## TERMINAL PROCEDURES TABLE OF CONTENTS

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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.

1. **ILS, PAR, LPV, GLS minima**
   - | Inoperative Component or Visual Aid | Increase Visibility |
   - | All ALS types (except ODALS) | ¼ mile |

2. **ILS, LPV, GLS with visibility minima of RVR 1800†/2000*/2200*†**
   - | Inoperative Component or Visual Aid | Increase Visibility |
   - | ALSF 1 & 2, MALSR, SSALR | To RVR 4000†/4500* |
   - | TDZL or RCLS | To RVR 2400# |
   - | RVR | To ½ mile |
   - *For ILS, LPV, GLS procedures with a 200 foot HAT, RVR 1800 authorized with use of FD or AP or HUD to DA.*

3. **All Approach Types and all lines of minima other than (1) & (2) above**
   - | Inoperative Component or Visual Aid | Increase Visibility |
   - | ALSF 1 & 2, MALSR, SSALR | ½ mile |
   - | MALSF, MALS, SSALF, SSALS, SALSF, SALS | ¼ mile |

4. **Sidestep minima (CAT C-D)**
   - | Inoperative Component or Visual Aid to Sidestep Runway | Increase Visibility |
   - | ALSF 1 & 2, MALSR, SSALR | ½ mile |

5. **All Approach Types, All lines of minima**
   - | Inoperative Component or Visual Aid | Increase Visibility |
   - | ODALS (CAT A-B) | ¼ mile |
   - | ODALS (CAT C-D) | ¼ mile |
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</td>
<td>(200-½)</td>
<td>1440/50</td>
</tr>
<tr>
<td>S-LOC 27</td>
<td>1440/24</td>
<td>288</td>
<td>(300-½)</td>
<td>1440/50</td>
</tr>
<tr>
<td>Circulating</td>
<td>1540-1</td>
<td>1640-1</td>
<td>1640-1½</td>
<td>1740-2</td>
</tr>
<tr>
<td></td>
<td>361 (400-1)</td>
<td>461 (500-1)</td>
<td>461 (500-1½)</td>
<td>561 (600-2)</td>
</tr>
</tbody>
</table>

NOTE: The W symbol indicates outages of the WAAS vertical guidance may occur daily at this location due to initial system limitations. WAAS NOTAMS for vertical outages are not provided for this approach. Use LNAV minima for flight planning at these locations, whether as a destination or alternate. For flight operations at these locations, when the WAAS avionics indicate that LNAV/VNAV or LPV service is available, then vertical guidance may be used to complete the approach using the displayed level of service. Should an outage occur during the procedure, reversion to LNAV minima may be required. As the WAAS coverage is expanded, the W 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: A -12°C 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>HEIGHT ABOVE AIRPORT IN FEET</th>
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<tbody>
<tr>
<td>200</td>
</tr>
<tr>
<td>+10</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>-10</td>
</tr>
<tr>
<td>-20</td>
</tr>
<tr>
<td>-30</td>
</tr>
<tr>
<td>-40</td>
</tr>
<tr>
<td>-50</td>
</tr>
</tbody>
</table>

CATEGORIES

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:

MEANING TABLE

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

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TERMS/LANDING MINIMA DATA 19339

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 symbol on the circling line of minima.

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

EXPANDED CIRCLING APPROACH MANEUVERING AIRSPACE RADIUS

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

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

Comparable Values of RVR and Visibility

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

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

Radar Minima:

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

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".

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

NA Alternate minimums are Not Authorized due to unmonitored facility or absence of weather reporting service.

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

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

**CHART CURRENCY INFORMATION**

Date of Latest Revision 09365

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

<table>
<thead>
<tr>
<th>FAA Procedure Amendment Number</th>
<th>Orig 31DEC09</th>
<th>Procedure Amendment Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAA Procedure Amendment Number</td>
<td>Amdt 2B 12MAR09</td>
<td></td>
</tr>
</tbody>
</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 online. It must be noted that when filing a STAR/DP with a transition, the first three coded characters of the STAR and the last three coded characters of the DP are replaced by the transition code. Examples: ACTON SIX ARRIVAL, file (AQN.AQN6); ACTON SIX ARRIVAL, EDNAS TRANSITION, file (EDNAS.AQN6). FREEHOLD THREE DEPARTURE, file (FREH3.RBV), FREEHOLD THREE DEPARTURE, ELWOOD CITY TRANSITION, file (FREH3.EWC).

PROCEDURE PBN/EQUIPMENT REQUIREMENTS

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

IAP PBN/Equipment Requirements Notes Box

PBN Requirements Box  From WINRZ, UBG.E: RNAV-1 GPS, RNAV-1GPS from MAP to YARKU.
Equipment Requirements Box  DME required for LOC only.
Standard Procedure Notes Box  \( \checkmark \) Circling to Rwy 25 NA at night.
\# For inap MALSR increase S-ILS 16R all cats visibility to 2½ SM.

RNAV STAR and DP PBN/Equipment Requirements Notes Box

PBN Requirements Box  RNAV 1 - DME/DME/IRU or GPS
Equipment Requirements Box  RADAR required

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

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

Available FAA standard approach lighting systems are charted as a negative symbol to indicate pilot controlled lighting, e.g., \( \checkmark \), \( \checkmark \).

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

To activate lights, use frequency indicated in the communications section of the chart with a \( \checkmark \)

<table>
<thead>
<tr>
<th>KEY MIKE</th>
<th>FUNCTION</th>
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</thead>
<tbody>
<tr>
<td>7 times within 5 seconds</td>
<td>Highest intensity available</td>
</tr>
<tr>
<td>5 times within 5 seconds</td>
<td>Medium or lower intensity (Lower REIL or REIL-off)</td>
</tr>
<tr>
<td>3 times within 5 seconds</td>
<td>Lowest intensity available (Lower REIL or REIL-off)</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<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>APCH</td>
<td>Approach</td>
</tr>
<tr>
<td>APP CON</td>
<td>Approach Control</td>
</tr>
<tr>
<td>AR</td>
<td>Authorization Required</td>
</tr>
<tr>
<td>ARR</td>
<td>Arrival</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>
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<tr>
<td>AUNICOM</td>
<td>Automated UNICOM</td>
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<tr>
<td>AWOS</td>
<td>Automated Weather Observing System</td>
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<tr>
<td>AZ</td>
<td>Azimuth</td>
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<tr>
<td>BC</td>
<td>Back Course</td>
</tr>
<tr>
<td>BND</td>
<td>Bound</td>
</tr>
<tr>
<td>C</td>
<td>Circling</td>
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<td>CAT</td>
<td>Category</td>
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<tr>
<td>CCW</td>
<td>Counter Clockwise</td>
</tr>
<tr>
<td>CIW</td>
<td>Counter Clockwise</td>
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<td>Chan</td>
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<td>CIFP</td>
<td>Coded Instrument Flight Procedures</td>
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<td>CIR</td>
<td>Circling</td>
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<td>CLNC DEL</td>
<td>Clearance Delivery</td>
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<td>CNF</td>
<td>Computer Navigation Fix</td>
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<tr>
<td>CPDLC</td>
<td>Controller Pilot Data Link Communication</td>
</tr>
<tr>
<td>CTAF</td>
<td>Common Traffic Advisory Frequency</td>
</tr>
<tr>
<td>CW</td>
<td>Clockwise</td>
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<tr>
<td>D-ATIS</td>
<td>Digital-Automated Terminal Information Service</td>
</tr>
<tr>
<td>DA</td>
<td>Decision Altitude</td>
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<td>DER</td>
<td>Departure End of Runway</td>
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<td>DH</td>
<td>Decision Height</td>
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<td>DME</td>
<td>Distance Measuring Equipment</td>
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<td>DTHR</td>
<td>Displaced Threshold</td>
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<tr>
<td>DVA</td>
<td>Diverse Vector Area</td>
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<td>ELEV</td>
<td>Elevation</td>
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<td>EMAS</td>
<td>Engineered Material Arrestr System</td>
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<td>FAF</td>
<td>Final Approach Fix</td>
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<td>FD</td>
<td>Flight Director System</td>
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<td>FM</td>
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<td>GBAS</td>
<td>Ground Based Augmentation System</td>
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<td>GCO</td>
<td>Ground Communications Outlet</td>
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<td>GLS</td>
<td>Ground Based Augmentation System Landing System</td>
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<tr>
<td>GP</td>
<td>Glidepath</td>
</tr>
<tr>
<td>GPI</td>
<td>Ground Point of Interception</td>
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<td>GPS</td>
<td>Global Positioning System</td>
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<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>
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<tr>
<td>HAT</td>
<td>Height above Touchdown</td>
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<tr>
<td>HTh</td>
<td>Height above Threshold</td>
</tr>
<tr>
<td>HCH</td>
<td>Heliport Crossing Height</td>
</tr>
<tr>
<td>HGS</td>
<td>Heads-up Guidance System</td>
</tr>
<tr>
<td>HiRL</td>
<td>High Intensity Runway Lights</td>
</tr>
<tr>
<td>HUD</td>
<td>Head-up Display</td>
</tr>
<tr>
<td>IAF</td>
<td>Initial Approach Fix</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
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<tr>
<td>IF</td>
<td>Intermediate Fix</td>
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<tr>
<td>IM</td>
<td>Inner Marker</td>
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<tr>
<td>INOP</td>
<td>Inoperative</td>
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<tr>
<td>INT</td>
<td>Intersection</td>
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<td>K</td>
<td>Knots</td>
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<td>KIAS</td>
<td>Knots Indicated Airspeed</td>
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<td>LAAS</td>
<td>Local Area Augmentation System</td>
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<tr>
<td>LDA</td>
<td>Localizer Type Directional Aid</td>
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<tr>
<td>Ldg</td>
<td>Landing</td>
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<tr>
<td>LIRL</td>
<td>Low Intensity Runway Lights</td>
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<tr>
<td>LNAV</td>
<td>Lateral Navigation</td>
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<td>LOC</td>
<td>Localizer</td>
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<tr>
<td>LP</td>
<td>Localizer Performance</td>
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<tr>
<td>LPV</td>
<td>Localizer Performance with Vertical Guidance</td>
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<tr>
<td>LR</td>
<td>Lead Radial. Provides at least 2 NM (Copter 1 NM) of lead to assist in turning onto the intermediate/final course.</td>
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<tr>
<td>MAA</td>
<td>Maximum Authorized Altitude</td>
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<tr>
<td>MALS</td>
<td>Medium Intensity Approach Light System</td>
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<tr>
<td>MALSF</td>
<td>Medium Approach Lighting System with Sequenced Flashers</td>
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<tr>
<td>MALSR</td>
<td>Medium Intensity Approach Light System with RAIL</td>
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<tr>
<td>MAP</td>
<td>Missed Approach Point</td>
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<td>Minimum Reception Altitude</td>
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<td>Nautical Mile</td>
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<td>NoPT</td>
<td>No Procedure Turn Required (Procedure Turn shall not be executed without ATC clearance)</td>
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**Abbreviations Table:**

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>NoPT</td>
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<td>Abbreviation</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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<td>PAR</td>
<td>Precision Approach Radar</td>
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<tr>
<td>PDC</td>
<td>Pre-Departure Clearance</td>
</tr>
<tr>
<td>PRM</td>
<td>Precision Runway Monitor</td>
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<td>R</td>
<td>Radial</td>
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<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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<td>RCLS</td>
<td>Runway Centerline Light System</td>
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<td>REIL</td>
<td>Runway End Identifier Lights</td>
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<td>RF</td>
<td>Radius-to-Fix</td>
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<tr>
<td>RLLS</td>
<td>Runway Lead-in Light System</td>
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<td>RNAV</td>
<td>Area Navigation Required Performance Navigation Point of Intercept</td>
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<td>RPI</td>
<td>Runway Point of Intercept</td>
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<td>RRL</td>
<td>Runway Remaining Lights</td>
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<td>Runway</td>
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<td>RVR</td>
<td>Runway Visual Range</td>
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<td>S</td>
<td>Straight-in</td>
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<td>Short Approach Light System</td>
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<td>SALSF</td>
<td>Short Approach Lighting System with Sequenced Flashing Lights</td>
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<tr>
<td>SSALF</td>
<td>Simplified Short Approach Lighting System with Sequenced Flashers</td>
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<td>Simplified Directional Facility</td>
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<td>Statute Mile</td>
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<td>SOIA</td>
<td>Simultaneous Offset Instrument Approach</td>
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<td>SR-SS</td>
<td>Sunrise-Sunset</td>
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<td>TAA</td>
<td>Terminal Arrival Area</td>
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<tr>
<td>TAC</td>
<td>TACAN</td>
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<tr>
<td>TCH</td>
<td>Threshold Crossing Height (height in feet above ground level)</td>
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<tr>
<td>TDZ</td>
<td>Touchdown Zone</td>
</tr>
<tr>
<td>TDZE</td>
<td>Touchdown Zone Elevation</td>
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<td>TDZ/CL</td>
<td>Touchdown Zone and Runway Centerline Lighting</td>
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<td>Touchdown Zone Lights</td>
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<td>THR</td>
<td>Threshold</td>
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<td>Takeoff Distance Available</td>
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<tr>
<td>TORA</td>
<td>Takeoff Run Available</td>
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<td>TR</td>
<td>Track</td>
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<td>VASI</td>
<td>Visual Approach Slope Indicator</td>
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<td>VCOA</td>
<td>Visual Climb over Airport</td>
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<td>VDA</td>
<td>Vertical Descent Angle</td>
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<td>Visual Descent Point</td>
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<td>VGSI</td>
<td>Visual Glide Slope Indicator</td>
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<td>Vertical Navigation</td>
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<td>WAAS</td>
<td>Wide Area Augmentation System</td>
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<tr>
<td>WP/WPT</td>
<td>Waypoint (RNAV)</td>
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</tbody>
</table>
**INSTRUMENT APPROACH PROCEDURES (CHARTS)**

**LEGEND**

**PLANVIEW SYMBOLS**

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

**MISSING LEGEND**
- Procedure Track
- Feeder Route
- Missed Approach
- Visual Flight Path

**MINIMUM ROUTE ALTITUDE**
- 3100 NoPT to LOM
- Mileage (14.2)

**HOLDING PATTERNS**
- Hold-in-lieu of Procedure Turn
- Holding pattern with maximum restricted airspeed:
- (175K) applies to all altitudes.
- (210K) applies to altitudes above 6000’ to and including 14000’.
- Arrival Holding Pattern altitude restrictions will be indicated when they deviate from the adjacent leg.

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

**FIXES/ATC REPORTING REQUIREMENTS**
- Reporting Point
- Waypoint
- MAP WP (Flyby)
- MAP WP (Flyover)
- Flyover Point

**RADIO AIDS TO NAVIGATION**
- Underline indicates No Voice transmitted on this frequency
- VOR
- VORTAC
- TACAN
- DME
- NDB
- NDB/DME
- LOM (Compass locator at Outer Marker)
- Marker Beacons

**AIRSPEEDS**
- Altitude
- Mandatory Airspeed
- Minimum Airspeed
- Maximum Airspeed

**ALTIMETRY**
- Recommended Altitude
- Mandatory Altitude
- Minimum Altitude
- Maximum Altitude

**INDICATED AIRSPEED**
- 175K
- 120K
- 250K
- 180K

**DME fixes may be shown.**

**Procedure Turn Holding Patterns will be shown.**

**HOLDING PATTERNS**
- 10000 8000
- 10000 8000

**LEGEND**

**ALTITUDES**
- 5500 Mandatory Altitude
- 5000 Mandatory Block
- 4300 Maximum Altitude
- 3000 Recommended Altitude
- 3000 Altitude

**INDICATED AIRSPEED**
- 175K
- 120K
- 250K
- 180K

**RADIO AIDS TO NAVIGATION**
- LOC/LDA/SDF Transmitter
- LOC/DME

**COMPUTER NAVIGATION FIX (CNF)-No ATC Function**
- Computer Navigation Fix (CNF)-No ATC Function
- R-198
- LR-198
- LB-198

**MARKER BEACON**
- Marker beacon that is not specifically part of the procedure.
LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

PLANVIEW SYMBOLS

MINIMUM SAFE ALTITUDE (MSA)

Terrestrial Arrival Area (TAA)

MISCELLANEOUS

SPECIAL USE AIRSPACE

AIRPORTS

OBSTACLES

Distance not to scale

International Boundary

Air Defense Identification Zone

Primary and Secondary (named in planview)

Civil

Seaplane Base

Joint (Civil-Military)

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 35
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 Caper procedures this is depicted in the following format: 7.30° TCH 20

ILS or LOC APPROACH

RNNAV and GLS PROCEDURES WITH VERTICAL GUIDANCE

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

RNP APPROACH WITH TF AND RF SEGMENTS

Descent from Holding Pattern

Altimetres

Profile Symbols

Note: Facilities and waypoints are depicted as a solid vertical line while fixes and intersections are depicted as a dashed vertical line.
LEGEND

STANDARD TERMINAL ARRIVAL (STAR) CHARTS

RADIO AIDS TO NAVIGATION

Compulsory:

- VOR
- VORTAC
- DME
- NDB/DME

Non-Compulsory:

- VOR
- VORTAC
- DME
- NDB/DME

Legend:

- LOM (Compass locator at outer marker)
- Marker Beacon
- Localizer Front Course
- Localizer Back Course (Shading on left)
- TACAN or DME NAVAID Box
- VHF Paired Frequency

(T) indicates frequency protection range

(Y) TACAN must be placed in "Y" mode to receive distance information

FIXES/ATC REPORTING REQUIREMENTS

- Unnamed DME fix
- Reporting Point (Compulsory)
- Reporting Point (Non-Compulsory)

Obvious DME (DME mileage matches route mileage)

Waypoint (Compulsory)

Waypoint (Non-Compulsory)

Flyover Point

Computer Navigation Fix (CNF) - No ATC Function

AIRPORTS

- Civil
- Military
- Joint (Civil-Military)

Airports not served by the procedure shown in screened color

LEGEND

ROUTES

MAA FL200 Maximum Authorized Altitude
4500 MEA-Minimum Enroute Altitude
3500 MOCA-Minimum Obstruction Clearance Altitude
270° Arrival Route
(65) Mileage between Radio Aids, Reporting Points, and Route Breaks

V12 J80 Airway/Jet Route Identification

Holding Pattern
Lost Comm Holding Pattern

SPECIAL USE AIRSPACE

R-Restricted W-Warning
P-Prohibited A-Alert
MOA-Military Operations Area

ALTIMETERS

5500 2300 4800

Mandatory Altitude (Cross at)
Minimum Altitude (Cross at or above)
Maximum Altitude (Cross at or below)

15000 12000

Block Altitude

INDICATED AIRSPEED

175K 120K 250K

Mandatory Airspeed
Minimum Airspeed
Maximum Airspeed

MISCELLANEOUS

Changeover Point

Air Defense Identification Zone

N Indicates True North is not aligned to the top of the page

Ldg KLAS and KHND
Ldg Rwys 16L/C/R

Terminus identifier
DEPARTURE PROCEDURE (DP) CHARTS

RADIO AIDS TO NAVIGATION

Compulsory:
- VOR
- VORTAC
- DME
- NDB/DME

Non-Compulsory:
- VOR
- VORTAC
- DME
- NDB/DME

Marker Beacon
LOC/DME
LOC

SPECIAL USE AIRSPACE
- MEA-Minimum Enroute Altitude
- MOCA-Minimum Obstruction Clearance Altitude
- Transition Route
- R-275
- Lost Communications Track
- Visual Flight Path
- Airway/Jet Route Identification

MISCELLANEOUS
- Changeover Point
- Sector Boundary
- International Boundary
- Air Defense Identification Zone
- Takeoff Minimums and (Obstacle) Departure Procedures entry published.

FLIGHT PROCEDURE

~ Unnamed DME fix

DME Mileage

75

WAYPOINT

Upper left indicates VHF paired

Waypoint

Waypoint

Computer Navigation Fix (CNF) - No ATC Function

AIRPORTS

Civil
Military
Heliport
Joint (Civil-Military)

MINIMUM SAFE ALTITUDE (MSA)

TOP ALTITUDE: 5000

INDICATED AIRSPEED

75K

250K

120K

Mandatory Airspeed
Minimum Airspeed
Maximum Airspeed

AIRPORTS

Facility Identifier
Airport Identifier

LEGEND

23334

PROHIBITED
A-Alert
R-Restricted
W-Warning

FACILITY IDENTIFIER
ORLANDO
12.25 (T) ORL
Chan 59(Y)

TACAN or DME NAVAID Box
SCOTT
Chan 59
SKE

NAVIGATION BOX
VHF Paired Frequency

MH-352

PROHIBITED
P-Prohibited
A-Alert
R-Restricted
W-Warning

FACILITY IDENTIFIER
SCOTT
Chan 59
SKE

NAVIGATION BOX
VHF Paired Frequency

MH-352

CRW 2.5 NM

MSA AIA 2.5 NM

5000

15000

12000

12000

5000

5000

5000

5000

5000
AIRPORT DIAGRAM/AIRPORT SKETCH

Runways
- Hard Surface
- Other Than Hard Surface
- Stopways, Taxiways, Parking Areas
- Metal Surface
- Displaced Threshold
- Non-Movement
- Under Construction
- Water Runway

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

REFERENCE FEATURES
- Hot Spot
- Runway Holding Position Markings
- Buildings
- Self-Serve Fuel ##
- Tanks
- Obstructions
- Airport Beacon #
- Runway Radar Reflectors
- Bridges
- Control Tower #
- Tetrahedron
- Landing Tee
- Wind Cone
- Runway End Elevation
- Unlit
- Lit

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

## See appropriate Chart Supplement for information.

Runway Weight Bearing Capacity or Pavement Classification Number (PCN)/Pavement Classification Rating (PCR) is shown as a codified expression. Refer to the appropriate Supplement/Directory for applicable codes e.g., RWY 14-32 PCR 560 R/B/W/T; S-75, D-185, 2D-325, 2D/2D2-1120

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

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

EMAS

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

Runway Slope...... — 0.3% Down......0.8% UP — (shown when rounded runway slope is \( \geq 0.3\% \))

NOTE:
- Runway Slope measured to midpoint on runways 8000 feet or longer.
- U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.

Approach light symbols are shown in the Flight Information Handbook.

Airport diagram scales are variable.

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

Coordinate values are shown in 1 or \( \frac{1}{2} \) minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

Positional accuracy within \( \pm 600 \) feet unless otherwise noted on the chart.

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

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

NOTE:
- All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in DoD FLIP (Foreign Only)

The airport sketch box includes the final approach course or final approach course extended.

DISCLAIMER:
- Airport 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., A, C, etc.

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

<table>
<thead>
<tr>
<th>CATEGORY I APPROACH LIGHTING SYSTEM</th>
<th>SHORT APPROACH LIGHTING SYSTEM</th>
<th>MEDIUM INTENSITY APPROACH LIGHTING SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALSF-1</td>
<td>SALS/SALSF</td>
<td>MALS</td>
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<td><img src="image2.png" alt="Diagram" /></td>
<td><img src="image3.png" alt="Diagram" /></td>
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<td>(High Intensity) LENGTH 2400/3000 FEET</td>
<td>(High Intensity) LENGTH 1500 FEET</td>
<td>(High Intensity) LENGTH 1500 FEET</td>
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<tr>
<th>CATEGORY II APPROACH LIGHTING SYSTEM</th>
<th>SIMPLIFIED SHORT APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR LIGHTS</th>
<th>OMNIDIRECTIONAL APPROACH LIGHTING SYSTEM</th>
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<td>SSALR</td>
<td>ODALS</td>
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<td>(High Intensity) LENGTH 2400 FEET</td>
<td>LENGTH 1500 FEET</td>
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</table>

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<thead>
<tr>
<th>MEDIUM INTENSITY (MALS AND MALSF) OR SIMPLIFIED SHORT (SSALS AND SSALF) APPROACH LIGHTING SYSTEMS</th>
<th>RUNWAY TOUCHDOWN ZONE AND CENTERLINE LIGHTING SYSTEMS</th>
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<tr>
<td>(High Intensity) LENGTH 1400 FEET</td>
<td>AVAILABILITY of TDZ/CL will be shown by NOTE in SKETCH e.g. &quot;TDZ/CL Rwy 15&quot;</td>
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</table>

NOTE: CIVIL ALSF-2 MAY BE OPERATED AS SSALR DURING FAVORABLE WEATHER CONDITIONS.
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, , , etc.

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

**LEGEND 22195**

**APPROACH LIGHTING SYSTEM - UNITED STATES**

**P** PRECISION APPROACH PATH INDICATOR

**PAPI**

![PAPI Diagram]

Legend:  White  Red

**VISUAL APPROACH SLOPE INDICATOR**

**VASI**

VISUAL APPROACH SLOPE INDICATOR WITH STANDARD THRESHOLD CLEARANCE PROVIDED.

- ALL LIGHTS WHITE  TOO HIGH
- FAR LIGHTS RED NEAR LIGHTS WHITE  ON GLIDE SLOPE
- ALL LIGHTS RED  TOO LOW

**VASI 2**

![VASI 2 Diagram]

**VASI 4**

![VASI 4 Diagram]

**VASI 12**

![VASI 12 Diagram]

**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.

**VISUAL APPROACH SLOPE INDICATOR**

**VASI**

3-BAR, 6 OR 16 BOX, VISUAL APPROACH SLOPE INDICATOR THAT PROVIDES 2 GLIDE ANGLES AND 2 THRESHOLD CROSSING HEIGHTS.

**VASI 6**

![VASI 6 Diagram]

**VASI 16**

![VASI 16 Diagram]

**THRESHOLD**

Painted panels which may be lighted at night. To use the system the pilot positions the aircraft so the elements are in alignment.

**ALIGNMENT OF ELEMENTS SYSTEMS**

**APAP**

![APAP Diagram]
## FREQUENCY PAIRING TABLE

<table>
<thead>
<tr>
<th>TACAN CHANNEL</th>
<th>VHF FREQUENCY</th>
<th>TACAN CHANNEL</th>
<th>VHF FREQUENCY</th>
<th>TACAN CHANNEL</th>
<th>VHF FREQUENCY</th>
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<tbody>
<tr>
<td>17Y</td>
<td>108.05</td>
<td>40X</td>
<td>110.30</td>
<td>88Y</td>
<td>114.15</td>
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<td>18X</td>
<td>108.10</td>
<td>40Y</td>
<td>110.35</td>
<td>89Y</td>
<td>114.25</td>
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<tr>
<td>18Y</td>
<td>108.15</td>
<td>41Y</td>
<td>110.45</td>
<td>90Y</td>
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<tr>
<td>19Y</td>
<td>108.25</td>
<td>42X</td>
<td>110.50</td>
<td>91Y</td>
<td>114.45</td>
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See the Chart Supplement for a complete listing.
### ARANSAS COUNTY
---SEE ROCKPORT, TX

### ALICE, TX
ALICE INTL(ALI)

- **Takeoff Minimums:**
  - IAPS: RNAV (GPS) RWY 13
  - RNAV (GPS) RWY 31
- **Alternate Minimums:**
  - LOC/DME RWY 31
  - VOR RWY 31
- **DPS:**
  - RNAV (GPS) RWY 23

### ALPINE, TX
ALPINE-CASPARIS MUNI(E38)

- **Takeoff Minimums:**
  - IAPS: RNAV (GPS) RWY 19
- **Alternate Minimums:**
  - RNAV (GPS) RWY 23
- **DPS:**
  - ODKAE ONE (Obstacle)

### AUSTIN, TX
AUSTIN EXEC(EDC)

- **Takeoff Minimums:**
  - IAPS: RNAV (GPS) RWY 13
- **Alternate Minimums:**
  - RNAV (GPS) RWY 31
- **Stars:**
  - BLEWE FIVE
  - KALLA FOUR
  - LAIKS THREE
  - SEWZY SIX
  - WLEESE SEVEN
- **IAPS:**
  - ILS OR LOC RWY 18L
  - RNAV (RNP) Z RWY 18L
  - RNAV (RNP) Z RWY 36L
  - RNAV (GPS) Y RWY 18L
  - RNAV (GPS) Y RWY 36L
- **Airport Diagram:**
  - AEROZ TWO (RNAV)
  - BNDIA THREE (RNAV)
  - ELOEL THREE (RNAV)
  - ILEXY FOUR (RNAV)
  - MUCKY THREE (RNAV)
  - SAYBR THREE (RNAV)

### AUSTIN-BERGSTROM INTL(AUS)

- **Takeoff Minimums:**
  - IAPS: RNAV (GPS) RWY 13
- **Alternate Minimums:**
  - RNAV (GPS) RWY 31
- **Stars:**
  - BLEWE FIVE
  - DXEE THREE (RNAV)
  - KALLA FOUR
  - LAIKS THREE (RNAV)
  - SEWZY SIX (RNAV)
  - WLEESE SEVEN (RNAV)
- **IAPS:**
  - ILS OR LOC RWY 18L
  - RNAV (RNP) Z RWY 18L
  - RNAV (RNP) Z RWY 36L
  - RNAV (GPS) Y RWY 18L
  - RNAV (GPS) Y RWY 36L
- **Airport Diagram:**
  - AEROZ TWO (RNAV)
  - BNDIA THREE (RNAV)
  - ELOEL THREE (RNAV)
  - ILEXY FOUR (RNAV)
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  - SAYBR THREE (RNAV)
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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

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

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

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

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

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

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

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

ALICE, TX

ALICE INTL (ALI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 07SEP23 (23250) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 17, trees beginning 205' from DER, 254' left of centerline, up to 194' MSL.
Tree 403' from DER, 316' right of centerline, 194' MSL.
Poles beginning 601' from DER, 179' right of centerline, up to 34' AGL/204' MSL.
Tree, poles beginning 618' from DER, 139' left of centerline, up to 203' MSL.

Rwy 31, pole 2' from DER, 251' right of centerline, 4' AGL/181' MSL.
Building 159' from DER, 44' left of centerline, 187' MSL.
Vertical structure, tree beginning 388' from DER, 256' left of centerline, up to 199' MSL.
Tree 1072' from DER, 358' right of centerline, 207' MSL.

Rwy 35, vegetation 330' from DER, 287' right of centerline, 185' MSL.
Tree 1154' from DER, 69' right of centerline, 202' MSL.
Windmill 1461' from DER, 164' left of centerline, 42' AGL/214' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

ALPINE, TX
ALPINE-CASPARIS MUNI (E38)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 27JAN22 (22027) (FAA)
DEPARTURE PROCEDURE:
Use ODKAE DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 1, fence 9' from DER, 283' left of centerline, 9' AGL/4458' MSL.
Sign 13' from DER, 239' right of centerline, 4452' MSL.
Vehicle on road 85' from DER, 278' left of centerline, 15' AGL/4463' MSL.
Pole 811' from DER, 470' right of centerline, 4470' MSL.
Rwy 5, sign 13' from DER, 239' left of centerline, 4452' MSL.
Sign 18' from DER, 164' right of centerline, 4453' MSL.
Antenna, vehicle on road, pole beginning 21' from DER, 400' right of centerline, up to 25' AGL/4474' MSL.
Tree 190' from DER, 468' left of centerline, 11' AGL/4455' MSL.
Tress beginning 292' from DER, 475' left of centerline, up to 19' AGL/4462' MSL.
Poles, tree beginning 480' from DER, 187' right of centerline, up to 4478' MSL.
Pole 612' from DER, 626' left of centerline, 33' AGL/4472' MSL.
Pole 1060' from DER, 658' left of centerline, 4476' MSL.
Rwy 19, vehicle on road, sign, tree beginning 1' from DER, 165' left of centerline, up to 4526' MSL.
Terrain 57' from DER, 121' right of centerline, 4516' MSL.
Vehicle on road 74' from DER, 276' right of centerline, 15' AGL/4531' MSL.
Vehicle on road 230' from DER, 290' left of centerline, 4527' MSL.
Vehicles on road beginning 293' from DER, 277' right of centerline, up to 4535' MSL.
Vehicles on road beginning 379' from DER, 265' right of centerline, up to 4536' MSL.
Vehicle on road 420' from DER, 289' left of centerline, 4528' MSL.
Pole 536' from DER, 573' left of centerline, 4548' MSL.
Windmill, vehicle on road, poles, tree beginning 548' from DER, 183' left of centerline, up to 4554' MSL.
Poles beginning 1325' from DER, 60' right of centerline, up to 4556' MSL.
Pole 1565' from DER, 689' right of centerline, 4562' MSL.
Terrain 2.4 NM from DER, 2888' left of centerline, 4927' MSL.

AUSTIN, TX
AUSTIN-BERGSTROM INTL (AUS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A 22APR21 (21112) (FAA)
DEPARTURE PROCEDURE:
Rwy 36L, climb on heading 355° to 1700 before turning left.
Rwy 36R, climb on heading 355° to 1300 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 18L, lighting 10' from DER, 4' right of centerline, 1' AGL/489' MSL.
Trees beginning 491' from DER, 560' left of centerline, up to 43' AGL/499' MSL.
Tree 552' from DER, 641' right of centerline, 29' AGL/494' MSL.
Trees beginning 562' from DER, 487' left of centerline, up to 44' AGL/501' MSL.
Tree 617' from DER, 571' right of centerline, 37' AGL/495' MSL.
Trees beginning 643' from DER, 472' left of centerline, up to 51' MSL.
Tree 674' from DER, 647' right of centerline, 50' AGL/499' MSL.
Trees beginning 721' from DER, 523' right of centerline, up to 50' AGL/504' MSL.
Trees beginning 756' from DER, 495' right of centerline, up to 64' AGL/508' MSL.
Tree 1750' from DER, 523' right of centerline, 75' AGL/519' MSL.
Tree 1899' from DER, 810' right of centerline, 75' AGL/526' MSL.
Rwy 36L, lighting beginning 5' from DER, 5' right of centerline, up to 1' AGL/543' MSL.
Rwy 36R, lighting beginning 10' from DER, 4' left of centerline, up to 2' AGL/489' MSL.
Tree 816' from DER, 663' right of centerline, 528' MSL.

AUSTIN EXEC (EDC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 17AUG17 (21112) (FAA)
TAKEOFF MINIMUMS:
Rwys 16, 34, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 31, pole and trees beginning 900' from DER, 258' left of centerline, up to 669' MSL.
Transmission line tower 1931' from DER, 911' right of centerline, 83' AGL/670' MSL.
Transmission line tower 2325' from DER, 878' right of centerline, 89' AGL/682' MSL.
Poles beginning 2362' from DER, 590' right of centerline, up to 113' AGL/707' MSL.
Transmission line tower 2568' from DER, 1159' left of centerline, 77' AGL/697' MSL.
Transmission line tower 3692' from DER, 437' left of centerline, 122' AGL/728' MSL.
Transmission line tower 4411' from DER, 1110' left of centerline, 135' AGL/749' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

AUSTIN, TX (CON’T)
SAN MARCOS RGNL (HYI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2B  17AUG17  (17229)  (FAA)

DEPARTURE PROCEDURE:
Rwy 31, climb heading 306° to 1500 before turning right.
Rwy 35, climb heading 006° to 2500 before turning left.

TAKEOFF OBSTACLE NOTES:
Rwy 8, sign 1’ from DER, 250’ left of centerline, 3’ AGL/583’ MSL.
Tree 942’ from DER, 259’ left of centerline, 612’ MSL.
Rwy 13, tree 2505’ from DER, 194’ right of centerline, 71’ AGL/637’ MSL.
Tree beginning 2639’ from DER, 139’ right of centerline, up to 80’ AGL/646’ MSL.
Rwy 17, bus 26’ from DER, 74’ left of centerline, 2’ AGL/576’ MSL.
Rwy 26, REIL 9’ from DER, 90’ right of centerline, 4’ AGL/589’ MSL.
Tree 1073’ from DER, 684’ right of centerline, 621’ MSL.
Poles and trees beginning 1206’ from DER, 394’ right of centerline, up to 50’ AGL/638’ MSL.
Rwy 31, trees beginning 912’ from DER, 613’ right of centerline, up to 622’ MSL.
Pole and tree beginning 1046’ from DER, 630’ right of centerline, up to 34’ AGL/631’ MSL.
Tree 1287’ from DER, 718’ left of centerline, 627’ MSL.
Rwy 35, sign 25’ from DER, 198’ left of centerline, 3’ AGL/597’ MSL.
Tree 2562’ from DER, 1113’ left of centerline, 659’ MSL.
Tree 3227’ from DER, 162’ left of centerline, 54’ AGL/676’ MSL.
Trees beginning 3540’ from DER, 51’ left of centerline, up to 52’ AGL/687’ MSL.
Tree 3655’ from DER, 362’ right of centerline, 54’ AGL/692’ MSL.
Trees beginning 3664’ from DER, 11’ right of centerline, up to 54’ AGL/693’ MSL.
Tree 3727’ from DER, 81’ left of centerline, 52’ AGL/688’ MSL.
Tree 3741’ from DER, 94’ left of centerline, 52’ AGL/690’ MSL.
Tree 3972’ from DER, 40’ left of centerline, 48’ AGL/696’ MSL.
Tree 4131’ from DER, 37’ right of centerline, 42’ AGL/699’ MSL.
Tree 4146’ from DER, 33’ right of centerline, 43’ AGL/700’ MSL.
Pole and trees beginning 4150’ from DER, 15’ right of centerline, up to 44’ AGL/702’ MSL.
Rwy 17, trees beginning 1902’ from DER, 661’ right of centerline, up to 100’ AGL/1859’ MSL.
Rwy 35, trees, building, and road beginning 29’ from DER, 210’ left of centerline, up to 100’ AGL/1839’ MSL.
Tree and poles beginning 887’ from DER, 429’ right of centerline, up to 37’ AGL/1772’ MSL.

BALLINGER, TX
BRUCE FLD (E30)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  22SEP11  (22139)  (FAA)

TAKEOFF OBSTACLE NOTES:
Rwy 17, trees beginning 1902’ from DER, 661’ right of centerline, up to 100’ AGL/1859’ MSL.
Rwy 35, trees, building, and road beginning 29’ from DER, 210’ left of centerline, up to 100’ AGL/1839’ MSL.
Tree and poles beginning 887’ from DER, 429’ right of centerline, up to 37’ AGL/1772’ MSL.

BEEVILLE, TX
BEEVILLE MUNI (BEA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A  26MAY16  (16147)  (FAA)

TAKEOFF MINIMUMS:
Rwys 18, 36, NA-environmental.
Rwy 30, 300-2 or std. w/ min. climb of 239’ per NM to 700.

TAKEOFF OBSTACLE NOTES:
Rwy 12, pole, and trees beginning 64’ from DER, 290’ right of centerline, up to 29’ AGL/272’ MSL.
Tree, road, and pole beginning 153’ from DER, 9’ right of centerline, up to 33’ AGL/275’ MSL.
Trees beginning 756’ from DER, 50’ left of centerline, up to 279’ MSL.
Trees and pole beginning 933’ from DER, 30’ right of centerline, up to 282’ MSL.
Rwy 30, pole, tree, and building beginning 117’ from DER, 290’ left of centerline, up to 32’ AGL/301’ MSL.
Tree 1054’ from DER, 574’ left of centerline, 307’ MSL.
Tree 1835’ from DER, 452’ right of centerline, 319’ MSL.
Pole and trees beginning 1875’ from DER, 287’ left of centerline, up to 323’ MSL.
Tree beginning 1907’ from DER, 246’ right of centerline, up to 53’ AGL/339’ MSL.
Trees and poles beginning 1934’ from DER, 100’ left of centerline, up to 336’ MSL.
Tower 1.4 NM from DER, 2568’ right of centerline, 230’ AGL/542’ MSL.
BIG LAKE, TX
REAGAN COUNTY (E41)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 05OCT23 (23278) (FAA)
TAKEOFF MINIMUMS:
Rwy 9, 27, NA-Environmental.
DEPARTURE PROCEDURE:
Rwy 16, climb on heading 161° to 3300 before turning left
TAKEOFF OBSTACLE NOTES:
Trees, poles beginning 345' from DER, 148' right of centerline, up to 100' AGL/2809' MSL.
Trees, poles beginning 620' from DER, 267' left of centerline, up to 100' AGL/2809' MSL.
Trees beginning 3664' from DER, 1042' right of centerline, up to 100' AGL/2819' MSL.
Rwy 34, trees beginning 350' from DER, 525' right of centerline, up to 100' AGL/2799' MSL.

BIGGS AAF (KBIF)
FORT BLISS, TX
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 30NOV23 (23334) (USA)
DEPARTURE PROCEDURE:
Rwy 4, climbing right turn to intercept ELP VORTAC R-330 to ELP, thence...
Rwy 22, climbing left turn to intercept ELP VORTAC R-240 to ELP, thence...
Continue climb in ELP holding pattern (hold east, left turns, 261° inbound) to cross ELP at or above MEA for route of flight before proceeding on course. Procedure NA for TACAN-only equipped aircraft.
TAKEOFF OBSTACLE NOTES:
Twr 1980' from DER, 841' left of centerline, 63' AGL/3962' MSL.

BRADY, TX
CURTIS FLD (BBD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 14FEB08 (22139) (FAA)
TAKEOFF MINIMUMS:
Rwys 8, 26, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Trees, fences, terrain, and vehicle on road beginning 50' from DER, 362' left of centerline, up to 30' AGL/1827' MSL.
Trees beginning 17' from DER, 216' right of centerline, up to 30' AGL/1818' MSL.

BROWNSVILLE, TX
BROWNSVILLE/SOUTH PADRE ISLAND INTL (BRO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 13OCT16 (16287) (FAA)
TAKEOFF OBSTACLE NOTES:
Trees and bushes beginning 32' from DER, 399' left of centerline, up to 30' AGL/50' MSL.
Trees, bushes, pole and building beginning 751' from DER, 191' right of centerline, up to 44' AGL/64' MSL.
Trees and pole beginning 56' from DER, 61' left of centerline, up to 53' AGL/78' MSL.
Trees and pole beginning 1011' from DER, 96' right of centerline, up to 44' AGL/69' MSL.
Airplanes on taxiway beginning 371' from DER, 563' right of centerline, up to 45' AGL/64' MSL.
Trees beginning 1141' from DER, 567' right of centerline, up to 37' AGL/52' MSL.
Pole and trees beginning 695' from DER, 140' right of centerline, up to 56' AGL/71' MSL.
Trees beginning 719' from DER, 84' left of centerline, up to 63' AGL/78' MSL.

BROWNWOOD, TX
BROWNWOOD RGNL (BWD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20OCT11 (11293) (FAA)
TAKEOFF OBSTACLE NOTES:
Trees beginning 1523' from DER, 844' right of centerline, up to 47' AGL/1412' MSL.
Trees beginning 797' from DER, 649' left of centerline, up to 33' AGL/1398' MSL.
Trees beginning 691' from DER, 640' right of centerline, up to 31' AGL/1393' MSL.
Building 737' from DER, 253' right of centerline, 29' AGL/1391' MSL.
Trees beginning 77' from DER, 272' left of centerline, up to 49' AGL/1411' MSL.
Trees beginning 771' from DER, 282' right of centerline, up to 46' AGL/1418' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BURNET, TX
BURNET MUNI/KATE CRADDOCK FLD (BMQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A  23FEB23  (23054)  (FAA)
DEPARTURE PROCEDURE:
Rwy 1, climb on heading 013° to 1700 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 1, trees beginning 502' from DER, 28' left of centerline, up to 55' AGL/1355' MSL.
Trees beginning 1160' from DER, 52' right of centerline, up to 55' AGL/1335' MSL.
Trees beginning 1502' from DER, 30' left of centerline, up to 55' AGL/1375' MSL.
Rwy 19, trees beginning 158' from DER, 63' left of centerline, up to 55' AGL/1286' MSL.
Trees beginning 1194' from DER, 15' right of centerline, up to 55' AGL/1315' MSL.

CARRIZO SPRINGS, TX
DIMMIT COUNTY (CZT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A  20APR23  (23110)  (FAA)
DEPARTURE PROCEDURE:
Rwy 31, climb on heading 307° to 1200 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 13, fence 9' from DER, 370' right of centerline, 593' MSL.
Tree 81' from DER, 466' left of centerline, 594' MSL.
Tree 237' from DER, 413' right of centerline, 597' MSL.
Tree 267' from DER, 453' left of centerline, 598' MSL.
Trees beginning 422' from DER, 54' right of centerline, up to 603' MSL.
Rwy 31, fence 4' from DER, 352' left of centerline, 604' MSL.
Trees, buildings beginning 56' from DER, 90' right of centerline, up to 640' MSL.
Tree 224' from DER, 537' left of centerline, 644' MSL.
Tree, building beginning 326' from DER, 442' left of centerline, up to 645' MSL.
Tree 1101' from DER, 724' left of centerline, 665' MSL.
Trees beginning 1276' from DER, 255' left of centerline, up to 669' MSL.

CASTROVILLE, TX
CASTROVILLE MUNI (CVB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  15OCT15  (15288)  (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, trees beginning 103' from DER, 361' left of centerline, up to 50' AGL/787' MSL.
Trees beginning 221' from DER, 347' right of centerline, up to 50' AGL/794' MSL.
Rwy 34, agriculture equipment beginning 1' from DER, 55' left of centerline, up to 15' AGL/790' MSL.
Road beginning 107' from DER, left and right of centerline, 15' AGL/789' MSL.
Trees beginning 1928' from DER, 5' right of centerline, up to 50' AGL/838' MSL.
Road beginning 107' from DER, 13' right of centerline, 15' AGL/794' MSL.
Pole beginning 1483' from DER, 834' right of centerline, 37' AGL/816' MSL.
Pole 2255' from DER, 247' left of centerline, 52' AGL/831' MSL.
Antenna on silo 2239' from DER, 911' left of centerline, 88' AGL/870' MSL.

COLEMAN, TX
COLEMAN MUNI (COM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  10MAR11  (11069)  (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 15, trees beginning 792' from DER, 67' right of centerline, up to 100' AGL/1774' MSL.
Rwy 33, cranes beginning 1010' from DER, 28' left of centerline, up to 65' AGL/1774' MSL.
Cranes beginning 2285' from DER, 13' right of centerline, up to 65' AGL/1774' MSL.

COMANCHE, TX
COMANCHE COUNTY-CITY (MKN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  30JAN20  (20030)  (FAA)
DEPARTURE PROCEDURE:
Rwy 17, climb heading 173° to 2000 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 17, building, terrain, tree, vehicle on road beginning 32' from DER, 260' right of centerline, up to 1395' MSL.
Terrain, trees, pole beginning 191' from DER, 310' left of centerline, up to 1411' MSL.
Trees, pole beginning 718' from DER, 20' left of centerline, up to 1425' MSL.
Pole, trees, building beginning 784' from DER, 25' right of centerline, up to 1419' MSL.
Trees, poles beginning 1090' from DER, 25' left of centerline, up to 1430' MSL.
Tree 1382' from DER, 280' right of centerline, 1422' MSL.
Trees, poles beginning 1451' from DER, 18' right of centerline, up to 1436' MSL.
Tree 2280' from DER, 70' right of centerline, 1438' MSL.
CONT
COMANCHE, TX (CON’T)
COMANCHE COUNTY-CITY (MKN) (CON’T)

Rwy 17 (CON’T), tree 2291’ from DER, 83’ left of centerline, 1436’ MSL.
Trees beginning 2334’ from DER, 155’ right of centerline, up to 1444’ MSL.
Trees beginning 2379’ from DER, 74’ left of centerline, up to 1438’ MSL.
Tree 2463’ from DER, 294’ right of centerline, 1448’ MSL.
Trees, pole beginning 2467’ from DER, 62’ right of centerline, up to 1463’ MSL.
Tree 2558’ from DER, 19’ left of centerline, 1443’ MSL.
Tree 2757’ from DER, 314’ left of centerline, 1446’ MSL.
Tree 3120’ from DER, 344’ left of centerline, 1461’ MSL.
Trees beginning 3132’ from DER, 246’ left of centerline, up to 1466’ MSL.

Rwy 35, tree 54’ from DER, 354’ left of centerline, 1406’ MSL.
Tree 481’ from DER, 345’ right of centerline, 1404’ MSL.
Trees beginning 489’ from DER, 436’ right of centerline, up to 1408’ MSL.

CORPUS CHRISTI, TX
CORPUS CHRISTI INTL (CRP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 26MAY16 (16147) (FAA)

TAKEOFF MINIMUMS:

Rwy 36, 400-2¾ or std. w/ min. climb of 235’ per NM to 600.

DEPARTURE PROCEDURE:

Rwy 31, Climbing heading 312° to 600 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 13, vehicles on road and wind cone beginning 2’ from DER, 260’ right of centerline, up to 53’ MSL.
Vehicles on road 69’ from DER, 337’ right of centerline, 54’ MSL.

Rwy 18, vehicles on road beginning 301’ from DER, 103’ left of centerline, up to 53’ MSL.

Rwy 31, vehicles on road 22’ from DER, 65’ right of centerline, 58’ MSL.
Poles beginning 765’ from DER, 616’ right of centerline, up to 36’ AGL/75’ MSL.

Rwy 36, vehicles on road beginning 261’ from DER, 444’ right of centerline, up to 52’ MSL.
Vehicles on road 490’ from DER, 604’ left of centerline, 54’ MSL.
Light poles beginning 1217’ from DER, 648’ right of centerline, up to 31’ AGL/74’ MSL.
Light poles beginning 1241’ from DER, 665’ left of centerline, up to 31’ AGL/74’ MSL.
Light pole 1294’ from DER, 799’ right of centerline, 31’ AGL/75’ MSL.
Light pole 1330’ from DER, 850’ left of centerline, 32’ AGL/75’ MSL.
Refinery 1.9 NM from DER, 180’ right of centerline, 318’ AGL/344’ MSL.
Tower 2.1 NM from DER, 3773’ left of centerline, 401’ AGL/423’ MSL.

CORPUS CHRISTI NAS (TRUAX FLD) (KNGP)
CORPUS CHRISTI, TX
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 30NOV23 (23334) (USN)

TAKEOFF OBSTACLE NOTES:

Rwy 4, terrain 0’ from DER, 500’ right of centerline, 35’ MSL.
Antenna 103’ from DER, 417’ left of centerline, 38’ MSL.
Terrain 304’ from DER, 500’ left of centerline, 37’ MSL.
Terrain 761’ from DER, 704’ right of centerline, 33’ MSL.

Rwy 13L, terrain 0’ from DER, 500’ left of centerline, 35’ MSL.
Antenna 57’ from DER, 406’ right of centerline, 22’ AGL/37’ MSL.

Rwy 18, terrain 0’ from DER, 500’ left of centerline, 35’ MSL.
Pylon 4925’ from DER, 382’ left of centerline, 124’ AGL/142’ MSL.

Rwy 22, terrain 0’ from DER, 500’ left of centerline, 33’ MSL.
Antenna 209’ from DER, 474’ left of centerline, 20’ AGL/40’ MSL.

Rwy 31R, terrain 0’ from DER, 500’ right of centerline, 33’ MSL.
Terrain 292’ from DER, 500’ right of centerline, 33’ MSL.

Rwy 36, terrain 0’ from DER, 500’ left of centerline, 36’ MSL.
Terrain 300’ from DER, 580’ left of centerline, 36’ MSL.
Antenna 568’ from DER, 417’ right of centerline, 38’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

COTULLA, TX
COTULLA-LA SALLE COUNTY (COT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 18SEP14 (14261) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees beginning 4' from DER, left and right of centerline, up to 20' AGL/465' MSL.
Vehicles on unlighted roadway, beginning 55' from DER, 507' left of centerline, up to 15' AGL/482' MSL.
Trees beginning 142' from DER, left and right of centerline, up to 20' AGL/482' MSL.
Trees beginning 622' from DER, left and right of centerline, up to 24' AGL/480' MSL.
Pole 1002' from DER, 548' left of centerline, 33' AGL/488' MSL.
Rwy 31, fence .08' from DER, 310' right of centerline, 3' AGL/476' MSL.
Trees beginning 19' from DER, left and right of centerline, up to 13' AGL/485' MSL.
Trees beginning 178' from DER, 311' right of centerline, up to 16' AGL/490' MSL.
Trees beginning 380' from DER, 386' right of centerline, up to 21' AGL/493' MSL.

DEL RIO, TX
DEL RIO INTL (DRT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 09SEP99 (99252) (FAA)
DEPARTURE PROCEDURE:
Rwy 13, climb to 1500 prior to left turn.

DEVINE, TX
DEVINE MUNI (23R)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 15DEC11 (11349) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 35, 300-1 or std. w/min. climb of 265' per NM to 900.

EAGLE PASS, TX
MAVERICK COUNTY MEML INTL (5T9)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 25SEP08 (22139) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, vehicle on road 171' from DER, 393' right of centerline, 15' AGL/894' MSL.

EDINBURG, TX
SOUTH TEXAS INTL AT EDINBURG (EBG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 28SEP06 (06271) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 14, tree 1109' from DER, 525' right of centerline, 19' AGL/108' MSL.
Terrain 20' from DER, 312' right of centerline, 0' AGL/74' MSL.
Rwy 32, multiple poles beginning 831' from DER, 53' right of centerline, up to 32' AGL/111' MSL.
Road 640' from DER, 671' right of centerline, 17' AGL/96' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

EL PASO, TX
EL PASO INTL (ELP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 8  20AUG15 (15232)  (FAA)
TAKEOFF MINIMUMS:
Rwys 8L, 26R, NA-Environmental.
Rwy 26L, std. w/min. climb of 490' per NM to 6300.
DEPARTURE PROCEDURE:
Rwy 4, 8R, climbing right turn heading 120° and ELP R-150 to 9000, then proceed on course.
Rwy 22, 26L, climbing left turn heading 120° and ELP R-150 to 9000, then proceed on course.
TAKEOFF OBSTACLE NOTES:
Rwy 4, light poles beginning 1053’ from DER, 746’ left of centerline, 39’ AGL/3986’ MSL.
Rwy 26L, light poles beginning 1248’ from DER, 614’ left of centerline, up to 60’ AGL/3983’ MSL.
Windsor 113’ from DER, 295’ right of centerline, 20’ AGL/3943’ MSL.
Rwy 22, utility pedestal 30’ from DER, 205’ right of centerline, 4’ AGL/3918’ MSL.

FALFURRIAS, TX
BROOKS COUNTY (BKS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  07MAY09 (09127)  (FAA)
TAKEOFF MINIMUMS:
Rwy 32, 400-2½ or std. w/ min. climb of 249’ per NM to 600.
Rwy 35, std. w/ min. climb of 250’ per NM to 800, or 500-3 w/ min. climb of 242’ per NM to 800, or 900-2½ for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 35, for climb in visual conditions: cross Brooks County Airport at or above 900 MSL before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 14, vehicle on road, 29’ from DER, 499’ left of centerline, 15’ AGL/1050’ MSL.
Pole 1121’ from DER, 746’ left of centerline, 33’ AGL/1048’ MSL.

FORT CAVAZOS (KILLEEN), TX
ROBERT GRAY AAF (GRK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A  30NOV23 (23334)  (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 33, pole 974’ from DER, 746’ left of centerline, 35’ AGL/1050’ MSL.
Pole 1121’ from DER, 746’ left of centerline, 33’ AGL/1048’ MSL.

FORT STOCKTON, TX
FORT STOCKTON-PECOS COUNTY (FST)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  27AUG09 (09239)  (FAA)
TAKEOFF MINIMUMS:
Rwys 7, 11, 16, 25, 29, 34, NA-Environmental.
Rwy 21, 300-1 or std. w/ min. climb of 280’ per NM to 3600.
DEPARTURE PROCEDURE:
Rwy 21, climbing heading 208° to 3600 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 12, tree 899’ from DER, 310’ right of centerline, 39’ AGL/3049’ MSL.
Rwy 21, brush beginning 110’ from DER, 222’ right of centerline, up to 20’ AGL/3159’ MSL.
Terrain beginning 124’ from DER, 77’ right of centerline, up to 3173’ MSL.
Terrain beginning 56’ from DER, 132’ left of centerline, up to 3111’ MSL.
Bush 236’ from DER, 30’ left of centerline, 6’ AGL/3013’ MSL.
Vehicle on road, 2017’ from DER, 973’ left of centerline, 17’ AGL/3066’ MSL.
Rwy 30, trees beginning 64’ from DER, 354’ left of centerline, up to 6’ AGL/2995’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

FREDERICKSBURG, TX
GILLESPIE COUNTY (T82)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 25APR19 (19115) (FAA)
DEPARTURE PROCEDURE:
Rwy 14, climb heading 141° to 2400 before turning right.
Rwy 32, climb heading 321° to 2400 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 14, trees beginning 32' from DER, 310' right of centerline, up to 1685' MSL.
Pole 202' from DER, 515' left of centerline, 30' AGL/1708' MSL.
Tree 325' from DER, 298' right of centerline, 1688' MSL.
Trees beginning 336' from DER, 439' left of centerline, up to 1715' MSL.
Trees beginning 437' from DER, 297' left of centerline, up to 1718' MSL.
Trees beginning 517' from DER, 323' left of centerline, up to 1723' MSL.
Tree 531' from DER, 328' right of centerline, 1694' MSL.
Rwy 32, building, trees beginning 9' from DER, 22' right of centerline, up to 31' AGL/1719' MSL.
Trees beginning 84' from DER, 7' left of centerline, up to 1726' MSL.
Tree 943' from DER, 490' right of centerline, 1720' MSL.
Pole 1028' from DER, 713' right of centerline, 45' AGL/1733' MSL.
Trees, poles beginning 1038' from DER, 113' right of centerline, up to 1735' MSL.
Trees beginning 1108' from DER, 117' left of centerline, up to 1731' MSL.
Trees, poles beginning 1201' from DER, 39' right of centerline, up to 1737' MSL.
Tree 1883' from DER, 432' right of centerline, 1742' MSL.

GEORGE WEST, TX
LIVE OAK COUNTY (8T6)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 23JUN16 (16175) (FAA)
TAKEOFF MINIMUMS:
Rwy 31, 700-3 or std. with a min. climb of 230' per NM to 1000.
DEPARTURE PROCEDURE:
Rwy 13, climb runway heading to 600 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 13, Trees and poles beginning 20' from DER, left and right of centerline, up to 37' AGL/157' MSL.
Vehicles on road starting 200' from DER, 431' left of centerline, up to 15' AGL/138' MSL.
Trees 815' from DER, 613' right of centerline, 48' AGL/168' MSL.
Rwy 31, Building, trees and poles beginning 57' from DER, 484' right of centerline, up to 40' AGL/163' MSL.
Vehicles on road starting 85' from DER, left and right of centerline, up to 15' AGL/143' MSL.
Trees and poles beginning 365' from DER, 401' left of centerline, up to 50' AGL/180' MSL.

GEORGETOWN, TX
GEORGETOWN EXEC (GTU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 17AUG17 (22195) (FAA)
TAKEOFF MINIMUMS:
Rwy 18, 200-1¼ or std. w/min. climb of 250' per NM to 1000.
TAKEOFF OBSTACLE NOTES:
Rwy 11, tree 11' from DER, 401' right of centerline, 786' MSL.
Poles and trees beginning 79' from DER, 136' right of centerline, up to 39' AGL/796' MSL.
Building 183' from DER, 477' left of centerline, 776' MSL.
Poles and buildings beginning 251' from DER, 424' left of centerline, up to 789' MSL.
Trees beginning 489' from DER, 226' left of centerline, up to 791' MSL.
Transmission towers, catenary, and telephone line beginning 2019' from DER, 27' left of centerline, up to 97' AGL/837' MSL.
Transmission tower and telephone line beginning 2271' from DER, 900' right of centerline, up to 826' MSL.
Tower 5361' from DER, 515' right of centerline, 179' AGL/894' MSL.
Rwy 18, REIL, vehicles on road, and tree beginning 30' from DER, 124' left of centerline, up to 784' MSL.
Tree 148' from DER, 465' left of centerline, 33' AGL/787' MSL.
Trees beginning 175' from DER, 444' right of centerline, up to 779' MSL.
Obstruction light on pole, poles, and trees beginning 300' from DER, 38' left of centerline, up to 792' MSL.
Obstruction light on pole, poles, and trees beginning 351' from DER, 19' right of centerline, up to 792' MSL.
Transmission tower 3137' from DER, 1036' left of centerline, 90' AGL/835' MSL.
Antenna on water tower 1 NM from DER, 1158' right of centerline, 163' AGL/932' MSL.

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

GEORGETOWN, TX (CON’T)
GEORGETOWN EXEC (GTU) (CON’T)

Rwy 29, bushes beginning 10’ from DER, 117’ left of centerline, up to 792’ MSL.
Terrain 15’ from DER, 91’ right of centerline, 790’ MSL.
Terrain 15’ from DER, 191’ right of centerline, 792’ MSL.
Trees beginning 89’ from DER, 345’ left of centerline, up to 806’ MSL.
Bush and tree beginning 103’ from DER, 351’ right of centerline, up to 23’ AGL/819’ MSL.
Tree 205’ from DER, 403’ left of centerline, 811’ MSL.
Tree 260’ from DER, 562’ right of centerline, 824’ MSL.
Trees beginning 296’ from DER, 291’ left of centerline, up to 819’ MSL.
Trees beginning 331’ from DER, 162’ right of centerline, up to 828’ MSL.
Trees beginning 544’ from DER, 22’ right of centerline, up to 833’ MSL.
Trees beginning 549’ from DER, 78’ left of centerline, up to 821’ MSL.
Pole 766’ from DER, 524’ right of centerline, 837’ MSL.
Poles and trees beginning 787’ from DER, 48’ left of centerline, up to 826’ MSL.
Poles beginning 800’ from DER, 56’ right of centerline, up to 840’ MSL.
Tree 1902’ from DER, 923’ right of centerline, 841’ MSL.
Trees beginning 1958’ from DER, 563’ right of centerline, up to 844’ MSL.

Rwy 36, building 70’ from DER, 513’ right of centerline, 789’ MSL.
Antenna 104’ from DER, 492’ right of centerline, 810’ MSL.
Terrain 115’ from DER, 345’ left of centerline, 789’ MSL.
Trees beginning 143’ from DER, 378’ left of centerline, up to 18’ AGL/810’ MSL.
Pole 269’ from DER, 565’ left of centerline, 35’ AGL/828’ MSL.
Trees beginning 284’ from DER, 424’ right of centerline, up to 818’ MSL.
Tree 322’ from DER, 360’ left of centerline, 831’ MSL.
Pole and trees beginning 392’ from DER, 301’ left of centerline, up to 837’ MSL.
Tower and trees beginning 510’ from DER, 429’ right of centerline, up to 45’ AGL/823’ MSL.

HAMILTON, TX
HAMILTON MUNI (MNZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 17DEC09 (09351) (FAA)
TAKEOFF OBSTACLE NOTES:

Rwy 18, tree 689’ from DER, 211’ left of centerline, 40’ AGL/1346’ MSL.
Vehicle on North-South road 849’ from DER, on extended centerline, 15’ AGL/1321’ MSL.

Rwy 36, trees beginning 621’ from DER, 186’ left of centerline, 40’ AGL/1359’ MSL.
Trees 879’ from DER, 87’ right of centerline, 40’ AGL/1359’ MSL.

HARLINGEN, TX
VALLEY INTL (HRL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 11JUL24 (24193) (FAA)
TAKEOFF OBSTACLE NOTES:

Rwy 13, sign 28’ from DER, 252’ left of centerline, 6’ AGL/39’ MSL.
Rwy 18L, vehicles on road 410’ from DER, 519’ left of centerline, 51’ MSL.
Rwy 18R, vehicles on road 8’ from DER, 430’ right of centerline, 50’ MSL.
Vehicles on roads, fences, beginning 10’ from DER, 22’ left of centerline, up to 50’ MSL.

Rwy 31, NAVALID 39’ from DER, 146’ right of centerline, 4’ AGL/35’ MSL.
Light poles 39’ from DER, 114’ right of centerline, 4’ AGL/36’ MSL.
Light poles 40’ from DER, 115’ left of centerline, 3’ AGL/36’ MSL.
NAVALID 53’ from DER, 199’ left of centerline, 4’ AGL/37’ MSL.
Poles beginning 753’ from DER, 541’ left of centerline, up to 34’ AGL/66’ MSL.
Trees beginning 982’ from DER, 462’ left of centerline, up to 34’ AGL/74’ MSL.

Rwy 36L, sign 23’ from DER, 250’ left of centerline, 3’ AGL/36’ MSL.
Rwy 36R, tree 1231’ from DER, 599’ right of centerline, 33’ AGL/66’ MSL.

HEBBRONVILLE, TX
JIM HOGG COUNTY (HBV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 29JUL10 (10210) (FAA)
TAKEOFF OBSTACLE NOTES:

Rwy 13, trees beginning 7’ from DER, 59’ left of centerline, up to 25’ AGL/694’ MSL.

Rwy 31, trees beginning 112’ from DER, 274’ right of centerline to 438’ left of centerline, up to 12’ AGL/681’ MSL. Pole 801’ from DER, 374’ right of centerline, up to 26’ AGL/685’ MSL.

NDB 275’ from DER, 495’ left of centerline, up to 33’ AGL/692’ MSL.
Vehicle on road 399’ from DER, left and right of centerline, up to 15’ AGL/674’ MSL.
HONDO, TX
SOUTH TEXAS RGNL AT HONDO (HDO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 28JUL11 (11209) (FAA)
TAKEOFF MINIMUMS:
Runways 4, 22, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
- Rwy 8, trees 407' from DER, 243' left of centerline, 30' AGL/959' MSL.
- Rwy 17L, vehicles on road 488' from DER, 131' right of centerline, 15' AGL/925' MSL.
- Rwy 17R, sand storage domes beginning 3653' from DER, up to 115' AGL/1023' MSL.
- Rwy 35R, vehicles on road 161' from DER, 172' left of centerline, 15' AGL/943' MSL.
- Multiple trees beginning 636' from DER, 354' right of centerline, up to 26' AGL/955' MSL.
- Vehicles on road beginning 1023' from DER, 241' right of centerline, 15' AGL/959' MSL.
- Rwy 13, trees 726' from DER, 250' left of centerline, 30' AGL/939' MSL.

JUNCTION, TX
KIMBLE COUNTY (JCT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 05MAY11 (11125) (FAA)
TAKEOFF MINIMUMS:
- Runways 8, 26, NA - Environmental.
- Rwy 17, std. w/min. climb of 340' per NM to 2300 or 1300-3 for climb in visual conditions.
- Rwy 35, std. w/min. climb of 565' per NM to 2200 or 400-3 with minimum climb of 230' per NM to 2500, or 1300-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
- Rwy 17, climb heading 172° to 2800 before proceeding on course, for climb in visual conditions cross Kimble County Airport at or above 2900 before proceeding on course.
- Rwy 35, for climb in visual conditions cross Kimble County Airport at or above 2900 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
- Rwy 17, trees beginning abeam DER, 297' right of centerline, up to 50' AGL/1749' MSL.
- Power lines beginning 229' from DER, 370' right of centerline, up to 75' AGL/1744' MSL.
- Vehicles on road beginning 390' from DER, left and right of centerline, up to 17' AGL/1716' MSL.
- Trees beginning 1548' from DER, left and right of centerline, up to 50' AGL/2049' MSL.
- Radio towers beginning 4568' from DER, 736' left of centerline, up to 169' AGL/1854' MSL.
- Rwy 35, power lines beginning abeam DER, 545' left of centerline, up to 75' AGL/1854' MSL.
- Power lines abeam DER, 561' right of centerline, up to 75' AGL/1854' MSL.
- Vehicles on road beginning 1121' from DER, left and right of centerline, up to 15' AGL/1794' MSL.
- Trees beginning 1254' from DER, left and right of centerline, up to 50' AGL/2129' MSL.

KELLY FLD (KSKF)
SAN ANTONIO, TX
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 25MAY17 (17145)
TAKEOFF OBSTACLE NOTES:
- Rwy 34, trees 50' AGL/743' MSL, 1763' from DER, 919' left of cntrln.
Kenedy, TX
Kenedy RGNL (2R9)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A 15AUG19 (19227) (FAA)
TAKEOFF MINIMUMS:
Rwy 16, 300-1 1/2 or std. w/min. climb of 310' per NM to 600.
Rwy 34, 400-2 1/2 or std. w/min. climb of 675' per NM to 600.
DEPARTURE PROCEDURE:
Rwy 34, climb heading 344° to 800 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 16, fence at DER, 293' right of centerline, 8' AGL/277' MSL.
Fence at DER, 291' left of centerline, 8' AGL/279' MSL.
Trees beginning 11' from DER, 268' right of centerline, up to 100' AGL/379' MSL.
Poles beginning 965' from DER, 352' left of centerline, up to 80' AGL/364' MSL.
Tree 1771' from DER, 937' right of centerline, 100' AGL/419' MSL.
Tree 3408' from DER, 982' right of centerline, 100' AGL/419' MSL.
Tree 4050' from DER, 808' right of centerline, 100' AGL/429' MSL.
Tree 4523' from DER, 348' right of centerline, 100' AGL/439' MSL.
Tree 4854' from DER, 200' right of centerline, 100' AGL/449' MSL.
Tree 5091' from DER, 147' right of centerline, 100' AGL/459' MSL.
Trees beginning 5351' from DER, 18' right of centerline, up to 100' AGL/469' MSL.
Tower, trees beginning 1.4 NM from DER, 86' left of centerline, up to 238' AGL/628' MSL.

Kerrville, TX
Kerrville Mun/Louis Schreiner Fld (ERV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 03JAN19 (22139) (FAA)
TAKEOFF MINIMUMS:
Rwy 3, 500-3 w/min. climb of 390' per NM to 2600, or std. w/min. climb of 455' per NM to 2400 or 1300-3 for VCOA.
Rwy 30, std. w/min. climb of 215' per NM to 2300 or 1300-3 for VCOA.
VCOA:
Rwys 3, 30, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Kerrville Mun/Louis Schreiner Fld at or above 2800 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 3, tree 23' from DER, 465' left of centerline, 41' AGL/1631' MSL.
Terrain 25' from DER, 401' right of centerline, 1635' MSL.
Terrain 36' from DER, 505' right of centerline, 1647' MSL.
Vehicles on road, terrain beginning 45' from DER, 310' right of centerline, up to 1649' MSL.
Trees beginning 239' from DER, 445' left of centerline, up to 47' AGL/1640' MSL.
Vehicles on road, terrain beginning 296' from DER, 352' right of centerline, up to 1650' MSL.
Trees beginning 436' from DER, 344' left of centerline, up to 66' AGL/1664' MSL.
Vehicles on road, terrain beginning 496' from DER, 311' right of centerline, up to 1652' MSL.
Trees, vehicles on road beginning 853' from DER, 117' right of centerline, up to 38' AGL/1673' MSL.
Trees beginning 895' from DER, 46' right of centerline, up to 31' AGL/1675' MSL.
Trees beginning 985' from DER, 96' right of centerline, up to 26' AGL/1678' MSL.
Trees beginning 1030' from DER, 198' right of centerline, up to 41' AGL/1684' MSL.
Poles, vehicles on road, transmission line, trees beginning 1176' from DER, 11' right of centerline, up to 55' AGL/1715' MSL.
Pole 1418' from DER, 418' left of centerline, up to 58' AGL/1672' MSL.
Transmission line, pole beginning 1440' from DER, 414' left of centerline, up to 59' AGL/1674' MSL.
Pole 1523' from DER, 772' left of centerline, 63' AGL/1698' MSL.
CON’T
KERRVILLE, TX (CON’T)

KERRVILLE MUNI/LOUIS SCHREINER FLD (ERV) (CON’T)

Rwy 3 (CON’T), transmission line, trees, windmill, pole, vehicle on road beginning 1525’ from DER, 28’ left of centerline, up to 64’ AGL/1705’ MSL.

Trees, vehicles on road, fence beginning 2019’ from DER, 37’ right of centerline, up to 33’ AGL/1742’ MSL.

Trees, terrain beginning 2581’ from DER, 576’ right of centerline, up to 1743’ MSL.

Trees, terrain beginning 2717’ from DER, 540’ left of centerline, up to 29’ AGL/1708’ MSL.

Trees, fence beginning 2978’ from DER, 804’ left of centerline, up to 37’ AGL/1733’ MSL.

Trees, terrain beginning 3253’ from DER, 920’ left of centerline, up to 30’ AGL/1738’ MSL.

Trees, pole beginning 3636’ from DER, 1190’ left of centerline, up to 33’ AGL/1742’ MSL.

Trees, terrain beginning 3905’ from DER, 120’ right of centerline, up to 31’ AGL/1751’ MSL.

Trees, terrain beginning 4069’ from DER, 920’ right of centerline, up to 16’ AGL/1753’ MSL.

Trees, terrain beginning 4108’ from DER, 1199’ right of centerline, up to 27’ AGL/1773’ MSL.

Tree 4291’ from DER, 1344’ right of centerline, 23’ AGL/1776’ MSL.

Trees beginning 4312’ from DER, 1200’ right of centerline, up to 23’ AGL/1796’ MSL.

Poles, trees, terrain beginning 4393’ from DER, 120’ right of centerline, up to 4’ AGL/1824’ MSL.

Fence, tree beginning 4504’ from DER, 1136’ right of centerline, up to 6’ AGL/1832’ MSL.

Terrain, fence, terrain beginning 4610’ from DER, 1475’ right of centerline, up to 1869’ MSL.

Trees, fence, terrain beginning 4656’ from DER, 347’ right of centerline, up to 14’ AGL/1879’ MSL.

Poles beginning 4892’ from DER, 1415’ left of centerline, up to 40’ AGL/1753’ MSL.

Tree 5259’ from DER, 1498’ left of centerline, 34’ AGL/1764’ MSL.

Trees beginning 5329’ from DER, 1203’ left of centerline, up to 41’ AGL/1769’ MSL.

Tree 5565’ from DER, 1718’ left of centerline, 33’ AGL/1772’ MSL.

Trees, vehicle on road, poles beginning 5366’ from DER, 1159’ left of centerline, up to 32’ AGL/1773’ MSL.

Trees, terrain beginning 5669’ from DER, 1423’ left of centerline, 34’ AGL/1775’ MSL.

Pole 5579’ from DER, 1525’ left of centerline, 28’ AGL/1778’ MSL.

Pole beginning 5639’ from DER, 1125’ left of centerline, up to 27’ AGL/1800’ MSL.

Pole, terrain, trees beginning 5667’ from DER, 1228’ left of centerline, up to 36’ AGL/1809’ MSL.

Tree 5885’ from DER, 1970’ left of centerline, 28’ AGL/1850’ MSL.

Trees, terrain beginning 5931’ from DER, 1336’ left of centerline, up to 26’ AGL/1874’ MSL.

Tree 6068’ from DER, 1968’ left of centerline, 21’ AGL/1890’ MSL.

Trees beginning 1 NM from DER, 1442’ left of centerline, up to 21’ AGL/1892’ MSL.

Tree, vehicle on road, terrain, fence beginning 1 NM from DER, 1349’ left of centerline, up to 1924’ MSL.

Vehicle on road, tree beginning 1 NM from DER, 914’ right of centerline, up to 1902’ MSL.

Trees on road beginning 1 NM from DER, 1170’ right of centerline, up to 1903’ MSL.

Trees beginning 1 NM from DER, 991’ right of centerline, up to 22’ AGL/1921’ MSL.

Tree, vehicles on road beginning 1.1 NM from DER, 735’ right of centerline, up to 29’ AGL/1923’ MSL.

Tree, terrain beginning 1.1 NM from DER, 524’ right of centerline, up to 1927’ MSL.

Trees, vehicle on road, terrain, poles beginning 1.1 NM from DER, 416’ right of centerline, up to 36’ AGL/1929’ MSL.

Building, trees, vehicle on road beginning 1.2 NM from DER, 1213’ right of centerline, up to 32’ AGL/1931’ MSL.

Trees, vehicles on road, poles, buildings, terrain, tank beginning 1.2 NM from DER, on and right of centerline, up to 35’ AGL/1934’ MSL.

Fence, tree beginning 1.3 NM from DER, 1576’ left of centerline, up to 6’ AGL/1925’ MSL.

Building 1.3 NM from DER, 2597’ left of centerline, 14’ AGL/1934’ MSL.

Tree 1.3 NM from DER, 2558’ left of centerline, 23’ AGL/1943’ MSL.

Building, trees, poles, vehicles on road beginning 1.3 NM from DER, 1543’ left of centerline, up to 41’ AGL/1962’ MSL.

Buildings, poles, vehicles on road, trees, fence, tank, terrain beginning 1.3 NM from DER, 18’ left of centerline, up to 32’ AGL/1963’ MSL.

Trees, poles, vehicle on road beginning 1.4 NM from DER, 160’ right of centerline, up to 31’ AGL/1941’ MSL.

Trees, vehicles on road, fence beginning 1.4 NM from DER, 233’ right of centerline, up to 25’ AGL/1947’ MSL.

Trees, poles, vehicles on road beginning 1.5 NM from DER, 196’ right of centerline, up to 25’ AGL/1950’ MSL.

Poles, trees beginning 1.5 NM from DER, 158’ right of centerline, up to 44’ AGL/1961’ MSL.

Trees, vehicles on road, terrain beginning 1.6 NM from DER, 37’ right of centerline, up to 25’ AGL/1967’ MSL.

Trees, vehicles on road, pole beginning 1.7 NM from DER, 133’ right of centerline, up to 28’ AGL/1962’ MSL.

Vehicle on road, tree beginning 1.7 NM from DER, 1457’ right of centerline, up to 1963’ MSL.

Trees, vehicles on road beginning 1.7 NM from DER, 1586’ left of centerline, up to 18’ AGL/1968’ MSL.

Trees, fence, vehicles on road beginning 1.7 NM from DER, 15’ right of centerline, up to 22’ AGL/1978’ MSL.

Poles, trees, vehicles on road, terrain, beginning 1.7 NM from DER, 196’ right of centerline, up to 36’ AGL/1982’ MSL.

Trees on road, tree beginning 1.7 NM from DER, 2149’ left of centerline, up to 1969’ MSL.

Poles, trees, vehicles on road beginning 1.7 NM from DER, 906’ left of centerline, up to 39’ AGL/1976’ MSL.

Pole, trees, vehicles on road beginning 1.7 NM from DER, 76’ right of centerline, up to 45’ AGL/1994’ MSL.

Pole, tree on road, terrain beginning 1.7 NM from DER, 17’ left of centerline, up to 40’ AGL/1986’ MSL.

Tree, vehicle on road, tank beginning 1.8 NM from DER, 271’ right of centerline, up to 36’ AGL/2000’ MSL.

Trees beginning 1.8 NM from DER, 88’ right of centerline, up to 27’ AGL/2010’ MSL.

Poles, fence, buildings, trees, vehicle on road, terrain beginning 1.8 NM from DER, 84’ left of centerline, up to 1989’ MSL.

Trees, poles, vehicles on road, building, terrain beginning 1.8 NM from DER, 173’ left of centerline, up to 44’ AGL/2003’ MSL.

Tree, terrain, buildings, vehicles on road, pole beginning 1.9 NM from DER, 267’ left of centerline, up to 34’ AGL/2025’ MSL.

Windmill, buildings, trees, terrain, vehicles on road, poles, tank, transmission line beginning 1.9 NM from DER, 34’ left of centerline, up to 52’ AGL/2044’ MSL.

CON’T
KERRVILLE, TX (CON’T)
KERRVILLE MUNI/LOUIS SCHREINER FLD (ERV) (CON’T)

Rwy 3 (CON’T), transmission line, tree beginning 2.4 NM from DER, 135’ left of centerline, up to 116’ AGL/2077’ MSL. Transmission lines, trees beginning 2.4 NM from DER, 524’ left of centerline, up to 108’ AGL/2078’ MSL. Transmission lines 2.5 NM from DER, 866’ right of centerline, 103’ AGL/2042’ MSL.

Rwy 12, terrain beginning 76’ from DER, 189’ left of centerline, up to 1593’ MSL. Tree 289’ from DER, 448’ right of centerline, 32’ AGL/1605’ MSL. Vehicles on road beginning 517’ from DER, 617’ left of centerline, up to 1608’ MSL.

Tree 625’ from DER, 442’ right of centerline, 33’ AGL/1607’ MSL. Tree, building beginning 1’ from DER, 145’ right of centerline, up to 1583’ MSL. Vehicles on road, sign, terrain beginning 13’ from DER, 125’ left of centerline, up to 1576’ MSL.

Tree 838’ from DER, 593’ right of centerline, 35’ AGL/1595’ MSL. Pole, trees beginning 893’ from DER, 422’ right of centerline, up to 41’ AGL/1602’ MSL. Trees beginning 975’ from DER, 277’ right of centerline, up to 54’ AGL/1608’ MSL.

Trees beginning 1291’ from DER, 284’ right of centerline, up to 80’ AGL/1610’ MSL. Tree 1438’ from DER, 250’ right of centerline, 89’ AGL/1619’ MSL. Antenna 2904’ from DER, 870’ right of centerline, 102’ AGL/1655’ MSL. Tree 4950’ from DER, 1649’ right of centerline, 48’ AGL/1704’ MSL.

Tree, building beginning 4963’ from DER, 1520’ right of centerline, up to 50’ AGL/1710’ MSL.

Rwy 30, vehicle on road 1’ from DER, 477’ left of centerline, 1577’ MSL. Tree 190’ from DER, 493’ left of centerline, 28’ AGL/1584’ MSL.

Tree 210’ from DER, 514’ left of centerline, 41’ AGL/1592’ MSL. Pole, tree, building, lighting beginning 244’ from DER, 208’ left of centerline, up to 33’ AGL/1594’ MSL. Fence beginning 324’ from DER, 330’ right of centerline, up to 11’ AGL/1582’ MSL.

Vehicles on road, fence beginning 329’ from DER, 271’ right of centerline, up to 1592’ MSL. Tree 404’ from DER, 521’ right of centerline, 35’ AGL/1610’ MSL. Trees, poles beginning 407’ from DER, 412’ left of centerline, up to 51’ AGL/1598’ MSL.

Poles, buildings, trees beginning 443’ from DER, 32’ right of centerline, up to 39’ AGL/1615’ MSL. Tree 599’ from DER, 500’ left of centerline, 51’ AGL/1605’ MSL. Trees beginning 621’ from DER, 19’ left of centerline, up to 51’ AGL/1606’ MSL.

Trees beginning 874’ from DER, 104’ left of centerline, up to 83’ AGL/1614’ MSL. Tree 1748’ from DER, 93’ left of centerline, 93’ AGL/1619’ MSL.

KILLEEN, TX
SKYLARK FLD (ILE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 15JAN09 (21224) (FAA)

DEPARTURE PROCEDURE:

Rwy 19, climb heading 190° to 1900 before turning east.

TAKEOFF OBSTACLE NOTES:

Rwy 1, multiple poles beginning 317’ from DER, 384’ left of centerline, up to 27’ AGL/868’ MSL. Tree, 973’ from DER, 100’ left of centerline, 28’ AGL/876’ MSL. Building, 486’ from DER, 9’ right of centerline, 13’ AGL/854’ MSL.

Antenna, 351’ from DER, 277’ right of centerline, 11’ AGL/852’ MSL. Rwy 19, pole, 288’ from DER, 588’ right of centerline, 32’ AGL/880’ MSL. Building, 102’ from DER, 411’ right of centerline, 8’ AGL/856’ MSL.

Vehicle on road, 232’ from DER, 499’ right of centerline, 15’ AGL/867’ MSL. Pole, 256’ from DER, 497’ left of centerline, 32’ AGL/873’ MSL. Building, 276’ from DER, 342’ left of centerline, 11’ AGL/859’ MSL.

Building, 298’ from DER, 83’ left of centerline, 9’ AGL/857’ MSL.

KINGSVILLE NAS (KNQI)
KINGSVILLE, TX
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 16JUL20 (20198)

TAKEOFF OBSTACLE NOTES:

Rwy 13R, terrain 0’ from DER, 500’ right of cntrln, 0’ AGL/45’ MSL. Terrain 328’ from DER, 500’ left of cntrln, 0’ AGL/59’ MSL.

Rwy 31L, terrain 0’ from DER, 500’ left of cntrln, 0’ AGL/52’ MSL.

Rwy 17L, terrain 0’ from DER, 500’ left of cntrln, 0’ AGL/56’ MSL. Terrain 0’ from DER, 500’ right of cntrln, 0’ AGL/60’ MSL. Terrain 281’ from DER, 500’ right of cntrln, 0’ AGL/60’ MSL.

Rwy 31R, terrain 0’ from DER, 500’ right of cntrln, 0’ AGL/62’ MSL.

KINGSVILLE, TX
KLEBERG COUNTY (IKG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 29JUL10 (10210) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 13, terrain 0’ from DER, 500’ right of cntrln, 0’ AGL/45’ MSL. Trees beginning 775’ from DER, 554’ left of centerline, up to 35’ AGL/159’ MSL.

Rwy 31, terrain 0’ from DER, 358’ right of centerline, up to 28’ AGL/153’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LAGO VISTA, TX
LAGO VISTA TX/RUSTY ALLEN (RYW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 17AUG17 (22027) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 15, building 4' from DER, 157' right of centerline, 25' AGL/1225' MSL.
Building and trees beginning 18' from DER, 248' left of centerline, up to 1232' MSL.
Rwy 33, trees beginning 14' from DER, 158' right of centerline, up to 1258' MSL.
Trees beginning 44' from DER, 144' left of centerline, up to 1257' MSL.
Trees beginning 173' from DER, 315' left of centerline, up to 1262' MSL.
Trees beginning 743' from DER, 159' left of centerline, up to 1273' MSL.
Tree 1430' from DER, 122' right of centerline, 1270' MSL.
Tree 1612' from DER, 132' left of centerline, 1274' MSL.

LAKEWAY, TX
LAKEWAY AIRPARK (3R9)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 05MAR15 (15064) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, 500-2¾ or std. w/min. climb of 265' per NM to 1500.
DEPARTURE PROCEDURE:
Rwy 16, climb heading 165° to 1700 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 16, trees on rising terrain beginning 26' from DER, 161' right of centerline, up to 50' AGL/975' MSL.
Building 38' from DER, 229' right of centerline, 50' AGL/989' MSL.
Tree 194' from DER, 221' left of centerline, 50' AGL/943' MSL.
Building and trees beginning 534' from DER, 165' left of centerline, 40' AGL/941' MSL.
Power lines with catenary markers beginning 776' from DER, crossing centerline, up to 80' AGL/999' MSL.
Tower 2.1 NM from DER, 1314' right of centerline, 195' AGL/1326' MSL.
Rwy 34, trees beginning abeam DER, right of centerline, up to 50' AGL/931' MSL.
Trees and buildings beginning abeam DER, 161' left of centerline, up to 50' AGL/965' MSL.
Trees and buildings on rising terrain beginning 3405' from DER, crossing centerline, up to 50' AGL/1009' MSL.

LAMPASAS, TX
LAMPASAS (LZZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 17DEC09 (09351) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, building 39' from DER, 374' left of centerline, 20' AGL/1189' MSL.
Trees beginning 795' from DER, 217' right of centerline, up to 30' AGL/1189' MSL.
Rwy 34, trees beginning 657' from DER, 147' right of centerline, up to 50' AGL/1249' MSL.

LAREDO, TX
LAREDO INTL (LRD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4B 08NOV18 (18312) (FAA)
DEPARTURE PROCEDURE:
Rwy 14, climb heading 142° to 1000 before turning right.
Rwy 18L, climb heading 163° to 1200 before turning right.
Rwy 18R, climb heading 163° to 1300 before turning right.
Rwy 32, climb heading 322° to 1200 before turning left.
Rwys 36L, 36R, climb heading 358° to 1000 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 14, trees beginning 135' from DER, 298' left of centerline, up to 59' AGL/519' MSL.
Sign 226' from DER, 244' left of centerline, 14' AGL/474' MSL.
Rwy 18L, terrain beginning 48' from DER, 333' right of centerline, up to 478' MSL.
Rwy 18R, terrain beginning 4' from DER, 219' right of centerline, up to 489' MSL.
Light poles beginning 894' from DER, 344' right of centerline, up to 41' AGL/511' MSL.
Rwy 32, aircraft on taxiway beginning 50' from DER, 367' left of centerline, up to 75' AGL/584' MSL.
Trees beginning 768' from DER, 584' left of centerline, up to 59' AGL/559' MSL.
Trees beginning 88' from DER, 275' right of centerline, up to 59' AGL/559' MSL.
Rwy 36L, MALSR 5' from DER, on centerline, 5' AGL/505' MSL.
NAVAID 10' from DER, on centerline, 5' AGL/505' MSL.
Antenna on building 81' from DER, 404' left of centerline, 30' AGL/520' MSL.
Rwy 36R, terrain beginning 19' from DER, 191' left of centerline, up to 500' MSL.
Terrain beginning 176' from DER, 489' right of centerline, up to 512' MSL.

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

LAUGHLIN AFB (KDLF)
DEL RIO, TX
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  20APR23  (23110)  (USAF)
TAKEOFF OBSTACLE NOTES:
Rwy 13C, taxiing aircraft 196’ from DER, 220’ right of centerline, 14’ AGL/1079’ MSL.
Rwy 13L, taxiing aircraft 9’ from DER, 204’ right of centerline, 14’ AGL/1076’ MSL.
Rwy 13R, taxiing aircraft 1159’ from DER, 175’ left of centerline, 38’ AGL/1108’ MSL.
Taxiing aircraft 36’ from DER, 181’ left of centerline, 14’ AGL/1090’ MSL.
Taxiing aircraft 65’ from DER, 301’ left of centerline, 14’ AGL/1090’ MSL.
Taxing aircraft 524’ from DER, 605’ right of centerline, 14’ AGL/1093’ MSL.
Rwy 31C, vehicular traffic 16’ from DER, 466’ right of centerline, 10’ AGL/1092’ MSL.
Rwy 31L, terrain 187’ from DER, 550’ right of centerline, 1082’ MSL.
Taxiing aircraft 101’ from DER, 196’ right of centerline, 14’ AGL/1091’ MSL.
Taxiing aircraft 248’ from DER, 329’ right of centerline, 14’ AGL/1094’ MSL.
Rwy 31R, taxiing aircraft 5’ from DER, 174’ left of centerline, 14’ AGL/1090’ MSL.
Terrain 118’ from DER, 427’ right of centerline, 1082’ MSL.
Terrain 149’ from DER, 535’ right of centerline, 1085’ MSL.
Terrain 170’ from DER, 537’ right of centerline, 1085’ MSL.
Terrain 171’ from DER, 515’ right of centerline, 1083’ MSL.
Terrain 172’ from DER, 492’ right of centerline, 1082’ MSL.
Terrain 189’ from DER, 544’ right of centerline, 1085’ MSL.
Terrain 228’ from DER, 544’ right of centerline, 1085’ MSL.
Terrain 267’ from DER, 532’ right of centerline, 1085’ MSL.
Terrain 72’ from DER, 450’ right of centerline, 1085’ MSL.
Terrain 84’ from DER, 491’ right of centerline, 1085’ MSL.
Terrain 96’ from DER, 438’ right of centerline, 1083’ MSL.
Wind sock 18’ from DER, 495’ left of centerline, 26’ AGL/1101’ MSL.

LLANO, TX
LLANO MUNI (AQO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  17DEC09 (09351)  (FAA)
TAKEOFF MINIMUMS:
Rwys 13, 31, NA-Environmental.
DEPARTURE PROCEDURE:
Rwy 35, climb heading 354° to 1900 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 17, tree 11’ from DER, 364’ left of centerline, 25’ AGL/1144’ MSL.
Trees 811’ from DER, 242’ right of centerline, 30’ AGL/1124’ MSL.
Rwy 35, hangar 209’ from DER, 497’ right of centerline, 30’ AGL/1149’ MSL.
Tree 485’ from DER, 265’ right of centerline, 25’ AGL/1144’ MSL.
Vehicles on North-South road, 270’ left of centerline, 15’ AGL/1114’ MSL.
Vehicles on road 390’ from DER, crosses centerline East-West, 15’ AGL/1134’ MSL.

LOCKHART, TX
LOCKHART MUNI (50R)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  25AUG11 (11237)  (FAA)
TAKEOFF MINIMUMS:
Rwy 36, 400-3 or std. w/min. climb of 275’ per NM to 1200.
DEPARTURE PROCEDURE:
Rwy 36, climb heading 355° to 1200 before turning.
TAKEOFF OBSTACLE NOTES:
Rwy 18, trees beginning 47’ from DER, 267’ left of centerline, up to 65’ AGL/555’ MSL.
Trees beginning 245’ from DER, 13’ right of centerline, up to 42’ AGL/541’ MSL.
Rwy 36, bush 51’ from DER, 305’ right of centerline, 8’ AGL/568’ MSL.
Pole 1298’ from DER, 561’ right of centerline, 38’ AGL/568’ MSL.
Tower 2.2 NM from DER, 2536’ right of centerline, 378’ AGL/918’ MSL.
MARFA, TX
MARFA MUNI (MRF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 25FEB21 (21056) (FAA)
TAKEOFF MINIMUMS:
Rwys 9, 27, NA - Environmental.
CAUTION: Unmarked balloon and cable to 14000' MSL in R-6318.
DEPARTURE PROCEDURE:
Rwy 4, climbing right turn direct MRF VOR/DME thence...
Rwy 13, climb direct MRF VOR/DME thence...
Rwys 22, 31, climbing left turn direct MRF VOR/DME thence...
...all aircraft climb in MRF holding pattern (southeast, left turn, 313° inbound) to cross MRF VOR/DME at or above MEA for direction of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 4, vehicle on road, tree beginning 18' from DER, 319' left of centerline, up to 15' AGL/4863' MSL.
Tree 76' from DER, 504' right of centerline, 4852' MSL.
Vehicle on road 462' from DER, 270' left of centerline, 4866' MSL.
Vehicle on road 469' from DER, 613' right of centerline, 4863' MSL.
Tree on road beginning 558' from DER, 197' left of centerline, up to 4869' MSL.
Vehicle on road 709' from DER, 417' left of centerline, 4870' MSL.
Tree on road 744' from DER, 583' right of centerline, 4868' MSL.
Rwy 13, vehicle on road 29' from DER, 413' right of centerline, 4846' MSL.
Vehicle on road 175' from DER, 429' right of centerline, 15' AGL/4848' MSL.
Vehicle on road 513' from DER, 564' left of centerline, 4846' MSL.
Pole 1041' from DER, 572' right of centerline, 4858' MSL.
Rwy 22, vehicle on road beginning 5' from DER, 281' left of centerline, up to 15' AGL/4840' MSL.
Tree 152' from DER, 419' right of centerline, 4833' MSL.
Tank, vehicle on road beginning 340' from DER, 272' left of centerline, up to 4846' MSL.
Rwy 31, building 31' from DER, 249' right of centerline, 5' AGL/4843' MSL.

MASON, TX
MASON COUNTY (T92)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 17AUG17 (17229) (FAA)
TAKEOFF MINIMUMS:
Rwy 36, 300-1 or std. w/ min. climb of 440' per NM to 1800.
DEPARTURE PROCEDURE:
Rwy 18, climb heading 176° to 2100' before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 18, trees beginning 469' from DER, 87' left of centerline, up to 35' AGL/1555' MSL.
Rwy 36, trees beginning 379' from DER, left and right of centerline, up to 35' AGL/1538' MSL.
T-L tower 3061' from DER, 1185' left of centerline, 95' AGL/1628' MSL.
T-L towers beginning 3625' from DER, 193' left of centerline, up to 85' AGL/1641' MSL.
T-L towers beginning 4435' from DER, 303' right of centerline, up to 90' AGL/1667' MSL.
Buildings 2016' from DER, 860' right of centerline, 89' AGL/197' MSL.
Buildings 1.29 NM from DER, 243' right of centerline, 263' AGL/394' MSL.

MC ALLEN, TX
MC ALLEN INTL (MFE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 10DEC15 (23054) (FAA)
TAKEOFF MINIMUMS:
Rwy 36, 300-1½, or std. w/min. climb of 296' per NM to 500'.
TAKEOFF OBSTACLE NOTES:
Rwy 14, trees beginning 792' from DER, 593' left of centerline, up to 44' AGL/139' MSL.
Rwy 32, trees and poles beginning 709' from DER, 362' left of centerline, up to 52' AGL/157' MSL.
Tree 1019' from DER, 627' right of centerline, 42' AGL/142' MSL.
Rwy 36, pole 581' from DER, on centerline, 19' AGL/122' MSL.
Tower 198' from DER, 335' left of centerline, 38' AGL/140' MSL.
Buildings and trees beginning 652' from DER, 36' left of centerline, up to 50' AGL/155' MSL.
Towers, poles and buildings beginning 635' from DER, 25' right of centerline, up to 62' AGL/166' MSL.
Buildings 2016' from DER, 860' right of centerline, 89' AGL/197' MSL.
Buildings 1.29 NM from DER, 243' right of centerline, 263' AGL/394' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

MIDLAND, TX
MIDLAND AIRPARK (MDD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 16AUG18 (18228) (FAA)
TAKEOFF MINIMUMS:
Rwy 16, 400-2½ or std. w/min. climb of 220’ per NM to 3300.
Rwy 25, 300-1½ or std. w/min. climb of 230’ per NM to 3100, 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 7, vehicles on road and tree beginning 87’ from DER, 360’ left of centerline, up to 2803’ MSL.
Vegetation 218’ from DER, 441’ right of centerline, 2797’ MSL.
Poles beginning 316’ from DER, 443’ left of centerline, up to 50’ AGL/2840’ MSL.
Poles beginning 1601’ from DER, 252’ left of centerline, up to 52’ AGL/2843’ MSL.
Tree 856’ from DER, 377’ left of centerline, 52’ AGL/2849’ MSL.
Pole 2136’ from DER, 343’ left of centerline, 52’ AGL/2855’ MSL.
Pole 2403’ from DER, 309’ left of centerline, 52’ AGL/2859’ MSL.
Poles beginning 268’ from DER, 256’ left of centerline, up to 52’ AGL/2861’ MSL.
Rwy 16, vegetation 37’ from DER, 496’ right of centerline, 2803’ MSL.
Pole 196’ from DER, 498’ right of centerline, 33’ AGL/2827’ MSL.
Pole 318’ from DER, 449’ right of centerline, 34’ AGL/2828’ MSL.
Poles and trees beginning 613’ from DER, 296’ right of centerline, up to 42’ AGL/2834’ MSL.
Pole 826’ from DER, 454’ left of centerline, 32’ AGL/2822’ MSL.
Trees 856’ from DER, 227’ left of centerline, 2829’ MSL.
Trees beginning 1098’ from DER, 291’ right of centerline, up to 2842’ MSL.
Poles beginning 1269’ from DER, 664’ left of centerline, up to 51’ AGL/2839’ MSL.
Tower 2 NM from DER, 3181’ left of centerline, 354’ AGL/3136’ MSL.
Building 2 NM from DER, 3680’ left of centerline, 354’ AGL/3135’ MSL.
Rwy 25, pole 104’ from DER, 519’ right of centerline, 67’ AGL/2870’ MSL.
Poles beginning 373’ from DER, 316’ right of centerline, up to 69’ AGL/2873’ MSL.
Tree and sign beginning 642’ from DER, 205’ left of centerline, up to 40’ AGL/2903’ MSL.
Poles, lighting, and tree beginning 644’ from DER, 12’ right of centerline, up to 20’ AGL/2874’ MSL.
Tree, pole, and lighting beginning 72’ from DER, 76’ left of centerline, up to 20’ AGL/2877’ MSL.
Building and trees beginning 866’ from DER, 38’ left of centerline, up to 40’ AGL/2851’ MSL.
Tower 5309’ from DER, 1326’ right of centerline, 137’ AGL/2956’ MSL.
Rwy 34, vehicles on road 572’ from DER, 423’ left of centerline, 2816’ MSL.
Pole and trees beginning 635’ from DER, 329’ right of centerline, up to 51’ AGL/2843’ MSL.
Tree 838’ from DER, 484’ left of centerline, 2825’ MSL.
Trees beginning 1216’ from DER, 328’ right of centerline, up to 2850’ MSL.

MIDLAND INTL AIR AND SPACE PORT (MAF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 22JUN17 (17173) (FAA)
TAKEOFF MINIMUMS:
Rwy 34L, 300-1½ or std. w/min. climb of 400’ per NM to 3200.
Rwy 34R, 300-1¼ or std. w/min. climb of 320’ per NM to 3200.
TAKEOFF OBSTACLE NOTES:
Rwy 4, trees beginning 24’ from DER, 34’ right of centerline, up to 40’ AGL/2903’ MSL.
Rods, towers and domes beginning 1231’ from DER, 442’ left of centerline, up to 108’ AGL/2963’ MSL.
Rods and trees beginning 72’ from DER, 40’ right of centerline, up to 20’ AGL/2874’ MSL.
Poles, trees, and signs beginning 1296’ from DER, 457’ left of centerline, up to 20’ AGL/2913’ MSL.
Rwy 16L, signs and poles beginning 94’ from DER, 20’ left of centerline, up to 30’ AGL/2877’ MSL.
Railroad beginning 530’ from DER, 17’ left of centerline, 23’ AGL/2869’ MSL.
Vehicles on road beginning 301’ from DER, 268’ left of centerline, 17’ AGL/2862’ MSL.
Rwy 16R, pole 1794’ from DER, 975’ right of centerline, 55’ AGL/2906’ MSL.
Pole and trees beginning 256’ from DER, 10’ right of centerline, up to 17’ AGL/2881’ MSL.
Trees and bushes beginning 171’ from DER, 80’ right of centerline, up to 40’ AGL/2878’ MSL.
Poles and fence beginning 28’ from DER, 109’ right of centerline, up to 38’ AGL/2903’ MSL.
Fence beginning 63’ from DER, 271’ left of centerline, 8’ AGL/2872’ MSL.
Windmill, poles and trees beginning 1239’ from DER, 116’ left of centerline, up to 66’ AGL/2913’ MSL.
Drilling rig 5540’ from DER, 267’ left of centerline, 165’ AGL/3025’ MSL.
MONAHANS, TX
ROY HURD MEML (E01)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 31MAY12 (21224) (FAA)
TAKEOFF MINIMUMS:
Rwy 1, 400-1½ or std. w/min. climb of 434' per NM to 3100.
Rwy 12, 300-1 or std. w/min. climb of 552' per NM to 2900.
TAKEOFF OBSTACLE NOTES:
Rwy 1, vehicles on road, trees, and power line and poles beginning 185' from DER, left and right of centerline, up to 40' AGL/2649' MSL.
Tower 1.2 NM from DER, 211' right of centerline, 303' AGL/2928' MSL.
Trees and a pole beginning 778' from DER, 23' right of centerline, up to 31' AGL/2641' MSL.
Rwy 12, bush 75' from DER, 12' AGL/2617' MSL.
Rwy 19, vehicle on road 215' from DER, 45' right of centerline, 15' AGL/2624' MSL.
Vehicle on road, light pole, building, and poles beginning 294' from DER, 41' left of centerline, up to 50' AGL/2655' MSL.

NEW BRAUNFELS, TX
NEW BRAUNFELS NTL (BAZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 25JUN15 (21336) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, poles beginning 1236' from DER, 277' right of centerline, up to 40' AGL/678' MSL.
Poles beginning 1238' from DER, 557' left of centerline, up to 41' AGL/677' MSL.
Trees beginning 1339' from DER, 211' right of centerline, up to 55' AGL/690' MSL.
Rwy 35, airport visual aid 56' from DER, 25' right of centerline, 3' AGL/649' MSL.

ODESSA, TX
ODESSA-SCHLEMEYER FLD (ODO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A 13SEP18 (21308) (FAA)
TAKEOFF MINIMUMS:
Rwy 16, 300-2 or std. with a min. climb of 255' per NM to 3400, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient. Takeoff must occur no later than 1300 feet prior to DER.
Rwy 20, 300-2½ or std. w/min. climb of 225' per NM to 3400, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient. Takeoff must occur no later than 2100' prior to DER.
TAKEOFF OBSTACLE NOTES:
Rwy 2, vehicles on roadway 184' from DER, left and right of centerline, up to 13' AGL/3013' MSL.
Rwy 16, tower 1.5 NM from DER, 2759' right of centerline, 145' AGL/3205' MSL.
Rwy 20, tower 2.0 NM from DER, 1311' left of centerline, 340' AGL/3287' MSL.
Rwy 29, rising terrain, trees and poles beginning 8' from DER, 495' right of centerline, up 3012' MSL.
Rwy 34, vehicles on roadway beginning 48' from DER, left and right of centerline, up to 16' AGL/3001' MSL.
Hangars 739' from DER, 628' left of centerline, 25' AGL/3012' MSL.
Antenna 1104' from DER, 185' right of centerline, 45' AGL/3032' MSL.

ORANGE GROVE, TX
ORANGE GROVE NALF (KNOG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 13JUN24 (24165) (USN)
TAKEOFF OBSTACLE NOTES:
Rwy 31, terrain 0' from DER, 500' right of centerline, 260' MSL.

OZONA, TX
OZONA MUNI (OZA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10JUL03 (03191) (FAA)
TAKEOFF MINIMUMS:
Rwy 16, 300-1 or std. with a min. climb of 445' per NM to 2700.
Rwy 34, 200-1½ or std. with a min. climb of 380' per NM to 2600.
TAKEOFF OBSTACLE NOTES:
Rwy 16, trees 3686' from DER, 354' left of centerline, 100' AGL/2560' MSL.
Trees 4436' from DER, 355' left of centerline, 100' AGL/2574' MSL.
Rwy 34, trees 1363' from DER, 638' left of centerline, 100' AGL/2529' MSL.
Trees 3479' from DER, 791' left of centerline, 100' AGL/2535' MSL.
Trees 7679' from DER, 932' left of centerline, 100' AGL/2593' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PEARSALL, TX
MC KINLEY FLD (T30)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 17NOV11 (22111) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees beginning abeam DER, 300' left of centerline, up to 40' AGL/605' MSL.
Transmission lines beginning 1777' from DER, across centerline, up to 80' AGL/642' MSL.
Rwy 31, train on track 496' from DER, across centerline, 23' AGL/610' MSL.
Vehicle on road 291' from DER, across centerline, 15' AGL/602' MSL.

PECOS, TX
PECOS MUNI (PEQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20SEP12 (12264) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 14, bush 170' from DER, 252' right of centerline, up to 7' AGL/2607' MSL.
Rwy 32, bush 129' from DER, 348' left of centerline, up to 9' AGL/2614' MSL.

PLEASANTON, TX
PLEASANTON MUNI (PEZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 20NOV08 (08325) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, vehicle on road 108' from DER, 285' left of centerline, 15' AGL/424' MSL.
Fence 135' from DER, 194' left of centerline, 3' AGL/412' MSL.
Fence 235' from DER, 38' right of centerline, 3' AGL/412' MSL.
Trees beginning 246' from DER, 56' left of centerline, up to 100' AGL/529' MSL.
Trees beginning 173' from DER, 154' right of centerline, up to 100' AGL/529' MSL.
Rwy 34, vehicle on road 136' from DER, 150' right of centerline, up to 15' AGL/444' MSL.
Fence 191' from DER, 251' left of centerline, 3' AGL/442' MSL.
Trees beginning 210' from DER, 51' left of centerline, up to 100' AGL/539' MSL.
Tree 172' from DER, 74' right of centerline, 100' AGL/529' MSL.

PORT ARANSAS, TX
MUSTANG BEACH (RAS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 15JAN09 (09015) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 12, transmission towers and poles beginning 43' from DER, 28' right of centerline, up to 81' AGL/86' MSL. Building 2435' from DER, 967' right of centerline, 130' AGL/135' MSL.
Transmission towers and poles beginning 1141' from DER, 13' left of centerline, up to 83' AGL/88' MSL.
Rwy 30, boat 1657' from DER, 915' left of centerline, 60' AGL/50' MSL.

PORT ISABEL, TX
PORT ISABEL-CAMERON COUNTY (PIL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2B 19JUL18 (18200) (FAA)
TAKEOFF MINIMUMS:
Rwy 17, std. w/min. climb of 243' per NM to 700 or 900-3 for VCOA.
Rwy 21, 600-3 w/min. climb of 231' per NM to 700 or std. w/min. climb of 312' per NM to 700 or 900-3 for VCOA.
DEPARTURE PROCEDURE:
Rwy 13, climb on heading 130° to 500 before turning right.
Rwy 17, climb on heading 175° to 600 before turning right.
VCOA:
Rwy 17, obtain ATC approval for VCOA when requesting IFR clearance: climb in visual conditions to cross Port Isabel-Cameron County airport at or above 800 before proceeding on course.
Rwy 21, obtain ATC approval for VCOA when requesting IFR clearance: climb in visual conditions to cross Port Isabel-Cameron County airport at or above 800 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 3, trees beginning 15' from DER, 5' right of centerline, up to 100' AGL/117' MSL.
Trees beginning 200' from DER, 25' left of centerline, up to 100' AGL/117' MSL.
Rwy 8, trees beginning 141' from DER, 109' right of centerline, up to 100' AGL/117' MSL.
Trees beginning 142' from DER, 183' left of centerline, up to 100' AGL/117' MSL.
Rwy 13, trees beginning 6' from DER, 6' left of centerline, up to 100' AGL/117' MSL.
Trees beginning 26' from DER, 15' right of centerline, up to 100' AGL/117' MSL.
Rwy 17, trees beginning 183' from DER, 84' right of centerline, up to 100' AGL/117' MSL.
Trees beginning 185' from DER, 178' left of centerline, up to 100' AGL/117' MSL.
CON'T
PORT ISABEL, TX (CON’T)
PORT ISABEL-CAMERON COUNTY (PIL) (CON’T)

**Rwy 21**, trees beginning 90’ from DER, 19’ left of centerline, up to 100’ AGL/117’ MSL.
Trees beginning 246’ from DER, 0’ of centerline, up to 100’ AGL/117’ MSL.
Windmill 2.1 NM from DER, 2541’ left of centerline, 492’ AGL/512’ MSL.
Windmill 2.2 NM from DER, 1999’ left of centerline, 492’ AGL/514’ MSL.
**Rwy 26**, trees beginning 6’ from DER, 208’ right of centerline, up to 100’ AGL/117’ MSL.
Trees beginning 7’ from DER, 83’ left of centerline, up to 100’ AGL/117’ MSL.
**Rwy 35**, trees beginning 158’ from DER, 202’ right of centerline, up to 100’ AGL/114’ MSL.
Trees beginning 765’ from DER, 63’ left of centerline, up to 100’ AGL/114’ MSL.
Trees beginning 3191’ from DER, 61’ left of centerline, up to 100’ AGL/117’ MSL.

**PRESIDIO, TX**
PRESIDIO LELY INTL (PRS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 03APR14 (14093) (FAA)

**TAKEOFF MINIMUMS:**
**Rwy 17**, std. w/min. climb of 230’ per NM to 5600, or 1900-3 for climb in visual conditions.
**Rwy 35**, std. w/min. climb of 280’ per NM to 5700, or 1900-3 for climb in visual conditions.

**DEPARTURE PROCEDURE:**
**Rwy 17**, climbing left turn to 9000 on heading 045° and MRF VOR/DME R-185 to MRF VOR/DME, or for climb in visual conditions, cross Presidio Lely Intl airport at or above 4700, then climb to 9000 on heading 021° and MRF VOR/DME R-197 to MRF VOR/DME. When executing VCOA, notify ATC prior to departure.
**Rwy 35**, climbing right turn to 9000 on heading 065° and MRF VOR/DME R-190 to MRF VOR/DME, or for climb in visual conditions, cross Presidio Lely Intl airport at or above 4700, then climb to 9000 on heading 021° and MRF VOR/DME R-197 to MRF VOR/DME. When executing VCOA, notify ATC prior to departure.

**TAKEOFF OBSTACLE NOTES:**
**Rwy 17**, brush abeam DER, left and right of centerline, up to 10’ AGL/2929’ MSL.
Power line 990’ from DER, 762’ left of centerline, 86’ AGL/3005’ MSL.
Vehicles on road, 990’ from DER, 762’ left of centerline, up to 17’ AGL/3016’ MSL.
**Rwy 35**, brush abeam DER, left and right of centerline, up to 10’ AGL/3089’ MSL.
Powerlines beginning 2978’ from DER, 749’ right of centerline, up to 1291’ AGL/3016’ MSL.
Vehicles on road, 2978’ from DER, 1291’ right of centerline, up to 17’ AGL/3016’ MSL.

**ROBSTOWN, TX**
NUCES COUNTY (RBO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 30JAN20 (20030) (FAA)

**TAKEOFF MINIMUMS:**
**Rwy 13**, std. w/min. climb of 267’ per NM to 1400 or 1400-2½ for climb in visual conditions.

**DEPARTURE PROCEDURE:**
**Rwy 13**, climb heading 129° to 1400 before turning westbound or northbound. For climb in visual conditions, cross Nueces County airport at or above 1300’ MSL before proceeding on course. When executing VCOA, notify ATC prior to departure.
**Rwy 31**, climb heading 309° to 700 before turning southeast bound.

**TAKEOFF OBSTACLE NOTES:**
**Rwy 13**, tower 4.8 NM from DER, 5070’ right of centerline, 989’ AGL/1049’ MSL.
Poles beginning 1005’ from DER, 347’ left of centerline, up to 42’ AGL/116’ MSL.
Poles, vehicles on road, post, transmission tower and grain bin/silo beginning at DER, 69’ left of centerline, up to 62’ AGL/136’ MSL.
**Rwy 31**, vehicles on road and pole beginning 2’ from DER, 250’ right of centerline, 15’ AGL/93’ MSL.

**ROCKPORT, TX**
ARANAS COUNTY (RKP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 15MAR07 (07074) (FAA)

**TAKEOFF OBSTACLE NOTES:**
**Rwy 14**, road plus vehicle 500’ from DER, 593’ left of centerline, 17’ AGL/40’ MSL.
**Rwy 18**, road plus vehicle 5599’ from DER, 602’ right of centerline, 160’ AGL/171’ MSL.
**Rwy 32**, road plus vehicle 291’ from DER, 533’ left of centerline, 17’ AGL/40’ MSL.
**Rwy 36**, road plus vehicle 576’ from DER, 597’ left of centerline, 17’ AGL/40’ MSL.

**ROCKSPRINGS, TX**
EDWARDS COUNTY (ECU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 28SEP06 (06271) (FAA)

**TAKEOFF OBSTACLE NOTES:**
**Rwy 14**, multiple trees beginning 1076’ from DER, 22’ right of centerline, up to 100’ AGL/2450’ MSL.
**Rwy 32**, multiple trees beginning 318’ from DER, 71’ left of centerline, up to 100’ AGL/2479’ MSL.
Multiple trees beginning 992’ from DER, 352’ right of centerline, up to 100’ AGL/2479’ MSL.
SAN ANGELO, TX
SAN ANGELO RGNL/MATHIS FLD (SJT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 26AUG10 (21112) (FAA)
DEPARTURE PROCEDURE:
Rwy 27, climb to 2500 before turning right.
Rwy 36, climb to 2800 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 3, fence 8' from DER, 490' right of centerline, up to 3' AGL/1896' MSL.
Rwy 18, multiple trees and poles beginning 112' from DER, 183' left of centerline, up to 43' AGL/1962' MSL.
Multiple trees and poles beginning 1076' from DER, 114' right of centerline, up to 47' AGL/1966' MSL.
Catenary 1779' from DER, 457' right of centerline, 45' AGL/1964' MSL.
Rwy 27, multiple trees beginning 482' from DER, 74' left of centerline, up to 24' AGL/1933' MSL.
Light pole 1040' from DER, 252' left of centerline, 22' AGL/1931' MSL.
Tree 538' from DER, 226' right of centerline, 21' AGL/1930' MSL.

SAN ANTONIO, TX
BOERNE STAGE AIRFIELD (5C1)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 18JAN07 (23166) (FAA)
DEPARTURE PROCEDURE:
Rwy 17, climb heading 169° to 2000 before turning westbound.
Rwy 35, climb heading 349° to 2800 before turning westbound.
TAKEOFF OBSTACLE NOTES:
Rwy 17, tree, pole beginning 20' from DER, 34' left of centerline, up to 1446' MSL.
Tree, pole beginning 47' from DER, 12' right of centerline, up to 1410' MSL.
Pole, tree beginning 788' from DER, 526' left of centerline, up to 1448' MSL.
Trees beginning 1005' from DER, 566' left of centerline, up to 1451' MSL.
Tree 2244' from DER, 996' right of centerline, 1450' MSL.
Tree 2327' from DER, 1069' right of centerline, 1455' MSL.
Tree 2464' from DER, 1093' left of centerline, 1452' MSL.
Tree 2465' from DER, 1093' right of centerline, 1457' MSL.
Tree 2531' from DER, 1082' left of centerline, 1454' MSL.
Trees beginning 2569' from DER, 980' right of centerline, up to 1471' MSL.
Trees beginning 2659' from DER, 1037' right of centerline, up to 1476' MSL.
Rwy 35, building beginning 3' from DER, 221' right of centerline, up to 1400' MSL.
Trees beginning 79' from DER, 175' right of centerline, up to 1412' MSL.
Tree, pole beginning 103' from DER, 8' left of centerline, up to 1416' MSL.
Trees beginning 163' from DER, 23' right of centerline, up to 1431' MSL.
Pole, tree beginning 207' from DER, 37' left of centerline, up to 1418' MSL.
Pole, tree beginning 246' from DER, 103' left of centerline, up to 1422' MSL.
Trees beginning 437' from DER, 573' left of centerline, up to 1426' MSL.
Trees beginning 584' from DER, 78' left of centerline, up to 1428' MSL.
Trees beginning 778' from DER, 371' left of centerline, up to 1430' MSL.

SAN ANTONIO INTL (SAT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 02MAR17 (17061) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13R, antenna on rtr tower, 1034' from DER, 723' right of centerline, 42' AGL/820' MSL.
Building 3801' from DER, 1488' right of centerline, 117' AGL/881' MSL.
Rwy 22, antenna on hangar and flagpole 1198' from DER, 700' right of centerline, 39' AGL/825' MSL.
Poles beginning 2209' from DER, 1041' right of centerline, up to 23' AGL/869' MSL.
Sign 2713' from DER, 1034' right of centerline, 71' AGL/857' MSL.
Rwy 31L, pole 1931' from DER, 911' left of centerline, 42' AGL/867' MSL.
Poles beginning 2306' from DER, 913' left of centerline, up to 42' AGL/882' MSL.
Sign 2435' from DER, 1032' right of centerline, 42' AGL/873' MSL.
Tower 2766' from DER, 834' left of centerline, 54' AGL/891' MSL.
Rwy 31R, rod on ol gs 1261' from DER, 591' left of centerline, 57' AGL/854' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SAN ANTONIO, TX (CON’T)
STINSON MUNI (SSF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 14FEB08 (08045) (FAA)
TAKEOFF MINIMUMS:
- **Rwy 9**, std. w/min. climb of 225’ per NM to 1900 or 1000-2½ for climb in visual conditions.
- **Rwy 27**, 300-1½ or std. w/min. climb of 221’ per NM to 900, or alternatively, with std. takeoff minimums and normal 200’ per NM climb gradient, takeoff must occur no later than 1700’ prior to DER.

DEPARTURE PROCEDURE:
- **Rwy 9**, for climb in visual conditions, cross Stinson Muni airport at or above 1400 MSL before proceeding on course.
- **Rwy 14**, climb heading 137° to 1200 before turning left.
- **Rwy 32**, climb heading 317° to 1500 before turning right.

TAKEOFF OBSTACLE NOTES:
- **Rwy 9**, vehicle on road 285’ from DER, 380’ left of centerline, 15’ AGL/584’ MSL. Trees beginning 1653’ from DER, 435’ right of centerline, up to 70’ AGL/629’ MSL.
- **Rwy 14**, vehicle on road 114’ from DER, on centerline extending 373’ left of centerline, up to 15’ AGL/564’ MSL. Vehicles beginning 72’ from DER, 79’ right of centerline, up to 70’ AGL/607’ MSL. Trees beginning 232’ from DER, 54’ left of centerline, up to 70’ AGL/618’ MSL. Transmission line tower 4205’ from DER, 133’ right of centerline, 119’ AGL/663’ MSL.
- **Rwy 27**, fence 41’ from DER, 30’ right of centerline, 8’ AGL/584’ MSL. Vehicle on road 108’ from DER, 202’ right of centerline, 15’ AGL/584’ MSL. Vehicle on road 123’ from DER, 113’ right of centerline, 15’ AGL/564’ MSL. Trees and poles beginning 229’ from DER, 117’ right of centerline, up to 70’ AGL/645’ MSL. Trees and poles beginning 599’ from DER, 6’ left of centerline, up to 70’ AGL/634’ MSL. Tank beginning 1.32 NM from DER, 1338’ right of centerline, 179’ AGL/799’ MSL.
- **Building 1422’ from DER, 432’ right of centerline, 40’ AGL/627’ MSL. Building 2133’ from DER, 36’ left of centerline, 55’ AGL/635’ MSL. Vehicles beginning 462’ from DER, 65’ left of centerline, up to 1257’ MSL. Tree 464’ from DER, 455’ right of centerline, 1285’ MSL. Trees, vehicle on road beginning 574’ from DER, 121’ right of centerline, up to 1290’ MSL.

SAN SABA, TX
SAN SABA COUNTY MUNI (81R)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 30NOV23 (23334) (FAA)
TAKEOFF OBSTACLE NOTES:
- **Rwy 13**, vegetation beginning 14’ from DER, 182’ left of centerline, up to 1244’ MSL. Vehicle on road, fences beginning 17’ from DER, 271’ right of centerline, up to 1256’ MSL. Vegetation beginning 103’ from DER, 203’ left of centerline, up to 4’ AGL/1246’ MSL. Poles, vehicle on road, tree beginning 215’ from DER, 268’ right of centerline, up to 29’ AGL/1268’ MSL. Vegetation on road extending 462’ from DER, 65’ left of centerline, up to 1257’ MSL. Tree 522’ from DER, 382’ left of centerline, 1265’ MSL.
- **Rwy 31**, vegetation 5’ from DER, 196’ left of centerline, 3’ AGL/1259’ MSL. Vegetation beginning 6’ from DER, 172’ right of centerline, up to 1262’ MSL. Trees, vegetation, terrain, fence beginning 7’ from DER, 129’ left of centerline, up to 26’ AGL/1286’ MSL. Vegetation beginning 54’ from DER, 152’ right of centerline, up to 4’ AGL/1264’ MSL. Vegetation beginning 95’ from DER, 159’ right of centerline, up to 1287’ MSL. Vehicle on road extending 365’ from DER, 586’ right of centerline, 1276’ MSL. Tree 464’ from DER, 455’ right of centerline, 1285’ MSL. Trees, vegetation on road beginning 574’ from DER, 121’ right of centerline, up to 1290’ MSL.

SINTON, TX
SINTON (T69)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 13NOV14 (24137) (FAA)
TAKEOFF MINIMUMS:
- Rwy 3, 21, NA-Environmental.

DEPARTURE PROCEDURE:
- **Rwy 14**, climb runway heading to 800 prior to turning east.

TAKEOFF OBSTACLE NOTES:
- **Rwy 32**, vehicle on road 29’ from DER, 308’ right of centerline, 15’ AGL/64’ MSL.
SMITHVILLE, TX
SMITHVILLE CRAWFORD MUNI (84R)

ORIG 15JUN23 (23166) (FAA)

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

TAKEOFF MINIMUMS:

Rwy 17, 300-1/2 or std. w/min. climb of 300’ per NM to 600, or 1000-3 for VCOA.

Rwy 35, 300-1/2 or std. w/min. climb of 330’ per NM to 600.

DEPARTURE PROCEDURE:

Rwy 17, climb on heading 169° to 800 before turning right.

VCOA:

Rwy 17, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Smithville Crawford Muni airport at or above 1200 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 17, tree 108' from DER, 293' right of centerline, 340' MSL.

Tree 113' from DER, 297' left of centerline, 340' MSL.

Trees beginning 197' from DER, 296' right of centerline, up to 31' AGL/342' MSL.

Trees beginning 302' from DER, 294' left of centerline, up to 341' MSL.

Tree 334' from DER, 297' right of centerline, 344' MSL.

Tree 648' from DER, 160' left of centerline, 343' MSL.

Trees beginning 682' from DER, 7' left of centerline, up to 28' AGL/346' MSL.

Tree 778' from DER, 131' left of centerline, 30' AGL/348' MSL.

Tree 836' from DER, 128' left of centerline, 32' AGL/349' MSL.

Trees beginning 858' from DER, 119' left of centerline, 34' AGL/351' MSL.

Tree 866' from DER, 106' right of centerline, 31' AGL/348' MSL.

Tree 910' from DER, 120' left of centerline, 38' AGL/355' MSL.

Tree 1040' from DER, 490' right of centerline, 386' MSL.

Tree 1136' from DER, 251' left of centerline, 40' AGL/358' MSL.

Trees pole beginning 1172' from DER, 583' left of centerline, up to 363' MSL.

Poles, catenary wires beginning 1357' from DER, 10' left of centerline, up to 388' MSL.

Catenary wires 1390' from DER, 84' right of centerline, 50' AGL/367' MSL.

Tower, catenary wires beginning 1393' from DER, 35' right of centerline, up to 52' AGL/369' MSL.

Catenary wires 1396' from DER, 466' right of centerline, 374' MSL.

Transmission line 1396' from DER, 185' right of centerline, 65' AGL/383' MSL.

Tower, pole, catenary wires, electrical system, trees beginning 1406' from DER, 323' right of centerline, up to 384' MSL.

Tank 4154' from DER, 773' left of centerline, 152' AGL/474' MSL.

Water tower 4157' from DER, 771' left of centerline, 156' AGL/477' MSL.

Tank 5314' from DER, 76' left of centerline, 165' AGL/488' MSL.

Water tower 5322' from DER, 72' left of centerline, 166' AGL/489' MSL.

Rwy 35, fence 104' from DER, 294' left of centerline, 6' AGL/327' MSL.

Sign, trees, vehicle on road beginning 297' from DER, 357' right of centerline, up to 34' AGL/360' MSL.

Tree 311' from DER, 472' left of centerline, 332' MSL.

Trees beginning 522' from DER, 53' left of centerline, up to 340' MSL.

Trees, pole beginning 903' from DER, 65' left of centerline, up to 362' MSL.

Trees, poles, building beginning 1075' from DER, 322' right of centerline, up to 384' MSL.

Trees beginning 1270' from DER, 14' left of centerline, up to 40' AGL/366' MSL.

Trees, building, pole beginning 1296' from DER, 16' right of centerline, up to 408' MSL.

Trees, sign, pole beginning 1319' from DER, 6' left of centerline, up to 52' AGL/379' MSL.

Trees, pole beginning 1409' from DER, 168' right of centerline, up to 412' MSL.

Trees, terrain, poles beginning 1489' from DER, 124' right of centerline, up to 420' MSL.

Trees, fence, terrain, building beginning 1506' from DER, 2' right of centerline, up to 426' MSL.

Trees beginning 1666' from DER, 4' left of centerline, up to 52' AGL/385' MSL.

Trees, terrain, fence beginning 1828' from DER, 1' right of centerline, up to 434' MSL.

Trees beginning 1884' from DER, 71' left of centerline, up to 387' MSL.

Trees beginning 1910' from DER, 8' left of centerline, up to 56' AGL/392' MSL.

Tree 2113' from DER, 7' left of centerline, 34' AGL/395' MSL.

Trees, building, terrain, fence beginning 2151' from DER, 23' right of centerline, up to 56' AGL/449' MSL.

Trees, pole beginning 2161' from DER, 47' left of centerline, up to 34' AGL/401' MSL.

Trees, terrain, building beginning 2249' from DER, 16' left of centerline, up to 29' AGL/413' MSL.

Trees beginning 2350' from DER, 27' left of centerline, up to 29' AGL/416' MSL.

Trees, building beginning 2360' from DER, 64' left of centerline, up to 29' AGL/417' MSL.

Poles, trees, terrain beginning 2439' from DER, 9' right of centerline, up to 44' AGL/455' MSL.

Pole, tree beginning 2452' from DER, 31' left of centerline, up to 32' AGL/423' MSL.

Trees, buildings, electrical systems, terrain, poles, fences beginning 2535' from DER, 3' left of centerline, up to 33' AGL/434' MSL.

Trees, terrain, poles, fences, electrical system, vehicle on road beginning 2550' from DER, 7' right of centerline, up to 54' AGL/465' MSL.

Trees, terrain, building, pole beginning 2944' from DER, 9' left of centerline, up to 33' AGL/438' MSL.

Trees, fences beginning 2990' from DER, 84' left of centerline, up to 439' MSL.

Tree 3039' from DER, 57' left of centerline, 35' AGL/456' MSL.

Trees, building, terrain, poles, fence, vehicle on road, electrical system beginning 3051' from DER, 3' left of centerline, up to 467' MSL.

Tree, vehicle on road beginning 3097' from DER, 54' right of centerline, up to 50' AGL/466' MSL.

Trees, vehicle on road, poles beginning 3462' from DER, 3' left of centerline, up to 47' AGL/468' MSL.

Trees, vehicle on road, poles beginning 3601' from DER, 66' right of centerline, up to 47' AGL/469' MSL.

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

SMITHVILLE, TX (CON’T)
SMITHVILLE CRAWFORD MUNI (84R) (CON’T)

Rwy 35 (CONT), trees beginning 3668’ from DER, 110’ left of centerline, up to 36’ AGL/469’ MSL.

Trees, vehicle on road, electrical systems, terrain, pole beginning 3712’ from DER, 24’ right of centerline, up to 45’ AGL/472’ MSL.

Trees beginning 3723’ from DER, 155’ left of centerline, up to 36’ AGL/470’ MSL.

Trees, terrain beginning 3736’ from DER, 24’ left of centerline, up to 42’ AGL/476’ MSL.

Trees, buildings, vehicle on road, fences, pole, terrain, electrical system beginning 3838’ from DER, 3’ right of centerline, up to 39’ AGL/473’ MSL.

Trees beginning 3924’ from DER, 107’ left of centerline, up to 56’ AGL/477’ MSL.

Trees beginning 3945’ from DER, 3’ left of centerline, up to 64’ AGL/482’ MSL.

Trees, electrical system beginning 4094’ from DER, 6’ right of centerline, up to 36’ AGL/483’ MSL.

Trees, terrain, pole beginning 4167’ from DER, on centerline, up to 49’ AGL/484’ MSL.

Trees beginning 4320’ from DER, 5’ right of centerline, up to 49’ AGL/488’ MSL.

Trees, vehicle on road, pole beginning 4365’ from DER, 3’ right of centerline, up to 56’ AGL/492’ MSL.

Trees beginning 4431’ from DER, 2’ left of centerline, up to 492’ MSL.

Trees, vehicle on road beginning 4781’ from DER, 22’ right of centerline, up to 494’ MSL.

Trees, vehicle on road beginning 4827’ from DER, 2’ left of centerline, up to 55’ AGL/495’ MSL.

Trees beginning 4844’ from DER, 54’ right of centerline, up to 36’ AGL/496’ MSL.

Trees, vehicle on road beginning 4858’ from DER, 306’ right of centerline, up to 42’ AGL/498’ MSL.

Trees, pole beginning 4861’ from DER, 29’ right of centerline, up to 37’ AGL/506’ MSL.

Trees, vehicle on road, electrical system beginning 4889’ from DER, on centerline, up to 49’ AGL/517’ MSL.

Trees beginning 5373’ from DER, 6’ left of centerline, up to 506’ MSL.

Trees beginning 5583’ from DER, 245’ left of centerline, up to 510’ MSL.

Trees beginning 5655’ from DER, 30’ left of centerline, up to 517’ MSL.

Trees beginning 5747’ from DER, 478’ left of centerline, up to 522’ MSL.

Trees, poles, vehicle on road, electrical systems, building beginning 5751’ from DER, 12’ left of centerline, up to 523’ MSL.

Trees beginning 1.3 NM from DER, 425’ right of centerline, up to 545’ MSL.

Tree 1.4 NM from DER, 368’ right of centerline, 551’ MSL.

SONORA, TX

SONORA MUNI (SOA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 20AUG15 (15232) (FAA)

TAKEOFF MINIMUMS:

Rwy 18, 300-1 or std. w/min. climb gradient of 553’ per NM to 2400.

DEPARTURE PROCEDURE:

Rwy 18, climb heading 182° to 2900 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 18, buildings beginning 683’ from DER, left and right of centerline, up to 27’ AGL/2163’ MSL.

Trees and terrain beginning 2233’ from DER, 686’ right of centerline, up to 50’ AGL/2309’ MSL.

Tower 4860’ from DER, 1458’ right of centerline, 75’ AGL/2287’ MSL.

Rwy 35, vehicles on road beginning 8’ from DER, left and right of centerline, up to 10’ AGL/2149’ MSL.

Tree 65’ from DER, 462’ right of centerline, 48’ AGL/2178’ MSL.

Tree 247’ from DER, 337’ left of centerline, 47’ AGL/2187’ MSL.

Trees beginning 278’ from DER, 439’ right of centerline, up to 27’ AGL/2157’ MSL.

Tree 759’ from DER, 508’ left of centerline, 15’ AGL/2195’ MSL.

Trees and terrain beginning 581’ from DER, 258’ left of centerline, up to 39’ AGL/2269’ MSL.

TAYLOR, TX

TAYLOR MUNI (T74)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 17AUG17 (17229) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 17, transmission line towers beginning 2212’ from DER, 17’ left of centerline, up to 50’ AGL/656’ MSL.

Transmission line towers beginning 2298’ from DER, 463’ right of centerline, up to 85’ AGL/649’ MSL.

Transmission line tower 2365’ from DER, 1041’ right of centerline, 110’ AGL/661’ MSL.

Rwy 35, vehicles on road 773’ from DER, 544’ left of centerline, 630’ MSL.

Pole and tree beginning 829’ from DER, 442’ left of centerline, up to 28’ AGL/642’ MSL.

Vehicles on road 1105’ from DER, 427’ right of centerline, 635’ MSL.

Tree 1129’ from DER, 415’ right of centerline, 639’ MSL.

Poles beginning 1150’ from DER, 474’ right of centerline, up to 30’ AGL/644’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

TEMPLE, TX
DRAUGHON-MILLER CENTRAL TEXAS RGNL (TPL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A  08SEP22  (22251)  (FAA)

DEPARTURE PROCEDURE:
Rwy 3, climb on heading between 085° CW to 200° from DER or climb on heading between 200° CW to 345° from DER to 3600 before proceeding on course or minimum climb of 250' per NM to 3200 for all other courses.
Rwy 34, climb on heading between 070° CW to 155° from DER or climb on heading between 155° CW to 330° from DER to 3600 before proceeding on course or min. climb of 240' per NM to 3200 for all other courses.

TAKEOFF OBSTACLE NOTES:
Rwy 3, vegetation beginning 176' from DER, 416' left of centerline, up to 680' MSL.
Tree 279' from DER, 362' right of centerline, 680' MSL.
Tree 1267' from DER, 750' left of centerline, 699' MSL.
Rwy 16, vegetation 60' from DER, 209' left of centerline, 680' MSL.
Rwy 21, hangars beginning 548' from DER, 571' right of centerline, up to 18' AGL/697' MSL.
Rwy 34, tree 306' from DER, 473' right of centerline, 695' MSL.
Tree 479' from DER, 545' right of centerline, 701' MSL.

UVALDE, TX
GARNER FLD (UVA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  05MAY11  (22139)  (FAA)

TAKEOFF OBSTACLE NOTES:
Rwy 15, trees and poles beginning 70' from DER, 374' left of centerline, up to 100' AGL/1039' MSL.
Trees and poles beginning 208' from DER, 359' right of centerline, up to 100' AGL/1059' MSL.
Rwy 33, vegetation 60' from DER, 209' left of centerline, up to 15' AGL/966' MSL.
Trees beginning 744' from DER, 636' left of centerline, up to 100' AGL/1059' MSL.
Trees beginning 861' from DER, 269' right of centerline, up to 100' AGL/1049' MSL.

VAN HORN, TX
CULBERSON COUNTY (VHN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2  15JUN23  (23166)  (FAA)

TAKEOFF MINIMUMS:
Rwy 3, std. w/min. climb of 445' per NM to 7400 or 2500-3 for VCOA.
Rwy 7, std. w/min. climb of 445' per NM to 11000 or 2500-3 for VCOA.
Rwy 21, std. w/min. climb of 435' per NM to 12000 or 2500-3 for VCOA.
Rwy 25, std. w/min. climb of 500' per NM to 7800 or 2500-3 for VCOA.

DEPARTURE PROCEDURE:
Rwy 3, climb on heading 035° to 7200 before proceeding on course.
Rwy 7, climb on heading 074° to 7700 before proceeding on course.
Rwy 21, climb on heading 215° to 5200 before proceeding on course.
Rwy 25, climb on heading 254° to 7500 before proceeding on course.

VCOA:
Rwys 3, 7, 21, 25, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Culberson County airport at or above 6300 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 3, tree, vegetation beginning 16' from DER, 133' right of centerline, up to 11' AGL/3928' MSL.
Trees, vegetation beginning 45' from DER, 147' left of centerline, up to 11' AGL/3929' MSL.
Tree, vehicle on road, vegetation beginning 135' from DER, 389' right of centerline, up to 17' AGL/3930' MSL.
Trees, vehicle on road beginning 248' from DER, 291' right of centerline, up to 10' AGL/3969' MSL.
Vegetation beginning 84' from DER, 404' left of centerline, up to 3961' MSL.
Trees beginning 1310' from DER, 21' right of centerline, up to 100' AGL/4077' MSL.
Trees beginning 1340' from DER, 21' right of centerline, up to 100' AGL/4080' MSL.
Trees beginning 1629' from DER, 4' left of centerline, up to 100' AGL/4079' MSL.
Trees beginning 2178' from DER, 255' left of centerline, 100' AGL/4080' MSL.
Trees beginning 2320' from DER, 71' right of centerline, up to 100' AGL/4090' MSL.
Trees beginning 2438' from DER, 229' left of centerline, up to 100' AGL/4083' MSL.
Trees beginning 2579' from DER, 97' right of centerline, up to 100' AGL/4093' MSL.
Trees beginning 2607' from DER, 178' left of centerline, 97' to 100' AGL/4090' MSL.
Trees beginning 2839' from DER, 122' right of centerline, up to 100' AGL/4100' MSL.
Trees beginning 3217' from DER, 153' left of centerline, up to 100' AGL/4093' MSL.

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

VAN HORN, TX (CON’T)
CULBERSON COUNTY (VHN) (CON’T)
Rwy 25 (CON’T), trees beginning 3477’ from DER, 77’ left of centerline, up to 100’ AGL/4097’ MSL.
Trees beginning 3589’ from DER, 198’ right of centerline, up to 100’ AGL/4103’ MSL.
Trees beginning 4108’ from DER, 249’ right of centerline, up to 100’ AGL/4110’ MSL.
Trees beginning 4256’ from DER, 51’ left of centerline, up to 100’ AGL/4100’ MSL.
Trees beginning 4368’ from DER, 24’ right of centerline, up to 100’ AGL/4113’ MSL.
Trees beginning 4515’ from DER, 1’ left of centerline, up to 100’ AGL/4106’ MSL.
Trees beginning 5377’ from DER, 75’ right of centerline, up to 100’ AGL/4116’ MSL.
Trees beginning 5584’ from DER, 226’ left of centerline, up to 100’ AGL/4110’ MSL.
Trees 5637’ from DER, 1910’ right of centerline, 100’ AGL/4120’ MSL.
Trees beginning 5666’ from DER, 100’ right of centerline, up to 100’ AGL/4123’ MSL.
Trees beginning 5844’ from DER, 125’ right of centerline, up to 100’ AGL/4126’ MSL.
Trees beginning 1 NM from DER, 1081’ right of centerline, up to 100’ AGL/4129’ MSL.

WACO, TX
MC GREGOR EXEC (PWG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 13DEC90 (22139) (FAA)
TAKEOFF MINIMUMS:
Rwys 4, 17, 22, 35, 2000-3 or std. w/min. climb of 280’ per NM to 3000.
DEPARTURE PROCEDURE:
Rwys 17, 22, climb via ACT R-195 to 3000 before proceeding on course.
Rwys 4, 35, climb runway heading to 3000 before proceeding on course.

TSTC WACO (CNW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 05DEC19 (19339) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 17L, terrain 104’ from DER, 473’ right of centerline, 460’ MSL.
Terrain 198’ from DER, 467’ right of centerline, 464’ MSL.
Poles beginning 1123’ from DER, 584’ left of centerline, up to 45’ AGL/493’ MSL.
Rwy 17R, vehicles on roads beginning at DER, 365’ right of centerline, up to 65’ AGL/479’ MSL.
Trees beginning 750’ from DER, 482’ right of centerline, up to 66’ AGL/514’ MSL.
Trees beginning 870’ from DER, 238’ right of centerline, up to 81’ AGL/530’ MSL.
Tree 1239’ from DER, 449’ left of centerline, 497’ MSL.
Tree 1558’ from DER, 629’ left of centerline, 500’ MSL.
Tree 1924’ from DER, 73’ left of centerline, 512’ MSL.
Rwy 35L, aircraft on taxiway at DER, on centerline, 65’ AGL/532’ MSL.
Aircraft on taxiway 783’ from DER, 478’ left of centerline, 65’ AGL/534’ MSL.
Aircraft on taxiway 808’ from DER, 315’ right of centerline, 65’ AGL/518’ MSL.
Tree 2349’ from DER, 669’ left of centerline, 537’ MSL.
Tree 2877’ from DER, 1044’ left of centerline, 539’ MSL.
Rwy 35R, tree 2082’ from DER, 897’ left of centerline, 523’ MSL.

WACO RGNL (ACT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 23SEP10 (10266) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 1, rising terrain beginning 11’ from DER, 34’ right of centerline, up to 504’ MSL.
Pole 1170’ from DER, 593’ left of centerline, 34’ AGL/534’ MSL.
Tree 1674’ from DER, 794’ right of centerline, 80’ AGL/581’ MSL.
Rwy 19, rod 590’ from DER, 257’ right of centerline, 40’ AGL/524’ MSL.
Rwy 32, trees beginning 501’ from DER, 17’ left of centerline, up to 70’ AGL/562’ MSL.
Trees beginning 836’ from DER, 30’ right of centerline, up to 80’ AGL/609’ MSL.
TAKEOFF MINIMUMS, (OBLAST) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WESLACO, TX
MID VALLEY (TXW)
TAKEOFF MINIMUMS AND (OBLAST) DEPARTURE PROCEDURES
AMDT 1 02MAR17 (17061) (FAA)
DEPARTURE PROCEDURE:
- Rwy 14, climbing left turn heading 360° to 1800 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
- Rwy 14, road, fence, sign, tree, bldg, beginning 4’ from DER, 174’ left of centerline, up to 84’ MSL.
- Road, fence, beginning 18’ from DER, 442’ right of centerline, up to 82’ MSL.
- Road 71’ from DER, 502’ right of centerline, 83’ MSL.
- Tree, flagpole, road, pole, beginning 94’ from DER, 421’ left of centerline, up to 26’ AGL/90’ MSL.
- Flagpole, road, beginning 110’ from DER, 373’ left of centerline, up to 31’ AGL/96’ MSL.
- Tree, road, beginning 161’ from DER, 429’ left of centerline, up to 33’ AGL/98’ MSL.
- Pole, beginning 220’ from DER, 408’ left of centerline, up to 32’ AGL/99’ MSL.
- Pole, tree, beginning 242’ from DER, 412’ left of centerline, up to 34’ AGL/101’ MSL.
- Light pole, beginning 284’ from DER, 462’ left of centerline, up to 38’ AGL/103’ MSL.
- Pole, tree, line pole, beginning 289’ from DER, 349’ left of centerline, up to 37’ AGL/105’ MSL.
- Pole, tree, line pole, beginning 360’ from DER, 307’ left of centerline, up to 39’ AGL/106’ MSL.
- Pole 499’ from DER, 475’ right of centerline, 31’ AGL/98’ MSL.
- Pole 499’ from DER, 471’ right of centerline, 30’ AGL/99’ MSL.
- Tower, tree, pole, line pole, beginning 511’ from DER, 264’ left of centerline, up to 60’ AGL/131’ MSL.
- Cateretary, road, pole, beginning 520’ from DER, 468’ right of centerline, up to 33’ AGL/100’ MSL.
- Tree, pole, beginning 546’ from DER, 337’ left of centerline, up to 33’ AGL/101’ MSL.
- Tree, pole, catenary, beginning 745’ from DER, 264’ left of centerline, up to 60’ AGL/131’ MSL.
- Catenary, road, pole, beginning 1711’ from DER, 763’ right of centerline, up to 75’ AGL/142’ MSL.
- Rwy 32, road, fence, beginning 17’ from DER, 345’ left of centerline, up to 82’ MSL.
- Tree 64’ from DER, 510’ left of centerline, 29’ AGL/95’ MSL.
- Tree 69’ from DER, 496’ left of centerline, 32’ AGL/97’ MSL.
- Pole 109’ from DER, 524’ left of centerline, 33’ AGL/100’ MSL.
- Pole, road, tree, beginning 111’ from DER, 261’ left of centerline, up to 38’ AGL/103’ MSL.
- Road, beginning 562’ from DER, 396’ right of centerline, up to 87’ MSL.
- Road 630’ from DER, 391’ right of centerline, 88’ MSL.
- Road, beginning 659’ from DER, 75’ right of centerline, up to 89’ MSL.
- Trees, beginning 881’ from DER, 571’ left of centerline, up to 40’ AGL/106’ MSL.

WINK, TX
WINKLER COUNTY (INK)
TAKEOFF MINIMUMS AND (OBLAST) DEPARTURE PROCEDURES
ORIG-A 10MAR11 (11069) (FAA)
DEPARTURE PROCEDURE:
- Rwy 13, climb heading 147° to 3400 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
- Rwy 4, power lines beginning 524’ from DER, right and left of centerline, up to 30’ AGL/2829’ MSL.
- Trees beginning 472’ from DER, right and left of centerline, up to 50’ AGL/2859’ MSL.
- Rwy 13, trees beginning 133’ from DER, 307’ right of centerline, up to 50’ AGL/2822’ MSL.
- Vehicles on road beginning 535’ from DER, right and left of centerline, up to 15’ AGL/2829’ MSL.
- Rwy 31, trees beginning 49’ from DER, 396’ left of centerline, up to 50’ AGL/2832’ MSL.
- Trees beginning 1563’ from DER, 589’ right of centerline, up to 50’ AGL/2874’ MSL.

WINTERS, TX
WINTERS MUNI (77F)
TAKEOFF MINIMUMS AND (OBLAST) DEPARTURE PROCEDURES
ORIG 25AUG11 (11237) (FAA)
TAKEOFF OBSTACLE NOTES:
- Rwy 17, multiple trees and fence beginning 428’ from DER, 45’ left of centerline, up to 25’ AGL/1914’ MSL.
- Multiple trees and terrain beginning 110’ from DER, 188’ right of centerline, up to 12’ AGL/1895’ MSL.

YOAKUM, TX
YOAKUM MUNI (T85)
TAKEOFF MINIMUMS AND (OBLAST) DEPARTURE PROCEDURES
ORIG 10MAR11 (11069) (FAA)
TAKEOFF OBSTACLE NOTES:
- Rwy 13, vehicle on road, 179’ from DER, 237’ left of centerline, up to 15’ AGL/364’ MSL.
- Rwy 31, vehicle on road, 77’ from DER, 257’ right of centerline, up to 15’ AGL/384’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

YOAKUM DEFRENN AHP (KHLR)
FORT CAVAZOS, TX
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 05OCT23 (23278) (USA)
TAKEOFF MINIMUMS:
  Rwys 16, 34, climb of 400’ per NM, for copter use only.
TAKEOFF OBSTACLE NOTES:
  Rw 34, bldgs beginning 538’ from DER, 588’ left of centerline, up to 50’ AGL/967’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 05OCT23 (23278) (USA)
  Rwys 16, 34, climb of 400’ per NM, as assigned by ATC.
### IFR ALTERNATE AIRPORT MINIMUMS

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

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

<table>
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<tr>
<th>NAME</th>
<th>ALTERNATE MINIMUMS</th>
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<td>REAGAN COUNTY (E41)</td>
<td>BEEVILLE MUNI (BEA)</td>
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#### Notes:

For alternate airport flight planning purposes, precision approach operations include: ILS, PAR, and GLS, and Non-Precision approach operations include: NDB, VOR, LOC, TACAN, LDA, SDF, ASR, RNAV (GPS) and RNAV (RNP).
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<td>PLEASANTON MUNI (PEZ)</td>
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<tr>
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<td>PORT ISABEL-CAMERON</td>
<td>RNAV (GPS) Rwy 31</td>
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<tr>
<td>ROCKPORT, TX</td>
<td>RNAV (GPS) Rwy 14</td>
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<tr>
<td>ARANSAS</td>
<td>RNAV (GPS) Rwy 18</td>
</tr>
<tr>
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<td>RNAV (GPS) Rwy 32</td>
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<td>RNAV (GPS) Rwy 36</td>
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<tr>
<td></td>
<td>VOR or TACAN-A&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>1Category C, 800-2½.</td>
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<tr>
<td>ROCKSPRINGS, TX</td>
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<tr>
<td>EDWARDS</td>
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<td>COUNTY (ECU)</td>
<td>VOR or TACAN-3&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
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<td>ILS Y or LOC Y Rwy 3&lt;sup&gt;12&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 21&lt;sup&gt;4&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 3&lt;sup&gt;6&lt;/sup&gt;</td>
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<td>VOR/DME or TACAN Rwy 3&lt;sup&gt;4&lt;/sup&gt;</td>
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<td></td>
<td>1LOC, Category D, 800-2½; Category E, 800-2½.</td>
</tr>
<tr>
<td></td>
<td>2LOC, NA when control tower closed.</td>
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<tr>
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<td>3NA when control tower closed.</td>
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<td>4Category D, 800-2½; Category E, 800-2½.</td>
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<td>AIRFIELD (5C1)................................................................................................................................</td>
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<td><strong>RNAV (GPS) Rwy 17</strong></td>
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<td><strong>RNAV (GPS) Rwy 35</strong></td>
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<td><strong>ILS or LOC Rwy 31L</strong></td>
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<td><strong>RNAV (GPS) Y Rwy 13R</strong></td>
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<td><strong>RNAV (GPS) Y Rwy 22</strong></td>
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<td><strong>RNAV (GPS) Y Rwy 31L</strong></td>
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<tr>
<td></td>
<td>¹LOC, Category D, 800-2¼.</td>
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<tr>
<td></td>
<td>²Category D, 800-2¼.</td>
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<td>¹Category D, 900-2½.</td>
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<td><strong>SONORA MUNI (SOA)</strong></td>
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<td></td>
<td><strong>NA when local weather not available.</strong></td>
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<td></td>
<td><em>Category A, 900-2; Category B, 1000-2.</em>*</td>
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<td><strong>VOR Rwy 17</strong></td>
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<td><strong>RNAV (GPS) Rwy 34</strong></td>
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<td><strong>NA when control tower closed.</strong></td>
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<td>**Category D, 800-2¼.</td>
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**BIGGS AAF (KBIF),** Fort Bliss, TX  Amdt 8  30NOV23 (23334) (USA)  

**ELEV 3947**

**RADAR - 124.15  307.0  ** NA

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<th>HAT/HATh</th>
<th>CEIL-VIS</th>
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<td>22</td>
<td>AB</td>
<td>4460-¾</td>
<td>513</td>
<td>(600-¾)</td>
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<td>22</td>
<td>CDE</td>
<td>4460-1</td>
<td>513</td>
<td>(600-1)</td>
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<tr>
<td>CIR²</td>
<td>22</td>
<td>AB</td>
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<td>613</td>
<td>(700-1)</td>
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<td></td>
<td>22</td>
<td>C</td>
<td>4560-1¾</td>
<td>613</td>
<td>(700-1¾)</td>
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<td>22</td>
<td>D</td>
<td>4560-2</td>
<td>613</td>
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<td>22</td>
<td>E</td>
<td>4560-2¼</td>
<td>613</td>
<td>(700-2¼)</td>
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</table>

¹When ALS inop, increase CAT AB vis to 1¼ mile, CAT CDE vis to 1¾ miles.  
²CAT DE circling west of Rwy 4-22 NA.
# RADAR INSTRUMENT APPROACH MINIMUMS

## CORPUS CHRISTI NAS (TRUAX FLD) (KNGP), Corpus Christi, TX

Amdt 3 30NOV23  (23334)  (USN)  ELEV 19

<table>
<thead>
<tr>
<th>RWY</th>
<th>GS/TCH/RPI</th>
<th>CAT</th>
<th>DH/MDA-VIS</th>
<th>HAT/HATH/CEIL-VIS</th>
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<tr>
<td>18</td>
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<td>ABCDE</td>
<td>118-½</td>
<td>100 (100-½)</td>
</tr>
<tr>
<td>31L</td>
<td>3.0°/51/959</td>
<td>ABCDE</td>
<td>117-½</td>
<td>100 (100-½)</td>
</tr>
<tr>
<td>36</td>
<td>3.0°/50/937</td>
<td>ABCDE</td>
<td>118-½</td>
<td>100 (100-½)</td>
</tr>
</tbody>
</table>

| PAR W/O GS |       |       |            |                   |
| 13R        | ABCDE | 340-¼ | 327        | (400-¾)           |
| 18         | ABCDE | 340-1 | 322        | (400-1)           |
| 36         | AB    | 400-1 | 382        | (400-1)           |
|            | CDE   | 400-1½| 382        | (400-1½)          |
|            | AB    | 420-1 | 403        | (500-1)           |
|            | CDE   | 420-1½| 403        | (500-1½)          |

| ASR |       |       |            |                   |
| 18  | AB    | 400-1 | 382        | (400-1)           |
|     | CDE   | 400-1½| 382        | (400-1½)          |
| 13R | AB    | 420-¾ | 407        | (500-¾)           |
|     | CDE   | 420-1 | 407        | (500-1)           |
|     | AB    | 420-1½| 402        | (500-1½)          |
|     | CDE   | 420-1½| 402        | (500-1½)          |
|     | AB    | 460-1 | 443        | (500-1)           |
|     | CDE   | 460-1½| 443        | (500-1½)          |
| 31L | AB    | 460-1 | 443        | (500-1)           |
|     | CDE   | 460-1½| 443        | (500-1½)          |
| 31R | AB    | 460-1 | 442        | (500-1)           |
|     | CDE   | 460-1½| 442        | (500-1½)          |
| 36  | AB    | 460-1 | 442        | (500-1)           |
|     | CDE   | 460-1½| 442        | (500-1½)          |

| CIR  |       |       |            |                   |
|      | All Rwys | A  | 460-1 | 442 | (500-1) |
|      |          | B  | 480-1 | 462 | (500-1) |
|      |          | C  | 520-1½| 502 | (600-1½) |
|      |          | DE | 580-2 | 562 | (600-2) |

---

1. No-NOTAM MP: PAR Mon 1300-1700Z++.  
2. When ALS inop, increase CAT ABCDE vis to ½ mile.  
3. When ALS inop, increase CAT ABCDE vis to 1 mile.  
4. When ALS inop increase CAT AB vis to 1 mile, CAT CDE vis to 1½ miles.  
5. Circling authorized only from ASR and PAR W/O GS.  
6. SDF at 2 NM from thld, 680' min.  
7. SDF at 3 NM from thld, 980' min.
RADAR INSTRUMENT APPROACH MINIMUMS

EL PASO, TX
EL PASO INTL (ELP)

RADAR-1 124.25 298.85

RADAR MINS
23334

Circling NA for CATS D and E W of Rwy 4-22.
Rwy 4 Circling Cat E NA.
For inoperative ALS, increase S-22 CAT C/D/E visibility to 1 3/8 SM, increase S-26L CAT A/B visibility to 1 SM, and CAT E to 1 1/4 SM.
Caution: steeply rising terrain 4.5 NM west of airport.

FORT CAVAZOS (KILLEEN), TX
ROBERT GRAY AAF (GRK)

Circling NA W of Rwy 15-33.
For inoperative ALS, increase ASR S-15 and ASR S-33 CATS C/D/E visibility to 1 3/8 mile.

FORT CAVAZOS (KILLEEN), TX
ROBERT GRAY AAF (GRK)

For inoperative ALS, increase PAR S-15 CAT E visibility to RVR 4000 and PAR S-33 CAT E visibility to ¾ SM.
Rwy 15 VGSI and PAR glidepath not coincident (VGSI Angle 3.00/TCH 71).
Rwy 33 VGSI and PAR glidepath not coincident (VGSI Angle 2.77/TCH 52).
### RADAR INSTRUMENT APPROACH MINIMUMS

**KINGSVILLE NAS (KNQI),** Kingsville, TX  Amdt 2 23MAR23  (23082)  (USN)  

**ELEV 50**

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<th>GS/TCH/RPI</th>
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<th>DH/MDA-VIS</th>
<th>HAT/HAA</th>
<th>CEIL-VIS</th>
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<tbody>
<tr>
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<td>100</td>
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<td>13L</td>
<td>ABCDE</td>
<td>149-½</td>
<td>100</td>
<td>(100-½)</td>
</tr>
<tr>
<td></td>
<td>13R³</td>
<td>ABCDE</td>
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<td>100</td>
<td>(100-½)</td>
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<td></td>
<td>17R</td>
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<td>100</td>
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<td>31R</td>
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<td>100</td>
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<td>D</td>
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<td></td>
<td></td>
<td>E</td>
<td>760-2½</td>
<td>710</td>
<td>(800-2½)</td>
</tr>
</tbody>
</table>

---

1. Use landing/taxi lights when conducting apch during VMC. DASR-11 unmto dur hr of afld closure.
2. No NOTAM MP: PAR 1300-1700Z++ Wed. Maint conducted next bus day if clsd on Wed.
3. When ALS inop, increase vis to ½ mile.
4. When tower closed, increase vis to 1 mile
5. VGSI and descent angles not coincident (VGSI 3.00/TCH 33).
6. Step Down Fix at 3 NM from RPI, cross at or above 1100 ft.
7. When ALS inop, increase vis to 1 mile.
8. Step Down Fix at 2 NM from RPI, cross at or above 740 ft.
9. Step Down Fix at 2 NM from RPI, cross at or above 720 ft.
10. Circling authorized only from PAR W/O GS and ASR.
11. Circling to Rwy 31L NA at night.
### WACO, TX

**MC GREGOR EXEC (PWG)**

**RADAR-1** 127.65 352.0

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<th>DA/MDA-VIS</th>
<th>HAT/HAA</th>
<th>CEIL-VIS</th>
<th>CAT</th>
<th>DA/MDA-VIS</th>
<th>HAT/HAA</th>
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When Waco Regional approach control closed, ASR not authorized.

### WACO, TX

**TSTC WACO (CNW)**

**RADAR-1** 127.65 227.125

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<th>DA/MDA-VIS</th>
<th>HAT/HAA</th>
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<td>611</td>
<td>(700-1½)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D</td>
<td>1080-1½</td>
<td>611</td>
<td>(700-1½)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>CIRCLING</td>
<td>ALL</td>
<td>1080-1</td>
<td>610</td>
<td>(700-1)</td>
<td>C</td>
<td>1080-1½</td>
<td>610</td>
<td>(700-1½)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D</td>
<td>1080-2</td>
<td>610</td>
<td>(700-2)</td>
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</tbody>
</table>

When Waco Regional approach control closed, ASR not authorized.

### WACO, TX

**WACO RGNL (ACT)**

**RADAR-1** 127.65 227.125

<table>
<thead>
<tr>
<th>RWY</th>
<th>GP/TCH/RPI</th>
<th>CAT</th>
<th>DA/MDA-VIS</th>
<th>HAT/HAA</th>
<th>CEIL-VIS</th>
<th>CAT</th>
<th>DA/MDA-VIS</th>
<th>HAT/HAA</th>
<th>CEIL-VIS</th>
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<tbody>
<tr>
<td>ASR</td>
<td></td>
<td>ABC</td>
<td>880/24</td>
<td>376</td>
<td>(400-½)</td>
<td>D</td>
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<td>920-1½</td>
<td>407</td>
<td>(500-1½)</td>
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<td>32</td>
<td>1020-1</td>
<td>504</td>
<td>(600-1)</td>
<td>CD</td>
<td>1020-1½</td>
<td>504</td>
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<td>564</td>
<td>(600-2)</td>
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</table>

For inoperative MALS increase S-19 CAT D visibility to RVR 6000.
When control tower closed, ASR NA.
THERE ARE NO LAND AND HOLD SHORT OPERATIONS (LAHSO) FOR SC-3 VOLUME
### HOT SPOTS

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

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

<table>
<thead>
<tr>
<th>CITY/AIRPORT</th>
<th>HOT SPOT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTIN, TX</td>
<td>HS 1</td>
<td>E service road, Traffic on crossing Twy G and Twy H.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Int of Rwy 26 and Rwy 35.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Int of Rwy 31, Twy F and Rwy 35.</td>
</tr>
<tr>
<td>SAN MARCOS RGNL (HYI)</td>
<td>HS 1</td>
<td>Int of Rwy 26 and Rwy 35.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Int of Rwy 31, Twy F and Rwy 35.</td>
</tr>
<tr>
<td>EL PASO, TX</td>
<td>HS 1</td>
<td>Rwy 08R apch considered active, do not proceed on or cross without ATC clnc especially when taxiing to Rwy 04 via the terminal ramp.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Area not visible from twr.</td>
</tr>
<tr>
<td>SAN ANGELO, TX</td>
<td>HS 1</td>
<td>Rwy 18-36 at the int of Rwy 09-27.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Rwy 18-36 at the int of Rwy D.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Rwy B close proximity to Rwy 18-36 and Rwy 03-21.</td>
</tr>
<tr>
<td>SAN ANTONIO, TX</td>
<td>HS 1</td>
<td>The unpaved portion of the north overrun.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Int of Rwy 16-34, Twy D, and Twy G.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Rwy 31L hold short line on Rwy 04.</td>
</tr>
<tr>
<td></td>
<td>HS 4</td>
<td>Twy G and Twy N in close proximity of Rwy 31L.</td>
</tr>
<tr>
<td>WACO, TX</td>
<td>HS 1</td>
<td>Rwy 01 hold short line at approach end not visible from the tower.</td>
</tr>
</tbody>
</table>

*See appropriate Chart Supplement HOT SPOT table for additional information.*
**ARRIVAL ROUTE DESCRIPTION**

**TXSAS TRANSITION (TXSAS.BEAHR3)**

From UUTEP on track 292° to MYNRS, then on track 292° to BEAHR, cross BEAHR at 8000 at 210K, expect RNAV (RNP) approach or RADAR vectors to final approach course. 

**NOTE:** Chart not to scale.

**NOTE:** RADAR required.
**NOTE:** RNAV 1.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** Turbojet aircraft only.
**NOTE:** Expect RNP approach or RADAR vectors to final approach course prior to BEAHR.
ARRIVAL ROUTE DESCRIPTION

HUMBLE TRANSITION (IAH.BITER9): From over IAH VORTAC on IAH R-262 to SHYNR INT, then on IDU R-085 to IDU VORTAC, then on IDU R-281 to WLEEIE INT. Thence . . . .

INDUSTRY TRANSITION (IDU.BITER9): From over IDU VORTAC on IDU R-281 to WLEEIE INT. Thence . . . .

LUFKIN TRANSITION (LFK.BITER9): From over LFK VORTAC on LFK R-222 to BOCCK INT, then on IDU R-085 to IDU VORTAC, then on IDU R-281 to WLEEIE INT. Thence . . . .

. . . . From over WLEEIE on IDU R-281 to BITER, then on IDU R-281 to ISHOV, then on IDU R-281 to BASTO. Expect vectors to final approach course at or prior to BASTO.

NOTE: RADAR required.
NOTE: DME required.
NOTE: DME/DME/IRU or GPS equipped aircraft must file the WLEEIE (RNAV) or POTRR (RNAV) STAR.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

WACO TRANSITION (ACT.BLEWE5): From over ACT VORTAC on ACT R-165 to BLEWE. Thence . . . .

WINDU TRANSITION (WINDU.BLEWE5): From over WINDU on CWK R-012 to BLEWE. Thence . . . .

. . . .From over BLEWE on CWK R-012 to SEWZY, then on CWK R-012 to CWK VORTAC. Expect vectors to final approach course at or prior to CWK VORTAC.
ARRIVAL ROUTE DESCRIPTION

FORT STOCKTON TRANSITION (FST.CSI2): From over FST VORTAC via FST R-096 and CSI R-280 to CSI VORTAC. Thence . . . .

JUNCTION TRANSITION (JCT.CSI2): From over JCT VORTAC via JCT R-134 and CSI R-314 to CSI VORTAC. Thence . . . .

. . . . From over CSI VORTAC on CSI R-105 to REUBE INT. Expect vectors to final approach course.
NOTE: Jet and turboprop aircraft only.
ARRIVAL ROUTE DESCRIPTION

SAN ANTONIO INTL (KSAT): From CRVZA on track 357° to cross CEGAR at or below 8000.

LANDING KSAT RUNWAY 4: From CEGAR on track 339° to cross HARDD at 5000 and at 210K. Expect ILS or LOC RWY 4 approach.

LANDING KSAT RUNWAY 13R: From CEGAR on track 356° to cross AYALA at 6000 and at 210K, then on track 308° to cross AGOVE at 6000, then on track 308°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 22: From CEGAR on track 008° to TIERA, then on track 037° to cross I phon at 6000 and at 210K, then on track 037°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 31L: From CEGAR on track 354° to SAYNN, then on track 041° to cross KEENM at 6000 and at 210K, then on track 128° to cross KRILN at 6000, then on track 128°. Expect RADAR vectors to final approach course.

LANDING KSKF/KBAZ/KCVB/KSSF/KPEZ/5C1/KNRD: From CRVZA on track 357° to cross LLISA at 8000, then on track 357°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS
KSAT RUNWAY 13R: After AGOVE proceed to SARAI, then on ILS or LOC RWY 13R or RNAV (GPS) Y RWY 13R approach.
KSAT RUNWAY 22: After I phon proceed to TYRYN, then on RNAV (GPS) Y RWY 22 approach.
KSAT RUNWAY 31L: After KRILN proceed to SLLOW at 4000 and hold.
NOTE: Jet and turboprop aircraft only.
ARRIVAL ROUTE DESCRIPTION

SAN ANTONIO INTL (KSAT):
From AIRBL on track 109° to cross FOLLK between 9000 and 13000, then on track 109° to DNKIN.

LANDING KSAT RUNWAY 4: From DNKIN on track 127° to cross MANOO at or below 9000, then on track 130° to cross DYNMO at or above 7000 and at 230K, then on track 157° to cross DIIAW at 6000 and at 210K, then on track 157° to TIMYY, then on track 217° to cross LOWWN at 6000, then on track 217°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 22: From DNKIN on track 108° to cross GERVN at 6000 and at 210K, then on track 101° to ADDYY, then on track 037° to cross IXION at 6000, then on track 037°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 13R: From DNKIN on track 112° to cross LDRO at 6000 and at 210K. Expect ILS or LOC Rwy 13R approach.

LANDING KSAT RUNWAY 31L: From DNKIN on track 127° to cross MANOO at or below 9000, then on track 130° to cross PATII at or above 7000, then on track 130° to cross KEEEN at 6000 and at 210K, then on track 130°. Expect RADAR vectors to final approach course.

LANDING KSKF, KBAZ, KCVB, KSSF, KPEZ, 5C1, KRND: From AIRBL on track 109° to cross FOLLK between 9000 and 13000, then on track 109° to DNKIN, then on track 121° to cross RESST at 9000 and at 210K, then on track 121°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS

RUNWAY 4: After LOWWN, proceed to HARDD at 5000 and hold.

RUNWAY 22: After IXION, proceed direct to ERROR and hold.

RUNWAY 31L: After KEENM proceed to TRNKS at 3400, then on ILS or LOC Rwy 31L or RNAV (GPS) Y Rwy 31L approach.
AUSTIN BERGSTROM INTL (AUS)
AUSTIN, TEXAS

ARRIVAL ROUTE DESCRIPTION

- **DOBBY TRANSITION (DOBBY.DXEEE3)**
- **HFMAN TRANSITION (HFMAN.DXEEE3)**
- **HOOLR TRANSITION (HOOLR.DXEEE3)**
- **VIDAA TRANSITION (VIDAA.DXEEE3)**

From DXEEE on track 011° to BAAAB, then on track 058° to cross SMILN at or below 12000.

**LANDING RUNWAYS 18L/R:** From SMILN on track 103° to cross PLANX at or above 8000, then on track 103° to DBORD, then on track 078° to cross TRPPN at 6000 and at 210K, then on track 355° to SNOTT, then on track 355°.

Expect RADAR vectors to final approach course.

**LANDING RUNWAYS 36L/R:** From SMILN on track 094° to FAACE, then on track 115° to cross LIPSS at 4000 and at 210K, then on track 115° to STNSN, then on track 175° to TATAU, then on track 175°. Expect RADAR vectors to final approach course.

NOTE: Turbojet and turboprop aircraft only.

NOTE: Expect runway assignment from AUSTIN TRACON upon initial contact.
ARRIVAL ROUTE DESCRIPTION

Landing all airports: From GABOO on track 194° to cross SEWZY at 13000, then on track 194°. Expect RADAR vectors to final approach course.

NOTE: Chart not to scale.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.

ARRIVAL ROUTE DESCRIPTION

SSOLO TRANSITION (SSOLO.GABOO1)
WINDU TRANSITION (WINDU.GABOO1)
ARRIVAL ROUTE DESCRIPTION

DOHHN TRANSITION (DOHHN.HSKNS1)

LANDING RWY 4: From HSKNS on track 091° to FINAG, cross FINAG at or above 11000, then on track 091° to BECON, cross BECON at 9000 at 210K, expect RNAV (RNP) approach or RADAR vectors to final approach course.

NOTE: Expect RNP approach clearance or RADAR vectors to final approach prior to BECON.

NOTE: For Non-RNP aircraft, expect RADAR vectors to final approach course.

NOTE: Expect RNP approach clearance or RADAR vectors to final approach prior to BECON.

NOTE: Turbojet aircraft only.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: RADAR required.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

LLANO TRANSITION (LLO.KALLA4): From over LLO VORTAC on LLO R-089 to KALLA. Thence . . . .

. . . . from over KALLA on CWK R-300 to cross CWK VORTAC at 10000. Expect vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

NOTE: Chart not to scale.

From LAIKS on track 111° to cross BOYZZ at or below 11000.

LANDING RUNWAYS 18L/R: From BOYZZ on track 126° to cross CRLOS at 5000, then on track 126° to cross HOUKM at 5000 and at or above 6000 and at 220K, then on track 175° to cross LAIDY at 5000 and at 210K, then on track 175° to cross LAIKS at or above 11000.

LANDING RUNWAYS 36L/R: From BOYZZ on track 150° to cross CRLOS at 5000, then on track 150° to cross RATTT at 220K, then on track 175° to cross HOUKM at 5000 and at or above 6000 and at 220K, then on track 175° to cross LAIDY at 5000 and at 210K, then on track 175° to cross LAIKS at or above 11000.

LANDING RUNWAYS 36R/L: From BOYZZ on track 150° to cross CRLOS at 5000, then on track 150° to cross RATTT at 220K, then on track 175° to cross HOUKM at 5000 and at or above 6000 and at 220K, then on track 175° to cross LAIDY at 5000 and at 210K, then on track 175° to cross LAIKS at or above 11000.

UCOKA TRANSITION (UCOKA.LAIKS3)

DILLO TRANSITION (DILLO.LAIKS3)

NOTE: DME/DME/IRU or GPS required.

NOTE: Expect Rwy assignment from AUSTIN TRACON upon initial contact.

NOTE: Expect ILS or LOC or RNAV (RNP) approach, or RADAR vectors to final approach course.

NOTE: Turbojet and turboprop aircraft only.

NOTE: RNAV 1.

NOTE: RADAR required.

NOTE: Chart not to scale.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

CORPUS CHRISTI TRANSITION (CRP.LEMIG1): From over CRP VORTAC via CRP R-305 and THX R-126 to THX VORTAC, then via THX R-319 to LEMIG INT. Thence . . . .

COTULLA TRANSITION (COT.LEMIG1): From over COT VORTAC via COT R-037 to LEMIG INT. Thence . . . .

LAREDO TRANSITION (LRD.LEMIG1): From over LRD VORTAC via LRD R-019 to LEMIG INT. Thence . . . .

THREE RIVERS TRANSITION (THX.LEMIG1): From over THX VORTAC via THX R-319 to LEMIG INT. Thence . . . .

. . . . ALL AIRPORTS: From over LEMIG INT via SAT R-175 to ELKAY INT. Expect radar vectors to final approach course.

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

NOTE: Radar required.

MARCS ONE ARRIVAL
(MARCS.MARCS1) 24MAR17

NEW: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

CENTEX TRANSITION (CWK.MARCS1): From over CWK VORTAC via CWK R-205 to MARCS INT. Thence. . . .

INDUSTRY TRANSITION (IDU.MARCS1): From over IDU VORTAC via IDU R-259 to MARCS INT. Thence. . . .

LUFKIN TRANSITION (LFK.MARCS1): From over LFK VORTAC via LFK R-228 and IDU R-044 to IDU VORTAC, then via IDU R-259 to MARCS INT. Thence. . . .

WACO TRANSITION (ACT.MARCS1): From over ACT VORTAC via ACT R-165 to BLEWE INT, then via CWK R-012 to CWK VORTAC, then via CWK R-205 to MARCS INT. Thence. . . .

WINDU TRANSITION (WINDU.MARCS1): From over WINDU INT via CWK R-012 to CWK VORTAC, then via CWK R-205 to MARCS INT. Thence. . . .

. . . . From over MARCS on SAT R-056 to BRAUN, then on SAT R-056 to TROOP. Thence....

SAN ANTONIO INTL (SAT):
LANDING RWY 13R: On SAT R-056 to CRISS. Depart CRISS heading 300° for vectors to final approach course.
LANDING RWY 31L: Depart TROOP heading 140° for vectors to final approach course.
LANDING ALL OTHER RUNWAYS: On SAT R-056 to CRISS. Expect vectors to final approach course.

ALL OTHER AIRPORTS: On SAT R-056 to CRISS. Expect vectors to final approach course.
EL PASO, TEXAS

**ARRIVAL ROUTE DESCRIPTION**

**GREBE TRANSITION (GREBE.MOLLY5)**

**TEEES TRANSITION (TEEES.MOLLY5)**

**LANDING RWy 22/26L/26R:** From MOLLY on track 098° to cross WIKKR at 9000 and at 210K, expect RNAV (RNP) approach or RADAR vectors to final approach course.

**LANDING RWy 04, 08R:** From MOLLY on track 153° to cross KOACH at 8000 and at 210K, expect RNAV (RNP) approach or RADAR vectors to final approach course.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: For non-GPS equipped aircraft using GREBE Transition, CUS must be operational.
NOTE: Landing Rwy 22, 26L, 26R: Expect RNP approach clearance or RADAR vectors to final approach prior to WIKKR.
NOTE: Landing Rwy 04, 08R: Expect RNP approach clearance or RADAR vectors to final approach prior to KOACH.
RNAV 1 - DME/DME/IRU or GPS.
RADAR required.

NOTE: Chart not to scale.

NOTE: Jet and turboprop aircraft only.

DILLO TRANSITION (DILLO.POPPO1)
PPNUT TRANSITION (PPNUT.POPPO1)
PRTZY TRANSITION (PRTZY.POPPO1)
TRVLL TRANSITION (TRVLL.POPPO1)

See following page for arrival routes

CONTINUED ON FOLLOWING PAGE
NOTE: Chart not to scale.

RNAV 1 - DME/DME/IRU or GPS.
RADAR required.

NOTE: Jet and turboprop aircraft only.

SAN ANTONIO APP CON
125.1 307.0
BAZ ATIS
119 325
KRND ATIS
290 525
KSSF ATIS
120.45 273.5
SAT D-ATIS
118.9
SSF ATIS
128.8

NOTE: Chart not to scale.

CONTINUED ON FOLLOWING PAGE
ARRIVAL ROUTE DESCRIPTION

SAN ANTONIO INTL (KSAT): From POPPO on track 179° to cross VIICH at or below 9000 and at 250K.

LANDING KSAT RUNWAY 4: From VIICH on track 179° to PRKKR, then on track 157° to cross DYNMO at or above 7000 and at 230K, then on track 157° to cross DIIAW at 6000 and at 210K, then on track 157° to TIMYY, then on track 217° to cross LOWWN at 6000 and at 210K, then on track 217°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 13R: From VIICH on track 172° to cross SWUPZ at 7000 and at 210K. Expect ILS or LOC RWY 13R approach.

LANDING KSAT RUNWAY 22: From VIICH on track 150° to cross GERVN at 6000 and at 210K, then on track 101° to ADDYY, then on track 037° to cross IXION at 6000 and at 210K, then on track 037°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 31L: From VIICH on track 179° to PRKKR, then on track 153° to cross BEKKK at or above 8000, then on track 130° to cross PATII at or above 7000, then on track 130° to cross KEENM at 6000 and at 210K, then on track 130°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 4: From POPPO on track 179° to cross VIICH at or below 9000 and at 250K, then on track 179° to cross GAYMS at 9000, then on track 179°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS

KSAT RUNWAY 4: After LOWWN proceed to HARDD at 5000 and hold.
KSAT RUNWAY 22: After IXION proceed to ERROR and hold.
KSAT RUNWAY 31L: After KEENM proceed to TRNKS at 3400, then on ILS or LOC Rwy 31L or RNAV (GPS) Y Rwy 31L approach.
LANDING ALL AIRPORTS: From WLEE on track 284° to POTRR, then on track 284°. Expect RADAR vectors to final approach course.

NOTE: Jets expect to cross WLEE at 12000.
NOTE: MNURE Transition for Houston terminal departures only.
NOTE: Jet and turboprop aircraft only.
NOTE: Jet and turboprop aircraft only.
NOTE: WAILN Transition for Houston terminal Area Departures only.

(CONTINUED ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

SAN ANTONIO INTL (KSAT): From MARCS on track 245° to cross PGOUT between 11000 and 13000 and at 280K, then on track 245° to QERVO.

LANDING KSAT RUNWAY 4: From QERVO on track 217° to cross TEXNN at or above 8000, then on track 217° to cross JEFRE at or above 7000, then on track 217° to cross MCRTY at 6000 and at 210K, then on track 217°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 13R: From QERVO on track 245° to cross TAHKO at or below 11000, then on track 245° to cross FJITA at or below 8000, then on track 245° to TRTLA, then on track 246° to cross SALZA at 6000 and at 210K, then on track 268° to DOMNK, then on track 308° to cross CARNE at 6000 and at 210K, then on track 308°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 22: From QERVO on track 274° to cross TRITP at 7000 and at 210K, then on track 274°. Expect RADAR vectors to final approach course.

LANDING KSAT RUNWAY 31L: From QERVO on track 229° to DERRR, then on track 228° to cross COMUT at 6000 and at 210K, then on track 164° to ALRGI, then on track 128° to cross XLANT at 6000 and at 210K, then on track 128°. Expect RADAR vectors to final approach course.

LANDING KSKF/KBAZ/KCVB/KSSF/KPEZ/5C1/KNRD: From MARCS on track 245° to cross PGOUT between 11000 and 13000 and at 280K, then on track 245° to QERVO, then on track 245° to cross POYYO at 10000, then on track 245°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS:
KSAT RUNWAY 4: After MCRTY, proceed to FOALL at 5000, then on ILS or LOC RWY 4 or RNAV (GPS) Y RWY 4 approach.
KSAT RUNWAY 13R: After CARNE, proceed to RBNSN and hold.
KSAT RUNWAY 22: After TRITP proceed to AREEA at 5000, then on RNAV (GPS) Y RWY 22 approach.
KSAT RUNWAY 31L: After XLANT, proceed to SLLOW at 4000 and hold.
ARRIVAL ROUTE DESCRIPTION

CHISUM TRANSITION (CME.SAMMR3)
LIFTFT TRANSITION (LIFTFT.SAMMR3)

From SAMMR on track 260° to SARRT, cross SARRT at 8000 at 210K, expect RNAV (RNP) approach or RADAR vectors to final approach course.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Expect RNP approach or radar vectors to final approach course prior to SARRT.
ARRIVAL ROUTE DESCRIPTION

WINDU TRANSITION (WINDU.SEWZY6)

From GABOO on track 195° to cross SEWZY between 10000 and 16000, then on track 202° to cross VADRR at or above 8000.

LANDING RUNWAYS 18L/R: From VADRR on track 202° to cross MGTEC at or above 5000 and at 220K, then on track 221° to cross JEDYE at 4000 and at 210K. Expect ILS or RNAV (RNP) RWY 18L/R approach or RADAR vectors to final approach course.

LANDING RUNWAYS 36L/R: From VADRR on track 197° to HHOOF, then on track 176° to cross MMARE at or above 6000 and at 220K, then on track 175° to cross SMRFF at 5000 and at 210K, then on track 175°. Expect RADAR vectors to final approach course.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

ABILENE TRANSITION (ABI, STV1): From over ABI VORTAC via ABI R-146 and STV R-329 to STV VORTAC. Thence . . . .

JUNCTION TRANSITION (JCT, STV1): From over JCT VORTAC via JCT R-104 and STV R-284 to STV VORTAC. Thence . . . .

LLANO TRANSITION (LLO, STV1): From over LLO VORTAC via LLO R-165 and STV R-284 to STV VORTAC. Thence . . . .

ALL AIRPORTS EXCEPT RANDOLPH AIR FORCE BASE: . . . . From over STV VORTAC via STV R-177 to REUBE INT. Expect radar vectors to final approach course.

RANDOLPH AIR FORCE BASE: . . . . From over STV VORTAC via direct RND VORTAC.
NOTE: Chart not to scale.

WAZKO ONE ARRIVAL (RNAV)

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: TURBOJET Aircraft only.
NOTE: Landing Rwy 04: Expect RNP approach or RADAR vectors to final approach course prior to KOACH.
NOTE: Landing Rwy 22,26L: Expect RNP approach or RADAR vectors to final approach course prior to WIKKR.

SC-3, 11 JUL 2024 to 05 SEP 2024
ARRIVAL ROUTE DESCRIPTION

SLNNK TRANSITION (SLNNK.WAZKO1):

**LANDING RWY 4:** From WAZKO on track 167° to KOACH at 8000 and at 210K. Expect RNAV (RNP) approach or RADAR vectors to final approach course.

**LANDING RWY 8R:** From WAZKO on track 167° to KOACH at 8000 and at 210K. Expect RADAR vectors to final approach course.

**LANDING RWY 22/26L:** From WAZKO on track 150° to cross JEBSU at or above 10000, then on track 098° to cross WIKKR at 9000 and at 210K. Expect RNAV (RNP) approach or RADAR vectors to final approach course.

**LANDING RWY 26R:** From WAZKO on track 150° to cross JEBSU at or above 10000, then on track 098° to cross WIKKR at 9000 and at 210K. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

JUNCTION Transition (JCT.WEBOX4): From over JCT VORTAC via JCT R-190 to WEBOX. Thence...

LLANO Transition (LLO.WEBOX4): From over LLO VORTAC via LLO R-224 to WEBOX. Thence...

STONEWALL Transition (STV.WEBOX4): From over STV VORTAC via STV R-249 to WEBOX. Thence...

CENTER POINT Transition (CSI.WEBOX4): From over CSI VORTAC via CSI R-263 to WEBOX. Thence...

...From over DLF R-040/50 (WEBOX) via DLF R-040 to DLF R-040/12 (WASOD). Expect vectors for an instrument approach to runway in use.
NOTE: Turbojet and turboprop aircraft only.

NOTE: MNURE Transition for Houston terminal departures only.

NOTE: Expect runway assignment from AUSTIN TRACON upon initial contact.

RNAV 1 - DME/DME/IRU or GPS. RADAR required.
ARRIVAL ROUTE DESCRIPTION

DBOYS TRANSITION (DBOYS.WLEEE7)
LUKKN TRANSITION (LUKKN.WLEEE7)
MNURE TRANSITION (MNURE.WLEEE7)
WAILN TRANSITION (WAILN.WLEEE7)
WEEED TRANSITION (WEEED.WLEEE7)

From WLEEE on track 285° to cross BITER at or below 12000.

LANDING RUNWAYS 18L/R: From BITER on track 285° to ISHOV, then on track 285° to cross BASTO at or below 8000, then on track 289° to cross LUKKE at or above 6000 and at 230K, then on track 291° to cross XWING at 4000 and at 210K, then on track 315° to SSURF, then on track 355° to cross BEESO at 4000, then on track 355°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 36L/R: From BITER on track 262° to cross MUSEC at or above 6000 and at 230K, then on track 263° to cross TOONE at 4000, then on track 263° to cross BOWTZ at 4000 and at 210K, then on track 213° to EEVEE, then on track 175° to cross SCUTE at 4000, then on track 175°. Expect RADAR vectors to final approach course.
**RNAV (GPS) RWY 13**

**ALICE INTL (ALI)**

**Apt Elev:** 178

**TDZE:** 178

**LNAV only.**

**Baro-VNAV NA when using Nueces County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 42°C. When local altimeter setting not received, use Nueces County altimeter setting and increase all DA 56 feet and all MDA 60 feet, increase LPV and LNAV/VNAV visibility all Cats ½ mile and LNAV Cat C and D ¼ mile. Rwy 13 helicopter visibility reduction below ⅛ SM NA. VDP NA with Nueces County altimeter setting.

**ASOS**

119.225

**KINGSVILLE APP CON**

119.9 290.45

**UNICOM**

123.0 (CTAF)

Procedure NA for arrival on CRP VORTAC airway radials 184 CW 305.

**MISSED APPROACH:** Climb to 2600 direct ITDAZ and hold.

- **UWAGO**
  - 2100 NoPT 200° (18.3)
  - 2100 NoPT 200° (18)

- **ITDAZ**
  - 2900 272° (34.8)

- **CRP**
  - CARTI
  - TITAE

- **ASOS**
  - 119.225

- **KINGSVILLE APP CON**
  - 119.9 290.45

- **UNICOM**
  - 123.0 (CTAF)

**ITDAZ**

- Holding Pattern

**2100**

**GP 3.00° TCH 50**

**WACBI**

**1900**

**KOVLE**

**RW13**

**ITDAZ**

**2600**

**250 (300-3½)**

**560-1 382 (400-1)**

**ELEV 178**

**TDZE 178**

**27°44'N-98°02'W**

**ALICE, TEXAS**

Amdt 1B 07NOV19

**23166**

**SC-3, 11 JUL 2024 to 05 SEP 2024**
Baro-VNAV and VDP NA when using Nueces County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 54°C. When local altimeter setting not received, use Nueces County altimeter setting: increase LPV DA to 494 feet, LNAV/VNAV DA to 524 feet; increase all MDA 60 feet and LNAV Cat C and D, and Circling Cat D visibility ½ SM. For inop ALS, increase all LPV and LNAV/VNAV visibilities to ½ SM. For inop ALS with Nueces County altimeter setting, increase all LPV visibilities to ½ SM and LNAV Cat C and D visibility to 1½ SM.

MISSED APPROACH: Climb to 2100 direct UWAGO and hold.

ASOS
119.225

KINGSVILLE APP CON
119.9 290.45

UNICOM
123.0 (CTAF)

Procedure NA for arrivals at CRP VORTAC on airway radials 169 CW 305.

MISSED APCH FIX

UWAGO
4 NM

128°
308°

378°

556
267°

197°

570
255

(FAF)
(CITCU)

(MSA Rwys 13-31 and 17-35)

ELEV 178

TDZE 174

2100 UWAGO

ITDAZ

4 NM Holding Pattern

1800

309°

129°

14000

2600

GP 3.00°

TCH 47

CATEGORY

A
B
C
D

LPV DA
437-⅓
600-1

263 (300-⅓)
462 (500-1)

LNAV/VNAV DA
467-⅔
700-⅓

293 (300-⅔)
522 (600-⅓)

LNAV MDA
520-⅓
900-⅔

346 (400-⅓)
722 (800-⅔)

CIRCLING

600-1

422 (500-1)

462 (500-1)

522 (600-⅓)

722 (800-⅔)
LOC/DME RWY 31
ALICE INTL (ALI)

ASOS
119.225

KINGSVILLE APP CON
119.9  290.45

UNICOM
123.0 (CTAF)

ALICE, TEXAS

AL-481 (FAA)

23278

RADAR required for procedure entry from Corpus Christi CRP VORTAC.

VDP NA when using Nueces County altimeter setting. When local altimeter setting not received, use Nueces County altimeter setting and increase all MDAs 60 feet and S-LOC 31 visibility Cat C/D ¼ SM, and Circling visibility Cat D ¼ SM. For inop ALS when using Nueces County altimeter setting, increase S-31 Cats C, D visibility to 1¼ SM.

ASOS
119.225

KINGSVILLE APP CON
119.9  290.45

UNICOM
123.0 (CTAF)

ALICE, TEXAS

AL-481 (FAA)

23278

RADAR required for procedure entry from Corpus Christi CRP VORTAC.

VDP NA when using Nueces County altimeter setting. When local altimeter setting not received, use Nueces County altimeter setting and increase all MDAs 60 feet and S-LOC 31 visibility Cat C/D ¼ SM, and Circling visibility Cat D ¼ SM. For inop ALS when using Nueces County altimeter setting, increase S-31 Cats C, D visibility to 1¼ SM.

ALICE, TEXAS

AL-481 (FAA)

23278

RADAR required for procedure entry from Corpus Christi CRP VORTAC.

VDP NA when using Nueces County altimeter setting. When local altimeter setting not received, use Nueces County altimeter setting and increase all MDAs 60 feet and S-LOC 31 visibility Cat C/D ¼ SM, and Circling visibility Cat D ¼ SM. For inop ALS when using Nueces County altimeter setting, increase S-31 Cats C, D visibility to 1¼ SM.

ALICE, TEXAS

AL-481 (FAA)

23278

RADAR required for procedure entry from Corpus Christi CRP VORTAC.

VDP NA when using Nueces County altimeter setting. When local altimeter setting not received, use Nueces County altimeter setting and increase all MDAs 60 feet and S-LOC 31 visibility Cat C/D ¼ SM, and Circling visibility Cat D ¼ SM. For inop ALS when using Nueces County altimeter setting, increase S-31 Cats C, D visibility to 1¼ SM.
ALICE, TEXAS

AL-481 (FAA)

VOR RWY 31
ALICE INTL (ALI)

VOR ALI
114.5

APP CRS
325°

5997

Rwy Ldg
174

Apt Elev
178

When local altimeter setting not received, use Nueces County altimeter setting: increase all MDA 60 feet and visibility S-31 Cats C and D and Circling Cat D 1/4 SM. For inop ALS, increase S-31 Cats C and D visibility to 1 1/2 SM. For inop ALS when using Nueces County altimeter setting, increase S-31 Cats C and D visibility to 1 1/2 SM.

MALS

MISSING APPROACH: Climb to 1500 then climbing left turn to 2000 direct ALI VOR and hold.

ASOS
119.225

KINGSVILLE APP CON
119.9  290.45

UNICOM
123.0  (CTAF)

ALICE, TEXAS

Amdt 13G  05OCT23

27°44’N-98°02’W

SC-3, 11 JUL 2024 to 05 SEP 2024

SC-3, 11 JUL 2024 to 05 SEP 2024

23278
### ALICE, TEXAS

**VOR ALI**

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<thead>
<tr>
<th>VOR ALI</th>
<th>APP CRS</th>
<th>Rwy Ldg</th>
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<tr>
<td>114.5</td>
<td>084°</td>
<td>N/A</td>
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**ASOS**

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<th>KINGSVILLE APP CON</th>
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<tr>
<td>119.225</td>
<td>119.9 290.45</td>
<td>123.0 (CTAF)</td>
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**When local altimeter setting not received, use Nueces County altimeter setting and increase all MDAs 60 feet.**

**MISSED APPROACH:** Climb to 1500 then climbing left turn to 2000 direct ALI VOR and hold.

**CARTI**

- 2000
- 2200 (25.4)

**KINGSVILLE APP CON**

- 084°
- 378±
- 267±

**UNICOM**

- 123.0 (CTAF)

**POGOE**

- 2000
- 243° (32.2)
- 2200 (31.8)

**POGOE**

- 114.5 ALI

**ALICE, ALI**

- ELEV 178

**ALICE INTL (ALI)**

- 27°44'N-98°02'W

**CIRCLING**

- Remain within 10 NM
- 1500
- 2000
- 084°
- 264°

**CATEGORY**

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<tr>
<td>CIRCLING</td>
<td>1060-1¼</td>
<td>882 (900-1¼)</td>
<td>1060-2¾</td>
<td>882 (900-2¾)</td>
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<td></td>
<td>1060-3</td>
<td>882 (900-3)</td>
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**ELEV 178**

- 230°
- 084°
- REIL Rwy 13
- MIRL Rwy 13-31 and 17-35

**ALICE INTL (ALI)**

- 23166

**VOR-A**

- AL-481 (FAA)
RNAV (GPS) RWY 19
ALPINE-CASPARIS MUNI (E38)

For uncompensated Baro-VNAV systems, UNAV/VNAV NA below -23°C or above 54°C. Circling NA W of Rwy 1-19. Rwy 19 helicopter visibility reduction below ½ SM NA.

Procedure NA for arrivals on FST VORTAC airway radials 273 CW 283.

<table>
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<td>LPV DA</td>
<td>4964-13/4</td>
<td>482 (500-13/4)</td>
<td>NA</td>
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<td>UNAV/VNAV DA</td>
<td>5125-13/4</td>
<td>643 (700-13/4)</td>
<td>NA</td>
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<td>UNAV MDA</td>
<td>5180-1</td>
<td>698 (700-1)</td>
<td>5180-2</td>
<td>698 (700-2)</td>
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<tr>
<td>CIRCLING</td>
<td>5180-1</td>
<td>666 (700-1)</td>
<td>5460-13/4</td>
<td>5760-3</td>
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Amdt 1B 21MAR24

SC-3, 11 JUL 2024 to 05 SEP 2024
RNAV (GPS) RWY 23
ALPINE-CASPARIS MUNI (E38)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 23°C (9°F) or above 54°C (130°F). Circling NA west of Rwy 1-19. Rwy 23 helicopter visibility reduction below ½ SM NA. DME/DME RNP 0.3 NA.

MISSED APPROACH: (Do not exceed 165K until ODKAE)
Climb to 5400 then climbing left turn to 9000 direct ODKAE and hold, continue climb-in-hold to 9000.

RNAV (GPS) RWY 23

AWOS-3 119.025
ALBUQUERQUE CENTER 135.875 292.15
UNICOM 122.8 (CTAF)

ALPINE, TEXAS
ALPINE-CASPARIS MUNI (E38)

Procedure NA for arrival on FST VORTAC airway radials 273 CW 283.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF MINIMUMS**
Rwy 23: NA - Obstacle.
Rwys 1, 5: Standard.
Rwy 19: Standard with minimum climb of 432' per NM to 6800 or 1800-3 for VCOA.

**TAKEOFF RUNWAY 1:** Climbing right turn to intercept MRF VOR/DME R-055 to ODKAE/29 DME, thence...
**TAKEOFF RUNWAY 5:** Climb on heading 048° to intercept MRF VOR/DME R-055 to ODKAE/29 DME, thence...
**TAKEOFF RUNWAY 19:** Climbing left turn on heading 027° to intercept MRF VOR/DME R-055 to ODKAE/29 DME, thence...

...continue climb in ODKAE holding pattern to 8600 before proceeding on course.

**VCOA RUNWAY 19:** Obtain ATC approval for VCOA when requesting IFR clearance.
Climb in visual conditions to cross Alpine-Casparis Muni airport at or above 6200 on heading 027° and on MRF VOR/DME R-055 to ODKAE/29 DME, do not exceed 210K until established on MRF R -055 to ODKAE. Continue climb in ODKAE holding pattern to 8600 before proceeding on course.
Takeoff Obstacle Notes

Rwy 1: Fence 9’ from DER, 283’ left of centerline, 9’ AGL/4458’ MSL.
Sign 13’ from DER, 239’ right of centerline, 4452’ MSL.
Vehicle on road 85’ from DER, 278’ left of centerline, 15’ AGL/4463’ MSL.
Pole 811’ from DER, 470’ right of centerline, 4470’ MSL.

Rwy 5: Sign 13’ from DER, 239’ left of centerline, 4452’ MSL.
Sign 18’ from DER, 164’ right of centerline, 4453’ MSL.
Antenna, vehicle on road, pole beginning 21’ from DER, 400’ right of centerline,
up to 25’ AGL/4474’ MSL.
Tree 190’ from DER, 468’ left of centerline, 11’ AGL/4455’ MSL.
Trees beginning 292’ from DER, 475’ left of centerline, up to 19’ AGL/4462’ MSL.
Poles, tree beginning 480’ from DER, 187’ right of centerline, up to 4478’ MSL.
Pole 612’ from DER, 626’ left of centerline, 33’ AGL/4472’ MSL.
Pole 1060’ from DER, 658’ left of centerline, 4476’ MSL.

Rwy 19: Vehicle on road, sign, tree beginning 1’ from DER, 165’ left of centerline, up to 4526’ MSL.
Terrain 57’ from DER, 121’ right of centerline, 4516’ MSL.
Vehicle on road 74’ from DER, 276’ right of centerline, 15’ AGL/4531’ MSL.
Vehicle on road 230’ from DER, 290’ left of centerline, 4527’ MSL.
Vehicles on road beginning 293’ from DER, 277’ right of centerline, up to 4535’ MSL.
Vehicles on road beginning 379’ from DER, 265’ right of centerline, up to 4536’ MSL.
Vehicle on road 420’ from DER, 289’ left of centerline, 4528’ MSL.
Pole 536’ from DER, 573’ left of centerline, 4548’ MSL.
Windmill, vehicle on road, poles, tree beginning 548’ from DER,
183’ left of centerline, up to 4554’ MSL.
Poles beginning 1325’ from DER, 60’ right of centerline, up to 4561’ MSL.
Poles beginning 1334’ from DER, 279’ left of centerline, up to 4556’ MSL.
Pole 1565’ from DER, 689’ right of centerline, 4562’ MSL.
Terrain 2.4 NM from DER, 2888’ left of centerline, 4927’ MSL.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 126° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence. . . .

TAKEOFF RUNWAY 31: Climb on heading 306° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence. . . .

. . . . on track 293° to AEROZ, then on SAN ANGELO TRANSITION. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

SAN ANGELO TRANSITION (AEROZ2.SJT)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 126° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence. . . .

TAKEOFF RUNWAY 31: Climb on heading 306° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence. . . .

. . . .on track 224° to BNDIA. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
NOTE: RADAR required. 
NOTE: DME/DME/IRU or GPS required. 
NOTE: RNAV 1.

TAKEOFF MINIMUMS:
Rwys 16, 34: NA-Environmental. 
Rwys 13, 31: Standard.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 126° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence. . . .
TAKEOFF RUNWAY 31: Climb on heading 306° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence. . . .

. . . .on track 338° to ELOEL, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

ABILENE TRANSITION (ELOEL3.ABI)
FORSS TRANSITION (ELOEL3.FORSS)
KLNGR TRANSITION (ELOEL3.KLNGR)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 126° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence.

TAKEOFF RUNWAY 31: Climb on heading 306° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence.

... on track 090° to ILEYX, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

JAYJO TRANSITION (ILEXY4.JAYJO)
ZENZI TRANSITION (ILEXY4.ZENZI)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 13:** Climb on heading 126° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence. . . .

**TAKEOFF RUNWAY 31:** Climb on heading 306° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence. . . .

. . . . on track 279° to MUCKY. Maintain altitude 10 minutes after departure.
NOTE: Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 13:** Climb on heading 126° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence.

**TAKEOFF RUNWAY 31:** Climb on heading 306° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence.

. . . . . .on track 024° to SAYBR. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

**TAKEOFF MINIMUMS**

Rwys 16, 34: NA-Environmental.
Rwys 13, 31: Standard.

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: For DFW terminal area arrivals at FL230 or below only.
### ILS or LOC RWY 36L

**AUSTIN-BERGSTROM INTL (AUS)**

**App Crs:** 110.95°

**TDZE:** 496

**Apt Elev:** 542

---

**D-ATIS**

- **AUSTIN APP CON:** 127.225, 317.65° (SOUTH), 120.875, 270.25° (WEST)

---

**CPDLC**

- **AUSTIN TOWER:** 121.0, 261.5

---

**GND CON**

- **CLNC DEL:** 121.9, 348.6

---

**TDZE:** 496

---

**ELEV:** 542

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**MALS**

- **MISSED APPROACH:** Climb to 1000 then climbing left turn to 3500 on heading 250° and CWK VORTAC R-222 to GARDS INT/CWK 29.2 DME and hold.

---

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<tr>
<td>Knots</td>
<td>60</td>
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<td>120</td>
<td>150</td>
<td>180</td>
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<td>2:12</td>
<td>1:39</td>
<td>1:19</td>
<td>1:06</td>
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**SC-3, 11 JUL 2024 to 05 SEP 2024**
ILS RWY 18L (SA CAT I)
AUSTIN-BERGSTROM INTL (AUS)

MISSED APPROACH: Climb to 1000, then climbing left turn to 3000 on heading 040° and CWK VORTAC R-088 to HOOKK/CWK 17 DME and hold.

MSPEC or LOA approval. Simultaneous approach authorized. Requires specific OPSPEC, MSPEC or LOA approval.

SA CATEGORY I - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED
**ILS RWY 36R (SA CAT I & II)**

**AUSTIN-BERGSTROM INTL (AUS)**

**30°12'N-97°40'W**

**AUSTIN, TEXAS**

**AL-556 (FAA)**

**23054**

**Amdt 4C 14JUL22**

**HIRL Rwys 1BR-36L and 1BL-36R**

**TDZ/CL Rwys 18L and 36R**

**SA CATEGORY I & II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

**ELEV 542**

**TDZE 480**

---

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

**Simultaneous approach authorized.**

**SA CAT I: Requires specific OPSPEC, MSPEC or LOA approval.**

**SA CAT II: Requires specific OPSPEC, MSPEC or LOA approval.**

**MALSR**

**AUSTIN APP CON**

**127.225 317.65 (EAST)**

**120.875 270.25 (SOUTH)**

**119.0 370.85 (WEST)**

**AUSTIN TOWER**

**GND CON**

**121.9 348.6**

**CLNC DEL**

**125.5 263.0**

**TDZE**

**268°**

**HOO KK**

**CWK 17**

---

**LOC/DME I-HCE**

**110.5**

**APP CRS**

**355°**

**Rwy Idg**

**9000**

**TDZE**

**480**

**Apt Elev**

**542**

---

**MISSED APPROACH:** Climb to 1000 then climbing right turn to 3000 on heading 030° and CWK VORTAC R-088 to HOOKK/CWK 17 DME and hold.

---

**SA CATEGORY I & II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

**ILS RWY 36R (SA CAT I & II)**
**RNAV (RNP) Z Rwy 18R**

AUSTIN-BERGSTROM INTL (AUS)

<table>
<thead>
<tr>
<th>Rwy Idg</th>
<th>TDZE</th>
<th>Apt Elev</th>
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<tbody>
<tr>
<td>12250</td>
<td>542</td>
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</tbody>
</table>

**Category A**

- **RNP 0.30 DA**: 883/40 341 (400-¾)

**Authorization Required**

- Simultaneous approach authorized. For uncompensated Baro-VNAV systems, procedure NA below -5°C or above 54°C.

- **RNP AR APCH-GPS. RADAR required.**

- **Missed Approach**: Climb to 1000 then climbing right turn to 3500 direct GARDS and hold.

- TCH 59

See planview for multiple IF locations.

SC-3, 11 JUL 2024 to 05 SEP 2024
RNP AR APCH. RADAR required.

Simultaneous approach authorized. For uncompensated Baro-VNAV systems, procedure NA below -5°C or above 54°C. For inap ALS, increase RNP 0.11 all Cats visibility to RVR 4500 and RNP 0.30 all Cats visibility to RVR 5500.

GARDS \( \triangle \) 1158

GARDS \( \triangle \) 2049

AUSTIN TOWER

121.0 281.5

AUSTIN APP CON

127.225 317.65 (EAST)

120.875 270.25 (SOUTH)

119.0 370.85 (WEST)

AUSTIN, TEXAS

AL-556 (FAA)

21112

RNAV (RNP) Z RWY 36L

AUSTIN-BERGSTROM INTL (AUS)

MALS

AUTHORIZATION REQUIRED

AIRNAV (RNP) Z RWY 36L

AUSTIN-BERGSTROM INTL (AUS)

AIRNAV (RNP) Z RWY 36L

AUSTIN-BERGSTROM INTL (AUS)

AIRNAV (RNP) Z RWY 36L

AUSTIN-BERGSTROM INTL (AUS)
RNP APCH-GPS.

Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. Incomp table does not apply to LPV. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C or above 54°C. For inop ALS, increase LNAV/VNAV all cats visibility to RVR 4500; increase LNAV Cat E visibility to RVR 5500.

AUSTIN APP CON

127.225 317.65 (EAST)
120.875 270.25 (SOUTH)
119.0 370.85 (WEST)

AUSTIN TOWER

121.0 281.5

GND CON

121.9 348.6

CLNC DEL

125.5 263.0

UTTEE

2800

175°

ELLBJ

1600

GP 3.00°

TCH 59°

CATEGORY

A

B

C

D

E

LPV DA

742/40 200 (200-3/4)

LNAV/ VNAV DA

834/40 292 (300-3/4)

LNAV MDA

900/40 358 (400-3/4)

CIRCLING

1040-1 498 (500-1)

1120-1 578 (600-1)

1200-1 1200-1 1200-1

1200-2 1200-2 1200-2

1520-3 978 (1000-3)

CTA 3.8 NM

2.2 NM

0.9 NM

RW18R

175°

0.9 NM to RW18R

UTTEE

18L 18R

36L 36R

175°

175°

175°

175°

542 542 542 542

AUSTIN, TEXAS

AL-556 (FAA)

RNAV (GPS) Y RWY 18R

AUSTIN-BERGSTROM INTL (AUS)

AUSTIN, TEXAS

Amdt 3A 14JUL22

30°12'N-97°40'W

31
RNAV (GPS) Y RWY 36L
AUSTIN-BERGSTROM INTL (AUS)

Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C or above 54°C. For inop ALS, increase LNAV/ VNAV Cat E visibility to 1 ½ SM, LNAV Cat E visibility to 1 ¼ SM. Inop table does not apply to LPV all Cats.

D-ATIS
124.4

AUSTIN APP CON
127.225 317.65 (EAST)
120.875 270.25 (SOUTH)
119.0 370.85 (WEST)

GND CON
121.0 281.5

CLNC DEL
121.9 348.6
125.5 263.0

CPDLC

LNAV/VNAV DA
970/60 474 (500-1 ½)

LNAV MDA
920/40 424 (400-½)
920/50 424 (400-1)

DA
696/40 200 (200-¾)

LPV

MALS

GARDS

VGS I and RNAV glidepath not coincident
(VGS I Angle 3.00/TCH 60).

* LNAV only.

1.2 NM to RW 36L

TWR 727

HIRL Rwys 18L-36R and 18R-36L
TDZ/CL Rwys 18L and 36R

HILL Rdys 18L-36R and 18R-36L
TDZ/CL Rwys 18L and 36R

30°12'N-97°40'W
AUSTIN-BERGSTROM INTL (AUS)

RNAV (GPS) Y RWY 36L
AUSTIN-BERGSTROM INTL (AUS)

Amdt 3A 14JUL22

AUS, 3-11 JUL 2024 to 05 SEP 2024

SC-3, 11 JUL 2024 to 05 SEP 2024
Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C or above 54°C. For inop ALS increase LPV Cat E visibility to RVR 4000, LNAV/VNAV all Cats visibility to 1/8 SM and LNAV Cat C/D/E visibility to 1 3/8 SM.

**AUSTIN TOWER**

**GND CON**

**CLNC DEL**

**CPDLC**

**MISSING APPROACH FIX**

**HOKKK**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**1638**

**1448**

**799**

**2049**

**846**

**842**

**696**

**1600**

**36R**

**119.0 370.85**

**1120-1**

**1120-1**

**578 (600-1)**

**578 (600-1)**

**842**

**1600**

**1600**

**2500**

**355°**

**4000**

**BALDD**

**1600-2**

**1600-2**

**658 (700-2)**

**978 (1000-3)**

**1000**

**3000**

**HOOKK**

**1.5 NM to RW36R**

**RW36R**

**GW36R**

**VGS/GP**

**1.9 NM from HOKKK**

**520 (500-1)**

**12250 X 150**

**9000 X 150**

**680**

**H**

**H**

**H**

**CIRCLING**

**124.4**

**30°12'N-97°40'W**

**ELEV 542**

**TDZE 480**

**AUSTIN, TEXAS**

**AL-556 (FAA)**

**22195**

**RNAV (GPS) Y RWY 36R**

**AUSTIN-BERGSTROM INTL (AUS)***

**355° to RW36R**

**30°12'N-97°40'W**

**RNAV (GPS) Y RWY 36R**

**AUSTIN-BERGSTROM INTL (AUS)***

**355° to RW36R**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 18L/R: Climb on heading 175° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

TAKEOFF RUNWAYS 36L/R: Climb on heading 355° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

...... on track 293° to AEROZ, then on SAN ANGELO TRANSITION. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

SAN ANGELO TRANSITION (AEROZ2.SJT)
NOTE: Chart not to scale.

NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 18L/R: Standard.
Rwys 36L/R: Standard with minimum climb of 240’ per NM to 2600.

(CONTINUED ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 18L/R, 36L/R: Climb on assigned heading for vectors, then on assigned transition. Maintain altitude assigned by ATC, expect filed altitude 10 minutes after departure.

ABILENE TRANSITION (AUS6.ABI): From over CWK VORTAC on CWK R-285 and LLO R-103 to LLO VORTAC, then on LLO R-324 and ABI R-141 to ABI VORTAC.

GOOCH SPRINGS TRANSITION (AUS6.AGJ): From over CWK VORTAC on CWK R-321 and AGJ R-142 to AGJ VORTAC.

JUNCTION TRANSITION (AUS6.JCT): From over CWK VORTAC on CWK R-271 and JCT R-088 to JCT VORTAC.

LLANO TRANSITION (AUS6.LLO): From over CWK VORTAC on CWK R-285 and LLO R-103 to LLO VORTAC.

SAN ANGELO TRANSITION (AUS6.SJT): From over CWK VORTAC on CWK R-285 and LLO R-103 to LLO VORTAC, then on LLO R-284 and SJT R-102 to SJT VORTAC.

SAN ANTONIO TRANSITION (AUS6.SAT): From over CWK VORTAC on CWK R-222 and SAT R-040 to SAT VORTAC.

STONEWALL TRANSITION (AUS6.STV): From over CWK VORTAC on CWK R-271 and STV R-047 to STV VORTAC.
NOTE: Chart not to scale.

NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

TAKEOFF MINIMUMS:
Rwys 18L/R: Standard.
Rwys 36L/R: Standard with minimum climb of 240’ per NM to 2600.

TAKEOFF RUNWAYS 18L/R: Climb on heading 175° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence . . . .

TAKEOFF RUNWAYS 36L/R: Climb on heading 355° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence . . . .

. . . . on track 224° to BNDIA. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
CENTEX SEVEN DEPARTURE

**NOTE:** RADAR required.

**NOTE:** COLLEGE STATION transition for aircraft requesting 9000 MSL to FL230.

**NOTE:** ILEXY transition for turboprop and turbojet aircraft landing HOU; for turbojet aircraft landing EFD, GLS, or LXB; for all aircraft landing IAH.

**NOTE:** JAYJO transition for piston aircraft landing HOU; for piston and turboprop aircraft landing EFD, GLS, or LXB; for all aircraft landing other west/south Houston terminal area airports.

**NOTE:** NAVYS transition for aircraft destined to the Dallas/Fort Worth terminal area requesting FL230 and below. Do not file this transition if these conditions are not met.

**NOTE:** WACO transition for aircraft requesting 12000’ MSL and below.

*(CONTINUED ON FOLLOWING PAGE)*

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

TAKEOFF RUNWAYS 18L/R, 36L/R: Climb on assigned heading for vectors, then on assigned transition. Maintain altitude assigned by ATC, expect filed altitude 10 minutes after departure.

COLLEGE STATION TRANSITION (CWK7.CLL): From over CWK VORTAC on CWK R-088 to ILEY INT, then on CLL R-238 to CLL VORTAC.

ILEXY TRANSITION (CWK7.ILEY): From over CWK VORTAC on CWK R-088 to ILEY INT.

JAYJO TRANSITION (CWK7.JAYJO): From over CWK VORTAC on CWK R-088 to JAYJO INT.

NAVASOTA TRANSITION (CWK7.TNV): From over CWK VORTAC on CWK R-088 and TNV R-266 to TNV VOR/DME.

NAVYS TRANSITION (CWK7.NAVYS): From over CWK VORTAC on CWK R-040 to NAVYS INT.

WACO TRANSITION (CWK7.ACT): From over CWK VORTAC on CWK R-004 and ACT R-181 to ACT VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 18L/R: Climb on heading 175° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence ....

TAKEOFF RUNWAYS 36L/R: Climb on heading 355° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence ....

. . . . on track 338° to ELOEL, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

ABILENE TRANSITION (ELOEL3.ABI)
FORSS TRANSITION (ELOEL3.FORSS)
KLNGR TRANSITION (ELOEL3.KLNGR)

NOTE: Chart not to scale.

NOTE: RNAV 1.
DEPARTURE ROUTE DESCRIPTION

**TAKEOFF RUNWAYS 18L/R:** Climb on heading 175° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence...

**TAKEOFF RUNWAYS 36L/R:** Climb on heading 355° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence...

...on track 090° to ILEXY, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

**JAYJO TRANSITION (ILEXY4.JAYJO)**

**ZENZI TRANSITION (ILEXY4.ZENZI)**

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF MINIMUMS
Rwys 18L/R: Standard.
Rwys 36L/R: Standard with minimum climb of 240’ per NM to 2600.

TAKEOFF RUNWAYS 18L/R: Climb on heading 175° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence . . .
TAKEOFF RUNWAYS 36L/R: Climb on heading 355° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence . . .

. . . on track 279° to MUCKY. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
NOTE: Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

TAKEOFF RUNWAYS 18L/R, 36L/R: Climb on assigned heading for vectors to CWK VORTAC, then on CWK R-169 to cross PALMS INT at or above 5000, then on CRP R-352 to CRP VORTAC. Maintain altitude assigned by ATC, expect filed altitude 10 minutes after departure.
**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 18L/R:** Climb on heading 175° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence . . . .

**TAKEOFF RUNWAYS 36L/R:** Climb on heading 355° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence . . . .

. . . . on track 024° to SAYBR. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

**NOTE:** RADAR required.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** RNAV 1.
**NOTE:** For DFW terminal area arrivals at FL230 or below only.
ILS or LOC RWY 13
SAN MARCOS RGNL (HYI)

MISSED APPROACH: Climb to 2000 then climbing left turn to 3200 direct GARYS LOM/INT and hold.

ATIS * 120.825
AUSTIN APP CON 119.0 370.85
SAN MARCOS TOWER * 126.825 (CTAF)
GND CON 120.125
CLNC DEL 120.125
CLNC DEL 121.35

Alternate Missed Approach Fix

ILS or LOC RWY 13
SAN MARCOS RGNL (HYI)

SAN ANTONIO 116.8 SAT
Chan 115

113.8 STV
Chan 85

BETTI STV (36.8)

GARYS
Chan 115

Procedure NA for arrival on CWK VORTAC airway radials 222 CW 271.

Procedure NA for arrival on SAT VORTAC airway radials 002 CW 081.

Remain within 1.5 NM

RU LOM GARYS INT

2000 3200 RU

2700 3200
GS 3.00 TCH 57

MIRL Rwys 8-26, 13-31, and 17-35

FAF to MAP 5.5 NM

Knots 60 90 120 150 180
Min:Sec 5:30 3:40 2:45 2:12 1:50

29°54'N-97°52"W

SAN MARCOS RGNL (HYI)
ILS or LOC RWY 13

Ann 6D 12AUG21

AUSTIN, TEXAS

AL-502 (FAA)
**RNAV (GPS) RWY 8**

**SAN MARCOS RGNL (HYI)**

<table>
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<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>839-1</td>
<td>250 (300-1)</td>
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<td>LNAV/ VNAV DA</td>
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<td>321 (400-1)</td>
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<td>LNAV MDA</td>
<td>1120-1</td>
<td>531 (600-1)</td>
<td>1120-1½</td>
<td>531 (600-1½)</td>
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<tr>
<td>CIRCLING</td>
<td>1120-1</td>
<td>525 (600-1)</td>
<td>1240-1³⁄₄</td>
<td>645 (700-1½)</td>
<td>1320-2³⁄₄</td>
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**HOLDING PATTERNS**

- **6 NM Holding Pattern**
  - RAJRY to RAJRY
  - KEDCE to RAJRY
  - NLUOS to RAJRY
  - RW08 to RAJRY

**CIRCLING NA for Cat E SW of Rwy 13-31, Rwy 8 helicopter visibility reduction below ¾ SM NA.**

**Baro-VNAV NA when using New Braunfels altimeter setting.**

For uncompensated Baro-VNAV systems, LNAV/ VNAV NA below -16°C or above 54°C. VDP NA with New Braunfels altimeter setting and increase LPV DA to 882, LNAV/VNAV DA to 953 and increase all MDA 60 feet; increase LNAV Cat C/D/E and Circling Cat C/D visibility ¾ SM.

**ATIS**

- **AUSTIN APP CON**: 120.825
- **SAN MARCOS TOWER**: 126.825 (CTAF)
- **GND CON**: 120.125
- **CLNC DEL**: 120.125
- **CLNC DEL**: 121.35 (when twr closed)

**GND CON**

- **ATIS**: 120.825
- **AUSTIN APP CON**: 119.0
- **SAN MARCOS TOWER**: 126.825 (CTAF)
- **GND CON**: 120.125
- **CLNC DEL**: 120.125
- **CLNC DEL**: 121.35 (when twr closed)

**APP CRS**

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<th>WAAS CH</th>
<th>APP CRS</th>
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<th>TDZE</th>
<th>Apt Elev</th>
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<td>081°</td>
<td>6330</td>
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<td>595</td>
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</table>

**ATIS**

- **AUSTIN APP CON**: 120.825
- **SAN MARCOS TOWER**: 126.825 (CTAF)
- **GND CON**: 120.125
- **CLNC DEL**: 120.125
- **CLNC DEL**: 121.35 (when twr closed)

**RNP APCH**

- **Circling NA for Cat E SW of Rwy 13-31, Rwy 8 helicopter visibility reduction below ¾ SM NA.**
- **Baro-VNAV NA when using New Braunfels altimeter setting.**
- **For uncompensated Baro-VNAV systems, LNAV/ VNAV NA below -16°C or above 54°C. VDP NA with New Braunfels altimeter setting and increase LPV DA to 882, LNAV/VNAV DA to 953 and increase all MDA 60 feet; increase LNAV Cat C/D/E and Circling Cat C/D visibility ¾ SM.**

**ATIS**

- **AUSTIN APP CON**: 120.825
- **SAN MARCOS TOWER**: 126.825 (CTAF)
- **GND CON**: 120.125
- **CLNC DEL**: 120.125
- **CLNC DEL**: 121.35 (when twr closed)

**ATIS**

- **AUSTIN APP CON**: 120.825
- **SAN MARCOS TOWER**: 126.825 (CTAF)
- **GND CON**: 120.125
- **CLNC DEL**: 120.125
- **CLNC DEL**: 121.35 (when twr closed)

**RNP APCH**

- **Circling NA for Cat E SW of Rwy 13-31, Rwy 8 helicopter visibility reduction below ¾ SM NA.**
- **Baro-VNAV NA when using New Braunfels altimeter setting.**
- **For uncompensated Baro-VNAV systems, LNAV/ VNAV NA below -16°C or above 54°C. VDP NA with New Braunfels altimeter setting and increase LPV DA to 882, LNAV/VNAV DA to 953 and increase all MDA 60 feet; increase LNAV Cat C/D/E and Circling Cat C/D visibility ¾ SM.**
RNAV (GPS) RWY 13
SAN MARCOS RGNL (HYI)

HOLD
3000
3500

AUSTIN, TEXAS

Amdt 2C  12AUG21

ATIS  120.825
AUSTIN APP CON  119.0  370.85
SAN MARCOS TOWER*  126.825 (CTAF)  
GND CON  120.125
CLNC DEL  121.35
CLNC DEL (when twr closed)  121.35

Circling NA for Cat E southwest of Rwy 13-31. Inop table does not apply to LPV all Cats.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.
For inap ALS, increase LNAV/VNAV Cat E visibility to 1 SM and LNAV Cat E visibility to 1½ SM.

Circling NA for Cat E southwest of Rwy 13-31. Inop table does not apply to LPV all Cats.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.
For inap ALS, increase LNAV/VNAV Cat E visibility to 1 SM and LNAV Cat E visibility to 1½ SM.

AUSTIN, TEXAS

Amdt 2C  12AUG21

AUSTIN, TEXAS

Amdt 2C  12AUG21

RNAV (GPS) RWY 13
SAN MARCOS RGNL (HYI)

HOLD
3000
3500

AUSTIN, TEXAS

Amdt 2C  12AUG21

RNAV (GPS) RWY 13
SAN MARCOS RGNL (HYI)

HOLD
3000
3500

AUSTIN, TEXAS

Amdt 2C  12AUG21

RNAV (GPS) RWY 13
SAN MARCOS RGNL (HYI)

HOLD
3000
3500

AUSTIN, TEXAS

Amdt 2C  12AUG21

RNAV (GPS) RWY 13
SAN MARCOS RGNL (HYI)

HOLD
3000
3500

AUSTIN, TEXAS

Amdt 2C  12AUG21

RNAV (GPS) RWY 13
SAN MARCOS RGNL (HYI)

HOLD
3000
3500

AUSTIN, TEXAS

Amdt 2C  12AUG21

RNAV (GPS) RWY 13
SAN MARCOS RGNL (HYI)

HOLD
3000
3500

AUSTIN, TEXAS

Amdt 2C  12AUG21

RNAV (GPS) RWY 13
SAN MARCOS RGNL (HYI)

HOLD
3000
3500

AUSTIN, TEXAS

Amdt 2C  12AUG21

RNAV (GPS) RWY 13
SAN MARCOS RGNL (HYI)
RNAV (GPS) RWY 17
SAN MARCOS RGNL (HYI)

Holding Pattern
CIRCLING 171°

MISSED APCH FIX
CILAK

CAT E visibility 1/2 mile; increase LNAV/VNAV DA 43 feet and all systems, LNAV/VNAV NA below -16°C (3°F) or above 54°C (130°F). When local altimeter setting not received, use New Braunfels altimeter setting and increase all DA 43 feet and all MDA 60 feet; increase LPV all Cats and Circling Cat C/D visibility ¼ mile; increase LNAV/VNAV all Cats and LNAV Cat C/D/E visibility ½ mile. Circling NA for Cat E SW of Rwy 13-31.

DME/DME RNP-0.3 NA. VDP NA with New Braunfels altimeter setting. Helicopter visibility reduction below ½ SM NA.

ATIS 120.825
AUSTIN APP CON 119.0 370.85
SAN MARCOS TOWER 126.825 (CTAF)
GND CON 120.125
CLNC DEL 120.125
CLNC DEL 121.35 (when twr closed)
AUSTIN, TEXAS
Orig B 23JUN16

SAN MARCOS RGNL (HYI)

29°54′N-97°52′W

AL-502 (FAA)

RNAV (GPS) RWY 26
SAN MARCOS RGNL (HYI)

Baro-VNAV NA when using New Braunfels altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (3°F) or above 54°C (130°F). When local altimeter setting not received, use New Braunfels altimeter setting and increase all DA 43 feet and all MDA 60 feet; increase LPV and LNAV/VNAV all Cats, and LNAV Cat C/D/E visibility ½ mile and Circling Cat C/D visibility ¾ mile. Circling NA for Cat E SW of Rwy 13-31. DME/DME RNP 0.3 NA. VDP NA with New Braunfels altimeter setting. Helicopter visibility reduction below 3/8 SM NA.

MISSED APPROACH: Climb to 3000 direct RAJRY and hold.

For uncompensated Baro-VNAV systems, LPV DA 837-3 250 (300-3½)

LPV VNAV DA 866-7½ 279 (300-3½)

LNAV MDA 1060-1 473 (500-1)

CIRCLING MDA 1080-1 485 (500-1)

CIRCLING MDA 1120-1 525 (600-1)

CIRCLING MDA 1240-1½ 645 (700-1½)

CIRCLING MDA 1320-2½ 725 (800-2½)

CIRCLING MDA 1340-2½ 745 (800-2½)

CIRCLING MDA 1060-1½ 473 (500-1½)

CIRCLING MDA 1120-1 525 (600-1)

CIRCLING MDA 1240-1½ 645 (700-1½)

CIRCLING MDA 1320-2½ 725 (800-2½)

CIRCLING MDA 1340-2½ 745 (800-2½)

CIRCLING MDA 1060-1½ 473 (500-1½)

CIRCLING MDA 1120-1 525 (600-1)

CIRCLING MDA 1240-1½ 645 (700-1½)

CIRCLING MDA 1320-2½ 725 (800-2½)

CIRCLING MDA 1340-2½ 745 (800-2½)

CIRCLING MDA 1060-1½ 473 (500-1½)

CIRCLING MDA 1120-1 525 (600-1)

CIRCLING MDA 1240-1½ 645 (700-1½)

CIRCLING MDA 1320-2½ 725 (800-2½)

CIRCLING MDA 1340-2½ 745 (800-2½)

CIRCLING MDA 1060-1½ 473 (500-1½)

CIRCLING MDA 1120-1 525 (600-1)

CIRCLING MDA 1240-1½ 645 (700-1½)

CIRCLING MDA 1320-2½ 725 (800-2½)

CIRCLING MDA 1340-2½ 745 (800-2½)

CIRCLING MDA 1060-1½ 473 (500-1½)

CIRCLING MDA 1120-1 525 (600-1)

CIRCLING MDA 1240-1½ 645 (700-1½)

CIRCLING MDA 1320-2½ 725 (800-2½)

CIRCLING MDA 1340-2½ 745 (800-2½)
RNAV (GPS) RWY 31
SAN MARCOS RGNL (HYI)

ATIS 120.825
AUSTIN APP CON 119.0 370.85
SAN MARCOS TOWER 126.825 (CTAF)
GND CON 120.125
CLNC DEL 120.125

MISSED APPROACH: Climb to 3500 direct ORALE and hold.

Baro-VNAV NA when using New Braunfels altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (3°F) or above 54°C (130°F). When local altimeter setting not received, use New Braunfels altimeter setting and increase all DA 43 feet and all MDA 60 feet; increase LPV all Cats and LNAV/VNAV all Cats visibility 1/8 mile and LNAV Cat C/D/E and Circling Cat C/D visibility 1/4. Circling NA for Cat E SW of Rwy 13-31. DME/DME RNP-0.3 NA. VDP NA with New Braunfels altimeter setting. Helicopter visibility reduction below 3/4 SM NA.

RNAV (GPS) RWY 31
SAN MARCOS RGNL (HYI)

RNAV (GPS) RWY 31
SAN MARCOS RGNL (HYI)
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 081° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

TAKEOFF RUNWAY 13: Climb on heading 126° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

TAKEOFF RUNWAY 17: Climb on heading 171° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

TAKEOFF RUNWAY 26: Climb on heading 261° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

TAKEOFF RUNWAY 31: Climb on heading 306° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

TAKEOFF RUNWAY 35: Climb on heading 351° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

.... on track 293° to AEROZ, then on SAN ANGELO TRANSITION. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

SAN ANGELO TRANSITION (AEROZ2.SJT)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 081° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 13: Climb on heading 126° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 17: Climb on heading 171° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 26: Climb on heading 261° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 31: Climb on heading 306° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 35: Climb on heading 351° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....

....on track 224° to BNDIA. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 081° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....
TAKEOFF RUNWAY 13: Climb on heading 126° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....
TAKEOFF RUNWAY 17: Climb on heading 171° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....
TAKEOFF RUNWAY 26: Climb on heading 261° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....
TAKEOFF RUNWAY 31: Climb on heading 306° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....
TAKEOFF RUNWAY 35: Climb on heading 351° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....

.... on track 338° to ELOEL, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

ABILENE TRANSITION (ELOEL3.ABI)
FORSS TRANSITION (ELOEL3.FORSS)
KLNGR TRANSITION (ELOEL3.KLNGR)
TAKEOFF RUNWAY 8: Climb on heading 081° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence. . . .
TAKEOFF RUNWAY 13: Climb on heading 126° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence. . . .
TAKEOFF RUNWAY 17: Climb on heading 171° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence. . . .
TAKEOFF RUNWAY 26: Climb on heading 261° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence. . . .
TAKEOFF RUNWAY 31: Climb on heading 306° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence. . . .
TAKEOFF RUNWAY 35: Climb on heading 351° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence. . . .

... on track 090° to ILEXY, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

JAYJO TRANSITION (ILEXY4.JAYJO)
ZENZI TRANSITION (ILEXY4.ZENZI)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 081° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence....

TAKEOFF RUNWAY 13: Climb on heading 126° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence....

TAKEOFF RUNWAY 17: Climb on heading 171° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence....

TAKEOFF RUNWAY 26: Climb on heading 261° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence....

TAKEOFF RUNWAY 31: Climb on heading 306° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence....

TAKEOFF RUNWAY 35: Climb on heading 351° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence....

...on track 279° to MUCKY. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
NOTE: Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 8:** Climb on heading 081° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence....

**TAKEOFF RUNWAY 13:** Climb on heading 126° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence....

**TAKEOFF RUNWAY 17:** Climb on heading 171° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence....

**TAKEOFF RUNWAY 26:** Climb on heading 261° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence....

**TAKEOFF RUNWAY 31:** Climb on heading 306° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence....

**TAKEOFF RUNWAY 35:** Climb on heading 351° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence....

....on track 024° to SAYBR. Maintain altitude assigned by ATC.

Expect filed altitude 10 minutes after departure.
**RNAV (GPS) RWY 17**

**BALLINGER, TEXAS**

**RNAV (GPS) RWY 17**

**BRUCE FLD (E30)**

---

**SAN ANGELO APP CON**

| 125.35 | 354.1 |

**CTAF**

| 122.9 |

---

**BRUCE FLD**

**ELEV 1739**

**TDZE 1738**

---

**Missed Approach**

Climb to 4000 direct WIKUS and hold.

---

**Baro-VNAV NA.**

DME/DME RNP-0.3 NA.

Use San Angelo altimeter setting, when not received use Brady altimeter setting and increase all DA 15 feet and all MDA 20 feet, and increase LPV and LNAV/VNAV all Cats visibility ½ mile.

---

**Category**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>2089-1 ½</td>
<td>351 (400-1 ½)</td>
<td>NA</td>
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<tr>
<td>LNAV/ VNAV DA</td>
<td>2089-1 ½</td>
<td>351 (400-1 ½)</td>
<td>NA</td>
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<tr>
<td>LNAV MDA</td>
<td>2160-1</td>
<td>422 (500-1)</td>
<td>NA</td>
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<tr>
<td>Circling</td>
<td>2220-1</td>
<td>481 (500-1)</td>
<td>NA</td>
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</tbody>
</table>
RNAV (GPS) RWY 35
BRUCE FLD (E30)

Holding Pattern
172°
352°

TCH 40
NA

CTAF
122.9

MISSED APPROACH: Climb to 3500 direct RIEEE and hold.

SAN ANGELO APP CON*
125.35 354.1

SAN ANGELO
SJT
Procedure NA for arrivals at SJT VORTAC via airway radials 014 CW 102.

WAAS
CH 86228
W35A

APP CRS 352°
Rwy Idg 3909
TDZE 1738
Apt Elev 1738

DME/DME RNP-0.3 NA. Use San Angelo Rgnl/Mathis Fld altimeter setting, if not received use Curtis Field altimeter setting and increase all DA/MDAs 20 feet.

4 NM
Holding Pattern
WIKUS

4000
172°
352°

GP 3.00°
TCH 40

CATEGORY
A
B
C
D

LPV DA
2089-1 351 (400-1¾)
NA

LNAV MDA
2160-1 422 (500-1)
2160-1¼ 422 (500-1¾)
NA

CIRCLING
2220-1 482 (500-1)
2220-1½ 482 (500-1½)
NA

MIRL Rwy 17-35

3500 RIEEE

4 NM
via airway radials 014 CW 102.

ELEV 1738
TDZE 1738

SC-3, 11 JUL 2024 to 05 SEP 2024

AL-6881 (FAA)
24137

BRUCE FLD (E30)

31°40'N-99°59'W

BALLINGER, TEXAS
Orig-A 20DEC07
RNAV (GPS) RWY 12

BEEVILLE MUNI (BEA)

**AWOS-3**

| 118.675 |

**HOUSTON CENTER**

| 134.6 | 322.5 |

**UNICOM**

| 122.8 (CTAF) |

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 18 and 36 NA at night. Rwy 12 helicopter visibility reduction below ¾ SM NA.**

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

**307° to RW12**

**2000**

**GP 3.00°**

**TCH 40**

**2000**

**307°**

**127°**

**2000**

**4 NM**

**Holding Pattern**

**NEYIB**

**ECEPA**

**JOSUK**

**RW12**

**127° to RW12**

**2.2 NM to RW12**

**VGS** and RNAV glidepath not coincident (VGS Angle 3.00/TCH 20).

**CATEGORY**

| A | B | C | D |

| LPV | DA | 518-1 | 250 (300-1) | NA |
| LNAV/VNAV | DA | 880-1¾ | 612 (700-1¾) | NA |
| LNAV | MDA | 1000-1 | 732 (800-1) | 1000-2 | 732 (800-2) | NA |
| CIRCLING | 1000-1 | 727 (800-1) | 1000-2 | 727 (800-2) | NA |
RNAV (GPS) RWY 30
BEEVILLE MUNI (BEA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Circling Rwy 18 and 36 NA at night. Rwy 30 helicopter visibility reduction below ½ SM NA.

AWOS-3 118.675
HOUSTON CENTER 134.6 322.5
UNICOM 122.8 [CTAF]

MISSED APPROACH: Climb to 2000 direct NEYIB and hold.

ELEV 273
TDZE 262

APP CRS
Rwy Idg
W30A
453
262
273

WAAS
CH 53741
307°

RNAP APCH.

Amdt 1 24MAY18

28°22'N-97°48'W
Use Corpus Christi Intl altimeter setting.
Circling NA to Rwy's 18 and 36.

### VOR/DME RWY 12

#### MISSED APPROACH:

#### CATEGORY

<table>
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<tr>
<td>S-12</td>
<td>1000-1</td>
<td>1000-1½</td>
<td>1000-2</td>
<td>NA</td>
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<tr>
<td>C</td>
<td>1000-1</td>
<td>1020-1½</td>
<td>1120-2½</td>
<td>847 (900-2½)</td>
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<td>732 (800-1)</td>
<td>732 (800-1½)</td>
<td>732 (800-2)</td>
<td></td>
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</tbody>
</table>

#### Turn Procedure

- **YICKS**: THX 9
- **AKVI**: THX 15

#### Procedure Notes

- **2000**: 106°
- **VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 20).**
RNAV (GPS) RWY 31
CHASE FLD INDUSTRIAL (TX2)

BARO-VNAV NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct INAHI and hold.

BEA AWOS-3
118.675

HOUSTON CENTER
134.6 322.5

UNICOM
122.8 (CTAF)

Baro-VNAV NA. DME/DME RNP-0.3 NA.

Category
A
B
C
D

LPV DA
432-1/8
250 (300-3/8)

LNAV/VNAV DA
461-1/8
279 (300-3/8)

LNAV MDA
620-1
438 (500-1)

620-1½
438 (500-1½)

1800

311°

INAH1I

KINGSVILLE 4 MOA

WEDBU

3000

311°

311°

4 NM Holding Pattern

GP 3.00°
TCH 50

5 NM

6 NM

MIRL Rwy 13-31

BEEVILLE, TEXAS

Orig 17AUG17

28°22'N-97°40'W

67
RNAV (GPS) RWY 16

REAGAN COUNTY (E41)

MISSED APPROACH: Climb to 5000 direct JEKAB and hold.

When local altimeter not received, use San Angelo altimeter setting. Circling NA east of Rwy 16-34.
Arrival procedure NA via V-94-611, T317 westbound without holding at MOLLY. ATC clearance required.

Procedure NA via V-560 eastbound without holding at PIERS. ATC clearance required.

Inop table does not apply.
Use El Paso Inlet altimeter setting. Inop table does not apply. Arrivals expect RADAR vectors to final when restricted areas are active.

**TACAN only equipped act:** Final approach holding pattern not authorized. RADAR vectors required to final approach course.

Procedure not authorized via V-560 eastbound without holding at PIERS. ATC clearance required.

---

**ATIS**

<table>
<thead>
<tr>
<th>EL PASO APP CON</th>
<th>TOWER</th>
<th>EL PASO CLNC DEL</th>
<th>ASR</th>
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<tr>
<td>120.0 254.3</td>
<td>127.9</td>
<td>125.0 379.1</td>
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</table>

**Notes:**
- Holding pattern at 10000 ft MSL.
- El Paso Inlet airport is 2.5 NM southeast with same runway configuration.
- Category: A
- CIRCLING

---

**VOR or TACAN RWY 22**

**BIGGS AAF (KBIF)**

**FORT BLISS, TEXAS**

**EWM VORTAC**

- 112.4
- Chan 71

**APCH CRS**

<table>
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<tr>
<th>TDZE</th>
<th>Arpt Elev</th>
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<tbody>
<tr>
<td>3947</td>
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</table>

**Rwy Idg**

| 13554 |

**[USA]**

---

**Radar Required when R5103A, R5103B, R5103C, R5107K are active**

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**ELEV 3947**

**TDZE 3947**
RNAV (GPS) RWY 17
CURTIS FLD (BBD)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). When local altimeter setting not received, use Junction altimeter setting and increase all DA/MDA 120 feet, increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ½ mile, and LNAV Cat C visibility ½ mile. VDP and Baro-VNAV NA when using Junction altimeter setting.

Procedure NA for arrivals at LLO VORTAC on V161-568 southbound.

MISSED APPROACH: Climb to 4000 ft direct CEGOS and on track 228° to BREDY and hold.
RNAV (GPS) RWY 35
CURTIS FLD (BBD)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). When local altimeter setting not received, use Junction altimeter setting and increase all DA/MDA 120 feet, increase LPV, LNAV/VNAV all CRs below 3/4 SM NA.

Junction altimeter setting. Rwy 35 helicopter visibility reduction below ½ SM NA.

**RNAV (GPS) RWY 35**

**CURTIS FLD (BBD)**

**WAAS**
- CH 49108
- W35A

**APP CRS** 353°

**Rwy Idg** 4605
**TDZE** 1823
**Apt Elev** 1827

**AWOS 3** 118.375
**HOUSTON CENTER** 132.35 317.5
**UNICOM** 122.8 (CTAF)

**UNICOM**
- BRADY, TEXAS
- Amdt 18 07NOV19

**TCH 48**

**ELEV 1827**
**TDZE 1823**

**GR 3.00°**
**TCH 48**

**Apt Elev** 1827
**Rwy 35** HLD

**MIRL Rwy 17-35**

**3 NM**

**0.3% UP**

**0.7% UP**

**353° to ZILAG**

**2.1 NM to ZILAG**

**holding pattern**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**

**RNAV (GPS) RWY 35**

**C**

**D**

**2073-1 250 (300-1)**

**NA**

**2107-1 284 (300-1)**

**NA**

**2240-1 417 (500-1)**

**417 (500-1¼)**

**NA**
RNAV (GPS) RWY 18

BROWNSVILLE/SOUTH PADRE ISLAND INTL (BRO)

TWR

A

P

V

ELEV

CIRCLING

1900

3.00°

HETUK

4.2 NM

RELAX

1900

1900 direct RELAX and hold.

1900 then climbing left turn to

MISSED APPROACH: Climb to

1900 direct RELAX and hold.

Rwy 18 helicopter visibility reduction below 3/4 SM NA. When local altimeter not received, use Port Isabel altimeter setting and increase all MDA 40 feet; increase LNAV Cats C and D visibility 1/4 mile and CIRCLING Cat D 1/4 mile.

Procedure NA for arrivals at RELAX on V163 northbound.

Category

LP MDA

LNAV MDA

CIRCLING

440-1

540-1

540-1 1/2

680-2

418 (500-1)

518 (600-1)

518 (600-1 1/2)

658 (700-2)

 citas: 06/07/2024 a 05/09/2024

UNITED STATES

MEXICO

UNITED STATES

MEXICO

UNITED STATES

MEXICO

UNITED STATES

MEXICO
Procedure NA for arrivals at RELAX on V163 northbound.

MISSED APPROACH: Climb to 2000 direct FIRTA and hold.

<table>
<thead>
<tr>
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<th>A</th>
<th>B</th>
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<td>LPV DA</td>
<td>270-7/4 250 (300-7/4)</td>
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<td>LNAV MDA</td>
<td>380-1 360 (400-1)</td>
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<td>CIRCLING</td>
<td>440-1 418 (500-1) 478 (500-1) 478 (500-1 1/2) 680-2</td>
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</tr>
</tbody>
</table>

LG NAV and RNAV glidepath not coincident

(VGSI Angle 3.00/TCH 68).

* LNAV only.

- 0.9 NM to RW31
- 312°
- 520*
- 1700
- 300°
- GP 3.00°
- TCH 68

LG NAV only.

- 0.9 NM to RW31
- 312°
- 520*
- 1700
- 300°
- GP 3.00°
- TCH 68
LOC BC RWY 31
BROWNSVILLE/SOUTH PADRE ISLAND INTL (BRO)

MAP CRS 180
TDZE 150
Apt Elev

Missed Approach: Climb to 1900 on I-BRO localizer NW course (312°) to DEPOO LOM/ I-BRO 7.3 DME and hold.

Helicopter visibility reduction below ½ SM NA. When local altimeter setting not received, use Port Isabel altimeter setting and increase all MDA 40 ft; increase Circling Cat D visibility ½ mile. Circling to Rwy 18 NA at night. ADF or DME required. VDP NA when using Port Isabel altimeter setting.

Disregard Glide Slope Indications.

Back Course

Loc/DME I-BRO
110.3
Chan 40

APP CRS
312°

Rwy Idg
7399

TDZE
20

Apt Elev
22

GND CON
121.9

UNICOM
122.95

ATIS
128.55

Valley APP Con
119.5 257.6

Brownsville Tower
118.9 (CTAF)

UNICOM
128.55

121.9

122.95

Chan 110

Localizer (IAP)
110.3

I-BRO 7.3

Keep Right

Wigip
I-BRO 0.5

Remain within 10 NM

Disregard Glide Slope Indications.

VGSI and descent angles not coincident

(VGSI Angle 3.00/TCH 68).

Circling

BR

(2600)

(1600)

312°

MISA 25 NM

79

79
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**RNAV (GPS) RWY 17**  
**BROWNWOOD RGNL (BWD)**

### RNP APCH:
- Rwy 17 helicopter visibility reduction below 3/4 SM NA.

### MALS
- MISSED APPROACH: Climb to 4000 direct PEQIS and hold.

<table>
<thead>
<tr>
<th>WAAS</th>
<th>APP CRS</th>
<th>Rwy Idg</th>
<th>Apt Elev</th>
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<tr>
<td>CH 70325 W17A</td>
<td>175°</td>
<td>5599</td>
<td>1387</td>
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<td>1387</td>
<td>1000</td>
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### UNICOM
- 122.8 (CTAF)

### FORT WORTH CENTER
- 127.45 290.3

### AWOS-3
- 118.325

---

**CIRCLING RNAV (GPS) RWY 17**

**BROWNWOOD, TEXAS**

Amdt 1C 14JUL22

31°48'N-98°57"W

**RNAV (GPS) RWY 17**  
**BROWNWOOD RGNL (BWD)**

### Holding Pattern
- **GP 3.00° TCH 52**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
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<th>C</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>1637-1/4</td>
<td>250 (300-3/4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>1800-3/4</td>
<td>413 (500-3/4)</td>
<td>1800-1/4</td>
<td>413 (500-1/4)</td>
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<tr>
<td>CIRCLING</td>
<td>1840-1</td>
<td>453 (500-1)</td>
<td>1980-1/2</td>
<td>2160-2/3</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>593 (600-1/3)</td>
<td>773 (800-2/3)</td>
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</table>

**AWOS-3**
- 118.325

**FORT WORTH CENTER**
- 127.45 290.3

**UNICOM**
- 122.8 (CTAF)

---

**BROWNWOOD, TEXAS**

Amdt 1C 14JUL22

31°48'N-98°57"W

**RNAV (GPS) RWY 17**  
**BROWNWOOD RGNL (BWD)**

---

**CIRCLING RNAV (GPS) RWY 17**

**BROWNWOOD, TEXAS**

Amdt 1C 14JUL22

31°48'N-98°57"W

**RNAV (GPS) RWY 17**  
**BROWNWOOD RGNL (BWD)**

---

**CIRCLING RNAV (GPS) RWY 17**

**BROWNWOOD, TEXAS**

Amdt 1C 14JUL22

31°48'N-98°57"W
RNAV (GPS) RWY 35
BROWNWOOD RGNL (BWD)

**MISSED APPROACH:** Climb to 4000 direct MUSRE and hold.

**AWOS-3**

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>FORT WORTH CENTER</th>
<th>UNICOM</th>
</tr>
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<tbody>
<tr>
<td>118.325</td>
<td>127.45 290.3</td>
<td>122.8 (CTAF)</td>
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**ELEV**

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<tr>
<td>1387</td>
<td>1386</td>
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</table>

**Rwy 35 helicopter visibility reduction below 3/4 SM NA.**

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**AL-705 (FAA)**

**20142**

---

**Category:**

<table>
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<tr>
<td>LPV DA</td>
<td>1636-1</td>
<td>250 (300-1)</td>
<td>1780-1 ½</td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>1780-1 394 (400-1)</td>
<td>394 (400-1 ½)</td>
<td>394 (400-1 ¼)</td>
</tr>
</tbody>
</table>
MISSED APPROACH: Climb to 3600 directly WDR VOR/DME and hold.

Amdt 1D 15JUL21

BROWNWOOD, TEXAS

CIRCLING

SC-3, 11 JUL 2024 to 05 SEP 2024

BROWNWOOD RGNL (BWD)

SC-3, 11 JUL 2024 to 05 SEP 2024

BROWNWOOD, TEXAS

118.325

351°

AWOS-3

UNICOM

127.45 290.3

122.8 (CTAF)

ELEV 1387

TDZE 1386

UNICOM

Rwy 35 helicopter visibility reduction below 3/4 SM NA.
**RNAV (GPS) RWY 1**

**BURNET MUNI/KATE CRADDOCK FLD (BMQ)**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

### RNP APCH - GPS

- **Rwy 1** helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Lago Vista altimeter setting and increase all MDA 60 feet.

### ASOS

<table>
<thead>
<tr>
<th>Location</th>
<th>Temp</th>
<th>Wind</th>
<th>Visibility</th>
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<tr>
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### HOUSTON CENTER

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<th>Channel</th>
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<td>317.5</td>
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### UNICOM

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

### Procedure NA for arrivals at AMUSE on V565 southeast bound and V163 southbound.

### MISSED APPROACH: Climb to 3500 direct DLORA and hold.

### UNICOM

- **122.8 (CTAF)**

### Category

<table>
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<tr>
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<th>A</th>
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<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LNAV MDA</td>
<td>1660-1¼</td>
<td>391 (400-1¼)</td>
<td>NA</td>
<td></td>
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</table>
CARRIZO SPRINGS, TEXAS

RNAV (GPS) RWY 13
DIMMIT COUNTY (CZT)

MISSED APPROACH: Climb to 3000 direct ADDIL and hold.

WAAS CH 82133

APP CRS 127°

Rwy Idg 5003

TDZE 598

Apt Elev 598

Boro-VNAV NA. DME/DME RNP-0.3 NA. Use Cotulla altimeter setting; when not received use Uvalde altimeter setting and increase all DA 52 feet, all MDA 60 feet and increase LPV all Cats, LNAV/VNAV all Cats, and Circling Cat C visibility ¾ mile. Helicopter visibility reduction below ¾ SM NA.

AWOS-3
119.625

COT ASOS
118.325

HOUSTON CENTER
127.8 307.2

UNICOM
122.8 (CTAF)

CARRIZO SPRINGS, TEXAS

AL-6272 (FAA)

22139

RNAV (GPS) RWY 13
DIMMIT COUNTY (CZT)

CARRIZO SPRINGS, TEXAS

Orig 13NOV14

28°31'N 99°49'W

DIMMIT COUNTY (CZT)

CARRIZO SPRINGS, TEXAS

Orig 13NOV14

28°31'N 99°49'W

DIMMIT COUNTY (CZT)

CARRIZO SPRINGS, TEXAS

Orig 13NOV14

28°31'N 99°49'W

DIMMIT COUNTY (CZT)
RNAV (GPS) RWY 31
DIMMIT COUNTY (CZT)

Missed Approach:
Climb to 3000 direct WEGID and hold.

Procedure NA for arrivals at COT VORTAC on V17 northbound.

ELEV 598
TDZE 589

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
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<th>C</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>931-1 1/8</td>
<td>342 (400-1 1/8)</td>
<td>NA</td>
<td></td>
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<tr>
<td>LNAV/ VNAV DA</td>
<td>931-1 1/8</td>
<td>342 (400-1 1/8)</td>
<td>NA</td>
<td></td>
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<tr>
<td>LNAV MDA</td>
<td>1040-1</td>
<td>451 (500-1)</td>
<td>1040-1 3/8</td>
<td>451 (500-1 3/8)</td>
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<tr>
<td>CIRCLING</td>
<td>1160-1</td>
<td>562 (600-1)</td>
<td>1240-1</td>
<td>642 (700-1)</td>
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</table>

Baro-VNAV NA. DME/DME RNP-0.3 NA. Use Cotulla altimeter setting; when not received use Uvalde altimeter setting and increase all DA 52 feet, all MDA 60 feet and increase LPV all Cats, LNAV/VNAV all Cats, and Circling Cat C visibility ½ mile. Helicopter visibility reduction below ¾ SM NA.
**RNAV (GPS) RWY 16**

**CASTROVILLE MUNI (CVB)**

**APP CRS**

- **Apt Elev** 774
- **TDZE** 774
- **Rwy Idg** 5001
- **W16A CH 86838**

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

**Category**

- **A**
  - **LP MDA** 1200-1 426 (500-1)
  - **LNAV MDA** 1240-1 466 (500-1)
  - **CIRCLING** 1240-1 466 (500-1)
- **B**
  - **LP MDA** NA
  - **LNAV MDA** NA
  - **CIRCLING** NA
- **C**
  - **LP MDA** 1200-1 426 (500-1)
  - **LNAV MDA** 1240-1 466 (500-1)
  - **CIRCLING** 1240-1 466 (500-1)
- **D**
  - **LP MDA** NA
  - **LNAV MDA** NA
  - **CIRCLING** NA

**AWOS-3**

- **119.25**

**UNICOM**

- **122.8 (CTAF)**

**SAN ANTONIO APP CON**

- **118.05**
- **353.5**

**157°**

- **0.5 NM**
- **1 SM**
- **2 NM**

**Castroville, Texas**

- **Amdt 1A 04FEB16**

**Procedure NA for arrivals on CSI VORTAC airway radials 105 CW 138.**

---

**MISSED APCH FIX**

- **3000 SHEOL**
- **4 NM**

**MISSED APPROACH FIX**

- **157°**
- **3000 SHEOL**

---

**CENTER POINT**

- **CSI**

---

**ELEV 774**

**TDZE 774**

---

**MIRL Rwy 16-34**

---

**SAN ANTONIO APP CON**

- **118.05**
- **353.5**

**UNICOM**

- **122.8 (CTAF)**

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**CASTROVILLE, TEXAS**

**Amdt 1A 04FEB16**

---

**29°21'N-98°51'W**

---

**CASTROVILLE MUNI (CVB)**

---

**RNAV (GPS) RWY 16**
RNAV (GPS) RWY 34
CASTROVILLE MUNI (CVB)

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 Lackland AFB (Kelly Fld Annex) altimeter setting: increase all DA/MDA 60 feet and all visibilities ¾ mile. Helicopter visibility reduction below ¾ SM NA.

Procedure NA for arrivals at SOMER on V17 northbound.

Amdt 1 15OCT15

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Lackland AFB (Kelly Fld Annex) altimeter setting: increase all DA/MDA 60 feet and all visibilities ¾ mile. Helicopter visibility reduction below ¾ SM NA.

Night landing: Rwy 16 NA.

AWOS 3
SAN ANTONIO APP CON
UNICOM
119.25
118.05 353.5
122.8 (CTAF)

Procedure NA for arrivals at SOMER on V17 northbound.

Amdt 1 15OCT15
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb on heading 157° or as assigned by ATC, for vectors to TREVA, thence . . .

**TAKEOFF RUNWAY 34:** Climb on heading 337° or as assigned by ATC, for vectors to TREVA, thence . . .

. . . on track 305° to TATAR, then on track 305° to ALISS. Maintain ATC assigned altitude.

**TAKEOFF MINIMUMS**
Rwys 16, 34: Standard.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° or as assigned by ATC, for vectors to YENNS, thence . . . .
TAKEOFF RUNWAY 34: Climb on heading 337° or as assigned by ATC, for vectors to YENNS, thence . . . .

. . . . on track 161° to LILJO, then on track 161° to SLENA, then on transition.
Maintain ATC assigned altitude.

BRENI TRANSITION (SLENA1.BRENI)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° or as assigned by ATC, for vectors to WRKIT, thence . . . .

TAKEOFF RUNWAY 34: Climb on heading 337° or as assigned by ATC, for vectors to WRKIT, thence . . . .

WYLSN TRANSITION (SNIDR1.WYLSN)
WHAEL TRANSITION (SNIDR1.WHAEL)
WEMAR TRANSITION (SNIDR1.WEMAR)
SEEDS TRANSITION (SNIDR1.SEEDS)
MOLLR TRANSITION (SNIDR1.MOLLR)
FFSSH TRANSITION (SNIDR1.FFSSH)
CAAGE TRANSITION (SNIDR1.CAAGE)
BLUMS TRANSITION (SNIDR1.BLUMS)

Maintain ATC assigned altitude.

. . . on track 080° to CHURN, then on track 085° to SNIDR, then on transition.

Note: Chart not to scale.
TJANO ONE DEPARTURE (RNAV)

TJANO ONE DEPARTURE (RNAV) 25JAN24

SAN ANTONIO DEP CON
118.05 353.5

RNAV 1 - DME/DME IRU or GPS.
RADAR required.

TOP ALTITUDE:
ASSIGNED BY ATC

118.05 353.5

SAN ANTONIO DEP CON
118.05 353.5

RNAV 1 - DME/DME IRU or GPS.
RADAR required.

TOP ALTITUDE:
ASSIGNED BY ATC

Rwys 16, 34: Standard.

TAKEOFF MINIMUMS
Rwys 16, 34: Standard.

NOTE: For non-GPS equipped aircraft, THX and SAT DME must be operational.

TAKEOFF RUNWAY 16: Climb on heading 157° or as assigned by ATC, for vectors to LVACA, thence . . . .

TAKEOFF RUNWAY 34: Climb on heading 337° or as assigned by ATC, for vectors to LVACA, thence . . . .

. . . . on track 205° to TJANO, then on Transition. Maintain ATC assigned altitude.

KAHAN TRANSITION (TJANO1.KAHAN)
ZANNI TRANSITION (TJANO1.ZANNI)

Note: Chart not to scale.
YODUH ONE DEPARTURE (RNAV)

RNAV 1 - DME/DME IRU or GPS.
RADAR required.

TOP ALTITUDE: ASSIGNED BY ATC

NOTE: Chart not to scale.

RN: Chart not to scale.

NOTE: Aircraft destined for airports north/northeast of DFW terminal area must file the KLNGR Transition.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° or as assigned by ATC, for vectors to SITHH, thence . . .
TAKEOFF RUNWAY 34: Climb on heading 337° or as assigned by ATC, for vectors to SITHH, thence . . .

. . . on track 002° to YODUH, then on Transition. Maintain ATC assigned altitude.

KLNGR TRANSITION (YODUH1.KLNGR)
PRTZY TRANSITION (YODUH1.PRTZY)
RNAV (GPS) RWY 15
COLEMAN MUNI (COM)

AWOS-3PT 119.1
FORT WORTH CENTER 127.45 290.3
UNICOM 122.8 (CTAF) 0

HOLD 6000

328°

6000

4000

WIBUG

GP 3.00°

TCH 40

4 NM Holding Pattern

WIBUG

IREZO

148°

1.7 NM to RW15

583 (600-1)

MIRL Rwy 15:33 0

COLEMAN, TEXAS
AL-881 (FAA)

Amdt 1B 19MAY22

31°50'N-99°24'W

97
RNAV (GPS) RWY 33

COLEMAN MUNI (COM)

AWOS-3PT 119.1

FORT WORTH CENTER 127.45 290.3

UNICOM 122.8 (CTAF)

COLEMAN, TEXAS

31°50'N-99°24'W

RNAV (GPS) RWY 33

COLEMAN MUNI (COM)

Amdt 1 10OCT19

SC-3, 11 JUL 2024 to 05 SEP 2024
**RNAV (GPS) RWY 17**

**COMANCHE COUNTY-CITY (MKN)**

**AWOS-3**

<table>
<thead>
<tr>
<th>FORT WORTH CENTER</th>
<th>UNICOM (CTAF)</th>
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<tbody>
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<td>118.575</td>
<td>127.15 314.0</td>
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<td>123.075</td>
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**VNAV**

- **WAAS CH 97436**
- **W17A**
- **APP CRS 173°**
- **Rwy Idg 4497**
- **TDZE 1387**
- **Apt Elev 1387**

**Notes:**
- **Night landing:** Rwy 35 NA. DME/DME RNP-0.3 NA. When local altimeter setting is not received, use Brownwood altimeter setting; increase all DA 46 feet and all MDA 60 feet, increase LNAV/VNAV visibility all Cats 1/2 mile. Baro-VNAV and VDP NA when using Brownwood altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 17°C (2°F) or above 54°C (130°F).

**MISSED APPROACH:**
- Climb to 4000 and hold.

**AVAILIBILITY:**

- **LPV DA 1637-1 250 (300-1) NA**
- **LNAV/VNAV DA 1686-1 299 (300-1) NA**
- **LNAV MDA 1760-1 373 (400-1) NA**
- **CIRCLING 2100-1 713 (800-1) NA**

**Category:**

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

**Comanche, Texas**

**Amdt 1A 23JUN16**

**COMANCHE, TEXAS**

**AL-10216 (FAA)**

**23278**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**VNAV LPV DA**

- **LPV DA**
- **3.00° TCH 40**
- **LNAV/VNAV DA**
- **LNAV MDA**
- **CIRCLING**

**CIRAR**

- **CIRAR (IF/IAF)**
- **HUPIN (FAF)**
- **ZALIR (MKN)**

**AWOS-3**

- **118.575**

**Fort Worth Center**

- **127.15 314.0**

**Unicom (CTAF)**

- **123.075**

**AWOS-3**

- **118.575**

**Fort Worth Center**

- **127.15 314.0**

**Unicom (CTAF)**

- **123.075**

**AWOS-3**

- **118.575**

**Fort Worth Center**

- **127.15 314.0**

**Unicom (CTAF)**

- **123.075**

**MINUS APPROACH FIX**

- **ZALIR**

**CIRAR**

- **CIRAR (IF/IAF)**
- **HUPIN (FAF)**
- **ZALIR (MKN)**

**MIRL Rwy 17-35**

- **MIRL Rwy 17-35**

**COMANCHE COUNTY CITY**

**31°55'N-98°36'W**

**Amdt 1A 23JUN16**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**

**Category A**

- **DA 1637-1 250 (300-1) NA**

**Category B**

- **DA 1686-1 299 (300-1) NA**

**Category C**

- **MDA 1760-1 373 (400-1) NA**

**Category D**

- **MDA 2100-1 713 (800-1) NA**
RNAV (GPS) RWY 35
COMANCHE COUNTY-CITY (MKN)

**AWOS-3**
118.575

**FORT WORTH CENTER**
127.15 314.0

**UNICOM**
123.075 (CTAF)

**ORIGINAL**
ORIG-B 07OCT21

**RNAV (GPS) RWY 35**

**Category**: A B C D

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<td>2100-1 713 (800-1)</td>
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**AWOS-3**

**Unicom**

**Holding Pattern**

**Visual Segment - Obstacles**

**ZALIR**

**173°**

**173°**

**4000**

**263°**

**353°**

**263°**

**4000**

**353°**

**263°**

**353°**

**263°**

**083°**

**263°**

**353°**

**4000**

**UNICOM**

123.075 (CTAF)

**AWOS-3**

118.575

**FORT WORTH CENTER**

127.15 314.0

**UNICOM**

123.075 (CTAF)

**Category**: A B C D

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<td>2100-1 713 (800-1)</td>
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**AWOS-3**

**Unicom**

**Holding Pattern**

**Visual Segment - Obstacles**

**ZALIR**

**173°**

**173°**

**4000**

**263°**

**353°**

**263°**

**353°**

**083°**

**263°**

**353°**

**263°**

**083°**

**4000**

**UNICOM**

123.075 (CTAF)

**AWOS-3**

118.575

**FORT WORTH CENTER**

127.15 314.0

**UNICOM**

123.075 (CTAF)

**Category**: A B C D

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<td>1840-1 456 (500-1)</td>
<td>1840-1 456 (500-1)</td>
<td>2100-1 713 (800-1)</td>
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</tbody>
</table>
ILS or LOC RWY 13
CORPUS CHRISTI INTL (CRP)

MISSED APPROACH: Climb to 500 then climbing right turn to 2000 on heading 132° and CRP VORTAC, R-169 to SOLON INT/CRP VORTAC 2B DME and hold.

For inop ALS, decrease S-ILS 13Cat E visibility to RVR 4000 and S-LOC 13 Cat C, D, and E visibility to RVR 5500. *RVR 1800 authorized with use of FD or AP or HUD to DA.

Autopilot coupled approach NA below 260.

For inop ALS, increase S-ILS 13 Cat E visibility to RVR 4000 and S-LOC 13 Cat C, D, and E visibility to RVR 5500. *RVR 1800 authorized with use of FD or AP or HUD to DA.

ATIS
126.8
CORPUS APP CON
120.9 348.725
CORPUS TOWER
119.4 257.8
GND CON
121.9 269.15
CLNC DEL
118.55

LOC/DME I-15
110.3
APP CRS
132°
Rwy Idg
7510
TDEE
46
Apt Elev
46

MALSR
AM

GS 3.00°
TCH 50
312°
1700

Use I-15 DME when on the localizer course.

Remain within 15 NM

101
RNAV (RNP) Z RWY 13
CORPORUS CHRISTI INTL (CRP)

For uncompensated Baro-VNAV systems, procedure NA below -1°C (31°F) or above 54°C (130°F). GPS required.

**ATIS** | CORPUS APP CON | CORPUS TOWER | GND CON | CLNCE DEL
---|---|---|---|---
126.8 | 120.9 348.725 | 119.4 257.8 | 121.9 269.15 | 118.55

**SKIDS (RNP 0.90)**
Procedure NA for arrivals at SKIDS on V163 northwest bound.

Procedure NA for arrivals at COPAN on V20-70 northeast bound.

**RNP 0.30 DA**
Max 180 KIAS

**PVT Field Cabaniss**
3 (Pvt)
3.2 NM

**HIRL Rwys 13-31 and 18-36**

**AUTHORIZATION REQUIRED**

**ATIS** | CORPUS APP CON | CORPUS TOWER | GND CON | CLNCE DEL
---|---|---|---|---
126.8 | 120.9 348.725 | 119.4 257.8 | 121.9 269.15 | 118.55

**RNAV (RNP) Z RWY 13**
CORPORUS CHRISTI INTL (CRP)

27°46'N-97°30'W

Amdt 1 26MAY16
RNAV (RNP) Z RWY 31
CORPUS CHRISTI INTL (CRP)

**ATIS**
126.8

**CORPUS APP CON**
120.9 348.725

**CORPUS TOWER**
119.4 257.8

**GND CON**
121.9 269.15

**CLNCR DEL**
118.55

---

**For uncompensated Baro-VNAV systems, procedure NA below -1°C (31°F) or above 54°C (130°F). GPS and RF required.** For inop MALSR, increase RNP 0.14 all Cats visibility to ½ mile.

*Missed approach requires minimum climb of 335 feet per NM to 500.

Procedure NA for arrivals on CRP VORTAC airway radials 169 CW 184.

See planview for multiple IF locations.

**AUTHORIZATION REQUIRED**

27°46'N-97°30'W

**CORPUS CHRISTI INTL (CRP)**

Amdt 1  26MAY16
For uncompensated Baro-VNAV systems, procedure NA below -1°C (-31°F) or above 54°C (130°F). GPS required. For inop MALSRS, increase RNP 0.11 visibility all Cats to RVR 4000. For inop MALSRS, increase RNP 0.30 visibility all Cats to RVR 5900.

Procedure NA for arrivals on CRP VORTAC airway radials 030 CW 184.

CONTACTS:
- ATIS: 126.8
- CORPUS APP CON: 120.9 348.725
- CORPUS TOWER: 119.4 257.8
- GND CON: 121.9 269.15
- CLNC DEL: 118.55

AUTHORIZATION REQUIRED:
- MAALSRS: 110° 290° (RF REQD)
- AUSTS (RNP 0.70) (RF REQD)
- ENMOJ Max 180 KIAS
- YUCUN Max 180 KIAS
- RUVVU Max 180 KIAS

See Planview for multiple IF locations.
RNAV (GPS) RWY 18
CORPUS CHRISTI INTL (CRP)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C or above 54°C. For inop ALS, increase LPV Cat E visibility to 3/4 SM, all LNAV/VNAV visibilities to 1 1/8 SM, and LNAV Cat C, D, and E visibility to 1 3/4 SM.

ATIS
CORPUS APP CON
CORPUS TOWER
GND CON
CLNC DEL

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<td>LPV DA</td>
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<td>LNAV MDA</td>
<td>660-1/2</td>
<td>618 (700-1/2)</td>
<td>660-1 1/8</td>
<td>618 (700-1 1/8)</td>
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<tr>
<td>C</td>
<td>660-1</td>
<td>614 (700-1)</td>
<td>780-1</td>
<td>734 (800-1)</td>
<td>820-2/4</td>
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</tbody>
</table>

Procedure NA for arrivals at SKIDS on V163 northwest bound.

Procedure NA for arrivals at COPAN on V20-70 northeast bound.

RNAV (GPS) RWY 18
CORPUS CHRISTI INTL (CRP)

WAAS CH 53635 W18A

APP CRS 175°
Rwy Idg 6080
TDZE 42
Apt Elev 46

MALSR

ATIS 126.8
CORPUS APP CON 120.9 348.725
CORPUS TOWER 119.4 257.8
GND CON 121.9 269.15
CLNC DEL 118.55
For inop ALS, increase LNAV Cat E visibility to 1½ mile.

Procedure NA for arrivals at SKIDS on V13-20-163 northeast bound.

Procedure NA for arrivals at SOLON on V13-20-163 southbound.

Procedure NA for arrivals at WORRY on V13-V407 northwest bound.

Procedure NA for arrivals at ATHIS on V163 northwest bound.
RNAV (GPS) Y RWY 13
CORPORUS CHRISTI INTL (CRP)

ATIS 126.8
CORPUS APP CON 120.9 348.725
CORPUS TOWER 119.4 257.8
GND CON 121.9 269.15
CLNC DEL 118.55

Procedure NA for arrivals at SKIDS on V163 northwest bound.
RNAV (GPS) Y RWY 31
CORPUS CHRISTI INTL (CRP)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. Procedure NA when Cabaniss Fld traffic patterns active. For inop ALS, increase LPV Cat E visibility to 3/4 SM, LNAV/VNAV all Cats visibility to 3/4 SM, and LNAV Cat E visibility to 1 1/2 SM.

ATIS
126.8

CORPUS APP CON
120.9 348.725

CORPUS TOWER
119.4 257.8

GND CON
121.9 269.15

CLNC DEL
118.55

Procedure NA for arrivals at SKIDS on V163 northwest bound.

Procedure NA for arrivals at WORRY on V13-407 northeast bound.

Procedure NA for arrivals at SOLON on V13-20-163 southbound.

Climb to 2000 direct on V2000 northwest bound.

HOLD 2000 on V163 to ZULEX.

HOLD 2000 on V2000 to ZULEX.

ATIS
126.8

CORPUS APP CON
120.9 348.725

CORPUS TOWER
119.4 257.8

GND CON
121.9 269.15

CLNC DEL
118.55

Procedure NA for arrivals at SKIDS on V163 northwest bound.

Procedure NA for arrivals at WORRY on V13-407 northeast bound.

Procedure NA for arrivals at SOLON on V13-20-163 southbound.

Climb to 2000 direct on V2000 northwest bound.

HOLD 2000 on V163 to ZULEX.

HOLD 2000 on V2000 to ZULEX.

ATIS
126.8

CORPUS APP CON
120.9 348.725

CORPUS TOWER
119.4 257.8

GND CON
121.9 269.15

CLNC DEL
118.55

Procedure NA for arrivals at SKIDS on V163 northwest bound.

Procedure NA for arrivals at WORRY on V13-407 northeast bound.

Procedure NA for arrivals at SOLON on V13-20-163 southbound.

Climb to 2000 direct on V2000 northwest bound.

HOLD 2000 on V163 to ZULEX.

HOLD 2000 on V2000 to ZULEX.

ATIS
126.8

CORPUS APP CON
120.9 348.725

CORPUS TOWER
119.4 257.8

GND CON
121.9 269.15

CLNC DEL
118.55

Procedure NA for arrivals at SKIDS on V163 northwest bound.

Procedure NA for arrivals at WORRY on V13-407 northeast bound.

Procedure NA for arrivals at SOLON on V13-20-163 southbound.

Climb to 2000 direct on V2000 northwest bound.

HOLD 2000 on V163 to ZULEX.

HOLD 2000 on V2000 to ZULEX.
RNAV (GPS) Y RWY 36
CORPUS CHRISTI INTL (CRP)

ATIS 126.8
CORPUS APP CON 120.9 348.725
CORPUS TOWER 119.4 257.8
GND CON 121.9 269.15
CLNC DEL 118.55

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. For inop ALS, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV all Cats visibility to RVR 4500 and LNAV Cat E visibility to RVR 6000.

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

MISSED APPROACH: Climb to 2000 direct FEKEL and on track 304° to ATHIS and hold.

**Procedure NA for arrival on CRP VORTAC airway radials 169 CW 184.**
VOR or TACAN RWY 18
CORPUS CHRISTI INTL (CRP)

DME required.

✈ Rwy 18 helicopter visibility reduction below ¾ SM NA. Inop table does not apply.

ATIS 126.8  CORPUS APP CON 120.9 348.725  CORPUS TOWER 119.4 257.8  GND CON 121.9 269.15  CLNCE DEL 118.55

MISSED APPROACH: Climbing left turn to 2000 on heading 150° and CRP VORTAC R-169 to SOLON INT/CRP 28 DME and hold.

ATIS 120.9  CORPUS APP CON 120.9 348.725  CORPUS TOWER 119.4 257.8  GND CON 121.9 269.15  CLNCE DEL 118.55

DME required.

✈ Rwy 18 helicopter visibility reduction below ¾ SM NA. Inop table does not apply.

ATIS 126.8  CORPUS APP CON 120.9 348.725  CORPUS TOWER 119.4 257.8  GND CON 121.9 269.15  CLNCE DEL 118.55

MISSED APPROACH: Climbing left turn to 2000 on heading 150° and CRP VORTAC R-169 to SOLON INT/CRP 28 DME and hold.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.

READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**ILS Y or RNAV (GPS) RWY 13R**

**CORPORUS CHRISTI NAS (TRUAX FLD) (KNGP)**

**LOC I-NGP 111.3**

**APCH CRS 132°**

**Rwy Idg 8001**

**TDZE 13**

**Arpt Elev 18**

**SALSF**

**MISSSED APPROACH: Climb to 600, then climbing left turn to 1600 direct HAULS and hold.**

**ATIS**

**127.9 290.9**

**APP CON**

**128.675 343.75**

**NAVY CORPUS TOWER**

**134.85**

**GND CON**

**340.2**

**CLNC DEL**

**314.3**

**ASR/PAR**

---

**EMERG SAFE ALT 100 NM 11,100**

**VDP NA when using Corpus Christi (CRP) Intl altimeter setting**

**GS 3.00°**

**TCH 47**

**LOCALIZER 111.3**

**I-NGP 132°**

**TRUAX Chan 87 NGP**

**Channel 102**

---

**CORPORUS CHRISTI (CRP) INTL ALTIMETER SETTING**

**S-ILS 13R**

**246-3/4**

**233**

**[300-1/4]°**

---

**LNAV MDA* 500-3/4**

**540-1/2**

**620-2**

---

**CIRCLING**

**500-1**

**482**

**[500-1/4]°**

**620-2**

---

**CORPORUS CHRISTI, TEXAS**

**Orig 30NOV23**

---

**ILS Y or RNAV (GPS) RWY 13R**

---

**CORPORUS CHRISTI NAS (TRUAX FLD) (KNGP)**

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**ILS Y or RNAV (GPS) RWY 13R**

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**ILS Y or RNAV (GPS) RWY 13R**

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**CORPORUS CHRISTI NAS (TRUAX FLD) (KNGP)**

---

**ILS Y or RNAV (GPS) RWY 13R**

---

**CORPORUS CHRISTI NAS (TRUAX FLD) (KNGP)**

---

**ILS Y or RNAV (GPS) RWY 13R**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (125°F).

MISSED APPROACH: Climb to 2000 direct FOLEM and hold.

When local altimeter setting not received, use Corpus Christi (CRP) Intl altimeter setting.

Northbound arrivals on V70-407 and V13-20-163 require turn in holding at CRP VORTAC (see L-20) or RADAR vectors. Holding at CRP NA for TACAN users.

Baro-VNAV NA when local altimeter not available.
### RNP APCH

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5° C (-5° F) or above 54° C (129° F).

<table>
<thead>
<tr>
<th>ATIS</th>
<th>APP CON</th>
<th>NAVY CORPUS TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
<th>ASR/ PAR</th>
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<tbody>
<tr>
<td>127.9</td>
<td>128.675</td>
<td>134.85 ✗ 340.2</td>
<td>118.7</td>
<td>257.85</td>
<td>314.3</td>
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</tbody>
</table>

### EMERG SAFE ALT

Alt 100 NM 11,100

When local altimeter setting not received, use Corpus Christi (CRP) Intl altimeter setting. Baro-VNAV NA when local altimeter not available.

#### VDP NA when using Corpus Christi (CRP) Intl altimeter setting.

- FOLEM: Holding Pattern
- 042°
- 2000

### CORPUS CHRISTI NAS (TRUAX FLD) (KNGP)

#### CORPUS CHRISTI, TEXAS

- Amdt 2 30NOV23

#### RNAV (GPS) RWY 22

- 23334
- SC-3, 11 JUL 2024 to 05 SEP 2024

#### Table:

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<tr>
<th>CATEGORY</th>
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<th>B</th>
<th>C</th>
<th>D</th>
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<td>(400-1)</td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>320-7/6</td>
<td>305</td>
<td>(400-3/4)</td>
<td>380-1</td>
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<td>C CIRCLING</td>
<td>460-1</td>
<td>480-1</td>
<td>520-1/2</td>
<td>580-2</td>
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<td>422 (500-1)</td>
<td>462 (500-1)</td>
<td>502 (600-1/2)</td>
<td>562 (600-2)</td>
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</tbody>
</table>

#### CORPUS CHRISTI, TEXAS

- 27°42'N-97°17'W

### RNAV (GPS) RWY 22

- SC-3, 11 JUL 2024 to 05 SEP 2024

#### Diagram:

- Map with waypoints and holding pattern
- 4 NM holding pattern
- RW22
- OKUNE
- 222°
- 2000

### Notes:

- Holding pattern
- 222°
- 2000

#### Holding Pattern

- 4 NM

- 222°
- 2000

### Additional Information:

- GND CON 118.7
- CLNC DEL 257.85
- ASR/ PAR 314.3

### Map Coordinates:

- ELEV 18
- TDZE 15

### Weather Information:

- HIRL Rwy 4-22, 13R-31L
- HIRL Rwy 13L-31R, 18-36
- REL Rwy 4-22, 13L-31R, 18-36, 31L

### Aeronautical Chart:

- 119
**RNAV (GPS) RWY 31L**

**Corpus Christi NAS (TRUAX FLD) (KNGP)**

**APCH CRS**
- Rwy Idg: 8001
- TDZE: 17
- Arpt Elev: 18

**RNP APCH**
- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15° C (5° F) or above 54° C (129° F)

**ATIS**
- 127.9 290.9

**APP CON**
- 128.675 343.75

**NAVY CORPUS TOWER**
- 134.85 340.2

**GND CON**
- 118.7 257.85

**CLNC DEL**
- 314.3

**ASR/PAR**
- 120

---

**EMERG SAFE ALT 100 NM 11,100**

**MSA RW31L 2.5 NM**
- 2100

**VGS TCH not coincident (45)**

**EMERG SAFE ALT 100 NM 11,100**

**1.1 NM to RW31L**

**POLCK Holding Pattern**
- 132°
- 2000
- 6000

**G P 3.00" TCH 50**

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

**LNAV/VNAV DA**
- 412-1/6
- 395 (400-1/4)

**LNAV MDA**
- 420-1
- 403 (500-1)
- 420-1/6
- 403 (500-1/4)

**CIRCLING**
- 460-1
- 480-1
- 520-1/6
- 580-2

**CORPUS CHRISTI [CRP] INTL ALTIMETER SETTING**

**LNAV MDA**
- 460-1
- 443 (500-1)
- 460-1/6
- 443 (500-1/4)

**CIRCLING**
- 500-1
- 482 (500-1)
- 540-1/2
- 620-2

**HIRL Rwy 4-22 13R-31L**
- 31L-3R 27° 42'N-97° 17'W

**ReiL Rwy 4-22 13L-31R 18-36**
- 18-36 31L

---

**Corpus Christi, Texas**

**Amdt 2 30 Nov 2023**
CORPORUS CHRISTI, TEXAS

APCH CRS
Rwy Ldg 5002
TDZE 18
Arpt Elev 18

RNAV (GPS) RWY 31R
[USN]
CORPORUS CHRISTI NAS (TRUAX FLD) (KNGP)

RNP APCH

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15° C (5° F) or above 54° C (129° F).

ATIS
127.9 290.9

APP CON
128.675 343.75

NAVY CORPUS TOWER
134.85 340.2

GND CON
118.7 257.85

CLNC DEL
314.3

ASR/PAR

1068

Northbound arrivals on V70-407 and V13-20-163 require turn in holding at CRP VORTAC (See L-20), or RADAR vectors. Holding at CRP NA for TACAN users.

EMERG SAFE ALT 100 NM 11,100

1.1 NM to RW31R

VDP NA when using Corpus Christi (CRP) Init. alimeter setting

VISSA

RW31R

4.8 NM

1600

GP 3.00°
TCH 50°

4 NM

HOLD 6000
2000

When local alimeter setting not received, use Corpus Christi (CRP) Init. alimeter setting.

Baro-VNAV NA when local alimeter not available.

HOLD 6000
2000

EMERG SAFE ALT 100 NM 11,100

600 2000 UBOAT

VGSI TCH not coincident (45).

EMERG SAFE ALT 100 NM 11,100

VGSI TCH not coincident (45).

EMERG SAFE ALT 100 NM 11,100

VGSI TCH not coincident (45).

EMERG SAFE ALT 100 NM 11,100

VGSI TCH not coincident (45).

EMERG SAFE ALT 100 NM 11,100

VGSI TCH not coincident (45).

EMERG SAFE ALT 100 NM 11,100

VGSI TCH not coincident (45).

EMERG SAFE ALT 100 NM 11,100

VGSI TCH not coincident (45).
EMERG SAFE ALT 100 NM 11,100

† VDP NA when using Corpus Christi (CRP) Intl altimeter setting

123
When local altimeter setting not received, use Corpus Christi (CRP) Intl altimeter setting.

**ATIS**
127.9 290.9

**APP CON**
128.675 343.75

**NAVY CORPUS TOWER**
134.85 340.2

**GND CON**
118.7 257.85

**CLNC DEL**
314.3

**ASR/PAR**

Northbound arrivals on V70-407 and V13-20-163 require turn in holding at CRP VORTAC (See L-20), or RADAR vectors. Holding at CRP NA for TACAN users.

**TRUAX**
Chan B7 NGP

**EMERG SAFE ALT**
100 NM 11,100

**327°**

**VDP NA** when using Corpus Christi (CRP) Intl altimeter setting.

**TACAN**

**ACVIR**

**CATEGORY**

**A**

**B**

**C**

**D**

**5-36**

400-1

382

400-1\(^\frac{1}{2}\)

382

**5-36**

440-1

480-1

520-1

580-2

**CIRCLING**

442 (500-1)

462 (500-1)

502 (600-1\(^\frac{1}{2}\))

562 (600-2)

**5-36**

440-1\(^\frac{1}{2}\)

442

540-1

620-2

**CIRCLING**

500-1

482

540-1\(^\frac{1}{2}\)

620-2

**CORPORUS CHRISTI NAS (TRUAX FLD) (KNGP)**

Amdt 2 30NOV23
SEATAC NAS (TRUAX FLD)  (KNGP)

When local altimeter setting not received, use SEATAC (CRP) Intl altimeter setting.

ATIS

127.9 290.9

APP CON

128.675 343.75

NAVY CORPUS TOWER

134.85 340.2

GND CON

118.7 257.85

CLNC DEL

314.3

ASR/PAR

1068

TRUAX

Chan 87 NGP

2100

NGP

Rwy Ldg 8001

TDZE 17

Arpt Elev 18

EMERG SAFE ALT 100 NM 11,100

Northbound arrivals on V70-407 and V13-20-163 require turn in holding at CRP VORTAC (See 1-20), or RADAR vectors. Holding at CRP VORTAC NA for TACAN users.

† VDP NA when using Corpus Christi (CRP) Intl altimeter setting.

TACAN X RWY 31L

TACAN

1600

STOWS

111

NGP 4-20

NGP 9-4

NGP R-041

2000

291

1600

VGS TCH not coincident [45]

Remain within 10 NM of STOWS

CIRCLING

460-1

480-1

520-1½

580-2

562 (600-1½)

562 (600-2)

CATEGORY

A

B

C

D

S-31L

420-1

403 (500-1)

420-1½

403 (500-1½)

CIRCLING

460-1

480-1

520-1½

580-2

562 (600-1½)

562 (600-2)

CORPUS CHRISTI (CRP) INTL ALTIMETER SETTING

S-31L

460-1

443 (500-1)

460-1½

443 (500-1½)

CIRCLING

500-1

482 (500-1)

540-1½

620-2

562 (600-1½)

602 (700-2)

CORPUS CHRISTI, TEXAS

Amend 2 30NOV23

27°42'N-97°17'W

127
CORPUS CHRISTI, TEXAS

TACAN Z RWY 13R

**When ALS inop, increase CAT AB vis to 1 mile, CAT CD vis to 1/2 mile.**

SALSFL

**MISSING APPROACH:** Climb to 1600 direct NGP TACAN and turn left to intercept R-041 to RYNOL and hold.

ATIS **127.9 290.9**

APP CON **128.675 343.75**

NAVY CORPUS TOWER **134.85 0 340.2**

GND CON **118.7 257.85**

CLNC DEL **314.3**

ASR/PAR

IAF

CORPUS CHRISTI

115.5 CRP

Chan 102

NAV

CAUTION:

Intermediate segment length 4.3 NM, less than CAT AB 5.0 NM

CAT CD 6.0 NM

Northbound arrivals on V70-407 and V13-20-163 require turn in holding at CRP VORTAC (IAF) (see L-20), or RADAR vectors. Holding at CRP NA for TACAN users.

EMERG SAFE ALT 100 NM 11,100

**VDP NA when using Corpus Christi (CRP) Intl altimeter**

ELEV 18  

TDZE 13

**CORPUS CHRISTI (CRP) INST ALTIMER SETTING**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-13R *</td>
<td>400-3/4</td>
<td>387</td>
<td>(400-3/4)</td>
<td>400-7/8</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>460-1</td>
<td>480-1</td>
<td>520-1/2</td>
<td>580-2</td>
</tr>
<tr>
<td></td>
<td>442</td>
<td>462</td>
<td>502</td>
<td>562</td>
</tr>
<tr>
<td></td>
<td>(500-1)</td>
<td>(500-1)</td>
<td>(600-1/2)</td>
<td>(600-2)</td>
</tr>
</tbody>
</table>

CORPUS CHRISTI, TEXAS

Amdt 2 30NOV23

27*42'N-97*17'W  

CORPUS CHRISTI NAS (TRUAX FLD)  

(KNGP)
When local altimeter setting not received, use Corpus Christi (CRP) intnl altimeter setting.

**MISSING APPROACH:** Climb to 1600 direct NGP TACAN and turn right to intercept R-041 to RYNOL and hold.

Northbound arrivals on V70-407 and V13-20-163 require turn in holding at CRP VORTAC (See L-20), or RADAR vectors. Holding at CRP NA for TACAN users.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C (23°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2600 direct FOSIM and hold.
When local altimeter setting not received, use Pleasanton Muni altimeter setting; increase all MDA 120 feet, Circling Cat C visibility 1/2 SM.

MISSING APPROACH: Climbing right turn to 2100 direct COT VORTAC and hold.

COTULLA, TEXAS

VOR-A
COTULLA-LA SALLE COUNTY (COT)

<table>
<thead>
<tr>
<th>ASOS</th>
<th>HOUSTON CENTER</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>118.325</td>
<td>134.6 322.5</td>
<td>122.7 [CTAF]</td>
</tr>
</tbody>
</table>

When local altimeter setting not received, use Pleasanton Muni altimeter setting; increase all MDA 120 feet, Circling Cat C visibility 1/2 SM.

MISSING APPROACH: Climbing right turn to 2100 direct COT VORTAC and hold.

COTULLA, TEXAS

VOR-A
COTULLA-LA SALLE COUNTY (COT)

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCLING</td>
<td>920-1</td>
<td>940-1</td>
<td>1120-1 3/4</td>
<td>NA</td>
</tr>
</tbody>
</table>

COTULLA, TEXAS
Amdt 13A 08OCT20

28°27'N-99°13'W
ILS or LOC RWY 13
DEL RIO INTL (DRT)

**DEL RIO, TEXAS**

**AL-5268 (FAA)**

- **LOC I-DRT**
  - 111.9
  - Chan 56
- **APP CRS**
  - 132°
- **Rwy Idg**
  - 6000
- **TDZE**
  - 1002
- **Apt Elev**
  - 1002

Circling NA for Cat D SW of Rwy 13-31. When local altimeter setting not received, use Laughlin AFB altimeter setting and increase all DAs 30 feet, all MDAs 40 feet, increase S-LOC 13 Cat D and Circling Cats C and D visibility 1/2 SM. VDP NA when using Laughlin AFB altimeter setting.

**DEL RIO APP CON**
- 118.525

**CLNC DEL**
- 120.5

**UNICOM**
- 122.8 (CTAF)

**ASOS**
- 120.5

**Radar Required**

**ADF or DME Required**

**FAF**
- 132°
- 4.9 NM from FAF

**TDZE**
- 1002

**ELEV**
- 1002

**REL Rwy 31**
- HIRL Rwy 13-31

**LOM/IAF**
- KOTTI
- 335 DR
- I-DRT 6

**LOM/LOCT**
- KOTTI
- 335 DR
- I-DRT 6

**LOCALIZER**
- 111.9
- I-DRT 6
- Chan 56

**ILS or LOC RWY 13**

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

**FAF**
- 3.7 NM

**DR HIRL**
- 1036
- 1051

**S-ILS 13**
- 1429
- 2000
- hdg 122°

**S-LOC 13**
- 2673

**GS 3.00°**
- TCH 48

**2000**

**4000**

**DLF**

**CIRCLING**
- 1440-1
- 1560-1
- 1740-2
- 1740-2¼

**FAF**
- 1420-1
- 200 (200-1)

**AFB**
- 232°

**312°**

**2673**

**132°**

**3200**

**2700**

**3.7 NM**

**2000**

**4000**

**DLF**

**ILS or LOC RWY 13**

**DEL RIO INTL (DRT)**

**ASOS**
- 118.525
- DEL RIO APP CON
- 119.6
- 259.1

**CLNC DEL**
- 120.5

**UNICOM**
- 122.8 (CTAF)

**PREPAREDNESS**
- 134

**DEL RIO, TEXAS**

**Orig-B 20MAY21**

**29°22'N-100°56'W**
Circling NA for Cat D southwest of Rwy 13-31. When local altimeter setting not received, use Laughlin AFB altimeter setting and increase all DA 30 feet and all MDA 40 feet, increase LPV visibility all Cats, LNAV Cats C and D and Circling Cats C and D visibility ½ SM. Baro-VNAV NA when using Laughlin AFB altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17° C (2°F) or above 47°C (116°F).

---

**RNAV (GPS) RWY 13**  
**DEL RIO INTL (DRT)**

- **MALS**: MISSED APPROACH: Climb to 4000 direct AREXE and on 069° track to DLF VORTAC and hold, continue climb-in-hold to 4000.

---

**ASOS**:  
**118.525**

**DEL RIO APP CON**:  
**119.6**  
**259.1**

**CLNC DEL**:  
**120.5**

**UNICOM**:  
**122.6 (CTAF)**
MISSED APPROACH: Climbing right turn to 4000 via heading 340° then right turn direct DLF VORTAC and hold.

Circling NA for Cat D SW of Rwy 13-31. If local altimeter setting not received, use Laughlin AFB altimeter setting and increase all MDAs 40 feet.
RNAV (GPS) RWY 35
DELINE MUNI (23R)

MISSED APPROACH: Climbing right turn to 2600 direct CIKEB and hold.

- Night landing: Rwy 35 NA. Helicopter visibility below 1 SM NA.
- Misdirection: Climbing right turn to 2600 direct CIKEB and hold.

CVB AWOS-3 119.25

CTAF 122.9

ELEV 702

TDZE 702

RNAV (GPS) RWY 35
DELINE MUNI (23R)

Visual Segment - Obstacles.

Category A

LNAV MDA 1140-1 438 (500-1)

CIRCLING 1380-1 678 (700-1)

NA
Use Castroville Muni altimeter setting; when not received, use South Texas Rgnl at Hondo altimeter setting and increase all MDA 40 feet. Helicopter visibility reduction below 1 SM NA. Night landing: Rwy 35 NA.

**MISSED APPROACH:** Climbing left turn to 2400 in HHH NDB holding pattern.
MISSED APPROACH: Climb to 1600 then climbing left turn to 4000 direct COKAD and hold.

Procedure NA for arrival on SAT VORTAC airway radials 160 CW 331.
RNAV (GPS) RWY 31
MAVERICK COUNTY MEML INTL (5T9)

**MISSING APPROACH:** Climb to 4000 direct CEXEV and via 056° track to NEYIR and hold.

**Procedure NA for arrivals at SAT VORTAC on airway radials 190 CW 285.**

**EAGLE PASS, TEXAS**

**UNICOM**

**354°**

**LNAV only.**

<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>1236-1½</td>
<td>354 (400-1½)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV/ VNAV DA</td>
<td>1298-1½</td>
<td>416 (500-1½)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>1280-1</td>
<td>398 (400-1)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1500-1</td>
<td>613 (700-1)</td>
<td>1500-1³</td>
<td>613 (700-1³)</td>
</tr>
</tbody>
</table>

**ALERT AREA**

A-633B

**FAA ALERT AREA**

28°51'N-100°30'W

**AWOS-3**

119.175

**KDFL ATIS***

114.4 269.9

**DEL RIO APP CON***

127.75 326.2

**UNICOM**

122.8 (CTAF)

**Uncertainties**

- VNAV NA. Use Laughlin AFB altimeter setting; when not received, use Del Rio Intl altimeter setting.
- Procedure NA for arrivals at SAT VORTAC on airway radials 190 CW 285.
**RNAV (GPS) RWY 14**

**SOUTH TEXAS INTL AT EDINBURG (EBG)**

**Misssed Approach:** Climb to 1900 and arrivals at **FATOR** via V17 southeast bound. Procedure NA for arrivals at **JIMIE** via V20 northeast bound.

- **MIA** 1 MOA
- **FATOR**
- **WELGA**
- **TELYO**
- **TOYUK**
- **WELGA**
- **GUYEV**
- **RASOY**
- **REIL Rwy 14**

**Category A**
- LPV DA: 325-1
- LNAV/VNAV DA: 441-1/4
- LNAV MDA: 440-1/4
- Circling: 500-1/4

**Category B**
- LPV DA: 250 (300-1)
- LNAV/VNAV DA: 366 (400-1/4)
- LNAV MDA: 365 (400-1/4)

**Category C**
- LPV DA: 620-1/4
- LNAV/VNAV DA: 545 (600-1/4)
- LNAV MDA: 685 (700-2)

**Category D**
- LPV DA: 760-2/4
- LNAV/VNAV DA: 685 (700-2/4)

**RNAV (GPS) RWY 14**

**South Texas Intl at Edinburg (EBG)**

**AWOS-3PT**
- **UNICOM**

**Kingsville 1 MOA**

**4 NM Holding Pattern**

**318° 138° 1800 1900**

**Note:**
- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (120°F).
- **Rwy 14** helicopter visibility reduction below 3/4 SM NA.
- **GSI and RNAV glidepath not coincident** (GSI Angle 3.00°/TCH 42).

**Procedure for arrivals via V20 northeast bound:**
- Climb to 1900 and arrivals at **FATOR** via V17 southeast bound.
RNAV (GPS) RWY 32
SOUTH TEXAS INTL AT EDINBURG (EBG)

WAAS CH 70701
W32A

Rwy Idg 5000
TDZE 73
Apt Elev 75

LNAV only.

Procedure NA for arrivals at JIMIE via V20 northeast bound, V407 northbound, V70 northwest bound, and arrivals at FATOR via V17 northwest bound.

RNAV (GPS) RWY 32
direct RASOY and hold.

For uncompensated Baro-VNAV systems LNAV/VNAV NA below -15°C or above 48°C.

MISSED APPROACH: Climb to 1900 direct RASOY and hold.

Category

LPV DA
323-3/4 250 (300-3/4)

LNAV/ VNAV DA
361-1 288 (300-1)

LNAV MDA
660-1 587 (600-1) 660-11/2 587 (600-11/2) 660-13/4 587 (600-13/4)

CIRCLING
660-1 585 (600-1) 760-2 685 (700-2) 760-21/4 685 (700-21/4)

-15°C or above 48°C.

For uncompensated Baro-VNAV systems LNAV/VNAV NA below -15°C or above 48°C.

MISSED APPROACH: Climb to 1900 direct RASOY and hold.

For uncompensated Baro-VNAV systems LNAV/VNAV NA below -15°C or above 48°C.

MISSED APPROACH: Climb to 1900 direct RASOY and hold.

For uncompensated Baro-VNAV systems LNAV/VNAV NA below -15°C or above 48°C.

MISSED APPROACH: Climb to 1900 direct RASOY and hold.

For uncompensated Baro-VNAV systems LNAV/VNAV NA below -15°C or above 48°C.

MISSED APPROACH: Climb to 1900 direct RASOY and hold.

For uncompensated Baro-VNAV systems LNAV/VNAV NA below -15°C or above 48°C.

MISSED APPROACH: Climb to 1900 direct RASOY and hold.
RNAV (RNP) X RWY 8R

EL PASO INTL (ELP)

Categories A, B, C, and D

RNP 0.20 DA

4193-0.3

253 (300-0.3)

RNP 0.30 DA

4234-0.3

294 (300-0.3)

AUTHORIZATION REQUIRED

For uncompensated Baro-VNAV systems, procedure NA below -5°C or above 54°C.

See planview for multiple IF locations.

MISRAN: Climb to 4400 then climbing right turn to 7500 direct FABAN and hold.

APP CRS

Rwy ldg 9025

TDZE 3940

Apt Elev 3962

RNP AR APCH.

RF required.

For uncompensated Baro-VNAV systems, procedure NA below -5°C or above 54°C.

See planview for multiple IF locations.
RNAV (RNP) Y RWY 4
EL PASO INTL (ELP)

MISSED APPROACH: Climb to 4400 then climbing right turn to 7500 direct FABAN and hold.

For uncompensated Baro-VNAV systems, procedure NA below -22°C or above 54°C.

AUTHORIZATION REQUIRED

SC-3, 11 JUL 2024 to 05 SEP 2024
RNAV (RNP) Y RWY 8R

EL PASO INTL (ELP)

**RNAV (RNP) Y RWY 8R**

**EL PASO, TEXAS**

**Category A/B/C/D**

- **RNP 0.20 DA**
  - 4193-1/4 253 (300-%)

- **RNP 0.30 DA**
  - 4234-7/8 294 (300-%)

**Authorization Required**

**RNAV (RNP) Y RWY 8R**

**El Paso, Texas**

**EL PASO INTL (ELP)**

- **RNP AR ACH**
  - **RF** required.

- **For uncompensated Baro-VNAV systems, procedure NA below -5°C or above 54°C.**

- **RNP 0.30 DA**
  - 4234-294 (300-95)

- **RNP 0.20 DA**
  - 4193-253 (300-95)

**MISSED APPROACH:** Climb to 4400 then climbing right turn to 7500 direct FABAN and hold.

**Table:**

<table>
<thead>
<tr>
<th><strong>D-ATIS</strong></th>
<th><strong>EL PASO APP CON</strong></th>
<th><strong>CLNC DEL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>120.0 254.3</td>
<td>124.25 298.85</td>
<td>125.0 379.1</td>
</tr>
</tbody>
</table>

**Diagram:**

- **EL PASO APP CON**
  - **GND CON**
    - 121.9 348.6
  - **CLNC DEL**
    - 125.0 379.1

- **OLDEE**
  - **TRTIP**
    - **SEZAR**
      - **OLDEE**
        - **5900**

- **OLDEE**
  - **TRTIP**
    - **SEZAR**
      - **OLDEE**
        - **5900**

- **OLDEE**
  - **TRTIP**
    - **SEZAR**
      - **OLDEE**
        - **5900**
RNAV (RNP) Z RWY 22
EL PASO INTL (ELP)

For uncompensated Baro-VNAV systems, procedure NA below -8°C or above 54°C. For inop ALS, increase RNP 0.10 all Categories visibility to RVR 4000 and RNP 0.30 all Categories visibility to RVR 4500.

D-ATIS
120.0 254.3

EL PASO APP CON
124.25 298.85

EL PASO TOWER
118.3 239.275

GND CON
121.9 348.6

CLENC DEL
125.0 379.1

MALSR

A R T I S

ASR

MISSED APPROACH: Climb to 4400 then climbing left turn to 7500 direct FABAN and hold.

El Paso, Texas

RNAV (RNP) Z RWY 22

Amdt 1B 05NOV20
For uncompensated Baro-VNAV systems, procedure NA below -8°C (18°F) or above 50°C (122°F). For inop MALSR, increase RNP 0.30 visibility all Cats to 1 mile. GPS Required.

**MALSR**

**MISSED APPROACH:** Climb to 4400, then climbing right turn to 7500 direct FABAN and hold.

**D-ATIS**

**EL PASO APP CON**

**EL PASO TOWER**

**GND CON**

**CLNC DEL**

**APP CRS** 265°

**Rwy Idg** 9025

**TDZE** 3962

**Apt Elev** 3962

**RNAV (RNP) Z RWY 26L**

**EL PASO INTL (ELP)**

**ASR**

**TDZE 3962**

**Amdt 1A 16OCT14**

**31°48'N-106°23'W**

**RNP 0.30 DA**

**4275-1/2 313 (400-1/2)**

**AUTHORIZATION REQUIRED**
RNAV (GPS) X RWY 4
EL PASO INTL (ELP)

D-ATIS
120.0 254.3

EL PASO APP CON
124.25 298.85

EL PASO TOWER
118.3 239.275

GND CON
121.9 348.6

CLNC DEL
125.0 379.1

Circling NA for Cat D north of Rwy 26R and northwest of Rwy 4.

MISSED APPROACH: Climb to 6900 direct WAHYU and on track 099° to ELP VORTAC and hold, continue climb-in-hold to 6900.

RNAV (GPS) X RWY 4

MIRL Rwy BL-26R
REIL Rwys 4 and 8R
HIRL Rwys 4-22 and 8R-26L

EL PASO, TEXAS
Orig-E 29DEC22
31°48'N-106°23'W

RT90

EL PASO INTL (ELP)
RNAV (GPS) Y RWY 26L

EL PASO INTL (ELP)

D-ATIS
120.0 254.3
EL PASO APP CON
124.25 298.85
EL PASO TOWER
118.3 239.275
GND CON
121.9 348.6
CLNC DEL
125.0 379.1

Procedure NA for arrivals at Piers on V560 eastbound and for arrivals at FABAN on V66-198 eastbound.

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 75).

MISSED APPROACH: Climb to 4380 then climbing right turn to 7500 direct FABAN and hold.

RNAV (GPS) Y RWY 26L

SC-3, 11 JUL 2024 to 05 SEP 2024
RADAR required for procedure entry.

Circling NA for Cat D north of Rwy 26R and northwest of Rwy 4.

MISSED APPROACH: Climb to 4500 then climbing right turn to 6900 direct ELP VORTAC and hold, continue climb-in-hold to 6900.

D-ATIS

AL-134 (FAA)

LOC/DME RWY 4
EL PASO INTL (ELP)

UNITED STATES

MEXICO

ELEV 3962  D  TDZE 3923

LOC/DME I-ETF 111.5
Chan 52
APP CRS 042°
Rwy Idg 12020
TDZE 3923
Apt Elev 3962

LOCATOR 111.5
I-ETF 7.8
Chan 52

LOCALIZER 111.5
I-ETF 7.8
Chan 52

LATIN I-ETF 4.8
RADAR

EKOG E I-ETF 7.8
RADAR

KANTR I-ETF 10.8
RADAR

6136 A

7192

4675

3964

3991

6143

4090 ±

3800

4362

4041

5900

5345

7500

6600

5800

3.42° TCH 55

4500

6900

ELP

WO NSU I-ETF 0.5

WONSU I-ETF 0.5

MIRL Rwy 8L-26R
HIRL Rwy 4-22 and 8R-26L

RADAR required for procedure entry.

Disregard GS indications.

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 55). Disregard GS indications.

MISSED APPROACH: Climb to 4500 then climbing right turn to 6900 direct ELP VORTAC and hold, continue climb-in-hold to 6900.

Circling NA for Cat D north of Rwy 26R and northwest of Rwy 4.

RADAR required for procedure entry.

UNITED STATES

MEXICO

ELEV 3962  D  TDZE 3923

LOC/DME I-ETF 111.5
Chan 52
APP CRS 042°
Rwy Idg 12020
TDZE 3923
Apt Elev 3962

LOCATOR 111.5
I-ETF 7.8
Chan 52

LOCALIZER 111.5
I-ETF 7.8
Chan 52

LATIN I-ETF 4.8
RADAR

EKOG E I-ETF 7.8
RADAR

KANTR I-ETF 10.8
RADAR

6136 A

7192

4675

3964

3991

6143

4090 ±

3800

4362

4041

5900

5345

7500

6600

5800

3.42° TCH 55

4500

6900

ELP

WO NSU I-ETF 0.5

WONSU I-ETF 0.5

MIRL Rwy 8L-26R
HIRL Rwy 4-22 and 8R-26L

RADAR required for procedure entry.

Disregard GS indications.

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 55). Disregard GS indications.

MISSED APPROACH: Climb to 4500 then climbing right turn to 6900 direct ELP VORTAC and hold, continue climb-in-hold to 6900.

Circling NA for Cat D north of Rwy 26R and northwest of Rwy 4.

RADAR required for procedure entry.

UNITED STATES

MEXICO

ELEV 3962  D  TDZE 3923

LOC/DME I-ETF 111.5
Chan 52
APP CRS 042°
Rwy Idg 12020
TDZE 3923
Apt Elev 3962

LOCATOR 111.5
I-ETF 7.8
Chan 52

LOCALIZER 111.5
I-ETF 7.8
Chan 52

LATIN I-ETF 4.8
RADAR

EKOG E I-ETF 7.8
RADAR

KANTR I-ETF 10.8
RADAR

6136 A

7192

4675

3964

3991

6143

4090 ±

3800

4362

4041

5900

5345

7500

6600

5800

3.42° TCH 55

4500

6900

ELP

WO NSU I-ETF 0.5

WONSU I-ETF 0.5

MIRL Rwy 8L-26R
HIRL Rwy 4-22 and 8R-26L

RADAR required for procedure entry.

Disregard GS indications.

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 55). Disregard GS indications.

MISSED APPROACH: Climb to 4500 then climbing right turn to 6900 direct ELP VORTAC and hold, continue climb-in-hold to 6900.

Circling NA for Cat D north of Rwy 26R and northwest of Rwy 4.

RADAR required for procedure entry.

UNITED STATES

MEXICO

ELEV 3962  D  TDZE 3923

LOC/DME I-ETF 111.5
Chan 52
APP CRS 042°
Rwy Idg 12020
TDZE 3923
Apt Elev 3962

LOCATOR 111.5
I-ETF 7.8
Chan 52

LOCALIZER 111.5
I-ETF 7.8
Chan 52

LATIN I-ETF 4.8
RADAR

EKOG E I-ETF 7.8
RADAR

KANTR I-ETF 10.8
RADAR

6136 A

7192

4675

3964

3991

6143

4090 ±

3800

4362

4041

5900

5345

7500

6600

5800

3.42° TCH 55

4500

6900

ELP

WO NSU I-ETF 0.5

WONSU I-ETF 0.5

MIRL Rwy 8L-26R
HIRL Rwy 4-22 and 8R-26L

RADAR required for procedure entry.

Disregard GS indications.

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 55). Disregard GS indications.

MISSED APPROACH: Climb to 4500 then climbing right turn to 6900 direct ELP VORTAC and hold, continue climb-in-hold to 6900.

Circling NA for Cat D north of Rwy 26R and northwest of Rwy 4.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
NOTE: Takeoff Rwy 8R, do not exceed 220K until passing JAPOD.
NOTE: Takeoff Rwy 26L, do not exceed 220K until passing JAPOD.
NOTE: For use by Turbojet aircraft only.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8R: Climb heading 085° to 6000, then right turn direct JAPOD, then on depicted route to ATKNN, thence . . .
TAKEOFF RWY 22: Climb heading 222° to 4462, then right turn direct BIVKE, then on depicted route to ATKNN, thence . . .
TAKEOFF RWY 26L: Climb heading 265° to 4462, then left turn direct BIVKE, then on depicted route to ATKNN, thence . . .

. . . (transition). Maintain altitude as assigned by ATC, expect filed altitude 10 minutes after departure.

FLOGS TRANSITION (ATKNN5.FLOGS)
GREBE TRANSITION (ATKNN5.GREBE)
NOCHI TRANSITION (ATKNN5.NOCHI)
SLNNK TRANSITION (ATKNN5.SLNNK)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 042° to 6450, then left turn direct JCOXX, thence . . .

. . . (transition). Maintain altitude as assigned by ATC, expect filed altitude 10 minutes after departure.

GREBE TRANSITION (JCOXX2.GREBE)
HBACK TRANSITION (JCOXX2.HBACK)
SLNNK TRANSITION (JCOXX2.SLNNK)
TELKE TRANSITION (JCOXX2.TELKE)
EL PASO INTL (ELP) 2 Jan 16

LATVE THREE DEPARTURE (RNAV)

NOTE: Chart not to scale.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: For use by Turbojet aircraft only.

NOTE: RADAR required for non-GPS equipped aircraft.

NOTE: Takeoff Rwy 8R, maintain 250K until passing CATEG.

TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwys 4, 8R, 22, 26L: Standard with a minimum climb of 500' per NM to 11000.

R-5107A

R-5115

NARRATIVE ON FOLLOWING PAGE
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 042° to 4462, then direct KERGE, then on track 052° to DOTGE, then on track 078° to LATVE. Thence. . . .

TAKEOFF RWY 8R: Climb heading 085° to 4462, then direct MATLE, then on track 056° to cross CATEG at or above 11000, then on track 043° to LATVE. Thence. . . .

TAKEOFF RWY 22: Climb heading 222° to 4462, then left turn direct AKADE, then on track 080° to cross HIKEM at or above 9000, then on track 042° to cross CATEG at or above 11000, then on track 043° to LATVE. Thence. . . .

TAKEOFF RWY 26L: Climb heading 265° to 4462, then left turn direct AKADE, then on track 080° to cross HIKEM at or above 9000, then on track 042° to cross CATEG at or above 11000, then on track 043° to LATVE. Thence. . . .

. . . .on depicted route to CME VORTAC.

CHISUM TRANSITION (LATVE3.CME)
NOTE: Chart not to scale.

NOTE: For use by Turbojet aircraft only.

NOTE: For non-GPS equipped aircraft EWM and HUP must be operational.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required for non-GPS equipped aircraft.

TAKEOFF MINIMUMS:
Rwys 4, 8R, 22, 26L: Standard with minimum climb of 500' per NM to 4462.

TOP ALTITUDE: Assigned by ATC

uates by ATC

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 042° to 4462, then right turn direct DAVNE, then on track 136° to cross CABS1 at or below 7000, then on track 129° to MREDD, then on track 122° to NEUVE. Thence... 

TAKEOFF RWY 8R: Climb heading 085° to 4462, then direct DAVNE, then on track 136° to cross CABS1 at or below 7000, then on track 129° to MREDD, then on track 122° to NEUVE. Thence... 

TAKEOFF RWY 22: Climb heading 222° to 4462, then left turn direct AKADE, then on track 108° to FOBET, then on track 111° to NEUVE. Thence... 

TAKEOFF RWY 26L: Climb heading 265° to 4462, then left turn direct AKADE, then on track 108° to FOBET, then on track 111° to NEUVE. Thence... 

. . . on depicted route to FST VORTAC. 

FT STOCKTON TRANSITION (NEVUE3.FST)
NOTE: Chart not to scale.

JIMBA CADEK DAVNE SFL SALT FLAT TDOWN (RNAV)

22307 AL-134 (FAA)

EL PASO, TEXAS EL PASO INTL (TDOWN3.TDOWN) (RNAV)

NOTE: RADAR required for non-GPS equipped aircraft.

NOTE: For use by Turbojet aircraft only.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

21JUL16

TDOWN THREE DEPARTURE (RNAV)

Rwys 22, 26L: Standard with a minimum climb of 500’ per NM to 9000.
Rwys 4, 8R: Standard with a minimum climb of 500’ per NM to 4462.

TAKEOFF MINIMUMS

Rwys 4, 8R: Standard with a minimum climb of 500’ per NM to 4462.
Rwys 22, 26L: Standard with a minimum climb of 500’ per NM to 9000.

(QUESTION ON FOLLOWING PAGE)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 042° to 4462, then right turn direct JIMBA, then on track 115° to cross BUSEY at or below 7000, then on track 083° to TDOWN. Thence . . . .

TAKEOFF RWY 8R: Climb heading 085° to 4462, then direct DAVNE, then on track 080° to cross BUSEY at or below 7000, then on track 083° to TDOWN. Thence . . . .

TAKEOFF RWY 22: Climb heading 222° to 4462, then left turn direct AKADE, then on track 080° to cross HIKEM at or above 9000, then on track 051° to TDOWN. Thence . . . .

TAKEOFF RWY 26L: Climb heading 265° to 4462, then left turn direct AKADE, then on track 080° to cross HIKEM at or above 9000, then on track 051° to TDOWN. Thence . . . .

. . . . on depicted route to SFL VORTAC.

SALT FLAT TRANSITION (TDOWN3.SFL)
Procedure NA for arrivals on CRP VORTAC airway radials 169 CW 305.

Procedure NA for arrivals at NELEE on V17 northwest bound.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).
Circling Rwy 14 NA at night. Rwy 17 helicopter visibility reduction below 3/4 SM NA.
DME/DME RNP-0.3 NA. Circling NA for Cat D west of Rwy 17-35.

**MISSED APPROACH:** Climb to 3000 direct VAGBY and hold.
RNAV (GPS) RWY 35
BROOKS COUNTY (BKS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

Procedure NA for arrivals at NELEE via V17 northwest bound.

Procedure NA for arrivals at JIMIE on V20 southwest bound.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

Procedure NA for arrivals at NELEE via V17 northwest bound.

Procedure NA for arrivals at JIMIE on V20 southwest bound.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

Procedure NA for arrivals at NELEE via V17 northwest bound.

Procedure NA for arrivals at JIMIE on V20 southwest bound.

Procedure NA for arrivals at NELEE via V17 northwest bound.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA.
RNAV (GPS) RWY 33
ROBERT GRAY AAF (GRK)

ATIS 124.9
GRAY APP CON 120.075 323.15
GRAY TOWER 120.75 (CTAF) 285.5
GND CON 121.8 279.5
CLNC DEL 126.2 251.1

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Circling NA west of Rwy 15-33.
For inop ALS, increase LPV Cat E visibility to ¾ SM, LNAV/VNAV Cat E visibility to 2 SM, and LNAV Cat E visibility to 1 ½ SM.

Category

LNAV/VNAV DA

LPV DA

1195-1/2 200 (200-1/2)
1552-1/2 557 (600-1/2)

1460-1/2 465 (500-1/2)
1460-1 465 (500-1)

1560-1/2 1620-2 1740-2/2
545 (600-1/2) 605 (700-2) 725 (800-2/2)

CIRCLING

1540-1 525 (600-1)
1560-1/2 1620-2 1740-2/2
545 (600-1/2) 605 (700-2) 725 (800-2/2)

RNAV (GPS) RWY 33
ROBERT GRAY AAF (GRK)

For inop ALS, increase LPV Cat E visibility to ¾ SM, LNAV/VNAV Cat E visibility to 2 SM, and LNAV Cat E visibility to 1 ½ SM.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Circling NA west of Rwy 15-33.
For inop ALS, increase LPV Cat E visibility to ¾ SM, LNAV/VNAV Cat E visibility to 2 SM, and LNAV Cat E visibility to 1 ½ SM.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Circling NA west of Rwy 15-33.
For inop ALS, increase LPV Cat E visibility to ¾ SM, LNAV/VNAV Cat E visibility to 2 SM, and LNAV Cat E visibility to 1 ½ SM.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Circling NA west of Rwy 15-33.
For inop ALS, increase LPV Cat E visibility to ¾ SM, LNAV/VNAV Cat E visibility to 2 SM, and LNAV Cat E visibility to 1 ½ SM.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Circling NA west of Rwy 15-33.
For inop ALS, increase LPV Cat E visibility to ¾ SM, LNAV/VNAV Cat E visibility to 2 SM, and LNAV Cat E visibility to 1 ½ SM.
Circling NA west of Rwys 15 and 33. For inop ALS, increase S-15 Cat E visibility to 1½ SM.

VGSi and descent angles not coincident (VGSi angle 3.00/TCH 53).

VGSI/PAR required.

Cat E procedure turn not authorized.

S-15

GND CON

CLNC DEL

ROBERT GRAY AAF (GRK)
Circling NA W of Rwy 15-33.

GEOGRAPHIC LOCATION:
- VOR/DME: GRK (Gray)
- App CRS: 333°
- Rwy Ldg Idg: N/A
- Apt Elev: 1015

ATIS
- 124.9

GRAY APP CON
- 120.075 323.15

GRAY TOWER
- 120.75[C] 285.5

GND CON
- 121.8 279.5

CLNC DEL
- 126.2 251.1

ATIS CON
- ROBERT GRAY AAF
- 124.9

TWR: 1191

VOR/DME: GRK
- Chan 55

MISSED APPROACH:
- Climb to 2000 then climbing right turn to 3000 direct GRK VOR/DME and hold.

VOR CON
- ROBERT GRAY AAF
- 124.9

approach point

ROBERT GRAY AAF (GRK)

AMTD 2D 30NOV23

31°04'N-97°50'W
COPTER VOR RWY 33
ROBERT GRAY AAF (GRK)
TOP ALTITUDE: 3500

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 15, 33: Climb on assigned heading for RADAR vectors to CONRA INT, maintain 3500. Thence... . . .

. . . (transition), expect filed altitude 10 minutes after departure.

COLLEGE STATION TRANSITION (CONRA3.CLL): From over CONRA INT on CLL R-287 to CLL VORTAC.
LEONA TRANSITION (CONRA3.LOA): From over CONRA INT on LOA R-257 to LOA VORTAC.
LAMPS EIGHT DEPARTURE

NOTE: WACO TRANSITION for aircraft inbound to terminal area airports.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climbing right turn heading 333° (to assigned altitude) to intercept and proceed on AGJ R-109. Thence . . . .

TAKEOFF RUNWAY 33: Climbing left turn heading 243° (to assigned altitude) to intercept and proceed on AGJ R-109. Thence . . . .

. . . . on (transition) or (assigned route). Maintain ATC assigned altitude.

STONEDALE TRANSITION (LAMPS8.STV): From over AGJ VORTAC on AGJ R-202 and STV R-018 to STV VORTAC.

WACO TRANSITION (LAMPS8.ACT): From over AGJ VORTAC on AGJ R-036 to SONET INT, then on ACT R-271 to ACT VORTAC.
RNAV (GPS) RWY 30
FORT STOCKTON-PECOS COUNTY (FST)

**RNP APCH.**

- **V** Rwy 30 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Pecos altimeter setting and increase all MDA 160 feet. Increase LNAV Cat C/D visibility ½ mile, Circling Cat C visibility ¾ mile, Cat D visibility ½ mile. Circling NA to Rwy 7-25, 11-29 and 16-34. Straight-in Rwy 30 NA at night, Circling Rwy 3, 21, 30 NA at night.

- **A** MISSED APPROACH: Climb to 5100 direct ATGIY and hold.

**ASOS**

- **118.525**

**ALBUQUERQUE CENTER**

- **135.875 292.15**

**UNICOM**

- **122.8 (CTAF)**

**Procedure NA for arrivals at FST VORTAC via V198-222 westbound.**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**Amdt 1B 04NOV21**

**APP CRS**

- **298°**

- **Rwy Idg 7508**
- **TDZE 3011**
- **Apt Elev 3011**

**RNAV (GPS) RWY 30**

**FORT STOCKTON, TEXAS**

**AL-5350 (FAA)**

**21308**
FORT STOCKTON, TEXAS

VOR RWY 12
FORT STOCKTON-PECOS COUNTY (FST)

VORTAC FST
APP CRS
Rwy Idg
TDZE
Apt Elev
116.9
116°
7508
3002
3111

Circling NA to Rwys 7-25, 11-29 and 16-34.
Circling Rwys 3, 21, 30 NA at night.

MISSED APPROACH: Climbing left turn to 5000 direct
FST VORTAC and hold.

ASOS
ALBUQUERQUE CENTER
UNICOM
118.525
135.875 292.15
122.8 (CTAF) 0

PECOS
WINK
116.5 PEQ
112.1 INK
Chan 116
Chan 58

Remain
within 10 NM

VGSI and descent
angles not coincident
(VGSI Angle 3.00/TCH 45).

CATEGORY
A
B
C
D

S-12
3500-1
498 (500-1)
3500-1½
498 (500-1½)
3500-1½
498 (500-1½)

CIRCLING
3540-1
529 (600-1)
3660-1
649 (700-1)
3740-2
729 (800-2)
3760-2½
749 (800-2½)

5000 FST

MiRl Rwys 3-21 and 12-30

VGSI Angle 3.00/TCH 45.

Misrouting to 3-21 and 12-30.

30°55'N-102°55'W

FORT STOCKTON-PECOS COUNTY (FST)

SC-3, 11 JUL 2024 to 05 SEP 2024

Amdt 8C 04NOV21

SC-3, 11 JUL 2024 to 05 SEP 2024
Rwy 14 helicopter visibility reduction below 3/4 SM NA.

MISSED APPROACH: Climb to 4500 direct CIRIX and hold.

4 NM Holding Pattern

4 NM

Visual Segment - Obstacles.

 CATEGORY   A   B   C   D

LP MDA         2060-1 365 (400-1) NA

LNAV MDA      2200-1  505 (600-1) 2200-13/5 505 (600-13/5) NA

CIRCLING     2200-1  505 (600-1) 2480-1 785 (800-1) 2520-2/5 825 (900-2/5) NA
Rwy 32 helicopter visibility reduction below ⅔ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C.

MISSED APPROACH: Climb to 4000 direct UCETI and hold.

AWOS-3
120.0

HOU (CTAF) 134.2 307.3

GCO 121.725

UNICOM 122.7 (CTAF) 0

WAAS
81930
W32A

CH 81930
TDZE
Apt Elev
5001
1685
1695

Rwy Idg
321°

��

LNAV only.

APP CRS
321°

RW32

Rwy 32

MISSED APPROACH FIX
4 NM

UCETI

W32A

2330

2185

171

RW32

1849

2221

WODAB
2.6 NM to RW32

(FAF) REYOS

2339

UCETI

2208

2044

4500

CIRIX

051°

051°

30 NM to CIRIX (North)

30 NM to CIRIX

CIRIX

4500

3049

4 NM

4 NM

HOLD

4000

5000

4500

MG 3.00°

TCH 37

LNAV only.

WODAB
2.6 NM to RW32

1.2 NM to RW32

1.2 NM

321°

321°

321°

321°

051°

051°

231°

231°

321°

321°

231°

231°

4500

3049

3000

3300

900-1

600-1

150-1

125-1

3000

3300

321°

2540

3300

4500

6000

MIRL Rwy 14-32

FREDERICKSBURG, TEXAS

Amrd 1E 02DEC21

30°15'N-98°55'W
RNAV (GPS) RWY 13
LIVE OAK COUNTY (8T6)

Use Alice Intl altimeter setting. DME/DME RNP-0.3 NA. Procedure NA at night. Visibility reduction by helicopters NA.

Procedure NA at night. Visibility reduction by helicopters NA.

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

RNAV (GPS) RWY 13

GEORGE WEST, TEXAS
Orig-B 20MAY21

AWOS-3PT 119.05
ALL ASOS 119.225
HOUSTON CENTER 134.6 322.5
CTAF 122.9

122.7

ALI ASOS 119.05

HOU STON CENTER 134.6 322.5

122.9

CTAF 122.7

Procedure NA at night. Visibility reduction by helicopters NA.

PROCEDURE NA at night. Visibility reduction by helicopters NA.

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

RNAV (GPS) RWY 13
LIVE OAK COUNTY (8T6)

GEORGE WEST, TEXAS
Orig-B 20MAY21

AWOS-3PT 119.05
ALL ASOS 119.225
HOUSTON CENTER 134.6 322.5
CTAF 122.9

122.7

130° to RW13

THX

DORKY

HARTA

3.1 NM to RW13

3.04° TCH 40

2000

1800

5 NM

2 NM

3.1 NM

GEORGE WEST, TEXAS
Orig-B 20MAY21
Use Alice Intl altimeter setting. Circling to Rwy 31 at night. Visibility reduction by helicopters NA.

VOR/DME-A
"THREE RIVERS"
VORTAC THX 111.4
Chan 51
NoPT for arrivals on THX airway radials 319 clockwise 337.

AWOS-3PT 119.05
ALI ASOS 119.225
HOUSTON CENTER 134.6 322.5
CTAF 122.9

<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>760-1</td>
<td>860-1</td>
<td>860-2</td>
<td>NA</td>
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<tr>
<td></td>
<td>631 (700-1)</td>
<td>731 (700-1)</td>
<td>731 (800-2)</td>
<td></td>
</tr>
</tbody>
</table>

NoPT for arrivals on THX airway radials 319 clockwise 337.

THX VORTAC

One Minute Holding Pattern

2000 340° 160°

160° 3.4 NM from FAF

MIRL Rwy 13-31

SC-3, 11 JUL 2024 to 05 SEP 2024

AL-6928 (FAA)
RNAV (GPS) RWY 11
GEORGETOWN EXEC (GTU)

RWP IDG 4099
TDZE 790
Apt Elev 790

ATIS 118.6
AUSTIN APP CON 119.0
GEORGETOWN TOWER 120.225 (CTAF)
GND CON 119.125
CLNC DEL 119.125
CLNC DEL 121.1
UNICOM 123.0

Procedure NA for arrival at AGJ VORTAC on V358 northbound.

Procedure NA for arrival at CWK VORTAC on airway radials 222 CW 300.

MISSED APPROACH: Climbing left turn to 3000 direct DARTE and hold.
Circling Rwy 29 NA at night. For uncompensated Baro VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.

**Missed Approach:** Climb to 1300 then climbing left turn to 3000 direct DARTE and hold.
RNAV (GPS) RWY 29
GEORGETOWN EXEC (GTU)

Rwy 29 helicopter visibility reduction below ¾ SM NA. VDP NA when using Skylark Field altimeter setting. When local altimeter setting not received, use Skylark Field altimeter setting and increase all MDA 80 feet increase LNAV and Circling Cat C/D visibility ¾ SM.

**Procedure NA for arrival on CWK VORTAC airway radials 271 CW 070.**

- **ATIS:** 118.6
- **AUSTIN APP CON:** 119.0 370.85
- **GEORGETOWN TOWER:** 120.225 (CTAF)
- **GND CON:** 119.125
- **CLNCE DEL:** 121.1
- **CLNCE DEL (when twr closed):** 123.0
- **UNICOM:** 121.1

**ELEV:** 790 **TDZE:** 777

**LNAV MDA:**
- A: 1220-1
- B: 1220-1
- C: 1220-1
- D: 1220-1

**CIRCLING:**
- A: 1240-1
- B: 1240-1
- C: 1240-1
- D: 1240-1

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

**RNAV (GPS) RWY 29**

**MISSED APPROACH:** Climbing right turn to 3000 direct DARTE and hold.
RNAV (GPS) RWY 36
GEORGETOWN EXEC (GTU)

Circling RWY 29 NA at night.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct DARTE and hold.

ATIS 118.6  AUSTIN APP CON  119.0 370.85  GEORGETOWN TOWER  120.225 (CTAF)
GND CON  119.125  CLNC DEL  121.1 (when twr closed)  CLNC DEL  122.1  UNICOM  123.0

RNAV APCH.

Rev Amdt 2A  15AUG19

30°41'N 97°41'W

RNAV (GPS) RWY 36
GEORGETOWN EXEC (GTU)

CARAVELLE

Rwys 11-29 and 18-36

MIRL Rwys 11-29 and 18-36

REIL RWYS 18-36

GEORGETOWN, TEXAS

WAAS CH 72738 358°
W36A

Rwy Idg 5004
TDZE 765
Apt Elev 790

LNAV MDA
APP CRS

Apt Elev
TDZE
Rwy Idg

358°
765
790

CIRCLING

GEORGETOWN, TEXAS

AL-5724 (FAA)

23222

SC-3, 11 JUL 2024 to 05 SEP 2024

189
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM
22363
GEORGETOWN EXEC (GTU)
GEORGETOWN, TEXAS

SC-3, 11 JUL 2024 to 05 SEP 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb on heading 115° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....
TAKEOFF RUNWAY 18: Climb on heading 178° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....
TAKEOFF RUNWAY 29: Climb on heading 295° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....
TAKEOFF RUNWAY 36: Climb on heading 358° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

... on track 293° to AEROZ, then on SAN ANGELO TRANSITION. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

SAN ANGELO TRANSITION (AEROZ2.SJT)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb on heading 115° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 18: Climb on heading 178° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 29: Climb on heading 295° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 36: Climb on heading 358° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....

....on track 224° BNDIA. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb on heading 115° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence...
TAKEOFF RUNWAY 18: Climb on heading 178° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence...
TAKEOFF RUNWAY 29: Climb on heading 295° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence...
TAKEOFF RUNWAY 36: Climb on heading 358° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....

... on track 338° to ELOEL, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

ABILENE TRANSITION (ELOEL3.ABI)
FORSS TRANSITION (ELOEL3.FORSS)
KLNGR TRANSITION (ELOEL3.KLNGR)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 11:** Climb on heading 115° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence...

**TAKEOFF RUNWAY 18:** Climb on heading 178° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence...

**TAKEOFF RUNWAY 29:** Climb on heading 295° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence...

**TAKEOFF RUNWAY 36:** Climb on heading 358° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence...

...on track 090° to ILEY, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

**JAYJO TRANSITION (ILEXY4.JAYJO)**

**ZENZI TRANSITION (ILEXY4.ZENZI)**
NOTE: Chart not to scale.

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

TAKEOFF MINIMUMS:
Rwys 11, 29, 36: Standard.
Rwy 18: 200-1\frac{1}{4} or standard with minimum climb of 250’ per NM to 1000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb on heading 115° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence . . .
TAKEOFF RUNWAY 18: Climb on heading 178° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence . . .
TAKEOFF RUNWAY 29: Climb on heading 295° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence . . .
TAKEOFF RUNWAY 36: Climb on heading 358° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence . . .

. . . on track 279° to MUCKY. Maintain altitude assigned by ATC.
Expect filed altitude 10 minutes after departure.
SAYBR THREE DEPARTURE (RNAV)
(SAYBR3.SAYBR) 22APR21

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb on heading 115° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence. . . .
TAKEOFF RUNWAY 18: Climb on heading 178° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence. . . .
TAKEOFF RUNWAY 29: Climb on heading 295° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence. . . .
TAKEOFF RUNWAY 36: Climb on heading 358° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence. . . .

. . . . .  on track 024° to SAYBR. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

NOTE: Chart not to scale.
When local altimeter setting not received, use Beeville Muni altimeter setting and hold, continue climb-in-hold to 4000.

US Navy Training Wing Four Use Only
EMERG SAFE ALT 100 NM 11,100

BERCLAIR, TEXAS

RNAV (GPS) RWY 11

APCH CRS Rwy Idg 8000
TDZE 318
Arpl Elev 322
AL-2440 [USN]

GOLIAD NOLF (KNGT)

RNP APCH - DME/DME RNP: 0.3 NA.

MISSCD APPROACH: Climb to 4000 direct SWEEN and hold, continue climb-in-hold to 4000.

ASOS
353.675

CTAF
132.875 307.075

5 NM
Holding Pattern RFNEK

4000

SWEEN

ELEV 322
TDZE 318

BERCLAIR, TEXAS

Amrd 3 05OCT23

RNAV (GPS) RWY 11

28°37'N-97°37'W

GOLIAD NOLF (KNGT)
RNAV (GPS) RWY 29

GOLIAD NOLF (KNGT)

When local altimeter setting not received, use Beeville Muni altimeter setting.

ASOS
353.675

CTAF
132.875 307.075

MISSED APPROACH: Climb to 900 then climbing right turn to 4000 direct SWEEN and hold, continue climb-in-hold to 4000.

SWEEN is a fly-over fix when used as a missed approach clearance limit.

US NAVY Training Wing Four Use Only
EMERG SAFE ALT 100 NM 11,100

BERCLAIR, TEXAS
28°37'N-97°37'W

Andt 3 05OCT23

RNAV (GPS) RWY 29

GOLIAD NOLF (KNGT)
RNPA CH-72629 W18A

**MISSED APCH FIX**

- **RNPA CH-72629 W18A**
- **MISSED APPROACH**: Climb to 3100 direct USXEL and hold.

**AWOS-3PT** 118.525  **GRAY APP CON** 120.075  **UNICOM** 122.7 (CTAF)

**PROCEDURE NA** for arrivals at BUILT on V161 southbound.

**Rwy 18** helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

**HOLD**
- **5000**
- **3600**
- **4 NM**

**3600** 
- **(IF/IAF)**
- **UGY**
- **272°** 
- **(3.3)**

**KUYNJU**
- **2.2 NM to RW18**

**RW18**
- **182°**
- **2500**

**USXEL**
- **3100**

**UUGY**
- **4 NM**

**UUGY**
- **002°**
- **6000**
- **3600**

**GP 3.00°**
- **TCH 40**

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

- **LPV DA**
  - 1555-1
  - 250 (300-1)
  - NA

- **LNAV/VNAV DA**
  - 1555-1
  - 250 (300-1)
  - NA

- **LNAV MDA**
  - 1640-1
  - 335 (400-1)
  - NA

- **CIRCLING**
  - 1680-1
  - 375 (400-1)
  - 1840-1
  - 535 (600-1)
  - 1960-1
  - 655 (700-14)
  - NA
HARLINGEN, TEXAS

AL-827 (FAA)

24193

ILS or LOC RWY 18R
VALLEY INTL (HRL)

LOC/DME I-HRL
111.5
APP CRS
178°
Rwy Idg
9400
TDZE
35
Apt Elev
36

When local altimeter setting not received, use Port Isabel altimeter setting: increase S-ILS 18R DA to 277 feet; increase all MDAs 60 feet and S-LOC 18R visibility Cat C/D to RVR 4000 and Circling Cat C/D ½ SM. For inop ALS when using Port Isabel altimeter setting, increase S-LOC 18R visibility Cat C/D to RVR 5500; VDP NA when using Port Isabel altimeter setting.

*RVR 1800 authorized with use of FD or AP or HUD to DA. [NA when using secondary altimeter setting].

MISSED APPROACH: Climb to 500 then climbing left turn to 2000 direct RELAX and hold.

-0.9 NM
-0.6 NM
2.6 NM
6.3 NM

GS 3.00°
TCH 55

LOCALIZER 111.5
I-HRL
Chan 52

HARLINGEN
113.66 HRL
Chan 83 (Y)

MIRL Rwy 18L-36R
REIL Rwys 13 and 18L
HIRL Rwys 13-31 and 18R-36L

HARLINGEN, TEXAS
Amdt 11 JUL 2024

26°14'N-97°39"W
203
ILS or LOC RWY 36L

VALEY INTL (HRL)

MICED APPROACH: Climb to 2000 direct ZIPV and hold.

MISS ED APCH FIX

4 NM

358°

ZIPV

LOCALIZER 111.5

I-RVZ

Chan 52

LOC/DME I-RVZ

111.5

358°

APP CRS

Rwy Ldg 9400

TDZE 36

Apt Elev 36

DME required.

VDP NA when using PIL altimeter setting. When local altimeter setting not received, use Port Isabel altimeter setting and increase S-ILS 36L DA to 278 feet; increase all MDAs 60 feet and S-LOC 36L. Cats C and D visibilities to RVR 5500 and Circling visibility Cats C and D ½ SM. For inop ALS, increase S-LOC 36L Cat C/D visibility to 1½ SM.

* RVR 1800 authorized with use of FD or AP or HUD to DA (NA when using PIL altimeter setting).

ATIS

124.85

VALLEY APP CON

120.7  279.5

HARLINGEN TOWER

119.3 (CTAF)  317.6

GND CON

121.7

UNICOM

122.95

VALEY INTL (HRL)

111.5

358°

GS 3.00° TCH 55

CATEGORY

A

B

C

D

S-ILS 36L

236/24  200 (200-½)

S-LOC 36L

500/24  464 (500-½)

500/50  464 (500-1)

CIRCLING

500-1

464 (500-1)

560-1

524 (600-1)

600-1½

564 (600-1¾)

680-2

644 (700-2)

HARLINGEN, TEXAS

Orig 11JUL24

26°14'N-97°39'W

204
ILS RWY 18R (SA CAT I & II)
VALLEY INTL (HRL)

LOC/DME I-HRL
111.5
Chan 52

APP CRS
178°

Rwy Idg
TDZE
35

Apt Elev
36

MALS

Requires specific OPSPEC, MSPEC, or LOA approval. Procedure NA when tower closed.

ATIS
124.85

VALLEY APP CON
120.7 279.5

HARLINGEN TOWER *
119.3 (CTAF) 317.6

GND CON
121.7

UNICOM
122.95

HARLINGEN, TEXAS
AL-827 (FAA)

SC-3, 11 JUL 2024 to 05 SEP 2024
ILS RWY 36L (SA CAT I & II)
VALLEY INTL (HRL)

SA CATEGORY I & II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SA CAT I: Requires specific OPSPEC, MSPEC, or LOA approval.

SA CAT II: Requires specific OPSPEC, MSPEC, or LOA approval.

MISSED APPROACH: Climb to 2000 direct ZIPPIV and hold.

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 74).

MISSED APCH FIX

SA CATEGORY I & II: Requires specific OPSPEC, MSPEC, or LOA approval.
**RNAV (RNP) Z RWY 13**

**VALLEY INTL (HRL)**

**HARLINGEN, TEXAS**

**AL-827 (FAA)**

**AUTHORIZATION REQUIRED**

**Category B**

- RNP 0.15 DA: 285-3/4 250 (300-3/4)
- RNP 0.30 DA: 342-7/8 307 (400-7/8)

For uncompensated Baro-VNAV systems, procedure NA below -1°C or above 54°C. When local altimeter setting not received, procedure NA.

**ATIS**
- 124.85

**VALLEY APP CON**
- 120.7 279.5

**HARLINGEN TOWER**
- 119.3 (CTAF) 317.6

**GND CON**
- 121.7

**UNICOM**
- 122.95

**RNAV (RNP) Z RWY 13**

**HUTES (IF)**

**CAKOB (IAF)**
- 3000 2T0K (RNP 0.50)

**ORFEN (IF)**
- 3000 2T0K (RNP 0.50)

**CERLI**

**524**

**1049**

**362**

**RW13**

**AMAPE**

**523**

**1393**

**533**

**547**

**1244**

**ELEV**
- 36

**TDZE**
- 35

**UNITED STATES**

**MEXICO**

**2000**

**AMAPE 4 NM**

**HARLINGEN TOWER**

121.7 (CTAF)

122.95

See planview for multiple IF locations.
RNAV (RNP) Z RWY 31
VALLEY INTL (HRL)

**ATIS**
124.85

**VALLEY APP CON**
120.7  279.5

**HARLINGEN TOWER**
119.3 (CTAF)  317.6

**GND CON**
121.7

**UNICOM**
122.95

**ELEV**
36

**TDZE**
36

**MALSR**
1

**AUTHORIZATION REQUIRED**

For uncompensated Baro-VNAV systems, procedure NA below -1°C or above 54°C. For inop ALS, increase RNP 0.11 all Cats visibilities to ¾ SM and increase RNP 0.30 all Cats visibilities ½ SM. When local altimeter setting not received, procedure NA.

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

See Planview for multiple IF locations.
RNAV (RNP) Z RWY 36L
VALLEY INTL (HRL)

For uncompensated Baro-VNAV systems, procedure NA below -1°C or above 54°C. When local altimeter setting not received, procedure NA. For inop ALS, increase RNP 0.11 DA all Cats visibility to ½ SM.

MISSED APPROACH: Climb to 2000 direct ZIPIV and hold.

Cats visibility to ½ SM.

For uncompensated Baro-VNAV systems, procedure NA below -1°C or above 54°C. When local altimeter setting not received, procedure NA. For inop ALS, increase RNP 0.11 DA all Cats visibility to ½ SM.

MISSED APPROACH: Climb to 2000 direct ZIPIV and hold.

AUTHORIZATION REQUIRED
RNAV (GPS) RWY 36R
VALLEY INTL (HRL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. Baro-VNAV and VDP NA when using Port Isabel altimeter setting. When local altimeter setting not received, use Port Isabel altimeter setting: increase LPV DA to 278 feet; increase LNAV/VNAV DA to 328 feet and all visibilities 1/2 SM, increase all MDAs 60 feet and LNAV visibility Cat C and D 1/2 SM, and Circling visibility Cat C and D 1/2 SM.

MISSED APPROACH:
Climb to 2000 direct BETVE and hold.

ATIS
124.85

VALLEY APP CON
120.7 279.5

HARLINGEN TOWER
119.3 (CTAF) 317.6

GND CON
121.7

UNICOM
122.95

HARLINGEN, TEXAS

WAAS CH 72830 W36A
App CRS
Rwy Idg 5759
TDZE 36
Apt Elev 36

RNAV (GPS) RWY 36R
VALLEY INTL (HRL)

Amdt 1 11JUL24

HARLINGEN, TEXAS

MIRL Rwy 18L-36R
REIL Rwy 13 and 18L
HIRL Rwy 13-31 and 18R-36L
RNAV (GPS) Y RWY 13
VALLEY INTL (HRL)

ATIS 124.85
VALLEY APP CON 120.7 279.5
HARLINGEN TOWER 119.3 (CTAF) 317.6
GND CON 121.7
UNICOM 122.95

RNAV (GPS) Y RWY 13

HOLD 6000

2000

IF/IAF CAKOB

HRL

[IF/IAF] FAMVI

[IF/IAF] HIRA

[IF/IAF] HIRTA

ELEV 36
TDZE 35

MISSED APCH FIX

AMAPE

313°

AMAPE and hold.

Baro-VNAV and VDP NA when using Port Isabel altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. When local altimeter setting not received, use Port Isabel altimeter setting: increase LPV DA to 327 feet and all visibilities ½ SM; increase LNAV/VNAV DA to 327 feet and all visibilities ½ SM; increase all MDAs 60 feet and visibility Cats C and D ½ SM.

BARO-VNAV and VDP NA when using Port Isabel altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. When local altimeter setting not received, use Port Isabel altimeter setting: increase LPV DA to 327 feet and all visibilities ½ SM; increase LNAV/VNAV DA to 327 feet and all visibilities ½ SM; increase all MDAs 60 feet and visibility Cats C and D ½ SM.

MISSED APPROACH: Climb to 2000 direct AMAPE and hold.

RNAV (GPS) Y RWY 13

BARO-VNAV and VDP NA when using Port Isabel altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. When local altimeter setting not received, use Port Isabel altimeter setting: increase LPV DA to 327 feet and all visibilities ½ SM; increase LNAV/VNAV DA to 327 feet and all visibilities ½ SM; increase all MDAs 60 feet and visibility Cats C and D ½ SM.

Amdt 3 11JUL24
RNAV (GPS) Y RWY 31
VALLEY INTL (HRL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. Baro-VNAV and VDP NA when using Port Isabel altimeter setting. For inop ALS, increase LNAV/VNAV all Cats visibilities to 3/4 SM. For inop ALS when using Port Isabel altimeter setting, increase LNAV/VNAV all Cats visibilities to 3/4 SM. When local altimeter setting not received, use Port Isabel altimeter setting; increase LPV DA to 278 feet; increase LNAV/VNAV DA to 328 feet; increase all MDAs 60 feet and LNAV visibility Cats C and D 3/4 SM and Circling visibility Cat C and D 3/4 SM.

Procedure NA for arrivals at RELAX on V163 northbound.

Amdt 4 11Jul24
SC-3, 11 JUL 2024 to 05 SEP 2024

HARLINGEN, TEXAS  AL-827 (FAA)  24193

RNAV (GPS) Y RWY 31
VALLEY INTL (HRL)
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. Baro-VNAV and VDP NA when using Port Isabel altimeter setting. When local altimeter setting not received, use Port Isabel altimeter setting and increase LPV DA to 278 feet; increase LNAV/VNAV DA to 447 feet and all visibilities 1/4 SM. Increase all MDAs 60 feet, and LNAV visibility Cat C and D 1/4 SM; and Circling visibility Cats C and D 1/4 SM.

Climb Approach: Climb to 2000 direct ZIPIV and hold.

2000 ZIPIV VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 74). QUTIE

1.3 NM to RW36L

1400 358° (1.3)

1600

GP 3.00° TCH 55

236-3/4 200 (200-3/4)

405-1 369 (400-1)

500-1 464 (500-1) 500-1 369 (400-1)

500-1 369 (400-1)

560-1 624 (600-1) 564 (600-1/2)

680-2 644 (700-2)
VOR RWY 18L
VALLEY INTL (HRL)

DME required. RADAR required for procedure entry at KULKE.

ATIS 124.85
VALLEY APP CON 120.7 279.5
HARLINGEN TOWER* 119.3 (CTAF) 317.6
GND CON 121.7
UNICOM 122.95

HARLINGEN, TEXAS
AL-827 (FAA)
24193

SC-3, 11 JUL 2024 to 05 SEP 2024

HARLINGEN, TEXAS
Ammd 2 11JUL24
26°14’N-97°39’W
217
For inop ALS, increase S-18R Cat C/D visibility to 1/2 SM. When local altimeter setting not received, use Port Isabel altimeter setting and increase all MDAs 60 feet and S-18R visibility Cat C/D to RVR 5500 and Circling visibility Cat C/D 1/4 SM. VPD NA when using Port Isabel altimeter setting.

**MISSED APPROACH:** Climb to 1200 then climbing right turn to 2000 direct HRL VOR/DME and hold, continue to climb in hold to 2000.
HARLINGEN, TEXAS

VOR Y or TACAN RWY 31

VALLEY INTL (HRL)

VOR Y or TACAN RWY 31

MISSED APPROACH: Climbing right turn to 2000
on BRO R-311 to ZOCKE/12 DME and hold.

Procedure NA for arrival
on BRO VORTAC
airway radials 258 CW 349.

UNITED STATES

UNITED STATES

MEXICO

MEXICO

CIRCLING

1000-1/4
964 (1000-1/4)

1000-1/2
964 (1000-1/2)

1000-3
964 (1000-3)

CATEGORY

A

B

C

D

S-31

1000-3/4
964 (1000-3/4)

1000-1
964 (1000-1)

1000-1/2
964 (1000-1/2)

1000-3
964 (1000-3)

HARLINGEN, TEXAS

Amdt 2 11JUL24

26°14'N-97°39'W

VALLEY INTL (HRL)
RNAV (GPS) RWY 17L
SOUTH TEXAS RGNL AT HONDO (HDO)

HONDO, TEXAS
Amdt 1B 15JUL21

29°22'N-99°11'W

ASA 119.675
HOUSTON CENTER 134.95 269.4
UNICOM 122.725 (CTAF)

Procedure NA for arrivals on V68 southeast bound.

MISSED APPROACH: Climb to 4000 direct MUNJO and hold, continue climb-in-hold to 4000.

Baro-VNAV and VDP NA when using Castroville altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 47°C. When local altimeter setting not received, use Castroville altimeter setting and increase all DA 62 feet and all MDA 80 feet, increase LNAV/VNAV all Cats visibility ½ SM, LNAV and Circling Cats C/D visibility ½ SM. Rwy 17L helicopter visibility reduction below ½ SM NA. Circling to Rwy 17L, 13R, 26, 31 and 35L NA at night.

SC-3, 11 JUL 2024 to 05 SEP 2024

Amdt 1B 15JUL21
RNAV (GPS) RWY 35R
SOUTH TEXAS RGNL AT HONDO (HDO)

Boro-VNAV NA when using Castroville altimeter setting. For uncompensated Boro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). Visibility reduction by helicopters NA. When local altimeter setting not received, use Castroville altimeter setting and increase all DA 62 feet and all MDA 80 feet, increase LNAV/VNAV all Cats, and LNAV and Circling Cats C and D visibility ¼ mile. Circling Rwy 8, 13, 17R, 26, 31, 35L NA at night.

**MISSING APPROACH:**
Climb to 3700 direct JENDE and hold.

**Procedure NA for arrival on SAT VORTAC airway radials 175 CW 190.**

- **ASOS**
  - HONDO, TEXAS
  - UNICOM
  - HOUSTON CENTER
  - 119.675
  - 134.95
  - 269.4
  - 122.725

- **MDA**
  - 352°

- **MIRL Rwy 17L-35R**

- **APPROACH**
  - CATEGORY A
  - B
  - C
  - D

- **LPV**
  - DA
  - 1170-1
  - 253 (300-1)

- **LNAV/VNAV**
  - DA
  - 1293-1
  - 376 (400-1)

- **LNAV MDA**
  - 1360-1
  - 443 (500-1)
  - 1360-1/4
  - 443 (500-1/4)
  - 1360-1/2
  - 443 (500-1/2)

- **CIRCLING**
  - 1440-1
  - 1520-1
  - 1580-1/4
  - 1580-1/2
  - 650 (700-1)
  - 650 (700-2)

- **TDZE**
  - 917

- **ELEV**
  - 930

- **W35A**
  - CH 48820
  - 352°
  - 6002
  - 917
  - 930

- **SC-3, 11 JUL 2024 to 05 SEP 2024**

- **SOUTH TEXAS RGNL AT HONDO (HDO)**

- **29°22’N-99°11’W**

- **225**

- **SOUTHERN RGNL AT HONDO (HDO)**

- **RNAV (GPS) RWY 35R**
RNAV (GPS) RWY 13
MCCAMPBELL-PORTER (TFP)

**RNAV GPS RWY 13**

CIRCLING RNAV (GPS) RWY 13

LNAV/ VNAV

286 - 268 (300 -)

2100

313°

133°

OLIRE

ROYOT

TCH 40

3.4 NM

6.1 NM

315°

519

525

520

32

72

554

A-632D

A-632B

COPAN

Procedure NA for arrivals at COPAN via V20-70 northeast bound.

**AWOS-3**

**CORPUS APP CON**

**UNICOM**

118.775

120.9 348.725

122.7 (CTAF)

**MISSED APPROACH:**

Climb to 2000 direct ISICE and hold.

Baro-VNAV NA when using Mustang Beach altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 49°C. When local altimeter setting not received, use Mustang Beach altimeter setting: increase LPV DA to 292 feet; increase LNAV/VNAV DA to 310 feet; increase all MDAs 40 feet and Circling visibility Cat C \(\frac{3}{4}\) SM. VDP NA when using Mustang Beach altimeter setting.

A-632D

(FAF) ROYOT

PUCIL

2 NM to RW13

(5.6)

301°

223°

2100 NOPT

133° to RW13

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**INGLESIDE, TEXAS**

Amdt 1B 11 AUG 22

27°55'N-97°13'W
RNAV (GPS) RWY 31
MCCAMPBELL-PORTER (TFP)

Baro-VNAV NA when using Mustang Beach altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). When local altimeter setting not received, use Mustang Beach altimeter setting: increase LPV DA to 292 feet; increase LNAV/VNAV DA to 534 feet; increase all MDAs 40 feet, LNAV and Circling visibility Cat C ½ SM. VDP NA when using Mustang Beach altimeter setting. DME/DME RNP-0.3 NA.

AWOS-3
118.775
CORPUS APP CON
120.9 348.725
UNICOM
122.7 (CTAF) *

MCC 2100 (IF/IAF)
NEGIC

OLIRE Holding Pattern

2100 OLIRE VGS1 and descent angles not coincident
(IF/IAF) ISICE

4 NM

ISICE

313° to RW31

2100

1048 A

AWSAS CH 82601
APP CRS 313°
Rwy Idg 4999
TDZE 18
Apt Elev 18

INGLESIDE, TEXAS

Amdt 1A 21APR22

27°55'N-97°13'W

227

AL-10220 (FAA)
Procedures NA for arrival on JCT VORTAC airway radials 302 CW 104.

Procedure NA for approach or land at JCT VORTAC.

Circling NA to Rwy 8-26. Rwy 17 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing right turn to 4000 direct CRUMP WP and hold.

Category A B C D
LNAV MDA 2420-1 669 (700-1) 2420-1½ 669 (700-1¼) NA
CIRCLING 2420-1 666 (700-1) 2680-1¼ 926 (1000-1¼) 2780-3 1026 (1100-3) NA

RNAV (GPS) RWY 17
KIMBLE COUNTY (JCT)

ASOS
| CATEGORY | 119.275 |

HOUSTON CENTER
| 125.75 346.4 |

UNICOM
| 122.8 (CTAF) |
Circling NA to Rwy 8-26.

ASOS
119.275

HOUSTON CENTER
125.75 346.4

UNICOM
122.8 (CTAF) 

MISSED APPROACH: Climbing left turn to 4000
direct to JCT VORTAC and hold.

JCT VORTAC
116.0 JCT
Chan 107

APP CRS
144°

Rwy Idg
TDZE
N/A

Apt Elev
1754

HOUSTON CENTER
125.75 346.4

ATC
116.0 JCT
Chan 107

VOR-A
KIMBLE COUNTY (JCT)

ASOS
119.275

UNICOM
122.8 (CTAF)

VOR-A
KIMBLE COUNTY (JCT)

ASOS
119.275

UNICOM
122.8 (CTAF)

Junction, Texas

Amdt 12A 30DEC21

30°31’ N-99°46’ W

229
**RNAV (GPS) RWY 34**

**AL-371 (USAF)**

**KELLY FLD (KSKF)**

---

**RNP APCH**

**ALS F-1**

**ATIS**

120.45 273.5

**SAN ANTONIO APP CON**

118.05 353.5

**KELLY TOWER**

124.3 322.35

**GND CON**

121.8 289.4

---

**1542**

**MONST**

**RW34**

**(FAP) WUKEN**

**(IAF) ZEGVI**

**CEPRO 2700**

**HOLD 2700**

EMERG SAFE ALT 100 NM 4200

---

**3000**

**MONST**

**VGSI and descent angles not coincident (VGSI Angle 3.02/TCH 93).**

**CEPRO 158° 338° 2700**

**5 NM Holding Pattern**

---

**CATEGORY**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>3LPV DA*</td>
<td>860/24</td>
<td>200</td>
<td>(200-1/2)</td>
<td></td>
</tr>
<tr>
<td>2LNAV/VNAV DA**</td>
<td>1120/45</td>
<td>460</td>
<td>(500-1/2)</td>
<td></td>
</tr>
<tr>
<td>LNAV MDA***</td>
<td>1120/24 460 (500-1/2)</td>
<td>1120/45 460 (500-1/2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CIRCULING****

- 1200-1
- 510 (600-1)

- 1280-1
- 590 (600-1)

- 1340-1¼
- 650 (700-1¼)

- 1400-2¼
- 710 (800-2¼)

- 1900-3
- 1210 (1300-3)

---

**SAN ANTONIO, TEXAS**

**Amrd 2 23FEB23**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**233**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16**: Climb on heading 158° or as assigned by ATC, for vectors to TREVA, thence . . .

**TAKEOFF RUNWAY 34**: Climb on heading 338° or as assigned by ATC, for vectors to TREVA, thence . . .

. . . on track 305° to TATAR, then on track 305° to ALISS.
Maintain ATC assigned altitude.

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 158° or as assigned by ATC, for vectors to YENNS, thence . . .

TAKEOFF RUNWAY 34: Climb on heading 338° or as assigned by ATC, for vectors to YENNS, thence . . .

. . . . on track 161° to LILJO, then on track 161° to SLENA, then on transition. Maintain ATC assigned altitude.

BRENI TRANSITION (SLENA1.BRENI)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 158° or as assigned by ATC, for vectors to WRKIT, thence . . .

TAKEOFF RUNWAY 34: Climb on heading 338° or as assigned by ATC, for vectors to WRKIT, thence . . .

. . . on track 080° to CHURN, then on track 085° to SNIDR, then on transition. Maintain ATC assigned altitude.

BLUMS TRANSITION (SNIDR1.BLUMS)
CAAGE TRANSITION (SNIDR1.CAAGE)
FFSSH TRANSITION (SNIDR1.FFSSH)
MOLLR TRANSITION (SNIDR1.MOLLR)
SEEDS TRANSITION (SNIDR1.SEEDS)
WEMAR TRANSITION (SNIDR1.WEMAR)
WHAEI TRANSITION (SNIDR1.WHAEL)
WYLSN TRANSITION (SNIDR1.WYLSN)
TJANO ONE DEPARTURE (RNAV)

**RNAV 1 - DME/DME IRU or GPS.**

**RADAR required.**

**TOP ALTITUDE:**

**ASSIGNED BY ATC**

**SOUTHERN AIRPORTS**

**SAN ANTONIO DEP CON**

125.7  290.225

ATIS
120.45  273.5

GND CON
121.8  289.4

KELLY TOWER
124.3  322.35

**NOTE:** For non-GPS equipped aircraft, THX and SAT DME must be operational.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb on heading 158° or as assigned by ATC, for vectors to LVACA, thence . . .

**TAKEOFF RUNWAY 34:** Climb on heading 338° or as assigned by ATC, for vectors to LVACA, thence . . .

. . . on track 205° to TJANO, then on Transition. Maintain ATC assigned altitude.

**KAHAN TRANSITION (TJANO1.KAHAN)**

**ZANNI TRANSITION (TJANO1.ZANNI)**
NOTE: Aircraft destined for airports north/northeast of DFW terminal area must file the KLNGR Transition.
RNAV (GPS) RWY 16
KENEDY RGNL (2R9)

Procedure NA at night. When local altimeter setting not received, use Pleasanton altimeter setting. Rwy 16 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000 direct FORLU and hold.

AWOS 3-PT
118.45

HOUSTON CENTER
134.6 322.5

UNICOM
123.0 (CTAF)

RNAV APCH.

HOLD 6000 2000

MISSED APPROACH: Climb to 2000 direct FORLU and hold.

CATEGORY
A  B  C  D

LP MDA
860-1 571 (600-1) NA

RNAV MDA
1040-1 751 (800-1) 1040-1¼ 751 (800-1¼) NA

KENEDY, TEXAS
Orig-D 07NOV19
28°49’N-97°52’W

KENEDY RGNL (2R9)
AL-5975 (FAA)
SC-3, 11 JUL 2024 to 05 SEP 2024
Procedure NA at night. Rwy 34 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Pleasanton altimeter setting.

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

**AWOS 3-PT**
- **KENEDY, TEXAS**
  - 118.45

**HOUOTN CENTER**
- **KENEDY, RGNL (2R9)**
  - 134.6 322.5

**UNICOM**
- **KENEDY, RGNL (2R9)**
  - 123.0 (CTAF)

**2000 direct WONIX and hold.**

**Visual Segment - Obstacles.**

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

**LP MDA**
- 840-1 552 (600-1)
- NA

**LNAV MDA**
- 900-1 612 (700-1)
- NA

**344° 164° 344° 2000 2000**

**FORLU**
- 2100
- 254°
- 254°
- 074°
- 074°

**CIKDA**
- 2.5 NM to RW34

**RW34**
- 2.5 NM to RW34

**HOLD**
- 6000 2000

**28°49'N-97°52'W**

**RNAV (GPS) RWY 34**

**RNAV (GPS) RWY 34**
**LOC RWY 30**

**KERRVILLE MUNI/LOUIS SCHREINER FLD (ERV)**

<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-30</td>
<td>2360-1,771</td>
<td>2360-1½,771</td>
<td>2360-2½,771</td>
<td>2360-2/½,771</td>
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<tr>
<td>C-CIRCLING</td>
<td>2360-1,743</td>
<td>2360-1½,743</td>
<td>2380-2½,763</td>
<td>2540-3,923</td>
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</tbody>
</table>

**ZABOS FIX MINIMUMS (DUAL VOR RECEIVERS 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-30</td>
<td>2260-1,643</td>
<td>2340-1,723</td>
<td>2380-2½,763</td>
<td>2540-3,923</td>
</tr>
<tr>
<td>C-CIRCLING</td>
<td>2260-1,643</td>
<td>2340-1,723</td>
<td>2380-2½,763</td>
<td>2540-3,923</td>
</tr>
</tbody>
</table>

**Procedure NA for arrival on CSI VORTAC airway radials 105 CW 138.**

**MISSED APPROACH:** Climb to 2100 then climbing left turn to 4100 direct CSI VORTAC and hold, continue climb-in-hold to 4100.
**VOR-A**

**KERRVILLE MUNI/LOUIS SCHREINER FLD (ERV)**

**MISSED APPROACH:** Climbing left turn to 4000 direct CSI VORTAC.

**AWOS-3**  
118.125

**HOUSTON CENTER**  
134.95 269.4

**CLNC DEL**  
134.95

**UNICOM**  
122.7 (CTAF)

---

**Category A**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>CIRCLING</td>
<td>2440-1 1/4</td>
<td>2440-1 1/4</td>
<td>2440-2 1/2</td>
<td>NA</td>
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<tr>
<td></td>
<td>823 (900-1)</td>
<td>823 (900-1)</td>
<td>823 (900-2 1/4)</td>
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</table>

**HODIS Fix Minimums**

**Category C**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
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<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>CIRCLING</td>
<td>2320-1</td>
<td>2340-1</td>
<td>2380-2 1/4</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>703 (800-1)</td>
<td>723 (800-1)</td>
<td>763 (800-2 1/4)</td>
<td></td>
</tr>
</tbody>
</table>

**FAF to MAP** 7.2 NM

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**KERRVILLE, TEXAS**

Amdt 3B 30JAN20

**29°59'N-99°05'W**

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**SC-3, 11 JUL 2024 to 05 SEP 2024**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Circling Rwy 19 NA at night.

**MISSING APPROACH:** Climb to 1300 then Climbing right turn to 3100 direct IZSUN and hold.

**AWOS-3PT** 128.575  
**GRAY APP CON** 120.075 323.15  
**CLNC DEL** 121.7  
**UNICOM** 122.7 (CTAF)  

**Procedure NA for arrival on AGJ** VORTAC airway radials 185 CW 202.

**Procedure NA for arrivals at DARTE on V17 southbound.**

**カテゴリ**  
**LPV DA** 1044-3/4 200 (200-3/4) NA  
**LNAV/VNAV DA** 1608-3 764 (800-3) NA  
**LNAV MDA** 1360-1 516 (600-1) 1360-1 516 (600-1.5) 516 (600-1.5) NA  
**CIRCLING** 1360-1 512 (500-1) 1440-1/2 592 (600-1/2) NA  

**AL-5344 (FAA)**  
**SC-3, 11 JUL 2024 to 05 SEP 2024**  
**SKYLARK FLD (ILE)**  
**RNAV (GPS) RWY 1**  
**KILLEEN, TEXAS**  
**Amnd 1 15SEP16**  
**31°05'N-97°41'W**
Circling Rwy 19 NA at night.
When local altimeter setting not received, use Robert Gray AAF altimeter setting and increase all MDA 60 feet.

AWOS-3PT  GRAY APP CON  CIRNC DEL  UNICOM
128.575  120.075  323.15  121.7  122.7 (CTAF)

*NA when R-6302C in affect.

Remain within 10 NM

#1680 when using Robert Gray AAF altimeter setting.

**CIRCLING**

<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>1620-1</td>
<td>1620-1½</td>
<td>1620-2½</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>772 (800-1)</td>
<td>772 (800-1½)</td>
<td>772 (800-2½)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>3000</td>
<td>GRK</td>
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<td></td>
<td></td>
<td>HEKIP</td>
<td>GRK</td>
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<td>ZEKID</td>
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<td>7</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3000</td>
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</tbody>
</table>

#1620

#1440-1½

**CIRCLING**

<table>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>CIRCLING</td>
<td>1320-1</td>
<td>1360-1</td>
<td>592</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>472 (500-1)</td>
<td>512 (600-1)</td>
<td>(592-1½)</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td>HEKIP</td>
<td>GRK</td>
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<td></td>
<td>ZEKID</td>
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<td>5</td>
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#3000

#592

**CIRCLING**

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NA
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 1:** Climb on assigned heading for RADAR vectors to CONRA INT, maintain 3500. Thence . . .

**TAKEOFF RUNWAY 19:** Climb on heading 192° to 1900 before turning east. Then climb on assigned heading for RADAR vectors to CONRA INT, maintain 3500. Thence . . .

. . . (transition), expect filed altitude 10 minutes after departure.

**COLLEGE STATION TRANSITION (CONRA3.CLL):** From over CONRA INT on CLL R-287 to CLL VORTAC.

**LEONA TRANSITION (CONRA3.LOA):** From over CONRA INT on LOA R-257 to LOA VORTAC.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 1**: Climbing right turn heading 300° (to assigned altitude) to intercept and proceed on AGJ R-098. Thence. . . .

**TAKEOFF RUNWAY 19**: Climbing right turn heading 330° (to assigned altitude) to intercept and proceed on AGJ R-098. Thence. . . .

. . . .on (transition) or (assigned route). Maintain ATC assigned altitude.

**STONEWALL TRANSITION (LAMPS8.STV)**: From over AGJ VORTAC on AGJ R-202 and STV R-018 to STV VORTAC.

**WACO TRANSITION (LAMPS8.ACT)**: From over AGJ VORTAC on AGJ R-036 to SONET INT, then on ACT R-271 to ACT VORTAC.

**NOTE**: WACO TRANSITION for aircraft inbound to terminal area airports.

**NOTE**: Chart not to scale.
**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. Visibility reduction by helicopters NA. When local altimeter setting not received, use Alice altimeter setting and increase all DA 33 feet and all MDA 40 feet and LPV all Cats, LNAV/VNAV all Cats, and LNAV Cat D visibility ¼ mile. Baro-VNAV and VDP NA when using Alice altimeter setting.**

**MISSING APPROACH:** Climb to 2000 direct OREN and hold.

**IAP CRS**

**KINGSVILLE 2 MOA**

**4 NM Holding Pattern**

**VGS and RNAV glidepath not coincident (VGS Angle 3.00°/TCH 39).**

**NOTE**

- 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. Visibility reduction by helicopters NA. When local altimeter setting not received, use Alice altimeter setting and increase all DA 33 feet and all MDA 40 feet and LPV all Cats, LNAV/VNAV all Cats, and LNAV Cat D visibility ¼ mile. Baro-VNAV and VDP NA when using Alice altimeter setting.

- **MISSING APPROACH:** Climb to 2000 direct OREN and hold.

- **IAP CRS**

- **KINGSVILLE 2 MOA**

- **4 NM Holding Pattern**

- **VGS and RNAV glidepath not coincident (VGS Angle 3.00°/TCH 39).**
KINGSVILLE, TEXAS

ILS X or LOC/DME X RWY 13R

LOC I-NQI 110°
APCH CRS 130°
Rwy Ldg 8000
TDZE 0
Arpt Elev 50
AL-918 [USN]

TACAN required

- 686

ATIS * 282.25
APP CON 119.9 290.45
TOWER * 124.1 377.05
GND CON 239.05
CLNC DEL 328.4

MISSED APPROACH: Climbing right turn to 3000 to intercept NQI TACAN R-184 to BRAMA and hold.

LOCALIZER 110.9

EMERG SAFE ALT 100 NM 16,200

VGS I and ILS glideslope not coincident (VGS I TCH 34)

CATEGORY
A
B
C
D

S-ILS 13R
250-3/4
200
(200-1/4)

S-LOC 13R
460-1
410
(500-1)
460-1/2
410
(500-1/4)

CIRCLING
540-1
490
(500-1)
760-2
710
(800-2)
710
(800-2/2)

KINGSVILLE, TEXAS
Orig 14JUL22

KINGSVILLE NAS (KNQI)
MISSED APPROACH: Climbing right turn to 3000 and intercept NQI TACAN R-184 to BRAMA and hold.

EMERG SAFE ALT 100 NM 16,200

VGS ILS and ILS glidespath not coincident (VGS ICH T34)

CIRCLING

255
TACAN RWY 17L

KINGSVILLE NAS (KNQI)

ATIS 282.25
APP CON 119.9 290.45
TOWER 124.1 377.05
GND CON 239.05
CLNC DEL 328.4
ASR/PAR

MISSED APPROACH: Climb to 3000 direct NQI TACAN and climbing right turn to intercept NQI R-184 to BRAMA and hold.

EMERG SAFE ALT 100 NM 16,200

CATEGORY A B C D
S-17L 360-1 311 [400-1]

HRL all rwys REL all rwys TDZL/CL Rwy 17L

KINGSVILLE NAS (KNQI)

Amdt 1 05NOV20

TACAN RWY 17L

KINGSVILLE, TEXAS

27°30′N-97°45′W

2024
KINGSVILLE, TEXAS

TACAN RWY 31L/R

ATIS 282.25
APP CON 119.9 290.45
TOWER 124.1 377.05
GND CON 239.05
CLNC DEL 328.4
ASR/PAR

EMERG SAFE ALT 100 NM 16,200

3000 NQI
NQI 319
NQI 12
BALTS
NQI 12

CORPUS CHRISTI
115.5 CRP
Chan 102

KINGSVILLE
Chan 125 NQI

MISSED APPROACH: Climb to 3000 direct NQI TACAN and climbing right turn to intercept NQI R-319 to BALTS and hold. Continue climb-in-hold to 3000.

CATEGORY A B C D
S-31L 380-1 333 (400-1)
S-31R 380-1 336 (400-1)
CIRCLING 540-1 490 (500-1) 760-2 760-2.5
TACL/CL Rwy 17L 292* to TACAN

KINGSVILLE, TEXAS
27°30’N-97°45’W

Amdt 1 05NOV20
TACAN Y RWY 17R

KINGSVILLE NAS (KNGI)

ATIS 282.25
APP CON 119.9 290.45
TOWER 124.1 377.05
GND CON 239.05
CLNC DEL 328.4
ASR/PAR

ORANGE GROVE
Chan 63 NOG

CORPUS CHRISTI
Chan 102

HINKE CRP 15

HOLD 4000

GROVI CRP 34

2300

EMERG SAFE ALT 100 NM 16,200

146* 5.9 NM from FAF

146* 1200 feet

EMERGENCY

1800 NOG 2.5 NM

NEL 171

REL 150

35L 35R

HIL R DRG

REL all runys

TDZL/CL RWY 17L

KINGSVILLE, TEXAS

CATEGORY A B C D
S-17R 560-1 511 (600-1) 560-1% 511 (600-1%)
C CIRCLING 560-1 510 (600-1) 760-2 760-2%}

27*30'N-97*49'W

05NOV20

SC-3, 11 JUL 2024 to 05 SEP 2024

KINGSVILLE NAS (KNGI)

AL-918 (USN)

SC-3, 11 JUL 2024 to 05 SEP 2024

KINGSVILLE, TEXAS

Amir 1 05NOV20

TACAN Y RWY 17R
TACAN Z RWY 17R

KINGSVILLE, TEXAS

ATIS ★ 282.25
APP CON 119.9 290.45
TOWER ★ 124.1 377.05
GND CON 239.05
CLNC DEL 328.4
ASR/PAR

SC-3, 11 JUL 2024 to 05 SEP 2024

EMERG SAFE ALT 100 NM 16,200

CAUTION: Intermediate segment length 5.8 NM
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 13L/R: Climb via heading 130° to join NQI TACAN 7 DME arc, thence...

TAKE-OFF RWY 17L/R: Climb via heading 175° to join NQI TACAN 7 DME arc, thence...

TAKE-OFF RWY 31L/R: Climb via heading 310° to join NQI TACAN 7 DME arc, thence...

TAKE-OFF RWY 35L/R: Climb via heading 355° to join NQI TACAN 7 DME arc, thence...

CORPUS CHRISTI TRANSITION (NQI3•CRP):

Rwys 13L/R and 17L/R: Turn left to intercept NQI 7 DME arc and arc NE. Turn right to intercept NQI R-038 to cross JERIR at or above 8000. Then on NQI R-038 to CRP VORTAC.

Rwys 31L/R and 35L/R: Turn right to intercept NQI 7 DME arc and arc NE. Turn left to intercept NQI R-038 to cross JERIR at or above 8000. Then on NQI R-038 to CRP VORTAC.

(Continued on next page)
DEPARTURE ROUTE DESCRIPTION
(Continued)

HOBOZ TRANSITION (NQI3•HOBOZ):
Rwys 13L/R and 35L/R: Turn left to intercept NQI 7 DME arc and arc NW. Turn right to intercept NQI R-339 to HOBOZ.
Rwys 17L/R and 31L/R: Turn right to intercept NQI 7 DME arc and arc NW. Turn left to intercept NQI R-339 to HOBOZ.

JUBAK TRANSITION (NQI3•JUBAK): *
Rwys 13L/R and 17L/R: Turn left to intercept NQI 7 DME arc and arc SE. Turn right to intercept NQI R-125 to JUBAK.
Rwys 31L/R and 35L/R: Turn right to intercept NQI 7 DME arc and arc SE. Turn left to intercept NQI R-125 to JUBAK.

RICTO TRANSITION (NQI3•RICTO): *
Rwys 13L/R and 17L/R: Turn right to intercept NQI 7 DME arc and arc SW. Turn left to intercept NQI R-225 to RICTO.
Rwys 31L/R and 35L/R: Turn left to intercept NQI 7 DME arc and arc SW. Turn right to intercept NQI R-225 to RICTO.

* RICTO and JUBAK transitions are for local use for Special Use Airspace entry only.

LOST COMMUNICATIONS: If no transmissions are received one minute after departure, climb to assigned altitude, proceed direct assigned NAVAID or intercept NQI TACAN 7 DME arc, arc to respective departure radial then via departure radial to assigned departure fix. Then via assigned transition or route. Once established on departure radial climb to filed altitude.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Rwy 15 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 1700 then climbing right turn to 4100 direct AWALT and hold.

AWOS-3PT
119.375

AUSTIN APP CON
119.0 370.85

UNICOM
122.725 (CTAF)

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Procedure NA for arrival on LLO VORTAC airway radials 018 CW 165 and on CWK VORTAC airway radials 222 CW to 004.

LAGO VISTA, TEXAS
Amdt 1 05JAN17

RNAV (GPS) RWY 15
LAGO VISTA TX/RUSTY ALLEN (RYW)

AWALT and hold.

then climbing right turn to 4100 direct AWALT and hold.

* VGSI and RNAV glidepath not coincident (VGSI Angle 4.00/TCH 56).

** LNAV only.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 157° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

TAKEOFF RUNWAY 33: Climb on heading 337° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

. . . . on track 293° to AEROZ, then on SAN ANGELO TRANSITION. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

SAN ANGELO TRANSITION (AEROZ2.SJT)
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.

NOTE: Chart not to scale.

TAKEOFF MINIMUMS:
Rwys 15, 33: Standard.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 157° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 33: Climb on heading 337° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....

....on track 224° to BNDIA. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
**ELOEL THREE DEPARTURE (RNAV)**

**TOP ALTITUDE:**
ASSIGNED BY ATC

**TAKEOFF MINIMUMS:**
Rwys 15, 33: Standard.

**NOTE:** RADAR required.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** RNAV 1.

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 15:** Climb on heading 157° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....

**TAKEOFF RUNWAY 33:** Climb on heading 337° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....

... on track 338° to ELOEL, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

**ABILENE TRANSITION (ELOEL3.ABI)**

**FORSS TRANSITION (ELOEL3.FORSS)**

**KLNGR TRANSITION (ELOEL3.KLNGR)**
NOTE: Chart not to scale.

RAV 1 - DME/DME/IRU or GPS.
RADAR required.

TOP ALTITUDE:
ASSIGNED BY ATC

AWOS-3PT
119.375
UNICOM (CTAF)
122.725
AUSTIN DEP CON
119.0 370.85

NOTE: Houston terminal area arrivals expect routing from ILEXY.  
NOTE: JAYJO transition to join V306 only.  
NOTE: Aircraft not destined the Houston terminal area or joining 
V306 must file the ZENZI transition.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 157° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence...

TAKEOFF RUNWAY 33: Climb on heading 337° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence...

...on track 090° to ILEXY, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

JAYJO TRANSITION (ILEXY4.JAYJO)
ZENZI TRANSITION (ILEXY4.ZENZI)
NOTE: Chart not to scale.

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

TAKEOFF MINIMUMS:
Rwys 15, 33: Standard.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 157° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence....
TAKEOFF RUNWAY 33: Climb on heading 337° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence....

. . . . on track 279° to MUCKY. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
**SAYBR THREE DEPARTURE (RNAV)**

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 15:** Climb on heading 157° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence....

**TAKEOFF RUNWAY 33:** Climb on heading 337° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence....

...on track 024° to SAYBR. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

**NOTE:** Chart not to scale.

**AWOS-3PT**
119.375

**UNICOM (CTAF)**
122.725

**AUSTIN DEP CON**
119.0 370.85

**TOP ALTITUDE:**

**ASSIGNED BY ATC**

**SAYBR**

**MUNCH**
5000

**NOTE:** RADAR required.

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

**NOTE:** RNAV 1.

**NOTE:** For DFW terminal area arrivals at FL230 or below only.

**TAKEOFF MINIMUMS**

Rwys 15, 33: Standard.
AERÖZ TWO DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb heading 165° to 1700, then as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

TAKEOFF RUNWAY 34: Climb on heading 345° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

. . . . . on track 293° to AEROZ, then on SAN ANGELO TRANSITION. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

SAN ANGELO TRANSITION (AEROZ2.SJT)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 165° to 1700, then as assigned by ATC for vectors to cross GARDS at or above 5000, thence....

TAKEOFF RUNWAY 34: Climb on heading 345° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....

....on track 224° to BNDIA. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 165° to 1700, then as assigned by ATC for vectors to cross WLMRT at or above 5000, thence...

TAKEOFF RUNWAY 34: Climb on heading 345° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....

... on track 338° to ELOEL, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

ABILENE TRANSITION (ELOEL3.ABI)
FORSS TRANSITION (ELOEL3.FORSS)
KLNGR TRANSITION (ELOEL3.KLNGR)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb on heading 165° to 1700, then as assigned by ATC for vectors to cross HOOKK at or above 5000, thence . . .

**TAKEOFF RUNWAY 34:** Climb on heading 345° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence . . .

. . . on track 090° to ILEYX, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

**JAYJO TRANSITION (ILEXY4.JAYJO)**

**ZENZI TRANSITION (ILEXY4.ZENZI)**

**NOTE:** Houston terminal area arrivals expect routing from ILEYX.

**NOTE:** JAYJO transition to join V306 only.

**NOTE:** Takeoff Rwy 16 requires a climb to 1700 on heading 165° prior to turning for obstacle avoidance.

**NOTE:** Aircraft not destined the Houston terminal area or joining V306 must file the ZENZI transition.

**NOTE:** Chart not to scale.
TAKEOFF MINIMUMS:
Rwy 16: 500-2 3/4 or standard with minimum climb of 265’ per NM to 1500.
Rwy 34: Standard.

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: TAKEOFF Rwy 16 requires a climb to 1700 on heading 165° prior to turning for obstacle avoidance.

TAKEOFF RUNWAY 16: Climb on heading 165° to 1700, then as assigned by ATC for vectors to cross PAYDA at or above 5000, thence . . .
TAKEOFF RUNWAY 34: Climb on heading 344° or as assigned by ATC for vectors to cross PAYDA at of above 5000, thence . . .
. . . . on track 279° to MUCKY. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
TAKEOFF MINIMUMS
Rwy 34: Standard.
Rwy 16: 500-2-3/4 or standard with minimum climb of 265’ per NM to 1500.

NOTE: Chart not to scale.

TAKEOFF RUNWAY 16: Climb on heading 165° to 1700, then as assigned by ATC for vectors to cross MUNCH at or above 5000, thence. . . .
TAKEOFF RUNWAY 34: Climb on heading 345° or as assigned by ATC for vectors to cross MUNCH at of above 5000, thence. . . .

. . . . on track 024° to SAYBR. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
RNAV (GPS) RWY 34  
LAMPASAS (LZZ)

Circling Rwy 16 NA at night.  
Rwy 34 helicopter visibility reduction below 1/2 SM NA.

**AWOS-3**  
119.075

**GRAY APP CON**  
120.075 323.15

**UNICOM**  
122.8 (CTAF)

---

Procedure NA for arrival on LLO VORTAC airway radials 018 CW 120.

- **343° to RW34**
- **3.04°**

**GUBVE**  
3200 070° (28.2)

**AGJ**  
063°

**HUGOD**  
163° 6000

**343° holding Pattern**

**034° to RW34**

**343° to RW34**

**1.3 NM to RW34**

**3.04°**

**163°**

**3.7 NM**

**7 NM**

**CATEGORY**

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<td>1620 1/4 430 (500-1/4)</td>
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<td>1680 466 (500-1)</td>
<td>1880 666 (700-1)</td>
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**Rwy 34 helicopter visibility reduction below 1/2 SM NA.**

**Circling Rwy 16 NA at night.**

**MISSED APPROACH:** Climb to 3000 direct GUBVE and on track 063° to AGJ VORTAC and hold.
When local altimeter setting not received, use Robert Gray AAF altimeter setting and increase all MDA's 80 feet and visibility Cat C 1/2 SM. Circling Rwy 16 NA at night. Rwy 16 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct AGJ VORTAC and hold.

NoPT for arrivals on AGJ VORTAC airway radials 005 CW 033.

NoPT for arrivals on AGJ VORTAC airway radials 005 CW 033.

NoPT for arrivals on AGJ VORTAC airway radials 005 CW 033.

NoPT for arrivals on AGJ VORTAC airway radials 005 CW 033.

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NoPT for arrivals on AGJ VORTAC airway radials 005 CW 033.

NoPT for arrivals on AGJ VORTAC airway radials 005 CW 033.
ILS or LOC RWY 18R
LAREDO INTL (LRD)

**CIRCLING NA west of Rwys 14 and 36L.**

DME required.
For inop ALS, increase S-ILS 18R Cat E visibility to 1/8 SM and increase S-LOC 18R Cat C/D/E visibility to 1/8 SM.

**ATIS**
125.775

**HOUSTON CENTER**
127.8
307.2

**LAREDO TOWER**
120.1 (CTAF) 257.9

**GND CON**
121.8

**UNICOM**
122.95

**MISSP ANNAPLCE**: Climb to 1100 then climbing left turn to 2500 direct LRD VORTAC and on LRD VORTAC R-132 to ELKOS/LRD 15 DME and hold.

**ATIS**
125.775

**HOUSTON CENTER**
127.8
307.2

**LAREDO TOWER**
120.1 (CTAF) 257.9

**GND CON**
121.8

**UNICOM**
122.95

**DME REQUIRED**

**LOCALIZER 111.9**
Chan 56

**MODIFFER**

**C категории**

**A**

**B**

**C**

**D**

**E**

**S-ILS 18R**

**S-LOC 18R**

**SIDESTEP 18L**

**CIRCLING**

**ILS**

27°33‘N-99°28‘W

**Amdt 12 01FEB18**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C (34°F) or above 54°C (130°F). Circling NA west of Rwys 14 and 36L.
DME/DME RNP-0.3 NA.

Missed Approach: Climb to 2500 direct ZERIK and hold.

- ATIS: 125.775
- Houston Center: 127.8 307.2
- Laredo Tower*: 120.1 (CTAF) 257.9
- GND CON: 121.8
- UNICOM: 122.95

**RADAR REQUIRED**

- MSA RWY14 25NM
- 2500
- ZERIK
- HIRL Rwys 18R-36L and 18L-36R
- MIRL Rwy 14-32
- *LNAV only.

**Holding Pattern**

- 4 NM
- Holding Pattern
- HIRL Rwys 18R-36L and 18L-36R

**LNAV only.**

- 1.3 NM to RW14
- 3.9 NM
- 6.2 NM

### CATEGORY

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<td>758-3/4</td>
<td>250 (300-3/4)</td>
<td></td>
<td></td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>810-7/8</td>
<td>302 (400-7/8)</td>
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<tr>
<td>LNAV MDA</td>
<td>960-1 452 (500-1)</td>
<td>960-1 3/8</td>
<td>452 (500-1/8)</td>
<td></td>
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<tr>
<td>CIRCLING</td>
<td>960-1 452 (500-1)</td>
<td>980-1 472 (500-1)</td>
<td>1100-1 1/2</td>
<td>1200-2 1/4</td>
<td>1200-2 1/4</td>
</tr>
</tbody>
</table>

**LAGOON**

- 27°33’N-99°28’W

**LAREDO, TEXAS**

- Amdt 1 01FEB18

**LAREDO INTL (L.RD)**

282
UNITED STATES  MEXICO
0.6% UP 0.4%

CATEGORY
LAREDO, TEXAS (LRA)

LAREDO INTL (LRA)

WAAS
Ch 82599
W18A

APP CRS
178°

Rwy Idg
8743

TDZE
504

Apt Elev
508

125.775

127.8  307.2

120.1(CTAF) 257.9

121.8

122.95

ATIS
HOUSTON CENTER
LAREDO TOWER*
GND CON
UNICOM

MALSR
Climb to 1000 then climbing left turn to 2500 direct ELKOS and hold.

MISSED APPROACH:
Climb to 1000 then climbing left turn to 2500 direct ELKOS and hold.

Procedure NA for arrivals at KAHAN on V17 northbound.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C (34°F) or above 54°C (130°F). Circling NA West of Rwys 14 and 36L. DME/DME RNP-0.3 NA. For inop ALS, increase LPV Cat E visibility to ½ SM, LNAV/VNAV all Cats visibility to ½ SM, and LNAV Cats C/D/E to 1 SM.

MALSR

ATIS
125.775

HOUSTON CENTER
127.8  307.2

LAREDO TOWER*
120.1(CTAF) 257.9

GND CON
121.8

UNICOM
122.95

WAAS
Ch 82599
W18A

APP CRS
178°

Rwy Idg
8743

TDZE
504

Apt Elev
508

LNAV/VNAV NA below 1°C (34°F) or above 54°C (130°F). Circling NA West of Rwys 14 and 36L. DME/DME RNP-0.3 NA. For inop ALS, increase LPV Cat E visibility to ½ SM, LNAV/VNAV all Cats visibility to ½ SM, and LNAV Cats C/D/E to 1 SM.

MALSR

ATIS
125.775

HOUSTON CENTER
127.8  307.2

LAREDO TOWER*
120.1(CTAF) 257.9

GND CON
121.8

UNICOM
122.95

WAAS
Ch 82599
W18A

APP CRS
178°

Rwy Idg
8743

TDZE
504

Apt Elev
508

LNAV/VNAV NA below 1°C (34°F) or above 54°C (130°F). Circling NA West of Rwys 14 and 36L. DME/DME RNP-0.3 NA. For inop ALS, increase LPV Cat E visibility to ½ SM, LNAV/VNAV all Cats visibility to ½ SM, and LNAV Cats C/D/E to 1 SM.

MALSR

ATIS
125.775

HOUSTON CENTER
127.8  307.2

LAREDO TOWER*
120.1(CTAF) 257.9

GND CON
121.8

UNICOM
122.95

MALSR

ATIS
125.775

HOUSTON CENTER
127.8  307.2

LAREDO TOWER*
120.1(CTAF) 257.9

GND CON
121.8

UNICOM
122.95
SC-3, 11 JUL 2024 to 05 SEP 2024

RNAV (GPS) RWY 32
LAREDO INTL (LRD)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C (34°F) or above 54°C (130°F). Circling NA west of Rwys 14 and 36L. Rwy 32 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct HISIK and hold.

ATIS
125.775

HOUSTON CENTER
127.8 307.2

LAREDO TOWER *
120.1 (CTAF) 257.9

GND CON
121.8

UNICOM
122.95

Procedure NA for arrivals at KAHAN on V17 northbound.

Procedure NA for arrivals at NELEE on V17 southeast bound.

3000 HISIK

[Diagram showing coordinates and directions]
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C (34°F) or above 54°C (130°F). Circling NA west of Rwys 14 and 36L. DME/DME RNP-0.3 NA.

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

### Procedure NA for arrivals at KAHAN on V17 northbound.

**WAMUT**
- 2.1 NM to RW36L
- GND CON 121.1 (CAF)
- UNICOM 122.95

**WUGRO**
- 3000 (10)
- A) 268
- B) 997
- C) 747

**NELEE** (IAF)
- Procedure NA for arrivals at NELEE on V17 southeast bound.

**HUIWLA**
- MIRL Rwy 14-32

**AOVOS**
- 3000 (21.8)
- 472 (500-1)

**SC-3**, 11 JUL 2024 to 05 SEP 2024
Circling NA west of Rwys 14 and 36L. DME required.

MISSED APPROACH: Climb to 1100 then climbing left turn to 2600 on heading 290° and on LRD VORTAC R-319 to BLAME/LRD 18 DME and hold.

Use I-LRD DME when on the localizer course.

Disregard glide slope indications.
Circling NA west of Rwys 14 and 36L. DME required.

**MISSED APPROACH:** Climb to 2500 direct LRD VORTAC and hold, continue climb-in-hold to 2500 (TACAN aircraft continue on LRD VORTAC R-132 to ELKOS/15 DME and hold SE, right turn, 312° inbound).

<table>
<thead>
<tr>
<th>ATIS</th>
<th>HOUSTON CENTER</th>
<th>LAREDO TOWER*</th>
<th>GND CON</th>
<th>UNICOM</th>
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</thead>
<tbody>
<tr>
<td>125.775</td>
<td>127.8 307.2</td>
<td>120.1 [CTAF]</td>
<td>257.9</td>
<td>121.8 122.95</td>
</tr>
</tbody>
</table>

**DME and RADAR REQUIRED**

**EMERGENCY CONTACT:**
- COXIR: LRD 18
- TETUC: LRD 7.5
- LRD 18 Arc

**TACAN MISSED APCH FIX**

**VOR or TACAN RWY 14**

**LAREDO INTL (LRD)**

**CATEGORY**

<table>
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<tr>
<th>S-14</th>
<th>CIRCLING</th>
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<tbody>
<tr>
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<td>920-1/4</td>
<td>980-1</td>
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<tr>
<td>920-1/2</td>
<td>1100-1/2</td>
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<tr>
<td>920-1/3</td>
<td>1200-1/2</td>
</tr>
<tr>
<td>920-1/4</td>
<td>1200-1/2</td>
</tr>
<tr>
<td>920-1/5</td>
<td>1200-1/2</td>
</tr>
</tbody>
</table>

**MIRL Rwy 14-32**

**HIRL Rwys 18R-36L and 18L-36R**

**Amendment 10A, 01MAR18**

**LATITUDE:** 27°33'N-99°28'W

**LONGITUDE:** 288
VOR or TACAN RWY 32
LAREDO INTL (LRD)

Circling NA west of Rwys 14 and 36L.
Rwy 32 helicopter visibility reduction below 3⁄4 SM NA. DME required.

ATIS
125.775
HOUSTON CENTER
127.8 307.2
LAREDO TOWER *
120.1 (CTAF) 257.9
GND CON
121.8
UNICOM
122.95

MISSED APPROACH: Climb to 2600 on LRD VORTAC R-319 to BLAME/LRD 18 DME and hold.

- VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 71).
- Remain within 1.5 NM.

SC-3, 11 JUL 2024 to 05 SEP 2024

LAREDO, TEXAS
Amdt 11A 01MAR18

VOR or TACAN RWY 32
LAREDO INTL (LRD)

27°33'N-99°28'W

LAREDO, TEXAS
AL-226 (FAA) 24137
HIRM Rwys 18R-36L and 18L-36R
MIRL Rwy 14-32
HINKO ONE DEPARTURE (HINKO1 • HINKO)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 13C: Climb on track 128°, intercept the DLF VORTAC R-132 to DLF 5 DME (MAVRK), cross DLF VORTAC 2 DME at or below 3000, cross DLF R-132/5 DME (MAVRK) at or above 3000. Then turn left and track 350° to intercept the DLF R-031 prior to ROSPE, cross ROSPE at or above 8000, cross HJORN at or above FL230, then direct HINKO.

TAKEOFF RWY 13L: Climb on track 128°, intercept the DLF VORTAC R-130 to DLF 5 DME (HAPSU), cross DLF VORTAC 2 DME at or below 3000, cross DLF R-130/5 DME (HAPSU) at or above 3000. Then turn left and track 350° to intercept the DLF R-031 prior to ROSPE, cross ROSPE at or above 8000, cross HJORN at or above FL230, then direct HINKO.

TAKEOFF RWY 31C: Climb on track 308°, intercept the DLF VORTAC R-305 to DLF 5 DME (AMSTD), cross DLF VORTAC 2 DME at or below 3000, cross DLF R-305/5 DME (AMSTD) at or above 3000. Then turn right and track 070° to intercept the DLF R-031 prior to ROSPE, cross ROSPE at or above 8000, cross HJORN at or above FL230, then direct HINKO.

TAKEOFF RWY 31R: Climb on track 308°, intercept the DLF VORTAC R-307 to DLF 5 DME (HAMIX), cross DLF VORTAC 2 DME at or below 3000, cross DLF R-307/5 DME (HAMIX) at or above 3000. Then turn right and track 070° to intercept the DLF R-031 prior to ROSPE, cross ROSPE at or above 8000, cross HJORN at or above FL230, then direct HINKO.
DEPARTURE ROUTE DESCRIPTION

(MAVRKR Tracks)

TAKEOFF RWY 13C: Climb on track 128°, thence...
TAKEOFF RWY 13L: Climb on track 131°, thence...
TAKEOFF RWY 13R: Climb on track 127°, thence...

...intercept DLF VORTAC R-132 to DLF 5 DME (MAVRKR), cross DLF 2 DME at or below 3000, cross DLF 5 DME (MAVRKR) at or above 3000, then as directed by ATC.

(AMSTD Tracks)

TAKEOFF RWY 31C: Climb on track 308°, thence...
TAKEOFF RWY 31L: Climb on track 310°, thence...
TAKEOFF RWY 31R: Climb on track 306°, thence...

...intercept DLF VORTAC R-305 to DLF 5 DME (AMSTD), cross DLF 2 DME at or below 3000, cross DLF 5 DME (AMSTD) at or above 3000, then as directed by ATC.
RNAV (GPS) RWY 17
LLANO MUNI (AQO)

AWOS-3
119.425

HOUSTON CENTER
132.35 317.5

UNICOM
123.05 (CTAF)

Procedure NA for arrivals at LLO VORTAC airway radials 018 CW 103.

MISSED APPROACH: Climb to 3500 direct IYMUD and hold.

Holding Pattern AKEKY

RNAV (GPS) RWY 17

MAP RWY 17 25 NM

3700

MISSED APCH FIX
IYMUD

1969

Procedure NA for arrival on AGJ VORTAC airway radials 185 CW 202.

RNAV (GPS) RWY 17

LLANO, TEXAS
AL-5959 (FAA)

Amdt 1 23FEB23

30°47'N-98°40'W

301
RNAV (GPS) RWY 35
Llano Muni (AQO)

**APP CRS** 354°
Rwy Idg 4202
TDZE 1102
Apt Elev 1102

**RNP APCH - GPS.**

- Procedure NA at night.
- Rwy 35 helicopter visibility reduction below 1 SM NA.

**AWOS-3**
119.425

**HOUSTON CENTER**
132.35 317.5

**UNICOM**
123.05 (CTAF)

**MISSING APCH FIX**

- 4 NM direct AKEKY.

**MISSED APPROACH:**
Climb to 3300 direct AKEKY and hold.

**ELEV 1102**
TDZE 1102

**MISA RW35 2.5 NM**

- 3700

**Procedure NA for arrivals at CORVY on V568 southbound and V306 westbound.**

**Procedure NA for arrivals at AMUSE on V565 southeast bound, V306 eastbound and V163 southbound.**

**3300 AKEKY**

**KOFFY**
3.2 NM to RW35

**3500 NoPT**
6000
3500

**HOLD 6000 3500**

**3500 NoPT 285° (20.1)**

**IAF AMUSE**

**3500 NoPT**
174°
354°

**6000**

**3500**

**TCH 40**

**MISSED APPROACH FIX**

- 4 NM direct AKEKY.

**RNAV (GPS) RWY 35**

- LNAV MDA
1480-1 378 (400-1)
NA

**CATEGORY**
A  B  C  D

**LLANO, TEXAS**
Amdt 1 23FEB23

**30°47'N-98°40'W**
Circling Rwy 13, 31 NA. Circling Rwy 35 NA at night. When local altimeter setting not received, use Burnet altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climb to 2200 then climbing left turn to 3500 direct LLO VORTAC.

AWOS-3
119.425

HOUSTON CENTER
132.35 317.5

UNICOM
123.05 (CTAF)

\[ \angle 2348 \]

\[ \angle 1842 \]

\[ \angle 1256 \]

\[ \angle 1584 \]

\[ \angle 1969 \]

\[ \angle 089^\circ \]

\[ 3500 \]

\[ 269^\circ \]

\[ 089^\circ \]

One Minute Holding Pattern

LLO

VORTAC

2200

3500

LLO

ZAMTA

LLO 6.5

\[ 3700 \]

ELEV 1102

SC-3, 11 JUL 2024 to 05 SEP 2024
RNAV (GPS) RWY 18
LOCKHART MUNI (50R)

RNP APCH.

Baro-VNAV NA. Use San Marcos altimeter setting, when not received, use Austin-Bergstrom Intl altimeter setting and increase all DA 16 feet, all MDA 20 feet; increase LNAV Cat B visibility 1/2 SM.

Procedure NA for arrivals on CWK VORTAC airway radials 088° CW 237.

Procedure NA for arrivals at SEEDS on T256 eastbound.

Missed Approach: Climb to 4000 direct EDIVE and on track 095° to SEEDS and hold.

AUSTIN APP CON
120.875 270.25

UNICOM
122.8 (CTAF)

1615

4000
EDIVE
SEEDS

175°

095°

190°

175°

2100

2100

190°

2100

GP 3.00°

TCH 40

4.8 NM

5.3 NM

LOGCAT

A

B

C

D

LPV
DA

815-1
283 (300-1)

NA

LNAV/VNAV
DA

883-1¾
351 (400-1¾)

NA

LNAV MDA
1260-1
728 (800-1)

1260-2
728 (800-2)

NA

304
RNAV (GPS) RWY 36
LOCHART MUNI (50R)

Rwy 36 helicopter visibility reduction below 1/2 NA. Baro-VNAV NA. Use San Marcos altimeter setting; when not received, use Austin-Bergstrom Intl altimeter setting; increase LPV DA to 830 feet; increase LNAV/VNAV DA to 880 feet; increase all MDAs 20 feet and visibility Cat C 1/2 SM.

MISSED APPROACH: Climb to 1000, then climbing right turn to 3000 direct CRAYS and hold.

Procedure NA for arrivals at BETTI on V222, T466 westbound and V17 northeast bound.

Procedure NA for arrivals at SEEDS on T256 and T466 eastbound.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 25).

7 NM 3.2 NM 1.6 NM

 CATEGORY A B C D
 LPV DA 813-1 283 (300-1) NA
 LNAV/VNAV DA 863-1 333 (400-1) NA
 LNAV MDA 940-1 410 (500-1) 940-1 410 (500-1) NA

MINL Rwy 18-36 0

UNICOM 122.8 (CTAF)

MIRL Rwy 18-36

W36A

0

355°

ELEV 532

TDZE 530

532

355°

W36A

0

355°
When local altimeter setting not received, procedure NA. Circling NA to Rwy 9, 27.

MISSED APPROACH: Climb to 5300 then climbing left turn to 9000 direct TITFE and hold, continue climb-in-hold to 9000.

AWOS-3PT
134.025

ALBUQUERQUE CENTER
135.875 292.15

UNICOM
122.8 (CTAF)

RNAV (GPS) RWY 31
MARFA MUNI (MRF)

MIRL Rwy 13-31

RNAV (GPS) RWY 31
MARFA MUNI (MRF)

MARFA, TEXAS
Orig-C 08SEP22

30°22'N-104°01'W
VOR RWY 31
MARFA MUNI (MRF)^

AWOS-3PT
134.025

ALBUQUERQUE CENTER
135.875 292.15

UNICOM
122.8 (CTAF)

When local altimeter setting not received, procedure NA.
Circling NA to Rwys 9, 27.

MISSED APPROACH: Climbing left turn to
9000 direct MRF VOR/DME and hold,
continue climb-in-hold to 9000.

AWOS-3PT
134.025

ALBUQUERQUE CENTER
135.875 292.15

UNICOM
122.8 (CTAF)

When local altimeter setting not received, procedure NA.
Circling NA to Rwys 9, 27.

MISSED APPROACH: Climbing left turn to
9000 direct MRF VOR/DME and hold,
continue climb-in-hold to 9000.

AWOS-3PT
134.025

ALBUQUERQUE CENTER
135.875 292.15

UNICOM
122.8 (CTAF)

When local altimeter setting not received, procedure NA.
Circling NA to Rwys 9, 27.

MISSED APPROACH: Climbing left turn to
9000 direct MRF VOR/DME and hold,
continue climb-in-hold to 9000.
RNAV (GPS) RWY 18
MASON COUNTY (T92)

**APP CRS**

<table>
<thead>
<tr>
<th>RWY Idg</th>
<th>TDZE</th>
<th>Apl Elev</th>
</tr>
</thead>
<tbody>
<tr>
<td>3716</td>
<td>1502</td>
<td>1514</td>
</tr>
</tbody>
</table>

**ELEV**

- **3100**
- **2380**

**WODIR**

- **176°**
- **A**

**BBD AWOS-3**

- **3800**

**CTAF**

- **122.9**

**HOUSTON CENTER**

- **132.35**
- **317.5**

**MISSED APPROACH:** Climb to 3800 direct UCOBA and hold.

**RNAV (GPS) RWY 18**

- **3800 direct UCOBA and hold.**
- **RNAV (GPS) RWY 18**
- **3800**
- **2348**
- **2260**
- **2252**
- **1964**
- **1667**
- **RW18**
- **OZEYI 2.7 NM to RW18**
- **FEGIP**

**Category A**

- **FAA**
- **AL-6269**
- **30°44’N 99°11’W**

**LNAV MDA**

- **2080-1**
- **578 (600-1)**
- **NA**

**CIRCLING**

- **2140-1**
- **626 (700-1)**
- **NA**

**March 11, 2024 to 05 SEP 2024**
Rwy 18/36 helicopter visibility reduction below 1 SM NA. Procedure NA at night.
Use Brady altimeter setting; when not received, use Llano altimeter setting and increase all MDAs 20 feet.

**MISSED APPROACH:** Climb to 3800 direct WODIR and hold.
2260

2252

1964 ±

2195

1667

LLO 19.7

CUBAZ LLO 15

MAHIR LLO 20.7

YOKUG LLO 19.7

ILW 4000

CUBAZ LLO 15

MAHIR LLO 20.7

LLO 10.7

MAHINT

YOKUG 4000

CUBAZ 4000

251° (10)

4000

251° (5)

procedure NA for arrival on LLO VORTAC airway radials 195 CW 284.
Circling NA northeast of Rwy 14-32. When local altimeter setting not received, use Weslaco altimeter setting: increase all DA 39 feet; increase all MDA 40 feet and S-LOC 14 Cat C/D and Circling Cat C visibility ½ mile, increase LOBIC Fix Minimums S-LOC 14 Cat C/D visibility ½ mile. For inop ALS, increase S-LOC 14 Cat C/D visibility to 1 ½ SM. For inop ALS when using Weslaco altimeter setting, increase LOBIC Fix Minimums S-LOC 14 Cat C/D visibility to 1 ½ SM.

ATIS 128.5 VALLEY APP CON 126.55 377.2
MC ALLEN TOWER* 118.5 (CTAF) 256.9 UNICOM 122.95

**660 when using Weslaco altimeter setting.**

**For inop ALS when using Weslaco altimeter setting, increase all DA 39 feet; increase all MDA 40 feet and S-LOC 14 Cat C/D visibility to 1 ½ SM.**

**When local altimeter setting not received, use Weslaco altimeter setting: increase all DA 39 feet; increase all MDA 40 feet and S-LOC 14 Cat C/D and Circling Cat C visibility ½ mile, increase LOBIC Fix Minimums S-LOC 14 Cat C/D visibility ½ mile. For inop ALS, increase S-LOC 14 Cat C/D visibility to 1 ½ SM.**

**Circling NA northeast of Rwy 14-32. When local altimeter setting not received, use Weslaco altimeter setting: increase all DA 39 feet; increase all MDA 40 feet and S-LOC 14 Cat C/D and Circling Cat C visibility ½ mile, increase LOBIC Fix Minimums S-LOC 14 Cat C/D visibility ½ mile. For inop ALS, increase S-LOC 14 Cat C/D visibility to 1 ½ SM. For inop ALS when using Weslaco altimeter setting, increase LOBIC Fix Minimums S-LOC 14 Cat C/D visibility to 1 ½ SM.**

**MC ALLEN, TEXAS**

**MC ALLEN INTL (MFE)**

**26°11'N-98°14'W**

**311**
Circling NA northeast of Rwy 14-32. For inop ALS, increase LNAV/VNAV visibility all Cats to 7/8 SM and LNAV visibility Cat C/D to 1/2 SM. For inop ALS when using Weslaco altimeter setting, increase LNAV/VNAV visibility all Cats to 1 SM. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C or above 54°C. Local altimeter setting not received, use Weslaco altimeter setting and increase all DA 39 feet and LNAV/VNAV all Cats visibility 1/8 SM; increase all MDA 40 feet and LNAV Cat C/D visibility 1/8 SM.

Procedure NA for arrivals at HARGI on V20 northbound.

MISSED APPROACH: Climb to 1500 then climbing left turn to 3000 direct FLATZ and hold.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C (34°F) or above 54°C (130°F). Circling NA northeast of Rwy 14-32. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Weslaco altimeter setting: increase all DA 39 feet and LNAV/VNAV all Cat visibility ½ mile; increase all MDA 40 feet and LNAV Cat C/D visibility ½ mile. Baro-VNAV and VDP NA when using Weslaco altimeter setting.

MISSED APPROACH: Climb to 800 then climbing right turn to 2000 direct SANCA and hold.

Procedure NA for arrivals at FLATZ on V17 eastbound.

<table>
<thead>
<tr>
<th>ATIS</th>
<th>VALLEY APP CON</th>
<th>MC ALLEN TOWER*</th>
<th>GND CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>128.5</td>
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<td>118.5 (CTAF) 256.9</td>
<td>121.8</td>
<td>122.95</td>
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</tbody>
</table>

**RNAV (GPS) RWY 32**
MC ALLEN INTL (MFE)
ADF or DME REQUIRED

Circling NA northeast of Rwy 14-32. ADF or DME required. For inop MALSR, increase S-14 Cat C/D visibility to ½ mile. When local altimeter setting not received, use Weslaco altimeter setting and increase all MDA 40 feet and S-14 Cat C/D and Circling Cat C visibility ½ mile. VDP NA when using Weslaco altimeter setting.

LOM/IAF MISSI 330° MF 6.1
MFE 13°

MC ALLEN INTL (MFE)

ATIS 128.5
VALLEY APP CON 126.55 377.2
MC ALLEN TOWER 118.5 (CTAF) 256.9
GND CON 121.8
UNICOM 122.95

SC-3, 11 JUL 2024 to 05 SEP 2024
Baro-VNAV NA when using Midland Intl and Space Port altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.

LNAV only

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 26°C (78°F). When local altimeter setting not received, use Midland Intl Air and Space Port altimeter setting and increase LPV DA to 3109 and LNAV/VNAV DA to 3172 and all MDA 40 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility 1/4 SM. When VGSI inop, Straight-in/Circling Rwy 25 procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 5000 direct BAVNE and on 248° track to JOJOS and hold.
### RNAV (GPS) RWY 34

**Midland Airpark (MDD)**

**APP CRS**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
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<tbody>
<tr>
<td>LPV DA</td>
<td>3051-7/8</td>
<td>250 (300-%)</td>
<td>NA</td>
<td></td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>3235-1/4</td>
<td>434 (500-1/4)</td>
<td>NA</td>
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<tr>
<td>LNAV MDA</td>
<td>3400-1</td>
<td>599 (600-1)</td>
<td>NA</td>
<td></td>
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<tr>
<td>CIRCLING</td>
<td>3400-1</td>
<td>595 (600-1)</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

**Rwy 34**

- **Direction:** 338° to RW34

**MISSED APPROACH:** Climb to 4500 and hold.

**AWOS-3**

- **Temperature:** 118.125
- **Humidity:** 290.4

**CINC DEL**

- **Temperature:** 121.8

**UNICOM**

- **Temperature:** 122.7 (CTAF)

**RNAV (GPS) RWY 34**

- **Direction:** 338° to RW34

**MISSED APCH FIX**

- **Direction:** 338° to ZEBIB

**AWOS-3**

- **Temperature:** 118.125
- **Humidity:** 290.4

**CINC DEL**

- **Temperature:** 121.8

**UNICOM**

- **Temperature:** 122.7 (CTAF)

**RNAV (GPS) RWY 34**

- **Direction:** 338° to RW34

**MISSED APCH FIX**

- **Direction:** 338° to ZEBIB
VOR RWY 25
MIDLAND AIRPARK (MDD)

AWOS-3 116.125  MIDLAND APP CON  *  CLNC DEL  124.6 290.4  UNICOM  122.7 [CTAF]

Procedure NA for arrivals at MERGE on V16 westbound.

MIDLAND 114.8 MAF 17
Chan 95

MIDLAND, TEXAS

Amdt 3E 19MAY22

SC-3, 11 JUL 2024 to 05 SEP 2024

32°02'N-102°06'W
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 25°C (77°F). Circling Rwy 16L NA at night. Rwy 4 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

**ATIS**
- **126.8 235.975**
- **124.6 290.4**
- **118.7 (CTAF) 273.45**
- **121.9 348.6**
- **118.05 317.65**
- **122.95**

**CLNC DEL**
- **122.95**

**GND CON**
- **118.7 348.6**

**MIDLAND TOWER**
- **118.7 (CTAF) 273.45**
- **121.9 348.6**
- **118.05 317.65**
- **122.95**

**MISSED APPROACH:** Climb to 4700 direct AYUPA and hold.

**LISTENING Frequency:** **122.95**

**MAP:**
- **AYUPA**
- **TDZE 2851**
- **5 NM**

**HOLDING Pattern**
- **TOKRE**
- **DILBE**
- **5000**
- **045°**
- **225°**
- **7.2 NM**
- **3.5 NM**
- **1.5 NM**

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

**LPV DA**
- **3051-1/4**
- **200 (200-3/4)**

**LNAV/VNAV DA**
- **3283-1/2**
- **432 (500-1/2)**

**LNAV MDA**
- **3360-1**
- **509 (500-1)**
- **3360-1/2**
- **509 (500-1/2)**

**CIRCLING**
- **3440-1**
- **568 (600-1)**
- **3440-1/2**
- **568 (600-1/2)**
- **3520-2**
- **648 (700-2)**

**LNAV/VNAV**
- **3520-2**
- **648 (700-2)**

**DA**
- **500-1**
- **500-1/2**

**Rwy Idg**
- **0465 X 100**
- **8302 X 150**

**Amdt 1C 22JUN17**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**31°57'N-102°12'W**

**RNAV (GPS) RWY 4**

**MIDLAND INTL AIR AND SPACE PORT (MAF)**

**2000 FT**

**2000 FT**

**2000 FT**
**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 25°C (77°F). Circling Rwy 16L NA at night. DME/DME RNP-0.3 NA.**

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

---

**RVR**

**5 NM**

Holding Pattern

---

**5000**

**284°**

**104°**

**JEMMO**

---

**3240**

**3394-1**

**3021**

**3480/24**

**611 (700-1½)**

**3480-1½**

**611 (700-1½)**

**3520-2**

**648 (700-2)**

---

**EASYY**

**2872**

**TDZE 2869**

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For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 26°C (78°F). Circling Rwy 16L NA at night. DME/DME RNP-0.3 NA.

**MISSED APPROACH**: Climb to 5100 direct PERAE and hold.
Circling Rwy 16L NA at night. Rwy 34L helicopter visibility reduction below ½ SM NA. DME required.

**MISSING APPROACH**: Climb to 4800 direct MAF VORTAC and on MAF VORTAC R-357 to MERGE INT/MAF 16.7 DME and hold.

**Radar and DME required for procedure entry at PEMSE INT.**

**DME REQUIRED**

**Remain within 10 NM**

**4800 - 357°**

**4800**

**357°**

**4600**

**2.96° TCH 50**

**357°**

**MAF 5.9**

**MAF 10**

**ROVCO MAF 17**

**ODDLE**

**17° 10**

**Merge**

**MAF R-357**

**MERGE**

**MAF 4.6**

**PROCEDURE TURN NOT AUTHORIZED FOR CAT E.**

**CATEGORY**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-34L</td>
<td>3320-1</td>
<td>462 (500-1)</td>
<td>3320-1 ½</td>
<td>462 (500-1½)</td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>3440-1</td>
<td>568 (600-1)</td>
<td>3440-1½</td>
<td>568 (600-1½)</td>
<td>3520-2</td>
</tr>
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</table>

**S-34L, 11 JUL 2024 to 05 SEP 2024**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**330**

**31°57'N-102°12'W**

**VOR or TACAN RWY 34L**

**MIDLAND INTL AIR AND SPACE PORT (MAF)**

**AL-258 (FAA)**

**23334**

**MIDLAND, TEXAS**

**Amdt 108 22JUN17**

**MIDLAND INTL AIR AND SPACE PORT (MAF)**

**VOR or TACAN RWY 34L**

**MIDLAND, TEXAS**

**Amdt 108 22JUN17**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RNAV (GPS) RWY 12
ROY HURD MEML (E1)

MONAHANS, TEXAS
AL-6748 (FAA)

WAAS
CH 57927
W12A

APP CRS 118°
Rwy Idg 4268
TDZE 2609
Apt Elev 2615

† DME/DME RNP 0.30 NA. Obtain local altimeter setting on CTA; when not received, use Wink altimeter setting. Night landing: Rwy 12 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3200 then climbing left turn to 6000 direct INK VORTAC and hold.

AWOS 3PT
118.225

FORT WORTH CENTER
133.1 298.95

UNICOM
122.8 (CTAF)

<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>LP MDA</td>
<td>3100-1</td>
<td>491 (500-1)</td>
<td>3100-1½</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>491 (500-1)</td>
<td>511 (600-1)</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3120-1½</td>
<td>665 (700-1)</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>3120-1</td>
<td>511 (600-1)</td>
<td>3120-1½</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>511 (600-1)</td>
<td>665 (700-1)</td>
<td>NA</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>3280-1</td>
<td>665 (700-1)</td>
<td>3280-1½</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>665 (700-1)</td>
<td>745 (800-1)</td>
<td>NA</td>
</tr>
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</table>

RNAV (GPS) RWY 12

MONAHANS, TEXAS
Orig-A 02APR15

31°35' N-102°55' W
RNAV (GPS) RWY 30
ROY HURD MEML (E01)

**DME/DME RNP-0.3 NA. VDP NA with Wink altimeter setting.**
Obtain local altimeter setting on CTAF, when not received, use Wink altimeter setting. Night landing: Rwy 12 NA.
Helicopter visibility reduction below 3/8 SM NA.

**WINK ALTIMETER SETTING MINIMUMS**

- **LP MDA:**
  - 3080-1 467 (500-1)
  - 3080-1 467 (500-1½)
  - 3100-1 487 (500-1½)
  - 3100-1 487 (500-1¾)
  - 3160-1 547 (600-1)
  - 3160-1 547 (600-1½)
  - 3160-1 547 (600-1¾)
  - 3180-1 567 (600-1)
  - 3180-1 567 (600-1½)
  - 3180-1 567 (600-1¾)
  - 3360-1 745 (800-1)
  - 3360-1 745 (800-1½)
  - 3360-1 745 (800-1¾)

**WINK ALTIMETER SETTING MINIMUMS**

- **LNAV MDA:**
  - 3080-1 467 (500-1)
  - 3080-1 467 (500-1½)
  - 3100-1 487 (500-1½)
  - 3100-1 487 (500-1¾)
  - 3160-1 547 (600-1)
  - 3160-1 547 (600-1½)
  - 3160-1 547 (600-1¾)
  - 3180-1 567 (600-1)
  - 3180-1 567 (600-1½)
  - 3180-1 567 (600-1¾)
  - 3360-1 745 (800-1)
  - 3360-1 745 (800-1½)
  - 3360-1 745 (800-1¾)

- **CIRCLING:**
  - 3080-1 467 (500-1)
  - 3080-1 467 (500-1½)
  - 3100-1 487 (500-1½)
  - 3100-1 487 (500-1¾)
  - 3160-1 547 (600-1)
  - 3160-1 547 (600-1½)
  - 3160-1 547 (600-1¾)
  - 3180-1 567 (600-1)
  - 3180-1 567 (600-1½)
  - 3180-1 567 (600-1¾)
  - 3360-1 745 (800-1)
  - 3360-1 745 (800-1½)
  - 3360-1 745 (800-1¾)

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**Procedures:**

**MISSED APPROACH:** Climb to 6000 direct WUVNI and on track 308 to INK VORTAC and hold.

**MONAHANS, TEXAS**

Orig-A 02APR15

**ELEV 2615**

**TDZE 2613**

**AWOS-3PT 118.225**

**FORT WORTH CENTER 133.1 298.95**

**UNICOM 122.8 (CTAF)**

**3602**

**MONAHANS, TEXAS**

31°35' N - 102°55' W
MONAHANS, TEXAS

**VOR/DME RWY 12**

ROY HURD MEML (F01)

**AWOS-3P**

118.225

**FORT WORTH CENTER**

133.1  298.96

**UNICOM**

122.8 (CTAF)

**VORTAC INK**

112.1

Chan 58

**APP CRS**

125°

**TDZE**

2609

**Apt Elev**

2615

**Rwy Idg**

4268

**Rwy 12 NA. Helicopter visibility reduction below 1 SM NA.**

Obtain local altimeter setting on CTAF; when not received, use Wink altimeter setting.

**Missed Approach:** Climbing right turn to 5000 direct INK VORTAC and hold.

**Procedure Turn NA.**

**VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 24).**

**Category A**

3340-1

731 (800-1)

**Category C**

3340-2

731 (800-2)

**Wink Altimeter Minimums**

**Categories S-12**

3420-1

811 (900-1)

3420-2

811 (900-2)

**Categories CIRCLING**

3420-1

805 (900-1)

3420-2

805 (900-2)

**UNICOM**

118.225

**AWOS-3PT**

118.225

**FORT WORTH CENTER**

133.1  298.96

**UNICOM**

122.8 (CTAF)

**VORTAC INK**

112.1

Chan 58

**APP CRS**

125°

**TDZE**

2609

**Apt Elev**

2615

**Rwy Idg**

4268

**Rwy 12 NA. Helicopter visibility reduction below 1 SM NA.**

Obtain local altimeter setting on CTAF; when not received, use Wink altimeter setting.

**Missed Approach:** Climbing right turn to 5000 direct INK VORTAC and hold.

**Procedure Turn NA.**

**VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 24).**

**Category A**

3340-1

731 (800-1)

**Category C**

3340-2

731 (800-2)

**Wink Altimeter Minimums**

**Categories S-12**

3420-1

811 (900-1)

3420-2

811 (900-2)

**Categories CIRCLING**

3420-1

805 (900-1)

3420-2

805 (900-2)
When local altimeter setting not received, use San Marcos Rgnl altimeter setting; increase LPV DA to 951 feet, LNAV/VNAV DA to 1169 feet; increase all MDAs 60 feet and visibility LNAV and Circling Cat C/D 1/2 SM. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using San Marcos altimeter setting. For inop ALS, increase LNAV/VNAV visibility to 1 1/2 SM. Inop table does not apply to LPV all Cats and LNAV Cats A/B. For inop ALS when using San Marcos Rgnl altimeter setting, increase LPV all Cats visibility to 1/2 SM and LNAV/VNAV all Cats visibility to 1 1/2 SM. When using San Marcos Rgnl altimeter setting, inop table does not apply to LNAV Cats A/B.

**MALS**

**MISSED APPROACH:** Climb to 3500 direct NUMMO and hold, continue climb-in-hold to 3500.

**ATIS**

**SAN ANTONIO APP CON**

**NEW BRAUNFELS TOWER**

**GND CON**

**CLNC DEL**

**CLNC DEL**

**UNICOM**

**ELEV 658**

**TDZE 658**

---

**NEW BRAUNFELS, TEXAS**

**AL-6080 (FAA)**

**23054**

**RNAV (GPS) RWY 13**

**NEW BRAUNFELS NTL (BAZ)**

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**SC-3, 11 JUL 2024 to 05 SEP 2024**
Procedure NA for arrivals at SHEPE via V17 southwest bound.

When local altimeter setting not received, use San Marcos Rgnl altimeter setting and increase all MDAs 60 feet and visibility Cat C ¼ SM. VDP NA when using San Marcos Rgnl altimeter setting.

MISSED APPROACH: Climb to 3500 direct CUDVI and via 112° track to NUMMO and hold, continue climb-in-hold to 3500.

Procedure NA for arrivals at SHEPE via V17 southwest bound.

When local altimeter setting not received, use San Marcos Rgnl altimeter setting and increase all MDAs 60 feet and visibility Cat C ¼ SM. VDP NA when using San Marcos Rgnl altimeter setting.

MISSED APPROACH: Climb to 3500 direct CUDVI and via 112° track to NUMMO and hold, continue climb-in-hold to 3500.
DME/DME RNP 0.3 NA. When local altimeter setting not received, use San Marcos altimeter setting and increase all DA 43 feet and all MDA 60 feet, and increase LPV all Cats, LNAV/VNAV all Cats, and Circling Cats C and D visibility ¾ mile, and LNAV Cats C and D visibility ½ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C (23°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using San Marcos altimeter setting. Helicopter visibility reduction below ¾ SM NA.

**NEW BRAUNFELS NTL (BAZ)**

**RNAV (GPS) RWY 31**

**NEW BRAUNFELS, TEXAS**

**ELEV 658**

**TDZE 646**

**ATIS 119.325**

**SAN ANTONIO APP CON 124.45**

**335.625**

**NEW BRAUNFELS TOWER 127.05 (CTAF) 285.4**

**GND CON 120.175**

**CLNC DEL 134.75**

**CLNC DEL 134.75 (When twr closed)**

**UNICOM 122.7**

**RNAV (GPS) RWY 31**

**NEW BRAUNFELS NTL (BAZ)**

**ATIS 119.325**

**SAN ANTONIO APP CON 124.45**

**335.625**

**NEW BRAUNFELS TOWER 127.05 (CTAF) 285.4**

**GND CON 120.175**

**CLNC DEL 134.75**

**CLNC DEL 134.75 (When twr closed)**

**UNICOM 122.7**

**RNAV (GPS) RWY 31**

**NEW BRAUNFELS NTL (BAZ)**

**ATIS 119.325**

**SAN ANTONIO APP CON 124.45**

**335.625**

**NEW BRAUNFELS TOWER 127.05 (CTAF) 285.4**

**GND CON 120.175**

**CLNC DEL 134.75**

**CLNC DEL 134.75 (When twr closed)**

**UNICOM 122.7**

**RNAV (GPS) RWY 31**

**NEW BRAUNFELS NTL (BAZ)**

**ATIS 119.325**

**SAN ANTONIO APP CON 124.45**

**335.625**

**NEW BRAUNFELS TOWER 127.05 (CTAF) 285.4**

**GND CON 120.175**

**CLNC DEL 134.75**

**CLNC DEL 134.75 (When twr closed)**

**UNICOM 122.7**
RNAV (GPS) RWY 35
NEW BRAUNFELS NTL (BAZ)

MISSED APPROACH: Climb to 3100 direct FONEK and via 340° track to BRAUN and hold, continue climb-in-hold to 3100.

When local altimeter setting not received, use San Marcos Rgnl altimeter setting: increase LPV DA to 972 feet, LNAV/VNAV DA to 1153 feet; increase all MDAs 60 feet and visibility LNAV Cat C and D 1/4 SM. Baro-VNAV and VDP NA when using San Marcos Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).

Procedure NA for arrival at SAT VORTAC via V198-212 westbound and V163 northbound.

When local altimeter setting not received, use San Marcos Rgnl altimeter setting: increase LPV DA to 972 feet, LNAV/VNAV DA to 1153 feet; increase all MDAs 60 feet and visibility LNAV Cat C and D 1/4 SM. Baro-VNAV and VDP NA when using San Marcos Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).

LPV DA to 972 feet, LNAV/VNAV DA to 1153 feet; increase all MDAs 60 feet and visibility LNAV Cat C and D 1/4 SM. Baro-VNAV and VDP NA when using San Marcos Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).

When local altimeter setting not received, use San Marcos Rgnl altimeter setting: increase LPV DA to 972 feet, LNAV/VNAV DA to 1153 feet; increase all MDAs 60 feet and visibility LNAV Cat C and D 1/4 SM. Baro-VNAV and VDP NA when using San Marcos Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).

LPV DA to 972 feet, LNAV/VNAV DA to 1153 feet; increase all MDAs 60 feet and visibility LNAV Cat C and D 1/4 SM. Baro-VNAV and VDP NA when using San Marcos Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

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

TOP ALTITUDE: 24025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 128° or as assigned by ATC, for vectors to TREVA, thence . . .

TAKEOFF RUNWAY 17: Climb on heading 173° or as assigned by ATC, for vectors to TREVA, thence . . .

TAKEOFF RUNWAY 31: Climb on heading 308° or as assigned by ATC, for vectors to TREVA, thence . . .

TAKEOFF RUNWAY 35: Climb on heading 353° or as assigned by ATC, for vectors to TREVA, thence . . .

... on track 305° to TATAR, then on track 305° to ALISS. Maintain ATC assigned altitude.

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

SLENA ONE DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 128° or as assigned by ATC, for vectors to YENNS, thence . . . .
TAKEOFF RUNWAY 17: Climb on heading 173° or as assigned by ATC, for vectors to YENNS, thence . . . .
TAKEOFF RUNWAY 31: Climb on heading 308° or as assigned by ATC, for vectors to YENNS, thence . . . .
TAKEOFF RUNWAY 35: Climb on heading 353° or as assigned by ATC, for vectors to YENNS, thence . . . .

. . . . on track 161° to LILJO, then on track 161° to SLENA, then on transition. Maintain ATC assigned altitude.

BRENII TRANSITION (SLENA1.BRENI)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 128° or as assigned by ATC, for vectors to WRKIT, thence . . . .
TAKEOFF RUNWAY 17: Climb on heading 173° or as assigned by ATC, for vectors to WRKIT, thence . . . .
TAKEOFF RUNWAY 31: Climb on heading 308° or as assigned by ATC, for vectors to WRKIT, thence . . . .
TAKEOFF RUNWAY 35: Climb on heading 353° or as assigned by ATC, for vectors to WRKIT, thence . . . .

. . . . on track 080° to CHURN, then on track 085° to SNIDR, then on transition. Maintain ATC assigned altitude.

BLUMS TRANSITION (SNIDR1.BLUMS)
CAAGE TRANSITION (SNIDR1.CAAGE)
FFSSH TRANSITION (SNIDR1.FFSSH)
MOLLR TRANSITION (SNIDR1.MOLLR)
SEEDS TRANSITION (SNIDR1.SEEDS)
WEMAR TRANSITION (SNIDR1.WEMAR)
WHAEL TRANSITION (SNIDR1.WHAEL)
WYLSN TRANSITION (SNIDR1.WYLSN)

Note: Chart not to scale.
TJANO ONE DEPARTURE (RNAV)

RNAV 1 - DME/DME IRU or GPS. 
RADAR required.

TOP ALTITUDE:
ASSIGNED BY ATC

San Antonio Dep Con
128.05 290.225
ATIS
119.325
CLNC DEL
134.75
GND CON
120.175
NEW BRAUNFELS TOWER ★
127.05 285.4

NOTE: For non-GPS equipped aircraft, THX and SAT DME must be operational.

TJANO ONE DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 128° or as assigned by ATC, for vectors to LVACA, thence . . . .

TAKEOFF RUNWAY 17: Climb on heading 173° or as assigned by ATC, for vectors to LVACA, thence . . . .

TAKEOFF RUNWAY 31: Climb on heading 308° or as assigned by ATC, for vectors to LVACA, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 353° or as assigned by ATC, for vectors to LVACA, thence . . . .

. . . . on track 205° to TJANO, then on Transition. Maintain ATC assigned altitude.

KAHAN TRANSITION (TJANO1.KAHAN)
ZANNI TRANSITION (TJANO1.ZANNI)

Note: Chart not to scale.
YODUH ONE DEPARTURE (RNAV)

NOTE: Chart not to scale.

TAKEOFF RUNWAY 13: Climb on heading 128° or as assigned by ATC, for vectors to SITHH, thence . . .
TAKEOFF RUNWAY 17: Climb on heading 173° or as assigned by ATC, for vectors to SITHH, thence . . .
TAKEOFF RUNWAY 31: Climb on heading 308° or as assigned by ATC, for vectors to SITHH, thence . . .
TAKEOFF RUNWAY 35: Climb on heading 353° or as assigned by ATC, for vectors to SITHH, thence . . .

. . . on track 002° to YODUH, then on Transition. Maintain ATC assigned altitude.

KLNGR TRANSITION (YODUH1.KLNGR)
PRTZY TRANSITION (YODUH1.PRTZY)
RNAV (GPS) RWY 11
ODESSA-SCHLEMEYER FLD (ODO)

Circling to Rwys 16 and 20 NA at night. 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.

Midland Intl Air and Space Port altimeter setting and increase all DA 41 feet and all MDA 60 feet and increase LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat C and D and Circling Cat C visibility ¼ mile. VDP NA with Midland Intl Air and Space Port altimeter setting. Baro-VNAV NA when using Midland Intl Air and Space Port altimeter setting.

**ASOS** 119.275  **MIDLAND APP CON** 124.6  256.875  **CLNC DEL** 121.7

**UNICOM** 123.0 [CTAF] 1

**MISSED APCH FIX:**

1. **LNAV only**
2. **JP (FAA)**

**MISSED APPROACH:**

Climb to 5000 direct JEMBI and hold.
Procedure NA for arrivals at PIZON on V68 northwest bound.

Procedure NA for arrivals at MERGE on V81 northbound.

RNAV (GPS) RWY 20
ODESSA-SCHLEMEYER FLD (ODO)

ASOS
119.275

MIDLAND APP CON★
124.6 256.875

CLNC DEL
121.7

UNICOM
123.0 (CTAF) ★

Circling NA south of Rwys 2 and 34. When local altimeter setting not received use Midland Intl Air and Space Port altimeter setting and increase all MDAs 60 feet and increase Circling Cat C visibility ½ SM. Rwy 20 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 5100 direct PIZON and hold.

RNAV (GPS) RWY 20
ODESSA-SCHLEMEYER FLD (ODO)

ELEV 3004
TDZE 3004

MIRL Rwys 2-20, 11-29, and 16-34.

Cat C visibility     SM. Rwy 20 helicopter visibility reduction below 1 SM NA.

ODDESSA, TEXAS
Orig-B 04NOV21

31°55’N-102°23’W
347
RNAV (GPS) RWY 29
ODESSA-SCHLEMEYER FLD (ODO)

RNP APCH.

Baro-VNAV NA when using Midland Intl Air and Space Port altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C or above 43°C. Circling NA south of Rwys 2 and 34. When local altimeter setting not received use Midland Intl Air and Space Port altimeter setting and increase all DAs 41 feet and all MDAs 60 feet and increase LNAV Cats C and D visibility ½ SM, Circling Cat C visibility ½ SM. VDP NA with Midland Intl Air and Space Port altimeter setting.

ASOS
119.275

MIDLAND APP CON
124.6 256.875

CLNC DEL
121.7

UNICOM
123.0 (CTAF)

Procedure NA for arrivals at JOKES on V68 southeast bound.

Procedure NA for arrivals at OHARA on V81 southwest bound.

MISSED APPROACH: Climb to 5000 direct KIMTE and hold.

5 NM
KIMTE

3994

Procedure Turn NA

OGEDA-SCHLEMEYER FLD (ODO)

RNAV (GPS) RWY 29

31° 55'N-102° 23'W
**Circling NA south of Rwys 2 and 34. When local altimeter setting not received use Midland Intl Air and Space Port altimeter setting and increase all MDA 60 feet, increase Circling Cat C visibility ¾ SM.**

**MISSED APPROACH:** Climbing right turn to 5000 direct MAF VORTAC and hold.

NoPT for arrival on MAF VORTAC airway radials 357 CW 102.

**ASOS**

| ASOS | 119.275 |

**MIDLAND APP CON**

| MIDLAND APP CON | 124.6 256.875 |

**CNC DEL**

| CNC DEL | 121.7 |

**UNICOM**

| UNICOM | 123.0 (CTAF) |

**5000 MAF**

Remain within 10 NM

**NUKTY MAF 10.7**

**5000 MAF VORTAC**

Increase all MDA 60 feet, increase Circling Cat C visibility ¾ SM.

**ID: 349**
MISSED APPROACH: Climb to 700 then climb to 3000 intercept NOG TACAN R-121 to DAYET and hold.

Wheel crossing height 19° less than minimum for C-5, C-17, B-747 type aircraft.
ILS Z or LOC Z RWY 13

ORANGE GROVE NALF (KNOG)

ATIS ** 254.35
KINGSVILLE APP CON 119.90 290.45
TOWER ** 128.4 281.425
GND CON 229.4

Wheel crossing height 19’ less than minimum for C-5, C-17, B-747 type aircraft.

EMERG SAFE ALT 100 NM 16,200
ELEV 257 TDZE 257

CATEGORY A B C D
S-ILS 13 457-1 200 (200-1)
S-LOC 13 620-1 363 (400-1)
C CIRCLING 720-1 463 (500-1) 920-1½ 663 (700-1½) 1000-2½ 743 (800-2½)

ORANGE GROVE, TEXAS
Amdt 1 13JUN24

SC-3, 11 JUL 2024 to 05 SEP 2024

ORANGE GROVE, TEXAS 27°54’N-98°03’W ORANGE GROVE NALF (KNOG)

24165
ORANGE GROVE, TEXAS

TACAN RWY 31

KINGSVILLE APP CON 119.90 290.45
TOWER 128.4 281.425
GND CON 229.4

ATIS 254.35

EMERG SAFE ALT 100 NM 16,200
ELEV 257 TDZE 232

MISSED APPROACH: Climb to 700 then climb to 3000 intercept NOG TACAN R-310 to GRANE and hold.

ORANGE GROVE
Channel 63 NOG

KINGSVILLE
Channel 125 NQI

EMD 125

CIRCLING 720-1 463 (500-1) 920-1 663 (700-1½) 1000-2½

ORANGE GROVE NALF (KNOG)

Amst 2 13JUN24

SC-3, 11 JUL 2024 to 05 SEP 2024
**ATIS**

**254.35**

**KINGSVILLE APP CON**

**119.90**

**290.45**

**TOWER**

**128.4**

**281.425**

**GND CON**

**229.4**

---

**MISSING APPROACH:** Climb to 700 then climbing left turn to 3000 and intercept NOG TACAN R-121 to DAYET and hold.

---

**EMERG SAFE ALT 100 NM 16,200**

**ELEV**

**257**

**TDZE**

**257**

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**ORANGE GROVE, TEXAS**

**Amdt 2 13JUN24**

---

**ORANGE GROVE NALF (KNOG)**

---

**ORANGE GROVE, TEXAS**

**27*54'N-98*03'W**
MISSED APPROACH: Climb to 2000 on NQI TACAN R-328, then left turn to intercept NQI R-328 to DAMPS and hold.

ATIS * 254.35
KINGSVILLE APP CON 119.90 290.45
TOWER * 128.4 281.425
GND CON 229.4

EMERG SAFE ALT 100 NM 16,200
ELEV 257

CORPUS CHRISTI
115.5 CRP
Chan 102

328°

HOLd 6000

KINGSVILLE
Chan 125 NQI

2000

27°54’N-98°03’W

ORANGE GROVE, TEXAS
Amrd 2 13JUN24

SC-3, 11 JUL 2024 to 05 SEP 2024
RNAV (GPS) RWY 16
OZONA MUNI (OZA)

AWOS-3PT 118.425
HOUSTON CENTER 125.75 346.4
UNICOM 122.8 (CTAF)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Procedure NA at night. Obtain local altimeter on CTAF; when not received, use San Angelo altimeter setting. Rwy 16 helicopter visibility reduction below 1/4 SM NA.

MISSED APPROACH: Climb to 5000 direct IXALE WP and hold.

SAN ANGELO SJT
Procedure NA for arrival on SJT VORTAC airway radials 171 CW 309.

SAN ANGELO ALTIMETER SETTING MINIMUMS

**RNAV (GPS) RWY 16**

OZONA, TEXAS
Orig-A 10SEP20

30°44’N-101°12’W

SC-3, 11 JUL 2024 to 05 SEP 2024

356
**VOR/DME or GPS-A**

**MC KINLEY FLD (T3)**

**VORTAC COT** 115.8  
**Chan 105**

**APP CRS** 352°  
**Rwy Idg** TDZE  
**Apt Elev** N/A

**HOUSTON CENTER** 134.6  322.5

**UNICOM** 122.8 (CTAF)

**HOUSTON CENTER** 134.6  322.5

**UNICOM** 122.8 (CTAF)

- **MISSED APPROACH:** Climbing left turn to 2500 direct COT VORTAC and hold.

- **Use Cotulla altimeter setting.** Procedure NA at night.

- **Procedure NA at night.** Use Cotulla altimeter setting.

**FLIGHT LEVEL** 2500

**IAF** COTULLA  
**COT C** 115.8  
**Chan 105**

**PEARSALL, TEXAS**

**AL-6177 (FAA)** 23222
RNAV (GPS) RWY 14
PECOS MUNI (PEQ)

Circling RWY 9, 27 NA at night. Baro-VNAV and VDP NA when using Wink altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C. When local altimeter setting not received, use Wink altimeter setting and increase LPV DA to 2903 feet and all visibilities ¾ SM. Increase LNAV/VNAV DA to 3004 feet and all visibilities ¾ SM. Increase all MDAs 100 feet and LNAV visibility Cat C/D ¾ SM, and Circling visibility Cat C/D ¾ SM.

AWOS-3
ALBUQUERQUE CENTER
UNICOM

5 NM
Holding Pattern
WALOM

SC-3, 11 JUL 2024 to 05 SEP 2024

LPV DA
2808-2/4 200 (200-2/4)

LNAV/VNAV DA
2909-1/8 301 (300-1/8)

LNAV MDA
3000-1 392 (400-1)
3000-1 392 (400-1/8)

CIRCLING
3060-1 3140-1 3360-2/4 3360-2 1/2
447 (500-1) 527 (600-1) 747 (800-2 1/4) 747 (800-2 1/2)

MIRL Rwys 9-27 and 14-32

PECOS, TEXAS
Orig-B 30DEC21

31°23’N-103°31’W
Baro-VNAV and VDP NA when using Wink altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C. When local altimeter setting not received, use Wink altimeter setting: increase LPV DA to 2900 feet, LNAV/VNAV DA to 2950 feet and all visibilities ¼ SM; increase all MDA 100 feet and visibility Cat C and LNAV Cat D ¼ SM. Circling RWy 9, 27 NA at night.

**MISSED APPROACH:**
Climb to 4600 direct WALOM and hold.

**Procedure NA for arrivals at INK VORTAC on V16-94.**

**Procedure NA for arrivals at FST VORTAC airway radii 222 CW 021.**

**RNAV (GPS) RWY 32**
Pecos Muni (PEQ)

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<th>D</th>
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<td>250 (300-1/4)</td>
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<td>CIRCLING</td>
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<td>3140-1</td>
<td>3360-2/4</td>
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</table>

**AWOS-3**

**118.175**

**ALBUQUERQUE CENTER**

**135.875 292.15**

**UNICOM**

**122.8 (CTAF)**

**WAAS CH 69629**

**W32A**

**APP CRS 317°**

**Rwy Idg 6236**

**TDZE 2605**

**Apt Elev 2613**

**RNAV (GPS) RWY 32**
Pecos Muni (PEQ)

**ELEV 2613**

**TDZE 2605**

**HOLD 6000**

**4500 N QFT**

**22° (10)**

**4500 N QFT**

**5 NM**

**HUGPA**

**2670 2770**

**2677 2777**

**WALOM**

**2770 2992**

**5000**

**AWOS-3 3.00°**

**B**

**C**

**D**

**3060-1**

**447 (500-1)**

**527 (600-1)**

**747 (800-1/4)**

**747 (800-1/2)**

**25° 27°**

**137° 317°**

**317° to RW32**

**31°23’N - 103°31’W**

**PECOS, TEXAS**

**Orig-C 30DEC21**
ASSIGNED BY ATC

TOP ALTITUDE:

24025

DEPARTURE ROUTE DESCRIPTION

Maintain ATC assigned altitude.

. . . on track 305° to TATAR, then on track 305° to ALISS.

TAKEOFF RUNWAY 16: Climb on heading 157° or as assigned by ATC, for vectors to TREVA, thence . . .

TAKEOFF RUNWAY 34: Climb on heading 337° or as assigned by ATC, for vectors to TREVA, thence . . .

. . .

NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 16, 34: Standard.

Rwys 16, 34: Standard.
**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb on heading 157° or as assigned by ATC, for vectors to YENNS, thence . . . .

**TAKEOFF RUNWAY 34:** Climb on heading 337° or as assigned by ATC, for vectors to YENNS, thence . . . .

. . . . on track 161° to LILJO, then on track 161° to SLENA, then on transition. Maintain ATC assigned altitude.

**BRENI TRANSITION (SLENA1.BRENI)**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb on heading 157° or as assigned by ATC, for vectors to WRKIT, thence . . .

**TAKEOFF RUNWAY 34:** Climb on heading 337° or as assigned by ATC, for vectors to WRKIT, thence . . .

. . . on track 080° to CHURN, then on track 085° to SNIDR, then on transition. Maintain ATC assigned altitude.

**BLUMS TRANSITION (SNIDR1.BLUMS)**
**CAAGE TRANSITION (SNIDR1.CAAGE)**
**FFSSH TRANSITION (SNIDR1.FFSSH)**
**MOLLR TRANSITION (SNIDR1.MOLLR)**
**SEEDS TRANSITION (SNIDR1.SEEDS)**
**WEMAR TRANSITION (SNIDR1.WEMAR)**
**WHAELE TRANSITION (SNIDR1.WHAELE)**
**WYLSN TRANSITION (SNIDR1.WYLSN)**
TJANO ONE DEPARTURE (RNAV)

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb on heading 157° or as assigned by ATC, for vectors to LVACA, thence . . . .

**TAKEOFF RUNWAY 34:** Climb on heading 337° or as assigned by ATC, for vectors to LVACA, thence . . . . . . . . on track 205° to TJANO, then on Transition. Maintain ATC assigned altitude.

**KAHAN TRANSITION (TJANO1.KAHAN)**

**ZANNI TRANSITION (TJANO1.ZANNI)**

**NOTE:** For non-GPS equipped aircraft, THX and SAT DME must be operational.

**SAN ANTONIO DEP CON**
125.7  290.225
CLNC DEL 121.375

**RNAV 1 - DME/DME IRU or GPS.**
RADAR required.

**TOP ALTITUDE:**
ASSIGNED BY ATC
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° or as assigned by ATC, for vectors to SITHH, thence . . .

TAKEOFF RUNWAY 34: Climb on heading 337° or as assigned by ATC, for vectors to SITHH, thence . . .

. . . on track 002° to YODUH, then on Transition. Maintain ATC assigned altitude.

KLNGR TRANSITION (YODUH1,KLNGR)

PRTZY TRANSITION (YODUH1,PRTZY)
RNAV (GPS) RWY 12
MUSTANG BEACH (RAS)

### Category

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<td>430 (500-1½)</td>
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<tr>
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<td>395 (400-1)</td>
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<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>500-1</td>
<td>495 (500-1)</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

### Navigation Points

- **HOSRU**: 120° 3000
- **JAPVO**: 120° 1500
- **ISOYE**: 5 NM

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

**DME/DME RNP-0.3 NA**. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 44°C (111°F). If local altimeter setting not received, use Corpus Christi Intl altimeter setting and increase all DAs/MDAs 60 feet. Baro-VNAV and VDP NA when using Corpus Christi Intl altimeter setting.

**AWOS-3**

**CORPUS APP CON**

**CTAF**

**118.425**

**125.4 307.9**

**122.9**

**Radar Required**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**PORT ARANSAS, TEXAS**

**Orig-B 05APR12**

**PORT ARANSAS, TEXAS**

**AL-10221 (FAA)**

**23278**

**27°49'N-97°05'W**
RNAV (GPS) RWY 30
MUSTANG BEACH (RAS)

**AWOS-3**
118.425

**CORPORUS APP CON**
125.4 307.9

**CTAF**
122.9

**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>LPV DA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

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

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 44°C (111°F). If local altimeter setting not received, use Corpus Christi Intl altimeter setting and increase all DAs/MDAs 60 feet.

Baro-VNAV and VDP NA when using Corpus Christi Intl altimeter setting.
RNAV (GPS) RWY 13
PORT ISABEL-CAMERON COUNTY (PIL)

**RNAV APCH:**
Baro-VNAV NA when using Brownsville altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. VDP NA when using Brownsville altimeter setting. When local altimeter setting not received, use Brownsville altimeter setting and increase all DA 38 feet and all MDA 40 feet, increase LPV all Cats, LNAV Cat C, and Circling Cat C visibility ¼ mile. Circling Rwys 3, 8, 17, 21, 26, 35 NA at night.

**MISSED APPROACH:**
Climb to 3000 direct COKAX and via 185° track to CHICO and hold.

ASOS
118.525

VALLEY APP CON
119.5 257.6

CINC DEL
119.2

UNICOM
122.8 (CTAF)

**PROCEDURE NA for arrivals at MADRE via V70 northwest bound.**
When local altimeter setting not received, use Brownsville altimeter setting and increase all MDA 40 feet and increase Cat C visibility ¼ mile. Circling Rwys 3, 8, 17, 21, 26, 35 NA at night.

MISSED APPROACH: Climb to 2000 ft above ground level and increase all MDA 40 feet and increase Cat C MDA. When local altimeter setting not received, use Brownsville altimeter setting and increase all MDA 40 feet and increase Cat C MDA. Circling Rwys 3, 8, 17, 21, 26, 35 NA at night.

One Minute Holding Pattern

 CATEGORY | A | B | C | D
---|---|---|---|---
C | 780-1 | 761 (800-1) | 840-2½ | 821 (900-2½) | NA
### RNAV (GPS)-A

**PRESIDIO LELY INTL (PRS)**

<table>
<thead>
<tr>
<th><strong>APP CRS</strong></th>
<th><strong>Rwy Idg</strong></th>
<th><strong>TDZE</strong></th>
<th><strong>Apt Elev</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>260°</td>
<td>N/A</td>
<td>N/A</td>
<td>2938</td>
</tr>
</tbody>
</table>

**ELEV** 2938

**AWOS-3PT** 118.0  **ALBUQUERQUE CENTER** 135.875 292.15  **UNICOM** 122.8 (CTAF)

**Misplaced Approach:** Climbing right turn to 9000 direct IMEGY and on track 006° to MRF VOR/DME and hold.

**When local altimeter setting not received, procedure NA.**

**United States-Mexico**

**RNAV (GPS) - A**

**Category**

<table>
<thead>
<tr>
<th><strong>A</strong></th>
<th><strong>B</strong></th>
<th><strong>C</strong></th>
<th><strong>D</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>3480-1</td>
<td>3540-1</td>
<td>6700</td>
</tr>
<tr>
<td>342 (600-1)</td>
<td>602 (700-1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MIRL Rwy17-35**

**UNICOM**

<table>
<thead>
<tr>
<th><strong>135.875</strong></th>
<th><strong>292.15</strong></th>
<th><strong>122.8</strong> (CTAF)</th>
</tr>
</thead>
</table>

**370**
**NOT FOR CIVIL USE**

Simultaneous approaches authorized with Rwy 15R and 15L

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**UNIVERSAL CITY, TEXAS**

**LOC I-UNY**

<table>
<thead>
<tr>
<th>APCH CRS</th>
<th>TDZE</th>
<th>Arpt Elev</th>
<th>Rwy Idg</th>
<th>CLNC DEL (RWY 15L-33R)</th>
<th>HANGOVER ATIS</th>
<th>HANGOVER TOWER</th>
<th>HANGOVER GND CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>111.3</td>
<td>761</td>
<td>761</td>
<td>8352</td>
<td>338.35</td>
<td>327.8</td>
<td>291.1</td>
<td>353.75</td>
</tr>
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</table>

**Radar or DME required**

*Circling not authorized NE of Rwy 15R-33L*

---

**ATS**

<table>
<thead>
<tr>
<th>ATIS</th>
<th>SAN ANTONIO APP CON</th>
<th>TOWER</th>
<th>GND CON</th>
<th>HANGOVER ATIS</th>
<th>HANGOVER TOWER</th>
<th>HANGOVER GND CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>290.525</td>
<td>128.05</td>
<td>381.1</td>
<td>249.7</td>
<td>119.65</td>
<td>275.8</td>
<td>124.75</td>
</tr>
</tbody>
</table>

---

**EMERG SAFE ALT 100 NM 4100**

---

**LOCALIZER 111.3 I-UNY**

---

**ILS or LOC RWY 15R**

---

**RANDOLPH AFB (KRND)**

---

**HRI all rwsys ALS Rwy 15L nstd len 2100’**

---

**FAF to MAP 6.7 NM**

- **Knots**: 60, 90, 120, 150, 180
- **Min:Sec**: 6.42, 4.28, 3.21, 2.41, 2.14

---

**UNIVERSAL CITY, TEXAS**

Amdt 2 13JUN24

---

**371**
** When ALS inop, increase CAT ABC RVR to 45, vis to 7/8 mile, CAT DE RVR to 50, vis to 1 mile.
** When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE vis to 1 3/4 miles.

** Missed Approach:** Climb to 1500, then climbing left turn to 3000 direct HOSPA. Expect ATC instructions.

** SBAS VNAV NA.**

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16° C or above 54° C.

** Simultaneous approach authorized with Rwy 15L and 15R.**

** Vertical guidance required for simultaneous operations.**

** LNAV procedures NA during simultaneous operations.**

---

** Category 1 Rwy 15L**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNAV/VNAV DA</td>
<td>1043/40</td>
<td>1054/40</td>
<td>1062/40</td>
<td>1073/40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>301 (300-312)</td>
<td>312 (300-312)</td>
<td>320 (400-412)</td>
<td>331 (400-412)</td>
<td></td>
</tr>
</tbody>
</table>

| LNAV MDA** | 1260/40 | 1260-1  |
|            | 518 (500-618) | 518 (500-618) |

** Circulating**

1260-1 499 (500-1) 1260-1½ 518 (500-618) 1800-3 1039 (1100-3)
SC-3, 11 JUL 2024 to 05 SEP 2024

**RNAV (GPS) RWY 15R**

**NOT FOR CIVIL USE**

**EMERG SAFE ALT 100 NM 4100**

**CATEGORY**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1206-1¾</td>
<td>445</td>
<td>(500-1½)</td>
<td></td>
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</table>

**RNAV/ VNAV DA**

<table>
<thead>
<tr>
<th>DA</th>
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</thead>
<tbody>
<tr>
<td>1520/55</td>
</tr>
<tr>
<td>759 (800-1)</td>
</tr>
<tr>
<td>1520-1¼</td>
</tr>
<tr>
<td>759 (800-1½)</td>
</tr>
<tr>
<td>1520-2</td>
</tr>
<tr>
<td>759 (800-2)</td>
</tr>
<tr>
<td>1520-2½</td>
</tr>
<tr>
<td>759 (800-2½)</td>
</tr>
<tr>
<td>1800-3</td>
</tr>
<tr>
<td>1039 (1100-3)</td>
</tr>
</tbody>
</table>

**CIRCLING**

| 1520-1 |
| 759 (800-1) |
| 1520-1¼ |
| 759 (800-1½) |
| 1520-2½ |
| 759 (800-2½) |
| 1800-3 |

**HIRL all runys**

**ALS RWY 15L std len 2100’**
**NOT FOR CIVIL USE**

**SBAS VNAV NA**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.

Simultaneous approach authorized with Rwy 33L and 33R.
Vertical guidance required for simultaneous operations.
LNAV procedures NA during simultaneous operations.

---

**EMERG SAFE ALT 100 NM 4100**
1200 3000 HAKTI

**CATEGORY** | **A** | **B** | **C** | **D** | **E**
---|---|---|---|---|---
LNAV/VNAV DA | 983/40 | 250 | (300-14) | 992/40 | 1030/45
LNAV MDA | 1180/55 | 447 (500-1) | 1180-1/3 | 447 (500-1/3)
CIRCLING | 1240-1 | 1280-1 | 1500-2 | 1800-3 | 1039 (1100-3)

---

**RNAV (GPS) RWY 33L**

---

**UNIVERSAL CITY, TEXAS**
Amdt 3 13JUN24

**RANDOLPH AFB (KRND)**

**ATIS** | **SAN ANTONIO APP CON** | **TOWER** | **GND CON** | **CLNC DEL** | **HANGOVER ATIS** | **HANGOVER TOWER** | **HANGOVER GND CON**
---|---|---|---|---|---|---|---
290.525 | 128.05 318.1 | 128.25 294.7 | 119.65 275.8 | 338.35 | 327.8 | 320.5 291.1 | 353.75
EMERG SAFE ALT 100 NM 4100

CATEGORY | A   | B   | C   | D   | E   
---------|-----|-----|-----|-----|-----
S-15R    | 1380/55 | 619 | 1380-134 | 619 | 700-134 |
CIRCLING*| 1380-1 | 619 | 1500-2 | 739 | 1800-3 | 1039 (1100-3)

HRL all rwy
ALS Rwy 15L std len 2100'
TAKEOFF MINIMUMS
Rwys 15L/R, 33L/R: Standard.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 15L/R: Climb on heading 145° or as assigned by ATC, for vectors to TREVA, thence . . .
TAKEOFF RUNWAYS 33L/R: Climb on heading 325° or as assigned by ATC, for vectors to TREVA, thence . . .

. . . on track 305° to TATAR, then on track 305° to ALISS.
Maintain ATC assigned altitude.

NOTE: Chart not to scale.
SLENA ONE DEPARTURE (RNAV)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15L/R: Climb on heading 145° or as assigned by ATC, for vectors to YENNS, thence . . . .

TAKEOFF RUNWAY 33L/R: Climb on heading 325° or as assigned by ATC, for vectors to YENNS, thence . . . .

. . . . on track 161° to LILJO, then on track 161° to SLENA, then on transition. Maintain ATC assigned altitude.

BRENI TRANSITION (SLENA1.BRENI)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 15L/R:** Climb on heading 145° or as assigned by ATC, for vectors to WRKIT, thence...

**TAKEOFF RUNWAYS 33L/R:** Climb on heading 325° or as assigned by ATC, for vectors to WRKIT, thence...

... on track 080° to CHURN, then on track 085° to SNIDR, then on transition. Maintain ATC assigned altitude.

- **BLUMS TRANSITION (SNIDR1.BLUMS)**
- **CAAGE TRANSITION (SNIDR1.CAAGE)**
- **FFSSH TRANSITION (SNIDR1.FFSSH)**
- **MOLLR TRANSITION (SNIDR1.MOLLR)**
- **SEEDS TRANSITION (SNIDR1.SEEDS)**
- **WEMAR TRANSITION (SNIDR1.WEMAR)**
- **WHAEL TRANSITION (SNIDR1.WHAEL)**
- **WYLSN TRANSITION (SNIDR1.WYLSN)**
**TJANO ONE DEPARTURE (RNAV)**

**RNAV 1 - DME/DME IRU or GPS.**

**TOP ALTITUDE:**

**ASSIGNED BY ATC**

- **AL-341 (FAA)**
- **RANDOLPH AFB (KRND)**
- **UNIVERSAL CITY, TEXAS**

**SAN ANTONIO DEP CON**
- 127.1 290.225
- 290.525
- ATIS
- 327.8
- CINC DEL (Rwy 15L-33R)
- 338.35
- GND CON
- 119.65 275.8
- GND CON (HANGOVER)
- 124.75 353.75
- TOWER
- 128.25 294.7
- HANGOVER TOWER
- 120.5 291.1

**NOTE:** For non-GPS equipped aircraft, THX and SAT DME must be operational.

**TJANO ONE DEPARTURE (RNAV)**

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 15L/R:** Climb on heading 145° or as assigned by ATC, for vectors to LVACA, thence . . .

**TAKEOFF RUNWAYS 33L/R:** Climb on heading 325° or as assigned by ATC, for vectors to LVACA, thence . . .

. . . on track 205° to TJANO, then on Transition. Maintain ATC assigned altitude.

**KAHAN TRANSITION (TJANO1.KAHAN)**

**ZANNI TRANSITION (TJANO1.ZANNI)**

**385**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 15L/R:** Climb on heading 145° or as assigned by ATC, for vectors to SITHH, thence . . .

**TAKEOFF RUNWAYS 33L/R:** Climb on heading 325° or as assigned by ATC, for vectors to SITHH, thence . . .

. . . on track 002° to YODUH, then on Transition. Maintain ATC assigned altitude.

**KLNGR TRANSITION (YODUH1,KLNGR)**

**PRTZY TRANSITION (YODUH1,PRTZY)**
RNAV (GPS) RWY 13
NUECES COUNTY (RBO)

Circling NA northeast of Rwy 13-31. Procedure NA at night. Baro-VNAV and VDP NA when using Corpus Christi Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Corpus Christi Intl altimeter setting and increase LPV DA to 358 feet, LNAV/VNAV DA to 400 feet and all MDA 40 feet.

Procedure NA for arrival on CRP VORTAC airway radials 184 CW 305.

AWOS-3
118.175

KINGSVILLE APP CON *
119.9 290.45

CTAF
122.9

Procedure NA for arrival on CRP VORTAC airway radials 184 CW 305.

MATSS
1.9 NM to RW13

*1.1 NM to RW13

2000

263°
(20.4)

122°

1048

ELEV 80

TDZE 80

RWP Idg 3700

Apt Elev 80

RWP Idg 3700

Apt Elev 80

RNAV (GPS) RWY 13
NUECES COUNTY (RBO)

**MISSED APPROACH: Climb to 540 then climbing right turn to 2000 direct ELELY and hold.**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Circling NA northeast of Rwy 31. Baro-VNAV and VDP NA when using Corpus Christi Intl altimeter setting. Rwy 31 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. Procedure NA at night. When local altimeter not received, use Corpus Christi Intl altimeter setting and increase LPV DA to 357 feet, LNAV/VNAV DA to 398 feet and all MDA 40 feet, increase LNAV/VNAV all Cats visibility ¾ SM.

MISSED APPROACH: Climb to 2000 direct ELELY and hold.

LPV DA
329-1 250 (300-1)  NA

LNAV/ VNAV DA
370-1 291 (300-1)  NA

LNAV MDA
480-1 401 (400-1)  NA

CIRCLING
540-1 460 (500-1)  NA

MIRL Rwy 13-31  NA

ELEV 80  TDZE 79

CORPUS CHRISTI CRP

RNAV (GPS) Rwy 31
ROBSTOWN, TEXAS
AL-6929 (FAA)  23166

NUECES COUNTY (RBO)
When local altimeter setting not received, use Corpus Christi Intl altimeter setting. Circling not authorized northeast of Rwy 13-31.

**AWOS-3**

**KINGSVILLE APP CON**

**CTAF**

**CRP**

**CORPUS CHRISTI**

**Remain within 10 NM**

**KITJU CRP**

**MUMMS CRP**

**2000 CRP**

**KITJU CRP**

**2000 to KITJU**

**MISSED APPROACH:** Climbing left turn to 2000 via CRP R-231 to KITJU/CRP 25 DME and hold.

**AWOS-3**

118.175

**KINGSVILLE APP CON**

119.9 290.45

**CTAF**

122.9

**CRP**

25

**MIRL Rwy 13-31**
Baro-VNA NA when using Ingleside altimeter setting. For uncompensated Baro-VNA systems, LNAV/VNAV NA below -15°C (5°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 Ingleside altimeter setting and increase all DA 33 feet and all MDA 40 feet increase LNAV/VNAV all Cats visibility ½ mile. VDP NA with Ingleside altimeter setting.

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

**Procedure NA** for arrivals at BETZY on V20-70 northeast bound.

**Procedure NA** for arrivals at SKIDS on V163 northwest bound.

**LNAV only** 2000 PITYI and hold.

**LNAV only** 2000 PITYI and hold.
### RNAV (GPS) RWY 18

**ARANSAS COUNTY (RKP)**

**UNICOM** 121.7

**ASOS** 119.275

**CORPUS APP CON** 120.9 348.725

**CLNC DEL** 121.7

**UNICOM** 123.05 (CTAF)

---

**ROCKPORT, TEXAS**

*SC-3, 11 JUL 2024 to 05 SEP 2024*

---

**A-632 B**

Baro/VNAV NA when using Ingleside altimeter setting. 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. Helicopter visibility reduction below ½ SM NA. When local altimeter setting not received, use Ingleside altimeter setting and increase all DA 33 feet and all MDA 40 feet; increase LNAV/VNAV visibility all Cats ½ mile. VDP NA with Ingleside altimeter setting.

**MISSED APPROACH:** Climb to 2000 direct YAYUR and on track 108° to PITYI and hold, continue climb-in-hold to 2000.

---

**DETAIL MAP**

- **2000**
- **YAYUR**
- **tr 108°**
- **PITYI**
- **OLUSE**
- **UDLAY**
- **GP 3.00° TCH 39°**

**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>272-1</td>
<td>250 (300-1)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>459-1½</td>
<td>437 (500-1½)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>440-1</td>
<td>418 (500-1)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>500-1</td>
<td>476 (500-1)</td>
<td>500-1½</td>
<td>476 (500-1½)</td>
</tr>
</tbody>
</table>

---

**APP CRS** 184°

**Rwy Ldg** 22

**Apt Elev** 24

---

**ROCKPORT, TEXAS**

*Orig-A 04APR13*
Baro-VA/NAV NA when using Ingleside altimeter setting. For uncompensated Baro-VA/NAV systems, LNAV/VNAV NA below -1.5°C (5°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 Ingleside altimeter setting and increase all DA 33 feet and all MDA 40 feet, increase LNAV Cat C visibility 1/4 mile. VDP NA with Ingleside altimeter setting.

Missed Approach:
Climb to 2000 direct COPIR and hold.

Procedure NA for arrivals at BETZY on V20-70 northeast bound.

Procedure NA for arrivals at SKIDS on V163 northwest bound.

VGS and RNAV glidespath not coincident. (VGS Angle 3.00°/TCH 25)

Procedure Turn NA

* LNAV only
Baro-VNAV NA when using Ingleside 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. Visibility reduction by helicopters NA. When local altimeter setting not received, use Ingleside altimeter setting and increase all DA 33 feet and all MDA 40 feet. VDP NA with Ingleside altimeter setting.

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

**Procedure NA for arrivals at BETZY on V20-70 northeast bound.**

**Procedure NA for arrivals at SKIDS on V163 northwest bound.**
VOR or TACAN-A
ARANSAS COUNTY (RKP)

DME required.

MISSED APPROACH: Climbing left turn to 1600 on heading 360° and CRP VORTAC R-045 to COPAN/16 DME and hold.

ASOS
CORPORUS APP CON
CLNC DEL
UNICOM

119.275
120.9 348.725
121.7
123.05 (CTAF)

ROCKPORT, TEXAS
AL-991 (FAA) 20198

VORTAC CRP
115.5
Chan 102

APP CRS
054°

Rwy Idg
TDZE
Apt Elev
NA
24

CRP 10
Arc

MEZRY
CRP 10

BISON
CRP 18

1600

1600

054° (10)

MACDY
CRP 23.3

1600

054° (8)

CRP 16

COPAN

174

2100

VOR or TACAN-A

MEZRY
CRP 10

BISON
CRP 18

1600

054° hdg

360°

CRP R-045

COPAN

△

1600

MACDY
CRP 23.3

054° 5.5 NM

from FAF

CATEGORY
A
B
C
D
CIRCLING
800-1
776 (800-1)
800-1 ¼
776 (800-1 ¼)
800-2 ¼
776 (800-2 ¼)
NA

ROCKPORT, TEXAS
Amdt 9B 05DEC19

28°05'N-97°03'W
ROCKSPRINGS, TEXAS

APPL CRS
138°

3772

2372

Apt Elev 2372

APP CRS

NA

DME/DME RNP-0.3 NA.
Procedure NA at night.
Helicopter visibility reduction below 1 SM NA.

RNAV (GPS) RWY 14

EDWARDS COUNTY (ECU)

AWOS-3
118.175

DEL RIO APP CON *
119.6 259.1

CTAF
122.9

JUNCTION JCT

Procedure NA for arrivals at JCT VORTAC
airway radials 121 CW 270.

CENTER POINT CSI

Procedure NA for arrivals at CSI VORTAC
on V68 southeast bound.

LNAV MDA
CIRCLING

4000

TOGUE

4000

CONDU

HAVIK

2.9 NM to RW14

RW14

Visual Segment - Obstacles.

CATEGORY

A

B

C

D

LNAV MDA

2960-1 588 (600-1)

2960-1½ 588 (600-1½) NA

CIRCLING

3000-1 628 (700-1)

3000-1¾ 628 (700-1¾) NA

ROCKSPRINGS, TEXAS
Orig-C 08OCT20

29°57’N-100°10’W

395
VOR RWY 14
EDWARDS COUNTY (ECU)

When local altimeter setting not received, use Kimble County altimeter setting and increase all MDA's 180 feet. Procedure NA at night.

Rwy 14 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 5000 direct RSG VORTAC and hold, continue climb-in-hold to 5000.

Procedure NA for arrival on CSI VORTAC airway radials 208 CW 328.

When local altimeter setting not received, use Kimble County altimeter setting.

* County altimeter setting and increase all MDA's 180 feet. Procedure NA at night.

* 3040 when using Kimble County altimeter setting.

** MIRL Rwy 14-32

** FAF to MAP 7.5 NM

** Knots 60 90 120 150 180

** Min:Sec 7:30 5:00 3:45 3:00 2:30

** Category A B C D
S-14 2860-1 488 (500-1) 2860-1¼ 488 (500-1¼) NA
CIRCLING 2860-1 488 (500-1) 2860-1½ 488 (500-1½) NA

** Category A B C D
S-14 2780-1 408 (500-1) 2780-1¼ 408 (500-1¼) NA
CIRCLING 2800-1 428 (500-1) 2840-1 468 (500-1½) NA
See diagram for approach details.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -8°C or above 54°C. Circling NA for Cat E west of Rwy 18-36.

**Procedure NA for arrivals at STEEP on V68 northbound.**

**Procedure NA for arrivals at CUGPA on V77 northbound.**

**Procedure NA for arrivals at EVILE on V76 eastbound.**

**MISSED APPROACH:** Climb to 4400 direct HUMUG and on track 232° to HEXPE and hold.
RNAV (GPS) RWY 21
SAN ANGELO RGNL/MATHIS FLD (SJT)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -8°C or above 54°C. Circling NA for Cat E west of Rwy 18-36.

Procedure NA for arrivals at WATOR on V76 westbound.

Procedure NA for arrivals at EVILE on V76 eastbound.

MISSED APPROACH: Climb to 4400 direct HEXPE and hold.

LPV DA 2106-1 200 (200-1)
LNAV/VNAV DA 2250-1 344 (400-1)
LNAV MDA 2340-1 434 (500-1)

CIRCLING 2360-1 441 (500-1) 2380-1 461 (500-1) 2500-1 581 (600-1½) 2700-1 781 (800-2½) 2700-2½ 781 (800-2½)
RNAV (GPS) RWY 36
SAN ANGELO RGNL/MATHIS FLD (SJT)

Circling NA for Cat E west of Rwy 18-36.
Rwy 36 helicopter visibility reduction below 3/4 SM NA.

Missed Approach: Climb to 4100 direct HONOB and hold.

ATIS
128.45 319.0
SAN ANGELO APP CON
125.35 354.1

Mathis Tower
118.3 (CAFA) 284.7

GND CON
121.9 348.6

UNICOM
122.95

Misssed APCH Fix
7 NM
HONOB

Category
A
B
C
D
E

LNAV MDA
2320-1 401 (500-1)
2320-1½ 401 (500-1½)

CIRCLING
2360-1 441 (500-1)
2380-1 461 (500-1)
2500-1½ 581 (600-1½)
2700-2½ 781 (800-2½)
2700-2¾ 781 (800-2¼)

SAN ANGELO, TEXAS
Orig 25FEB21
31°21'N-100°30'W

SAN ANGELO RGNL/MATHIS FLD (SJT)
RNAV (GPS) RWY 36
**AL-367 (FAA)**

**SAN ANGELO, TEXAS**

**SAN ANGELO RGNL/MATHIS FLD (SJT)**

**VOR/DME or TACAN RWY 3**

**SAN ANGELO RGNL/MATHIS FLD (SJT)**

**ATIS**

128.45 319.0

**SAN ANGELO APP CON**

125.35 354.1

**MATHIS TOWER**

118.3 (CTAF) 284.7

**GND CON**

121.9 348.6

**UNICOM**

122.95

**MISSED APPROACH:** Climbing left turn to 4400 via SJT R-284 to TANKR/11 DME and hold.

**Cat E Circling NA west of Rwy 18-36.**

**SC-3, 11 JUL 2024 to 05 SEP 2024**
VOR Y RWY 21
SAN ANGELO RGNL/MATHIS FLD (SJT)

ATIS 128.45 319.0
SAN ANGELO APP CON 125.35 354.1
MATHIS TOWER 118.3 (CTAF) 0 284.7
GND CON 121.9 348.6
UNICOM 122.95

MISSED APPROACH: Climb to 4000, then left turn direct SJT VORTAC and hold.

Circling NA for Cat D west of Rwy 18-36.

ATIS
SAN ANGELO APP CON *
MATHIS TOWER *
GND CON
UNICOM

SAN ANGELO, TEXAS
Amdt 18 02DEC21
For inop ALS, increase Cat A/B visibility to RVR 5500, and Cat C/D to 2 SM.

MISSED APPROACH: Climbing right turn to 4000 direct SJ NDB and hold.

### ATIS
- 128.45 319.0
- 125.35 354.1

### SAN ANGELO APP CON *
- 118.3 (CTAF) 284.7

### MATHIS TOWER *
- 121.9 348.6

### GND CON
- 122.95

### UNICOM
- 115.1 (CTAF) 284.7

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

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**SAN ANGELO, TEXAS**

**AL-367 (FAA)**

**SAN ANGELO RGNL/MATHIS FLD (SJT)**

**NDB RWY 3**

---

**NDB SJ 356**

**APP CRS 038°**

**Rwy Idg 5940**

**TDZE 1917**

**Apt Elev 1919**

---

**MALSR**

**CAT C/D**

---

**REIL Rwy 18**

---

**TANKR**

---

**GND CON**

---

**UNICOM**

---

**ELEV 1919**

**TDZE 1917**

---

**SAN ANGELO RGNL/MATHIS FLD (SJT)**

---

**SAN ANGELO, TEXAS**

**Amdt 15 28FEB19**

---

**31°21’N-100°30’W**

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**SAN ANGELO RGNL/MATHIS FLD (SJT)**

---

**NDB RWY 3**

---

**SAN ANGELO RGNL/MATHIS FLD (SJT)**

---

**NDB RWY 3**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RNAV (GPS) RWY 17
BOERNE STAGE AIRFIELD (5C1)

Amdt 1D  27JAN22

RNP APCH-GPS.

- Rwy 17 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use KSAT altimeter setting and increase all MDAs 120 feet.

AWOS-3
SAN ANTONIO APP CON
UNICOM
118.725
125.1
1384
123.0 (CTAF)

HOLD 5000 5000 4100
349° 349° 169°

- MISSED APPROACH: Climb to 1900 then climbing right turn to 4100 direct MEDIN.

AWOS-3
SAN ANTONIO APP CON
UNICOM
118.725
125.1
1384
123.0 (CTAF)

SC-3, 11 JUL 2024 to 05 SEP 2024

Rwy 17 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use KSAT altimeter setting and increase all MDAs 120 feet.

AWOS-3
SAN ANTONIO APP CON
UNICOM
118.725
125.1
1384
123.0 (CTAF)

HOLD 5000 5000 4100
349° 349° 169°

- MISSED APPROACH: Climb to 1900 then climbing right turn to 4100 direct MEDIN.

AWOS-3
SAN ANTONIO APP CON
UNICOM
118.725
125.1
1384
123.0 (CTAF)

SC-3, 11 JUL 2024 to 05 SEP 2024

Rwy 17 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use KSAT altimeter setting and increase all MDAs 120 feet.

AWOS-3
SAN ANTONIO APP CON
UNICOM
118.725
125.1
1384
123.0 (CTAF)

HOLD 5000 5000 4100
349° 349° 169°

- MISSED APPROACH: Climb to 1900 then climbing right turn to 4100 direct MEDIN.

AWOS-3
SAN ANTONIO APP CON
UNICOM
118.725
125.1
1384
123.0 (CTAF)

SC-3, 11 JUL 2024 to 05 SEP 2024

Rwy 17 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use KSAT altimeter setting and increase all MDAs 120 feet.

AWOS-3
SAN ANTONIO APP CON
UNICOM
118.725
125.1
1384
123.0 (CTAF)

HOLD 5000 5000 4100
349° 349° 169°

- MISSED APPROACH: Climb to 1900 then climbing right turn to 4100 direct MEDIN.
RNAV (GPS) RWY 35
BOERNE STAGE AIRFIELD (5C1)

**AWOS-3**
118.725

**SAN ANTONIO APP CON**
125.1 307.0

**UNICOM**
123.0 (CTAF)

**ELEV** 1384
**TDZE** 1384

**MISSED APPROACH:** Climb to 4100 direct JEGUM and on track 273° to MEDIN.

Rwy 35 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use San Antonio Intl altimeter setting and increase all MDAs 120 feet.

**SC-3, 11 JUL 2024 to 05 SEP 2024**

SAN ANTONIO, TEXAS
Amdt 1C 27JAN22

29°43'N-98°42'W
407
### Takeoff Minimums

Rwy 17: Standard with minimum climb of 210'/NM to 2200.
Rwy 35: Standard with minimum climb of 250'/NM to 3800.

### Departure Route Description

**Takeoff Runway 17:** Climb on heading 169° or as assigned by ATC, for vectors to TREVA, thence . . .

**Takeoff Runway 35:** Climb on heading 349° or as assigned by ATC, for vectors to TREVA, thence . . .

. . . on track 305° to TATAR, then on track 305° to ALISS.
Maintain ATC assigned altitude.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 169° or as assigned by ATC, for vectors to YENNS, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 349° or as assigned by ATC, for vectors to YENNS, thence . . . .

. . . . on track 161° to LILJO, then on track 161° to SLENA, then on transition. Maintain ATC assigned altitude.

BRENI TRANSITION (SLENA1.BRENI)
**BOERNE STAGE AIRFIELD**
SAN ANTONIO, TEXAS

**ASSIGNED BY ATC**

**TOP ALTITUDE:**
ASSIGNED BY ATC

**TAKEOFF MINIMUMS**
Rwy 17: Standard with minimum climb of 210'/NM to 2200.
Rwy 35: Standard with minimum climb of 250'/NM to 3800.

**TAKEOFF RUNWAY 17:** Climb on heading 169° or as assigned by ATC, for vectors to WRKIT, thence . . . .
**TAKEOFF RUNWAY 35:** Climb on heading 349° or as assigned by ATC, for vectors to WRKIT, thence . . . .

. . . . on track 080° to CHURN, then on track 085° to SNIDR, then on transition. Maintain ATC assigned altitude.

**DEPARTURE ROUTE DESCRIPTION**

BLUMS TRANSITION (SNIDR1.BLUMS)
CAAGE TRANSITION (SNIDR1.CAAGE)
FFSSH TRANSITION (SNIDR1.FFSSH)
MOLLR TRANSITION (SNIDR1.MOLLR)
SEEDS TRANSITION (SNIDR1.SEEDS)
WEMAR TRANSITION (SNIDR1.WEMAR)
WHAEI TRANSITION (SNIDR1.WHAEI)
WYLSON TRANSITION (SNIDR1.WYLSON)

**Note:** Chart not to scale.
TJANO ONE DEPARTURE (RNAV)

**Departure Route Description**

**Takeoff Runway 17:** Climb on heading 169° or as assigned by ATC, for vectors to LVACA, thence . . . .

**Takeoff Runway 35:** Climb on heading 349° or as assigned by ATC, for vectors to LVACA, thence . . . . . . . . .

. . . . on track 205° to TJANO, then on Transition. Maintain ATC assigned altitude.

**Kahan Transition (TJANO1.KAHAN)**

**Zanni Transition (TJANO1.ZANNI)**

Note: Chart not to scale.
YODUH ONE DEPARTURE (RNAV)

RNAV 1 - DME/DME IRU or GPS.
RADAR required.

TOP ALTITUDE: ASSIGNED BY ATC

YODUH ONE DEPARTURE (RNAV) 24025
AL-10309 (FAA)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 169° or as assigned by ATC, for vectors to SITHH, thence . . .
TAKEOFF RUNWAY 35: Climb on heading 349° or as assigned by ATC, for vectors to SITHH, thence . . .

. . . on track 002° to YODUH, then on Transition. Maintain ATC assigned altitude.

KLNGR TRANSITION (YODUH1.KLNGR)
PRTZY TRANSITION (YODUH1.PRTZY)
RNAV (RNP) X RWY 22
SAN ANTONIO INTL (SAT)

**APP CRS**
217°

**Rwy Ldg**
8505

**Apt Elev**
770

**ELEV**
809

**For uncompensated Baro-VNAV systems, procedure NA below**

-5°C or above 54°C.

**MISSED APPROACH:** (Do not exceed 195K until IMIKE)
Climb to 3100 direct IMIKE and on track 137° EMBOW and hold.

**D-ATIS**
118.9

**SAN ANTONIO APP CON**
125.1 307.0

**SAN ANTONIO TOWER**
119.8 257.8

**GND CON**
121.9 348.6

**CLNC DEL**
126.7

**CPDLC**

**AUTHORIZATION REQUIRED**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**See planview for multiple IF locations.**

**RNP AR APCH - GPS.**

**VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 85).**

**EMBOW**

**EMBOW**

**KAYYW**

**WRD**

**SPSHL**

**EEXXS**

**A1605**

**A1379**

**A1648**

**A1804**

**IMIKE**

**Max 195K until IMIKE**

---

**Categorization**

**RNP 0.15 DA**

**RNP 0.30 DA**

---

**SAN ANTONIO, TEXAS**

**Orig-A 11JUL24**

---

**SAN ANTONIO INTL (SAT)**

**29°32'N-98°28'W**
RNAV (RNP) Z RWY 4
SAN ANTONIO INTL (SAT)

For uncompensated Baro-VNAV systems, procedure NA below -5°C or above 54°C.

MISSED APPROACH: Climb to 3500 direct BISGE and track 030° to SHEPE and hold.

See planview for multiple IF locations.
For uncompensated Baro-VNAV systems, procedure NA below -5°C or above 54°C. For inap ALS, increase RNP 0.3 all Cats visibility to RVR 6000.

MISSED APPROACH: (Do not exceed 210K until POYIG) Climb to 3100 on track 128° to POYIG and track 171° to EMBOW and hold.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 75).

See planview for multiple IF locations.
RNAV (RNP) Z RWY 22
SAN ANTONIO INTL (SAT)

See planview for multiple IF locations.
RNP AR APCH - GPS.

For uncompensated Baro-VNAV systems, procedure NA below -5°C or above 54°C. For inop ALS, increase RNP 0.15 all Cats visibility to RVR 5500, increase RNP 0.30 all Cats visibility to RVR 6000.

See planview for multiple IF locations.

See planview for multiple IF locations.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 82).

AUTHORIZATION REQUIRED
**RNAV (GPS) Y RWY 4**  
**SAN ANTONIO INTL (SAT)**

### D-ATIS

<table>
<thead>
<tr>
<th>SAN ANTONIO APP CON</th>
<th>SAN ANTONIO TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
<th>CPDLC</th>
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<td>118.9</td>
<td>125.1</td>
<td>119.8</td>
<td>257.8</td>
<td>126.7</td>
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### MISSAPCH FIX

**SHEPE**

- 11° E - 4 NM

- **CG**
  - 120°
  - 120°

- **CL**
  - 120°
  - 120°

- **DU**
  - 120°
  - 120°

- **EO**
  - 120°
  - 120°

### NAVIGATION AID

- **MALS**
  - **RI**
    - 120°
    - 120°

### CLNC DEL

- **BISGE**
  - 109°
  - 109°
  - 109°

### PROCEDURE NA

- **Circling NA northwest of Rwys 4 and 13R. Inop table does not apply to LPV. For uncompensated Baro-VNAV systems, procedure NA below 5°C or above 54°C.**
- **For inop ALS, increase LNAV/VNAV all CATs visibility to RVR 6000. Increase LNAV CAT B/C visibility to RVR 5500 and LNAV CAT C/D visibility to 1/2 NM.**

- **MISSED APPROACH:** Climb to 3500 direct BISGE and track 030° to SHEPE and hold.

### RNAV (GPS) Y RWY 4

- **Rwy Idg**
  - 8505
  - 786
  - 809

- **App CRS**
  - 037°

- **MISSED APCH FIX:**
  - Climb to 3500 direct BISGE and track 030° to SHEPE and hold.

- **RNP APCH - GPS:**
  - CIRCLING
  - SAT SAN ANTONIO INTL 2000 RW04 TCH 56 3500 BISGE

- **[Diagram](#) showing SHEPE, BISGE, and other navigation aids.**

### CATEGORY

- **A**
  - **DA**
    - 986/40
  - **VNAV**
    - 1201/50
  - **MDA**
    - 1280/40
  - **CIRCLING**
    - 1280-1

- **B**
  - **DA**
    - 200 (200-3/4)
  - **VNAV**
    - 415 (400-1)
  - **MDA**
    - 494 (500-3/4)
  - **CIRCLING**
    - 1340-1

- **C**
  - **DA**
    - 611 (700-1 3/4)
  - **VNAV**
    - 711 (800-2 1/4)
  - **MDA**
    - 494 (500-1 3/4)
  - **CIRCLING**
    - 1420-1

- **D**
  - **DA**
    - 1520-2
  - **VNAV**
    - 711 (800-2 1/4)
  - **MDA**
    - 5000 (200-2 1/2)
  - **CIRCLING**
    - 1420-1
Circle RNAV (GPS) Y Rwy 13R. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 6000 and LNAV Cats C and D visibility to 1 SM. For uncompensated Baro-VNAV systems, increase LNAV/VNAV NA 2200 and 2.5 NM west of Rwys 4 and 13R. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 6000 and LNAV Cats C and D visibility to 1 SM.

**Table:**

<table>
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<th>Category</th>
<th>LPV DA</th>
<th>LNAV/VNAV DA</th>
<th>LNAV MDA</th>
<th>CIRCLING</th>
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<td>A</td>
<td>1009/18</td>
<td>1221/40</td>
<td>1480/24</td>
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<td>200 (200-1/2)</td>
<td>412 (500-3/4)</td>
<td>671 (700-1/2)</td>
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<td>671 (700-2)</td>
<td>711 (800-2/3)</td>
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<tr>
<td>D</td>
<td>1520-2/3</td>
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</table>

**Note:**

- **TDZ/CL Rwy 13R:** RW 13L, 31R
- **HRL Rwys 4-22 and 13-31L:** RW 13L, 31R
- **MIRL Rwy 13L-31R:** RW 13L, 31R

**San Antonio, Texas**

**Ampd:** 25JAN24

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**SAN ANTONIO, TEXAS**

**SAN ANTONIO INTL (SAT)**
RNAV (GPS) Y RWY 22
SAN ANTONIO INTL (SAT)

Circling NA northwest of Rwys 4 and 13R. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C or above 54°C.

MISSED APPROACH: Climb to 3100 direct IMIKE and on track 137° to EMBOW and hold.

D-ATIS
SAN ANTONIO APP CON
SAN ANTONIO TOWER
GND CON
CLNC DEL
CPDLC

SAN ANTONIO, TEXAS
Amdt 3 25JAN24

RNAV (GPS) Y RWY 22
SAN ANTONIO INTL (SAT)
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.

ALL AIRCRAFT USE UPPER ANTENNA UNTIL AIRBORNE
TOP ALTITUDE: 5000

NOTE: RADAR required.

TAKEOFF MINIMUMS

(CONTINUED ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L 13R, 22, 31L, 31R: Climb on assigned heading for RADAR vectors to SAT VORTAC. Maintain 5000, thence. . .

. . . on transition/route. Expect filed altitude 10 minutes after departure.

GOBBY TRANSITION (ALAMO3.GOBBY): From over SAT VORTAC on SAT R-002 to GOBBY.

GOOCH SPRINGS TRANSITION (ALAMO3.AGJ): From over SAT VORTAC on SAT R-002 to GOBBY, then on SAT R-002 and AGJ R-185 to AGJ VORTAC.

HENLY TRANSITION (ALAMO3.HENLY): From over SAT VORTAC on SAT R-359 to HENLY.

JUMBO TRANSITION (ALAMO3.JUMBO): From over SAT VORTAC on SAT R-359 to JUMBO.
ALISS SIX DEPARTURE (RNAV)

TAKEN OFF MINIMUMS


TAKEOFF RUNWAY 4: Climb on heading 037° or as assigned by ATC, for vectors to TREVA, hence...

TAKEOFF RUNWAY 13L/R: Climb on heading 128° or as assigned by ATC, for vectors to TREVA, hence...

TAKEOFF RUNWAY 22: Climb on heading 217° or as assigned by ATC, for vectors to TREVA, hence...

TAKEOFF RUNWAY 31L/R: Climb on heading 308° or as assigned by ATC, for vectors to TREVA, hence...

TAKEOFF RUNWAY 305° to TATAR, then on track 305° to ALISS, Maintain 5000.

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

SC-3, 11 JUL 2024 to 05 SEP 2024

NOTE:  RADAR Required.

SAN ANTONIO INTL (SAT)
SAN ANTONIO, TEXAS

D-ATIS
118.9
CLNC DEL
126.7
CPDLC
GND CON
121.9 348.6
SAN ANTONIO DEP CON
125.7 290.225 (Rwys 13/22/31)
127.1 269.1 (Rwy 4 CORPUS CHRISTI TRANSITION)
125.1 307.0 (Rwy 4 LAREDO TRANSITION)
SAN ANTONIO TOWER
119.8 257.8

NOTE:  RADAR Required.

CHAN 105
115.8  COT
CHAN 102
117.4  LRD
CHAN 115
116.8  SAT

SAN ANTONIO
116.8 SAT
Chan 115

SAN ANTONIO TOWER
125.1 269.1 (Rwy 4 CORPUS CHRISTI TRANSITION)
125.7 290.225 (Rwys 13/22/31)
121.9 348.6
SAN ANTONIO DEP CON

NOTE: Chart not to scale.

(CONTINUED ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 4, 13L 13R, 22, 31L, 31R: Climb on assigned heading for RADAR vectors to SAT VORTAC. Maintain 5000, thence...

... on transition/route. Expect filed altitude 10 minutes after departure.

CORPORUS CHRISTI TRANSITION (BOWIE7.CRP): From over SAT VORTAC on SAT R-160 to YENNS INT/SAT 35 DME, then on THX R-337 to THX VORTAC, then on THX R-126 and CRP R-305 to CRP VORTAC.

LAREDO TRANSITION (BOWIE7.LRD): From over SAT VORTAC on SAT R-190 to MILET INT/SAT 57 DME, then on LRD R-015 to LRD VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L/R, 22, 31L/R: Climb on assigned heading for RADAR vectors to SAT VORTAC, thence... . . .

...on depicted route to LEJON INT, maintain 5000. Expect filed altitude 10 minutes after departure.

NOTE: RADAR required.

TOP ALTITUDE: 5000
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on heading 037° or as assigned by ATC, for vectors to YENNS, thence . . . .

TAKEOFF RUNWAYS 13L/R: Climb on heading 128° or as assigned by ATC, for vectors to YENNS, thence . . . .

TAKEOFF RUNWAY 22: Climb on heading 217° or as assigned by ATC, for vectors to YENNS, thence . . . .

TAKEOFF RUNWAYS 31L/R: Climb on heading 308° or as assigned by ATC, for vectors to YENNS, thence . . . .

. . . . on track 161° to LILJO, then on track 161° to SLENA, then on transition. Maintain 5000.

BRENI TRANSITION (SLENA1.BRENI)
SAN ANTONIO DEP CON
125.7 290.225 (Rwy 22)
127.1 269.1 (Rwys 4, 13L/R, 31L/R)
D-ATIS
118.9
CLNC DEL
126.7
CPDLC
GND CON
121.9 348.6
SAN ANTONIO TOWER
119.8 257.8

RNAV 1 - DME/DME IRU OR GPS.
RADAR required.

TAKEOFF MINIMUMS

TAKEOFF RUNWAY 4:
Climb on heading 037° or as assigned by ATC, for vectors to WRKIT, thence.

TAKEOFF RUNWAY 13L/R:
Climb on heading 128° or as assigned by ATC, for vectors to WRKIT, thence.

TAKEOFF RUNWAY 22:
Climb on heading 217° or as assigned by ATC, for vectors to WRKIT, thence.

TAKEOFF RUNWAY 31L/R:
Climb on heading 308° or as assigned by ATC, for vectors to WRKIT, thence.

. . . on track 080° to CHURN, then on track 085° to SNIDR, then on transition. Maintain 5000.

BLUMS TRANSITION (SNIDR1.BLUMS)
CAAGE TRANSITION (SNIDR1.CAAGE)
FFSSH TRANSITION (SNIDR1.FFSSH)
MOLLR TRANSITION (SNIDR1.MOLLR)
SEEDS TRANSITION (SNIDR1.SEEDS)
WEMAR TRANSITION (SNIDR1.WEMAR)
WHAEL TRANSITION (SNIDR1.WHAEI)
WYLSN TRANSITION (SNIDR1.WYLSN)

Note: Chart not to scale.
**TAKEOFF MINIMUMS**


**NOTE:** For non-GPS equipped aircraft, THX and SAT DME must be operational.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 4:** Climb on heading 037° or as assigned by ATC, for vectors to LVACA, thence...

**TAKEOFF RUNWAY 13L/R:** Climb on heading 128° or as assigned by ATC, for vectors to LVACA, thence...

**TAKEOFF RUNWAY 22:** Climb on heading 217° or as assigned by ATC, for vectors to LVACA, thence...

**TAKEOFF RUNWAY 31L/R:** Climb on heading 308° or as assigned by ATC, for vectors to LVACA, thence...

...on track 205° to TJANO, then on Transition. Maintain 5000.

**KAHAN TRANSITION (TJANO1.KAHAN)**

**ZANNI TRANSITION (TJANO1.ZANNI)**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 4:** Climb on heading 037° or as assigned by ATC, for vectors to SITHH, thence . . .

**TAKEOFF RUNWAYS 13L/R:** Climb on heading 128° or as assigned by ATC, for vectors to SITHH, thence . . .

**TAKEOFF RUNWAY 22:** Climb on heading 217° or as assigned by ATC, for vectors to SITHH, thence . . .

**TAKEOFF RUNWAYS 31L/R:** Climb on heading 308° or as assigned by ATC, for vectors to SITHH, thence . . .

. . . on track 002° to YODUH, then on Transition. Maintain 5000.

**KLNGR TRANSITION (YODUH1.KLNGR)**

**PRTZY TRANSITION (YODUH1.PRTZY)**

**NOTE:** Aircraft destined for airports north/northeast of DFW terminal area must file the KLNGR Transition.
Rwy 32 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 32 NA at night, Circling Rwy 9, 14, and 32 NA at night.

MISSED APPROACH: Climb to 1400 then climbing right turn to 2500 direct SSF VOR and hold.

ATIS 128.8  SAN ANTONIO APP CON 125.7 290.225  STINSON TOWER* 118.2(CTAF) 379.9  GND CON 121.7 379.9  CLNC DEL (When twr closed) 121.7  UNICOM 122.95

SAN ANTONIO, TEXAS
Amdt 14 C 22APR21

VOR RWY 32
STINSON MUNI (SSF)

SC-3, 11 JUL 2024 to 05 SEP 2024

SAN ANTONIO, TEXAS
AL-372 (FAA)

VOR SSF 108.4
APP CRS 337°
Rwy Idg 3756
TDZE 571
Apt Elev 578

ELEV 578
TDZE 571

1400 2500 SSF

SSF VOR
One Minute Holding Pattern

CATEGORY  A  B  C  D
S-32 1020-1 449 (500-1) 1020-1 449 (500-1%) NA
CIRCLING 1040-1 462 (500-1) 1120-1 542 (600-1) 1260-2 682 (700-2) NA
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
TAKEOFF MINIMUMS:
Rwy 14, 32: Standard.
Rwy 9: Standard with minimum climb of 225’ per NM to 1900.
Rwy 27: 300-1½ or standard with minimum climb of 221’ per NM to 900, or alternatively, with standard takeoff minimums and a normal 200’ per NM climb gradient, takeoff must occur no later than 1700’ prior to DER.

NOTE: Chart not to scale

ALAMO THREE DEPARTURE (ALAMO3.ALMAMO) 26MAR20

SAN ANTONIO, TEXAS
STINSON MUNI (SSF)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 9, 27: Climb on assigned heading and altitude for RADAR vectors to SAT VORTAC, thence...
TAKEOFF RUNWAY 14: Climb on heading 137° to 1200 before turning left for RADAR vectors to SAT VORTAC, thence...
TAKEOFF RUNWAY 32: Climb on heading 317° to 1500 before turning right for RADAR vectors to SAT VORTAC, thence...

...on transition/route. Expect filed altitude 10 minutes after departure.

GOBBY TRANSITION (ALAMO3.GOBBY): From over SAT VORTAC on SAT R-002 to GOBBY.
GOOCH SPRINGS TRANSITION (ALAMO3.AGJ): From over SAT VORTAC on SAT R-002 to GOBBY, then on SAT R-002 and AGJ R-185 to AGJ VORTAC.
HENLY TRANSITION (ALAMO3.HENLY): From over SAT VORTAC on SAT R-359 to HENLY.
JUMBO TRANSITION (ALAMO3.JUMBO): From over SAT VORTAC on SAT R-359 to JUMBO.
TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 230’/NM to 1900.
Rwy 14: Standard with minimum climb of 220’/NM to 1900.
Rwy 27: 300-1% or standard with minimum climb of 230’/NM to 900, or alternatively, with standard takeoff minimums and a normal 200’/NM climb gradient, takeoff must occur no later than 1800’ prior to DER.
Rwy 32: Standard with minimum climb of 230’/NM to 1700.

TAKEOFF RUNWAY 9: Climb on heading 095° or as assigned by ATC, for vectors to TREVA, thence . . .
TAKEOFF RUNWAY 14: Climb on heading 137° or as assigned by ATC, for vectors to TREVA, thence . . .
TAKEOFF RUNWAY 27: Climb on heading 275° or as assigned by ATC, for vectors to TREVA, thence . . .
TAKEOFF RUNWAY 32: Climb on heading 317° or as assigned by ATC, for vectors to TREVA, thence . . .

. . . on track 305° to TATAR, then on track 305° to ALISS.
Maintain ATC assigned altitude.

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

TAKEOFF MINIMUMS
Rwy 14, 32: Standard.
Rwy 9: Standard with minimum climb of 225' per NM to 1900.
Rwy 27: 300-1 3/4 or standard with minimum climb of 221' per
NM to 900, or alternatively, with standard takeoff minimums
and a normal 200' per NM climb gradient, takeoff must occur no later
than 1700' prior to departure end of runway.

NOTE: RADAR required.

NOTE: Chart not to scale

(CONTINUED ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 9, 14, 27, 32: Climb on assigned heading and altitude for RADAR vectors to SAT VORTAC, thence. . . .

. . . .on transition/route. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (BOWIE7.CRP): From over SAT VORTAC on SAT R-160 to YENNS/SAT 35 DME, then on THX R-337 to THX VORTAC, then on THX R-126 and CRP R-305 to CRP VORTAC.

LAREDO TRANSITION (BOWIE7.LRD): From over SAT VORTAC on SAT R-190 to MILET/SAT 57 DME, then on LRD R-015 to LRD VORTAC.
TAKEOFF MINIMUMS
Rwy 14, 32: Standard.
Rwy 9: Standard with minimum climb of 225' per NM to 1900.
Rwy 27: 300-1 ⅓ or standard with a minimum climb of 221' per NM to 900, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1700' prior to DER.

TAKEOFF RUNWAYS 9, 14, 27, 32: Climb on assigned heading and altitude for RADAR vectors to SAT VORTAC, thence . . . . on depicted route to LEJON INT. Expect filed altitude 10 minutes after departure.

NOTE: RADAR required.

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

### TAKEOFF MINIMUMS

- **Rwy 9:** Standard with minimum climb of 230'/NM to 1900.
- **Rwy 14:** Standard with minimum climb of 220'/NM to 1900.
- **Rwy 27:** 300-1½ or standard with minimum climb of 230'/NM to 900, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1800’ prior to DER.
- **Rwy 32:** Standard with minimum climb of 230'/NM to 1700.

### DEPARTURE ROUTE DESCRIPTION

- **TAKEOFF RUNWAY 9:** Climb on heading 095° or as assigned by ATC, for vectors to YENNS, thence . . .
- **TAKEOFF RUNWAY 14:** Climb on heading 137° or as assigned by ATC, for vectors to YENNS, thence . . .
- **TAKEOFF RUNWAY 27:** Climb on heading 275° or as assigned by ATC, for vectors to YENNS, thence . . .
- **TAKEOFF RUNWAY 32:** Climb on heading 317° or as assigned by ATC, for vectors to YENNS, thence . . .

. . . on track 161° to LILJO, then on track 161° to SLENA, then on transition. Maintain ATC assigned altitude.

### BRENI TRANSITION (SLENA1.BRENI)
**NOTE:** Chart not to scale.

**RNAV 1 - DME/DME IRU or GPS.**

**TOP ALTITUDE:**

**ASSIGNED BY ATC**

**RADAR required.**

**TAKEOFF MINIMUMS**

Rwy 9: Standard with minimum climb of 230'/NM to 1900.
Rwy 14: Standard with minimum climb of 220'/NM to 1900.
Rwy 27: 300-1¾ or standard with minimum climb of 230'/NM to 900, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1800' prior to DER.
Rwy 32: Standard with minimum climb of 230'/NM to 1700.

---

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb on heading 095° or as assigned by ATC, for vectors to WRKIT, thence...

**TAKEOFF RUNWAY 14:** Climb on heading 137° or as assigned by ATC, for vectors to WRKIT, thence...

**TAKEOFF RUNWAY 27:** Climb on heading 275° or as assigned by ATC, for vectors to WRKIT, thence...

**TAKEOFF RUNWAY 32:** Climb on heading 317° or as assigned by ATC, for vectors to WRKIT, thence...

. . .on track 080° to CHURN, then on track 085° to SNIDR, then on transition. Maintain ATC assigned altitude.

**BLUMS TRANSITION (SNIDR1.BLUMS)**

**CAAGE TRANSITION (SNIDR1.CAAGE)**

**FFSSH TRANSITION (SNIDR1.FFSSH)**

**MOLLR TRANSITION (SNIDR1.MOLLR)**

**SEEDS TRANSITION (SNIDR1.SEEDS)**

**WEMAR TRANSITION (SNIDR1.WEMAR)**

**WAEL TRANSITION (SNIDR1.WAEL)**

**WYLSN TRANSITION (SNIDR1.WYLSN)**
RNAV 1 - DME/DME IRU or GPS.

Radar required.

Top Altitude: Assigned by ATC

Takeoff Mininimums
Rwy 9: Standard with minimum climb of 230'/NM to 1900.
Rwy 14: Standard with minimum climb of 220'/NM to 1900.
Rwy 27: 300-1½% or standard with minimum climb of 230'/NM to 900, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1800' prior to DER.
Rwy 32: Standard with minimum climb of 230'/NM to 1700.

Departure Route Description

Takeoff Runway 9: Climb on heading 095° or as assigned by ATC, for vectors to LVACA, thence...

Takeoff Runway 14: Climb on heading 137° or as assigned by ATC, for vectors to LVACA, thence...

Takeoff Runway 27: Climb on heading 275° or as assigned by ATC, for vectors to LVACA, thence...

Takeoff Runway 32: Climb on heading 317° or as assigned by ATC, for vectors to LVACA, thence...

...on track 205° to TJANO, then on Transition. Maintain ATC assigned altitude.

Kahan Transition (TJANO1.KAHAN)
Zanni Transition (TJANO1.ZANNI)
NOTE: Aircraft destined for airports north/northeast of DFW terminal area must file the KLNGR Transition.

TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 230'/NM to 1900.
Rwy 14: Standard with minimum climb of 220'/NM to 1900.
Rwy 27: 300-1 1/8 or Standard with minimum climb of 230'/NM to 900, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1800' prior to DER.
Rwy 32: Standard with minimum climb of 230'/NM to 1700.

NOTE: Chart not to scale.
Rwy 13 helicopter visibility reduction below 3/4 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3500 direct IFIMY and hold.

HOLD 2000

4 NM to RW13

1.8 NM to RW13

730°

3100

6.5 NM

3.9 NM

1.8 NM

PAYSA

MACLO

GP 3.00°

TCH 40

3500

310°

130°

PAYSA

BRADY NORTH MOA

BRADY LOW AND HIGH MOA

310°

130°

730°

3100

6000

3500

6.5 NM

3.9 NM

1.8 NM

LNAV/ VNAV

DA

1505-1

250 (300-1)

NA

LNAV MDA

1860-1

605 (700-1)

NA

CIRCLING

1860-1

605 (700-1)

NA

SAN SABA, TEXAS

Orig 30NOV23

31°14'N-98°43'W

451
SAN SABA, TEXAS

AL-11829 (FAA)

RNAV (GPS) RWY 31
SAN SABA COUNTY MUNI (81R)

Rwy 31 helicopter visibility reduction below 3/4 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3500 direct PAYSA and hold.

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<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>LPV</td>
<td>DA</td>
<td>1497-1</td>
<td>250 (300-1)</td>
<td>NA</td>
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<tr>
<td>LNAV/VNAV</td>
<td>DA</td>
<td>1497-1</td>
<td>250 (300-1)</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>1940-1</td>
<td>693 (700-1)</td>
<td>NA</td>
<td></td>
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<tr>
<td>CIRCLING</td>
<td>1940-1</td>
<td>685 (700-1)</td>
<td>NA</td>
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</tbody>
</table>
Procedure NA at night.

Rwy 14 helicopter visibility reduction below 1 SM NA.

**AWOS-3**

Thx 118.25

**CORPUS APP CON**

THX 120.9

**UNICOM**

Thx 348.725

Thx 122.8 (CTAF)
RNAV (GPS) RWY 32
SINTON (T69)

**AWOS-3**
118.25

**CORPUS APP CON**
120.9  348.725

**UNICOM**
122.8 (CTAF)

---

**RNAV (GPS) RWY 32**

- **MISSED APPROACH:** Climb to 1000 then climbing left turn to 2000 direct CRP VORTAC and hold.
- **Procedure NA at night.**
- **Rwy 32 helicopter visibility reduction below 1 SM NA.**

---

**NoPT for arrival on CRP VORTAC airway radials R-169 CW R-184.**

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**MIRL Rwy 14-32**

**REIL Rwys 14 and 32**

---

**SINTON, TEXAS**

**Orig-B 31DEC20**

---

28°02’ N - 97°33’ W
SINTON, TEXAS

VOR RWY 14
SINTON (T69)

AWOS-3
118.25
CORPUS APP CON
120.9 348.725
UNICOM
122.8 (CTAF)

DME required.

- Procedure NA at night.
- Rwy 14 helicopter visibility reduction below 1 SM NA.

VOR RWY 14
SINTON (T69)

MISSED APPROACH: Climbing right turn to 1800 on heading 230° and CRP VORTAC R-305 to SINTO INT/CRP 16 DME.

1700 to PANTH
318° (15)

Procedure NA for arrival on CRP VORTAC airway radials 287 CW 305.

VGSI and descent angles not coincident (VGSI Angle 3.00°/TCH 19).

Remain within 10 NM

MIRL Rwy 14-32
REIL Rwy 14 and 32

SC-3, 11 JUL 2024 to 05 SEP 2024
RNAV (GPS) RWY 17

SMITHVILLE CRAWFORD MUNI (84R)

GYB AWOS-3 119.225
AUSTIN APP CON 120.875 270.25
CTAF 122.9

MISSED APPROACH: Climb to 2600 direct TTUSH and hold.

Rwy 17 helicopter visibility reduction below 1 SM NA.
Straight-in Rwy 17 NA at night, Circling Rwy 17 NA at night.

APP CRS 169°
Rwy Idg 4000
TDZE 323
Apt Elev 323

LNAV MDA 900-1 577 (600-1) NA
CIRCLING 960-1 637 (700-1) NA

SMITHVILLE, TEXAS
Orig 15JUN23
30°02'N-97°10'W
RNAV (GPS) RWY 35
SMITHVILLE CRAWFORD MUNI (84R)

**SMITHVILLE, TEXAS**

**AL-9361 (FAA)**

**RNP APCH - GPS.**

- **Fishing Rwy 17 NA at night. Rwy 35 helicopter visibility reduction below 1 SM NA. Baro-VNAV NA.**

**MISSING APPCH FIX**

<table>
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<tr>
<th>NW 4 NM</th>
<th>653°</th>
<th>544°</th>
<th>926°</th>
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<tbody>
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<td>GYB AWOS 3</td>
<td>119.225</td>
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<tr>
<td>AUSTIN APP CON</td>
<td>120.875 270.25</td>
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<tr>
<td>CTAF</td>
<td>122.9</td>
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<tr>
<td>123.3°</td>
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**GNGRR**

- **HOLD 2000 6000**

**RWP35**

- **EMUUU**

**TTUSH**

**GP 3.80° TCH 40**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>648-1 325 (400-1)</td>
<td>NA</td>
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<tr>
<td>LNAV DA</td>
<td>827-1½ 504 (600-1½)</td>
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<tr>
<td>LNAV MDA</td>
<td>1040-1 717 (800-1)</td>
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<tr>
<td>CIRCLING</td>
<td>1040-1 717 (800-1)</td>
<td>NA</td>
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</tbody>
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**SMITHVILLE CRAWFORD MUNI (84R)**

**RNAV (GPS) RWY 35**

**SMITHVILLE, TEXAS**

**Orig 15JUN23**

**30°02'N-97°10'W**

**457**
RNAV (GPS) RWY 18
SONORA, TEXAS

AWOS-3 118.075
HOUSTON CENTER 125.75 346.4
UNICOM 122.8 (CTAF)

Circling Rwy 36 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C.

Missed Approach: Climb to 2700 then climbing right turn to 4400 direct CLABY and hold.

VGSi and RNAV glideslope not coincident (VGSi Angle 3.00/TCH 25).

NA
**RNAV (GPS) RWY 17**

**TAYLOR MUNI (T74)**

**AWOS-3PT**

| 119.75 |

**AUSTIN APP CON**

| 127.225 | 317.65 |

**UNICOM**

| 122.8 (CTAF) |

---

**For uncompensated Baro-VNAV systems, INAV/VNAV NA below -16C or above 54C. When local altimeter setting not received, use Austin Exec altimeter setting and increase all DA to 914 feet and all MDA 40 feet. VDP and Baro-VNAV NA when using Austin Exec altimeter setting.**

**MISSING APPROACH:** Climb to 1100 then climbing right turn to 3100 direct CWK VORTAC and hold.

**VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 40).**

**Holding Pattern**

- **4 NM**
- **354°**
- **3100**
- **174°**
- **1 NM to RW17**
- **GP 3.00° TCH 40**

**Category**

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

**LPV DA**

- 882-7/8 282 (300-3/8)
- NA

**LNAV/ VNAV DA**

- 882-7/8 282 (300-3/8)
- NA

**LNAV MDA**

- 960-1 360 (400-1)
- NA

**CIRCLING**

- 1100-1 500 (500-1)
- NA

---

**UNICOM**

- **AUSTIN APP CON**
- **127.225**
- **317.65**

**AWOS-3PT**

- **119.75**

**TDZE**

- **600**

**ELEV**

- **600**

---

**TAYLOR, TEXAS**

**ORIG-B 30JAN20**

**30°34'N-97°27'W**

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**TAYLOR MUNI (T74)**

---

**RNP APCH.**

- **WAAAS**
- **Ch 90535**
- **W17A**

---

**TEAM**

- **TAYLOR, TEXAS**
- **TAYLOR MUNI**
- **AL-6938 (FAA)**
**VOR RWY 17**  
**TAYLOR MUNI (T74)**

<table>
<thead>
<tr>
<th><strong>AWOS-3PT</strong></th>
<th><strong>AUSTIN APP CON</strong></th>
<th><strong>UNICOM</strong></th>
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<tr>
<td><strong>119.75</strong></td>
<td><strong>127.225 317.65</strong></td>
<td><strong>122.8 (CTAF)</strong></td>
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</table>

**VORTAC CWK**  
**112.8**  
**Chan 75**

**App CRS**  
**194°**

<table>
<thead>
<tr>
<th><strong>Rwy Idg</strong></th>
<th><strong>TDZE</strong></th>
<th><strong>Apt Elev</strong></th>
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<tbody>
<tr>
<td><strong>4000</strong></td>
<td><strong>600</strong></td>
<td><strong>600</strong></td>
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</tbody>
</table>

**DME required:**
- CIRCLING Rwy NA at night. Rwy 17 helicopter visibility reduction below 3/4 SM NA.
- When local altimeter setting not received, use Austin Exec altimeter setting and increase all MDA 40 feet. VDP NA when using Austin Exec altimeter setting.

**MISSED APPROACH:** Climbing right turn to 2500 on CWK VORTAC R-014 to ESDEF/17.6 DME and hold.

**AWOS-3PT:** **119.75**

**AUSTIN APP CON:** **127.225 317.65**

**UNICOM:** **122.8 (CTAF)**

---

**CENTEX**  
**112.8 CWK**  
**Chan 75**

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**TAYLOR, TEXAS**

**AL-6938 (FAA)**

**21112**

---

**30°34' N 97°27'W**

---

**Amdt 1E 08OCT20**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 174° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

TAKEOFF RUNWAY 35: Climb on heading 354° or as assigned by ATC for vectors to cross AMUSE at or above 5000, thence....

.... on track 293° to AEROZ, then on SAN ANGELO TRANSITION. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

SAN ANGELO TRANSITION (AEROZ2.SJT)
NOTE: RNAV-1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.

TAYLOR MUNI (T74)
TAYLOR, TEXAS

AL-6938 (FAA)

UNICOM (CTAF)
122.8
AUSTIN DEP CON
127.225 317.65

TOP ALTITUDE:
ASSIGNED BY ATC

TAKEOFF MINIMUMS:
Rwys 17, 35: Standard.

TAKEOFF RUNWAY 17: Climb on heading 174° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....
TAKEOFF RUNWAY 35: Climb on heading 354° or as assigned by ATC for vectors to cross GARDS at or above 5000, thence....

. . . on track 224° to BNDIA. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

NOTE: Chart not to scale.

SC-3, 11 JUL 2024 to 05 SEP 2024
TOP ALTITUDE:
ASSIGNED BY ATC

TAKEOFF MINIMUMS:
Rwys 17, 35: Standard.

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

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 174° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence...
TAKEOFF RUNWAY 35: Climb on heading 354° or as assigned by ATC for vectors to cross WLMRT at or above 5000, thence....

... on track 338° to ELOEL, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

ABILENE TRANSITION (ELOEL3.ABI)
FORSS TRANSITION (ELOEL3.FORSS)
KLNGR TRANSITION (ELOEL3.KLNGR)
TAKEOFF MINIMUMS:
Rwys 17, 35: Standard.

NOTE: Houston terminal area arrivals expect routing from ILEXY.
NOTE: JAYJO transition to join V306 only.
NOTE: Aircraft not destined the Houston terminal area or joining V306 must file the ZENZI transition.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 174° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence. . . .
TAKEOFF RUNWAY 35: Climb on heading 354° or as assigned by ATC for vectors to cross HOOKK at or above 5000, thence. . . .
. . . on track 090° to ILEXY, then on transition. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

JAYJO TRANSITION (ILEXY4.JAYJO)
ZENZI TRANSITION (ILEXY4.ZENZI)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17:** Climb on heading 174° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence. . . .

**TAKEOFF RUNWAY 35:** Climb on heading 354° or as assigned by ATC for vectors to cross PAYDA at or above 5000, thence. . . .

. . . . on track 279° to MUCKY. Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.
**SAYBR THREE DEPARTURE (RNAV)**

**TOP ALTITUDE:**

ASSIGNED BY ATC

Note: Chart not to scale.

**NOTE:** Radar required.

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

**NOTE:** RNAV 1.

**NOTE:** For DFW terminal area arrivals at FL230 or below only.

---

**TAKEOFF MINIMUMS**

Rwys 17, 35: Standard.

---

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17:** Climb on heading 174° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence.

**TAKEOFF RUNWAY 35:** Climb on heading 354° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence.

. . . . . . . . . on track 024° to SAYBR. Maintain altitude assigned by ATC.

Expect filed altitude 10 minutes after departure.

---

**SAYBR THREE DEPARTURE (RNAV)**

**UNICOM (CTAF)**

122.8

**AUSTIN DEP CON**

127.225  317.65

---

**SAYBR THREE DEPARTURE (RNAV)**

**TOP ALTITUDE:**

ASSIGNED BY ATC

Note: Chart not to scale.

**NOTE:** Radar required.

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

**NOTE:** RNAV 1.

**NOTE:** For DFW terminal area arrivals at FL230 or below only.

---

**TAKEOFF MINIMUMS**

Rwys 17, 35: Standard.

---

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17:** Climb on heading 174° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence.

**TAKEOFF RUNWAY 35:** Climb on heading 354° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence.

. . . . . . . . . on track 024° to SAYBR. Maintain altitude assigned by ATC.

Expect filed altitude 10 minutes after departure.

---

**SAYBR THREE DEPARTURE (RNAV)**

**UNICOM (CTAF)**

122.8

**AUSTIN DEP CON**

127.225  317.65

---

**SAYBR THREE DEPARTURE (RNAV)**

**TOP ALTITUDE:**

ASSIGNED BY ATC

Note: Chart not to scale.

**NOTE:** Radar required.

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

**NOTE:** RNAV 1.

**NOTE:** For DFW terminal area arrivals at FL230 or below only.

---

**TAKEOFF MINIMUMS**

Rwys 17, 35: Standard.

---

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17:** Climb on heading 174° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence.

**TAKEOFF RUNWAY 35:** Climb on heading 354° or as assigned by ATC for vectors to cross MUNCH at or above 5000, thence.

. . . . . . . . . on track 024° to SAYBR. Maintain altitude assigned by ATC.

Expect filed altitude 10 minutes after departure.
RNAV (GPS) RWY 16
DRAUGHON-MILLER CENTRAL TEXAS RGNL (TPL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to ½ SM and LNAV Cats C/D visibility to ½ SM.

Procedure NA for arrivals at ACT VORTAC on V15 north bound.
RNAV (GPS) RWY 34

DRAUGHON-MILLER CENTRAL TEXAS RGNL (TPL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.

MISSED APPROACH: Climb to 3000 direct IHSAZ and hold.

AWOS-3PT 134.975
GRAY APP CON 120.075 370.0
CLNC DEL 125.9
UNICOM 123.0 (CTAF)

MISSED APCH FIX

ELEV 682 D TDZE 674

SC-3, 11 JUL 2024 to 05 SEP 2024

RVNAV, LNAV/VNAV, GNV, RCNAV.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 34).

IYUJ 1.7 NM to RW34
FADXY 3000
GW 3.00°
TCH 50

1.1 NM to RW34
R-6302A

SUMM 3100
081° (37.9)

1260

2300

340°

3000

IHSAZ

R-6302B

1.1 NM to RW34

340° (6.8)

771 RW34

792

(MSA RW34 25 NM)

3600

ELEV 904

BARBA

3000

3000

3000

250° (9)

1181

awl

160°

340°

166°

3000

90°(9)

1181

070°

160°

1280-1

458 (500-1)

1140-1

> 1200-1

386 (400-1)

1140-1

> 1200-1

386 (400-1)

1260-1

> 1300-1

386 (400-1)

1420-2

738 (800-2)

792

340°

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150

7000 X 150
When local altimeter setting not received, use South Texas Rgnl at Hondo altimeter setting and increase all MDA 100 feet; increase LNAV Cat C/D and Circling Cat C/D visibility 1/4 SM. DME/DME RNP-0.3 NA.

AWOS-3: 124.175
HOUSTON CENTER: 134.95 269.4
UNICOM: 122.8 (CTAF)

**RNAV (GPS) RWY 33**
GARNER FLD (UVA)

**RADAR REQUIRED**

- **VGSI and descent angle not coincident (VGSI Angle 3.00/TCH 35).**
- Holding Pattern

**4 NM**

**CATEGORY**

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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
<td>GLS DA</td>
<td>NA</td>
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<tr>
<td>LNAV/ VNAV DA</td>
<td>NA</td>
<td></td>
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</table>

**LNAV MDA**
1380-1 447 (500-1) 1380-1 447 (500-1) 1380-1 447 (500-1) 1380-1 447 (500-1)

**CIRCLING**
1380-1 438 (500-1) 1460-1 518 (600-1) 1620-2 678 (700-2) 1620-2 678 (700-2)
Circling to Rwy 7, 25 NA at night.
Circling NA south of Rwy 25 and southeast of Rwy 3.

Procedure NA for arrivals at HUP VORTAC on V66 westbound.

MISSED APPROACH: Climb to 8800 direct COSIM and on track 304° to WIKOR and on track 034° to PONUE and hold.

Circling NA south of Rwy 25 and southeast of Rwy 3.

Circling to Rwy 7, 25 NA at night.
Circling NA south of Rwy 25 and southeast of Rwy 3.

Procedure NA for arrivals at HUP VORTAC on V66 westbound.

MISSED APPROACH: Climb to 8800 direct COSIM and on track 304° to WIKOR and on track 034° to PONUE and hold.
RNAV (GPS) RWY 17
MC GREGOR EXEC (PWG)

**RNP APCH - GPS.**

Baro-VNAV NA when using Waco Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C. When local altimeter setting not received, use Waco Rgnl altimeter setting and increase LPV DA to 873 feet and all visibilities ½ SM; increase LNAV/VNAV DA to 873 feet and all visibilities ½ SM; increase all MDAs 40 feet and Circling visibility Cat C ½ SM.

**AWOS-3PT**

| 135.525 |

**WACO APP CON**

| 127.65 |

**GCO**

| 121.725 |

**UNICOM**

| 122.8 | (CTAF) |

**Procedure NA for arrivals at IMIPE on V15-54 northeast bound.**

**MISSED APPROACH:**

Climb to 2500 direct ZUDIS and on track 095° to SATTY and hold.

**AWOS-3PT**

| 1296 |

**WACO APP CON**

| (IAF) |

**IGORR**

**ZUDIS**

**IMJUC**

**MISSER APCH FIX**

**ELEV 592**

**TDZE 592**

**Category**

| A | B | C | D |

**LPV DA**

| 842-3/4 | 250 (300-3/4) | NA |

**LNAV/VNAV DA**

| 842-3/4 | 250 (300-3/4) | NA |

**LNAV MDA**

| 1040-1 | 448 (500-1) | 1040-1 3/8 | 448 (500-1/8) | NA |

**CIRCLING**

| 1040-1 | 448 (500-1) | 1060-1 | 468 (500-1) | 1300-2 | 708 (800-2) | NA |

**WACO, TEXAS**

**Almd 1C 15JUN23**

**31°29'N-97°19'W**
RNAV (GPS) RWY 35
MC GREGOR EXEC (PWG)

Baro-VNAV NA when using Waco Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C. When local altimeter setting not received, use Waco Rgnl altimeter setting and increase LPV DA to 861 feet; increase LNAV/VNAV DA to 861 feet; increase all MDAs 40 feet and LNAV visibility Cat B¼ SM, and Circling visibility Cat B/C ¼ SM. Rwy 35 helicopter visibility reduction below ¾ SM NA.

Procedure NA for arrivals at BARBA on V548 southbound.

LNAV/VNAV DA to 861 feet; increase all MDAs 40 feet and LNAV visibility Cat B¼ SM, and Circling visibility Cat B/C ¼ SM. Rwy 35 helicopter visibility reduction below ¾ SM NA.

AWOS-3PT 135.525 WACO APP CON 127.65 352.0 GCO 121.725 UNICOM 122.8 (CTAF)

RNAV APCH - GPS:

AL-5441 (FAA) 23166 SC-3, 11 JUL 2024 to 05 SEP 2024 SC-3, 11 JUL 2024 to 05 SEP 2024 473
**VOR RWY 17**

**MC GREGOR EXEC (PWG)**

**AWOS-3PT**
135.525

**WACO APP CON**
127.65 352.0

**GCO**
121.725

**UNICOM**
122.8 (CTAF)

---

**IF/IAF**

**WACO**
115.3 ACT

**Chan** 100

---

**ASR**

**AWOS-3PT**

**WACO APP CON**

**GCO**

**UNICOM**

---

**ADDITIONAL INFORMATION**

**WACO, TEXAS**

Amdt 11A 15JUN23

---

**MISSED APPROACH:** Climb to 1000 then climbing right turn to 4000 direct ACT VORTAC and hold, continue climb-in-hold to 4000.

**AL-5441 (FAA)**

---

**WACO, TEXAS**

31°29'N-97°19'W

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**VORTAC**

**ACT**

**Chan** 100

---

**WACO, TEXAS**

Amdt 11A 15JUN23
MISSED APPROACH: Climb to 2300 direct CUKAV and hold.

Procedure NA for arrivals on ACT VORTAC airway radials 050 CW 181.

NoPT for arrival at OMOBE on V15 northwest bound.
NDB RWY 35R
TSTC WACO (CNW)

MISSED APPROACH: Climbing right turn to 2900 direct
ROB NDB and hold.

WACO, TEXAS
AL-579 (FAA)

WACO

115.3  ACT  
Chan 100

ASR

AWOS-3PT  WACO APP CON  TSTC TOWER  GND CON  UNICOM
134.225  127.65  227.125  124.0 (CTAF)  255.7  121.7  122.95

SC-3, 11 JUL 2024 to 05 SEP 2024

WACO, Texas
Amdt 12A  05DEC19

31°38'N-97°04'W
ILS or LOC RWY 19
WACO RGNL (ACT)

WACO, TEXAS
Amdt 17 30JAN20

LOC/DME I-Act
109.7
Chan 34

APP CRS
Rwy Idg
TDZE
Apt Elev
6605
505
516

MALS R

MISSED APPROACH: Climb to 1500
then climbing left turn to 4000 on ACT
VORTAC R-164 to BOSEL 14 DME
and hold, continue climb-in-hold to 4000.

ATIS
123.85

WACO APP CON
127.65 227.125

WACO TOWER
119.3 (CTAF) 257.8

GND CON
121.9

UNICOM
122.95

ASR

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

WACO MSA ACT 25 NM

ELEV 516 TDZE 505

187° 4.9 NM from FAF

Localizer 109.7
I-Act 2100

CQY 50.9

115.3 ACT

Chan 100

R-164

BOSEL

FADF

Circling

3.8 NM

31°37'N 97°14'W

ILS or LOC RWY 19
WACO RGNL (ACT)

WACO RGNL (ACT)

ILS or LOC RWY 19
WACO RGNL (ACT)

31°37'N 97°14'W
For uncompensated Baro-VNAV systems, UNAV/VNAV NA below -7°C (19°F) or above 54°C (130°F).

DME/DME RNP-0.3 NA. When local altimeter setting not received, use McGregor Exec altimeter setting and increase all DA 31 feet and all MDA 40 feet; increase LPV all Cats and UNAV/VNAV all Cats visibility ¼ mile and Circling Cat D ½ mile. Baro-VNAV and VDP NA with McGregor Exec altimeter setting. Helicopter visibility reduction below ½ SM NA.

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

**ATIS** | **WACO APP CON** | **WACO TOWER** | **GND CON** | **UNICOM**
---|---|---|---|---
123.85 | 127.65 227.125 | 119.3 (CTAF) 257.8 | 121.9 | 122.95

**MISSING APCH FIX**

**Procedure NA for arrivals at SATTY on V15 southeast bound.**

---

**LNAV only.**
Rwy 14 helicopter visibility reduction below 3/4 SM NA. For uncompensated Baro-VNAV systems, procedure NA below -8°C or above 54°C.

**ATIS**
123.85

**WACO APP CON**
127.65 227.125

**WACO TOWER**
119.3 (CTAF) 257.8

**GND CON**
121.9

**UNICOM**
122.95

---

Procedure NA for arrivals at SONET on V358 westbound.

Procedure NA for arrivals at DRILL on V15-54 northeast bound.

**SUPERVISED APCH FIX**
BOSEL 164° 4 NM

---

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 58).

**CIRCLING**
1020-1 504 (600-1) 1020-1 504 (600-1 1/2) 644 (700-2)

**MISSED APPROACH:** Climb to 1000 then climbing right turn to 4000 direct BOSEL and hold, continue climb-in-hold to 4000.

**MISSED APPROACH FIX**
BOSEL 164° 4 NM

---

VNAV and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 58).

**CATEGORY**
LPV DA 763-3/4 250 (300-3/4)
LNAV/VNAV DA 763-3/4 250 (300-3/4)
LNAV MDA 1020-1 507 (600-1) 1020-1 1/2 507 (600-1 1/2) 1160-2 644 (700-2)
CIRCLING 1020-1 504 (600-1)

---

WACO, TEXAS
Amdt 1 30JAN20

WACO RGNL (ACT)

SC-3, 11 JUL 2024 to 05 SEP 2024
RNAV (GPS) RWY 32
WACO RGNL (ACT)

ATIS 123.85
WACO APP CON * 127.65 227.125
WACO TOWER * 119.3 (CTAF) 257.8
GND CON 121.9
UNICOM 122.95

Procedure NA for arrivals at DRILL on V15-54 northeast bound.

Procedure NA for arrivals at SATTY on V15 southeast bound.

Procedure NA for arrivals at BARES on V548 southbound.

MISSED APCH FIX
4 NM EVVIS

ATIS
WACO APP CON *
WACO TOWER *
GND CON
UNICOM

WACO, TEXAS
Orig-D 02APR15
### VOR/DME RWY 32

**WACO RGNL (ACT)**

<table>
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<td>S-32</td>
<td>940-1</td>
<td>980-1</td>
<td>1020-1½</td>
<td>1160-2</td>
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<td>424 (500-1)</td>
<td>464 (500-1)</td>
<td>504 (600-1½)</td>
<td>644 (700-2)</td>
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**SC-3, 11 JUL 2024 to 05 SEP 2024**

**ATIS**

WACO APP CON *

**WACO APP CON**

**WACO TOWER**

**GND CON**

**UNICOM**

---

**WACO, TEXAS**

**AL-439 (FAA)**

**22139**

**VORTAC ACT**

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**APP CRS**

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**Rwy Idg**

<table>
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</table>

**Apt Elev**

| 516 |

**Apt Elev**

| 516 |

**VOR/DME RWY 32**

**WACO RGNL (ACT)**

---

**ASR**

VDP NA with Mc Gregor Exec altimeter setting. When local altimeter setting not received use Mc Gregor Exec altimeter setting and increase all MDA 40 feet; increase S-32 Cats C/D visibility ½ mile and Circling Cat D visibility ½ mile.

**MISSED APPROACH:** Climb to 3000 direct ACT VORTAC and hold, continue climb-in-hold to 3000.
VOR RWY 14
WACO RGNL (ACT)

**ATIS**
123.85

**WACO APP CON**
127.65 227.125

**WACO TOWER**
119.3 (CTAF) 257.8

**GND CON**
121.9

**UNICOM**
122.95

---

**MISSED APPROACH:** Climbing right turn to 4000 on ACT
VORTAC R164 to BOSEL/ACT 1400 DME and hold. Continue climb-in-hold to 4000.

**ATC**

---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

---

**Notes:**
- VGSII and descent angles not coincident (VGSII Angle 3.00/TCH 58).
- Setting and increase all MDAs 40 feet; and increase S-14 Cat C/D visibility ½ SM and Circling Cat D visibility ¼ SM.
- When local altimeter setting not received, use Mc Gregor Exec altimeter setting.
- **VDP NA with Mc Gregor Exec**
- **DME required.**
- **WACO RGNL (ACT)**
- **WACO CON (CTAF)** 115.3
- **WACO TOWER (ACT)** 115.3
- **WACO CON (CTAF)**
- **WACO RGNL (ACT)**
- **WACO CON (CTAF)**

---

**ASR**

---

**WACO, TEXAS**

---

**AL-439 (FAA)**

---
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RNAV (GPS) RWY 14

MID VALLEY (TXW)

**Rwy 14**

- Helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.
- Missed Approach: Climb to 900 then climbing right turn to 2100 direct WODEE and hold.

**AWOS-3PT**
- 118.575

**VALLEY APP CON**
- 126.55 377.2

**CLNC DEL**
- 125.95

**UNICOM**
- 122.8 (CTAF)

---

**RNAV (GPS) RWY 14**

- **CIRCLING**
  - 620-1 550 (600-1)
  - 700-1 630 (700-1)
  - 940-2 870 (900-2)

---

**Procedure NA**

- For arrivals at HARGI on V20 northeast bound.
- For arrivals at FATOR on V17 northwest bound.

**Rwy 14**

- Holding Pattern
  - 4 NM

**ECETE**

- **MIRL** Rwy 14-32
  - **REIL** Rwy 32

**WESLACO, TEXAS**

- **WAAS CH 70341 W14A**
  - **Rwy Idg** 6002
  - **TDZE** 69
  - **Apt Elev** 70

**WAAS**

- **CH 70341 W14A**
  - **Rwy Idg** 6002
  - **TDZE** 69
  - **Apt Elev** 70

---

**RNAV (GPS) RWY 14**

- **CIRCLING**
  - 620-1 550 (600-1)
  - 700-1 630 (700-1)
  - 940-2 870 (900-2)
**VOR-A**

**MID VALLEY (TXW)**

- **APP CRS**: 080°
- **Rwy Idg**: N/A
- **TDZE**: N/A
- **Apt Elev**: 70

**AWOS-3PT**: 118.575
**VALLEY APP CON**: 126.55 377.2
**CLNC DEL**: 125.95
**UNICOM**: 122.8 (CTAF)

---

**VOR/DME MFE**

- **117.2**: 080°
- **Chan 119**

**DME required**:

- When local altimeter not received, use McAllen altimeter setting and increase all MDA 40 feet.

**AWOS-3PT**: 118.575
**VALLEY APP CON**: 126.55 377.2
**CLNC DEL**: 125.95
**UNICOM**: 122.8 (CTAF)

Procedure NA for arrival on MFE VOR/DME airway radials 029 CW 075.

**AWOS-3PT**: 118.575
**VALLEY APP CON**: 126.55 377.2
**CLNC DEL**: 125.95
**UNICOM**: 122.8 (CTAF)

---

**MFE VOR/DME**

- **1600**: 080°
- **1500**: 080°

**DME**

- **10 NM**: 1600
- **4.2 NM**: 1500

**CATEGORY**

- **A**: 620-1
- **B**: 550 (600-1)
- **C**: 700-1¾
- **D**: 630 (700-1¾)

**CLNC DEL**: 1049

**UNICOM**: 122.8 (CTAF)

**AWOS-3PT**: 118.575
**VALLEY APP CON**: 126.55 377.2
**CLNC DEL**: 125.95
**UNICOM**: 122.8 (CTAF)

Missed Approach: Climb to 1000 then climbing left turn to 2000 direct MFE VOR/DME.
RNP APCH - GPS.

Baro-VNAV NA when using Pecos altimeter setting. For uncompensated FBO-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C. VDP NA with Pecos altimeter setting. Rwy 13 helicopter visibilities reduction below 1/2 SM NA. When local altimeter setting not received, use Pecos altimeter setting; increase LPV DA to 3167 feet and all Cat visibilities 1/4 SM; increase LNAV/VNAV DA to 3167 feet and all Cat visibilities 1/4 SM; increase all MDA 100 feet and LNAV Cat C visibility 1/2 SM and Circling Cat C visibility 1/4 SM.

**ASOS**

| 118.325 |

**FORT WORTH CENTER**

| 133.1  | 298.95 |

**UNICOM**

| 123.0 (CTAF) |

---

**RWA**

| 30 NM to AHASS (NoPT) |

**5 NM Holding Pattern**

AHASS

GP 3.00°

TCH 45

**30°**

**BORTY**

**AWAY**

3.4 NM

2 NM

0.8 NM

**5000 BORTY**

BORTY and hold.

Climb to 5000 direct to AHASS.

**BORTY**

5 NM

**313°**

**30°**

**AHASS**

**2864°**

**3006°**

**2918°**

**RNAV**

for GPS.

ELEV 2822

TDZE 2822

MISSED APCH FIX

**BP**

5 NM

**5000**

**MIRL**

Rwy 4-22 and 13-31

**WINK, TEXAS**

Amndt 1C 02NOV23
RNAV (GPS) RWY 31
WINKLER COUNTY (INK)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

ASOS
118.325

FORT WORTH CENTER
133.1  298.95

UNICOM
123.0 (CTAF)

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.**
VOR RWY 13
WINKLER COUNTY (INK)

MISSED APPROACH: Climb to 3500 then climbing right turn to 5000 direct INK VORTAC and hold, continue climb-in-hold to 5000.

VGSi and descent angles not coincident (VGSi Angle 3.00/TCH 22).

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-13</td>
<td>3340-1</td>
<td>518 (600-1)</td>
<td>3340-1½</td>
<td>NA</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>3340-1</td>
<td>518 (600-1)</td>
<td>3580-2¼</td>
<td>758 (800-2¼)</td>
</tr>
</tbody>
</table>

WINK, TEXAS
Amdt 10A 06OCT22

31°47'N-103°12'W
RNAV (GPS) RWY 17
WINTERS MUNI (77F')

**RNAV (GPS) RWY 17**

**ABILENE APP CON**

- 127.2
- 282.3

**CTAF**

- 122.9

Use Abilene altimeter setting. When not received, use Coleman altimeter setting and increase all MDA 20 feet.

**Procedure NA for arrivals at SHEPP on V77 northbound.**

- 2971
- [IAF] SHEPP

**4000 NoPT**

- 163° (6.7)
- 4 NM

**[IF/IAF] ROXAE**

**DONAW**

- 2.1 NM to RW17
- 2188
- 2081

**RV17**

- 1879

**[FAF] GERECE**

**MISSSED APCH FIX FILEP**

**FILEP**

- 352°
- 4 NM

**4 NM**

**Holding Pattern**

**ROXAE**

**GERECE**

- 3.00°
- TCH 40

**DONAW**

- 2.1 NM to RW17

**RW17**

- 172°

**CTAF**

- 122.9

MISSED APPROACH: Climb to 3400 direct FILEP and hold.

**FILEP**

- 4000 NoPT
- 11.5°

**ROSS**

- 352°

**FILEP**

- 3400

**FILEP**

- 4600

**ELEV 1871**

**TDZE 1870**

**Category**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td><strong>LP MDA</strong></td>
<td>2480-1</td>
<td>610 (700-1)</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td><strong>LNAV MDA</strong></td>
<td>2480-1</td>
<td>610 (700-1)</td>
<td>NA</td>
<td>NA</td>
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</tbody>
</table>

**WINTERS, TEXAS**

**WINTERS MUNI (77F')**

**Orig-B 07NOV19**

**AL-6639 (FAA)**

**31°57'N-99°59'W**

**493**
DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. Use Abilene altimeter setting; when not received, use Coleman altimeter setting and increase all MDA 20 feet. Night landing: Rwy 35 NA.

MISSED APCH FIX
4 NM to ROXAE

Procedure NA for arrival at OWENN on V77 southwest bound.

Procedure NA for arrival at TQA VOR/DME on V94 eastbound.

MISSED APPROACH:
Climb to 4000 direct ROXAE and hold.

ABILENE APP CON
127.2 282.3

CTAF
122.9

RNAV (GPS) RWY 35
WINTERS MUNI (77F')
Use Victoria Rgnl altimeter setting. Procedure NA at night. Rwy 31 helicopter visibility reduction below ¾ SM NA.

RNAV (GPS) RWY 31
YOAKUM MUNI (T85)

MISSED APPROACH: Climb to 1000 then climbing right turn to 2000 direct FOSAL and hold.
**NOT AUTHORIZED WHEN R-6302 A&B IN EFFECT**

Limit all segments airspeed to 90 KIAS.

When local altimeter setting not received, use SKYLARK FLD altimeter setting.

---

**CIRCLING**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>COPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-34</td>
<td>1400-1 900 (500-1)</td>
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</tbody>
</table>

---

**MIRL Rwy 16-34**

**FAF to MAP 6.6 NM**

<table>
<thead>
<tr>
<th>Knots</th>
<th>45</th>
<th>60</th>
<th>75</th>
<th>90</th>
<th>105</th>
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<tbody>
<tr>
<td>Min:Sec</td>
<td>8.48</td>
<td>6.36</td>
<td>5.17</td>
<td>4.24</td>
<td>3.46</td>
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</tbody>
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---

**SC-3, 11 JUL 2024 to 05 SEP 2024**

**FORT CAVAZOS, TEXAS**

Amdt 1 05OCT23

**COPTER NDB RWY 34**

**YOAKUM DEFRENN AHP**

(KHLR)
TAKE-OFF MINIMUMS  
Rwys 16, 34, Standard.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 16, 34: Climb on assigned heading for RADAR vectors to CONRA INT, maintain 3500. Thence . . .

. . . (transition), expect filed altitude 10 minutes after departure.

COLLEGE STATION TRANSITION (CONRA3.CLL): From over CONRA INT on CLL R-287 to CLL VORTAC.
LEONA TRANSITION (CONRA3.LOA): From over CONRA INT on LOA R-257 to LOA VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 16, 34: Climbing right turn heading 240° (to assigned altitude) to intercept and proceed on AGJ R-098. Thence . . . .

. . . . on (transition) or (assigned route). Maintain ATC assigned altitude.

STONEWALL TRANSITION (LAMPS8.STV): From over AGJ VORTAC on AGJ R-202 and STV R-018 to STV VORTAC.

WACO TRANSITION (LAMPS8.ACT): From over AGJ VORTAC on AGJ R-036 to SONET INT, then on ACT R-271 to ACT VORTAC.
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.

<table>
<thead>
<tr>
<th>ft/NM</th>
<th>%</th>
<th>GROUND SPEED (knots)</th>
<th>ANGLE</th>
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<tbody>
<tr>
<td>152</td>
<td>2.50</td>
<td>150, 230, 300, 380, 460, 530, 610, 680, 760, 840, 910</td>
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<tr>
<td>200</td>
<td>3.29</td>
<td>200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200</td>
<td>1.89</td>
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<td>210</td>
<td>3.46</td>
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<td>220</td>
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<td>2.07</td>
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<td>230</td>
<td>3.79</td>
<td>230, 350, 460, 580, 690, 810, 920, 1040, 1150, 1270, 1380</td>
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<td>240</td>
<td>3.95</td>
<td>240, 360, 480, 600, 720, 840, 960, 1080, 1200, 1320, 1440</td>
<td>2.26</td>
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<tr>
<td>250</td>
<td>4.11</td>
<td>250, 380, 500, 630, 750, 880, 1000, 1130, 1250, 1380, 1500</td>
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<tr>
<td>260</td>
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<td>270</td>
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<td>320</td>
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<tr>
<td>340</td>
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<td>340, 510, 680, 850, 1020, 1190, 1360, 1530, 1700, 1870, 2040</td>
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<td>360</td>
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<td>360, 540, 720, 900, 1080, 1260, 1440, 1620, 1800, 1980, 2160</td>
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<td>3.77</td>
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<td>550</td>
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