARYLAND
Orig 25MAY17

38°17'N - 76°25'W PATUXENT RIVER NAS (TRAPNELL FLD) (KNHK)

TACAN Rwy 6
Departure Rwy 2-20 not authorized.

**DEPARTURE ROUTE DESCRIPTION**

**TAKE-OFF RWY 6:** Climb to 6000 to heading 059°, thence...

**TAKE-OFF RWY 14:** Climbing left turn to 6000 to heading 060° within NHK TACAN 2.5 DME, thence...

**TAKE-OFF RWY 24:** Climb on heading 239° to NHK TACAN 2 DME, then climbing right turn to 6000 to heading 080°, thence...

**TAKE-OFF 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 (SBY6 CBEAV):** Then on SBY R-094 to CBEAV.
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

PATUXENT
Chan 39 NHK
N38°16.86' W76°24.64'

NOTTINGHAM 113.7 OTT
Chan 84
N38°42.35' W76°44.68'

CASANOVA 116.3 CSN
Chan 110
N38°38.47' W77°51.93'

GORDONSVILLE 115.6 GVE
Chan 103
N38°00.82' W78°09.18'

HOPEWELL 112.0 HPW
Chan 57
N37°19.73' W77°06.96'

HARCUM 108.8 HCM
Chan 25
N37°26.92' W76°42.68'

JUMIX
N37°52.38' W76°31.20'

ZIRAT 7000
R-4005

UNNAC
SWABY

STEIN L-35-36

CAPE CHARLES 112.2 CCV
Chan 59
N37°20.85' W75°59.86'

NORFOLK 116.9 ORF
Chan 116
N36°53.51' W76°12.02'

ATC BRIEF REQUIRED
135.2 316.125

TACAN REQUIRED

Note. Chart not to scale
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 6: Climb heading 059°, at NHK TACAN 3 DME turn left direct NHK to 3000, thence...

TAKE-OFF RWY 14: Climbing right turn to 3000 heading 250° within NHK TACAN 2.5 DME, intercept NHK R-222, thence...

TAKE-OFF RWY 24: Climbing left turn to 3000 heading 210°, intercept NHK TACAN R-222, thence...

TAKE-OFF RWY 32: Climbing left turn to 3000 heading 180°, intercept NHK TACAN R-222, thence...

...then on depicted route to the assigned transition or expect radar vectors. Cross ZIRAT at or below 7000.

CASANOVA TRANSITION (SWABY8 CSN): Then on CSN VORTAC R-131 to CSN.

EDDYS TRANSITION (SWABY8 EDDYS): Then on NHK R-202 to UCINE, then via OTT R-184 to EDDYS. Cross SWABY at or above 15,000.

GORDONSVILLE TRANSITION (SWABY8 GVE): Then on GVE VORTAC R-101 to GVE.

HARCUM TRANSITION (SWABY8 HCM): Then on HCM VORTAC R-026 to HCM.

HOPEWELL TRANSITION (SWABY8 HPW): Then on HPW VORTAC R-047 to HPW.

STEIN TRANSITION (SWABY8 STEIN): Then on NHK R-202 to UNNAC, then via CCV VORTAC R-323 to STEIN.
**RNAV (GPS) RWY 5**

*PETERSBURG, VIRGINIA*

**DINWIDDIE COUNTY (PTB)**

<table>
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<tr>
<th>WAAS CH</th>
<th>APP CRS</th>
<th>RWy Idg</th>
<th>TDZE</th>
<th>Apte Elev</th>
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<td>051°</td>
<td>5002</td>
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**AWOS-3** 133.325  
**POTOMAC** APP CON 126.75 307.2  
**GCO** 135.075  
**UNICOM** 122.7 (CTAF)

**MISSING APCH FIX**

**ONIKE** 231°  
**FASOS** 4 NM

**2000 to FASOS** 219° (31.4)

**RICHMOND RIC**

**AWOS-3**

**Procedure NA for arrival on RIC VORTAC airway radials 146 CW 283.**

**2000**  
231°  
051°

**GP 3.00**  
**TCH 42**

**4 NM Holding Pattern**

**FASOS**  
**RALOC**  
**NIYIP**  
**1.7 NM to RW05**

**2000**  
**ONIKE**

**760**  
**1.1 NM to RW05**

**LNAV only**

**MISSING APPROACH**

Climb to 2000 direct ONIKE and hold.

**INOP**

Table does not apply to LPV all Cats, LNAV/VNAV all Cats and LNAV Cat A and B. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Richmond Executive-Chesterfield County altimeter setting.

DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Richmond Executive-Chesterfield County altimeter setting: increase LPV DA to 534 feet and LNAV/VNAV DA to 546 feet and all MDA 40 feet; increase LNAV Cat C visibility 1/4 mile and increase Circling Cat C visibility 1/4 mile. For inop ODALS when using Richmond Executive-Chesterfield County altimeter setting, increase LPV all Cats visibility and LNAV/VNAV all Cats visibility to 1/4 mile. INOP table does not apply to LNAV Cat A and B when using Richmond Executive-Chesterfield County altimeter setting. For inop ODALS, increase LNAV Cat C visibility to 1/4 mile.

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**PETERSBURG, VIRGINIA**

Amdt 2 27APR17

37°11’N - 77°30’W

**DINWIDDIE COUNTY (PTB)**

RNAV (GPS) RWY 5

**RNAV (GPS) RWY 5**

**DINWIDDIE COUNTY (PTB)**
RNAV (GPS) RWY 23
DINWIDDIE COUNTY (PTB)

Baro-VNAV NA when using Richmond Executive-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 Executive-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 ½ mile. Proceed 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 205 CW 215.

Procedure NA for arrivals at RIC VORTAC airway radials 248 CW 283.

Procedure NA for arrivals at HPW VORTAC airway radials 205 CW 215.

Procedure NA for arrivals at RIC VORTAC airway radials 248 CW 283.

Procedure NA for arrivals at HPW VORTAC airway radials 205 CW 215.

Procedure NA for arrivals at RIC VORTAC airway radials 248 CW 283.

Procedure NA for arrivals at HPW VORTAC airway radials 205 CW 215.

Procedure NA for arrivals at RIC VORTAC airway radials 248 CW 283.
DME required. Helicopter visibility reduction below 3/4 SM NA. VDP NA when using Richmond Executive-Chesterfield County altimeter setting. When local altimeter setting not received, use Richmond Executive-Chesterfield County altimeter setting and increase all MDA 40 feet; increase S-LOC 5 Cat C visibility 1/4 mile and Circling Cat C visibility 1/4 mile. For inop ODALS, increase S-LOC 5 Cat C visibility to 1 1/4 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 Executive-Chesterfield County altimeter setting.

MISSING APPROACH:
Climbing left turn to 2000 on heading 355° and on RIC VORTAC R-223 to MATOX/RIC 16.3 DME and hold.

AWOS-3 133.325
POTOMAC APP CON 126.75 307.2
GCO 135.075
UNICOM 122.7 (CTAF)

DINWIDDIE COUNTY (PTB)

PETERSBURG, VIRGINIA

Amdt 1 27APR17

37°11'N - 77°30'W
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 ½ mile and YETUB fix minimums S-23 Cat C visibility ½ mile and Circling Cat C visibility ¼ mile. DME required.

**AWOS-3**
- 133.325

**POTOMAC**
- 126.75
- 307.2

**GCO**
- 135.075

**UNICOM**
- 122.7 (CTAF)

---

**MISSING APCH FIX**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**MISSED APPROACH:**
- Climb to 2000 on heading 214° and HPW R-244 to FASOS/HPW 30.8 DME and hold.

**NOPT for arrival on HPW VORTAC airway radials 323 CW 025.**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**CIRCLING**

**S-23**
- 620-1 429 (500-1)
- 620-1 429 (500-1)

**CIRCLING**
- 680-1 487 (500-1)
- 680-1 487 (500-1)

---

**VOR RWY 23**

**DINWIDDIE COUNTY (PTB)**

**AWOS-3**
- 133.325

**POTOMAC**
- 126.75
- 307.2

**GCO**
- 135.075

**UNICOM**
- 122.7 (CTAF)

---

**MISSING APCH FIX**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**MISSED APPROACH:**
- Climb to 2000 on heading 214° and HPW R-244 to FASOS/HPW 30.8 DME and hold.

**NOPT for arrival on HPW VORTAC airway radials 323 CW 025.**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**CIRCLING**

**S-23**
- 620-1 429 (500-1)
- 620-1 429 (500-1)

**CIRCLING**
- 680-1 487 (500-1)
- 680-1 487 (500-1)

---

**VOR RWY 23**

**DINWIDDIE COUNTY (PTB)**

**AWOS-3**
- 133.325

**POTOMAC**
- 126.75
- 307.2

**GCO**
- 135.075

**UNICOM**
- 122.7 (CTAF)

---

**MISSING APCH FIX**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**MISSED APPROACH:**
- Climb to 2000 on heading 214° and HPW R-244 to FASOS/HPW 30.8 DME and hold.

**NOPT for arrival on HPW VORTAC airway radials 323 CW 025.**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**CIRCLING**

**S-23**
- 620-1 429 (500-1)
- 620-1 429 (500-1)

**CIRCLING**
- 680-1 487 (500-1)
- 680-1 487 (500-1)

---

**VOR RWY 23**

**DINWIDDIE COUNTY (PTB)**

**AWOS-3**
- 133.325

**POTOMAC**
- 126.75
- 307.2

**GCO**
- 135.075

**UNICOM**
- 122.7 (CTAF)

---

**MISSING APCH FIX**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**MISSED APPROACH:**
- Climb to 2000 on heading 214° and HPW R-244 to FASOS/HPW 30.8 DME and hold.

**NOPT for arrival on HPW VORTAC airway radials 323 CW 025.**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**CIRCLING**

**S-23**
- 620-1 429 (500-1)
- 620-1 429 (500-1)

**CIRCLING**
- 680-1 487 (500-1)
- 680-1 487 (500-1)

---

**VOR RWY 23**

**DINWIDDIE COUNTY (PTB)**

**AWOS-3**
- 133.325

**POTOMAC**
- 126.75
- 307.2

**GCO**
- 135.075

**UNICOM**
- 122.7 (CTAF)

---

**MISSING APCH FIX**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**MISSED APPROACH:**
- Climb to 2000 on heading 214° and HPW R-244 to FASOS/HPW 30.8 DME and hold.

**NOPT for arrival on HPW VORTAC airway radials 323 CW 025.**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**CIRCLING**

**S-23**
- 620-1 429 (500-1)
- 620-1 429 (500-1)

**CIRCLING**
- 680-1 487 (500-1)
- 680-1 487 (500-1)

---

**VOR RWY 23**

**DINWIDDIE COUNTY (PTB)**

**AWOS-3**
- 133.325

**POTOMAC**
- 126.75
- 307.2

**GCO**
- 135.075

**UNICOM**
- 122.7 (CTAF)

---

**MISSING APCH FIX**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**MISSED APPROACH:**
- Climb to 2000 on heading 214° and HPW R-244 to FASOS/HPW 30.8 DME and hold.

**NOPT for arrival on HPW VORTAC airway radials 323 CW 025.**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**CIRCLING**

**S-23**
- 620-1 429 (500-1)
- 620-1 429 (500-1)

**CIRCLING**
- 680-1 487 (500-1)
- 680-1 487 (500-1)

---

**VOR RWY 23**

**DINWIDDIE COUNTY (PTB)**

**AWOS-3**
- 133.325

**POTOMAC**
- 126.75
- 307.2

**GCO**
- 135.075

**UNICOM**
- 122.7 (CTAF)

---

**MISSING APCH FIX**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**MISSED APPROACH:**
- Climb to 2000 on heading 214° and HPW R-244 to FASOS/HPW 30.8 DME and hold.

**NOPT for arrival on HPW VORTAC airway radials 323 CW 025.**

**YETUB INT**
- HPW 18.3

**ETRIK INT**
- HPW 14.2

---

**CIRCLING**

**S-23**
- 620-1 429 (500-1)
- 620-1 429 (500-1)

**CIRCLING**
- 680-1 487 (500-1)
- 680-1 487 (500-1)
RNAV (GPS) RWY 22

ABERDEEN, MARYLAND

**ATIS**

124.425

**POTOMAC APP CON/DEP CON**

125.525 291.625

**TOWER**

126.15 229.6

**GND CON**

121.9

**WAAS CH70342 W22A**

**APCH CRS**

218°

**Rwy Idg**

7998

**TDZE**

45

**Arpt Elev**

45

**AL-555 (USA)**

**PHILLIPS AAF (ABERDEEN PROVING GROUND) (KAPG)**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**MISSING APPROACH: Climb to 500, then climbing right turn to 2000 direct SUDOY and hold.**

**752**: DME/DME RNP-0.3 NA

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -13°C (9°F) or above 54°C (130°F).

Baro-VNAV and VDP NA when using Baltimore altimeter setting.

When local altimeter setting not received, use Baltimore altimeter setting, increase all DA/MDA 80’, and all visibilities 1/4.

Helicopter visibility reduction below 3/4 SM not authorized.

Inoperative table does not apply to LPV all CAT and LNAV CAT AB.

**SUDOY**

**500**

**2000**

Visual segment - Obstacles

**R4001A(B)**

**GP 3.00° TCH 59°**

**CURVY**

VGS and RNAV glidepath not coincident (VGS Angle 3.00/TCH 49).

**WIDEP**

1.2 NM to RW22

**REDTO**

218°

**218° to RW22**

**2600**

**5 NM**

091° 271° 489

053° 233°

6 NM

NoPT for arrival at CURVY on V166 westbound.

**M5A RW22 25 NM**

**ELEV 45**

**TDZE 45**

**HIRL all Rwy**

**REIL Rwy 22**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**20366**
**RNAV (GPS) RWY 2**

**ATIS**
263.15

**POTOMAC APP CON/DEP CON**
128.525 306.925

**TOWER**
118.6 360.2

**GND CON**
121.75 340.2

**ASR/PAR**

**RNP APCH**

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F).

Wheel crossing height
Group 3: 15 ft;
Group 4: 10 ft (is less than the minimum height).

**EMERG SAFE ALT 100 NM 5600**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**AMDT 3 10SEP20**

**QUANTICO, VIRGINIA**

**QUANTICO MCAF (KNYG)**

**AL-339 (USN)**

**MISSING APPROACH:** Climb to 600, then climbing right turn to 2000 direct BRV VORTAC and hold.
Final approach course 95° from Rwy centerline at 3000' from threshold.

Cross BROOKE VORTAC 3000 min alt from IAF GRUBY

CAUTION: Short Intermediate, recommend early configuration

EMERG SAFE ALT 100 NM 5600

**Circling not authorized W of Rwy 2-20.**

MISSED APPROACH: Climbing right turn to 2000 direct BRV VORTAC, then via BRV R-244 to MAAGS and hold.

<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>550 (600-1)</td>
<td>560-1½</td>
<td>550 (600-1¼)</td>
</tr>
<tr>
<td>CIRCLING*</td>
<td>560-1</td>
<td>640-1</td>
<td>720-2</td>
<td>800-2½</td>
</tr>
</tbody>
</table>

HIRL Rwy 2-20
REIL Rwy 2-20
RNAV (GPS) RWY 11
NEW KENT COUNTY (W96)

Amdt 2B, 12OCT17

NE-3, 07 OCT 2021 to 02 DEC 2021

QUINTON, VIRGINIA
AL-6855 (FAA)

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.

AWOS-3
RIC ASOS
POTOMAC APP CON
UNICOM

119.875
119.15
126.4
122.8 (CTAF)

119.75
263.025
282.375

Amdt 2B, 12OCT17

NoPT for arrival on RIC VORTAC airway radials 223 CW 317.
Use Richmond Intl altimeter setting. DME/DME RNP-0.3 NA.
Helicopter visibility reduction below 1 SM NA.
Procedure NA at night.

RNNAV (GPS) RWY 29
NEW KENT COUNTY (W96)

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>RIC ASOS</th>
<th>POTOMAC APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>119.875</td>
<td>119.15 263.025</td>
<td>126.4 282.375</td>
<td>122.8 (CTAF)</td>
</tr>
</tbody>
</table>

Procedure NA for arrivals at HPW VORTAC on V260 southwest bound.

Procedure NA for arrivals at HCM VORTAC on V33.

Helicopter visibility reduction below 1 SM NA.
Procedure NA at night.

Use Richmond Intl altimeter setting. DME/DME RNP-0.3 NA.

Use Richmond Intl altimeter setting. DME/DME RNP-0.3 NA.

Helicopter visibility reduction below 1 SM NA.
Procedure NA at night.
RICHMOND
114.1 RIC
Chan 88

VIQUOT, VIRGINIA
AL-6855 (FAA)

VOR-A
NEW KENT COUNTY (W96)

Use Richmond Intl altimeter setting. Procedure NA at night.
Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 2000 direct HPW VORTAC and hold.

AWOS-3
119.875
RIC ASOS
119.15 263.025
POTOMAC APP CON
126.4 282.375
UNICOM
122.8 (CTAF)

RICHMOND
114.1 RIC
Chan 88

NoPT for arrival on HPW VORTAC airway radials 178, 205, and 237.

IF/IAF
HOPEWELL
112.0 HPW
Chan 57

Helicopter visibility reduction below 1 SM NA.
Use Richmond Intl altimeter setting. Procedure NA at night.

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021
RNAV (GPS) RWY 7
TAZEWELL COUNTY (JF’Z)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Wise altimeter setting and increase all MDA 100 feet, increase LP and LNAV Cat C visibility ½ mile and Circling Cat C visibility ½ mile. Procedure 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 3200 then climbing left turn to 5900 direct ZOMAD and hold, continue climb-in-hold to 5900.

5 NM Holding Pattern

5900

CAYBA

4500

3240

7.3 NM

3.9 NM

-1.7 NM

Category

A

B

C

D

LP MDA
3080-1
427 (500-1)
3080-1¼
427 (500-1¼)
NA

LNAV MDA
3080-1
427 (500-1)
3080-1¼
427 (500-1¼)
NA

Circling
3240-1
587 (600-1)
3240-1½
587 (600-1½)
NA
RNAV (GPS) RWY 25
TAZEWELL COUNTY (JF’Z)

Baro-VNAV NA when using Wise altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA 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 3/8 mile, increase LNAV Cat C visibility 1/2 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)

---

Amdt 1B  05NOV20

---

MISSED APPROACH: Climb to 3800 then climbing right turn to 6400 direct NAYIC and hold, continue climb-in-hold to 6400.

---

ACRC 50202

---

Notes:
- LNAV only.
- LNAV and RNAV glidepath not coincident (VGSI Angle 3.50/TCH 47).
- Climb to 3800 then climbing right turn to 6400 direct NAYIC and hold, continue climb-in-hold to 6400.

---

Baro-VNAV NA when using Wise altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA 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 3/8 mile, increase LNAV Cat C visibility 1/2 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)

---

Amdt 1B  05NOV20

---

MISSED APPROACH: Climb to 3800 then climbing right turn to 6400 direct NAYIC and hold, continue climb-in-hold to 6400.

---

ACRC 50202

---

Notes:
- LNAV only.
- LNAV and RNAV glidepath not coincident (VGSI Angle 3.50/TCH 47).
- Climb to 3800 then climbing right turn to 6400 direct NAYIC and hold, continue climb-in-hold to 6400.

---

Baro-VNAV NA when using Wise altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA 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 3/8 mile, increase LNAV Cat C visibility 1/2 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)

---

Amdt 1B  05NOV20

---

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 (JF’Z)  

AWOS-3  
118.075

ATLANTA CENTER  
127.85  269.3

GCO  
135.075

ALTERNATE MISSED APCH FIX

STACY  
GZG 31.4

RICHLANDS, VIRGINIA  AL-9221 (FAA)  

APP CRS  
118.075  252°

Rwy Idg  
4299  75

Apt Elev  
2653

LOC/DME I-JFZ  
109.75  Chan 34 (Y)

NE-3, 07 OCT 2021 to 02 DEC 2021

RICHLANDS, VIRGINIA  37°04’N-81°48’W

Amdt 1C  05NOV20

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.

MISSED APPROACH: Climbing right turn to 6000 on heading 324° and GZG R-011 to STACY INT/GZG 31.4 DME and hold.

HOLD 6000

LOCALIZER 109.75
I-JFZ  Chan 34 (Y)

ELEV 2653  TDZE 2653

LOC/DME RWY 25
TAZEWELL COUNTY (JF’Z)

When VGSI inop, Circling Rwy 25 NA at night. Circling Cat C visibility mile. 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.

MISSED APPROACH: Climbing right turn to 6000 on heading 324° and GZG R-011 to STACY INT/GZG 31.4 DME and hold.

NoPT for arrival on BLF VOR/DME airway radials 340 CW 122.

VGSI and descent angles not coincident (VGSI Angle 3.50/TCH 47).

NE-3, 07 OCT 2021 to 02 DEC 2021

When VGSI inop, Straight-in/Circling Rwy 25 NA at night. Circling Cat C visibility mile. When local altimeter setting not received use Wise altimeter setting and increase all MDA 100 feet, increase S-25 Cat C visibility mile and Circling Cat C visibility 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.

MISSED APPROACH: Climbing right turn to 6000 on heading 324° and GZG R-011 to STACY INT/GZG 31.4 DME and hold.

VGSI and descent angles not coincident (VGSI Angle 3.50/TCH 47).

NE-3, 07 OCT 2021 to 02 DEC 2021

When VGSI inop, Straight-in/Circling Rwy 25 NA at night. Circling Cat C visibility mile. When local altimeter setting not received use Wise altimeter setting and increase all MDA 100 feet, increase S-25 Cat C visibility mile and Circling Cat C visibility 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.

MISSED APPROACH: Climbing right turn to 6000 on heading 324° and GZG R-011 to STACY INT/GZG 31.4 DME and hold.
RNAV (GPS) RWY 15

RICHMOND EXEC-CHESETERFIELD COUNTY (FCT)

RNAV (GPS) RWY 15

RICHMOND, VIRGINIA

Amdt 1D 07NOV19

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 ½ mile. VDP and Baro-VNAV NA when using Richmond Intl altimeter setting.

MISSED APPROACH: Climb to 2000 direct PUBBS and hold.

AWOS-3PT  128.625
POTOMAC APP CON  126.75  307.2
CLNC DEL  124.6
UNICOM  123.05 (CTAF)

Procedure NA for arrival on RIC VORTAC airway radials 248 CW 317.

Procedure NA for arrival on FAK VORTAC airway radials 001 CW 100.

Category

A

B

C

D

LPV DA

486-1  250 (300-1)

LNAV/ VNAV DA

692-1½  456 (500-1½)

LNAV MDA

680-1  444 (500-1)

680-1½  444 (500-1½)
RICHMOND, VIRGINIA

**LOC I-EZD** 110.9

**APP CRS** 023°

**Rwy Idg** 6607

**TDZE** 161

**Apt Elev** 168

**MALSR** 001°-185°

**MISSED APPROACH:** Climb to 2000 on RIC VORTAC R-018 to EPICS INT/RIC 17.3 DME and hold.

**ATIS** 119.15 263.025

**POTOMAC APP CON** 126.4 282.375 307.2

**RICHDON TOWER** 121.1 257.8

**GND CON** 121.9 348.6

**CLNC DEL** 127.55 348.6

**ALTERNATIVE MISSED APCH FIX**

**HOPEWELL** HPW 112.0

**Chan 57**

**RIC R-018**

**ILS or LOC RWY 2**

**RICHMOND INTL (RIC)**

**RICHMOND, VIRGINIA**

**Amdt 2C 10SEP20**

**37°30’N-77°19’W**

**ELEV 168**

**TDZE 161**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
For inoperative ALSF-2, increase S-ILS 34
Cat E visibility to RVR 4000 and S-LOC 34
Cats C, D, and E visibility to RVR 5500.

ALSF-2

MISSED APPROACH: Climb to 800 then climbing
right turn to 2000 via 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

MISSAPCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

GND CON
121.9

EPICS
RIC 17.3

ATIS
119.15

MISSED APCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

ATIS
119.15

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

MISSAPCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

GND CON
121.9

EPICS
RIC 17.3

ATIS
119.15

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

MISSAPCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

GND CON
121.9

EPICS
RIC 17.3

ATIS
119.15

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

MISSAPCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

GND CON
121.9

EPICS
RIC 17.3

ATIS
119.15

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

MISSAPCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

GND CON
121.9

EPICS
RIC 17.3

ATIS
119.15

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

MISSAPCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

GND CON
121.9

EPICS
RIC 17.3

ATIS
119.15

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

MISSAPCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

GND CON
121.9

EPICS
RIC 17.3

ATIS
119.15

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

MISSAPCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

GND CON
121.9

EPICS
RIC 17.3

ATIS
119.15

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

MISSAPCH FIX

EPICS
RIC 17.3

113.3 FAK
Chan 80

108.9 HCM
Chan 85

114.1 RIC 018 R-018

1057
A

1587
A

1002
A

ELEV
167
TDZE
161

GND CON
121.9

EPICS
RIC 17.3

ATIS
119.15

POTOMAC APP CON
126.4 282.375
[001°-185°]
RNAV (RNP) Y RWY 2

RICHMOND INTL (RIC)

MISSED APPROACH:
Climb to 2100 on track 023° to IMASE and hold.

For uncompensated Baro-VNAV systems, procedure NA below -11°C (13°F) or above 54°C (130°F). Rwy 2 helicopter visibility reduction below ½ SM NA. For inop ALS, increase RNP 0.11 all Cats visibility to 1 SM and RNP 0.3 all Cats visibility to 1½ SM.

APP CRS
023°
Rwy Idg 6607
TDZE 161
Apt Elev 168

POTOMAC APP CON
126.4 282.375 (001°-185°)
(186°-360°)

RICHMOND TOWER
121.1 257.8

GND CON
121.9 348.6

CLNC DEL
127.55 348.6

ATIS
119.15 263.025

See planview for multiple IF locations.

RNP AR APCH.

Authorized by RNP AR APCH.

RICHMOND, VIRGINIA
Orig-B 19JUL18

37°30'N-77°19'W

RNAV (RNP) Y RWY 2

RICHMOND INTL (RIC)
RNAV (RNP) Y RWY 16
RICHMOND INTL (RIC)

For uncompensated Baro-VNAV systems, procedure NA below -11°C (13°F) or above 54°C (130°F). For inop ALS, increase RNP 0.11 all Cats visibility to RVR 5500 and RNP 0.30 all Cats visibility to 1/2 SM.

**ATIS**
119.15 263.025
126.4 282.375 (001°-185°)
126.75 307.2 (186°-360°)

**POTOMAC APP CON**
RICHMOND TOWER
GND CON
CLNC DEL
121.1 257.8
121.9 348.6
127.55 348.6

**RWY 16**

RNP AR APCH.

**MALSR**

**MISS APPROACH:**
Climb to 2500 on track 157° to HAGLI and hold.

**MISSED APCH FIX**
OPUKE
HAGLI

**VGSI and RNAV glidepath not coincident**
(VGSI Angle 3.00/TCH 71).

**ELEV**
168

**TDZE**
167

**AUTHORIZATION REQUIRED**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**RICHMOND, VIRGINIA**
Orig-C 19JUL18

**37°30’N-77°19’W**

**369**
RNAV (RNP) Y RWY 20
RICHMOND INTL (RIC)

AUTHORIZATION REQUIRED

RICHMOND, VIRGINIA
Orig-C 30JAN20

37°30'N-77°19'W

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.

APP CRS
203°

Rwy Idg
6607

Apt Elev
168

POTOMAC APP CON
126.4 282.375 (001°-185°)

RICHMOND TOWER
121.1 257.8

GND CON
121.9 348.6

ATIS
119.15 263.025

CLNC DEL
127.55 348.6
RNAV (GPS) Z RWY 2

MALSR

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F).

Procedure NA for arrival on FAK VORTAC airway radials 100 CW 220.

Procedure NA for arrival at MATOX on V157 southwest bound.

Procedure NA for arrivals at MATOX on V157.

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).

Amdt 1C 19JUL18

RNAV (GPS) Z RWY 2

RNAV (GPS) Z RWY 2

RNAV (GPS) Z RWY 2
RNAV (GPS) Z RWY 16

Procedure NA for arrivals at EPICS on V376 northbound.
RNAV (GPS) Z RWY 20

RICHMOND INTL (RIC)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 34°C (130°F). Rw20 helicopter visibility reduction below ½ 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 205.

**Missed Approach:**
Climb to 2000 direct CASEE and hold.

**ATIS**
119.15 263.025
126.19 257.8
126.75 307.2

**RNAV**

- **DA**
  - LNAV only
  - 1.5 NM to RW20
  - 4 NM

- **MISSED APCH FIX**
  - CASEE
  - 2000
  - HOPPEWELL
  - 023°

- **ATIS**
  - 126.4 282.375
  - 126.75 307.2
  - 126.19 257.8

**RICHMOND TOWER**

- 121.1 257.8
- 121.9 348.6
- 127.55 348.6

**GND CON**

- 121.9 348.6
- 121.9 348.6

**CLNC DEL**

- 121.9 348.6
- 121.9 348.6

**MISSED APCH FIX**

- CASEE
  - 2000
  - HOPPEWELL
  - 023°

**ATIS**

- 119.15 263.025
- 126.19 257.8
- 126.75 307.2

**RICHMOND TOWER**

- 121.1 257.8
- 121.9 348.6
- 127.55 348.6

**GND CON**

- 121.9 348.6
- 121.9 348.6

**CLNC DEL**

- 121.9 348.6
- 121.9 348.6

**RICHMOND, VIRGINIA**

Amdt 2C 19JUL18

37°30'N-77°19'W

RICHMOND INTL (RIC)
RNAV (GPS) Z RWY 34
RICHMOND INTL (RIC)

**RNAV APCH.**

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 1/4 SM and LNAV Cats C and D visibility to RVR 5500.

**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

**MISSS APCH FIX**

IFPIG

Procedure NA for arrival on FAK VORTAC airway radials 100 CW 220.

**ELEV**

168

TDZE 161

**TDZ/CL Rwy 34**

HIRL Rwys 2-20 and 16-34
REIL Rwy 20

**TWR**

343

**HAGLI**

338° to RW34

360° to RW34

**FGP 3.00° TCH 79.**

VGS1 and RNAV glidepath not coincident (VGS1 Angle 3.00/TCH 79).

**LNAV only.**

**IF**

YUTUP 1.4 NM to RW34

**FAF**

JOMUS

**IF**

HAGLI

**FAF**

IGANE

**HP**

HOPEWELL HPW

Procedure NA for arrival on HPW VORTAC airway radials 205 CW 323.

**RW34**

2500

**HAGLI**

2500

**GND**

361/18 200 (200-1/2)

**LNAV/VNAV DA**

530/37 369 (400-1/4)

**LNAV MDA**

520/24 359 (400-1/4)

700-1/2 532 (600-1/1)

552 (600-2)

**CIRCLING**

660-1 492 (500-1)

**TPM**

343

**HAGLI**

338° to RW34

338° to RW34

**RW34**

2500

**HAGLI**

2500

**GND**

361/18 200 (200-1/2)

**LNAV/VNAV DA**

530/37 369 (400-1/4)

**LNAV MDA**

520/24 359 (400-1/4)

700-1/2 532 (600-1/1)

552 (600-2)

**CIRCLING**

660-1 492 (500-1)
Amdt 1E 03DEC20

RICHMOND, VIRGINIA

VOR RWY 20

RICHMOND INTL (RIC)

RADAR required for procedure entry. DME or RADAR required.

Rwy 20 helicopter visibility reduction below 1/2 SM NA.

MISSED APPROACH: Climbing right turn to 2000 on RIC R-223 to MATOX INT/RIC 16.3 DME and hold.

ATIS 119.15 263.025

POTOMAC APP CON 126.4 282.375 (001°-185°)

RICHMOND TOWER 121.1 257.8

GND CON 121.9 348.6

CLNC DEL 127.55 348.6

REIL Rwy 20

VGS1 and descent angles not coincident (VGS1 Angle 3.00/TCH 49).

NE-3, 07 OCT 2021 to 02 DEC 2021

HOPEWELL 112.0 HPW

Chan 57

HOPEWELL 112.0 HPW

Chan 57

MADOX

RIC 16.3

VOR RWY 20

RICHMOND INTL (RIC)

TDZ/CL Rwy 34

HIRL Rwys 20 and 16-34

REIL Rwy 20

FAF to MAP 5.2 NM

KNOTS 60 90 120 150 180

Min:Sec 5:12 3:28 2:36 2:05 1:44

RICHMOND, VIRGINIA

AL-347 (FAA)

20338

RICHMOND, VIRGINIA

NE-3, 07 OCT 2021 to 02 DEC 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

37°30'N-77°19'W
**VOR RWY 34**

**RICHMOND INTL (RIC)**

**ATIS**
119.15 263.025

**POTOMAC APP CON**
126.4 282.375

**RICHMOND TOWER**
121.1 257.8

**GND CON**
121.9 348.6

**CLNC DEL**
127.55 348.6

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

**For inop ALS, increase S-34 Cat C/D visibility to RVR 5500.**

**Missed Approach:** Climbing right turn to 2000 via RIC R-018 to EPICS INT and hold.

**ALSF-2**

**ATIS**
119.15 263.025

**POTOMAC APP CON**
126.4 282.375

**RICHMOND TOWER**
121.1 257.8

**GND CON**
121.9 348.6

**CLNC DEL**
127.55 348.6

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

**For inop ALS, increase S-34 Cat C/D visibility to RVR 5500.**

**Missed Approach:** Climbing right turn to 2000 via RIC R-018 to EPICS INT and hold.
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.
**NOTE: Chart not to scale.**

**ATIS**
119.15 263.025
CLNC DEL 127.55 348.6
GND CON 121.9 348.6
RICHMOND TOWER 121.1 257.8
POTOMAC DEP CON 126.75 307.2

**TAKEOFF MINIMUMS**
Rwys 2, 16, 20, 34: Standard with minimum climb of 500’ per NM to 687.

**NOTE: DME/DME/IRU or GPS required.**
**NOTE: RNAV 1.**
**NOTE: RADAR required for non-GPS equipped aircraft.**

*(NARRATIVE ON FOLLOWING PAGE)*
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 . . . .

. . . . on assigned transition. Maintain 5000, expect filed altitude within ten minutes after departure.

LYNCHBURG TRANSITION (KALLI6.LYH)
MONTEBELLO TRANSITION (KALLI6.MOL)
SANNY TRANSITION (KALLI6.SANNY)
Takeoff Minimums:
Rwy 2: Standard with minimum climb of 500' per NM to 687, then minimum climb of 372' per NM to 5000.
Rwys 16, 20: Standard with minimum climb of 500' per NM to 687, then minimum climb of 480' per NM to 4000.
Rwy 34: Standard with minimum climb of 500' per NM to 687, then minimum climb of 353' per NM to 5000.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required for non-GPS equipped aircraft.

(LUCYL6.LUCYL) 19339
LUCYL SIX DEPARTURE (RNAV)
(LUCYL6.LUCYL) 05DEC19
RICHMOND INTL (RIC)
RICHMOND, VIRGINIA
NOTE: Chart not to scale.
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.
DEPARTURE ROUTE DESCRIPTION

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.
SANNNY TRANSITION (READE7.SANNNY): From over READE INT/RIC 50 DME on RIC R-264 to SANNY.
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 Cat C/D visibility ½ mile. Baro-VNAV and VDP NA when using Richmond Intl altimeter setting.

MISSLED APPROACH: Climb to 700 then climb to 2000 direct COATT and hold.

**CAUTION:**

- NE-3, 07 OCT 2021 to 02 DEC 2021
- No PT for arrivals on RIC VORTAC airway radials 105 CW 248.

**WAAAS**
- CH 72937
- W34A

**APP CRS**
- 339°

**Rwy Idg**
- 5402

**Apt Elev**
- 207

**RICHMOND/ASHLAND, VIRGINIA**

**RNAV (GPS) RWY 34**

**HANOVER COUNTY MUNI (OPF)**

**ELEV**
- 207

**TDZE**
- 204

**ASOS**
- 119.025

**POTOMAC APP CON**
- 126.75

**CLNC DEL**
- 125.4

**UNICOM**
- 122.7 (CTAF)
LOC RWY 16
HANOVER COUNTY MUNI (OFP)

Apt Elev
TDZE 207
Apt Elev 207

Category A

<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-16</td>
<td>660-1</td>
<td>453 (500-1)</td>
<td>660-1½</td>
<td>453 (500-1½)</td>
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<tr>
<td>C Circling</td>
<td>660-1</td>
<td>453 (500-1)</td>
<td>900-2</td>
<td>693 (700-2)</td>
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LUKCI Fix Minimums

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<th>A</th>
<th>B</th>
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<tbody>
<tr>
<td>S-16</td>
<td>560-1</td>
<td>353 (400-1)</td>
<td>560-1½</td>
<td>353 (400-1½)</td>
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<tr>
<td>C Circling</td>
<td>660-1</td>
<td>453 (500-1)</td>
<td>900-2</td>
<td>693 (700-2)</td>
</tr>
</tbody>
</table>

HANOVER COUNTY MUNI (OFP)

RICHMOND/ASHLAND, VIRGINIA

Amdt 3E 26MAR20

RICHMOND/ASHLAND, VIRGINIA

ASOS
119.025

POTOMAC APP CON
126.75 307.2

CLNC DEL
125.4

UNICOM
122.7 (CTAF)
procedure NA for arrivals at COATT on V1.55 northeast bound.

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.

missed approach: climbing left turn to 2000 via RIC R-345 to annas int/19 DME and hold.

Richmond Int l altimeter setting required.

RICHMOND/ASHLAND, VIRGINIA
Amndt 2E 06DEC18
37°42'N - 77°26'W
RNAV (GPS) RWY 12
GOODEN AIRPARK (RJD)

ESN AWOS-3
124.475

POTOMAC APP CON
124.55 317.425

UNICOM
122.8 (CTAF)

Procedure NA for arrival at PALEO on V93 northeast bound,
V44 westbound, V312 southwest bound,
V170-433 southwest bound.

Procedure NA for arrival at GRACO on V379 southwest bound.

Procedure NA for arrival at CHOPS on V308 eastbound.

MISSED APPROACH: Climb to 2000 altimeter source. When not received, procedure NA.

DME/DME RNP-0.3 NA. Procedure NA at night. Use Easton altimeter source. When not received, procedure NA.

Procedure NA for arrival at BROSS on V268 eastbound.

Category
A
B
C
D
LNAV MDA
480-1 416 (500-1)
NA
CIRCLING
520-1 456 (500-1)
NA
RNAV (GPS) RWY 30
GOODEN AIRPARK (RJD)

NAV DME/DME RNP 0.3 NA. Procedure NA at night. Use Easton altimeter source. When not received, procedure NA. Rwy 12, 30 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000 direct DAKEY and hold.

Procedure NA for arrival at DONIL on V229 northeast bound, V44 eastbound.

Procedure NA for arrival at LAFLN on V29 southbound, V308 westbound.

Procedure NA for arrival at CHOPS on V16 157-213 southwest bound, V308 westbound.

esn AWOS-3 124.475
dover app con 132.425 257.875
unicom 122.8 (CTAF)

RIDGELY, MARYLAND
Orig-B 17AUG17

38°58'N-75°52'W
393
RNAV (RNP) Z RWY 6
ROANOKE-BLACKSBURG RGNL/WOODRUM FLD (ROA)

RNP APCH. RF required.

For uncompensated Baro-VNAV systems, procedure NA below -1.4°C or above 54.0°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

RNP AR APCH. RF required.

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.

MISSED APCH FIX
DEWET 258°
078° 4 NM

AUTHORIZATION REQUIRED

REIL Rwys 6 and 24
HIRL Rwys 6-24 and 16-34
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

ELEV 1175 TDZE 1170

TPUCK 2230
MONAT 2500
JAYYT 2297
FUDDZ 2268
WILHE 2045
DBERD 3500

AUTHORIZATION REQUIRED

RNAV AR APCH. RF required.

For uncompensated Baro-VNAV systems, procedure NA below -14°C or above 54°C.

Missed 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.

MISSED 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 126.9 339.8
ROANOKE TOWER 118.3 257.8
GND CON 121.9 257.8
CLNC DEL 119.7

ELEV 1175 TDZE 1170

TPUCK 2230
MONAT 2500
JAYYT 2297
FUDDZ 2268
WILHE 2045
DBERD 3500

AUTHORIZATION REQUIRED

RNAV AR APCH. RF required.

For uncompensated Baro-VNAV systems, procedure NA below -14°C or above 54°C.

Missed 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.

MISSED 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

ELEV 1175 TDZE 1170

TPUCK 2230
MONAT 2500
JAYYT 2297
FUDDZ 2268
WILHE 2045
DBERD 3500

AUTHORIZATION REQUIRED

RNAV AR APCH. RF required.

For uncompensated Baro-VNAV systems, procedure NA below -14°C or above 54°C.

Missed 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.

MISSED 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.
RNAV (RNP) Z RWY 34
ROANOKE-BLACKSBURG RGNL/WOODRUM FLD (ROA)

**RNP AR APCH. RF required.**

- Missed approach requires RNP less than 1.0. For inop ALS, increase RNP 0.30* all CATs visibility to ¾ SM.
- For uncompensated Baro-VNAV systems, procedure NA below -14°C or above 54°C.

**ATIS**

- **ROANOKE APP CON:** 126.9 339.8
- **ROANOKE TOWER:** 118.3 257.8
- **GND CON:** 121.9 257.8
- **CLNC DEL:** 119.7

**ATIS Codes:**

- **ROANOKE-BLACKSBURG RGNL/WOODRUM FLD (ROA):**
  - 132.375
  - 5810
  - 1160
  - 1175

**RNAV (RNP) Z RWY 34**

**ROANOKE BLACKSBURG RGNL/WOODRUM FLD (ROA)**

- **GND CON:** 121.9 257.8
- **CLNC DEL:** 119.7

**AUTHORIZATION REQUIRED**

**Procedure NA for arrivals at PIGGS on V258 southeast bound, V136 southeast bound, and V222 southwest bound.**

**ELEV 1175**

**TDZE 1160**

**APP CRS 336°**

**Rwy Idg 5810**

**Apt Elev 1175**

**MALS R**

**ROANOKE, VIRGINIA**

**ATIS:**

- **ROANOKE APP CON:** 126.9 339.8
- **ROANOKE TOWER:** 118.3 257.8
- **GND CON:** 121.9 257.8
- **CLNC DEL:** 119.7

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**37°20'N 79°59'W**

**397**
RNAV (GPS) Y RWY 6
ROANOKE-BLACKSBURG RGNL/WOODRUM FLD (ROA)

- Category A, B, C, and D visibility to 1 SM, LNAV Cat A visibility to 1 SM, and LNAV Cat C and D visibility to 2 1/2 SM.
- Missed approach requires minimum climb of 276 feet per NM to 2700.
- Procedure NA for arrivals at ZOOMS on V140 westbound and V258 westbound.
- Procedure NA for arrivals at PSK VORTAC on airway radials 069 CW 153.
- Final approach course offset 14.53°.
- MISSED APPROACH: Climbing right turn to 4000 direct DEWET and hold.

** Amdt 3A 15AUG19

ROANOKE, VIRGINIA
AL-349 (FAA) 21112

NE-3, 07 OCT 2021 to 02 DEC 2021

398
Circling NA northwest of Rwy 6-24. Rwy 24 helicopter visibility reduction below 3/4 SM NA.

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.
RNAV (GPS) Y RWY 34
ROANOKE-BLACKSBURG RGNL/WOODRUM FLD (ROA)
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.

**13°C**

**ATIS**
- ROANOKE APP CON 126.9 339.8
- ROANOKE TOWER 118.3 257.8
- GND CON 121.9 257.8
- CLNC DEL 119.7

**MSA ODR 2.5 NM**

**IAP**
- PULASKI 116.8 PSK Chan 115

**MISSED APCH FIX**

**VORTAC airway radials 021 CW 100.**

**LDA/GLIDE SLOPE**

**DME OR RADAR REQUIRED**

**One Minute Holding Pattern**

**VGSi and LDA glidepath not coincident**

(VGSi Angle 3.00/TCH 58).

**1800 5000**

**PARTE**

**ODR R-155**

**LOC/RADAR**

**REIL Rwys 6 and 24**

**HIRL Rwys 6-24 and 16-34**

**37°20’N-79°59’W**
Circling NA northwest of Rwy 6-24. DME from I-SZK LDA. Simultaneous reception of ODR VOR and I-SZK DME required.

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.

Simultaneous reception of ODR VOR and I-SZK DME required.

Circling NA northwest of Rwy 6-24. DME from I-SZK LDA. Simultaneous reception of ODR VOR and I-SZK DME required.

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.

Simultaneous reception of ODR VOR and I-SZK DME required.

Circling NA northwest of Rwy 6-24. DME from I-SZK LDA. Simultaneous reception of ODR VOR and I-SZK DME required.

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.

Simultaneous reception of ODR VOR and I-SZK DME required.
TAKING MINIMUMS:
Rwys 6, 16, 34: NA-Air Traffic.
Rwy 24: Standard with minimum climb
of 500’ per NM to 1675.

NOTE: Chart not to scale.

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.
**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.

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

TAKEOFF MINIMUMS:
Rwys 6, 34: NA - Obstacles
Rwy 16: Standard with minimum climb of 260’ per NM to 2300
Rwy 24: Standard with minimum climb of 205’ per NM to 2800

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.
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.
SCUTA THREE DEPARTURE (RNAV)  ROANOKE, VIRGINIA

ATIS 132.375
CLNC DEL 119.7
GND CON 121.9 257.8
ROANOKE DEP CON 126.9 339.8
ROANOKE TOWER 118.3 257.8

NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 16, 24, 34: NA - Air Traffic.
Rwy 6: Standard with minimum climb of 560' per NM to 2900.

NOTE: RNAV 1.
NOTE: GPS required.
NOTE: RADAR required.

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.
**ILS or LOC RWY 32**

**SALISBURY-OCEAN CITY WICOMICO RGNL** (SBY)

**MAPS**

- **TWR**: 128°
- **Rwy Idg**: 5400 X 100
- **TDZE**: 53
- **Apt Elev**: 53

**PANEL**

- **LOC 1-SBY**
  - 108.7
  - 319°
- **APP CRS**
  - 6400
- **RSR Idg**
  - 127.95
- **GND CON**
  - 123.775

**PILots**

- **ASOS**: 118.325
- **PATUXENT APP CON**: 127.95
- **SALISBURY TOWER**: 119.425 (CTAF)
- **GND CON**: 123.775
- **CLNL DEL**: 123.775
- **UNICOM**: 122.95

**ANALYSIS**

- **MALSR**:
- **MISSING 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**

- **PROCEDURE**:
  - Climb to 2000 on heading 170° and on SBY VORTAC
  - 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.

**NOTES**

- **Proceedings**
  - Climb to 2000 on heading 170° and on SBY VORTAC
  - 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.

**DEPARTURE**

- **SAFETY INFORMATION**
  - 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 1/4 SM.

**AIRPORT**

- **LOC 1-SBY**
  - 108.7
  - 319°
- **APP CRS**
  - 6400
- **RSR Idg**
  - 127.95
- **GND CON**
  - 123.775

**DEPARTURE**

- **SAFETY INFORMATION**
  - 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 1/4 SM.

**ANALYSIS**

- **MALSR**:
- **MISSING 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**

- **PROCEDURE**:
  - Climb to 2000 on heading 170° and on SBY VORTAC
  - 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.

**NOTES**

- **Proceedings**
  - Climb to 2000 on heading 170° and on SBY VORTAC
  - 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.

**DEPARTURE**

- **SAFETY INFORMATION**
  - 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 1/4 SM.

**AIRPORT**

- **LOC 1-SBY**
  - 108.7
  - 319°
- **APP CRS**
  - 6400
- **RSR Idg**
  - 127.95
- **GND CON**
  - 123.775

**DEPARTURE**

- **SAFETY INFORMATION**
  - 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 1/4 SM.
**RNAV (GPS) RWY 5**

**SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)**

---

**ASOS**
- **PATUXENT APP CON**
- **SALISBURY TOWER**
- **GND CON**
- **CLNL DEL**
- **UNICOM**

- **118.325**
- **127.95**
- **314.0**
- **119.425**
- **123.775**
- **123.775**
- **122.95**

---

**RNAV (GPS) RWY 5**

**SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)**

---

**Holding Pattern**
- **FEYKO**

**LNAV only.**
- **2000**
- **OKKOE**

**GROUND CON**
- **119.425**

---

**Procedure NA for arrivals at SBY VORTAC on V29 northbound.**

---

**CLNL DEL**
- **123.775**

---

**UNICOM**
- **122.95**

---

**RNAV (GPS) RWY 5**

**SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)**

---

**Amdt 1A 25MAR21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
RNAV (GPS) RWY 14

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

**ASOS**
- **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**

**WAAS CH 56320**
- **53**

**APP CRS**
- **139°**

**Rwy Idg**
- **6400**

**TDZE**
- **49**

**Apt Elev**
- **53**

**SAFETY INFORMATION**
- Rwy 14 helicopter visibility reduction below ¾ SM NA.
- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16° C or above 54° C.

**RNAV (GPS) RWY 14**

**MISSED APPROACH:**
- Climb to 2000 direct FRYER and hold.

**CHOPS**
- Procedure NA for arrivals at CHOPS on V16-157-213 northeast bound.

**EZIZI**
- Procedure NA for arrivals at EZIZI on V29 northbound.

**FRYER**
- 4 NM

**HYDRS**
- 6.1 NM

**EWWEL**
- 2.3 NM

**LNAV only**
- 1.1 NM

**RWY 14**
- 6400-2

**GP 3.00° TCH 45**
- 440-1

**LNAV MDA**
- 440-1½

**LNAV/ VNAV DA**
- 453-1½

**LPV**
- 363-1

**DA**
- 314 (400-1)

**CIRCLING**
- 480-1
- 427 (500-1)

**SAFETY INFORMATION**
- Reduced visibility above 1200-1.5° C.
- Minimum 80 m visibility at 4500 ft or 600 ft above MSL.

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**AIR NAVIGATION PROFESSIONALS**
- PATUXENT APCH CON
- SALISBURY TOWER
- PATUXENT APCH CON
- CLNL DEL
- UNICOM

**DME**
- 1048

**GND CON**
- 123.775

**UNICOM**
- 122.95

**ASOS**
- 118.325

**ATC**
- 119.425 (CTAF)

**EMERGENCY**
- 118.95

**MISSED APCH FIX**
- FRYER
- 4 NM

**ELEV 53**
- **D**

**SALISBURY, MARYLAND**
- 30JAN20

**SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)**
- 38°20'N-75°31'W
Rwy 5 helicopter visibility reduction below 1/4 SM NA.

INDEX

Rwy Idg 5000
TDZE 47
Apt Elev 53

ASOS 118.325
PATUXENT APP CON 127.95 314.0
SALISBURY TOWER 119.425 (CTAF) 0
GND CON 123.775
CLNL DEL 123.775
UNICOM 122.95

MISSED APPROACH: Climb to 2000 on SBY VORTAC R-039 then left turn direct SBY VORTAC and hold.

OMSIE FIX MINIMUMS

REIL Rwys 5, 14 and 23
MIRL Rwy 5-23
HIRL Rwy 14-32

SALISBURY, MARYLAND
Amdt 10A 30JAN20

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

38°20'N - 75°31'W

415
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NA Use Newport News/Williamsburg Intl altimeter setting. Procedure NA at night.

**MISSED APPROACH:** Climbing right turn to 1600 direct JUBJI WP and hold.

---

**AWOS-3**
- **118.45**

**NORFOLK APP CON**
- **126.05**
- **370.925**

**UNICOM**
- **123.0 [CTAF]**

---

**ELEV 30**
- **TDZE 30**

---

**APP CRS**
- **006°**
- **Rwy Idg 2042**
- **TDZE 30**
- **Apt Elev 30**

---

**CATEGORY**
- **S-1**
- **CIRCLING**

<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>S-1</td>
<td>1040-3</td>
<td>1010 (1100-3)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1040-3</td>
<td>1010 (1100-3)</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). 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 ½ mile and LNAV/VNAV all Cats visibility and Circling Cat C visibility ½ mile and LNAV Cat C visibility ½ mile. Night landing: Rwys 19 NA. Baro-VNAV and VDP NA when using Danville altimeter setting. Circling NA to Rwy 6-24.

Procedure NA for arrival on SBV VORTAC airway radials 203 CW 252.

Procedure NA for arrival at HARVY on V3 northbound.
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 Cats visibility and DICYE fix minimums Cat C visibility ¼ mile. Circling NA to Rwy 6-24.

AWOS-3 119.425 WASHINGTON CENTER 124.05 307.0 UNICOM 122.8 (CTAF)

MIRL Rwy 1-19
REIL Rwys 1 and 19

VICIOUS FIX MINIMUMS

CATEGORY
CIRCLING
CIRCLING

FAF to MAP 8.1 NM

MISA SBV 25 NM

AIRPORT COORDINATES

SOUTH BOSTON, VIRGINIA
36°43'N-78°51'W
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.
For inop ALS, increase LPV all visibility to 1 1/2 SM.

**AWOS-3**
127.525

**WASHINGTON CENTER**
118.75 377.1

**UNICOM**
122.8 (CTAF)

**ELEV**
441

**TDZE**
417
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.

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.

AWOS-3 127.525  
WASHINGTON CENTER 118.75 377.1  
UNICOM 122.8 (CTAF)

WASHINGTON CENTER

AL-6793 (FAA) 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.

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.
RNAV (GPS) RWY 33
STAFFORD RGNL (RMN)

MALS

**WARNING:** Inop table does not apply to LPV all Cats. 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 1/8 SM.

- **AWOS-3**: 126.325
- **POTOMAC APP CON**: 127.05 290.375
- **GCO**: 135.075
- **UNICOM**: 122.725 (CTAF)

**STAFFORD, VIRGINIA**
AL-9743 (FAA)

- **ELEV**: 211
- **TDZE**: 195

**RNAV (GPS) RWY 33**

- **Rwy Idg**: 5000
- **Apt Elev**: 195
- **APP CRS**: 329°
- **TDZE**: 211

**RNP APCH**

- **TECOV**
- **JAVIK**
- **FALKO**
- **KOBEC**
- **HILL MOA**
- **GRUBY**
- **PEGBY**

**MISSED APPROACH:** Climb to 4000 direct KOBEC and left turn on track 209° to TECOV and left turn on track 151° to FALKO and hold.

- **LNAV only**

**CATEGORY**

- **LPV DA**: 450-1 255 (300-1)
- **LNAV/ VNAV DA**: 546-1 351 (400-1)
- **LNAV MDA**: 700-1 505 (500-1)
- **CIRCLING**: 720-1 509 (600-1)

**UNICOM**

- **AWOS-3**: 126.325
- **POTOMAC APP CON**: 127.05 290.375
- **GCO**: 135.075
- **UNICOM**: 122.725 (CTAF)

**ELEV**: 211
**TDZE**: 195

**STAFFORD, VIRGINIA**
AL-9743 (FAA)

- **ELEV**: 211
- **TDZE**: 195

**RNAV (GPS) RWY 33**

- **Rwy Idg**: 5000
- **Apt Elev**: 195
- **APP CRS**: 329°
- **TDZE**: 211

**RNP APCH**

- **TECOV**
- **JAVIK**
- **FALKO**
- **KOBEC**
- **HILL MOA**
- **GRUBY**
- **PEGBY**

**MISSED APPROACH:** Climb to 4000 direct KOBEC and left turn on track 209° to TECOV and left turn on track 151° to FALKO and hold.

- **LNAV only**

**CATEGORY**

- **LPV DA**: 450-1 255 (300-1)
- **LNAV/ VNAV DA**: 546-1 351 (400-1)
- **LNAV MDA**: 700-1 505 (500-1)
- **CIRCLING**: 720-1 509 (600-1)

**UNICOM**

- **AWOS-3**: 126.325
- **POTOMAC APP CON**: 127.05 290.375
- **GCO**: 135.075
- **UNICOM**: 122.725 (CTAF)

**ELEV**: 211
**TDZE**: 195

**STAFFORD, VIRGINIA**
AL-9743 (FAA)

- **ELEV**: 211
- **TDZE**: 195

**RNAV (GPS) RWY 33**

- **Rwy Idg**: 5000
- **Apt Elev**: 195
- **APP CRS**: 329°
- **TDZE**: 211

**RNP APCH**

- **TECOV**
- **JAVIK**
- **FALKO**
- **KOBEC**
- **HILL MOA**
- **GRUBY**
- **PEGBY**

**MISSED APPROACH:** Climb to 4000 direct KOBEC and left turn on track 209° to TECOV and left turn on track 151° to FALKO and hold.

- **LNAV only**

**CATEGORY**

- **LPV DA**: 450-1 255 (300-1)
- **LNAV/ VNAV DA**: 546-1 351 (400-1)
- **LNAV MDA**: 700-1 505 (500-1)
- **CIRCLING**: 720-1 509 (600-1)

**UNICOM**

- **AWOS-3**: 126.325
- **POTOMAC APP CON**: 127.05 290.375
- **GCO**: 135.075
- **UNICOM**: 122.725 (CTAF)

**ELEV**: 211
**TDZE**: 195

**STAFFORD, VIRGINIA**
AL-9743 (FAA)

- **ELEV**: 211
- **TDZE**: 195

**RNAV (GPS) RWY 33**

- **Rwy Idg**: 5000
- **Apt Elev**: 195
- **APP CRS**: 329°
- **TDZE**: 211

**RNP APCH**

- **TECOV**
- **JAVIK**
- **FALKO**
- **KOBEC**
- **HILL MOA**
- **GRUBY**
- **PEGBY**

**MISSED APPROACH:** Climb to 4000 direct KOBEC and left turn on track 209° to TECOV and left turn on track 151° to FALKO and hold.

- **LNAV only**

**CATEGORY**

- **LPV DA**: 450-1 255 (300-1)
- **LNAV/ VNAV DA**: 546-1 351 (400-1)
- **LNAV MDA**: 700-1 505 (500-1)
- **CIRCLING**: 720-1 509 (600-1)

**UNICOM**

- **AWOS-3**: 126.325
- **POTOMAC APP CON**: 127.05 290.375
- **GCO**: 135.075
- **UNICOM**: 122.725 (CTAF)

**ELEV**: 211
**TDZE**: 195

**STAFFORD, VIRGINIA**
AL-9743 (FAA)

- **ELEV**: 211
- **TDZE**: 195

**RNAV (GPS) RWY 33**

- **Rwy Idg**: 5000
- **Apt Elev**: 195
- **APP CRS**: 329°
- **TDZE**: 211

**RNP APCH**

- **TECOV**
- **JAVIK**
- **FALKO**
- **KOBEC**
- **HILL MOA**
- **GRUBY**
- **PEGBY**

**MISSED APPROACH:** Climb to 4000 direct KOBEC and left turn on track 209° to TECOV and left turn on track 151° to FALKO and hold.

- **LNAV only**

**CATEGORY**

- **LPV DA**: 450-1 255 (300-1)
- **LNAV/ VNAV DA**: 546-1 351 (400-1)
- **LNAV MDA**: 700-1 505 (500-1)
- **CIRCLING**: 720-1 509 (600-1)

**UNICOM**

- **AWOS-3**: 126.325
- **POTOMAC APP CON**: 127.05 290.375
- **GCO**: 135.075
- **UNICOM**: 122.725 (CTAF)

**ELEV**: 211
**TDZE**: 195

**STAFFORD, VIRGINIA**
AL-9743 (FAA)

- **ELEV**: 211
- **TDZE**: 195

**RNAV (GPS) RWY 33**

- **Rwy Idg**: 5000
- **Apt Elev**: 195
- **APP CRS**: 329°
- **TDZE**: 211

**RNP APCH**

- **TECOV**
- **JAVIK**
- **FALKO**
- **KOBEC**
- **HILL MOA**
- **GRUBY**
- **PEGBY**

**MISSED APPROACH:** Climb to 4000 direct KOBEC and left turn on track 209° to TECOV and left turn on track 151° to FALKO and hold.

- **LNAV only**

**CATEGORY**

- **LPV DA**: 450-1 255 (300-1)
- **LNAV/ VNAV DA**: 546-1 351 (400-1)
- **LNAV MDA**: 700-1 505 (500-1)
- **CIRCLING**: 720-1 509 (600-1)
**STAFFORD, VIRGINIA**

**AL-9743 (FAA)**

**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.

**VORTAC BRV**

<table>
<thead>
<tr>
<th>APP CRS</th>
<th>Rwy Idg</th>
<th>TDZE</th>
<th>Apt Elev</th>
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<tr>
<td>144.5</td>
<td>5000</td>
<td>196</td>
<td>212</td>
</tr>
</tbody>
</table>

**MALS**

MISSED APPROACH: Climbing left turn to 2000 direct BRV VORTAC and hold.

**AWOS-3**

126.325

**POTOMAC APP CON**

127.05 290.375

**GCO**

135.075

**UNICOM**

122.725 (CTAF)

---

**ELEV 212**

**TDZE 196**

**STAFFORD, VIRGINIA**

Amdt 1 15APR04

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**NE-3, 07 OCT 2021 to 02 DEC 2021**

**VOR RWY 33**

**STAFFORD RGNL (RMN)**

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**VOR RWY 33**

**STAFFORD RGNL (RMN)**

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425
ADF Required. Autopilot coupled approach NA below 1494 feet. When local altimeter setting not received, use Charlottesville altimeter setting and increase all DA 130 feet and all MDA 140 feet. Increase S-ILS visibility ¼ SM all Cats, S-LOC 5 visibility Cat C/D 1/2 SM, Circling Cat C ½ SM, Cat D ¼ SM. For inop ALS when using Charlottesville altimeter setting, increase S-ILS 5 visibility to 1¼ SM.

**AWOS-3**
124.925

**POTOMAC APP CON**
132.85 323.125

**CINC DEL**
118.35

**UNICOM**
123.0 (CTAF) 123.0 (CTAF)

MALSR

MISSING APPROACH: Climb to 2600 then climbing left turn to 3600 direct SH LOM and hold.

**LOCALIZER 109.5**
I-SHD

**S-ILS**

**S-LOC**

**CIRCLING**

CEROL

I-SHD

**SHENANDOAH VALLEY RGNL (SHD)**

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

AL-5369 (FAA)

ILS or LOC RWY 5

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

Amdt 9A  22APR21

38°16'N-78°54'W

SHENANDOAH VALLEY RGNL (SHD)

ILS or LOC RWY 5

STALWORT WAYNEBRO HARRISONBIRD VIRGINIA

Amdt 9A 22APR21

38°16'N-78°54'W
For inoperative MALSR when using Charlottesville altimeter setting, increase LPV visibility to 1/2 mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C. Baro-VNAV and VDP NA when using Charlottesville altimeter setting. When local altimeter setting not received, use Charlottesville altimeter setting and increase all DA 130 feet and all MDA 140 feet. Increase LPV all Cats visibility 1/2 SM, LNAV/VNAV all Cats 1/2 SM, LNAV Cat C/D 1/2 SM, Circling Cat C 1/2 SM and Cat D 1/2 SM.

Procedure NA for arrivals at MOL VOR/DME via airway radials 009 CW 058.

Circling Cat C SM and Cat D SM. all Cats visibility SM, LNAV/VNAV all Cats SM, LNAV Cat C/D SM, altimeter setting and increase all DA 130 feet and all MDA 140 feet. Increase LPV altimeter setting. When local altimeter setting not received, use Charlottesville altimeter setting and increase all DA 130 feet and all MDA 140 feet. Increase LPV all Cats visibility 1/2 SM, LNAV/VNAV all Cats 1/2 SM, LNAV Cat C/D 1/2 SM, Circling Cat C 1/2 SM and Cat D 1/2 SM.

Procedure NA for arrivals at MOL VOR/DME via airway radials 009 CW 058.
RNAV (GPS) RWY 23
SHENANDOAH VALLEY RGNL (SHD)

RNP APCH.

Baro-VNAV NA when using Charlottesville altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 47°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 ⅔ SM, LNAV Cat C visibility ⅔ SM, LNAV Cat D ⅔ SM, Circling Cat C ½ SM and Cat D ¼ SM.

- 3860

4400

4397

Procedure NA for arrival at TTUMS on V377 northbound.

TTUMS 3700

5600 115° (12.8)

- 5300

GABEL

DORDE RW23 3 NM to FLLAT

Procedure NA for arrival at LURAY on V143 northeast bound.

LURAY

5 NM

4800 Napt (12.8)

(IAF) OLAJO

3900 227° (2.9)

5 NM

Procedure NA for arrival at MITER on V38 southeast bound and V140 southwest bound.

METER

5300

GABEL

3384

3389

3374

2491

2741

3587

5800 36° (11.4)

227°

4800

GP 3.00°

TCH 45

5 NM

ADIOS

Holding Pattern

047° 227°

227°

4300

3900

2200

5300

3 NM

2.9 NM

3.2 NM

CATEGORIES

LPV DA

1451-1 250 (300-1)

LNAV/VNAV DA

1530-1½ 329 (400-1½)

LNAV MDA

1520-1 319 (400-1)

CIRCLING

1660-1 459 (500-1)

1760-1 559 (600-1)

1900-2 699 (700-2)

2060-2½ 859 (900-2¾)

VNAV all Cats visibility ⅔ SM, LNAV Cat C visibility ⅔ SM, LNAV Cat D ⅔ SM, Circling Cat C ½ SM and Cat D ¼ SM.

AWOS-3 124.925

POTOMAC APP CON 132.85

CINC DEL 323.125

UNICOM 118.35

123.0 (CTAF)

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

AL-5369 (FAA)

21112

WAAS CH 78113 W23A

APP CRS 227°

Rwy Idg 6002

TDZE 1201

Apt Elev 1201

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

AL-5369 (FAA)

21112

RNAV (GPS) RWY 23

SHENANDOAH VALLEY RGNL (SHD)

REIL Rwy 23
HIRL Rwy 5-23

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

Orig A 22APR21
38°16'N-78°54'W

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

AL-5369 (FAA)

21112

RNAV (GPS) RWY 23

SHENANDOAH VALLEY RGNL (SHD)

REIL Rwy 23
HIRL Rwy 5-23

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

Orig A 22APR21
38°16'N-78°54'W
When local altimeter setting not received, use Charlottesville altimeter setting and increase all MDAs 140 feet and visibility S-5 and Circling Cat C ½ SM, Cat D ½ SM.

DIRECT TO: Maintain 180° course to STAUNTON.

REIL RWY 5 115.3 MOL Chan 100

REIL Rwy 23
HI RL Rwy 5-23

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

Amdt 10A 22APR21

38°16'N-78°54'W

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

Amdt 10A 22APR21

38°16'N-78°54'W
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 5:** Climb heading 060° to 6000 to intercept MOL VOR/DME R-036 outbound, thence...

**TAKEOFF RUNWAY 23:** Climb 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.

**NOTE:** Chart not to scale.
### RNAV (GPS) RWY 11

**BAY BRIDGE (W29)**

#### Unicom

**ZAKLY**

- 122.725 (CTAF)

#### AWOS-3

- 120.575

#### POTOMAC APP CON

- 119.0 282.275

#### RNAV (GPS) RWY 11

- LNAV only.
- 114° from ZAKLY
- 2.1 NM to XONIQ
- 1.3 NM to RW11
- 0.8 NM to RW11
- 2100 ZAKLY

#### LNAV/VNAV NA below -15°C or above 54°C.

**WARNING -- WASHINGTON DC SFRA. CTC POTOMAC APP CON**

- Procedure NA for arrivals at GEEMO on V123-445 eastbound.

- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.**

### RNP APCH.

**WAAS**

- CH 56639
- **W11A**

**APP CRS**

- 114°

**Rwy Ldg**

- 2713

**TDZE**

- 15

**Apt Elev**

- 15

**CIRCLING**

- 580-1
- 800-1
- 485 (500-1)
- 785 (800-1)

**MISSED APPROACH:**

- Climb to 2100 direct ZAKLY and hold.

- RNAV (GPS) RWY 11

**CATEGORIES**

- **A**
  - LPV DA: 265-1
  - LNAV/VNAV DA: 489-1.3
  - LNAV MDA: 460-1

- **B**
  - LPV DA: 250 (300-1)
  - LNAV/VNAV DA: 500 (500-1)
  - LNAV MDA: 445 (500-1)

- **C**
  - NA

- **D**
  - NA
Rwy 29 helicopter visibility reduction below 1 SM NA.

Procedure NA for arrivals at AGARD on V44 eastbound.
RNAV (GPS) RWY 4
SUFFOLK EXECUTIVE (SFQ)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

Procedure NA for arrival on ORF VORTAC airway radials 216 CW 233.

MISSED APPROACH:
Climb to 600 then climbing left turn to 2000 direct OLUCE and hold.

<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>322-7/8</td>
<td>256 (300-3/4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>474-1 3/8</td>
<td>408 (500-1 1/4)</td>
<td></td>
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</tr>
<tr>
<td>LNAV MDA</td>
<td>440-1</td>
<td>374 (400-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C CIRCLING</td>
<td>500-1</td>
<td>560-1</td>
<td>680-1 3/4</td>
<td>680-2</td>
</tr>
<tr>
<td></td>
<td>430 (500-1)</td>
<td>490 (500-1)</td>
<td>610 (700-1 1/4)</td>
<td>610 (700-2)</td>
</tr>
</tbody>
</table>
RNAV (GPS) RWY 7
SUFFOLK EXECUTIVE (SFQ)

**Missed Approach:**
Climbing left turn to 2000, direct LALSE and hold.

**Procedure NA for arrivals on CVI**
VORTAC airway radials 351 CW 086.

**Holding Pattern**
4 NM Holding Pattern

**Visual Segment - Obstacles**
- 2000 NAP T (14.1)
- LALSE
- 1600
- 680
- WOPID 1.8 NM to RW07
- RW07
- 074° to RW07

**ELEV 70**
**TDZE 68**

**Amdt 1C 02MAR17**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
RNAV (GPS) RWY 22
SUFFOLK EXECUTIVE (SFQ)

**AWOS-3**
119.375

**NORFOLK APP CON**
127.9 269.425

**UNICOM**
122.7 (CTAF)

---

**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 ¼ mile.

**MISSED APPROACH:**
Climb to 2000 direct OLUCE and hold.

---

Procedure NA for arrivals at VEGHE on V1 northeast bound.

---

**CATEGORY**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>LP MDA</td>
<td>440-1</td>
<td>371 (400-1)</td>
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<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>500-1</td>
<td>431 (500-1)</td>
<td>500-1½</td>
<td>431 (500-1½)</td>
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<tr>
<td>CIRCLING</td>
<td>500-1</td>
<td>430 (500-1)</td>
<td>560-1</td>
<td>490 (500-1)</td>
</tr>
</tbody>
</table>

---

**SUFFOLK, VIRGINIA**
Amdt 2 02MAR17

36°41′N-76°36′W

435
**RNAV (GPS) RWY 25**

**SUFFOLK EXECUTIVE (SFQ)**

**Category B**

<table>
<thead>
<tr>
<th>APP CRS</th>
<th>254°</th>
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<tbody>
<tr>
<td>Rwly Idg</td>
<td>3750</td>
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<tr>
<td>TDZE</td>
<td>69</td>
</tr>
<tr>
<td>Apt Elev</td>
<td>70</td>
</tr>
</tbody>
</table>

- **DME/DME RNP-0.3 NA.** Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Norfolk Int'l altimeter setting and increase all MDA 60 feet.

**Misste 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.**

**Visual Segment - Obstacles.**

**MISSED APPROACH:** Climb to 2000 direct LALSE and hold.

**Localizer (LALSE) 25 NM: 2000-2300**

- **Reil Rwys 4 and 22**
- **Hirl Rwy 4-22**
- **Mirl Rwy 7-25**

**RNAV (GPS) RWY 25**

**SUFFOLK, VIRGINIA**

- **Amdt 1B 02MAR17**

**36°41'N-76°36'W**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**Nearest Local NAVAID**

- **2000 direct LALSE and hold.**
One Minute Holding Pattern

OLUCE INT I-RKH 13.9
ZAXIB INT I-RKH 6.9

VGSi and descent angles not coincident (VGSi Angle 3.00/TCH 39).

ELEV 70
TDZE 66
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.

**AWOS-3**
119.8

**PATUXENT APP CON**
121.0 250.3

**UNICOM**
122.8 (CTAF)

**Final approach course offset 6.9°**

Procedure NA for arrival on CCV VORTAC airway radials 290 CW 041.

**Rwy Idg**
N/A

**TDZE**
N/A

**Apt Elev**
5

**RNAV (GPS)-B**

**TANGIER ISLAND (TGI)**

**APP CRS (011°)**

**Rwy Idg**
N/A

**TDZE**
N/A

**Apt Elev**
5

**CRADD**
2000

**KINSE**

**RW02**

**R-4006**

**R-6609**

**Awos-3**
119.8

**Patuxent App Con**
121.0 250.3

**Unicom**
122.8 (CTAF)

**Ne-3, 07 Oct 2021 to 02 Dec 2021**

**TANGIER, VIRGINIA**

**AL-5751 (FAA)**

**Amdt 1 27Apr17**

**37°50'N-76°00'W**
## RNAV (GPS) RWY 10
### TAPPAHANNOCK-ESSEX COUNTY (XSA)

<table>
<thead>
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<th>CATEGORY</th>
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<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNAV MDA</td>
<td>540-1</td>
<td>405 (500-1)</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>580-1</td>
<td>640-1</td>
<td>820-2</td>
<td>NA</td>
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<tr>
<td>MIRL Rwy 10-28</td>
<td>445 (500-1)</td>
<td>505 (600-1)</td>
<td>685 (700-2)</td>
<td>NA</td>
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</table>

### AWOS-3
- TAPPAHANNOCK, VIRGINIA
- 125.775

### POTOMAC APP CON
- 126.4 282.375

### UNICOM
- 122.8 (CTAF)

### Procedure
- **NoPT for arrival at DEGAY on V376 northbound.**
- **2000 to DEGAY 259° (20.9) and on V16-20-157 northeast bound.**
- **Procedure NA for arrivals at TAPPA on V213 northeast bound and on V16-20-157 northeast bound.**

### Amdt 2 25MAY17
- **REIL Rwys 10 and 28**
- **MIRL Rwy 10-28**
- **37°52'N-76°54'W**

---

**RNAV (GPS) RWY 10**
**TAPPAHANNOCK-ESSEX COUNTY (XSA)**

**DEGAY (IF/IAF) FEMAR**
**RW10**
**2.9 NM to RW10**
**096°**

**2000**
**096°**

**097°** to RW10
**276°**

**10.9**

**2.9 NM to RW10**
**096°**

**3 NM to RW10**
**097°**

**2000**

**1100**

**MODEL**

**2000 MODEL**

**1.1 NM to RW10**

**RW10**

**4 NM**

**MODEL**

**24 NM**

**135**

**TAPPAHANNOCK, VIRGINIA**

**Amrd 2 25MAY17**

**20198**

**RNAV (GPS) RWY 10**
**TAPPAHANNOCK-ESSEX COUNTY (XSA)**

**AWOS-3**
- 125.775

**POTOMAC APP CON**
- 126.4 282.375

**UNICOM**
- 122.8 (CTAF)
RNAV (GPS) RWY 28
TAPPAHANNOCK-ESSEX COUNTY (XSA)

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.

MISSED APPROACH: Climb to 600 then climbing left turn to 2000 direct SVILL and hold.

Procedure NA for arrivals at DUPEY via V16-20-157-213 southwest bound.

Procedure NA for arrivals on HCM VORTAC airway radials 010 CW 107.

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.

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.

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.

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.
### RNAV (GPS) RWY 20

**WAKEFIELD MUNI (AKQ)**

**Category B**

**Apt Elev** 111

**TDZE** 110

**Elev** 111

**ASOS** 128.325

**NORFOLK APP CON** 127.9 269.425

**UNICOM** 122.8 (CTAF)

**APP CRS** 208°

**Rwy Ldg** 3866

**Apt Elev** 111

- **DME/DME RNP-0.3 NA.**
- **Procedure NA at night.**
- **MISSED APPROACH:** Climbing left turn 2600 direct NOXEE and hold.

**ASOS**

- **128.325**

**NORFOLK APP CON**

- **127.9**
- **269.425**

**UNICOM**

- **122.8 (CTAF)**

**TDZE**

- **110**

**Elev**

- **111**

**MIRL Rwy 2-20**

- **2.92° CIRCLING**

**LNAV MDA**

- **1120-3**
- **1010 [1100-3]**

**CIRCLING**

- **1120-3**
- **1009 [1100-3]**

**RNAV (GPS) RWY 20**

**WAKEFIELD, VIRGINIA**

**Amdt 1 17AUG17**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
WAKEFIELD, VIRGINIA
AL-5781 (FAA)

NDB RWY 20
WAKEFIELD MUNI (AKQ)

ELEV 111
TDZE 110

ASOS 128.325
NORFOLK APP CON 127.9 269.425
UNICOM 122.8 (CTAF)

HOPEWELL 112.0 HPW Channel 57

Procedure NA at night.

MISSED APPROACH: Climb to 1,500 then climbing left turn to 2000 direct AKQ NDB and hold.

WAKEFIELD, VIRGINIA
AL-5781 (FAA)

NDB AKQ 274
APP CRS 204°
Rwy Idg TDZE 110
Apt Elev 111

MIRL Rwy 2-20

1120-3 1010 (1100-3)

1120-3 1009 (1100-3)

1120-3 1010 (1100-3)
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 324 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.

**MISSED APPROACH:** Climb to 600 then climbing left turn to 2000 direct MAGGO and hold.

**ASOS**

<table>
<thead>
<tr>
<th>119.175</th>
<th>127.95</th>
<th>314.0</th>
<th><strong>WALLOPS TOWER</strong></th>
<th>126.5 (CTAF)</th>
<th>306.975 (CTAF)</th>
<th><strong>GND CON</strong></th>
<th>127.875</th>
<th>269.325</th>
<th>121.7</th>
</tr>
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**ELEV 40**

**TDZE 37**

**WAAS**

**CH 56331 W04A**

<table>
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<th>APP CRS</th>
<th>05°</th>
<th>Rwy Idg</th>
<th>8748</th>
<th>TDZE</th>
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<tr>
<td>Apt Elev</td>
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**R-6604A**

**R-6604D**

**B**

**R-6604**

**C**

**R-6604**

**E**

**R-6604**

**E**

**P**

**P**

**P**

**P**

**P**

**P**

**P**

**P**

**P**

**P**

**P**

**100**

**17**

**4**

**28**

**35**

**8005 X 200**

**8748 X 150**

**X**

**X**

**X**

**X**

**X**

**X**

**X**

**4808 X 150**

**ELEV**

**APP CRS**

**40**

**WALLOPS ISLAND, VIRGINIA**

**WALLOPS FLIGHT FACILITY (WAL)**

**RNAV (GPS) RWY 4**

**Amdt 1B 21JUL16**

**37°56’N-75°28’W**

**443**
MISSING APPROACH: Climb to 600 then climbing right turn to 2000 direct MAGGO and hold.

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 ¾ mile, increase LNAV/VNAV DA to 437 and all Cats visibility ¾ mile, increase all MDA 60 feet and LNAV Cats C/D visibility ¾ mile and Circling Cat C visibility ¾ mile. Baro-VNAV and VDP NA when using Salisbury altimeter setting.

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 ¾ mile, increase LNAV/VNAV DA to 437 and all Cats visibility ¾ mile, increase all MDA 60 feet and LNAV Cats C/D visibility ¾ mile and Circling Cat C visibility ¾ mile. Baro-VNAV and VDP NA when using Salisbury altimeter setting.

When local altimeter setting not received, use Salisbury altimeter setting: increase LPV DA to 372 and all Cats visibility ¾ mile, increase LNAV/VNAV DA to 437 and all Cats visibility ¾ mile, increase all MDA 60 feet and LNAV Cats C/D visibility ¾ mile and Circling Cat C visibility ¾ mile. Baro-VNAV and VDP NA when using Salisbury altimeter setting.
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 ¾ mile; increase MDA 60 feet and LNAV Cats C/D visibility ½ mile and Circling Cat C visibility ¼ mile.

Boro VNAV and VDP NA when using Salisbury altimeter setting.

**MISSPED APPROACH:**
Climb to 600 then climbing right 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>
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</thead>
<tbody>
<tr>
<td>119.175</td>
<td>127.95</td>
<td>314.0</td>
<td>126.5 (CTAF)</td>
<td>306.975 (CTAF)</td>
</tr>
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</table>

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**REIL all Rwys**
HIRL Rwys 4-22, 10-28 and 17-35

**HIRL Rwys 4-22, 10-28 and 17-35**
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; increase LNAV/VNAV DA to 464 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. Helicopter visibility reduction below ½ SM NA. Procedure NA when R-6604 active.

MISSED APPROACH: Climb to 600 then climbing left turn to 2000 direct MAGGO and hold.

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 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. Helicopter visibility reduction below ½ SM NA. Procedure NA when R-6604 active.

MISSED APPROACH: Climb to 600 then climbing left turn to 2000 direct MAGGO and hold.

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 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. Helicopter visibility reduction below ½ SM NA. Procedure NA when R-6604 active.

MISSED APPROACH: Climb to 600 then climbing left turn to 2000 direct MAGGO and hold.
When local altimeter setting not received, use Salisbury altimeter setting and increase all MDA 60 feet and Circling Cats C/D visibility ¼ mile. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 2000 on heading 240° and SBY VORTAC 24.1 DME Arc clockwise to MAGGO/SBY 24.1 DME 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
AIRPORT DIAGRAM

WALLOPS FLIGHT FACILITY (W.A.L.)
WALLOPS ISLAND, VIRGINIA

ASOS
119.175
WALLOPS TOWER *
126.5 306.975
GND CON
127.875 269.325
CLNC DEL
121.7

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

ELEV 19

ELEV 31

ELEV 35

ELEV 40

FIELD

ELEV 31

ELEV 35

ELEV 34

101.7°

101.7°

8005 X 200

8005 X 200

214.1°

214.1°

E

E

H

H

G

G

FIRE STATION

WATER TANKS

TWR

A

A

FIRE STATION

WATER TANKS

TWR

A

A

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

ELEV 19

ELEV 31

ELEV 35

ELEV 40

FIELD

ELEV 31

ELEV 35

ELEV 34

101.7°

101.7°

8005 X 200

8005 X 200

214.1°

214.1°

E

E

H

H

G

G

FIRE STATION

WATER TANKS

TWR

A

A

FIRE STATION

WATER TANKS

TWR

A

A

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)

WARRENTON, VIRGINIA
38°35'N-77°43'W

LOC/DME  I-HWY  109.75
APP CRS  149°
Rwy Idg  3000
TDZE  327
Apt Elev  336

Helicopter visibility reduction below 1/2 SM NA. VDP NA with Culpeper altimeter setting. When local altimeter setting not received, use Culpeper altimeter setting and increase all MDAs 40 feet and Circling Cat D visibility 1/4 SM.

MISSED APPROACH: Climb to 1200 then climbing right turn to 3000 direct CSN VORTAC and hold.

WASHINGTON DC METROPOLITAN SFRA

One Minute Holding Pattern

EYAGI I-HWY 13.6

LIPIY I-HWY 6.8

OPAAL I-HWY 3.5

CASANOVA

CSN 116.3
Chan 110

LOCALIZER 109.75
I-HWY
Chan 34(Y)

One Minute Holding Pattern

REIL Rwys 15 and 33
HIRL Rwy 15-33

WARRENTON-FAUQUIER (HWY)

NE-3, 07 OCT 2021 to 02 DEC 2021
DME/DME RNP 0.3 NA. When local altimeter setting not received, use Culpeper altimeter setting; increase all MDA 40 feet, increase LP Cat C/D visibility 1/4 SM, increase LNAV Cat C/D and Circling Cat D visibility 1/4 SM.

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct CSN VORTAC and hold, continue climb in hold to 3000.

WARNING -- WASHINGTON DC SFRA. CONTACT POTOMAC APP CON

Procedure NA when DEMO 1 MOA active.

NoPT for arrival at ANTNY on V286 northwest bound.
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 ½ SM. Helicopter visibility reductions below ¾ SM NA.

MISSING APPROACH: Climbing right turn to 2800 direct to CSN VORTAC and hold.

AWOS-3 120.350
CJR AWOS-3 119.325
POTOMAC APP CON 128.525 306.925
UNICOM 122.7 (CTAF)
RNAV (GPS) RWY 16L
MANASSAS RGNL/HARRY P DAVIS FLD (HEF)

RNP APCH. RADAR required.

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.

**MISSED APPROACH:** Climb to 700 then climbing right turn to 3000 direct CSN VORTAC and hold.

**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.
DME/DME RNP 0.3 NA. When local altimeter setting not received, use Washington Dulles Intl altimeter setting and increase all MDA 60 feet; increase LNAV Cat C/D and Circling Cat C and D visibility ¼ mile. Helicopter visibility reduction below ¾ SM NA.

**MISSED APPROACH:**
Climbing left turn to 3000 direct CSN VORTAC and hold.

**ATIS**
- 125.175

**POTOMAC APP CON**
- 128.525

**MANASSAS TOWER**
- 133.1 (CTAF)
- 360.75

**GND CON**
- 121.8

**CLNC DEL**
- 120.2

Procedure NA for arrivals at BRV VORTAC on V286 southeast bound.

**RNAV (GPS) RWY 34L**
**MANASSAS RGNL/HARRY P DAVIS FLD (HEF)**

---

**ATIS**
- 125.175

**POTOMAC APP CON**
- 128.525

**MANASSAS TOWER**
- 133.1 (CTAF)
- 360.75

**GND CON**
- 121.8

**CLNC DEL**
- 120.2

Procedure NA for arrivals at BRV VORTAC on V286 southeast bound.

**RNAV (GPS) RWY 34L**
**MANASSAS RGNL/HARRY P DAVIS FLD (HEF)**

---

**ATIS**
- 125.175

**POTOMAC APP CON**
- 128.525

**MANASSAS TOWER**
- 133.1 (CTAF)
- 360.75

**GND CON**
- 121.8

**CLNC DEL**
- 120.2

Procedure NA for arrivals at BRV VORTAC on V286 southeast bound.

**RNAV (GPS) RWY 34L**
**MANASSAS RGNL/HARRY P DAVIS FLD (HEF)**

---

**ATIS**
- 125.175

**POTOMAC APP CON**
- 128.525

**MANASSAS TOWER**
- 133.1 (CTAF)
- 360.75

**GND CON**
- 121.8

**CLNC DEL**
- 120.2

Procedure NA for arrivals at BRV VORTAC on V286 southeast bound.

**RNAV (GPS) RWY 34L**
**MANASSAS RGNL/HARRY P DAVIS FLD (HEF)**

---

**ATIS**
- 125.175

**POTOMAC APP CON**
- 128.525

**MANASSAS TOWER**
- 133.1 (CTAF)
- 360.75

**GND CON**
- 121.8

**CLNC DEL**
- 120.2

Procedure NA for arrivals at BRV VORTAC on V286 southeast bound.

**RNAV (GPS) RWY 34L**
**MANASSAS RGNL/HARRY P DAVIS FLD (HEF)**

---

**ATIS**
- 125.175

**POTOMAC APP CON**
- 128.525

**MANASSAS TOWER**
- 133.1 (CTAF)
- 360.75

**GND CON**
- 121.8

**CLNC DEL**
- 120.2

Procedure NA for arrivals at BRV VORTAC on V286 southeast bound.

**RNAV (GPS) RWY 34L**
**MANASSAS RGNL/HARRY P DAVIS FLD (HEF)**

---

**ATIS**
- 125.175

**POTOMAC APP CON**
- 128.525

**MANASSAS TOWER**
- 133.1 (CTAF)
- 360.75

**GND CON**
- 121.8

**CLNC DEL**
- 120.2

Procedure NA for arrivals at BRV VORTAC on V286 southeast bound.

**RNAV (GPS) RWY 34L**
**MANASSAS RGNL/HARRY P DAVIS FLD (HEF)**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 34L/R: Climb heading 341° to 800, then climbing left turn on CSN VORTAC R-056. Cross SHRLI INT/CSN 10 DME at 2000, cross CSN VORTAC at 3000. Thence....

TAKEOFF RWY 16L/R: Climb heading 161° to 800, then climbing right turn on CSN VORTAC R-087, cross GADZI/CSN 10 DME at 2000, cross CSN VORTAC at 3000. Thence....

....via assigned transition.

FLUKY TRANSITION (ARSNL5.FLUKY): From over CSN VORTAC on CSN R-148 to FLUKY INT.
GORDONSVILLE TRANSITION (ARSNL5.GVE): From over CSN VORTAC on CSN R-206 to GVE VORTAC.
LINDEN TRANSITION (ARSNL5.LDN): From over CSN VORTAC on CSN R-315 to LDN VORTAC.
MARTINSBURG TRANSITION (ARSNL5.MRB): From over CSN VORTAC on CSN R-010 to DAWNZ INT, then on MRB R-180 to MRB VORTAC.
MONTEBELLO TRANSITION (ARSNL5.MOL): From over CSN VORTAC on CSN R-239 and MOL R-058 to MOL VOR/DME.
WITTO TRANSITION (ARSNL5.WITTO): From over CSN VORTAC on CSN R-239 to WITTO INT.
WOOLY TRANSITION (ARSNL5.WOOLY): From over CSN VORTAC on CSN R-010 to DAWNZ INT, then on MRB R-180 to MRB VORTAC, then on MRB R-101 to WOOLY INT.
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.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.
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):
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.
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)
Circling to Rwy 4 NA at night. Circling NA northeast of Rwy 1-33.
DME required.
For inop ALS, increase S-LOC 1 Cat C and D visibility to 1½ mile.

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.

Use I-DCA DME when on the LOC course.

Prohibited Area (P-56) 1.5 NM north of DCA. Avoid surface to 18000 MSL.
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.

Altimeter Setting: 1013.2

DME required.

POTOMAC APP CON

WASHINGTON TOWER

GND CON

CLNC DEL

WASHINGTON 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

RADAR REQUIRED

GEORGETOWN INT DCA 5.9

Prohibited Area (P-56) 1.5 NM north of DCA. Avoid surface to 18000 MSL.

WASHINGTON, DC

Amdt 41C 29MAR18

WASHINGTON, DC

Almd 41C 29MAR18

RSN REAGAN WASHINGTON NTL (DCA)

ILS RWY 1 (CAT II)

Ronald Reagan Washington NTL (DCA)

38°51'N-77°02'W

CATEGORY II ILS- SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED
WASHINGTON, DC

RNAV (RNP) RWY 1
RONALD REAGAN WASHINGTON NTL (DCA)

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 1/4 mile.

MISSING APPROACH: (Do not exceed 185K until FIVUD) Climb to 2200 left turn to FIVUD and on track 327° to HESLO and on track 327° to GTN NDB and hold.

Prohibited area (P-56) 1.5 NM north of DCA: avoid surface to 18000 MSL.

Amdt 1B 26APR18

WASHINGTON, DC

RONALD REAGAN WASHINGTON NTL (DCA)

38°51'N-77°02'W

471
RNAV (RNP) RWY 19
RONALD REAGAN WASHINGTON NTL (DCA)

For uncompensated Baro-VNAV systems, procedure NA below -9°C (16°F) or above 54°C (130°F).

Inoperative table does not apply. RF and GPS required.

### DA-ATIS

<table>
<thead>
<tr>
<th>POTOMAC APP CON</th>
<th>(WEST/SOUTH)</th>
<th>(EAST)</th>
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<tbody>
<tr>
<td>132.65</td>
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<td>239.25</td>
<td>360.8</td>
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### WASHINGTON TOWER

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<th>GND CON</th>
<th>CLNC DEL</th>
<th>CPDLC</th>
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<td>119.1</td>
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### MISSED APCH FIX

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<td>BADDN</td>
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### ATTENTION

- 1.5 NM north of DCA - Avoid surface to 18000 MSL.
- For uncompensated Baro-VNAV systems, procedure NA below -9°C (16°F) or above 54°C (130°F).

### Amdt 2B  29MAR18

Inoperative table does not apply. RF and GPS required.
### RNAV (GPS) RWY 15

**Ronald Reagan Washington NTL (DCA)**

**RNP APCH.**

- Circling NA northeast of RWY 15-33. RWY 15 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C or above 54°C.

**D-ATIS**

- 132.65

**POTOMAC APP CON**

- 119.85
- 239.25
- 124.2
- 360.8

**WASHINGTON TOWER**

- 119.1
- 257.6

**GND CON**

- 121.7
- 257.6

**CLNC DEL**

- 128.25

**CPDLC**

**NOTE:** Prohibited Area (P-56) 1.5 NM north of DCA—Avoid surface to 18000 MSL.

<table>
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<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>LPV DA</td>
<td>395-1½</td>
<td>381 (400-1½)</td>
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<td>LNAV/ VNAV DA</td>
<td>749-2</td>
<td>735 (800-2)</td>
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<tr>
<td>LNAV MDA</td>
<td>800-1 786 (800-1)</td>
<td>800-1¼ 786 (800-1½)</td>
<td>800-2½ 786 (800-2½)</td>
<td>900-3</td>
</tr>
</tbody>
</table>

**CIRCLING**

- 800-1 786 (800-1)
- 800-1¼ 786 (800-1½)
- 840-2½ 826 (900-2½)
- 900-3 886 (900-3)

**AVOLE**

- 138°
- 2000

**NIPEE**

- 2500

**2000**

- 07° (11.4)

**Final approach course offset 2.79°.**

**TWR**

- 229

**RONALD REAGAN WASHINGTON NTL (DCA)**

**WASHINGTON, DC**

- Orig-C 25FEB21

**RNAV (GPS) RWY 15**

**AL-443 (FAA)**

**21224**

**WASHINGTON, DC**

**POTOMAC APP CON**

- (WEST/SOUTH)
- (EAST)

**WASHINGTON TOWER**

- 119.1
- 257.6

**GND CON**

- 121.7
- 257.6

**CLNC DEL**

- 128.25

**CPDLC**

**NOTE:** Prohibited Area (P-56) 1.5 NM north of DCA—Avoid surface to 18000 MSL.

**VGSI and RNAV glidepath not coincident**

- (VGSI Angle 3.00/TCH 36).

**600**

**1800**

**DCA**

**2000**

**2300**

**2000**

**2000**

**NIPEE**

**AVOLE**

**2000**

**2000**

**151°**

**2.3 NM to (CFSDN)**

**2.3 NM to (CFSDN)**

**1052**

**1102**

**A987**

**M548**

**M674**

**M694**

**AVOLE**

**TWR**

**38°51’N-77°02’W**

**473**
Prohibited Area (P-56) 1.5 NM north of DCA - Avoid Surface to 18000 MSL.

Misused Approach: Climb to 1800 direct DCA VOR/DME and on DCA VOR/DME R-185 to OXONN NDB/DCA 5.6 DME and hold.

Category B

WASHINGTON, DC
RONALD REAGAN WASHINGTON NTL (DCA)

RADAR REQUIRED
Inop table does not apply. Circling NA northeast of Rwy 15-33. Rwy 19 helicopter visibility reduction below 1 SM NA. DME required.

**ALTERNATE MISSED APCH FIX**

Prohibited Area (P-56) 1.5 NM north of DCA - Avoid surface to 18000 MSL.
MOUNT VERNON VISUAL RUNWAY 1

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

NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA-AVOID-SURFACE TO 18000 MSL.

Vertical Guidance
Navoid and Angle:
I-DCA 3.00°

Weather Minimums: 3000 feet ceiling and 4 mile visibility.

RADAR REQUIRED

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.
NOTE: Clearance for visual approach does not authorize penetration of P-56.

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

NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA
- AVOID SURFACE TO 18,000 MSL
- ASDE-X in use. Operate transponders
  with altitude reporting mode and ADS-B
  (if equipped) enabled on all airport surfaces.
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 Intl Airport noise abatement and prohibited area (P-56) avoidance procedures in the chart supplement special notices.
NOTE: Turbo-jets only.
NOTE: 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.

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 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 Intl 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)

AL-443 (FAA)

WASHINGTON, DC

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)

DOCTR

DUPONT

DQO

GND CON

121.7 257.6
WASHINGTON TOWER
119.1 257.6
POTOMAC DEP CON
123.65 348.725

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.
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: Do not exceed 220K until REVGE.
NOTE: If unable to accept climb rate, advise ATC on intitial 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 5: 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):
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: 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.

(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 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)
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.
**REBLL FIVE DEPARTURE (RNAV)**

**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 Natl Airport noise abatement and prohibited area (P-56) avoidance procedures as defined in the Chart Supplement Special Notices.
**NOTE:** Turbo-jets only.

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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 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: Chart not to scale.

SOOKI FIVE DEPARTURE (RNAV) 21112

AL-443 (FAA) 125.6 340.725

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.

(SOOKI5, SOOKI) 3 DEC20

NE-3, 07 OCT 2021 to 02 DEC 2021
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 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....

TAKEOFF RUNWAY 4: Climb on heading 037° to intercept course 081° to ERECA, then on track 063° to SOOKI, cross SOOKI 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 053° to RIISE, then on track 056° to SOOKI, cross SOOKI at or above 5000, thence....

TAKEOFF RUNWAY 1: Climb 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....

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 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....

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 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)
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 Intl 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 227° 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.

<table>
<thead>
<tr>
<th>LOC/DME</th>
<th>I - IAD</th>
<th>APP CRS</th>
<th>011°</th>
<th>Rwy Idg</th>
<th>11500</th>
<th>TDZE</th>
<th>312</th>
<th>Apt Elev</th>
<th>313</th>
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<tr>
<td>POTOMAC APP CON</td>
<td>120.45 306.925 (241°-330°)</td>
<td>120.525 306.925 (331°-090°)</td>
<td>126.1 338.25</td>
<td>134.425 348.6</td>
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</tbody>
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DULLES TOWER

120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
A

GND CON

121.9 317.8 (East)
121.625 348.6 (West)

MISSING APCH FIX

ALTERNATE MISSED APCH FIX

WACCINGTON, DC

D-ATIS 134.85

LOCALIZER 110.1
I - IAD
Chan 38

ARMS AML 25 NM

VGS and ILS Glidespath not coincident
(VGSI Angle 3.00°/TCH 72).

MOSBY INT
I - IAD 12.1

WAXIN INT
I - IAD 4.5

DECES INT
AML 30

ALS/2-2

MISSING APCH FIX

BLITZ

REIL Rwy 30

HiRL all Rwy

S - ILS 1R

512/18 200 (200-1⁄2)

S - LOC 1R

760/24 448 (500-3⁄4)

CIRCLING

940-1 627 (700-1)

ELEV 313

NE-3, 07 OCT 2021 to 02 DEC 2021

WASHINGTON, DC

135.7 317.8

11500 X 150

800 3000

I - IAD 12.1

aml R-051

3000

WAXIN INT
I - IAD 4.5

HIL S-1L Idg 20 DME and hold.

NE-3, 07 OCT 2021 to 02 DEC 2021

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.

Procedure NA for arrivals at MRB VORTAC on airway radials 088 CW 137.
**AIL or LOC/DME RWY 1C**

**WASHINGTON DULLES INTL (IAD)**

**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 1L (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 APPROACH:** Climb to 3000 on heading 011° and FDK VOR R-200 to FDK VOR and hold.

**MISSING APCH FIX**

**FRIDAY**

**ALTERNATE MISSED APCH FIX**

**MARTINSBURG**

**MRB**

**Chan 58**

**MISSING APCH FIX**

**DULLES TOWER**

**GROUND CON**

**120.1 317.8** (W) **120.25 348.6** (Rwy 1C/19C)

**GND CON**

**121.9 317.8** (E)

**121.625 348.6** (W)

**135.7 317.8**

**CLNCD DEL**

**ELEV 313**

**D**

**TDZE 286**

**ILS or LOC/DME RWY 1C**

**WASHINGTON DULLES INTL (IAD)**

**Amdt 2**

**15JUL21**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
ILS or LOC/DME RWY 1L
WASHINGTON DULLES INTL (IAD)

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 APCH FIX
OLIVR
LDN 14.9
R-088
Channel 90

CASANOV
116.3
CSN
Channel 110

DME or RADAR REQUIRED

WASHINGTON, DC
Amrdt 1C 15JUL21

WASHINGTON DULLES INTL (IAD)
38°57’N-77°28’W
WASHINGTON DULLES INTL (IAD)

**ILS or LOC/DME RWY 12**

**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/19R)
- 120.25 348.6 (RWY 1C/19C)
- 134.425 348.6 (RWYs 1L/19R and 12/30)

**ALTERNATE MISSED APCH FIX**

**S-ILS 12**

- 4500 GS 3.00° TCH 49°
- 121° 4.2 NM from FAF

**S-LOC 12**

- 740/24 430 (500-1°)
- 740/40 430 (500-3°)

**CIRCLING**

- 940-1 627 (700-1)
- 940-13/4 627 (700-13/4)
- 1060-2 747 (800-2°)

**S-LOC 12**

- 740/24 430 (500-1°)
- 740/40 430 (500-3°)

**CIRCLING**

- 940-1 627 (700-1)
- 940-13/4 627 (700-13/4)
- 1060-2 747 (800-2°)

**WASHINGTN DULLES INTL (IAD)**

- 109.3 121°

**MALSR**

- DME from AML VOR/DME.
- Simultaneous reception of I-AJU and AML DME required.

**MISSING APPROACH**

- Climb to 800 then climbing right turn to 5000 via heading 290° and AML VOR/DME R-270 to OLVIR INT/AML 20 DME and hold, continue climb-in-hold to 5000.

**Radar Required**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**Washington DULLES INTL (IAD)**

- 38°57'N-77°28'W
- Amdt 9C 15JUL21

**CPDLC**

**NE-3, 07 OCT 2021 to 02 DEC 2021**
WASHINGTON, DC

ILS or LOC/DME RWY 19R
WASHINGTON DULLES INTL (IAD)

LOC/DME I-ISU
110.75
Chan 44 (Y)

APP CRS
191°

Rwy Idg 9400
TDZE 278
Apt Elev 313

POTOMAC APP CON
120.45 306.925 (241° - 330°)
128.525 306.925 (091° - 240°)
126.1 338.25 (331° - 090°)

ALSF-2

GND CON
121.9 317.8 (EAST)
121.625 348.6 (WEST)

D-UPL SW ISU

D-UPL SW ISU

D-UPL SW ISU

D-UPL SW ISU

D-UPL SW ISU

D-UPL SW ISU

D-UPL SW ISU

Rwy 19C, ILS Rwy 19C (Cat II), ILS Rwy 19C (Cat III), Rwy 19L.

ALTERNATE MISSED APCH FIX

OLIVR
LDN 14.9

CSN 16.3

CLAYY

AMUL

ARMEL

R-270

OLIVR

114.3 LDN

Chan 90:

1498 A

114.3 LDN

Chan 90:

268 A

300

CLAYY

HSU 7.2

AMUL

Clayy ISU 4.1

ARMEL

ISU 4.1

OLIVR

ISU 11.3

BEEZY INT

ISU 16

LOCALIZER 110.75

I-ISU 11.3

Channel 58

ISU 7.2

Channel 82

ISU 4.1

Channel 20

ISU 25

Channel 110

S-ILS 19R

S-LOC 19R

CIRCLING

CATEGORY

A

B

C

D

478/18

200 (200-1/2)

442 (500-1/2)

627 (700-1)

38°57'N-77°28'W

WASHINGTON DULLES INTL (IAD)

WASH DULLES TOWER

CPDLC

R-270

117.9 EML

Channel 126

(IAF)

RADAR

MRB 19.6

AMUL 20

DME and hold, continue climb-in-hold to 5000.

OLIVR INT/

MISSED APPROACH: Climb to 800 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.

APCH FIX
ALTERNATE MISSED
GND CON
Rwy 19R

ALTERNATE MISSED
APCH FIX

CLNC DEL

CPDLC

114.3 LDN

Chan 90:

268 A

300

CLAYY

HSU 7.2

AMUL

Clayy ISU 4.1

ARMEL

ISU 4.1

Channel 20

ISU 25

Channel 110

S-ILS 19R

S-LOC 19R

CIRCLING

CATEGORY

A

B

C

D

478/18

200 (200-1/2)

442 (500-1/2)

627 (700-1)

38°57'N-77°28'W

WASHINGTON DULLES INTL (IAD)

WASH DULLES TOWER

CPDLC

R-270

117.9 EML

Channel 126

(IAF)

RADAR

MRB 19.6

AMUL 20

DME and hold, continue climb-in-hold to 5000.

OLIVR INT/

MISSED APPROACH: Climb to 800 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.

APCH FIX
ALTERNATE MISSED
GND CON
Rwy 19R

ALTERNATE MISSED
APCH FIX

CLNC DEL

CPDLC

114.3 LDN

Chan 90:

268 A

300

CLAYY

HSU 7.2

AMUL

Clayy ISU 4.1

ARMEL

ISU 4.1

Channel 20

ISU 25

Channel 110

S-ILS 19R

S-LOC 19R

CIRCLING

CATEGORY

A

B

C

D

478/18

200 (200-1/2)

442 (500-1/2)

627 (700-1)

38°57'N-77°28'W

WASHINGTON DULLES INTL (IAD)

WASH DULLES TOWER

CPDLC

R-270

117.9 EML

Channel 126

(IAF)

RADAR

MRB 19.6

AMUL 20

DME and hold, continue climb-in-hold to 5000.

OLIVR INT/

MISSED APPROACH: Climb to 800 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.

APCH FIX
ALTERNATE MISSED
GND CON
Rwy 19R

ALTERNATE MISSED
APCH FIX

CLNC DEL

CPDLC

114.3 LDN

Chan 90:

268 A

300

CLAYY

HSU 7.2

AMUL

Clayy ISU 4.1

ARMEL

ISU 4.1

Channel 20

ISU 25

Channel 110

S-ILS 19R

S-LOC 19R

CIRCLING

CATEGORY

A

B

C

D

478/18

200 (200-1/2)

442 (500-1/2)

627 (700-1)

38°57'N-77°28'W

WASHINGTON DULLES INTL (IAD)

WASH DULLES TOWER

CPDLC

R-270

117.9 EML

Channel 126

(IAF)

RADAR

MRB 19.6

AMUL 20

DME and hold, continue climb-in-hold to 5000.

OLIVR INT/

MISSED APPROACH: Climb to 800 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.

APCH FIX
ALTERNATE MISSED
GND CON
Rwy 19R

ALTERNATE MISSED
APCH FIX

CLNC DEL

CPDLC

114.3 LDN

Chan 90:

268 A

300

CLAYY

HSU 7.2

AMUL

Clayy ISU 4.1

ARMEL

ISU 4.1

Channel 20

ISU 25

Channel 110

S-ILS 19R

S-LOC 19R

CIRCLING

CATEGORY

A

B

C

D

478/18

200 (200-1/2)

442 (500-1/2)

627 (700-1)

38°57'N-77°28'W

WASHINGTON DULLES INTL (IAD)

WASH DULLES TOWER

CPDLC

R-270

117.9 EML

Channel 126

(IAF)

RADAR

MRB 19.6

AMUL 20

DME and hold, continue climb-in-hold to 5000.

OLIVR INT/

MISSED APPROACH: Climb to 800 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.

APCH FIX
ALTERNATE MISSED
GND CON
Rwy 19R

ALTERNATE MISSED
APCH FIX

CLNC DEL

CPDLC

114.3 LDN

Chan 90:

268 A

300

CLAYY

HSU 7.2

AMUL

Clayy ISU 4.1

ARMEL

ISU 4.1

Channel 20

ISU 25

Channel 110

S-ILS 19R

S-LOC 19R

CIRCLING

CATEGORY

A

B

C

D

478/18

200 (200-1/2)

442 (500-1/2)

627 (700-1)
### ILS RWY 1L (CAT II & III)

**WASHINGTON DULLES INTL (IAD)**

**LOC/DME I-OU1**

<table>
<thead>
<tr>
<th>Category</th>
<th>App CRs</th>
<th>Rwy Ldg</th>
<th>TDZE</th>
<th>Apt Elev</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT II</td>
<td>110°</td>
<td>011°</td>
<td>9400</td>
<td>313</td>
</tr>
</tbody>
</table>

**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.

**ALSF-2**

- MISSED 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.

**D-ATIS**

<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>126.3 338.25 (331°-090°)</td>
<td>134.425 348.6 (RWys 1L/19R and 12/30)</td>
<td></td>
</tr>
</tbody>
</table>

**Alternate Missed Apch Fix**

- OLIVR LDN 14.9°, Channel 90
- OLIVR AML 20, Channel 82

**Missed Apch Fix**

- OLIVR AML 20, Channel 82
- OLIVR AML 20, Channel 90

**DME or Radar Required**

<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 1L</td>
<td>CAT II</td>
<td>RA 97/12</td>
<td>100 DA 396</td>
<td></td>
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<tr>
<td>S-ILS 1L</td>
<td>CAT III</td>
<td>RVR 07</td>
<td></td>
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</tr>
<tr>
<td>S-ILS 1L</td>
<td>CAT III</td>
<td>RVR 06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-ILS 1L</td>
<td>CAT IIIc</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Category II & III ILS - Special Aircrew & Aircraft Certification Required**

- RNAV (GPS) Y RWY 1C, ILS RWY 1C (Cat II), RNAV (GPS) Y RWY 1R, ILS or LOC RWY 1R, ILS or LOC RWY 1R, ILS or LOC RWY 1R, ILS or LOC RWY 1R.

**WASHINGTON, DC**

Amdt 1C 15JUL21

38°57'N-77°28'W
WASHINGTON, DC

ILS RWY 1R  (CAT II & III)
WASHINGTON DULLES INTL (IAD)

Simultaneous approach authorized with Rwy 1C or 1L.

POTOMAC APP CON
120.45 306.925 (24°-330°)
128.525 306.925 (09°-240°)
126.1 338.25 (331°-090°)
134.425 346.8

DULLES TOWER
120.1 317.8
120.25 346.8
121.625 346.8

GND CON
121.9 317.8
135.7 317.8

LOC/DME I-IAD
110.1
APP CRS
011°
Rwy Ldg
11500
TDZE
312
Apt Elev
313

MISSED APPROACH: Climb to 800 then climbing right turn 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 (24°-330°)
128.525 306.925 (09°-240°)
126.1 338.25 (331°-090°)
134.425 346.8

DULLES TOWER
120.1 317.8
120.25 346.8
121.625 346.8

GND CON
121.9 317.8
135.7 317.8

LOC/DME I-IAD
110.1
APP CRS
011°
Rwy Ldg
11500
TDZE
312
Apt Elev
313

MISSED APPROACH: Climb to 800 then climbing right turn 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 (24°-330°)
128.525 306.925 (09°-240°)
126.1 338.25 (331°-090°)
134.425 346.8

DULLES TOWER
120.1 317.8
120.25 346.8
121.625 346.8

GND CON
121.9 317.8
135.7 317.8

LOC/DME I-IAD
110.1
APP CRS
011°
Rwy Ldg
11500
TDZE
312
Apt Elev
313

MISSED APPROACH: Climb to 800 then climbing right turn to 3000 via heading 060° and AML VOR/DME R.051 to BLITZ INT/AML 20 DME and hold.
WASHINGTON DULLES INTL (IAD)

ILS RWY 1C (SA CAT II)

WASHINGTON, DC

NE-3, 07 OCT 2021 to 02 DEC 2021

Category II ILS - Special Aircrew & Aircraft Certification Required
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.

**ISL RWY 19L (SA CAT II)**

**WASHINGTON DULLES INTL (IAD)**

**LOC/DME** I-SGC 110.1
**App CRS** 191°
**Rwy Idg** 11500
**TDZE** 302
**Apt Elev** 313

**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)

**WOCL DEL**
- 135.7 317.8

**POTOMAC APP CON**
- **I-SGC** 110.1
- **MARTINSBURG** 112.1
- **MRB**
- **Chan 58**

**Alternate Missed APCH Fix**
- **ASPER**

**LOC/DME** I-SGC 110.1
**App CRS** 191°
**Rwy Idg** 11500
**TDZE** 302
**Apt Elev** 313

**NE-3, 07 OCT 2021 to 02 DEC 2021**

Procedure NA for arrivals at MRB VORTAC on airway radials 088 CW 137.
WASHINGTON, DC
AL-5100 (FAA) 20310

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 1¾. GPS required. Simultaneous approach authorized with ILS or LOC Rwy 1R, ILS Rwy 1R (Cat II), ILS Rwy 1R (Cat III). Use of FD or AP providing RNAV track guidance required during simultaneous operations.

POTOMAC APP CON
120.45 306.925 (24°-330°)
128.525 306.925 (01°-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)

MISSED APCH FIX
6 NM
3400

TDZE 286

WASHINGTON DULLES INTL (IAD)

RNAV (RNP) Z RWY 1C

AUTHORIZATION REQUIRED

WASHINGTON DULLES INTL (IAD)
RNAV (RNP) Z RWY 1C

WASHINGTON, DC
Orig-G 26JUN14

514
RNAV (RNP) Z RWY 19C
WASHINGTON DULLES INTL (IAD)

ALSF-2

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -1.4°C (6°F) or above 47°C (117°F). For inoperative ALSF, increase RNP 0.30 visibility to 1.8. Simultaneous approach authorized with ILS or LOC Rwy 19L, ILS Rwy 19L (Cat II). Use of FD or AP providing RNAV track guidance required during simultaneous operations.

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)

D-ATIS
134.85

CLNC DEL
135.7 317.8

MISSED APPROACH: Climb to 4000 via track 191° to BOPAC and via track 265° to BLUES and hold.

MISSED APCH FIX

3.7 NM 3.2 NM 7.4 NM

GP 3.00° TCH 54

RNP 0.30 DA 740/60 468 (500-1.4)

WASHINGTON DULLES INTL (IAD)
RNAV (RNP) Z RWY 19C

WASHINGTON, DC
38°57'N - 77°28'W

AUTHORIZATION REQUIRED

WASHINGTON, DC
Orig-D 08MAR12
RNAV (RNP) Z RWY 19L
WASHINGTON DULLES INTL (IAD)

- **RNAV (RNP) Z RWY 19L**
- **WASHINGTON DULLES INTL (IAD)**

**AUTHORIZATION REQUIRED**

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

**RNP 0.30 DA**
- 743/50
- 441 (500-1)

**GND CON**
- 121.9 317.8 (EAST)
- 121.625 348.6 (WEST)

**DULLES TOWER**
- 120.1 317.8 (Rwy 1R/19L)
- 120.25 348.6 (Rwy 1C/19C)
- 134.425 348.6 (Rwy 11/19R and 12/30)

**MISSED APCH FIX**
- CRVER
- YYANG
- PERTE
- WAXIN and hold.

**WAXIN**
- 191°
- 3000
- (14.2)

**DOMSE**
- 120°
- 3000
- (6.7)

**IZUMI**
- 048°
- 3000
- (13.1)

**TDZE**
- 134.85

**DRUZZ**
- (RNP 0.50)

**SHNON**
- (RNP 0.50)

**APP CRS**
- 191°

**Rwy Ldg**
- 302

**TWR**
- 11500

**Elev**
- 312

**HIRL all Rwys**
- REIL Rwy 30

**TDZ/CL 1C, 1L, 1R, 12, 19C and 19R**
- REIL Rwy 30

**WASHINGTON, DC**
- Orig-C 08MAR12

**APP CRS 191°**
- Rwy ldg 11500
- TDZE 302
- Apt Elev 312

**D-ATIS**
- 134.85

**RWY 19L**
- 191°

**ELEV 312**
- TDZE 302

**WASHINGTON DULLES INTL (IAD)**
- 38°57’N-77°28’W

**Authorization Required**

**WASHINGTON DULLES INTL (IAD)**

**38°57’N-77°28’W**

**517**
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 1L (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.

**MISSING APPROACH:** Climb to 4000 direct COCAV and on 300° track to PRISM and on 346° track to MRB VORTAC and hold.

**CLNC DEL**

<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>496/18</td>
<td>200 (200-1/2)</td>
<td></td>
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</tr>
<tr>
<td>LNAV/ VNAV DA</td>
<td>828/60</td>
<td>532 (600-1/2)</td>
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</tr>
<tr>
<td>LNAV MDA</td>
<td>740/24</td>
<td>740/40</td>
<td>740/50</td>
<td>740/50</td>
</tr>
<tr>
<td>444 (500-1/2)</td>
<td>444 (500-1)</td>
<td>444 (500-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>940-1</td>
<td>627 (700-1)</td>
<td>940-1 1/2</td>
<td>1060-2 1/2</td>
</tr>
<tr>
<td>627 (700-1/2)</td>
<td>747 (800-2 1/2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Procedure NA for arrivals at CSN VORTAC on V286 northwest bound.

**VGSi and RNAV glidepath not coincident (VGSi Angle 3.00°/TCH 72).**

**Procedure NA for arrivals at CSN VORTAC on V286 northwest bound.**

**Turn NA for arrivals at CSN VORTAC on V286 northwest bound.**
RNAV (GPS) RWY 12
WASHINGTON DULLES INTL (IAD)

For inop MALSR, increase LNAV Cat D visibility to RVR 6000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C.

For inop MALSR, increase LNAV Cat D visibility to RVR 6000.

MISSED APPROACH: Climb to 4000 direct OTSUE and via 199° track to ZULKA and right turn via 298° track to OLIVR and hold.

- Procedure NA for arrivals at DRUZZ via V4 westbound.
- VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 66).
- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C.

WASHINGTON, DC
Amdt 1D 15JUL21

38°57'N-77°28"W
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 19R (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.
RNAV (GPS) Y RWY 1R
WASHINGTON DULLES INTL (IAD)

RNP APCH.

For uncompensated Baro-VDME 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.

POTOMAC APP CON
120.45 306.925 (241°-330°)
128.525 306.925 (091°-240°)
126.1338.25 (331°-090°)

DULLES TOWER
120.1317.8 (Rwy 1R/19L)
120.25348.6 (Rwy 1C/19C)
134.425348.6 (Rwy 1L/19R and 12/30)

GND CON
121.9317.8 (EAST)
121.625348.6 (WEST)

CINC DEL
135.7317.8

D-ATIS
134.85

CPDLC

WASHINGTON DULLES INTL (IAD)
AL-5100 (FAA)

WASHINGTON, DC

NE-3, 07 OCT 2021 to 02 DEC 2021
RNAV (GPS) Y RWY 19C
WASHINGTON DULLES INTL (IAD)

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**
- 120.45 306.925 (224°-330°)
- 128.525 306.925 (091°-240°)
- 126.1338.25 (331°-090°)

**DULLES TOWER**
- 120.1331.7 (Rwy 1R/19L)
- 120.25 348.6 (Rwy 1C/19C)
- 134.425 348.6 (Rwys 1L/19R and 12/30)

**D-ATIS**
- 134.85

**GND CON**
- 121.9331.7 (EAST)
- 121.625 348.6 (WEST)

**CLNC DEL**
- 135.7 317.8

**MISSING APCH FIX**
- 4 NM, 30°

**CASANOVA CSN**

**4000**
- BOPAC

**CN**
- VGSi and RNAV glidepath not coincident (VGSi Angle 3.00°/TCH 72).

**LNAV only**
- 1.1 NM to RW19C

**RW19C**

**478**
- FEMKO

**1500**
- Procedure Turn NA

**4000**
- GP 3.00°/TCH 54

**AKA RW19C 25 NM**

**Procedure NA for arrivals at MULRR on V139-143 northeast bound.**
RNAV (GPS) Y RWY 19L
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/DME Rwy 19R, ILS Rwy 19R (Cat II), ILS
Rwy 19R (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.

POTOMAC APP CON

DULLES TOWER

GND CON

CINC DEL

D-ATIS

Procedure NA for arrivals at DRUZZ on V4 westbound.

CPDLC

MISSED APPROACH:
Climb to 2000 direct WAXIN and hold.

**RVR 1800 Rwy 19R (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.

POTOMAC APP CON

DULLES TOWER

GND CON

CINC DEL

D-ATIS

Procedure NA for arrivals at DRUZZ on V4 westbound.

Procedure NA for arrivals at MULRR on V139-143 northeast bound.

CPDLC

LNAV only.

Procedure NA for arrivals at DRUZZ on V4 westbound.

MISSED APPROACH:
Climb to 2000 direct WAXIN and hold.

**RVR 1800 Rwy 19R (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.

D-ATIS

Procedure NA for arrivals at DRUZZ on V4 westbound.

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°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). 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.

POTOMAC APP CON

DULLES TOWER

GND CON

CINC DEL

D-ATIS

Procedure NA for arrivals at DRUZZ on V4 westbound.

CPDLC

MISSED APPROACH:
Climb to 2000 direct WAXIN and hold.
INSTRUCTIONS IS REQUIRED.
READBACK OF ALL RUNWAY HOLDING CLEARANCES.
CAUTION: BE ALERT TO AIRPORT DIAGRAM.

Runway Status Lights in operation.
ASDE-X in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.
PCN 81 R/C/W/T

RWYS 01C-19C, 01L-19R, 12-30
GND CON
CLNC DEL
MIDFIELD RAMP CON
CPDLC
PDC
D

NE-3, 07 OCT 2021 to 02 DEC 2021

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
WASHINGTON, DC
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.
Rwy 1C, 1L, 1R, 19C, 19L, 19R, 30:
Standard with minimum climb of 500' per NM to 820.

NOTE: Aircraft may be Radar vectored to LOULU, TIICE, WHYUU, BUNZZ, or RAMAY.

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: Turbojets only.
NOTE: Radar required.
NOTE: Radar required.
NOTE: Chart not to scale.
**CAPITAL ONE DEPARTURE**

DC-1 134.85
CNC DEL 135.7 317.8
CPDLC
GND CON
121.9 317.8 [EAST]
121.625 348.6 [WEST]
120.1 317.8 [Rwy 1R/19L]
120.25 348.6 [Rwy 1C/19C]
134.425 348.6 [Rwy 1L/19R, 12/30]

- **POTOMAC DEP CON NORTH**
  125.05 350.2

- **JERES**
  N39°38.57'
  W77°27.30'
  L-29-34, H-10-12

- **BUFFR**
  N39°22.56'
  W77°35.90'
  L-29-34-36, H-10-12

- **WOOLY**
  N39°20.32'
  W77°02.19'
  L-29-34-36

- **PEEGE**
  N38°58.24'
  W77°03.54'
  L-29-34-36

- **WASHINGTON**
  111.0 DCA
  N38°51.57'
  W77°02.19'
  L-29-34-36, H-10-12

- **HAFNR**
  N38°23.84'
  W77°33.98'
  L-29-34-36, H-10-12

- **GORDONSVILLE**
  115.6 GVE
  N38°00.82'
  W77°09.18'
  L-34-36, H-10-12

**NOTE:** Radar required.

**NOTE:** Chart not to scale.

**NE-3, 07 OCT 2021 to 02 DEC 2021**

(CAPTAL1.IAD) WASHINGTON DULLES INTL (IAD)

**AL-5100 (FAA)** WASHINGTON, DC
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.
NOTE: Chart not to scale.

TO TOP ALTITUDE: 3000

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 11L/C/R, 19L/C/R, 30:

- Climb on heading assigned by ATC, expect RADAR vectors to BUTZ, then on track 239° to CLTCH, hence...

- ...on assigned transition. Maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

- ...on assigned transition. Maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

- ...on assigned transition. Maintain 3000. Expect clearance to filed altitude within ten (10) minutes after departure.

NOTE: Turbo-jets only.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/C/R: Climb on heading 011° to 820, then on heading 011° or as 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 as 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 as 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):

TAKEOFF MINIMUMS
Rwys 1L/C/R, 19L/C/R, 30:
Standard with minimum climb of 500' per NM to 820.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: Turbojets only.
NOTE: COLIN/SCOOB Transitions - Part 121 aircraft only.
NOTE: SWANN/AGARD Transitions - Part 121 and Part 129 aircraft only.

NOTE: Chart not to scale.
JDUBB FOUR DEPARTURE (RNAV)

D-ATIS
134.85
CLNC DEL
135.7 317.8
CPDLC
GND CON
121.9 317.8 (EAST)
121.625 348.6 (WEST)
DULLES TOWER
120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
134.425 348.6 (Rwys 1L/19R, 12/30)
POTOMAC DEP CON
126.65 350.2

TAKEOFF MINIMUMS:
Rwys 1L/C/R, 19L/C/R, 30:
   Standard with 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.

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.
MCRAY TWO DEPARTURE (RNAV)

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 MCRAZ, maintain 3000 or as directed by ATC. Expect clearance to filed altitude within ten (10) minutes after departure.
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.

OTTO TRANSITION (RNLDI4.OTTO):

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, WHYYU, RNLDI or OTTO.
**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.

---

**TOP ALTITUDE:**
3000

---

**NOTES:**
- NE-3, 07 OCT 2021 to 02 DEC 2021
- SCRAM SIX DEPARTURE (RNAV)
- SCRAM SIX DEPARTURE (RAV)
- D-ATIS 134.85
- CLNC DEL 135.7 317.8
- CPDL 121.9 317.8 (EAST)
- DULLES TOWER 120.1 317.8 (Rwy 18/19L)
- 120.25 348.6 (Rwy 1C/19C)
- 134.425 348.6 (Rwy 11L/19R, 12/30)
- POTOMAC DEP CON 126.65 350.2
- P-56A
- P-56B
- 31DEC20
- NE-3, 07 OCT 2021 to 02 DEC 2021
- 536
- DULLES TOWER
- AL-5100 (FAA)
- DULLES INTL (IAD)
- WASHINGTON DULLES INTL (IAD)
- POTOMAC DEP CON
- WASHINGTON DULLES INTL (IAD)
- WASHINGTON, DC
- NOTE: Chart not to scale
**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 on heading 320° or as assigned by ATC, expect RADAR vectors to RAZZA, thence . . . .

**TAKEOFF RUNWAY 30:** Climb heading 301° to 820, then 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 (WOOLY1.AGARD)**
**BALTIMORE TRANSITION (WOOLY1.BAL)**
**BROSS TRANSITION (WOOLY1.BROSS)**
**SWANN TRANSITION (WOOLY1.SWANN)**
RNAV (GPS) RWY 6
EAGLE'S NEST (W13)

MISSED APPROACH: Climb to 6300 direct ZEDPA and hold, continue climb-in-hold to 6300.

AWOS-3PT 118.625  POTOMAC APP CON 132.85 323.125
UNICOM 123.05 (CTAF)

NA

Rwy 6 helicopter visibility reduction below 1 SM NA. Procedure NA at night.

LANV MDA 2440-3 1004 (1100-3) NA
CIRCLING 2440-3 1004 (1100-3) NA

WAYNESBORO, VIRGINIA
Amrd 1A 10SEP20

38°05'N-78°57"W
RNAV (GPS) RWY 24
EAGLE’S NEST (W13)

RNP APCH.

- MISSED APPROACH: Climb to 6700 direct OBEPE and hold, continue climb-in-hold to 6700.

- Procedure NA at night. Rwy 24 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>
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<tbody>
<tr>
<td>LNAV MDA</td>
<td>2640-3</td>
<td>1204 (1300-3)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>2640-3</td>
<td>1204 (1300-3)</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

AWOS: 3PT 118.625
POTOMAC APP CON 132.85 323.125
UNICOM 123.05 (CTAF)

WAYNESBORO, VIRGINIA
Amdt 1A 10SEP20

38°05'N-78°57"W 539

NE-3, 07 OCT 2021 to 02 DEC 2021
PROCEED VFR FROM XUHSO OR CONDUCT THE SPECIFIED MISSED APPROACH.

FOR VFR MISSED APPROACH EXIT RESTRICTED AREA TO NORTH EXPEDITIOUSLY.

LIMIT ALL SEGMENTS TO 90 KIAS.

USE PHILLIPS AAF ALTIMETER SETTING.
RNAV 1

Use Phillips AAF altimeter setting.

GPS REQUIRED

DEPARTURE ROUTE DESCRIPTION

VFR SEGMENT: VFR climb to XUHSO, cross XUHSO at or above 700.

IFR SEGMENT: From XUHSO climb on track 005° to cross JIRET at or above 2500.
RNAV (GPS) RWY 10
MIDDLE PENINSULA RGNL (F'YJ)

For uncompensated VOR/LOC 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. 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 C/T visibility ¾ SM; increase all MDA 80 feet.

MISSED APPROACH: Climb to 2000 direct CIBAC and hold.

AWOS-3
132.825

POTOMAC APP CON
126.4  282.375

UNICOM
123.0 (CTAF)

WEST POINT, VIRGINIA

AL-5160 (FAA) 20086

NE-3, 07 OCT 2021 to 02 DEC 2021

WEST POINT, VIRGINIA
Amdt 1B  26MAR20

RNAV (GPS) RWY 10
MIDDLE PENINSULA RGNL (F'YJ)

For uncompensated VOR/LOC 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. 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 C/T visibility ¾ SM; increase all MDA 80 feet.

MISSED APPROACH: Climb to 2000 direct CIBAC and hold.

AWOS-3
132.825

POTOMAC APP CON
126.4  282.375

UNICOM
123.0 (CTAF)

WEST POINT, VIRGINIA

AL-5160 (FAA) 20086

NE-3, 07 OCT 2021 to 02 DEC 2021

WEST POINT, VIRGINIA
Amdt 1B  26MAR20

RNAV (GPS) RWY 10
MIDDLE PENINSULA RGNL (F'YJ)

For uncompensated VOR/LOC 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. 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 C/T visibility ¾ SM; increase all MDA 80 feet.

MISSED APPROACH: Climb to 2000 direct CIBAC and hold.

AWOS-3
132.825

POTOMAC APP CON
126.4  282.375

UNICOM
123.0 (CTAF)

WEST POINT, VIRGINIA

AL-5160 (FAA) 20086

NE-3, 07 OCT 2021 to 02 DEC 2021

WEST POINT, VIRGINIA
Amdt 1B  26MAR20

RNAV (GPS) RWY 10
MIDDLE PENINSULA RGNL (F'YJ)

For uncompensated VOR/LOC 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. 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 C/T visibility ¾ SM; increase all MDA 80 feet.

MISSED APPROACH: Climb to 2000 direct CIBAC and hold.

AWOS-3
132.825

POTOMAC APP CON
126.4  282.375

UNICOM
123.0 (CTAF)

WEST POINT, VIRGINIA

AL-5160 (FAA) 20086

NE-3, 07 OCT 2021 to 02 DEC 2021

WEST POINT, VIRGINIA
Amdt 1B  26MAR20

RNAV (GPS) RWY 10
MIDDLE PENINSULA RGNL (F'YJ)
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 ¼ 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.
When local altimeter setting not received, use Newport News altimeter setting and increase all MDA 80 feet.

NoPT for arrival at HCM VORTAC on V38 westbound.

MISSED APPROACH: Climbing right turn to 1700 direct HCM VORTAC and hold.

<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>480-1</td>
<td>620-1</td>
<td>NA</td>
<td>600 (600-1)</td>
</tr>
</tbody>
</table>

Knots: 60 90 120 150 180
Min:Sec: 4:48 3:12 2:24 1:55 1:36

WEST POINT, VIRGINIA
Amdt 4A 15SEP16

37°31'N-76°46'W
545
**RNAV (GPS) RWY 16**

**CARROLL COUNTY RGNL/JACK B POAGE FLD (DMW)**

**MISSED APPROACH:**
Climb to 2200 direct NABIC then climbing left turn to 3000 on track 070° to FIGID and hold.

---

**Category C Visibility:**
SM. When VGSI inop, Straight-in/Circling Rwy 16 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
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<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>1081-1</td>
<td>292</td>
<td>300-1</td>
<td>NA</td>
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<td>LNAV/VNAV DA</td>
<td>1189-1 1/3</td>
<td>400</td>
<td>400-1/3</td>
<td>NA</td>
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<tr>
<td>LNAV MDA</td>
<td>1280-1</td>
<td>491</td>
<td>500-1</td>
<td>1280-1 1/3</td>
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<tr>
<td>Circling</td>
<td>1320-1</td>
<td>531</td>
<td>600-1</td>
<td>1400-1</td>
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</table>

**RNAV (GPS) RWY 16**

**Amdt 2B 20MAY21**

**AWOS-3**

**POTOMAC APP CON**

**GCO**

**UNICOM**

**121.25**

**125.525**

**291.625**

**121.725**

**122.7 (CTAF)**

---

**WEATHER NOTES:**

- 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 1/2 SM, LNAV Cat C visibility 1/2 SM, and Circling Cat C visibility 1/2 SM. When VGSI inop, Straight-in/Circling Rwy 16 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

---

**MAP AND DIRECTION:**

- **Unnyts**
- **Hyper**
- **Binns**
- **Nabic**
- **Rwy Idg**
- **Rwy Elev**
- **Apt Elev**
- **MISSED APPROACH:**
  - Climbing 2200 direct NABIC then climbing left turn to 3000 on track 070° to FIGID and hold.
MISSED APPROACH: Climbing left turn to 2900 direct EMI VORTAC and hold.

WASHINGTON DC
METROPOLITAN SFRA
WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
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<th>C</th>
<th>D</th>
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<tbody>
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<td>S-34</td>
<td>1480-1</td>
<td>692 (700-1)</td>
<td>1480-2</td>
<td>692 (700-2)</td>
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<tr>
<td>CIRCLING</td>
<td>1480-1</td>
<td>691 (700-1)</td>
<td>1500-2</td>
<td>711 (800-2)</td>
</tr>
</tbody>
</table>

NE-3, 07 OCT 2021 to 02 DEC 2021
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.

NE-3, 07 OCT 2021 to 02 DEC 2021
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.**

Procedure NA at night. Rwy 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.

<table>
<thead>
<tr>
<th>DMW AWOS-3</th>
<th>POTOMAC APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>121.25</td>
<td>125.525 291.625</td>
<td>122.8 (CTAF)</td>
</tr>
</tbody>
</table>

Procedure NA for arrivals at GATHR on V408 eastbound.

**Category A**

- **LNAV MDA:** 1360-1 561 (600-1)
- **CIRCLING:** 1360-1 561 (600-1)

**SCALE:** 1 inch = 1/4 mile

**RNP APCH.**

1724

**JHONY**

Visual Segment - Obstacles.

- 1500
- 3000
- **BENDI**

 CATEGORY | A | B | C | D
--- | --- | --- | --- | ---
LNAV MDA | 1360-1 561 (600-1) | NA | NA | NA

**AIRPORT ELEVATION:** 799

**TDZE:** 799

**MISA RWY 14 25 NM**

**3400**
Use Carroll County Rgl/Jack B Poage Fld altimeter setting. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

**CLEARVIEW AIRPARK (2W2)**

**ELEV 799**

- ** Originally marked as 2.1% U P ELEV**
- **235° 2.4 NM from FAF**
- **URL Rwy 14-32**
- **FAF to MAP 2.4 NM**
- **CIRCLING 1280-1 481 (500-1)**
- **CATEGORY**
  - A
  - B
  - C
  - D
- **Knots** 60 90 120 150 180
- **Min:Sec** 2:24 1:36 1:12 0:58 0:48

**WESTMINSTER, MARYLAND**

**DMW AWOS-3** 121.25
**POTOMAC APP CON** 125.525 291.625
**UNICOM** 122.8 (CTAF)

**MISSED APPROACH:** Climb to 1,500, then climbing left turn to 2,600 direct EMI VORTAC and hold.

**NOTAM**

- **LIRL Rwy 14-32**
- **39°28’N-77°01’W**
- **Amdt 4A 07JAN16**
- **NE-3, 07 OCT 2021 to 02 DEC 2021**
- **Helicopter visibility reduction below 1 SM NA.**
- **Procedure NA at night.**

**AL-6188 (FAA)**

**DMW AWOS-3** 121.25
**POTOMAC APP CON** 125.525 291.625
**UNICOM** 122.8 (CTAF)
**RNAV (GPS)-C**

**WILLIAMSBURG-JAMESTOWN (JGG)**

<table>
<thead>
<tr>
<th>APP CRS</th>
<th>115°</th>
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<tbody>
<tr>
<td>Rwy Idg</td>
<td>N/A</td>
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<tr>
<td>TDZE</td>
<td>N/A</td>
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<tr>
<td>Apt Elev</td>
<td>49</td>
</tr>
</tbody>
</table>

- **WILLIAMSBURG, VIRGINIA**
- **AL-6425 (FAA)**
- **20254**

**DME/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.**

**MISSING APPROACH:** Climbing left turn to 2000 direct HCM VORTAC and hold.

<table>
<thead>
<tr>
<th>AWOS:3</th>
<th>120.625</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORFOLK APP CON</td>
<td>119.45 360.6</td>
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<tr>
<td>GCO</td>
<td>135.075</td>
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<tr>
<td>UNICOM</td>
<td>122.8 (CTAF)</td>
</tr>
</tbody>
</table>

**Procedure NA for arrivals on HPW VORTAC airway radials 025 CW 178.**

**632**

**1060-3 1011 (1100-3)**

**632**

**2000**

**HCM**

**ZESMI**

**WENDU**

**JUSBO**

**NE-3, 07 OCT 2021 to 02 DEC 2021**

**WILLIAMSBURG, VIRGINIA**

**Orig 13JAN11**

**37°14'N - 76°43'W**
VOR-B

WILLIAMSBURG, VIRGINIA

108.8
HCM
APP CRS
188°
N/A
25
N/A
ELEV
UNICOM
49
MISSED APPROACH: Climbing right turn to 2000 direct HCM VORTAC and hold.

AWOS:3
120.625
NORFOLK APP CON
119.45 360.6
GCO
135.075
UNICOM
122.8 (CTAF)

Procedure NA at night. Rwy 13, 31 helicopter visibility reduction below 1 SM NA.

WILLIAMSBURG-JAMESTOWN
(JGG)

NE-3, 07 OCT 2021 to 02 DEC 2021

Amdt 3A 07 OCT 2021

NE-3, 07 OCT 2021 to 02 DEC 2021

555
RNAG (GPS) RWY 1

NEW CASTLE (ILG)

Inoperative table does not apply to LPV all Cats and LNAV Cats A and B.
Baro-VNAV NA when using Philadelphia Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 380, LNAV/VNAV DA to 579, and all MDAs 60 feet; increase LNAV/VNAV all Cats visibility to RVR 6000 and Circling Cat D visibility ½ SM. For inoperative MALSR, increase LNAV/Cats C and D visibility ½ mile. For inoperative MALSR, when using Philadelphia Intl altimeter setting, increase LNAV visibility Cat C ½ mile.

**MISSING APPROACH: Climb to 2000 direct CUBBE and left turn via track 265° to TENPY and via track 214° to ELUDE and hold.**
RNAV (GPS) RWY 9
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 3/4 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 ¼ SM and LNAV/VNAV all Cats visibility ½ SM.

MISSED APPROACH:
Climb to 2100 direct GUSTE and via track 124° to OOD VORTAC and hold.

ATIS
PHILADELPHIA APP CON
123.95
118.35 323.1

WILMINGTON TOWER *
GND CON
CLNC DEL
UNICOM
126.00 (CTAF) 352.05
121.7 275.8
119.95
122.95

Procedures NA for arrival on MXE VORTAC airway radials 177 CW 283.

Procedures NA for arrival on OOD VORTAC airway radials 212 CW 290.

MISSED APPROACH:
Climb to 2100 direct GUSTE and via track 124° to OOD VORTAC and hold.

AWINN
Procedure turn NA
GP 3.00° TCH 55

* LNAV only

088° to RW09

WILMINGTON, DELAWARE
 Orig-B 07OCT21
39°41' N-75°36' W
Procedure NA for arrival on MXE VORTAC airway radials 056 CW 129.

Procedure NA for arrival on DQO VORTAC airway radials 053 CW 068.

RNAV (GPS) RWY 19
NEW CASTLE (ILG)

Baro-VNAV NA when using Philadelphia Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F), DME/DME RNP-0.3 NA.

Visibility reduction by helicopters NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 425, LNAV/VNAV DA to 592, and all MDA 60 feet; increase LPV all Cats and LNAV and Circling Cat D visibility ¼ SM.

MISSED APPROACH: Climb to 2000 direct FESER and hold.

ATIS 123.95
PHILADELPHIA APP CON 118.35 323.1
WILMINGTON TOWER* 126.0 (CTAF) 352.05
GND CON 121.7 275.8
CLNC DEL 119.95
UNICOM 122.95

Procedure NA for arrival on DQO VORTAC airway radials 053 CW 068.

RNAV (GPS) RWY 19
NEW CASTLE (ILG)

Baro-VNAV NA when using Philadelphia Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F), DME/DME RNP-0.3 NA.

Visibility reduction by helicopters NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 425, LNAV/VNAV DA to 592, and all MDA 60 feet; increase LPV all Cats and LNAV and Circling Cat D visibility ¼ SM.

MISSED APPROACH: Climb to 2000 direct FESER and hold.

ATIS 123.95
PHILADELPHIA APP CON 118.35 323.1
WILMINGTON TOWER* 126.0 (CTAF) 352.05
GND CON 121.7 275.8
CLNC DEL 119.95
UNICOM 122.95

Procedure NA for arrival on DQO VORTAC airway radials 053 CW 068.

RNAV (GPS) RWY 19
NEW CASTLE (ILG)

Baro-VNAV NA when using Philadelphia Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F), DME/DME RNP-0.3 NA.

Visibility reduction by helicopters NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 425, LNAV/VNAV DA to 592, and all MDA 60 feet; increase LPV all Cats and LNAV and Circling Cat D visibility ¼ SM.

MISSED APPROACH: Climb to 2000 direct FESER and hold.

ATIS 123.95
PHILADELPHIA APP CON 118.35 323.1
WILMINGTON TOWER* 126.0 (CTAF) 352.05
GND CON 121.7 275.8
CLNC DEL 119.95
UNICOM 122.95

Procedure NA for arrival on DQO VORTAC airway radials 053 CW 068.
Procedures at Wilmington, Delaware

**RNAV (GPS) RWY 27**

**NEW CASTLE (ILG)**

**Missed Approach:** Climb to 2000 direct BATRE and via track 273° to ELUDE and hold.

**ATIS:** 123.95
**PHILADELPHA APP CON:** 118.35 323.1

**WILMINGTON TOWER**

**GND CON:** 126.0 (CTAF) 352.05
**CLNC DEL:** 121.7 275.8
**UNICOM:** 119.95 122.95

**RNAV (GPS) RWY 27**

**NEW CASTLE (ILG)**

**Procedures:**

- For arrivals at RUUTH via V123-157 northeast bound.
- For arrivals on OOD VORTAC airway radials 290 CW 336.

**MISSED APPROACH:**

- Climb to 2000 direct BATRE and via track 273° to ELUDE and hold.

**Area Minimums:**

- **LNAV/MDA**
  - RW27: 300-1 (500-1)
  - RW27: 458 (500-1)

**Approach Minima:**

- **LPV DA**
  - 426-1/2
  - 354 (400-1/4)

- **LNAV/VNAV DA**
  - 530-1/2
  - 458 (500-1/4)

- **LNAV MDA**
  - 500-1/2
  - 428 (500-1/4)

- **CIRCLING**
  - 540-1
  - 560-1
  - 500-1/2
  - 428 (500-1/4)
  - 800-2/4

**Turns:**

- **268°**

**Alternate Minimums:**

- **LNAV only.**
  - 860°

**Procedures:**

- For arrivals on OOD VORTAC airway radials 290 CW 336.

**Precision Approach:**

- **VNAV**
  - Glidepath coincident with LNAV.

- **LNAV/VNAV**
  - Glidepath not coincident

**Airport Information:**

- **AIRPORT LANDING APPROACH RNAV (GPS) RWY 27**
- **NEW CASTLE (ILG)**
- **WILMINGTON, DELAWARE**

**Orig-C 07OCT21**

**560**
**VOR RWY 9**

**NEW CASTLE (ILG)**

**VORTAC DQO**
- 114°
- Chan 87

**APP CRS**
- Rwy Ldg 7000
- TDZE 80
- Apt Elev 80

**ATIS**
- 123.95

**PHILADELPHIA APP CON**
- 118.35
- 323.1

**WILMINGTON TOWER**
- 126.0 (CTAF) 352.05

**GND CON**
- 121.7 275.8

**CLNC DEL**
- 119.95

**UNICOM**
- 122.95

**MSA DQO 25 NM**
- 2600
- 090°
- 270°

**ELEV 80**
- TDZE 80

**Category Fix Minimums**

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<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-9</td>
<td>620-1 540 (600-1)</td>
<td>620-11/2 540 (600-11/2)</td>
<td>800-2 540 (600-11/2)</td>
<td>720 (800-2 1/2)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>620-1 540 (600-1)</td>
<td>540 (600-11/2)</td>
<td>720 (800-2 1/2)</td>
<td></td>
</tr>
</tbody>
</table>

**QWOTE Fix Minimums**

<table>
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<th>D</th>
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<tbody>
<tr>
<td>S-9</td>
<td>540-1 460 (500-1)</td>
<td>540-11/3 460 (500-11/3)</td>
<td>800-2 520 (600-11/2)</td>
<td>720 (800-2 1/2)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>540-1 460 (500-1)</td>
<td>480 (500-1)</td>
<td>520 (600-11/2)</td>
<td>720 (800-2 1/2)</td>
</tr>
</tbody>
</table>

**Visibility Reduction by Helicopters NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting and increase all MDAs 60 feet; increase S-9 Cat C/D and Circling Cat D visibility 1/2 SM.**

**MISSED APPROACH:** Climb to 1200 then climbing right turn to 2000 direct DQO VORTAC then on DQO VORTAC R-274 to GLEEM INT/DQO 5.1 DME and hold.

---

Amdt 7B 07OCT21
Helicopter visibility reduction below ¾ 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 ¾ SM and S-27 Cat C/D visibility ½ SM; WIROL fix minimums S-27 increase Cat C/D and Circling Cat D visibility ¾ SM.

MISSED APPROACH: Climb to 2000 on DQO VORTAC R-274 to GLEEM INT/DQO 5.1 DME and hold.

At 800* when using Philadelphia Intl altimeter setting, use Philadelphia Intl altimeter setting and increase all MDAs 60 feet; increase S-27 Cat B visibility reduction below SM NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting and increase all MDAs 60 feet; increase S-27 Cat B visibility reduction below SM NA.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
Rwy 32 helicopter visibility reduction below 3/4 SM 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 1/2 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 1 mile. VDP NA when using Martinsburg altimeter setting.

MISSED APPROACH: Climb to 1400 then climbing right turn to 3700 via heading 160° and I-TZX SE course to CLADD INT/I-TZX 12.6 DME and hold.
Procedures and Approaches:

RNAV (GPS) RWY 14

WINCHESTER RGNL (OKV)

Baro-VNAV and VDP NA when using Martinsburg altimeter setting. Rwy 14 helicopter visibility reduction below 3/4 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C. When local altimeter setting not received, use Martinsburg altimeter setting:
- increase all DA 63 feet and all MDA 80 feet;
- increase LPV all Cats and LNAV/VNAV Cats A/B visibility 1/2 SM;
- increase LNAV Cats C/D and Circling Cats C/D visibility 1/2 SM.

AWOS-3 124.85  POTOMAC APP CON 120.45  CLNC DEL 126.15  UNICOM 122.7 (CTAF) 0

MISSED APPROACH: Climb to 3700 direct CLADD and hold, continue climb-in-hold to 3700.

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.

ELEV 726  TDZE 726

39°09'N-78°09'W

RNAV (GPS) RWY 14

WINCHESTER RGNL (OKV)
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.

MISSED APPROACH: Climbing left turn to 3000 via MRB R-231 to CWINE/MRB 15 DME and hold, continue climb-in-hold to 3000.

MADCS MRB 20 from FAF

One Minute Holding Pattern

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1180-1</td>
<td>1220-1</td>
<td>1380-1½</td>
<td>1480-2½</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>454 (500-1)</td>
<td>494 (500-1)</td>
<td>654 (700-1½)</td>
<td>754 (800-2½)</td>
</tr>
</tbody>
</table>

MDA 80 feet and Cat C visibility ½ mile.

Martinsburg altimeter setting and increase all MDA 80 feet and Cat C visibility ½ mile.

When local altimeter setting not received, use Martinsburg altimeter setting and increase all MDA 80 feet and Cat C visibility ½ mile.
**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.
**NOTE:** Takeoff Rwy 32 requires a climb to 2500 on heading 341° before proceeding on the ATC assigned heading for obstacle avoidance.

**TAKEOFF MINIMUMS**
Rwy 14: Standard.
Rwy 32: Standard with minimum climb of 240' per NM to 1900.  
**NOTE:** Chart not to scale.
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)
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):

TAKEOFF MINIMUMS
Rwy 14: Standard.
Rwy 32: Standard with minimum climb of 240' per NM to 1900.

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.
RNAV (GPS) RWY 6

LONESOME PINE (LNP)

Procedure NA at night.
Rwy 6 helicopter visibility reduction below 1 SM NA.

AWOS-3
INDIANAPOLIS CENTER
UNICOM

118.6
126.575 253.5
123.0 (CTAF)

Final approach course offset 4.24\(^\circ\).

Procedure NA for arrivals at HILTO on V466-519 northeast bound.

VGSI and descent angles not coincident
(VGSI Angle 3.00/TCH 34).

Category A B C D

LNAV MDA
3260-1 589 (600-1) 3260-1\(^\frac{1}{3}\) 589 (600-1\(\frac{1}{3}\))
3260-1\(^\frac{1}{4}\) 589 (600-1\(\frac{1}{3}\))

MIRL Rwy 6-24
36°59'N-82°32'W

571
Circling to Rwy 6 NA at night. Rwy 24 helicopter visibility reduction below 7/10 SM NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

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 1/3 SM and LNAV Cat C/D visibility to 1/3 SM.

 văn Cá nuối virginiA

LNAV/VNAV NA below -20°C or above 54°C.

Circling to Rwy 6 NA at night. Rwy 24 helicopter visibility reduction below 7/10 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 1/3 SM and LNAV Cat C/D visibility to 1/3 SM.
LOC RWY 24
LOONESOME PINE (LNP)

Circling to Rwy 6 NA at night. Rwy 24 helicopter visibility reduction below 3/4 SM NA.

AWOS-3
118.6

INDIANAPOLIS CENTER
126.575 253.5

UNICOM
123.0 (CTAF)

MIRL Rwy 6-24
MIRL Rwy 6-24

LONESOME PINE
WISE, VIRGINIA

PROGRESSIVE NAVIGATION SERVICE
Amdt 1 25FEB21

NE-3, NE-7 OCT 2021 to 02 DEC 2021
36°59'N-82°32'W

DME required. RNAV 1-GPS required.

MISSED APPROACH: Climb to 3300 then climbing right turn to 4600 direct JUBTO and hold.

Use I-OWN DME when on the localizer course.

One Minute Holding Pattern

Rwy Ldg 2684
Apt Elev 2684

HOLD 6000
4600

REIL Rwys 6 and 24

LOC I-OWN
110.7
Chan 44

APP CRS
242°

Rwy Ldg
2684

Apt Elev
2684

5280

MIA GZG 25 NM

7000

8.327

062°

JUBTO INT

3059±

LOCALIZER 110.7
I-OWN
20.1

3700

12.6

6000

I-OWN

4600

GZG

2814±

2812±

2811

3700

242°

6000

4600

3.00°

TCH 36

3700

I-OWN

0.9

242°

062°

6000

4600

LONENOME PINE (LNP)
LOC RWY 24

21056

AL-5973 (FAA)

MIRL Rwys 6 and 24
INTENTIONALLY LEFT BLANK
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 exists upon breakout. Care should always be exercised so that minimum descent altitude and missed approach point are not exceeded.

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<th>ANGLE</th>
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