U.S. Terminal Procedures Publication
South Central (SC) Vol 5 of 5

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

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CORRECTIONS, COMMENTS AND/OR PROCUREMENT

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

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

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

Request for the creation or revisions to Airport Diagrams should be in accordance with FAA Order 7910.4
INOPERATIVE COMPONENTS OR VISUAL AIDS TABLE
(For Civil Use Only)

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

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

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

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

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

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

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

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

(4) Sidestep minima (CAT C-D)

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

(5) All Approach Types, All lines of minima

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ODALS (CAT A-B)</td>
<td>¼ mile</td>
</tr>
<tr>
<td>ODALS (CAT C-D)</td>
<td>⅜ mile</td>
</tr>
</tbody>
</table>
TERMS/LANDING MINIMA DATA

IFR LANDING MINIMA

The United States Standard for Terminal Instrument Procedures (TERPS) is the approved criteria for formulating instrument approach procedures. Landing minima are established for six aircraft approach categories (ABCDE and COPTER). In the absence of COPTER MINIMA, helicopters may use the CAT A minimums of other procedures.

LANDING MINIMA FORMAT

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

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-ILS 27</td>
<td>1352/24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-LOC 27</td>
<td>1440/24</td>
<td>288</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1540/1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All weather minimums in parentheses not applicable to Civil Pilots. Military Pilots refer to appropriate regulations.

NOTE: A symbol indicates a cold temperature altitude correction is required at this airport when reported temperature is at or below the published temperature. See the 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.

COLD TEMPERATURE AIRPORTS

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

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

COLD TEMPERATURE ERROR TABLE

COLD TEMPERATURE ERROR TABLE

HEIGHT ABOVE AIRPORT IN FEET

<table>
<thead>
<tr>
<th>REPORTED TEMP °C</th>
<th>200</th>
<th>300</th>
<th>400</th>
<th>500</th>
<th>600</th>
<th>700</th>
<th>800</th>
<th>900</th>
<th>1000</th>
<th>1500</th>
<th>2000</th>
<th>3000</th>
<th>4000</th>
<th>5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>-10</td>
<td>20</td>
<td>20</td>
<td>30</td>
<td>30</td>
<td>40</td>
<td>40</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>90</td>
<td>120</td>
<td>170</td>
<td>230</td>
<td>280</td>
</tr>
<tr>
<td>-20</td>
<td>30</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>290</td>
<td>390</td>
<td>490</td>
</tr>
<tr>
<td>-30</td>
<td>40</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>150</td>
<td>170</td>
<td>230</td>
<td>300</td>
<td>380</td>
<td>570</td>
<td>710</td>
</tr>
<tr>
<td>-40</td>
<td>50</td>
<td>50</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>150</td>
<td>170</td>
<td>190</td>
<td>220</td>
<td>300</td>
<td>380</td>
<td>570</td>
<td>760</td>
<td>950</td>
</tr>
<tr>
<td>-50</td>
<td>60</td>
<td>90</td>
<td>100</td>
<td>120</td>
<td>150</td>
<td>180</td>
<td>210</td>
<td>240</td>
<td>270</td>
<td>350</td>
<td>450</td>
<td>590</td>
<td>890</td>
<td>1190</td>
</tr>
</tbody>
</table>

AIRCRAFT APPROACH CATEGORIES

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

MANEUVERS TABLE

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

TERMS/LANDING MINIMA DATA 20142
TERMS/LANDING MINIMA DATA

CIRCLING APPROACH OBSTACLE PROTECTED AIRSPACE

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

STANDARD CIRCLING APPROACH MANEUVERING RADIUS

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

<table>
<thead>
<tr>
<th>Circling MDA in feet MSL</th>
<th>Approach Category and Circling Radius (NM)</th>
<th>CAT A</th>
<th>CAT B</th>
<th>CAT C</th>
<th>CAT D</th>
<th>CAT E</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Altitudes</td>
<td></td>
<td>1.3</td>
<td>1.5</td>
<td>1.7</td>
<td>2.3</td>
<td>4.5</td>
</tr>
</tbody>
</table>

C EXPANDED CIRCLING APPROACH MANEUVERING AIRSPACE RADIUS

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

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

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>3/4</td>
</tr>
<tr>
<td>2200</td>
<td>5/8</td>
</tr>
</tbody>
</table>

RADAR MINIMA

Rwy GP/TCH/RPI | DA/MDA-VIS | HAT | CEIL-VIS | CAT/MDA-VIS | HAT CEIL-VIS | Visibility in Statute Miles
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10 2.5°/42/1000</td>
<td>ABCDE</td>
<td>195/16</td>
<td>100</td>
<td>(100-1/4)</td>
<td></td>
<td>(RVR 100's of feet)</td>
</tr>
<tr>
<td>28 2.5°/48/1068</td>
<td>ABCDE</td>
<td>187/16</td>
<td>100</td>
<td>(100-1/4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASR 10</td>
<td>ABC</td>
<td>560/40</td>
<td>463</td>
<td>(500-3/4)</td>
<td>DE</td>
<td>600/50</td>
</tr>
<tr>
<td>CIR 28</td>
<td>AB</td>
<td>600/60</td>
<td>513</td>
<td>(600-1)</td>
<td>CDE</td>
<td>600/60</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 500-1/2.

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 (U) VHF emergency frequency (121.5) monitored (L) UHF emergency frequency (243.0) monitored

Additionally, unmanned 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.

CQ For airport operations, all operators must contact the tower.

TERMS/LANDING MINIMA DATA

B2
GENERAL INFORMATION

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

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

CHART CURRENCY INFORMATION

Date of Latest Revision 09365

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

FAA Procedure Amendment Number Orig 31DEC09 Procedure Amendment Effective Date Amdt 2B 12MAR09 15344 15344

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
Equipment Requirements Box
Standard Procedure Notes Box

From WINRZ, UBGE: RNAV-1 GPS, RNAV-1GPS from MAP to YARKU.
DEME required for LOC only.

For inop MALSR increase S-ILS 16R all cats visibility to 2 ½ SM.

RNAV STAR and DP PBN/Equipment Requirements Notes Box

PBN Requirements Box
Equipment Requirements Box

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

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

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

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

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

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

KEY MIKE

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

AAUP.................. Attention All Users Page
ADF.................... Automatic Direction Finder
ADIZ.................. Air Defense Identification Zone
AFS.................. Automatic Flight Information Service
AL.................. Approach Light System
ALSF.................. Approach Light System with Sequenced Flashing Lights
AOB.................. At or Below
AP.................. Autopilot System
APCH.................. Approach
APP CON.................. Authorization Required
AR.................. Arrival
ASOS.................. Automated Surface Observing System
ASR/PAR.................. Published Radar Minimums at this Airport
ASSC.................. Airport Surface Surveillance Systems
ATIS.................. Automated Terminal Information Service
AUNICOM.................. Automated UNICOM
AWOS.................. Automated Weather Observing System
AZ.................. Azimuth
BC.................. Back Course
BND.................. Bound
C.................. Circling
CAT.................. Category
CW.................. Clockwise
CDI.................. Course Deviation Indicator
Chan.................. Channel
CIFP.................. Coded Instrument Flight Procedures
CIR.................. Circling
CLNC DEL.................. Clearance Delivery
CNF.................. Computer Navigation Fix
CPDLC.................. Controller Pilot Data Link Communication
CTAF.................. Common Traffic Advisory Frequency
CW.................. Clockwise
D-ATIS.................. Digital-Automated Terminal Information Service
DA.................. Decision Altitude
DER.................. Departure End of Runway
DH.................. Decision Height
DME.................. Distance Measuring Equipment
DTHR.................. Displaced Threshold
DVA.................. Diverse Vector Area
ELEV.................. Elevation
EMAS.................. Engineered Material Arresting System
FAF.................. Final Approach Fix
FD.................. Flight Director System
FM.................. Fan Marker
FMS.................. Flight Management System
GBAS.................. Ground Based Augmentation System
GCO.................. Ground Communications Outlet
GLS.................. Ground based Augmentation System Landing System
GP.................. Glidepath
GPI.................. Ground Point of Intersection
GPS.................. Global Positioning System
GS.................. Glide Slope
HAA.................. Height above Airport
HAL.................. Height above Landing
HAT.................. Height above Touchdown
HATh.................. Height above Threshold
HCH.................. Heliport Crossing Height
HGS.................. Heads-up Guidance System
HiRL.................. High Intensity Runway Lights
HUD.................. Head-up Display
IAF.................. Initial Approach Fix
ICAO.................. International Civil Aviation Organization
IF.................. Intermediate Fix
IM.................. Inner Marker
INOP.................. Inoperative
INT.................. Intersection
K.................. Knots
KIAS.................. Knots Indicated Airspeed
LAAS.................. Local Area Augmentation System
LDA.................. Localizer Type Directional Aid
Ldg.................. Landing
LIRL.................. Low Intensity Runway Lights
LNAV.................. Lateral Navigation
LOC.................. Localizer
LP.................. Localizer Performance
LPV.................. Localizer Performance with Vertical Guidance
LR.................. Lead Radial. Provides at least 2 NM (Copter 1 NM) of lead to assist in turning onto the intermediate/final course.
MAA.................. Maximum Authorized Altitude
MAL.................. Medium Intensity Approach Light System
MALSF.................. Medium Intensity Approach System with Sequenced Flashers
MALS.................. Medium Intensity Approach Light System with RAIL
MAP.................. Missed Approach Point
MDA.................. Minimum Descent Altitude
MIRL.................. Medium Intensity Runway Lights
MRA.................. Middle Marker
MM.................. Minimum Reception Altitude
MIRL.................. Not Applicable
NA.................. Not Authorized
NDB.................. Non-directional Radio Beacon
NM.................. Nautical Mile
NoPT.................. No Procedure Turn Required (Procedure Turn shall not be executed without ATC clearance)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ODALS</td>
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<td>OM</td>
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<td>PAR</td>
<td>Precision Approach Radar</td>
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<td>PDC</td>
<td>Pre-Departure Clearance</td>
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<td>PRM</td>
<td>Precision Runway Monitor</td>
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<td>R</td>
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<td>RA</td>
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<td>RAIL</td>
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<td>Runway Centerline Light System</td>
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<td>REIL</td>
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<td>RF</td>
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<td>RNP</td>
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<td>Simplified Directional Facility</td>
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<td>SM</td>
<td>Statute Mile</td>
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<td>Sunrise-Sunset</td>
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<td>TACAN</td>
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<td>Threshold Crossing Height (height in feet above ground level)</td>
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<td>VCOA</td>
<td>Visual Climb over Airport</td>
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<td>Wide Area Augmentation System</td>
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<td>WP/WPT</td>
<td>Waypoint (RNAV)</td>
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</table>
**INSTRUMENT APPROACH PROCEDURES (CHARTS)**

**PLANVIEW SYMBOLS**

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

**Altimeters**
- 5500 Mandatory Altitude
- 3000 Recommended Altitude
- 2500 Minimum Altitude
- 5000 Mandatory Block
- 4300 Maximum Altitude

**IEEE**
- 175K Mandatory Airspeed
- 120K Minimum Airspeed
- 250K Maximum Airspeed
- 180K Recommended Airspeed

**RADIO AIDS TO NAVIGATION**
- Underline indicates No Voice transmitted on this frequency
- VOR
- VORTAC
- TACAN
- VOR/DME
- DME
- NDB
- NDB/DME

**LEGEND**
- Marker Beacon (LOC/LDA)
- Locals Back Course
- Right side shading: Front course
- Left side shading: Back Course
- SDF Course
- LOC/LDA/SDF Transmitter
- LOC/DME

**FIXES/ATC REPORTING REQUIREMENTS**
- Reporting Point
- Waypoint
- MAP WP (Flyby)
- MAP WP (Flyover)
- Flyover Point
- Computer Navigation Fix (CNF): No ATC Function

**MAP WP**
- GLGHR INT
- MYLES 1-LVF 14.9
- DME

**INT**
- LOM 114.5 LIM 14.9 Chan 92
- 362 AK

**TACAN or DME NAVIAD**
- SCOTT Chan 59
- PAIRED FREQUENCY
- VHF Paired Frequency
LEGEND INSTRUMENT APPROACH PROCEDURES (CHARTS)

PROFILE VIEW

Three different methods are used to depict either electronic or vertical guidance: "GS", "GP", or "VDA".
1. "GS" indicates that an Instrument Landing System (ILS) electronic glide slope (a ground antenna) provides vertical guidance. The profile section of ILS procedures depict a GS angle and TCH in the following format: GS 3.00°

2. "GP" on GLS and RNAV procedures indicates that either electronic vertical guidance (via Wide Area Augmentation System - WAAS or Ground Based Augmentation System - GBAS) or barometric vertical guidance is provided. GLS and RNAV procedures with a published decision altitude (DA/H) depict a GP angle and TCH in the following format: GP 3.00°

3. An advisory vertical descent angle (VDA) is provided on non-vertically guided conventional procedures and RNAV procedures with only a minimum descent altitude (MDA) to assist in preventing controlled flight into terrain. On Civil (FAA) procedures, this information is placed above or below the procedure track following the fix it is based on. Absence of a VDA or a note that the VDA is not authorized indicates that the prescribed obstacle clearance surface is not clear and the VDA must not be used below MDA. VDA is depicted in the following format: 3.00°. On Copter procedures this is depicted in the following format: 3.00°.

ILS or LOC APPROACH

RNAV and GLS PROCEDURES WITH VERTICAL GUIDANCE

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

RNP APPROACH WITH TF AND RF SEGMENTS

DESCRIPT FROM HOLDING PATTERN

ALTITUDES

PROFILE SYMBOLS

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

RADIO AIDS TO NAVIGATION

Compulsory:
- VOR
- VORTAC
- DME
- NDB/DME
- VOR/DME
- TACAN
- NDB
- LOM (Compass locator at outer marker)

Non-Compulsory:
- VOR
- VORTAC
- DME
- NDB/DME
- VOR/DME
- TACAN
- NDB
- Marker Beacon

Localizer Front Course
Localizer Back Course (Shading on left)

(T) indicates frequency protection range

Underline indicates no voice transmitted on this frequency

(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

(CFTSP) Computer Navigation Fix (CNF) - No ATC Function

AIRPORTS

- Civil
- Military
- Joint (Civil-Military)

Airports not served by the procedure shown in screened color

LEGEND

STANDARD TERMINAL ARRIVAL (STAR) CHARTS

WAYS

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

R-275 Transition Route

Radial line and value

Lost Communications Track

V12 I80 Airway/Jet Route Identification

Holding pattern with maximum restricted airspeed (175K) applies to all altitudes (210K) applies to altitudes above 6000' and including 14000'

SPECIAL USE AIRSPACE

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

MAA FL200

5500 Mandatory Altitude (Cross at)
2300 Minimum Altitude (Cross at or above)
4800 Maximum Altitude (Cross at or below)

15000 Mandatory Altitude (Cross at or above)
12000 Minimum Altitude
12000 Maximum Altitude

INDICATED AIRSPEED

175K Mandatory Airspeed
120K Minimum Airspeed
250K 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
INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

LEGEND

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

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

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

# 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.
- Runway TDZ elevation
- Runway Slope —— 0.3% Down —— 0.8% UP —— (shown when rounded runway slope is ≥ 0.3%)
- 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 ½ minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

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

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

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

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.

LEGEND

LEGEND
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, e.g., A, •, etc.

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

**CATEGORY I APPROACH LIGHTING SYSTEM**

**ALSF-1**

![Diagram of ALSF-1](image)

(White Intensity) LENGTH 2400/3000 FEET

**CATEGORY II APPROACH LIGHTING SYSTEM**

**ALSF-2**

![Diagram of ALSF-2](image)

(White Intensity) LENGTH 2400/3000 FEET

**SHORT APPROACH LIGHTING SYSTEM**

**SALS/SALSF**

![Diagram of SALS/SALSF](image)

(High Intensity) LENGTH 1500 FEET

**SIMPLIFIED SHORT APPROACH LIGHTING SYSTEM**

**SSALR**

![Diagram of SSALR](image)

(High Intensity) LENGTH 2400/3000 FEET

**MEDIUM INTENSITY APPROACH LIGHTING SYSTEM**

**MALS/MSLR**

![Diagram of MALS/MSLR](image)

(hight Intensity) LENGTH 1500 FEET

**OMNIDIRECTIONAL APPROACH LIGHTING SYSTEM**

**ODALS**

![Diagram of ODALS](image)

LENGTH 1500 FEET

**RUNWAY TOUCHDOWN ZONE AND CENTERLINE LIGHTING SYSTEMS**

**TDZ/CL**

![Diagram of TDZ/CL](image)

LENGTH 1400 FEET

**NOTE**: CIVIL ALSF-2 lights for flashing sequenced conditions.

**WEATHER CONDITIONS**: FAVORABLE

**TDZ/CL** WILL BE SHOWN BY NOTE IN SKETCH e.g., "TDZ/CL Rwy 15"

**LEGEND**: 22195

INSTRUMENT APPROACH PROCEDURES (CHARTS)

APPROACH LIGHTING SYSTEM - UNITED STATES
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, □, ○ etc. A dot "·" portrayed with approach lighting letter identifiers indicates sequenced flashing lights (F) installed with the approach lighting system e.g., □. Negative symbology, e.g., ○, □ indicates Pilot Controlled Lighting (PCL).

### PAPPI (Precision Approach Path Indicator)

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

**Legend:** □ White  ■ Red

### PVASI (Pulsating Visual Approach Slope Indicator)

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

**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.

### TRCV (Tri-Color Visual Approach Slope Indicator)

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

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

### APAP (Alignment of Elements Systems)

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

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

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<th>VHF FREQUENCY</th>
<th>TACAN CHANNEL</th>
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See the Chart Supplement for a complete listing.
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<th>NAME</th>
<th>PROC</th>
<th>SECT PG</th>
<th>NAME</th>
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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.

ANAHUAC, TX
CHAMBERS COUNTY (T00)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 10MAR11 (11069) (FAA)
TAKEOFF MINIMUMS:
Rwys 17,35, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 12, vehicles on roadway beginning 19' from DER, left and right of centerline, up to 15' AGL/34' MSL.
Trees beginning 986' from DER, 732' left of centerline, up to 100' AGL/119' MSL.
Rwy 30, trees beginning 60' from DER, left and right of centerline, up to 100' AGL/124' MSL.
Trees beginning 60' from DER, left and right of centerline, up to 100' AGL/124' MSL.
Trees beginning 1467' from DER, 788' left of centerline, up to 75' MSL.
Tree 1474' from DER, 670' right of centerline, 72' MSL.
Tree 1516' from DER, 684' right of centerline, 73' MSL.
Tree 1578' from DER, 759' right of centerline, 74' MSL.

ANGLETON/LAKE JACKSON, TX
TEXAS GULF COAST RGNL (LBX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 22JUN17 (17173) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 35, tree 1330' from DER, 797' left of centerline, 71' MSL.
Tree 1404' from DER, 796' left of centerline, 73' MSL.
Trees beginning 1467' from DER, 788' left of centerline, up to 75' MSL.
Tree 1474' from DER, 670' right of centerline, 72' MSL.
Tree 1516' from DER, 684' right of centerline, 73' MSL.
Tree 1578' from DER, 759' right of centerline, 74' MSL.
BAY CITY, TX
BAY CITY RGNL (BYY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 22JUN17 (17173) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees and poles beginning 51' from DER, 306' left of centerline, up to 91' MSL.
Tree 337' from DER, 442' right of centerline, 79' MSL. Tree 478' from DER, 473' right of centerline, 83' MSL.
Trees beginning 714' from DER, 496' right of centerline, up to 86' MSL.
Rwy 31, tree 102' from DER, 340' right of centerline, 61' MSL.
Tree 548' from DER, 272' left of centerline, 59' MSL.
Tree 944' from DER, 272' right of centerline, 70' MSL.
Trees beginning 1002' from DER, 255' right of centerline, up to 78' MSL.
Tree 1139' from DER, 750' right of centerline, 80' MSL.

BAYTOWN, TX
BAYTOWN (HPY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 10OCT19 (19283) (FAA)
TAKEOFF MINIMUMS:
Rwy 14, 300-1 or std. w/min. climb of 460' per NM to 300.
TAKEOFF OBSTACLE NOTES:
Rwy 14, tree 9' from DER, 214' left of centerline, 47' MSL.
Trees, poles, traverse way beginning 11' from DER, 33' right of centerline, up to 54' MSL.
Tree 89' from DER, 413' left of centerline, 51' MSL.
Poles, building, trees, traverse way beginning 122' from DER, 9' left of centerline, up to 58' MSL.
Trees, poles beginning 316' from DER, 158' left of centerline, up to 66' MSL.
Poles, trees beginning 462' from DER, 237' left of centerline, up to 67' MSL.
Tree 977' from DER, 447' left of centerline, 68' MSL.
Tree 1223' from DER, 90' left of centerline, 70' MSL.
Tree 1356' from DER, 427' left of centerline, 72' MSL.
Tree 1467' from DER, 531' right of centerline, 80' MSL.
Tree 1886' from DER, 558' left of centerline, 91' MSL.
Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.
Rwy 32, trees, building, fence, poles beginning 131' from DER, 6' right of centerline, up to 76' MSL.
Buildings beginning 251' from DER, 38' left of centerline, up to 42' MSL.
Poles, building, trees, traverse way beginning 289' from DER, 4' left of centerline, up to 38' AGL/71' MSL.
Poles, trees beginning 688' from DER, 70' right of centerline, up to 48' AGL/80' MSL.

RWJ AIRPARK (54T)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 25APR19 (19115) (FAA)
TAKEOFF MINIMUMS:
Rwys 14, 32, NA - Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 8, trees beginning 21' from DER, 152' left of centerline, up to 100' AGL/129' MSL.
Vehicle on road beginning 100' from DER, crossing centerline, up to 15' AGL/44' MSL.
Fence beginning abeam DER, 115' right of centerline, up to 6' AGL/35' MSL.
Trees beginning 133' from DER, 333' right of centerline, up to 100' AGL/129' MSL.
Buildings beginning 266' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Power lines beginning 356' from DER, 460' left of centerline, up to 32' AGL/61' MSL.
Pole 663' from DER, 188' right of centerline, 100' AGL/129' MSL.
Rwy 26, buildings beginning 47' from DER, 118' right of centerline, up to 30' AGL/64' MSL.
Buildings beginning 187' from DER, 85' left of centerline, up to 30' AGL/64' MSL.
Power lines beginning 407' from DER, crossing centerline, up to 32' AGL/66' MSL.
Vehicle on road beginning 448' from DER, crossing centerline, up to 15' AGL/49' MSL.
Trees beginning 619' from DER, left and right of centerline, up to 100' AGL/134' MSL.
Quarry equipment 2800' from DER, 193' left of centerline, up to 100' AGL/134' MSL.

BEAUMONT, TX
BEAUMONT MUNI (BMT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 15JAN09 (09015) (FAA)
TAKEOFF MINIMUMS:
Rwys 16, 34, NA - Obstacles.
TAKEOFF OBSTACLE NOTES:
Rwy 13, multiple trees, poles and buildings beginning 82' from DER, 2' left of centerline, up to 74' AGL/106' MSL.
Multiple trees, poles and buildings beginning 441' from DER, 22' right of centerline, up to 73' AGL/105' MSL.
Vehicle on road 152' from DER, 428' left of centerline, 15' AGL/46' MSL.
Train on railroad 545' from DER, 506' right of centerline, 23' AGL/57' MSL.
Rwy 31, multiple trees, poles and transmission line towers beginning 81' from DER, 2' left of centerline, up to 64' AGL/94' MSL.
Multiple trees, poles, and transmission line towers beginning 241' from DER, 4' right of centerline, up to 56' AGL/88' MSL.
Train on railroad 375' from DER, 354' right of centerline, 23' AGL/55' MSL.

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)
BEAUMONT/PORT ARTHUR, TX
JACK BROOKS RGNL (BPT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 17DEC09 (09351) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 12, multiple trees beginning 1024' from DER, 202' left of centerline, up to 43' AGL/48' MSL.
Trees 1676' from DER, 778' right of centerline, 51' AGL/56' MSL.
Rwy 16, multiple trees beginning 580' from DER, 519' right of centerline, up to 51' AGL/56' MSL.
Rwy 30, trees 1005' from DER, 629' right of centerline, 54' AGL/64' MSL.
Multiple trees beginning 1041' from DER, 617' left of centerline, up to 67' AGL/77' MSL.
Multiple trees beginning 1274' from DER, 398' right of centerline, up to 70' AGL/80' MSL.
Multiple trees beginning 1288' from DER, 218' left of centerline, up to 72' AGL/82' MSL.
Tower 1487' from DER, 398' right of centerline, 60' AGL/75' MSL.

BEAUMONT/PORT ARTHUR, TX
JACK BROOKS RGNL (BPT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 17DEC09 (09351) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 12, multiple trees beginning 1024' from DER, 202' left of centerline, up to 43' AGL/48' MSL.
Trees 1676' from DER, 778' right of centerline, 51' AGL/56' MSL.
Rwy 16, multiple trees beginning 580' from DER, 519' right of centerline, up to 51' AGL/56' MSL.
Rwy 30, trees 1005' from DER, 629' right of centerline, 54' AGL/64' MSL.
Multiple trees beginning 1041' from DER, 617' left of centerline, up to 67' AGL/77' MSL.
Multiple trees beginning 1274' from DER, 398' right of centerline, up to 70' AGL/80' MSL.
Multiple trees beginning 1288' from DER, 218' left of centerline, up to 72' AGL/82' MSL.
Tower 1487' from DER, 398' right of centerline, 60' AGL/75' MSL.

BEAUMONT/PORT ARTHUR, TX
JACK BROOKS RGNL (BPT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 17DEC09 (09351) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 12, multiple trees beginning 1024' from DER, 202' left of centerline, up to 43' AGL/48' MSL.
Trees 1676' from DER, 778' right of centerline, 51' AGL/56' MSL.
Rwy 16, multiple trees beginning 580' from DER, 519' right of centerline, up to 51' AGL/56' MSL.
Rwy 30, trees 1005' from DER, 629' right of centerline, 54' AGL/64' MSL.
Multiple trees beginning 1041' from DER, 617' left of centerline, up to 67' AGL/77' MSL.
Multiple trees beginning 1274' from DER, 398' right of centerline, up to 70' AGL/80' MSL.
Multiple trees beginning 1288' from DER, 218' left of centerline, up to 72' AGL/82' MSL.
Tower 1487' from DER, 398' right of centerline, 60' AGL/75' MSL.

BRENNHAM, TX
BRENNHAM MUNI (11R)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 11FEB10 (10042) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, trees and poles beginning 45' from DER, 272' right of centerline to 305' left of centerline, up to 89' AGL/299' MSL.

BRENNHAM, TX
BRENNHAM MUNI (11R)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 11FEB10 (10042) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, trees and poles beginning 45' from DER, 272' right of centerline to 305' left of centerline, up to 89' AGL/299' MSL.

BRYAN, TX
COULTER FLD (CFD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 05JUL07 (22139) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 15, vehicle on road 266' from DER, on centerline, 17' AGL/386' MSL.
Multiple trees and poles beginning 169' from DER, 339' right of centerline, up to 20' AGL/389' MSL.
Multiple trees and poles beginning 203' from DER, 245' left of centerline, up to 35' AGL/400' MSL.
Rwy 33, multiple poles and T-L towers beginning 36' from DER, 207' left of centerline, up to 35' AGL/382' MSL.
Trees 508' from DER, 290' right of centerline, 25' AGL/371' MSL.

CALDWELL, TX
CALDWELL MUNI (RWV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 20SEP12 (12264) (FAA)
TAKEOFF MINIMUMS:
Rwy 33, 300-1 or std. w/min. climb of 778' per NM to 800.
TAKEOFF OBSTACLE NOTES:
Rwy 15, trees beginning 323' from DER, left and right of centerline, up to 40' AGL/399' MSL.
Train on tracks 372' from DER, left and right of centerline, up to 23' AGL/382' MSL.
Power lines beginning 1896' from DER, left and right of centerline, up to 100' AGL/499' MSL.
Rwy 33, trees beginning 5' from DER, left and right of centerline, up to 40' AGL/449' MSL.
Power lines beginning 925' from DER, left and right of centerline, up to 50' AGL/499' MSL.
Water tank 3624' from DER, 1031' left of centerline 215' AGL/648' MSL.

CENTER, TX
CENTER MUNI (F17)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 29JUL10 (10210) (FAA)
DEPARTURE PROCEDURE:
Rwy 17, climb heading 167° to 1000 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 17, numerous trees beginning 326' from DER, 432' right and left of centerline, up to 100' AGL/414' MSL.
Vehicle on road 234' from DER, 530' left of centerline, up to 15' AGL/314' MSL.
Rwy 35, numerous trees beginning 1724' from DER, 388' left and right of centerline, up to 100' AGL/459' MSL. Vehicle on road 1091' from DER, 742' right of centerline, up to 15' AGL/354' MSL.
CLEVELAND, TX
CLEVELAND MUNI (6R3)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  22SEP11  (11265)  (FAA)
DEPARTURE PROCEDURE:
Rwy 16, climb heading 157° to 1400 before turning right.
Rwy 34, climb heading 312° to 2000 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 16, trees beginning abeam DER, right and left of centerline, up to 100' AGL/239' MSL.
Rwy 34, trees beginning 120' from DER, 243' left of centerline, up to 100' AGL/259' MSL.
Trees and poles beginning 225' from DER, 363' right of centerline, up to 19' AGL/169' MSL.
Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

COLLEGE STATION, TX
EASTERWOOD FLD (CLL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A  28FEB19  (21112)  (FAA)
DEPARTURE PROCEDURE:
Rwy 35, climb heading 346° to 900 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 11, traverse way 5' from DER, 275' right of centerline, 322' MSL.
Tree 8' from DER, 497' right of centerline, 40' AGL/346' MSL.
Tree 10' from DER, 323' right of centerline, 39' AGL/347' MSL.
Pole 10' from DER, 55' left of centerline, 2' AGL/312' MSL.
Tree, traverse way beginning 44' from DER, 162' right of centerline, up to 44' AGL/352' MSL.
Electrical system 139' from DER, 498' left of centerline, 315' MSL.
Tree 496' from DER, 30' left of centerline, 42' AGL/325' MSL.
Trees beginning 497' from DER, 101' left of centerline, up to 331' MSL.
Elevator, building beginning 1888' from DER, 704' left of centerline, up to 64' AGL/366' MSL.
Transmission line 2483' from DER, 1148' left of centerline, 374' MSL.
Rwy 29, pole 11' from DER, 55' right of centerline, 1' AGL/320' MSL.
Tree 30' from DER, 414' left of centerline, 322' MSL.
Tree 135' from DER, 530' left of centerline, 343' MSL.
Trees beginning 305' from DER, 533' left of centerline, up to 361' MSL.
Trees beginning 536' from DER, 561' right of centerline, up to 346' MSL.
Tree 838' from DER, 665' right of centerline, 348' MSL.
Trees beginning 1010' from DER, 371' left of centerline, up to 362' MSL.
Pole beginning 1083' from DER, 692' right of centerline, up to 358' MSL.
Trees beginning 1174' from DER, 244' left of centerline, up to 363' MSL.
Tree, pole beginning 1257' from DER, 251' left of centerline, up to 365' MSL.
Trees beginning 1429' from DER, 420' right of centerline, up to 366' MSL.
Trees beginning 1542' from DER, 528' right of centerline, up to 370' MSL.
Pole beginning 1888' from DER, 704' left of centerline, up to 64' AGL/366' MSL.
Rwy 35, pole 11' from DER, 55' left of centerline, 1' AGL/321' MSL.
Sign 23' from DER, 251' left of centerline, 1' AGL/321' MSL.
Tree 232' from DER, 552' left of centerline, 38' AGL/361' MSL.
Trees beginning 297' from DER, 460' left of centerline, up to 41' AGL/364' MSL.
Tree 774' from DER, 598' right of centerline, 341' MSL.
Tree 808' from DER, 607' right of centerline, 349' MSL.
Tree, building beginning 883' from DER, 235' left of centerline, up to 366' MSL.
Tree 1085' from DER, 649' right of centerline, 355' MSL.
Tree 1181' from DER, 719' right of centerline, 356' MSL.
Pole 1552' from DER, 818' left of centerline, 376' MSL.
Trees beginning 1740' from DER, 751' left of centerline, up to 380' MSL.

CROCKETT, TX
HOUSTON COUNTY (DKR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  15DEC11  (11349)  (FAA)
TAKEOFF MINIMUMS:
Rwy 2, 400-2 or std. w/min. climb of 280' per NM to 800.
Rwy 20, 300-1½ or std. w/min. climb of 459'per NM to 700.
TAKEOFF OBSTACLE NOTES:
Rwy 2, multiple trees beginning 57' from DER, 61' right of centerline, up to 50' AGL/399' MSL.
Multiple trees and terrain beginning 27' from DER, 109' left of centerline, up to 50' AGL/409' MSL.
Tower 1.5 NM from DER, 2864' left of centerline 233' AGL/623' MSL.
Rwy 20, multiple towers beginning 4567' from DER, 1025' right of centerline, up to 200' AGL/529' MSL.
EAGLE LAKE, TX
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 05DEC19 (19339) (FAA)
TAKEOFF MINIMUMS:
Rwy 17, 300-2½, or std. w/min. climb of 210’ per NM to 400.
TAKEOFF OBSTACLE NOTES:
Rwy 17, vehicles on road, tree, vegetation beginning 38’ from DER, 126’ left of centerline, up to 197’ MSL.
Tree 153’ from DER, 110’ left of centerline, 202’ MSL.
Trees beginning 155’ from DER, 6’ right of centerline, up to 197’ MSL.
Trees beginning 155’ from DER, 12’ left of centerline, up to 36’ AGL/216’ MSL.
Trees, vehicles on road beginning 216’ from DER, 205’ right of centerline, up to 212’ MSL.
Trees beginning 270’ from DER, 357’ left of centerline, up to 40’ AGL/220’ MSL.
Tree 1682’ from DER, 458’ left of centerline, 233’ MSL.
Tower 2588’ from DER, 792’ left of centerline, 192’ AGL/317’ MSL.
Tower 1.7 NM from DER, 3144’ right of centerline, 270’ AGL/443’ MSL.

EDNA, TX
JACKSON COUNTY (26R)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 10DEC15 (15344) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 15, trees beginning 758’ from DER, left and right of centerline, up to 20’ AGL/84’ MSL.
Rwy 33, vehicle on road beginning 292’ from DER, 576’ left of centerline, up to 15’ AGL/79’ MSL.
Power poles beginning 783’ from DER, 397’ left of centerline, 40’ AGL/104’ MSL.
Power pole 1169’ from DER, 506’ right of centerline, 40’ AGL/104’ MSL.

GALVESTON, TX
SCHOLES INTL AT GALVESTON (GLS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 22AUG13 (13234) (FAA)
DEPARTURE PROCEDURE:
Rwy 32, climb heading 318° to 800 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 14, building 2614’ from DER, 376’ right of centerline, 76’ AGL/81’ MSL.
Rwy 18, buildings beginning 2560’ from DER, 284’ left of centerline, up to 121’ AGL/178’ MSL.
T-L tower 636’ from DER, 551’ right of centerline, 55’ AGL/60’ MSL.
Trees and poles beginning 50’ from DER, 75’ right of centerline, up to 60’ AGL/65’ MSL.
Rwy 32, crane 4434’ from DER, 1081’ left of centerline, 131’ AGL/131’ MSL.
Rwy 36, bush 419’ from DER, 577’ left of centerline, 12’ AGL/17’ MSL.
Tree 526’ from DER, 371’ left of centerline, 14’ AGL/19’ MSL.
Trees beginning 713’ from DER, 383’ right of centerline, up to 27’ AGL/32’ MSL.

GIDDINGS, TX
GIDDINGS-LEE COUNTY (GYB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 29JUL10 (10210) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 17, numerous trees beginning 720’ from DER, 58’ right of centerline, up to 50’ AGL/479’ MSL.
Numerous trees beginning 754’ from DER, 340’ left of centerline, up to 50’ AGL/479’ MSL.
Rwy 35, numerous trees beginning 613’ from DER, 272’ right of centerline, up to 50’ AGL/539’ MSL.
Numerous trees beginning 558’ from DER, 265’ left of centerline, up to 50’ AGL/559’ MSL.
Vehicle on road 516’ from DER, 246’ left of centerline, 15’ AGL/514’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

HOUSTON, TX
CONROE/NORTH HOUSTON RGNL (CXO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 22JUN17 (21336) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 1, tree 829' from DER, 548' right of centerline, 297' MSL.
Tree 1252' from DER, 553' right of centerline, 312' MSL.
Trees beginning 1609' from DER, 300' left of centerline, up to 322' MSL.
Tree 3830' from DER, 580' right of centerline, 347' MSL.
Tree 4658' from DER, 135' right of centerline, 348' MSL.
Rwy 14, NAVAID 399' from DER, 266' right of centerline, 20' AGL/255' MSL.
Tree 1478' from DER, 691' right of centerline, 291' MSL.
Tree 1653' from DER, 682' left of centerline, 294' MSL.
Tree 2129' from DER, 80' right of centerline, 306' MSL.
Tree 2153' from DER, 407' left of centerline, 300' MSL.
Rwy 19,

DAVID WAYNE HOOKS MEML (DWH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A 20APR23 (23110) (FAA)
TAKEOFF MINIMUMS:
Rwys 17L, 35R, NA-Environmental.
Waterways 17, 35, NA-Air traffic.
TAKEOFF OBSTACLE NOTES:
Rwy 17R, trees, pole beginning 84' from DER, 294' right of centerline, up to 189' MSL.
Building 432' from DER, 526' left of centerline, 27' AGL/172' MSL.
Building, NAVAID beginning 643' from DER, 256' left of centerline, up to 29' AGL/173' MSL.
Trees beginning 706' from DER, 430' left of centerline, up to 188' MSL.
Tree 1383' from DER, 860' right of centerline, 190' MSL.
Tree 1514' from DER, 164' left of centerline, 189' MSL.
Trees beginning 1648' from DER, 394' left of centerline, up to 197' MSL.
Trees beginning 2100' from DER, 67' left of centerline, up to 214' MSL.
Tree 2407' from DER, 188' left of centerline, 215' MSL.
Tree 2469' from DER, 81' left of centerline, 217' MSL.
Trees beginning 2743' from DER, 163' left of centerline, up to 220' MSL.
Rwy 35L, building, pole, tree beginning 85' from DER, 68' left of centerline, up to 48' AGL/202' MSL.
Tree, vehicle on road beginning 100' from DER, on centerline, up to 175' MSL.
Tree 487' from DER, 488' right of centerline, 200' MSL.
Trees beginning 750' from DER, 123' right of centerline, up to 203' MSL.
Tree, building, pole beginning 797' from DER, 42' left of centerline, up to 211' MSL.
Tree, pole beginning 808' from DER, 144' right of centerline, up to 229' MSL.
Tree 898' from DER, 283' left of centerline, 223' MSL.
Tree, pole beginning 930' from DER, 31' left of centerline, up to 226' MSL.
Trees beginning 1190' from DER, 613' right of centerline, up to 233' MSL.
Tree 1266' from DER, 330' left of centerline, 228' MSL.
Tree 1333' from DER, 76' right of centerline, 231' MSL.
Tree, building, transmission line beginning 1342' from DER, 152' left of centerline, up to 233' MSL.
Transmission line, tree beginning 1428' from DER, 245' right of centerline, up to 107' AGL/254' MSL.
Building 1649' from DER, 252' left of centerline, 48' AGL/199' MSL.
Tree, transmission line beginning 2084' from DER, 569' left of centerline, up to 238' MSL.

ELLINGTON (EFD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 10JAN13 (13010) (FAA)
TAKEOFF MINIMUMS:
Rwy 22, 200-1/4 or std w/min. climb of 214' per NM to 300, or alternatively with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to DER.
TAKEOFF OBSTACLE NOTES:
Rwy 4, tree 1526' from DER, 737' right of centerline, 39' AGL/69' MSL.
Rwy 17R, pole 1488' from DER, 817' right of centerline, 40' AGL/74' MSL.
Rwy 22, obstruction light on GS and equipment 321' from DER, 544' left of centerline, 39' AGL/68' MSL.
Sign 213' from DER, 472' right of centerline, 6' AGL/32' MSL.
Antenna on building 1998' from DER, 598' right of centerline, 54' AGL/83' MSL.
Obstruction light on communication equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.
Obstruction light on water tower and tank 6114' from DER, 1835' right of centerline,159' AGL/192' MSL.

SC-5 30 NOV 2023 to 25 JAN 2024
CON’T
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

HOUSTON, TX (CONT')
ELLINGON (EFD) (CONT')

Rwy 35L, trees beginning 1119’ from DER, 679’ right of centerline, up to 37’ AGL/77’ MSL.
Crane 2353’ from DER, 1024’ left of centerline, 58’ AGL/97’ MSL.
Rwy 35R, tree 1597’ from DER, 32’ left of centerline, 50’ AGL/80’ MSL.
Tank 2639’ from DER, 1157’ right of centerline, 77’ AGL/109’ MSL.

GEORGE BUSH INT’L/HOUSTON (IAH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 05JUN08 (21112) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 8L, tree 2866’ from DER, 921’ left of centerline, 107’ AGL/201’ MSL.
Multiple trees beginning 2750’ from DER, 106’ right of centerline, up to 80’ AGL/174’ MSL.

HOUSTON EXEC (TME)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 30AUG07 (21112) (FAA)
DEPARTURE PROCEDURE:
Rwy 36, climb heading 355° to 700 before turning east.
TAKEOFF OBSTACLE NOTES:
Rwy 36, power poles from left to right beginning 703’ from DER, 623’ left to 685’ right of centerline, up to 32’ AGL/196’ MSL.

HOUSTON/SOUTHWEST (AXH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 05JUN08 (21336) (FAA)
DEPARTURE PROCEDURE:
Rwy 9, climb heading 089° to 2000 before turning left.
Rwy 27, climb heading 269° to 2200 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 9, multiple hangars beginning 239’ from DER, 360’ right of centerline, up to 42’ AGL/106’ MSL.
Multiple trees beginning 501’ from DER, 355’ right of centerline, up to 43’ AGL/111’ MSL.
Multiple trees beginning 119’ from DER, 498’ left of centerline, up to 41’ AGL/105’ MSL.
Pole 332’ from DER, 299’ left of centerline, 43’ AGL/97’ MSL.
Antenna 1172’ from DER, 658’ left of centerline, 51’ AGL/115’ MSL.
Multiple trees beginning 558’ from DER, 68’ left of centerline, up to 58’ AGL/122’ MSL.
Rwy 27, multiple trees beginning 1050’ from DER, 40’ left of centerline, up to 71’ AGL/140’ MSL.
Vehicle and road 99’ from DER, 291’ right of centerline, 15’ AGL/83’ MSL.
Multiple trees beginning 873’ from DER, 514’ right of centerline, up to 59’ AGL/130’ MSL.
Multiple transmission poles beginning 1304’ from DER, 131’ right of centerline, up to 41’ AGL/110’ MSL.

PEARLAND RGNL (LVJ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 03APR14 (14093) (FAA)
DEPARTURE PROCEDURE:
Rwy 14, climb heading 142° to 1600 before turning right.
Rwy 32, climb heading 322° to 700 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 14, vehicles on road beginning 11’ from DER, 450’ right of centerline, up to 15’ AGL/54’ MSL.
Hangars 99’ from DER, 521’ left of centerline, up to 13’ AGL/53’ MSL.
Trees beginning 102’ from DER, 328’ left of centerline, up to 27’ AGL/71’ MSL.
Trees beginning 199’ from DER, 307’ right of centerline, up to 64’ AGL/98’ MSL.
Vehicles on road beginning 364’ from DER, left and right of centerline, up to 15’ AGL/59’ MSL.
Trees beginning 618’ from DER, 331’ left of centerline, up to 32’ AGL/71’ MSL.
Trees beginning 983’ from DER, 94’ right of centerline, up to 20’ AGL/90’ MSL.
Trees beginning 1251’ from DER, 72’ left of centerline, up to 60’ AGL/94’ MSL.
Rwy 32, multiple trees beginning 30’ from DER, 142’ right of centerline, up to 59’ AGL/100’ MSL.
Multiple trees beginning 41’ from DER, 200’ left of centerline, up to 74’ AGL/118’ MSL.
Pole 68’ from DER, 103’ right of centerline, 26’ AGL/70’ MSL.
Multiple buildings and poles beginning 103’ from DER, 235’ right of centerline, up to 34’ AGL/78’ MSL.
Vehicles on road 513’ from DER, left and right of centerline, 15’ AGL/59’ MSL.
Multiple poles and trees beginning 605’ from DER, left and right of centerline up to 84’ AGL/128’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

HOUSTON, TX (CON’T)
SUGAR LAND RGNL (SGR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7A 20SEP12 (12264) (FAA)
DEPARTURE PROCEDURE:
- Rwys 17, climb heading 170° to 1500 before turning eastbound.
- Rwys 35, climb heading 350° to 1100 before turning southbound.
TAKEOFF OBSTACLE NOTES:
- Rwys 17, multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL.
- Railroad 110' from DER, 10' left of centerline, 23' AGL/104' MSL.
- Multiple poles beginning 135' from DER, 270' left of centerline, up to 44' AGL/111' MSL.
- Building 1036' from DER, 743' right of centerline, 26' AGL/102' MSL.
- Rwys 35, vehicle and road 65' from DER, 2' right of centerline, 15' AGL/96' MSL.
- Multiple trees beginning 37' from DER, 275' right of centerline, up to 81' AGL/164' MSL.
- DME antenna 380' from DER, 253' right of centerline, 24' AGL/100' MSL.
- Multiple trees beginning 83' from DER, 65' left of centerline, up to 81' AGL/155' MSL.

WEST HOUSTON (IWS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 20SEP12 (12264) (FAA)
TAKEOFF OBSTACLE NOTES:
- Rwys 15, road and vehicle beginning 74' from DER, 60' left of centerline, up to 15' AGL/123' MSL.
- Road and vehicle beginning 342' from DER, 6' right of centerline, up to 15' AGL/123' MSL.
- Building 177' from DER, 398' left of centerline, 18' AGL/126' MSL.
- Light pole 942' from DER, 453' right of centerline, 39' AGL/145' MSL.
- Trees beginning 307' from DER, 275' left of centerline, up to 81' AGL/164' MSL.
- Trees beginning 130' from DER, 1117' right of centerline, up to 100' AGL/208' MSL.
- Rwys 33, trees beginning 168' from DER, 9' left of centerline, up to 70' AGL/179' MSL.
- Trees beginning 66' from DER, 3' right of centerline, up to 75' AGL/184' MSL.

WILLIAM P HOBBY (HOU)
AMDT 7A 07OCT21 (21280) (FAA)
TAKEOFF MINIMUMS:
- Rwys 22, std. w/min. climb of 290' per NM to 2700.
DEPARTURE PROCEDURE:
- Rwys 31L/R, climb on heading 311° to 800 before turning westbound.
TAKEOFF OBSTACLE NOTES:
- Rwys 4, lighting beginning 2' from DER, 85' left of centerline, up to 1' AGL/39' MSL.
- Lighting beginning 2' from DER, 84' right of centerline, up to 1' AGL/39' MSL.
- Lighting beginning 9' from DER, 4' left of centerline, up to 1' AGL/40' MSL.
- Lighting beginning 9' from DER, 5' right of centerline, up to 1' AGL/40' MSL.
- Building 1962' from DER, 858' right of centerline, 69' AGL/103' MSL.
- Tree 2399' from DER, 154' left of centerline, 66' AGL/99' MSL.
- Pole beginning 4403' from DER, 767' right of centerline, up to 121' AGL/166' MSL.
- Trees beginning 121' from DER, 39' left of centerline, up to 75' AGL/115' MSL.
- Lighting beginning 9' from DER, 39' left of centerline, up to 1' AGL/40' MSL.
- Sign 26' from DER, 149' left of centerline, 2' AGL/42' MSL.
- Trees, building, tree beginning 174' from DER, 9' left of centerline, up to 75' AGL/115' MSL.
- Trees beginning 2389' from DER, 55' left of centerline, up to 75' AGL/118' MSL.
- Trees 2248' from DER, 1149' right of centerline, 75' AGL/121' MSL.
- Rwys 13R, lighting beginning 12' from DER, 85' right of centerline, up to 1' AGL/42' MSL.
- Lighting beginning 12' from DER, 94' left of centerline, up to 1' AGL/42' MSL.
- Lighting 41' from DER, 115' left of centerline, 3' AGL/44' MSL.
- Lighting 42' from DER, 114' right of centerline, 2' AGL/43' MSL.
- Fence 87' from DER, 492' left of centerline, 7' AGL/45' MSL.
- Traverse way 178' from DER, 497' left of centerline, 55' MSL.
- Traverse way 516' from DER, 542' right of centerline, 55' MSL.
- Pole, tree beginning 752' from DER, 686' left of centerline, up to 50' AGL/90' MSL.
- Trees beginning 1113' from DER, 737' right of centerline, up to 58' AGL/98' MSL.
- Tree 1930' from DER, 905' left of centerline, 50' AGL/92' MSL.
- Tree 2313' from DER, 948' right of centerline, 58' AGL/101' MSL.
- Tree 2365' from DER, 1030' right of centerline, 59' AGL/105' MSL.
- Tree 2716' from DER, 1128' right of centerline, 70' AGL/117' MSL.
- Rwys 22, lighting beginning 5' from DER, 84' right of centerline, up to 1' AGL/43' MSL.
- Pole, tree beginning 727' from DER, 626' right of centerline, up to 34' AGL/77' MSL.
- Pole 1353' from DER, 776' left of centerline, 38' AGL/82' MSL.
- Pole 1804' from DER, 968' right of centerline, 64' AGL/109' MSL.
- Pole 2942' from DER, 1189' right of centerline, 72' AGL/117' MSL.
CON’T
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

HOUSTON, TX (CON’T)
WILLIAM P HOBBY (HOU) (CON’T)

Rwy 31L, lighting 9’ from DER, 94’ right of centerline, 1’ AGL/45’ MSL.
Lighting beginning 9’ from DER, 85’ left of centerline, up to 1’ AGL/45’ MSL.
Electrical system 135’ from DER, 482’ left of centerline, 7’ AGL/50’ MSL.
Pole 190’ from DER, 508’ left of centerline, 40’ AGL/83’ MSL.
Pole, building beginning 359’ from DER, 411’ left of centerline, up to 39’ AGL/84’ MSL.
Building 547’ from DER, 273’ right of centerline, 27’ AGL/69’ MSL.
Tree 1391’ from DER, 466’ left of centerline, 89’ MSL.
Tree 2585’ from DER, 702’ left of centerline, 83’ AGL/121’ MSL.
Rwy 31R, sign beginning 29’ from DER, 82’ left of centerline, up to 2’ AGL/47’ MSL.
Trees, pole beginning 60’ from DER, 308’ right of centerline, up to 75’ AGL/121’ MSL.
Building 499’ from DER, 525’ left of centerline, 27’ AGL/69’ MSL.

HUNTSVILLE, TX
HUNTSVILLE MUNI (UTS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

DEPARTURE PROCEDURE:
Rwy 18, climb runway heading to 700 before turning.

JACKSONVILLE, TX
CHEROKEE COUNTY (JSO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 16FEB06 (06047) (FAA)

DEPARTURE PROCEDURE:
Rwy 14, climb via heading 135° to 1200 before proceeding on course.

JASPER, TX
JASPER COUNTY/BELL FLD (JAS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 27AUG09 (21336) (FAA)

TAKEOFF OBSTACLE NOTES:
Rwy 18, trees beginning 2081’ from DER, 118’ left of centerline, up to 100’ AGL/327’ MSL.
Trees beginning 690’ from DER, 87’ right of centerline, up to 100’ AGL/329’ MSL.
Rwy 36, hangar 320’ from DER, 504’ left of centerline, 27’ AGL/236’ MSL.
Trees beginning 534’ from DER, 139’ left of centerline, up to 100’ AGL/329’ MSL.
Pole 1968’ from DER, 409’ left of centerline, 33’ AGL/262’ MSL.
Bush 94’ from DER, 476’ right of centerline, 8’ AGL/217’ MSL.
Trees beginning 514’ from DER, 119’ right of centerline, up to 100’ AGL/354’ MSL.
Hangar 1176’ from DER, 675’ right of centerline, 30’ AGL/249’ MSL.
Tower 1246’ from DER, 611’ right of centerline, 40’ AGL/258’ MSL.

KOUNTZE/SILSBEE, TX
HAWTHORNE FLD (45R)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 14FEB08 (21280) (FAA)

TAKEOFF OBSTACLE NOTES:
Rwy 13, terrain 3’ from DER, 81’ right of centerline, 0’ AGL/69’ MSL.
Trees beginning 84’ from DER, 277’ right of centerline, up to 50’ AGL/119’ MSL.
Tree 111’ from DER, 516’ left of centerline, 50’ AGL/124’ MSL.
Terrain 172’ from DER, 119’ left of centerline, 0’ AGL/74’ MSL.
Rwy 31, terrain 109’ from DER, 134’ left of centerline, 0’ AGL/74’ MSL.
Tree 536’ from DER, 457’ right of centerline, 50’ AGL/114’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LA GRANGE, TX
FAYETTE RGNL AIR CENTER (3T5)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 13SEP18 (18256) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, trees, terrain beginning 146' from DER, 389' right of centerline, up to 45' AGL/378' MSL.
Trees beginning 246' from DER, 454' right of centerline, up to 47' AGL/381' MSL.
Tree 525' from DER, 533' right of centerline, 49' AGL/383' MSL.
Tree 570' from DER, 540' left of centerline, 35' AGL/355' MSL.
Tree, building beginning 760' from DER, 527' right of centerline, up to 45' AGL/384' MSL.
Tree 769' from DER, 569' left of centerline, 43' AGL/361' MSL.
Tree 880' from DER, 524' right of centerline, 45' AGL/386' MSL.
Tree, pole, catenary beginning 926' from DER, 589' right of centerline, up to 48' AGL/390' MSL.
Tree 945' from DER, 532' left of centerline, 45' AGL/364' MSL.
Trees beginning 1005' from DER, 367' left of centerline, up to 46' AGL/365' MSL.
Trees beginning 1183' from DER, 332' right of centerline, 49' AGL/396' MSL.
Trees beginning 1319' from DER, 259' left of centerline, up to 44' AGL/369' MSL.
Tree 1570' from DER, 652' right of centerline, up to 56' AGL/406' MSL.
Tree, catenary, pole beginning 1625' from DER, 32' right of centerline, up to 56' AGL/411' MSL.
Tree 2052' from DER, 188' left of centerline, 34' AGL/381' MSL.
Tree 2111' from DER, 523' left of centerline, 42' AGL/382' MSL.
Trees beginning 2456' from DER, 51' left of centerline, up to 44' AGL/399' MSL.
Trees beginning 2599' from DER, 5' right of centerline, up to 60' AGL/415' MSL.

LA PORTE, TX
LA PORTE MUNI (T41)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 29MAY14 (14149) (FAA)
DEPARTURE PROCEDURE:
Rwy 5, climb heading 046° to 500 before proceeding on course.
Rwy 12, climb heading 121° to 500 before turning right.
Rwy 30, climb heading 301° to 700 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 5, trees beginning 334' from DER, left and right of centerline, up to 67' AGL/91' MSL.
Poles beginning 973' from DER, 387' left of centerline, up to 40' AGL/64' MSL.
Buildings beginning 319' from DER, left and right of centerline, up to 30' AGL/54' MSL.
Stack, 2.3 NM from DER, 3296' left of centerline, 300' AGL/334' MSL.
Rwy 12, poles beginning 127' from DER, left and right of centerline, up to 54' AGL/74' MSL.
Trees beginning 183' from DER, 446' right of centerline, up to 40' AGL/60' MSL.
Building 675' from DER, 411' right of centerline, up to 32' AGL/55' MSL.
Trees beginning 888' from DER, 113' right of centerline, up to 43' AGL/63' MSL.
Rwy 23, buildings beginning 30' from DER, 242' left of centerline, up to 30' AGL/54' MSL.
Buildings beginning 231' from DER, 134' right of centerline, up to 30' AGL/54' MSL.
Trees beginning 243' from DER, 494' right of centerline, up to 67' AGL/91' MSL.
Poles beginning 363' from DER, left and right of centerline, up to 40' AGL/64' MSL.
Vehicle on road beginning 493' from DER, 562' left of centerline, up to 15' AGL/39' MSL.
Trees beginning 573' from DER, 292' left of centerline, up to 67' AGL/91' MSL.
Trees beginning 1123' from DER, 69' right of centerline, up to 67' AGL/91' MSL.
Rwy 30, trees beginning 44' from DER, 331' right of centerline, up to 51' AGL/71' MSL.
Pole 114' from DER, 500' left of centerline, 37' AGL/60' MSL.
Buildings beginning 334' from DER, 355' left of centerline, up to 25' AGL/50' MSL.
Trees beginning 367' from DER, 471' left of centerline, up to 37' AGL/57' MSL.
Building 669' from DER, 415' right of centerline, 30' AGL/55' MSL.
Poles beginning 768' from DER, 427' right of centerline, up to 50' AGL/74' MSL.
Trees beginning 1048' from DER, left and right of centerline, up to 67' AGL/87' MSL.

SC-5, 30 NOV 2023 to 25 JAN 2024

SC-5
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LIBERTY, TX

LIBERTY MUNI (T78)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 29MAY14 (14149) (FAA)

DEPARTURE PROCEDURE:
- Rwy 16, climb heading 161° to 1700 before turning left.
- Rwy 34, climb heading 341° to 1000 before turning right.

TAKEOFF OBSTACLE NOTES:
- Rwy 16, hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
- Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
- Trees beginning 1166' from DER, 48' right of centerline, up to 85' AGL/155' MSL.
- Rwy 34, trees beginning 176' from DER, 262' left of centerline, up to 52' AGL/117' MSL.
- Poles beginning 427' from DER, 318' right of centerline, up to 40' AGL/105' MSL.
- Poles beginning 451' from DER, 236' left of centerline, up to 39' AGL/106' MSL.
- Trees beginning 758' from DER, 101' right of centerline, up to 101' AGL/166' MSL.
- Trees beginning 1953' from DER, 40' left of centerline, up to 96' AGL/161' MSL.

LIVINGSTON, TX

LIVINGSTON MUNI (00R)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 05MAY11 (11125) (FAA)

DEPARTURE PROCEDURE:
- Rwy 12, climb heading 125° to 1700 before proceeding on course.
- Rwy 30, climb heading 305° to 800 before turning south.

TAKEOFF OBSTACLE NOTES:
- Rwy 12, trees beginning at DER, right and left of centerline, up to 100' AGL/249' MSL.
- Trees beginning 260' from DER, 304' right of centerline, up to 100' AGL/249' MSL.
- Rwy 30, vehicle on road 10' from DER, 492' right of centerline, 10' AGL/159' MSL.
- Trees beginning 260' from DER, 304' right of centerline, up to 100' AGL/249' MSL.
- Trees beginning 1018' from DER, 40' left of centerline, up to 96' AGL/161' MSL.
- Trees beginning 1249' from DER, 233' right of centerline, up to 364' MSL.

LUFKIN, TX

ANGELINA COUNTY (LFK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 07DEC17 (17341) (FAA)

TAKEOFF OBSTACLE NOTES:
- Rwy 7, trees beginning 109' from DER, 333' right of centerline, up to 354' MSL.
- Trees beginning 358' from DER, 293' left of centerline, up to 350' MSL.
- Trees beginning 467' from DER, 452' right of centerline, up to 365' MSL.
- Trees beginning 513' from DER, 302' left of centerline, up to 381' MSL.
- Tree 1470' from DER, 328' right of centerline, 366' MSL.
- Trees beginning 1477' from DER, 483' right of centerline, up to 367' MSL.
- Trees beginning 1599' from DER, 36' left of centerline, up to 387' MSL.
- Trees beginning 1618' from DER, 274' right of centerline, up to 369' MSL.
- Trees beginning 1636' from DER, 42' right of centerline, up to 376' MSL.
- Trees beginning 1977' from DER, 44' right of centerline, up to 379' MSL.
- Trees beginning 3207' from DER, 1351' left of centerline, up to 391' MSL.
- Tree 3787' from DER, 965' left of centerline, 395' MSL.
- Trees beginning 3798' from DER, 1035' left of centerline, up to 403' MSL.
- Rwy 16, trees beginning 6' from DER, 384' left of centerline, up to 56' AGL/324' MSL.
- Tree 138' from DER, 529' right of centerline, 284' MSL.
- Trees beginning 184' from DER, 3' left of centerline, up to 79' AGL/344' MSL.
- Tree 260' from DER, 229' right of centerline, 289' MSL.
- Tree, rd (n) beginning 264' from DER, 164' right of centerline, up to 320' MSL.
- Trees beginning 1333' from DER, 388' right of centerline, up to 324' MSL.
- Trees beginning 1932' from DER, 49' right of centerline, up to 327' MSL.
- Tree 2612' from DER, 448' right of centerline, 90' AGL/342' MSL.
- Rwy 25, tree 265' from DER, 511' right of centerline, 302' MSL.
- Trees beginning 403' from DER, 283' right of centerline, up to 354' MSL.
- Trees beginning 407' from DER, 555' left of centerline, up to 299' MSL.
- Trees beginning 1375' from DER, 605' left of centerline, up to 328' MSL.
- Tree 1627' from DER, 629' left of centerline, 330' MSL.
- Tree 2655' from DER, 144' left of centerline, 353' MSL.
- Tree 3109' from DER, 417' right of centerline, 362' MSL.
- Rwy 34, sign 20' from DER, 209' left of centerline, 1' AGL/290' MSL.
- Ldg 48' from DER, 457' right of centerline, 303' MSL.
- Tree 95' from DER, 328' right of centerline, 330' MSL.
- Trees beginning 166' from DER, 314' right of centerline, up to 54' AGL/338' MSL.
- Pole and trees beginning 344' from DER, 310' right of centerline, up to 346' MSL.
- Vehicles on road 571' from DER, 3' left of centerline, 312' MSL.
- Vehicle on road beginning 579' from DER, 75' right of centerline, up to 306' MSL.
- Trees beginning 602' from DER, 166' left of centerline, up to 367' MSL.
- Trees beginning 620' from DER, 446' right of centerline, up to 354' MSL.
- Pole, tree beginning 809' from DER, 230' right of centerline, up to 361' MSL.
- Trees beginning 1249' from DER, 233' right of centerline, up to 364' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

MADISONVILLE, TX
MADISONVILLE MUNI (51R)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 31MAY12 (12152) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 18, multiple trees and power poles beginning at DER, 179' right of centerline, up to 50' AGL/310' MSL. Multiple trees and power poles beginning at DER, 200' left of centerline, up to 50' AGL/309' MSL.
Rwy 36, multiple trees and power poles beginning 99' from DER, 50' left of centerline, up to 50' AGL/341' MSL. Multiple trees beginning 50' from DER, 75' right of centerline, up to 50' AGL/346' MSL.

MARLIN, TX
MARLIN (T15)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 10JAN13 (13010) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 17, power lines beginning 411' from DER, left and right of centerline, up to 125' AGL/524' MSL.
Building 7' from DER, 155' left of centerline, 30' AGL/439' MSL.
Trees beginning 656' from DER, left and right of centerline, up to 50' AGL/449' MSL. Vehicles in parking lot 364' from DER, on centerline, up to 15' AGL/415' MSL.
Rwy 35, trees 225' from DER, 232' right of centerline, up to 50' AGL/468' MSL. Trees 181' from DER, 240' left of centerline, up to 50' AGL/459' MSL.
Trees beginning 708' from DER, left and right of centerline, up to 50' AGL/469' MSL. Vehicles 68' from DER, 347' right of centerline, up to 15' AGL/424' MSL.

MEXIA, TX
MEXIA-LIMESTONE CO (LXY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 11AUG22 (22223) (FAA)
TAKEOFF MINIMUMS:
Rwy 36, 300-2½ or std. w/min. climb of 259' per NM to 1000, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1700' prior to the DER.
TAKEOFF OBSTACLE NOTES:
Rwy 18, vehicles on road beginning 202' from DER, 400' left of centerline, up to 15' AGL/554' MSL.
Tree 419' from DER, 292' right of centerline, up to 80' AGL/619' MSL.
Rwy 36, trees beginning 179' from DER, 382' right of centerline, up to 80' AGL/619' MSL. Trees beginning 391' from DER, 315' left of centerline, up to 80' AGL/629' MSL.

NACOGDOCHES, TX
NACOGDOCHES A L MANGHAM JR RGNL (OCH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A 22JUN17 (17173) (FAA)
DEPARTURE PROCEDURE:
Rwy 36, climb heading 359° to 1000 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 36, trees 47' from DER, 503' left of centerline, 67' AGL/397' MSL.
Trees 1227' from DER, 580' left of centerline, 52' AGL/382' MSL.
Trees 2234' from DER, 939' right of centerline, up to 71' AGL/431' MSL.
Rwy 36, trees 252' from DER, 485' left of centerline, 81' AGL/401' MSL.
Trees 792' from DER, 513' left of centerline, 87' AGL/447' MSL.
Trees beginning 1957' from DER, 23' left of centerline, up to 70' AGL/470' MSL.
Trees 207' from DER, 492' right of centerline, 58' AGL/388' MSL.
Multiple OL's and trees beginning 661' from DER, 2' right of centerline, up to 74' AGL/434' MSL.
Multiple trees beginning 2290' from DER, 316' right of centerline, up to 87' AGL/487' MSL.

NAVASOTA, TX
NAVASOTA MUNI (60R)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 02FEB84 (84033) (FAA)
DEPARTURE PROCEDURE:
Rwy 35, climb runway heading to 2100 before turning eastbound.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

ORANGE, TX
ORANGE COUNTY (ORG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  22OCT09 (09295) (FAA)
TAKEOFF MINIMUMS:
- Rw yr 4, 400-1½ or std. w/ min. climb of 425' per NM to 500.
- Rw yrs 13, 31, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
- Rw yr 4, trees beginning 893' from DER, 513' right of centerline, up to 30' AGL/87' MSL.
- Trees beginning 1856' from DER, 550 left of centerline, up to 30' AGL/66' MSL.
- Transmission poles beginning 2518' from DER, left and right of centerline, up to 73' AGL/83' MSL.
- Tower 6401' from DER, 1900' left of centerline, 283' AGL/298' MSL.
- Rw yr 22, trees beginning at DER, left and right of centerline, up to 30' AGL/39' MSL.

PALACIOS, TX
PALACIOS MUNI (PSX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A  26MAY16 (16147) (FAA)
DEPARTURE PROCEDURE:
- Rw yr 8, climbing right turn heading 125° to 1800 before proceeding on course.
- Rw yr 13, climb heading 132° to 1100 before turning left.
- Rw yr 36, climb heading 357° to 1100 before turning right.
TAKEOFF OBSTACLE NOTES:
- Rw yr 31, bush 20' from DER, 296' right of centerline, 6' AGL/16' MSL.

PALESTINE, TX
PALESTINE MUNI (PSN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3  30JAN20 (20030) (FAA)
TAKEOFF MINIMUMS:
- Rw yr 9, 400-3 w/min. climb of 262' per NM to 1200 or std. w/min. climb of 316' per NM to 900 or 1000-3 for VCOA.
- VCOA:
  - Rw yr 9, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Palestine Muni at or above 1300 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
- Rw yr 9, trees beginning 201' from DER, 195' left of centerline, up to 100' AGL/381' MSL.
- Trees beginning 207' from DER, 87' right of centerline, up to 100' AGL/378' MSL.
- Trees beginning 227' from DER, 216' left of centerline, up to 100' AGL/384' MSL.
- Trees beginning 2535' from DER, 218' left of centerline, up to 100' AGL/388' MSL.
- Trees beginning 2538' from DER, 84' right of centerline, up to 100' AGL/388' MSL.
- Trees beginning 2794' from DER, 221' left of centerline, up to 100' AGL/394' MSL.
- Trees beginning 2796' from DER, 69' right of centerline, up to 100' AGL/401' MSL.
- Trees beginning 3052' from DER, 223' left of centerline, up to 100' AGL/401' MSL.
- Trees beginning 4085' from DER, 233' left of centerline, up to 100' AGL/407' MSL.
- Trees beginning 4344' from DER, 236' left of centerline, up to 100' AGL/414' MSL.
- Trees beginning 4350' from DER, 66' right of centerline, up to 100' AGL/407' MSL.
- Trees beginning 4603' from DER, 238' left of centerline, up to 100' AGL/420' MSL.
- Trees beginning 4609' from DER, 64' right of centerline, up to 100' AGL/414' MSL.
- Trees beginning 4862' from DER, 241' left of centerline, up to 100' AGL/427' MSL.
- Trees beginning 4868' from DER, 61' right of centerline, up to 100' AGL/420' MSL.
- Trees beginning 5124' from DER, 243' left of centerline, up to 100' AGL/430' MSL.
- Trees beginning 5127' from DER, 59' right of centerline, up to 100' AGL/430' MSL.
- Tree 5380' from DER, 549' left of centerline, 100' AGL/434' MSL.
- Trees beginning 5386' from DER, 56' right of centerline, up to 100' AGL/437' MSL.
- Trees beginning 5404' from DER, 54' right of centerline, up to 100' AGL/440' MSL.
- Trees beginning 5627' from DER, 855' left of centerline, up to 100' AGL/440' MSL.
- Trees beginning 5639' from DER, 249' left of centerline, up to 100' AGL/443' MSL.
- Tree 5863' from DER, 1872' right of centerline, 100' AGL/443' MSL.
- Tree 5883' from DER, 2070' left of centerline, 100' AGL/447' MSL.
- Trees beginning 5886' from DER, 251' left of centerline, up to 100' AGL/450' MSL.
- Trees beginning 5904' from DER, 51' right of centerline, up to 100' AGL/450' MSL.
- Tree 1 NM from DER, 2073' left of centerline, 100' AGL/457' MSL.
- Trees beginning 1 nm from DER, 254' left of centerline, up to 100' AGL/460' MSL.
- Trees beginning 1 NM from DER, 48' right of centerline, up to 100' AGL/457' MSL.
- Tree 1 NM from DER, 1867' right of centerline, 100' AGL/460' MSL.
- Tree 1 NM from DER, 2075' left of centerline, 100' AGL/463' MSL.
- Trees beginning 1 NM from DER, 256' left of centerline, up to 100' AGL/470' MSL.
- Trees beginning 1 NM from DER, 46' right of centerline, up to 100' AGL/463' MSL.
- Tree 1 NM from DER, 2078' left of centerline, 100' AGL/473' MSL.
- Trees beginning 1 NM from DER, 43' right of centerline, up to 100' AGL/473' MSL.
- Tree 1.1 NM from DER, 2080' left of centerline, 100' AGL/483' MSL.
CON'T
PALESTINE, TX (CON’T)

PALESTINE MUNI (PSN) (CON’T)

Rwy 9 (CON’T), Trees beginning 1.1 NM from DER, 261’ left of centerline, up to 100’ AGL/489’ MSL.

Trees beginning 1.1 NM from DER, 41’ right of centerline, up to 100’ AGL/479’ MSL.

Trees beginning 1.1 NM from DER, 950’ right of centerline, up to 100’ AGL/483’ MSL.

Tree 1.1 NM from DER, 2083’ left of centerline, 100’ AGL/493’ MSL.

Trees beginning 1.1 NM from DER, 264’ left of centerline, up to 100’ AGL/499’ MSL.

Trees beginning 1.1 NM from DER, 38’ right of centerline, up to 100’ AGL/486’ MSL.

Trees beginning 1.1 NM from DER, 36’ right of centerline, up to 100’ AGL/493’ MSL.

Tree 1.2 NM from DER, 1479’ left of centerline, 100’ AGL/509’ MSL.

Trees beginning 1.2 NM from DER, 267’ left of centerline, up to 100’ AGL/519’ MSL.

Trees beginning 1.2 NM from DER, 33’ right of centerline, up to 100’ AGL/499’ MSL.

Trees beginning 1.2 NM from DER, 409’ left of centerline, up to 100’ AGL/497’ MSL.

Trees beginning 1.2 NM from DER, 41’ right of centerline, up to 100’ AGL/493’ MSL.

Trees beginning 1.3 NM from DER, 12’ right of centerline, up to 100’ AGL/455’ MSL.

Trees beginning 1.3 NM from DER, 274’ left of centerline, up to 100’ AGL/468’ MSL.

Tree 1.4 NM from DER, 2705’ left of centerline, 100’ AGL/575’ MSL.

Trees beginning 1.4 NM from DER, 279’ left of centerline, up to 100’ AGL/601’ MSL.

Trees beginning 1.4 NM from DER, 5’ left of centerline, up to 100’ AGL/621’ MSL.

Tower 2.5 NM from DER, 345’ left of centerline, 199’ AGL/809’ MSL.

Rwy 18, tree abeam DER, 409’ left of centerline, 415’ MSL.

Tree, terrain beginning 43’ from DER, 241’ right of centerline, up to 421’ MSL.

Trees beginning 80’ from DER, 257’ left of centerline, up to 435’ MSL.

Trees beginning 158’ from DER, 166’ right of centerline, up to 447’ MSL.

Trees beginning 328’ from DER, 41’ left of centerline, up to 81’ AGL/451’ MSL.

Trees, vehicle on road beginning 481’ from DER, 478’ left of centerline, up to 449’ MSL.

Tree 594’ from DER, 352’ right of centerline, 450’ MSL.

Trees beginning 695’ from DER, 35’ right of centerline, up to 463’ MSL.

Trees beginning 1561’ from DER, 109’ right of centerline, up to 465’ MSL.

Rwy 27, trees beginning 189’ from DER, 149’ left of centerline, up to 100’ AGL/420’ MSL.

Trees beginning 195’ from DER, 133’ right of centerline, up to 100’ AGL/411’ MSL.

Rwy 36, tree, terrain beginning 134’ from DER, 404’ right of centerline, up to 439’ MSL.

Tree 178’ from DER, 403’ left of centerline, 418’ MSL.

Tree 200’ from DER, 481’ left of centerline, 421’ MSL.

Trees beginning 432’ from DER, 270’ left of centerline, up to 434’ MSL.

Trees beginning 612’ from DER, 306’ left of centerline, up to 462’ MSL.

Trees beginning 783’ from DER, 401’ left of centerline, up to 471’ MSL.

Tree 990’ from DER, 733’ right of centerline, 456’ MSL.

CALHOUN COUNTY (PKV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS.

Rwys 5, 23, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 14, vehicles on road 475’ from DER, on centerline, up to 44’ MSL.

Trees beginning 195’ from DER, 133’ right of centerline, up to 100’ AGL/411’ MSL.

Rwy 36, tree, terrain beginning 134’ from DER, 404’ right of centerline, up to 439’ MSL.

Tree 178’ from DER, 403’ left of centerline, 418’ MSL.

Tree 200’ from DER, 481’ left of centerline, 421’ MSL.

Trees beginning 432’ from DER, 270’ left of centerline, up to 434’ MSL.

Tree 828’ from DER, 509’ right of centerline, 28’ AGL/127’ MSL.

Fence 24’ from DER, 288’ left of centerline, 4’ AGL/103’ MSL.

Tree 1147’ from DER, 425’ left of centerline, 41’ AGL/140’ MSL.

VICTORIA, TX

VICTORIA RGNL (VCT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 12AUG21 (21224) (FAA)

TAKEOFF MINIMUMS.

Rwys 5, 23, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 18, building 588’ from DER, 415’ left of centerline, 18’ AGL/118’ MSL.

Industrial system 1696’ from DER, 265’ right of centerline, 61’ AGL/159’ MSL.

Rwy 36, vegetation 104’ from DER, 165’ right of centerline, 10’ AGL/116’ MSL.

WHARTON, TX

WHARTON RGNL (ARM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 27AUG09 (09239) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 32, vehicle on roads beginning 26’ from DER, 312’ right of centerline, up to 17’ AGL/113’ MSL.

Buildings beginning 40’ from DER, 338’ right of centerline, up to 26’ AGL/125’ MSL.

Poles beginning 140’ from DER, 467’ right of centerline, up to 43’ AGL/142’ MSL.

Tree 828’ from DER, 599’ right of centerline, 28’ AGL/127’ MSL.

Trees beginning 14’ from DER, 288’ left of centerline, 4’ AGL/103’ MSL.

Tree 1147’ from DER, 425’ left of centerline, 41’ AGL/140’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WINNIE/STOWELL, TX
CHAMBERS COUNTY/WINNIE STOWELL (T90)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 05OCT23 (23278) (FAA)

TAKEOFF MINIMUMS:
Rwy 17, std w/min climb of 376’/NM to 2700, or 1800-3 for VCOA.
Rwy 35, std w/min climb of 341’/NM to 2700, or 1800-3 for VCOA.

VCOA:
All runways, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Chambers County/Winnie Stowell airport at or above 1700 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 17, trees beginning 616’ from DER, 23’ left of centerline, up to 125’ MSL.
Trees beginning 1164’ from DER, 475’ right of centerline, up to 125’ MSL.
Rwy 35, trees beginning 742’ from DER, 212’ left of centerline, up to 130’ MSL.
Tree 1572’ from DER, 672’ right of centerline, 130’ MSL.
### IFR ALTERNATE AIRPORT MINIMUMS

Pilots must review the IFR Alternate Minimums Notes to determine alternate airport suitability. A **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 designation on the approach chart indicates that the approach procedure has non-standard minimums (for aircraft other than helicopters) or restrictions (for all users) for its use as an alternate.

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Minimums</th>
<th>Precision Approach</th>
<th>Non-Precision Approach</th>
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<td><strong>Standard</strong></td>
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<td>600-2</td>
<td>800-2</td>
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<td>As indicated below</td>
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<td><strong>Helicopters</strong></td>
<td>For the selected approach: Ceiling: 200’ above published ceiling</td>
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<td>Visibility: the greater of 1 SM visibility or the published visibility</td>
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<td><strong>US Military</strong></td>
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<td>(USA/USN/USAF)</td>
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**Note:** 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).

### NAME | ALTERNATE MINIMUMS
---|---
**ANGLETON/LAKE JACKSON, TX**
Texas Gulf
Coast Rgnl (Lbx). . . . . . . RNAV (GPS) Rwy 17
RNAV (GPS) Rwy 35
NA when local weather not available.

**BAY CITY, TX**
Bay City
Rgnl (Bby). . . . . . . . . . RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 31
VOR-A

1NA when local weather not available.

**BEAUMONT, TX**
Beaumont
Muni (Bmt). . . . . . . . . . RNAV (GPS) Rwy 13
Category D, 800-2¼;

**BEAUMONT/PORT ARTHUR, TX**
Jack Brooks
Rgnl (Bpt). . . . . . . . . . ILS or LOC Rwy 12
RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 16
RNAV (GPS) Rwy 30
RNAV (GPS) Rwy 34
VOR/DME Rwy 34
VOR Rwy 12

NA when local weather not available.

1ILS, LOC, Categories A, B, 900-2; Category C, D, 900-2½; Category E, 900-3.
2NA when control tower closed.
3Category E, 900-2½.
4Category B, 900-2; Category C, 900-2½; Category D, 900-2¼; Category E, 900-3.

**BRENHAM, TX**
Brenham
Muni (11R). . . . . . . . . . RNAV (GPS) Rwy 16
RNAV (GPS) Rwy 34
NA when local weather not available.
Category D, 800-2¼.

**CALDWELL, TX**
Caldwell
Muni (Rwv). . . . . . . . . . RNAV (GPS) Rwy 15
RNAV (GPS) Rwy 33
VOR/DME-A

NA when local weather not available.
Category B, 900-2.
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<thead>
<tr>
<th>NAME</th>
<th>ALTERNATE MINIMUMS</th>
<th>NAME</th>
<th>ALTERNATE MINIMUMS</th>
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<td>HOUSTON, TX</td>
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<td>CLEVELAND MUNI (6R3)</td>
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<td>LOC BC Rwy 17</td>
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<td>EAGLE LAKE, TX</td>
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**ALTERNATE MINS**

**SC-5, 30 NOV 2023 to 25 JAN 2024**
ALTERNATE MINS

NAME          ALTERNATE MINIMUMS

JACKSONVILLE, TX
CHEROKEE COUNTY (JSO)................................RN3AV (GPS) Rwy 14
      RN3AV (GPS) Rwy 32
      VOR Rwy 14
      NA when local weather not available.

JASPER, TX
JASPER COUNTY/BELL FLD (JAS)..........................RN3AV (GPS) Rwy 18
      RN3AV (GPS) Rwy 36
      NA when local weather not available.

LA GRANGE, TX
FAYETTE RGNL AIR CENTER (3T5)......................RN3AV (GPS) Rwy 16
      RN3AV (GPS) Rwy 34
      NA when local weather not available.

LUFKIN, TX
ANGELINA COUNTY (LFK).................................RN3AV (GPS) Rwy 7
      RN3AV (GPS) Rwy 16
      RN3AV (GPS) Rwy 25
      RN3AV (GPS) Rwy 34
      VOR Rwy 16
      VOR Rwy 34
      Category D, 900-2¼.

NACOGDOCHES, TX
NACOGDOCHES A L MANGHAM JR RGNL (OCH)........RN3AV (GPS) Rwy 18
      RN3AV (GPS) Rwy 36
      NA when local weather not available.

ORANGE, TX
ORANGE COUNTY (ORG).................................RN3AV (GPS) Rwy 22
      VOR/DME Rwy 22
      NA when local weather not available.

PALACIOS, TX
PALACIOS MUNI (PSX).................................RN3AV (GPS) Rwy 13
      VOR Rwy 13
      NA when local weather not available.
      Category D, 800-2¼.

PALESTINE, TX
PALESTINE MUNI (PSN).................................RN3AV (GPS) Rwy 18
      RN3AV (GPS) Rwy 36
      NA when local weather not available.
      Category C, 1000-2¼; Category D, 1000-3.

PORT LAVACA, TX
CALHOUN COUNTY (PKV).............................RN3AV (GPS) Rwy 14
      RN3AV (GPS) Rwy 32
      VOR/DME-A
      NA when local weather not available.

VICTORIA, TX
VICTORIA RGNL (VCT).................................ILS or LOC Rwy 13
      RN3AV (GPS) Rwy 13
      RN3AV (GPS) Rwy 31
      VOR Rwy 13
      VOR Rwy 31
      NA when local weather not available.
      ¹NA when control tower closed.
      ²LOC, Category D, 800-2½.
      ³Category D, 800-2½.

SC-5, 30 NOV 2023 to 25 JAN 2024

ALTERNATE MINS

NAME          ALTERNATE MINIMUMS

JACKSONVILLE, TX
CHEROKEE COUNTY (JSO).................................RN3AV (GPS) Rwy 14
      RN3AV (GPS) Rwy 32
      VOR Rwy 14
      NA when local weather not available.

JASPER, TX
JASPER COUNTY/BELL FLD (JAS)..........................RN3AV (GPS) Rwy 18
      RN3AV (GPS) Rwy 36
      NA when local weather not available.

LA GRANGE, TX
FAYETTE RGNL AIR CENTER (3T5)......................RN3AV (GPS) Rwy 16
      RN3AV (GPS) Rwy 34
      NA when local weather not available.

LUFKIN, TX
ANGELINA COUNTY (LFK).................................RN3AV (GPS) Rwy 7
      RN3AV (GPS) Rwy 16
      RN3AV (GPS) Rwy 25
      RN3AV (GPS) Rwy 34
      VOR Rwy 16
      VOR Rwy 34
      Category D, 900-2¼.

NACOGDOCHES, TX
NACOGDOCHES A L MANGHAM JR RGNL (OCH)........RN3AV (GPS) Rwy 18
      RN3AV (GPS) Rwy 36
      NA when local weather not available.

ORANGE, TX
ORANGE COUNTY (ORG).................................RN3AV (GPS) Rwy 22
      VOR/DME Rwy 22
      NA when local weather not available.

PALACIOS, TX
PALACIOS MUNI (PSX).................................RN3AV (GPS) Rwy 13
      VOR Rwy 13
      NA when local weather not available.
      Category D, 800-2¼.

PALESTINE, TX
PALESTINE MUNI (PSN).................................RN3AV (GPS) Rwy 18
      RN3AV (GPS) Rwy 36
      NA when local weather not available.
      Category C, 1000-2¼; Category D, 1000-3.
THERE ARE NO RADAR PROCEDURES FOR SOUTHEAST TEXAS (SC-5)
LAND AND HOLD-SHORT OPERATIONS (LAHSO)

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

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

<table>
<thead>
<tr>
<th>CITY/AIRPORT</th>
<th>LDG RWY</th>
<th>HOLD-SHORT POINT</th>
<th>AVBL LDG DIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOUSTON, TX 1</td>
<td>26L</td>
<td>TWY NE</td>
<td>9,010 feet</td>
</tr>
<tr>
<td>HOUSTON (IAH)</td>
<td>08R</td>
<td>TWY NP</td>
<td>9,019 feet</td>
</tr>
</tbody>
</table>
An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

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

<table>
<thead>
<tr>
<th>CITY/AIRPORT</th>
<th>HOT SPOT</th>
<th>DESCRIPTION*</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEAUMONT/PORT ARTHUR, TX</td>
<td>HS 1</td>
<td>South end of Twy B not visible from control twr.</td>
</tr>
<tr>
<td>JACK BROOKS RGNL (BPT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLLEGE STATION, TX</td>
<td>HS 1</td>
<td>Rwy holding position marking Twy B and Rwy 11.</td>
</tr>
<tr>
<td>EASTWOOD FLD (CLL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOUSTON, TX</td>
<td>HS 1</td>
<td>Ramp A and Twy C at Rwy 17R.</td>
</tr>
<tr>
<td>DAVID WAYNE HOOKS MEML (DWH)</td>
<td>HS 2</td>
<td>Twy E, Twy D, Twy K at Rwy 17L.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Twy E at Rwy 17R-35L.</td>
</tr>
<tr>
<td></td>
<td>HS 4</td>
<td>Int of Twy G and Rwy 17L-35R.</td>
</tr>
<tr>
<td></td>
<td>HS 5</td>
<td>Int of Twy H and Rwy 17L-35R.</td>
</tr>
<tr>
<td></td>
<td>HS 6</td>
<td>Twy K at Rwy 17L.</td>
</tr>
<tr>
<td>HOUSTON, TX</td>
<td>HS 1</td>
<td>Twy F west of Twy D.</td>
</tr>
<tr>
<td>CONROE/NORTH HOUSTON RGNL (CXO)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOUSTON, TX</td>
<td>HS 1</td>
<td>Twy E int with Twy A, Twy A3 from Rwy 17-35.</td>
</tr>
<tr>
<td>SUGAR LAND RGNL (SGR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WILLIAM P. HOBBY (HOU)</td>
<td>HS 1</td>
<td>Twy G at Rwy 13R.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Twy E at int Rwy 13L.</td>
</tr>
</tbody>
</table>

*See appropriate Chart Supplement HOT SPOT table for additional information.
NOTE: Chart not to scale.

CONTINUED ON FOLLOWING PAGE
ARRIVAL ROUTE DESCRIPTION

From BAYYY on track 274° to cross PUCKS between 10000 and 14000.

LANDING RUNWAY 4: From PUCKS on track 290° to cross FRDDY between 8000 and 10000 and at 240K, then on track 289° to cross FIGGG between 6000 and 7000, then on track 255° to cross SHUUG at 6000 and at 210K, then on track 222° to EMARR, then on track 222°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 13L/R: From PUCKS on track 290° to cross FRDDY between 8000 and 10000 and at 240K, then on track 289° to cross FIGGG between 6000 and 7000, then on track 278° to cross IVEEE at 6000 and at 210K, then on track 280° to VILLI, then on track 311° to ALLLY, then on track 311°. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

COLLT TRANSITION (COLLT.BELLR5)
CORPUS CHRISTI TRANSITION (CRP.BELLR5)
LMEDA TRANSITION (LMEDA.BELLR5)
SAN ANTONIO TRANSITION (SAT.BELLR5)
WEMAR TRANSITION (WEMAR.BELLR5)

NOTE: For jet and turboprop aircraft capable of 280K or greater only.
NOTE: Expect runway assignment from Houston TRACON upon initial contact.
NOTE: Jet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.

From BELLR on track 049° to cross HNTRR between 8000 and 10000.

LANDING RUNWAY 4: From HNTRR on track 084° to cross GEEEO at 6000 and at 210K. Expect ILS or LOC Rwy 4 approach.

LANDING RUNWAYS 13L/R: From HNTRR on track 052° to cross HACKT at or below 7000, then on track 052° to cross CRSTY at 6000 and at 210K, then on track 042° to cross SEUSS at 6000, then on track 042°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 22: From HNTRR on track 067° to cross AWSTN at or below 7000 and at 210K, then on track 067° to cross VILLI at 6000, then on track 093° to cross MAAHH at 6000, then on track 110°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 31L/R: From HNTRR on track 067° to cross AWSTN at or below 7000 and at 210K, then on track 067° to cross VILLI at 6000, then on track 130° to cross RJAAY at 6000, then on track 130°. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

COLLEGE STATION TRANSITION (CLL.BLUBL4): From over CLL VORTAC on CLL R-153 to BLUBL. Thence . . . .

ELLVR TRANSITION (ELLVR.BLUBL4): From over ELLVR on CLL R-334 to CLL VORTAC, then on CLL R-153 to BLUBL. Thence . . . .

JAYJO TRANSITION (JAYJO.BLUBL4): From over JAYJO on TNV R-266 to BLUBL. Thence . . . .

LEONA TRANSITION (LOA.BLUBL4): From over LOA VORTAC on LOA R-087 and CLL R-029 to CLL VORTAC, then on CLL R-153 to BLUBL. Thence . . . .

LLANO TRANSITION (LLO.BLUBL4): From over LLO VORTAC on LLO R-087 and CLL R-268 to CLL VORTAC, then on CLL R-153 to BLUBL. Thence . . . .

. . . From over BLUBL on CLL R-153 to cross SNDAY at 9000, from SNDAY fly heading 153°. Expect vectors to final approach course at or prior to SNDAY.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: DME/DME/IRU or GPS equipped Turbojet and Turboprop aircraft capable of 280K or greater must file the WAAPL (RNAV) STAR.

**CESAN VERTICAL NAVIGATION PLANNING INFORMATION**

Expect 11000

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

From CESAN on track 185° to CREPO, then on track 196° to PLEDO.

LANDING HOU RWYS 13L/R: From PLEDO on track 196° to FRITZ, then on track 196° to SSERA, then on track 244° to LLEG, then on track 239° to FRDDY, then on track 289° to FIGGG, then on track 278° to IVEE, then on track 280° to VILLI, then on track 311° to ALLLY, then on track 311°. Expect vectors to final approach course.

LANDING HOU RWY 4: From PLEDO on track 196° to FRITZ, then on track 196° to SSERA, then on track 244° to LLEG, then on track 239° to FRDDY, then on track 289° to FIGGG, then on track 255° to SHUUG, then on track 222° to EMARR, then on track 222°. Expect vectors to approach course.

LANDING HOU RWY 22: From PLEDO on track 196° to FRITZ, then on track 196° to SSERA, then on track 244° to LLEG, then on track 273° to WWILD, then on track 310° to JCNTO, then on track 310°. Expect vectors to final approach course.

LANDING HOU RWYS 31L/R: From PLEDO on track 196° to FRITZ, then on track 196° to SSERA, then on track 244° to LLEG, then on track 220° to MMOOW, then on track 274°. Expect vectors to final approach course.

ALL OTHER AIRPORTS: From CESAN on track 185° to CREPO, then on track 196° to PLEDO, then on track 196° to FRITZ, then on track 196° to SSERA, then on track 244° to KAANE, then on track 215°. Expect vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

ALEXANDRIA TRANSITION (AEX.DOOBI2)
PLANB TRANSITION (PLANB.DOOBI2)
SAWMILL TRANSITION (SWB.DOOBI2)

From DOOBI on track 217° to cross HHART at or above 10000, at or below 13000 and at or above 230K, then on track 215° to cross BOPPR at or above 9000 and at 210K, then on track 215° to cross ODISS at or above 8000 and at 210K, then on track 216° to cross BOZZZ at 8000 and at 210K.

Expect assigned instrument approach.

LOST COMMUNICATIONS

In the event of lost communication prior to runway assignment, execute the ILS RWY 26L approach.

NOTE: Speed Restriction: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by STAR.
COWBOY Transition (CVE.DRLR5):

DIESL Transition (DIESL.DRLR5):

ILEXY Transition (ILEXY.DRLR5): Austin Terminal Area Departures only.

MILLSAP Transition (MQP.DRLR5):

OILL Transition (OILL.DRLR5):

TORNN Transition (TORNN.DRLR5):

NOTE: RADAR required.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: Turbojet and turboprop aircraft capable of 280K or greater only.

NOTE: Fly the Runway 26R transition; Houston Approach control may assign a different transition on initial contact.

NOTE: Corresponding RNAV STAR is GUSHR.

NOTE: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.

NOTE: Chart not to scale.

NOTES ON THE FOLLOWING PAGE

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

From MPORT on track 136° to cross DRLLR between 13000 and 16000 and at 250K, then on track 137° to cross PTROL between 11000 and 13000, then on track 137° to cross DOMNO between 8000 and 10000 and at 240K.

**LANDING RUNWAY 26L:** From DOMNO on track 087° to cross ZOEEE at 7000 and at 210K, then on track 087°. Expect vectors to final approach course.

**LANDING RUNWAY 26R:** From DOMNO on track 087° to cross SKLER at 6000 and at 210K, then on track 087°. Expect vectors to final approach course.

**LANDING RUNWAY 27:** From DOMNO on track 136° to cross BYSUN at 6000, then on track 136° to SMOCR, then on track 087° to cross PRAYY at 6000 and at 210K, then on track 087°. Expect vectors to final approach course.

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

VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS:
- Expect 14000 280K Landing West at IAH
- Expect 13000 250K Landing East at IAH

NOTE: DME/DME/IRU or GPS equipped turbojet and turboprop aircraft must file the HTOWN/TEJAS RNAV STARs.

NOTE: SAT TRANSITION FL240 and above only.
ARRIVAL ROUTE DESCRIPTION

CORPUS CHRISTI TRANSITION (CRP.DUUUK3): From over CRP VORTAC on CRP R-015 to CHVRN, then on IAH R-236 to DUUUK. Thence . . . .

PALACIOS TRANSITION (PSX.DUUUK3): From over PSX VORTAC on PSX R-359 to GMANN, then on IAH R-236 to DUUUK. Thence . . . .

SAN ANTONIO TRANSITION (SAT.DUUUK3): From over SAT VORTAC on SAT R-095 to CHVRN, then on IAH R-236 to DUUUK. Thence . . . .

. . . From over DUUUK on IAH R-236 to BIIGG. Depart BIIGG heading 085° for vectors to final approach.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Fly the Runway 08L transition; Houston approach control may assign a different transition on initial contact.
NOTE: Corresponding RNAV STAR is ZEEKK. Expect ZEEKK when IAH is landing west.
NOTE: Except for aircraft departing SHV, PLANB transition is ATC assigned only; do not file.
NOTE: CARPR transition is ATC assigned only; do not file.
NOTE: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.

NOTE: Corresponding RNAV STAR is ZEEKK. Expect ZEEKK may assign a different transition on initial contact.
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NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

ALEXANDRIA TRANSITION (AEX.GESNR1):
CARPR TRANSITION (CARPR.GESNR1):
PLANB TRANSITION (PLANB.GESNR1):
SAWMILL TRANSITION (SWB.GESNR1):

From ZEEKK on track 229° to cross GESNR at or above 13000, at or below 16000 and at 280K.

LANDING RUNWAY 8L: From GESNR on track 226° to cross KENNN at or above 10000, at or below 11000 and at 250K, then on track 227° to cross KNGWD at or above 8000, at or below 10000 and at 240K, then on track 257° to CROSS ZOEEE at 7000 and at 240K, then on track 267° to cross CASST at 6000 and at 210K, then on track 267°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 8R/9: From GESNR on track 226° to cross KENNN at or above 10000, at or below 11000 and at 250K, then on track 227° to cross KNGWD at or above 8000, at or below 10000 and at 240K, then on track 225° to cross EDEEE at or below 8000, then on track 225° to cross REAPR at 6000, then on track 225° to cross SHIVV at 6000 and at 240K, then on track 267° to cross HOWLN at 6000 and at 210K, then on track 267°. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

HARVEY TRANSITION (HRV.GILCO5): From over HRV VORTAC on HRV R-258 to JEPEG, then on MHF R-085 to WOLDE. Thence . . . .

JEPEG TRANSITION (JEPEG.GILCO5): From over JEPEG on MHF R-085 to WOLDE. Thence . . . .

KLAMS TRANSITION (KLAMS.GILCO5): From over KLAMS on SBI R-136 to KUGLE, then on MHF R-085 to WOLDE. Thence . . . .

LAFAYETTE TRANSITION (LFT.GILCO5): From over LFT VORTAC on LFT R-230 to GIRLY, then on MHF R-085 to WOLDE. Thence . . . .

LEEVILLE TRANSITION (LEV.GILCO5): From over LEV VORTAC on LEV R-276 to JEPEG, then on MHF R-085 to WOLDE. Thence . . . .

SABINE PASS TRANSITION (SBI.GILCO5): From over SBI VOR/DME on SBI R-233 to WOLDE. Thence . . . .

SEMMES TRANSITION (SJI.GILCO5): From SJI VORTAC on SJI R-244 to TOPEZ, then on HRV R-258 to JEPEG, then on MHF R-085 to WOLDE. Thence . . . .

From over WOLDE on IAH R-111 to GILCO.

LANDING RUNWAYS 8L/R, 9:
From GILCO fly heading 265° for vectors to final approach course.

FOR ALL OTHER RUNWAYS:
Expect vectors to final approach course at or prior to GILCO.
ARRIVAL ROUTE DESCRIPTION

COWBOY TRANSITION (CVE.GUSHR3):
DIESL TRANSITION (DIESL.GUSHR3):
ILEXY TRANSITION (ILEXY.GUSHR3):
MILLSAP TRANSITION (MQP.GUSHR3):
OILL TRANSITION (OILLL.GUSHR3):
TORNN TRANSITION (TORNN.GUSHR3):

From MPORT on track 171° to cross GUSHR at 6000 and at 210K. Expect ILS or LOC Rwy 08L.
ARRIVAL ROUTE DESCRIPTION

CORPUS CHRISTI TRANSITION (CRP.HTOWN3)
LMEDA TRANSITION (LMEDA.HTOWN3)
NEHOW TRANSITION (NEHOW.HTOWN3)
SAN ANTONIO TRANSITION (SAT.HTOWN3)
WEMAR TRANSITION (WEMAR.HTOWN3)
YEEHA TRANSITION (YEEHA.HTOWN3)

From GMANN on track 040° to cross HTOWN at 9000 and at 240K, then on track 031° to cross WDLNS at 7000 and at 210K. Expect ILS or LOC RWY 8R.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

ALEXANDRIA TRANSITION (AEX.HUDZY4): From over AEX VORTAC on AEX R-235 to WAPPL, then on IAH R-067 to HUDZY. Thence. . . .

SAWMILL TRANSITION (SWB.HUDZY4): From over SWB VOR/DME on SWB R-211 to BRWCK, then on AEX R-235 to WAPPL, then on IAH R-067 to HUDZY. Thence. . . .

. . . . from over HUDZY on IAH R-067 to CLWSN, then on IAH R-067 to SWWAA, then on heading 190°. Expect RADAR vectors to final approach course.
NOTE: Chart not to scale.

NOTE: Expect runway assignment from Houston TRACON upon initial contact.
NOTE: For turbojet and turboprop aircraft capable of 280K or greater only.
NOTE: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.
NOTE: ILEXY TRANSITION for AUS terminal area departures only.

See following page for arrival routes.

CONTINUED ON FOLLOWING PAGE
ARRIVAL ROUTE DESCRIPTION

From KIDDZ on track 152° to cross SNIFY at 12000 and at 270K, then on track 152° to QTRBK, then on track 150° to cross RVEEE at or above 11000, then on track 147° to cross AAHZZ at 10000, then on track 148° to cross GLUVR at or above 9000 and at 240K.

LANDING RUNWAY 4: From GLUVR on track 127° to cross GEEO at 6000 and at 210K. Expect ILS or LOC Rwy 04 approach.

LANDING RUNWAYS 13L/R: From GLUVR on track 090° to cross CRSTY at 6000 and at 210K, then on track 042° to SEUSS, then on track 042°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 22: From GLUVR on track 090° to cross CRSTY at 6000 and at 210K, then on track 090° to VILLI, then on track 093° to MAAHH, then on track 110°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 31L/R: From GLUVR on track 090° to cross CRSTY at 6000 and at 210K, then on track 090° to VILLI, then on track 130° to RJAAY, then on track 130°. Expect RADAR vectors to final approach course.
**NOTE:** Chart not to scale.

**NOTE:** RNAV 1.
**NOTE:** DME/DME/IRU or GPS Required.
**NOTE:** Turbojet and turboprop aircraft only.
**NOTE:** Fly the Rwy 27 transition; Houston approach control may assign a different transition on initial contact.
**NOTE:** Corresponding RNAV STAR is NNCEE. Expect NNCEE when IAH is landing east.
**NOTE:** Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.
**NOTE:** GPS Required for KELPP, PEGLG and SEAGL transitions.

SEAGL transitions.

Corresponding RNAV STAR is NNCEE.

RADAR Required for Arrival routes.

See following page for Arrival routes.

(NARRATIVE ON FOLLOWING PAGE)

(CONTINUED ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

From LINKK on track 301° to cross GILL between 8000 and 10000 and at 240K.

LANDING RUNWAY 26L: From GILL on track 325° to cross GARR at 7000 and at 210K. Expect assigned instrument approach RWY 26L.

LANDING RUNWAY 26R: From GILL on track 325° to cross GARR at 7000 and at 210K, then on track 290° at 210K. Expect vectors to final approach course.

LANDING RUNWAY 27: From GILL on track 313° to cross RDFSH at 6000 and at 210K. Expect assigned instrument approach RWY 27.

NOTE: Chart not to scale.

NOTE: RADAR Required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS Required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Fly the Rwy 27 transition; Houston approach control may assign a different transition on initial contact.
NOTE: Corresponding RNAV STAR is NNCEE. Expect NNCEE when IAH is landing east.
NOTE: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.
NOTE: GPS Required for KELPP, PEGLG and SEAGL transitions.

NOTE: GPS Required for KELPP, PEGLG and SEAGL transitions.

NOTE: DME/DME/IRU or GPS Required.
NOTE: RNAV 1.
NOTE: RADAR Required.
ARRIVAL ROUTE DESCRIPTION

**BRKAT TRANSITION (BRKAT.MSCOT4):**

- From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to cross DOMNO between 8000 and 10000 and at 210K.
- From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to cross DOMNO between 8000 and 10000 and at 210K.
- From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to cross DOMNO between 8000 and 10000 and at 210K.

**CHILY TRANSITION (CHILY.MSCOT4):**

- From DOMNO on track 116° to cross SKLER at 6000 and at 210K, then on track 087°. Expect vectors to final approach course.
- From DOMNO on track 116° to cross SKLER at 6000 and at 210K, then on track 087°. Expect vectors to final approach course.
- From DOMNO on track 116° to cross SKLER at 6000 and at 210K, then on track 087°. Expect vectors to final approach course.

**DESI TRANSITION (DESI.MSCOT4):**

- From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to cross DOMNO between 8000 and 10000 and at 210K.
- From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to cross DOMNO between 8000 and 10000 and at 210K.
- From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to cross DOMNO between 8000 and 10000 and at 210K.

**ILEXY TRANSITION (ILEXY.MSCOT4):**

- From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to cross DOMNO between 8000 and 10000 and at 210K.
- From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to cross DOMNO between 8000 and 10000 and at 210K.
- From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to cross DOMNO between 8000 and 10000 and at 210K.
NOTE: Jet and turboprop aircraft only.

NOTE: Fly the runway 8R/9 transition; Houston Approach Control may assign a different transition on initial contact.

NOTE: Corresponding RNAV STAR is LINKK. Expect LINKK when IAH is landing west.

NOTE: Jet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.

NOTE: GPS required for KELPP, PEGLG and SEAGL Transitions.

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

From LINKK on track 293° to cross NNCEE at or below 15000, then on track 293° to cross KONZZ at 12000, then on track 293° to cross BEDLM at or above 10000 and at 250K.

LANDING RUNWAY 8L: From BEDLM on track 293° to cross CHKEN at or below 7000, then on track 280° to cross PRAYY at 6000, then on track 319° to cross GOVVV at 6000 and at 240K, then on track 267° to cross CASST at 6000 and at 210K, then on track 280°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 8R, 9: From BEDLM on track 293° to cross CHKEN at or below 7000, then on track 280° to cross PRAYY at 6000, then on track 267° to SMOCR, then on track 267° to cross SHIVV at 240K, then on track 267° to cross HOWLN at 6000 and at 210K, then on track 267°. Expect RADAR vectors to final approach course.
NOTE: DME/DME/IRU or GPS equipped turbojet aircraft landing IAH must file the GESNR/ZEEKK or DOOBI/SKNRD (RNAV) STAR.

NOTE: ATC assigned only for airports other than KIAH, KDWH and KCXO, T78 and 6R3.

ARRIVAL ROUTE DESCRIPTION

ALEXANDRIA TRANSITION (AEX.OHII04):
From over AEX VORTAC via AEX R-251 to LYMBO INT, then on IAH R-046 to OHII0 INT. Thence . . . .

LUFKIN TRANSITION (LFK.OHII04):
From over LFK VORTAC on LFK R-159 to ZEEKK INT, then on IAH R-046 to OHII0 INT. Thence . . . .

GEORGE BUSH INT CNTL AIRPORT
/ HOUSTON (IAH):
. . . . from OHII0 INT on IAH R-046 to PNUUT. Thence . . . .

LANDING RUNWAYS 8L/R or 9:
. . . . fly heading 265° for vectors to final approach course.

LANDING ALL OTHER RUNWAYS:
. . . . expect vectors to final approach course at or prior to PNUUT.

FOR ALL OTHER AIRPORTS:
. . . . from OHII0 INT on IAH R-046 to PNUUT. Expect vectors to final approach course at or prior to PNUUT.
ARRIVAL ROUTE DESCRIPTION

EATIT TRANSITION (EATIT.PIEGY1)

FFSSH TRANSITION (FFSSH.PIEGY1)

LANDING ALL AIRPORTS: From WHAEL on track 027° to cross PIEGY at 7000, then on track 027° to COWZZ, then on track 027° to cross MUTWO at 5000, then on track 070°. Expect RADAR vectors to final approach course.
NOTE: Chart not to scale.

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

NOTE: Corresponding RNAV STAR is BAYYY. Expect BAYYY when HOU is landing 4/13.

NOTE: For turbojet and turboprop aircraft capable of 280K or greater only. Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.
ARRIVAL ROUTE DESCRIPTION

From BAYYY on track 274° to cross PUCKS between 8000 and 11000.

LANDING RUNWAY 22: From PUCKS on track 310° to cross SQRLL at or above 8000, then on track 310° to cross KEMAH at 6000, then on track 310° to cross WWILD at 6000 and at 210K, then on track 310° to cross JCNTO at 4000, then on track 310°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 31L/R: From PUCKS on track 274° to cross BLEAU at or above 8000, then on track 274° to cross MMOOW at 6000 and at 210K, then on track 274°. Expect RADAR vectors to final approach course.
RIICE NINE ARRIVAL

RIICE NINE ARRIVAL

BILLEE TRANSITION (BILLEE.RIICE9): From over BILLEE on TNV R-334 to HOMRN, then on IAH R-313 to RIICE. Thence. . . .

COLLEGE STATION TRANSITION (CLL.RIICE9): From over CLL VORTAC on CLL R-076 to BAZBL, then on IAH R-313 to RIICE. Thence. . . .

COWBOY TRANSITION (CVE.RIICE9): From over CVE VOR/DME on CVE R-160 to TORNN, then on TNV R-334 to HOMRN, then on IAH R-313 to RIICE. Thence. . . .

ILEXY TRANSITION (ILEXY.RIICE9): From over ILEY on CLL R-238 to CLL VORTAC, then on CLL R-076 to BAZBL, then on IAH R-313 to RIICE. Thence. . . .

ILEXY TRANSITION (ILEXY.RIICE9): From over ILEY on CLL R-238 to CLL VORTAC, then on CLL R-076 to BAZBL, then on IAH R-313 to RIICE. Thence. . . .

LEONA TRANSITION (LOA.RIICE9): From over LOA VORTAC on LOA R-181 to BAZBL, then on IAH R-313 to RIICE. Thence. . . .

LLANO TRANSITION (LLO.RIICE9): From over LLO VORTAC on LLO R-081 to HOMRN, then on IAH R-313 to RIICE. Thence. . . .

MILLSAP TRANSITION (MQP.RIICE9): From over MQP VORTAC on MQP R-124 to TORNN, then on TNV R-334 to HOMRN, then on IAH R-313 to RIICE. Thence. . . .

TORN TRANSITION (TORN.RIICE9): From over TORN on TNV R-334 to HOMRN, then on IAH R-313 to RIICE. Thence. . . .

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

(CONTINUED ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

GEORGE BUSH INTCNTL/ HOUSTON (IAH):
. . . . Since over RIICE on IAH R-313 to BRKMN, to MLRRR, to LYYTE.

LANDING RUNWAY 26L/R or 27:
. . . . Fly heading 085° for vectors to final approach course.

LANDING ALL OTHER RUNWAYS:
. . . . Expect vectors to final approach course at or prior to LYYTE.

FOR ALL OTHER AIRPORTS:
. . . . From over RIICE on IAH R-313 to BRKMN, thence as depicted to LYYTE expect vectors to final approach course at or prior to LYYTE.
NOTE:  Chart not to scale.

**SKNRD FOUR ARRIVAL (RNAV)**

**NOTE:**  RADAR required.
**NOTE:**  RNAV 1.
**NOTE:**  DME/DME/IRU or GPS required.
**NOTE:**  Turbojet and turboprop aircraft only.
**NOTE:**  Fly the Runway 8L transition; Houston Approach Control may assign a different transition on initial contact.
**NOTE:**  Corresponding RNAV STAR is DOOBI. Expect DOOBI when IAH is landing west.
**NOTE:**  Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.
ARRIVAL ROUTE DESCRIPTION

ALEXANDRIA TRANSITION (AEX.SKNRD4):

PLANB TRANSITION (PLANB.SKNRD4):

SAWMILL TRANSITION (SWB.SKNRD4):

From DOOBI on track 242° to cross SKNRD at or below 16000 and at 280K.

LANDING RUNWAY 8L: From SKNRD on track 242° to cross BFFET at or above 12000 and, at or below 14000 and at 250K, then on track 242° to cross KNGWD at or above 8000, at or below 10000 and at 240K, then on track 257° to cross ZOEEE at 7000 and at 240K, then on track 267° to cross CASST at 6000 and at 210K, then on track 267°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 8R, 9: From SKNRD on track 242° to cross BFFET at or above 12000, at or below 14000 and at 250K, then on track 242° to cross KNGWD at or above 8000, at or below 10000 and at 240K, then on track 225° to cross EDEEE at or below 8000, then on track 225° to cross REAPR at 6000, then on track 225° to cross SHIVV at 6000 and at 240K, then on track 267° to cross HOWLN at 6000 and at 210K, then on track 267°. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

COLLEGE STATION TRANSITION (CLL.SNIFY1): From over CLL VORTAC on CLL R-147 to KIDDZ. Thence....

ELLVR TRANSITION [ELLVR.SNIFY1]: From over ELLVR on CLL R-334 to CLL VORTAC, then on CLL R-147 to KIDDZ. Thence....

LLANO TRANSITION (LLO.SNIFY1): From over LLO VORTAC on LLO R-087 and CLL R-268 to CLL VORTAC, then on CLL R-147 to KIDDZ. Thence....

....from KIDDZ on CLL R-147 to cross SNIFY at 12000. Expect vectors to final approach course at or prior to SNIFY.
SOUL ONE ARRIVAL (RNAV)

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: ATC assigned only.
NOTE: Expect runway assignment from Houston TRACON upon initial contact.
NOTE: Turbojet and turboprop aircraft capable of 280K or greater only.
NOTE: GPS required for KELPP, PEGLG, and SEAGL transitions.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

From BAYYY on track 304° to SOULL at 240K.

LANDING RUNWAY 8L: From SOULL on track 304° to PHLLY at 240K, then on track 306° to CHKEN, then on track 280° to PRAYY, then on track 319° to GOVVV, then on track 267° to DOMNO at 210K, then on track 267° at 210K. Expect vectors to final approach course.

LANDING RUNWAY 8R: From SOULL on track 304° to PHLLY at 240K, then on track 306° to CHKEN, then on track 280° to PRAYY, then on track 267° to SMOCR, then on track 267° to SHIVV, then on track 267° to HOWLN at 210K, then on track 267°. Expect vectors to final approach course.

LANDING RUNWAY 9: From SOULL on track 304° to PHLLY at 240K, then on track 306° to CHKEN, then on track 280° to PRAYY, then on track 267° to SMOCR, then on track 267° to SHIVV, then on track 267° to HOWLN at 210K, then on track 267°. Expect vectors to final approach course.

LANDING RUNWAY 26L: From SOULL on track 338° to GARRR at 210K. Expect ILS or LOC Rwy 26L.

LANDING RUNWAY 26R: From SOULL on track 338° to GARRR at 210K, then on track 290° at 210K. Expect vectors to final approach course.

LANDING RUNWAY 27: From SOULL on track 336° to RDFSH at 210K. Expect ILS or LOC Rwy 27.
NOTE: Jet and turboprop aircraft only.

NOTE: Fly the Rwy 27 transition; Houston Approach Control may assign a different transition on initial contact.

NOTE: Corresponding RNAV STAR is HTOWN. Expect HTOWN when IAH is landing east.

NOTE: Jet aircraft descend via mach number until 280K, if unable, advise ATC.

(CONTINUED ON FOLLOWING PAGE)
From GMANN on track 058° to cross CITTE at or below 16000, then on track 059° to cross TEJAS between 12000 and 14000 and at 250K.

LANDING RUNWAY 26L: From TEJAS on track 059° to cross RIDLR at or below 10000, then on track 059° to cross BEEEP at or below 8000, then on track 059° to cross HOWLN at 6000 and at 240K, then on track 087° to SMOCR, then on track 087° to cross PRAYY at 6000 and at 210K, then on track 087°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 26R: From TEJAS on track 059° to cross RIDLR at or below 10000, then on track 059° to cross BEEEP at or below 8000, then on track 059° to cross HOWLN at 6000 and at 240K, then on track 034° to ZOEEE, then on track 087° to cross SKLER at 6000 and at 210K, then on track 087°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 27: From TEJAS on track 059° to cross RIDLR at or below 10000, then on track 059° to cross BEEEP at or below 8000, then on track 059° to cross HOWLN at 6000 and at 240K, then on track 087° to SHIVV, then on track 087° to SMOCR, then on track 087° to cross PRAYY at 6000 and at 210K, then on track 087°. Expect RADAR vectors to final approach course.
NOTE: Turbojet and turboprop aircraft only.
NOTE: ATC assigned only for aircraft landing HOU.
ARRIVAL ROUTE DESCRIPTION

BBURT TRANSITION (BBURT.TKNIQ3)

From TKNIQ on track 301° to DOCCC.

LANDING HOU RUNWAY 4: From DOCCC on track 302° to FRDDY, then on track 289° to FIGGG, then on track 255° to SHUUG, then on track 222° to EMARR, then on track 220°. Expect RADAR vectors to final approach course.

LANDING HOU RUNWAYS 13L/R: From DOCCC on track 302° to FRDDY, then on track 289° to FIGGG, then on track 278° to IVEEE, then on track 280° to VILLI, then on track 311° to ALLY, then on track 311°. Expect RADAR vectors to final approach course.

LANDING HOU RUNWAY 22: From DOCCC on track 323° to KEMAH, then on track 310°. Expect RADAR vectors to final approach course.

LANDING HOU RUNWAYS 31L/R: From DOCCC on track 288° to MMOOW, then on track 274°. Expect RADAR vectors to final approach course.

LANDING AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T0O, T41, 54T: From DOCCC on track 288° to MMOOW, then on track 253°. Expect RADAR vectors to final approach course.
NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS equipped turbojet and turboprop aircraft landing HOU must file the BELLR (RNAV) STAR.

NOTE: DME required.

NOTE: DME required for holding at HYDRL.

CORPORUS CHRISTI TRANSITION (CRP.TSHRT2): From over CRP VORTAC on CRP R-029 to HYDRL, then on IAH R-221 to BELLR. Thence . . . .

PALACIOS TRANSITION (PSX.TSHRT2): From over PSX VORTAC on PSX R-011 to BELLR. Thence . . . .

SAN ANTONIO TRANSITION (SAT.TSHRT2): From over SAT VORTAC on SAT R-100 to HYDRL, then on IAH R-221 to BELLR. Thence . . . .
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS equipped turbojet and turboprop aircraft landing HOU must file the BELLR (RNAV) STAR.
NOTE: DME required.

ARRIVAL ROUTE DESCRIPTION

.... from over BELLR on IAH R-221 to cross TSHRT at 12000. From TSHRT fly heading 075° for vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

BRKAT TRANSITION (BRKAT.TTORO3):
CHLLY TRANSITION (CHLLY.TTORO3):
DIESL TRANSITION (DIESL.TTORO3):
ILEXY TRANSITION (ILEXY.TTORO3):

From SUUNR on track 159° to cross TTORO at 8000 and at 210K. Expect ILS or LOC RWY 8R.

NOTE: Chart not to scale.
NOTE: Expect runway assignment from Houston TRACON upon initial contact.

NOTE: For turbojet and turboprop aircraft capable of 280K or greater only.

NOTE: Turbojet aircraft descend via MACH number until intercepting 280K. Maintain 280K until slowed by the STAR.

NOTE: ZEBBB TRANSITION ATC assigned only.

NOTE: Except for aircraft departing SHV, PLANB TRANSITION is ATC assigned only. Do not file.

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

See following page for Arrival Routes.
HOUSTON APP CON
120.05 379.1
EFD ATIS
135.575 269.9
HOU D ATIS
124.6
SGR ATIS*
118.125
TME ATIS
119.525

NOTE: Expect runway assignment from Houston TRACON upon initial contact.
NOTE: For turbojet and turboprop aircraft capable of 280K or greater only.
NOTE: Turbojet aircraft descend via MACH number until intercepting 280K. Maintain 280K until slowed by the STAR.

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

HOUSTON EXEC
WEST HOUSTON
SUGAR LAND RGNL
WHARTON RGNL
HOUSTON/SOUTHWEST
TEXAS GULF COAST RGNL
BAY CITY RGNL
PEARLAND RGNL

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

From WAPPL on track 250° to cross WLMOR between 15000 and FL210, then on track 250° to HUDZY, then on track 250° to cross CLWSN between 12000 and 14000 and at 280K, then on track 250° to cross SWWAA between 10000 and 12000 and at 250K, then on track 191° to cross PUSHN at or above 8000.

LANDING HOU RUNWAY 4: From PUSHN on track 192° to cross BUGZY at or below 10000, then on track 192° to cross PRTCH at or below 7000, then on track 177° to cross SHUUG at 6000 and at 210K, then on track 222° to EMARR, then on track 222°. Expect RADAR vectors to final approach course.

LANDING HOU RUNWAYS 13L/R: From PUSHN on track 192° to cross BUGZY at or below 10000, then on track 192° to cross PRTCH at or below 7000, then on track 200° to cross MOLLR at 6000 and at 210K, then on track 251° to VILU, then on track 311° to ALLLY, then on track 311°. Expect RADAR vectors to final approach course.

LANDING HOU RUNWAY 22: From PUSHN on track 192° to cross BUGZY at or below 10000, then on track 175° to cross RTWNG at 7000 and at 210K, then on track 111° to MAAHH, then on track 111°. Expect RADAR vectors to final approach course.

LANDING HOU RUNWAYS 31L/R: From PUSHN on track 192° to cross BUGZY at or below 10000, then on track 192° to cross PRTCH at or below 7000, then on track 126° to cross UBETR at 6000 and at 210K, then on track 126°. Expect RADAR vectors to final approach course.

LANDING GLS, TME, AXH, HPY, T41, S4T, T00, SGR, ARM, BYY, LBX, LVJ, IWS, EFD: From WAPPL on track 250° to cross WLMOR between 15000 and FL210, then on track 250° to HUDZY, then on track 250° to cross CLWSN between 12000 and 14000 and at 280K, then on track 250° to cross SWWAA between 10000 and 12000 and at 250K, then on track 191° to cross PUSHN at or above 8000, then on track 192° to cross BUGZY at or below 10000, then on track 175° to cross PLKTN at 8000, then on track 175°. Expect RADAR vectors to final approach course.
NOTE: Chart not to scale.

PLANB

CARPR

172°

191°

194°

216°

211°

244°

245°

224°

225°

209°

ALEXANDRIA

SWB

SAWMILL

185°

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209°

10 NM

20 NM

044°

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ARRIVAL ROUTE DESCRIPTION

ALEXANDRIA TRANSITION (AEX.ZEEKK2)
CARPR TRANSITION (CARPR.ZEEKK2)
PLANB TRANSITION (PLANB.ZEEKK2)
SAWMILL TRANSITION (SWB.ZEEKK2)

From ZEEKK on track 211° to cross BLUUZ at or below 10000 and at 240K.

LANDING RUNWAY 26L: From BLUUZ on track 191° to cross ODISS at or above 8000 and at 210K, then on track 216° to cross BOZZZ at 8000 and at 210K. Expect ILS or LOC RWY 26L approach.

LANDING RUNWAY 26R: From BLUZZ on track 194° to cross TABRR between 6000 and 7000, then on track 194° to cross HOOTI at 6000 and at 210K. Expect ILS or LOC RWY 26R approach.

LANDING RUNWAY 27: From BLUUZ on track 172° to cross PPUNK at or below 8000, then on track 172° to cross VZEEE at or above 6000, then on track 172° to SOFFT, then on track 185° to cross CLSIK at 4000 and at 210K. Expect ILS or LOC RWY 27 approach.
RNAV (GPS) RWY 12
CHAMBERS COUNTY (T\(\theta\))

HOUSTON APP CON
134.45 284.0

CTAF
122.9 \(\theta\)

RADAR required. Use William P Hobby altimeter setting. GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA. Procedure NA at night. Rwy 12 helicopter visibility reduction below 1 SM NA. Circling NA to Rwys 17 and 35.

MISSED APPROACH: Climb to 3000 direct GOLBY WP and hold.

RNAV (GPS) RWY 12

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LNAV MDA</td>
<td>560-1</td>
<td>539 (600-1)</td>
<td>560-1(\frac{1}{2})</td>
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<td>CIRCLING</td>
<td>660-1</td>
<td>639 (700-1)</td>
<td>700-2</td>
<td>NA</td>
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</tbody>
</table>

29°46'N-94°40'W

SC-5, 30 NOV 2023 to 25 JAN 2024
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 17, 35: NA - Environmental
Rwys 12, 30: Standard with minimum climb of 500' per NM to 540.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 124° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 30: Climb on heading 304° to 540 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 124° to 540, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 30: Climb on heading 304° to 540, for RADAR vectors to BORRN, thence. . . .

. . . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 12:** Climb on heading 124° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 30:** Climb on heading 304° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**BOWFN TRANSITION (HOODO7.BOWFN)**  
**CFOOD TRANSITION (HOODO7.CFOOD)**  
**HARVEY TRANSITION (HOODO7.HRV)**  
**LEEVILLE TRANSITION (HOODO7.LEV)**  
**SBIRD TRANSITION (HOODO7.SBIRD)**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 124° to 540 for RADAR vectors to RENNK, thence . . . .

TAKEOFF RUNWAY 30: Climb on heading 304° to 540 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)
RNAV-1 DME/DME/IRU or GPS.
RADAR required.

*NOTE: Chart not to scale.*

**TAKEOFF MINIMUMS**
Rwys 17, 35: NA - Environmental.
Rwys 12, 30: Standard with minimum climb of 500' per NM to 540.

**TOP ALTITUDE:**
ASSIGNED BY ATC

**SC-5, 30 NOV 2023 to 25 JAN 2024**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 124° to 540, for RADAR vectors to KARRR, thence . . . .

TAKEOFF RUNWAY 30: Climb on heading 304° to 540, for RADAR vectors to KARRR, thence . . . .

. . . . on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
CTAF
122.9

HOUSTON DEP CON
134.45  284.0

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

NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 17, 35: NA - Environmental.
Rwys 12, 30: Standard with minimum climb of 500' per NM to 540.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 124° to 540 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 30: Climb on heading 304° to 540 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
NOTE: Chart not to scale.

### DEPARTURE ROUTE DESCRIPTION

#### TAKEOFF RUNWAY 12:
Climb on heading 124° to 540, for RADAR vectors to MMALT, thence...

#### TAKEOFF RUNWAY 30:
Climb on heading 304° to 540, for RADAR vectors to MMALT, thence...

. . . . . . on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

#### GUSTI TRANSITION (MMALT7,GUSTI)
LAKE CHARLES TRANSITION (MMALT7.LCH)
WHITE LAKE TRANSITION (MMALT7.LLA)

NOTE: GUSTI and LCH Transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41 and 54T.

### TAKEOFF MINIMUMS
Rwys 17, 35: NA-Environmental.
Rwys 12, 30: Standard with minimum climb of 500' / NM to 540.

NOTE: Chart not to scale.
TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwys 17, 35: NA - Environmental.
Rwys 12, 30: Standard.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
CHAMBERS COUNTY (TWho)
ANAHUAC, TEXAS

NOTE: Chart not to scale.

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 124° to 540 for RADAR vectors to KNTKY, thence. . .
TAKEOFF RUNWAY 30: Climb on heading 304° to 540 for RADAR vectors to KNTKY, thence . . .

. . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JBULL TRANSITION (STRYA8.JBULL)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 124° to 540 for RADAR vectors to BBYSE, thence...

TAKEOFF RUNWAY 30: Climb on heading 304° to 540 for RADAR vectors to BBYSE, thence...

...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WTSON TRANSITION (STYCK8.WTSON)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF MINIMUMS:
WATFO SIX DEPARTURE (RNAV) 12:
Rwy 17, 35: NA - Environmental. Takeoff minimums for runway 17.
Rwy 12, 30: Standard with minimum climb of 500' / NM to 540.

NOTE: Chart not to scale.

Takeoff Runway 12: Climb on heading 124° to 540, for RADAR vectors to WATFO, hence...on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

Takeoff Runway 30: Climb on heading 304° to 540, for RADAR vectors to WATFO, hence...on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude.

NOTE: Chart not to scale.

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

CHAMBERS COUNTY (TW)
ANAHUAC, TEXAS

Ankrr Transition (WATFO6.ANKRR)
Kelp Transition (WATFO6.KELPP)
Musyl Transition (WATFO6.MUSYL)

SC-5, 30 NOV 2023 to 25 JAN 2024
WYLSN EIGHT DEPARTURE (RNAV)

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

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

TAKEOFF MINIMUMS
Rwy 17, 35: NA - Environmental.
Rwy 12, 30: Standard with minimum climb of 500’ per NM to 540.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 124° to 540 for RADAR vectors to WYLSN, thence . . .
TAKEOFF RUNWAY 30: Climb on heading 304° to 540 for RADAR vectors to WYLSN, thence . . .

. . . on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)

NOTE: Chart not to scale.
For inop ALS, increase S-LOC 17 Cat C/D visibility to 2/3 SM. Circling NA east of Rwy 17-35.

Procedure NA for arrival on VUH VOR/DME airway radials 243 CW 273.
**RNAV (GPS) RWY 35**

**TEXAS GULF COAST RGNL (LBX)**

**Amdt 2B  26MAR20**

**29°07’N-95°28’W**

<table>
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<th>HOUSTON APP CON</th>
<th>CLNC DEL</th>
<th>UNICOM</th>
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<td>119.925</td>
<td>134.45 284.0</td>
<td>125.2</td>
<td>123.0 (CTAF)</td>
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</table>

**KEEDS**

**PLOT**

**DELVE**

**MISSED APPROACH:** Climb to 2000 direct PLOT and right turn via 104° track to DELVE and hold.

**DME/DME RNP-0.3 NA.** When local altimeter setting not received, use William P. Hobby altimeter setting and increase all DAs/MDAs 100 feet and Circling Cat D visibility 1/2 SM. Baro-VNAV and VDP NA when using William P. Hobby altimeter setting. Circling NA east of Rwy 17-35.

**EGNOS/L5 (WAAS)**

**APP CRS 355°**

**Rwy Idg 25**

**Apt Elev 25**

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**SECTION 5, 30 NOV 2023 to 25 JAN 2024**
NOTE: RADAR required.

NOTE: The following TRANSITIONS are ATC assigned only. Do not file.

CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).

MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . .on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
NOTE: Radar required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS.
Rwys 17, 35: Standard with minimum climb of 500' per NM to 540.

TAKEOFF RUNWAY 17: Climb on heading 175° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 35: Climb on heading 355° to 540 for RADAR vectors to DREMR, thence . . . .

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
NOTE: CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EF,D, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 175° to 540, for RADAR vectors to BORRN, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 355° to 540, for RADAR vectors to BORRN, thence. . . .

. . . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
NOTE: RADAR required.
NOTE: For aircraft destined KMEM or filed via Q32 or J42.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . .on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.
NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF ALL RUNWAYS:** When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence... .

. . . . on IAH R-358 to cross GIFFA INT at or above 10000.
HOODO SEVEN DEPARTURE (RNAV)

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17:** Climb on heading 175° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 35:** Climb on heading 355° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

**NOTE:** Chart not to scale.

**NOTE:** Top altitude: Assigned by ATC.

**NOTE:** RNAV 1.

**NOTE:** Radar required.

**NOTE:** ATC assigned only.

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

**NOTE:** For non-GPS equipped aircraft, LCH, LLA, DME/DME/IRU or GPS required.

**NOTE:** ATC assigned only.

**NOTE:** RADAR required.

**NOTE:** RNAV 1.

---

**TAKING OFF MINIMUMS**

Runway 17, 35: Standard with minimum climb of 500' per NM to 540.

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**DEPARTURE ROUTE DESCRIPTION**

**HOODO SEVEN DEPARTURE (RNAV)**

**HOODO07.HOODO**

**HOODO SEVEN DEPARTURE (RNAV)**

**HOODO07.HOODO**

**07OCT21**

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**SC-5, 30 NOV 2023 to 25 JAN 2024**

**TEXAS GULF COAST RGNL (LBX)**

**INGLETON/LAKE JACKSON, TEXAS**

**HOODO07.HOODO**

**HOODO SEVEN DEPARTURE (RNAV)**

---
INDIE EIGHT DEPARTURE (RNAV)

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: TPAKK TRANSITION: For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF MINIMUMS
Rwys 17, 35: Standard with minimum climb of 500’ per NM to 540.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 175° to 540 for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 35: Climb on heading 355° to 540 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

NOTE: Chart not to scale.

INDIE EIGHT DEPARTURE (RNAV)
NOTE: RADAR required.
NOTE: JUNCTION TRANSITION: For aircraft overflying JCT VORTAC on J2, J15 or J86.
NOTE: CENTEX TRANSITION: ATC assigned only for aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.
NOTE: CORPUS CHRISTI TRANSITION: ATC assigned only.
NOTE: LAREDO TRANSITION: ATC assigned only.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

. . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
RNAV-1 DME/DME/IRU or GPS.
RADAR required.

NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwys 17, 35: Standard with minimum climb of 500' per NM to 540.

TOP ALTITUDE: ASSIGNED BY ATC

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 175° to 540, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 35: Climb on heading 355° to 540, for RADAR vectors to KARRR, thence. . . .

. . . on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPORUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
NOTE: Chart not to scale.

(LEONA FOUR DEPARTURE
(LOA4.LOA) 07OCT21

TOP ALTITUDE: ASSIGNED BY ATC

ARDMORE
116.7 ADM
Chan 114
N34°12.69’ - W97°10.10’
L-17, H-6

FL180
R-110
336°
(172)

RANGER
115.7 FUZ
Chan 104
N32°53.37’ - W97°10.77’
L-17, H-6

DOLEY
N32°11.35’ - W96°13.09’
WLLIS
N30°32.08’ - W95°39.10’

TULSA
114.4 TUL
Chan 91
N36°11.78’ - W95°47.29’

WACO
115.3 ACT
Chan 100
N31°39.74’ - W97°16.14’

CEDAR CREEK
114.8 CQY
Chan 98
N32°11.14’ - W96°14.05’

RANGER TRANSITION: For aircraft overflying west/northwest of the DFW terminal area FL240 and above.

ARDMORE TRANSITION: For aircraft overflying north/northwest of the DFW terminal area FL240 and above.

BONHAM TRANSITION: For aircraft overflying/landing TUL, transitions via FUZ (LOA4.FUZ), ADM (LOA4.ADM), or BYP (LOA4.BYP). 

NOTE: RADAR required.

NOTE: Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LEONA SID must file one of the published transitions via FUZ (LOA4.FUZ), ADM (LOA4.ADM), or BYP (LOA4.BYP).

NOTE: RANGER TRANSITION: For aircraft overflying west/northwest of the DFW terminal area FL240 and above.

NOTE: ARDMORE TRANSITION: For aircraft overflying north/northwest of the DFW terminal area FL240 and above.

NOTE: BONHAM TRANSITION: For aircraft overflying/landing TUL, VORTAC FL240 and above.

NOTE: Chart not to scale.

(TOPIC: PRIMARY ALTITUDE: ASSIGNED BY ATC)

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

TOP ALTITUDE:
ASSIGNED BY ATC

LUFKIN
112.1 LFK
Chan 58
N31°09.75'
W94°43.01'

SUSHI
N30°35.48'
W95°04.39'

COLET
N30°15.53'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

LITTLE ROCK
113.9 LIT
Chan B6
N34°40.66'
W92°10.83'
L-18, H-6

SKKIP
N31°14.91'
W94°39.45'

HUMBLE
116.6 IAH
Chan 113

DAISETTA
116.9 DAS
Chan 116

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

...on IAH R-013 to COLET INT, then right turn on LFK R-023 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

LURIC EIGHT DEPARTURE (RNAV)

TAKEOFF MINIMUMS
Rwys 17, 35: Standard with minimum climb of 500’ per NM to 540.

TAKEOFF RUNWAY 17: Climb on heading 175° to 540 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 35: Climb on heading 355° to 540 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 175° to 540 for RADAR vectors to KNTKY, thence . . .

TAKEOFF RUNWAY 35: Climb on heading 355° to 540 for RADAR vectors to KNTKY, thence . . .

. . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JBUll TRANSITION (STRYA8.JBUll)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 175° to 540 for RADAR vectors to BBYSE, thence. . .

TAKEOFF RUNWAY 35: Climb on heading 355° to 540 for RADAR vectors to BBYSE, thence. . .

. . . on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WTSON TRANSITION (STYCK8.WTSON)

NOTE: Chart not to scale.
(WATFO6.WATFO) 23222

WATFO SIX DEPARTURE (RNAV)

ASOS
119.925
CTAF
123.0
CLNC DEL
125.2
HOUSTON DEP CON
134.45 284.0

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

TOP ALTITUDE:
ASSIGNED BY ATC

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 175° to 540, for RADAR vectors to WATFO, thence. . . .
TAKEOFF RUNWAY 35: Climb on heading 355° to 540, for RADAR vectors to WATFO, thence. . . .

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6.ANKRR)
KELPP TRANSITION (WATFO6.KELPP)
MUSYL TRANSITION (WATFO6.MUSYL)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 175° to 540 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 355° to 540 for RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)
RNAV (GPS) RWY 13
BAY CITY RGNL (BYY)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Rwy 13, 31 helicopter visibility reduction below 1 SM NA. RADAR required. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Palacios altimeter setting and increase all DA 63 feet and all MDA 80 feet; increase LNAV visibility Cat C ½ mile. VDP and Baro-VNAV N/A when using Palacios altimeter setting.

AWOS-3
118.075

HOUSTON CENTER
128.6 360.8

UNICOM
122.8 (CTAF)

No PT for arrival at COSDI on V13 southwest bound.

Procedure NA for arrival on PSX VORTAC airway radials 009 CW 060.

Category

<table>
<thead>
<tr>
<th>LPV DA</th>
<th>LNAV/VNAV DA</th>
<th>LNAV MDA</th>
<th>CIRCLING</th>
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For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Rwy 13, 31 helicopter visibility reduction below 1 SM NA. RADAR required. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Palacios altimeter setting and increase all DA 63 feet and all MDA 80 feet; increase LNAV visibility Cat C ½ mile. VDP and Baro-VNAV N/A when using Palacios altimeter setting.

No PT for arrival at COSDI on V13 southwest bound.

Procedure NA for arrival on PSX VORTAC airway radials 009 CW 060.

Category

<table>
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<tr>
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</tbody>
</table>
RNAV (GPS) RWY 31
BAY CITY RGNL (BYY)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). RWy 13, 31 helicopter visibility reduction below 1 SM NA.

DME/DME RNP-0.3 NA. When local altimeter setting not received, use Palacios altimeter setting and increase all DA 63 feet and all MDA 80 feet; increase LNAV visibility Cat C ¼ mile. VDP and Baro-VNAV N/A when using Palacios altimeter setting.

MISSED APPROACH: Climb to 2000 direct COSDI and hold.

Procedure NA for arrival on PSX VORTAC airway radials 009 CW 060.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). RWy 13, 31 helicopter visibility reduction below 1 SM NA.

DME/DME RNP-0.3 NA. When local altimeter setting not received, use Palacios altimeter setting and increase all DA 63 feet and all MDA 80 feet; increase LNAV visibility Cat C ¼ mile. VDP and Baro-VNAV N/A when using Palacios altimeter setting.

MISSED APPROACH: Climb to 2000 direct COSDI and hold.

Procedure NA for arrival on PSX VORTAC airway radials 009 CW 060.
Rwy 13, 31 helicopter visibility reduction below 1 SM NA. DME required. When local altimeter setting not received, use Palacios altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climb to 1100 then climbing right turn to 2600 on PSX VORTAC R-054 to MARVY/17 DME and hold.

VOR-A
BAY CITY RGNL (BYY)

AWOS-3
118.075
HOUSTON CENTER
128.6 360.8
UNICOM
122.8 (CTAF)

PSX R-054
PSX R-054
PSX R-054

PSX
366

PSX

PSX

MARVY PSX
17
FEMEL PSX
23
OXUSY PSX
26.3

1100
2600
PSX R-054

PSX

1600

1600

MARVY
PSX
17

FEMEL
PSX
23

OXUSY
PSX
26.3

REIL Rwy 13
REIL Rwy 31
MIROL Rwy 13-31

CATEGORY
A
B
C
D

CIRCLING
1080-1½
1080-1½
1080-3
NA

1035 (1100-1¼)
1035 (1100-1½)
1035 (1100-3)

3.3 NM

6 NM

310 X 3

054° 3.3 NM from FAF

21056
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 13, 31: Standard with minimum climb of 500’ per NM to 560.

TAKEOFF RUNWAY 13: Climb on heading 131° or as assigned by ATC for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 31: Climb on heading 311° or as assigned by ATC for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)

NOTE: Chart not to scale.
INDIE EIGHT DEPARTURE (RNAV)

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: TPAKK TRANSITION: For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF MINIMUMS
Rwy 13, 31: Standard with minimum climb of 500' per NM to 560.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 13: Climb on heading 131° to 560 for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 31: Climb on heading 311° to 560 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE , then on (transition).
Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

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

TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwy 13, 31: Standard with minimum climb of 500’ per NM to 560.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 131° to 560 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 31: Climb on heading 311° to 560 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)

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

**TAKEOFF RUNWAY 13:** Climb on heading 131° to 560, for RADAR vectors to MMALT, thence.

**TAKEOFF RUNWAY 31:** Climb on heading 311° to 560, for RADAR vectors to MMALT, thence.

...on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**GUSTI TRANSITION (MMALT7.GUSTI)**
**LAKE CHARLES TRANSITION (MMALT7.LCH)**
**WHITE LAKE TRANSITION (MMALT7.LLA)**

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

- Chart not to scale.
- **NOTE:** DME/DME/IRU or GPS required.
- **NOTE:** RADAR required.
- **NOTE:** RNAV 1.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 13:** Climb on heading 131° to 560 for RADAR vectors to KNTKY, thence... **TAKEOFF RUNWAY 31:** Climb on heading 311° to 560 for RADAR vectors to KNTKY, thence... **... on track 032° to PEETY,** then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**DPATY TRANSITION (STRYA8.DPATY)**

**J Bulls TRANSITION (STRYA8.JBULL)**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 131° to 560 for RADAR vectors to BBYSE, thence...  
TAKEOFF RUNWAY 31: Climb on heading 311° to 560 for RADAR vectors to BBYSE, thence...  
...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)  
WTSON TRANSITION (STYCK8.WTSON)
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TOPE ALTITUDE: ASSIGNED BY ATC

NOTE: Chart not to scale.

RNAV 1.

NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb on heading 131° to 560 for RADAR vectors to WYLSN, thence. . . .
TAKEOFF RUNWAY 31: Climb on heading 311° to 560 for RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition).
Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)

WYLSN EIGHT DEPARTURE (RNAV)
(WYLSN8.WYLSN) 07OCT21

BAY CITY, TEXAS

SC-5, 30 NOV 2023 to 25 JAN 2024

BAY CITY RGNL (BYY)
Circling NA at night. Rwy 14 helicopter visibility reduction below 1 SM NA. Obtain local altimeter setting on CTAF; when not received, use William P Hobby altimeter setting and increase all MDA 60 feet.

HOUSTON APP CON
134.45  281.4

UNICOM
122.8 (CTAF)

RADAR REQUIRED

MISSED APPROACH: Climb to 2000 direct to POMDE and hold.
# RNAV (GPS) RWY 32

**Baytown (HPY)**

**APR CRS**
- **Rwy Idg**: 3283
- **TDZE**: 28
- **Ap't Elev**: 34

**RNP APCH-GPS**

- **Circling NA at night. Rwy 14 helicopter visibility reduction below 1 SM NA. Obtain local altimeter setting on CTAF; when not received, use William P Hobby altimeter setting and increase all MDA 60 feet.**
- **Misced Approach**: Climbing right turn to 2000 direct to POMDE and hold.

**HOUSTON APP CON**
- **UNICOM**: 122.8 (CTAF)
- **134.45 281.4**

**UNICOM**

**ELEV**: 34  D  **TDZE**: 28

**2000**
- **POMDE**
- **VGS1 and descent angles not coincident**
  - (VGS1 Angle 3.00/TCH 20).

**RNAV (GPS) RWY 32**

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

**LNAV MDA**
- **520-1**
- **492 (500-1)**
- **NA**

**CIRCLING**
- **520-1**
- **560-1**
- **NA**

**MIL Rwy 14-32**
- **REIL**

**Baytown, Texas**

*Orig B 11AUG22*
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwy 14, 32: Standard with minimum climb of 500' per NM to 540.

** DEPARTURE ROUTE DESCRIPTION **

TAKEOFF RUNWAY 14: Climb on heading 140° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 32: Climb on heading 320° to 540 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)

NOTE: Chart not to scale.
NOTE: CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

Takeoff Minimums
Rwys 14, 32: Standard with minimum climb of 500’/NM to 540.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 140° to 540, for RADAR vectors to BORRN, thence. . . .

TAKEOFF RUNWAY 32: Climb on heading 320° to 540, for RADAR vectors to BORRN, thence. . . .

. . . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14**: Climb on heading 140° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 32**: Climb on heading 320° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**BOWFN TRANSITION (HOODO7.BOWFN)**
**CFOOD TRANSITION (HOODO7.CFOOD)**
**HARVEY TRANSITION (HOODO7.HRV)**
**LEEVILLE TRANSITION (HOODO7.LEV)**
**SBIRD TRANSITION (HOODO7.SBIRD)**

**TOP ALTITUDE: ASSIGNED BY ATC**

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: ATC assigned only.
NOTE: DME/DME/IRU or GPS required.
NOTE: For non-GPS equipped aircraft, LCH, LLA, TBD, and LEV DME's must be operational.
INDIE EIGHT DEPARTURE (RNAV)

CTAF
122.8
HOUSTON DEP CON
134.45 284.0

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: TPAKK TRANSITION: For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF RUNWAY 14: Climb on heading 140° to 540 for RADAR vectors to RENNK, thence . . .
TAKEOFF RUNWAY 32: Climb on heading 320° to 540 for RADAR vectors to RENNK, thence . . .

. . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

NOTE: Chart not to scale.
RNAV-1 DME/DME/IRU or GPS. RADAR required.

NOTE: Chart not to scale.

**TAKEOFF MINIMUMS**
Rwys 14, 32: Standard with minimum climb of 500’ per NM to 540.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 140° to 540, for RADAR vectors to KARRR, thence.

TAKEOFF RUNWAY 32: Climb on heading 320° to 540, for RADAR vectors to KARRR, thence.

...on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14:** Climb on heading 140° to 540 for RADAR vectors to KNTKY, thence . . . .

**TAKEOFF RUNWAY 32:** Climb on heading 320° to 540 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 140° to 540, for RADAR vectors to MMALT, thence . . .

TAKEOFF RUNWAY 32: Climb on heading 320° to 540, for RADAR vectors to MMALT, thence . . .

. . . on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT7.GUSTI)
LAKE CHARLES TRANSITION (MMALT7.LCH)
WHITE LAKE TRANSITION (MMALT7.LLA)

NOTE: Chart not to scale.
BAYTOWN, TEXAS

ASSIGNED BY ATC

TOP ALTITUDE:

134.45  284.0

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
**NOTE:** Chart not to scale.

**NOTE:** RNAV 1.

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

**NOTE:** RADAR required.

**NOTE:** Chart not to scale.

**TOP ALTITUDE: ASSIGNED BY ATC**

**TAKEOFF MINIMUMS**

Rwys 14, 32: Standard with minimum climb of 500’ per NM to 540.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14:** Climb on heading 140° to 540 for RADAR vectors to KNTKY, thence . . .

**TAKEOFF RUNWAY 32:** Climb on heading 320° to 540 for RADAR vectors to KNTKY, thence . . .

. . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**DPATY TRANSITION (STRYA8.DPATY)**

**JBULL TRANSITION (STRYA8.JBULL)**
RNAV

RNAV

STYCK EIGHT DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 140° to 540 for RADAR vectors to BBYSE, thence...

TAKEOFF RUNWAY 32: Climb on heading 320° to 540 for RADAR vectors to BBYSE, thence...

...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)

WTSON TRANSITION (STYCK8.WTSON)

NOTE: Chart not to scale.

NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

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

STYCK EIGHT DEPARTURE (RNAV)

BAYTOWN, TEXAS

BAYTOWN (HPY)

AL-5757 (FAA)

STYCK EIGHT DEPARTURE (RNAV)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14:** Climb on heading 140° to 540, for RADAR vectors to WATFO, thence. . . .

**TAKEOFF RUNWAY 32:** Climb on heading 320° to 540, for RADAR vectors to WATFO, thence. . . .

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**ANKRR TRANSITION (WATFO6.ANKRR)**
**KELPP TRANSITION (WATFO6.KELPP)**
**MUSYL TRANSITION (WATFO6.MUSYL)**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 140° to 540 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAY 32: Climb on heading 320° to 540 for RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)

NOTE: Chart not to scale.
Circling NA to Rwys 14 and 32. Procedure NA at night. Use William P Hobby altimeter setting.

MISSED APPROACH: Climb to 500 then climbing right turn to 2200 direct TRIOS and hold.

- **TRIOS**
- **BDDRO**
- **HOU ASOS**: 124.6
- **HOUSTON APP CON**: 134.45 284.0
- **UNICOM**: 122.7 (CTAF)

**RNP APCH.**

<table>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>480-1</td>
<td>447 (500-1)</td>
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<td>467 (500-1)</td>
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<td>LIRL Rwy 8:26</td>
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**APP CRS**

- **Rwy Idg**: N/A
- **TDZE**: N/A
- **Apt Elev**: 33

**20198**

**RNAV (GPS)-A**

**264°**

**5035 X 40**

**5035 X 100**

**3100**

**5.1 NM**

**6 NM**

**73**
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 14, 32: NA - Environmental.
Rwys 8, 26: Standard with minimum climb of 500' per NM to 540.

TAKEOFF RUNWAY 8: Climb on heading 084° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 26: Climb on heading 264° to 540 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
Takeoff Minimums
Rwys 14, 32: NA - Environmental.
Rwys 8, 26: Standard with minimum climb of 500'/NM to 540.

NOTE: CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 084° to 540, for RADAR vectors to BORRN, thence . . .
TAKEOFF RUNWAY 26: Climb on heading 264° to 540, for RADAR vectors to BORRN, thence . . .

. . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 084° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .
TAKEOFF RUNWAY 26: Climb on heading 264° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO7.BOWFN)
CFOOD TRANSITION (HOODO7.CFOOD)
HARVEY TRANSITION (HOODO7.HRV)
LEEVILLE TRANSITION (HOODO7.LEV)
SBIRD TRANSITION (HOODO7.SBIRD)
INDIE EIGHT DEPARTURE (RNAV)

CTAF
122.7
HOUSTON DEP CON
134.45 284.0

TOP ALTITUDE:
ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwys 14, 32: NA Environmental.
Rwys 8, 26: Standard with minimum climb of 500' per NM to 540.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 084° to 540 for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 26: Climb on heading 264° to 540 for RADAR vectors to RENNK, thence . . . .
. . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)
**RNAV SEVEN DEPARTURE (RNAV)**

**KARRR7.KARRR**

**CTAF**
122.7
HOUSTON DEP CON
134.45 284.0

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

**TOP ALTITUDE:**
ASSIGNED BY ATC

**NOTE:** Chart not to scale.

**TAKEOFF MINIMUMS**
Rwys 14, 32: NA - Environmental.
Rwys 8, 26: Standard with minimum climb of 500’ per NM to 540.

**NARRATIVE ON FOLLOWING PAGE**

SC-5, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 084° to 540, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 26: Climb on heading 264° to 540, for RADAR vectors to KARRR, thence. . . .

. . . .on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 14, 32: NA - Environmental.
Rwys 8, 26: Standard with minimum climb of 500’ per NM to 540.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 8: Climb on heading 084° to 540 for RADAR vectors to KNTKY, thence . . .
TAKEOFF RUNWAY 26: Climb on heading 264° to 540 for RADAR vectors to KNTKY, thence . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 8:** Climb on heading 084° to 540, for RADAR vectors to MMALT, thence. . . .

**TAKEOFF RUNWAY 26:** Climb on heading 264° to 540, for RADAR vectors to MMALT, thence. . . .

. . . .on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**GUSTI TRANSITION (MMALT7.GUSTI)**

**LAKE CHARLES TRANSITION (MMALT7.LCH)**

**WHITE LAKE TRANSITION (MMALT7.LLA)**
CTAF  134.45  284.0

TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwy 8, 26: Standard.
Rwy 14, 32: Standard - NA at night.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

... on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 084° to 540 for RADAR vectors to KNTKY, thence. . . .
TAKEOFF RUNWAY 26: Climb on heading 264° to 540 for RADAR vectors to KNTKY, thence. . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JNULL TRANSITION (STRYA8.JBULL)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 084° to 540 for RADAR vectors to BBYSE, thence...
TAKEOFF RUNWAY 26: Climb on heading 264° to 540 for RADAR vectors to BBYSE, thence...

... on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WTSON TRANSITION (STYCK8.WTSON)

NOTE: Chart not to scale.
RNAV 1 - DME/DME/IRU or GPS.
RADAR required.

**TOP ALTITUDE:**
ASSIGNED BY ATC

**TAKEOFF MINIMUMS:**
Rwy 14, 32: NA - Environmental.
Rwy 8, 26: Standard with minimum climb of 500'NM to 540.

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

TAKEOFF RUNWAY 8: Climb on heading 084° to 540, for RADAR vectors to WATFO, thence.
TAKEOFF RUNWAY 26: Climb on heading 264° to 540, for RADAR vectors to WATFO, thence.

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6.ANKRR)
KELPP TRANSITION (WATFO6.KELPP)
MUSYL TRANSITION (WATFO6.MUSYL)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 084° to 540 for RADAR vectors to WYLEN, thence. . . .
TAKEOFF RUNWAY 26: Climb on heading 264° to 540 for RADAR vectors to WYLEN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

WYLEN EIGHT DEPARTURE (RNAV)
(WYLSN8.WYLSN) 07OCT21
RNAV (GPS) RWY 13
BEAUMONT MUNI (BMT)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Circling Rwy 31 NA at night. Rwy 13 helicopter visibility reduction below 3/4 SM NA.

Procedure NA for arrivals at DAS VOR/DME on V574 westbound.

**Procedure NA for arrival at SILBE on V569 southeast bound.**

**MISSED APPROACH:** (Do not exceed 230K until SILBE) Climb to 600 then climbing left turn to 2000 direct SILBE and hold.

**MISSING:** (Beaumont, Texas) 25 JAN 2024
Rwy 31 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 31 NA at night, Circling Rwy 31 NA at night.

Procedure NA for arrival on BPT VOR/DME airway radials 249 CW 331.

Misled Approach: Climb to 500 then climbing right turn to 2000 direct KIELL and hold.

RNP APCH GPS.

AWOS-3PT 118.425
HOUSTON APP CON 121.3 377.1
CLNC DEL 121.75
UNICOM 123.0 (CTAF)
Use Beaumont-Port Arthur, TX (Jack Brooks Rgnl) altimeter setting. Circling NA Rwy 16-34. Circling Rwy 31 NA at night. Rwy 13 VOR/DME RWY 13

AWOS-3PT
118.425
HOUSTON APP CON
121.3 377.1
CLNC DEL
121.75
UNICOM
123.0 (CTAF)

2000 NoPT
087°
(13.1)

IAF
DAISETTA
116.9
DAS
Chan 116

FITAP INT
BPT (24.2)

KIELL
BPT (22.2)

VOR/DME RWY 13
BEAUMONT MUNI (BMT)

Misunderstood APPROACH: Climbing left turn to 2300 via BPT R-316 to KIELL INT/DAS 22.2 DME.

AWOS-3PT
118.425
HOUSTON APP CON
121.3 377.1
CLNC DEL
121.75
UNICOM
123.0 (CTAF)

2000 NoPT
087°
(13.1)

IAF
DAISETTA
116.9
DAS
Chan 116

FITAP INT
BPT (24.2)

KIELL
BPT (22.2)

VOR/DME RWY 13
BEAUMONT MUNI (BMT)

Misunderstood APPROACH: Climbing left turn to 2300 via BPT R-316 to KIELL INT/DAS 22.2 DME.

AWOS-3PT
118.425
HOUSTON APP CON
121.3 377.1
CLNC DEL
121.75
UNICOM
123.0 (CTAF)

2000 NoPT
087°
(13.1)

IAF
DAISETTA
116.9
DAS
Chan 116

FITAP INT
BPT (24.2)

KIELL
BPT (22.2)

VOR/DME RWY 13
BEAUMONT MUNI (BMT)

Misunderstood APPROACH: Climbing left turn to 2300 via BPT R-316 to KIELL INT/DAS 22.2 DME.
**MISSED APPROACH:** Climb to 3000 on BPT VOR/DME R-113 to MARSA INT/BPT 15 DME and hold.

**COUGS Fix Minimums:**
- Increase S-LOC 12 Cat C/D/E visibility to 1\(\frac{3}{4}\) miles.
- For inop MALSR, increase S-ILS 12 Cat E visibility to 2\(\frac{1}{2}\) miles.
- When using Orange County altimeter setting, increase S-ILS 12 DA to 246 feet; increase S-LOC 12 DA to 200 feet; increase S-LOC 12 Cat C/D/E visibility to RVR 5000 feet. For inop MALSR, increase S-ILS 12 DA to 246 feet; increase S-LOC 12 Cat C/D/E visibility to 1\(\frac{3}{4}\) miles.

**DSR or RADAR required.**

When local altimeter setting not received, use Orange County altimeter setting: increase S-ILS 12 DA to 246 feet; increase all MDAs 40 feet. COUGS Fix Minimums: increase S-LOC 12 Cat C/D/E visibility to RVR 4000, S-LOC 12 Cat E visibility to 2\(\frac{1}{2}\) miles.

**DME or RADAR required.**

Use I-BPT DME when on the localizer course.

Use I-BPT DME when on the localizer course.

**GS 3.00°**

TCH 32

*Cat E procedure turn NA.

**CATEGORY**

A  B  C  D  E

S-ILS 12 **

215/24  200 (200-1\%)

S-LOC 12

820/24  820/40  820/17  820/17

805 (900-1\%)  805 (900-1\%)  805 (900-1\%)

**COUGS Fix Minimums (DME required)**

S-LOC 12

460/24  445 (500-1\%)

460/45  445 (500-1\%)
Baro-VNAV NA when using Orange County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Orange County altimeter setting and increase LPV DA to 247 feet, LNAV/VNAV DA to 407 feet and all MDA 40 feet; increase LNAV/VNAV and LNAV Cat E visibility 1 SM. For inoperative MALSR, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E to RVR 6000 and LNAV Cat E to 1 1/2 miles. For inoperative MALSR when using Orange County altimeter setting, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E to 1 1/2 miles, and LNAV Cat E to 1 1/2 miles. VDP NA when using Orange County altimeter setting. ** RVR 1800 authorized with use of FD or AP or HUD to DA (NA when using Orange County altimeter setting).
RNAV (GPS) RWY 30
JACK BROOKS RGNL (BPT)

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>263-¾</td>
<td>251 (300-¾)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>404-¼</td>
<td>392 (400-¼)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>540-1</td>
<td>528 (600-1)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Radar Required.**

Baro-VNAV NA when using Orange County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). RWY 30 helicopter visibility reduction below ½ SM NA. When local altimeter setting not received, use Orange County altimeter setting: increase LPV DA to 295 feet; increase LNAV/VNAV DA to 436 feet; increase all MDAs 40 feet, increase LPV and LNAV/VNAV all Cats visibility ½ SM and LNAV Cat E visibility ½ SM.

**Missed Approach:** Climb to 3000 direct GIDDY and hold.

**ATIS** 126.3
**HOUSTON APP CON** 121.3 377.1
**BEAUMONT TOWER** 119.5 (CTAF) 0
**GND CON** 124.85
**CLNC DEL** 118.3
**UNICOM** 122.95

**ELEV** 15
**TDZE** 12

**Radar** WAAS CH 69216
**W30A**
**APP CRS** 296°
**Rwy Idg** 6751
**TDZE** 12
**Apt Elev** 15

**BEAUMONT/PORT ARTHUR, TEXAS**

**Orig A 07NOV19**

**29°57'N-94°01'W**

**23110**
BEAUMONT/PORT ARTHUR, TEXAS
AL-521 (FAA) 23110

RNAV (GPS) RWY 34
JACK BROOKS RGNL (BPT)

WAAS CH 72616 341° 126 5070
W34A 15 15

RNP APCH.

BARO-VNAV NA when using Orange County altimeter setting. For uncompensated
BARO-VNAV systems, LNAV/VNAV NA below -15°C (59°F) or above 49°C (120°F).
When local altimeter setting not received, use Orange County altimeter setting: increase
LPV DA to 247 feet; increase LNAV/VNAV DA to 469 feet; increase LNAV Cat C
visibility to SM.

MISSED APPROACH: Climb to
3000 direct NUWRY and via
track 283° to GIDDY and hold.

BEAUMONT TOWER* 119.5 (CTAF) 1
ATIS 126.3 HOUSTON APP CON 121.3 377.1
BEAUMONT TOWER* 119.5 (CTAF)
GND CON 124.85
CLNC DEL 118.3
UNICOM 122.95

Missed approach fix

GIDDY
121°
4 NM
301°

BEAUMONT/PORT ARTHUR, TEXAS
Orig-A 07 NOV 19

TPW 126
V 5
P 3100 (BPT)

29°57'N 94°01'W

Jack Brooks RGNL (BPT)
Procedure Turn NA

**MISSING APPR/DEP: Climb to 2000 via BPT VOR/DME R-049 to PEVET INT.**

**ATIS** 126.3

**HOUSTON APP CON** 121.3 377.1

**BEAUMONT TOWER** 119.5 (CTAF)

**GND CON** 124.85

**CLNC DEL** 118.3

**UNICOM** 122.95

**ATIS** 126.3

**HOUSTON APP CON** 121.3 377.1

**BEAUMONT TOWER** 119.5 (CTAF)

**GND CON** 124.85

**CLNC DEL** 118.3

**UNICOM** 122.95

**VOR/DME RWY 34**

**JACK BROOKS RGNL (BPT)**

**VOR/DME RWY 34**

**JACK BROOKS RGNL (BPT)**
For inoperative MALSR, increase S-12 Cat C/D/E visibility to RVR 6000. When local altimeter setting not received, use Orange County altimeter setting and increase all MDA 40 feet and S-12 Cat C/D/E visibility to RVR 4500. For inop MALSR when using Orange County altimeter setting, increase S-12 Cat E visibility to 1½ mile.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RNAV (GPS) RWY 16
BRENHAM MUNI (11R)

1.1% UPP

3100
2000
RW16
DUDYA
FEFEP
EYUBE

1045°

MISSED APCH FIX
JINGA

165°
3.4" 4 NM

2000
1.7 NM to RW16

2200
JINGA

165° to RW16

GP 3.00°
TCH 45

DUDYA

3100

VGSI and RNAV glidepath not coincident
(VGSI Angle 3.00/TCH 36).

LNAV and VNAV glidepath not coincident
(VGSI Angle 3.00/TCH 36).

 CATEGORY A B C D
 LPV DA 594-7/8 276 (300-3/4)
 LNAV/VNAV DA 680-1 362 (400-1/4)
 LNAV MDA 880-1 562 (600-1)

165°

101
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 37°C. Rwy 34 helicopter visibility reduction below ½ SM NA. When local altimeter setting not received, use College Station altimeter setting and increase all DA 52 feet, and all MDA 60 feet; increase LPV and LNAV/VNAV all Cats visibility ½ SM. VDP and Baro-VNAV NA with College Station altimeter setting.

**MISSED APPROACH:** Climb to 3100 direct DUDYA and hold.

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>HOUSTON APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>121.125</td>
<td>134.3</td>
<td>123.075 (CTAF)</td>
</tr>
</tbody>
</table>

**RADAR REQUIRED**

**ELEV 318**  **TDZE 269**

**Amdt 2B  07NOV19**

**SC-5, 30 NOV 2023 to 25 JAN 2024**
Radar Required

Procedure NA for arrivals at SUXOE on V369 northwest bound.

Procedure NA for arrivals at GASEC on V15 northwest bound.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.50/TCH 40).

Category

<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>636-1</td>
<td>275 (300-1)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>636-1</td>
<td>275 (300-1)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>720-1</td>
<td>359 (400-1)</td>
<td>NA</td>
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</tr>
</tbody>
</table>
RNAV (GPS) RWY 33
Coulter Fld (CFD)

**RNAV (GPS) RWY 33**
Coulter Fld (CFD)

Baro-VNAV NA. Use College Station altimeter setting; when not received, use Caldwell altimeter setting and increase all DA 31 feet and all MDA 40 feet.

**MISSED APPROACH:** Climb to 2500 direct NUCIB and hold.

**RNP APCH:**
- **AWOS-3PT:** 125.975
- **CLL ASOS:** 126.85
- **HOUSTON APP CON:** 134.3 360.85
- **UNICOM:** 123.0 (CTAF)

**Radar Required**

**Missed APCH Fix**
- 4 NM to NUCIB

**ELEV 367**
- TDZE 367

**Category**
- **A**
- **B**
- **C**
- **D**
- **LPV DA**
  - 642-1 275 (300-1)
  - NA
- **RNAV/VNAV DA**
  - 642-1 275 (300-1)
  - NA
- **RNAV MDA**
  - 880-1 513 (600-1)
  - NA

**Use Caldwell altimeter setting and increase all DA 31 feet and all MDA 40 feet.**

Baro-VNAV NA. Use College Station altimeter setting; when not received, direct NUCIB and hold.
When local altimeter setting not received, use College Station altimeter setting and increase all MDA 60 feet. Circling NA east of Rwy 15-33. DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSING APPROACH: Climb to 2000 direct KOKEC and hold.

AWOS-3PT 118.35  HOUSTON APP CON 134.3 360.85  CTA 122.9

RADAR REQUIRED

ELEV 391  TDZE 391

NUPSY 2500  LUVHI 2000  RW15

MIRL Rwy 15-33
When local altimeter setting not received, use College Station altimeter setting and increase all MDA 60 feet. Circling NA east of Rwy 15-33.

DME/DME RNP-0.3 NA. Procedure NA at night. Rwy 33 helicopter visibility reduction below 1 SM NA.

**MISSING APPROACH:** Climb to 2500 direct NUPSY and hold.

<table>
<thead>
<tr>
<th>AWOS-3PT</th>
<th>HOUSTON APP CON</th>
<th>CTAF</th>
</tr>
</thead>
<tbody>
<tr>
<td>118.35</td>
<td>134.3 360.85</td>
<td>122.9</td>
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</tbody>
</table>

**Radar Required**

**ELEV 391**

**TDZE 390**

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**Caldwell, TX**

Orig-C 30DEC21

**RNAV (GPS) RWY 33**

**Caldwell Muni (RWV)**
VOR/DME-A
Caldwell Muni (RWV)

AWOS-3PT
118.35

Houston APP CON
134.3  360.85

CTAF
122.9

NoPT for arrival on CLL VORTAC airway radials 318 CW 143.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2100 direct CLL VORTAC and hold.

When local altimeter setting not received, use College Station altimeter setting and increase MDA 60 feet. Circling NA east of Rwy 15-33. Procedure NA at night.

ELEV 391

CATEGORY
A
B
C
D
CIRCLING
1000-1
609 (700-1)
1220-1/4
829 (900-1/4)
NA

CALDWELL, TEXAS
3252 X 50
Amdt 3A  30 NOV 2023 to 25 JAN 2024

30°31'N-96°42'W

AL-6743 (FAA) 23278
**RNAV (GPS) RWY 17**

**CENTER MUNI (F'17)**

**AWOS-3PT**
128.775

**OCH AWOS-3**
135.625

**FORTH WORTH CENTER**
126.325 346.25

**UNICOM**
122.8 (CTAF)

---

RNAV (GPS) RWY 17

**APPROACH**

**APP CRS**
167°

**Rwy Idg**
5501

**TDZE**
319

**Apt Elev**
319

---

**AWOS-3PT**
128.775

**OCH AWOS-3**
135.625

**FORTH WORTH CENTER**
126.325 346.25

**UNICOM**
122.8 (CTAF)

---

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

Procedure NA for arrivals at CARTH via V13 northbound.

---

**LNAV MDA**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B (500-1)</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SC-5</strong></td>
<td>800-1 481</td>
<td>800-1 481</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**CENTER MUNI (F'17)**

**Orig-E** 12AUG21

---

**RNP APCH.**

**Rw 17 helicopter visibility reduction below 1 SM NA.**

**Straight-In Rw 17 NA at night, Circling Rw 17 NA at night.**

---

**CIRCLING**

860-1 541 (600-1)

**NA**

---

**CATEGORY**

**A**

**B**

**C**

**D**

**LNAV MDA**

800-1 481 (500-1)

800-1 481 (500-1)

NA

NA

---

**Visual Segment - Obstacles.**

**SIYGO**

**DEBKY**

**RW17**

---

**SODVE 1.7 NM to RW17**

**3000**

**DEBKY**

**4 NM**

**DEKBY**

**Holding Pattern**

---

**MSA RW17 25 NM**

2200

---

**ELEV 319**

**TDZE 319**

---

**CARTH via V13 northbound.**

---

**3.4 NM**

**1.7 NM**

**6 NM**

---

**167° to RW17**

1.7 NM to SODVE RW17

---

**Visual Segment - Obstacles.**

IN Rwy 17 NA at night, Circling Rwy 17 NA at night.

---

**MISSED APPROACH:** Climbing left turn to 3000 direct DEBKY and hold, continue climb-in-hold to 3000.
Rwy 35 helicopter visibility reduction below ¾ SM NA. Circling Rwy 35 NA at night.

Procedure NA for arrivals on LFK VORTAC airway radials 354 CW 082.

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 49).

MISSED APPROACH: Climb to 3800 direct WENDE and on track 353° to CARTH and hold.

Procedure NA for arrivals on LFK VORTAC airway radials 354 CW 082.
Rwy 17 helicopter visibility reduction below 1 SM NA. Straight-In Rwy 17 NA at night, Circling Rwy 17 NA at night.

MISSSED APPROACH: Climb to 1500 then climbing left turn to 3000 direct CZJ NDB and hold.

AWOS-3PT
128.775
OCH AWOS-3
135.625
FORTH WORTH CENTER
126.325 346.25
UNICOM
122.8 (CTAF)
Circling to Rwy 34 NA at night. Rwy 16 helicopter visibility reduction below $\frac{3}{4}$SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

Procedure NA for arrivals at EAKES on T254 westbound.

**AWOS-3**  
119.325

**HOUSTON APP CON**  
119.7  281.4

**UNICOM**  
123.0 (CTAF)

**RNAV (GPS) RWY 16**

**CLEVELAND, TEXAS**

**RNP APCH.**

**Category**

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<td>CIRCLING</td>
<td>600-1</td>
<td>450(500-1)</td>
<td>660-1½</td>
<td>510(600-1½)</td>
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**RNP APCH.**

**CLEVELAND MUNI (6R3)**

**UNICOM**

123.0 (CTAF)

**RNAV (GPS) RWY 16**

**CLEVELAND, TEXAS**

**Orig-D 07OCT21**

30°21'N 95°00'W

111
NOTE: RNAV 1.

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

TAKEOFF MINIMUMS
Rwy 16, 34: Standard with minimum climb of 500’ per NM to 660.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 34: Climb on heading 312° to 2000 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
**BORRN SIX DEPARTURE (RNAV)**

**JUNCTION JCT**

**CRGER**

**PSTUR**

**PUFER**

**ZUUUU**

**MNURE**

**DILRE**

**BORRN**

**SAN ANTONIO SAT**

**MARCS**

**HAYYY**

**FOWLR**

**NOTE:** CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T06, T41.

**TOP ALTITUDE: ASSIGNED BY ATC**

**BORRN SIX DEPARTURE (RNAV)**

**NOTE:** Chart not to scale.

---

**TAKEOFF MINIMUMS**

Rwy 16: Standard with minimum climb of 500'/NM to 660.
Rwy 34: Standard with minimum climb of 500'/NM to 1000.

**RNAV 1 - DME/DME/IRU or GPS.**

**RADAR required.**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 34: Climb on heading 337° to 2000, for RADAR vectors to BORRN, thence. . . .

. . . on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400, for RADAR vectors to VUH VOR/DME, thence . . . .

TAKEOFF RUNWAY 34: Climb on heading 312° to 2000, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO7.BOWFN)
CFOOD TRANSITION (HOODO7.CFOOD)
HARVEY TRANSITION (HOODO7.HRV)
LEEVILLE TRANSITION (HOODO7.LEV)
SBIRD TRANSITION (HOODO7.SBIRD)
INDIE EIGHT DEPARTURE (RNAV)

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400 for RADAR vectors to RENNK, thence . . . .

TAKEOFF RUNWAY 34: Climb on heading 312° to 2000 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

NOTE: Chart not to scale.
RNAV-1 DME/DME/IRU or GPS.
RADAR required.

TAKEOFF MINIMUMS
Rwy 16: Standard with minimum climb of 500’ per NM to 660.
Rwy 34: Standard with minimum climb of 500’ per NM to 1000.

NOTE: Chart not to scale.
TAKEOFF RUNWAY 16: Climb on heading 157° to 1400, for RADAR vectors to KARRR, thence.

TAKEOFF RUNWAY 34: Climb on heading 337° to 2000, for RADAR vectors to KARRR, thence.

. . . .on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
**LURIC EIGHT DEPARTURE (RNAV)**

**TOP ALTITUDE: ASSIGNED BY ATC**

- **HAWES**
  - 12000 ft (36)
  - 049°
  - 031°

- **ORRTH**
  - 12000 ft (77)
  - 049°
  - 032°

- **LURIC**
  - 12000 ft (33)
  - 031°
  - 031°

- **ENJOY**
  - 12000 ft (12)
  - 031°
  - 031°

- **VELCO**
  - 12000 ft (11)
  - 031°
  - 031°

- **CLAVN**
  - 12000 ft (11)
  - 031°
  - 031°

- **MUSIQ**
  - 12000 ft (11)
  - 031°
  - 031°

- **DARTR**
  - 12000 ft (11)
  - 031°
  - 031°

- **PEETY**
  - 5200 ft (11)
  - 032°
  - 032°

- **KNTKY**
  - 3120 ft (12)
  - 157°
  - 157°

**TAKEOFF MINIMUMS**

Rwys 16, 34: Standard with minimum climb of 500’ per NM to 660.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb on heading 157° to 1400 for RADAR vectors to KNTKY, thence ....

**TAKEOFF RUNWAY 34:** Climb on heading 312° to 2000 for RADAR vectors to KNTKY, thence ....

.... on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**HAWES TRANSITION (LURIC8.HAWES)**

**ORRTH TRANSITION (LURIC8.ORRTH)**

**NOTE:** Chart not to scale.

**AWOS-3**

- 119.325
- CTAF
- 123.0
- HOUSTON DEP CON
- 119 7 281.4

**NOTE:** RADAR required.

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

**NOTE:** RNAV 1.
TOP ALTITUDE: ASSIGNED BY ATC

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400, for RADAR vectors to MMALT, thence . . .
TAKEOFF RUNWAY 34: Climb on heading 337° to 2000, for RADAR vectors to MMALT, thence . . .

. . . . on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT7.GUSTI)
LAKE CHARLES TRANSITION (MMALT7.LCH)
WHITE LAKE TRANSITION (MMALT7.LLA)

NOTE: Chart not to scale.

NOTE: GUSTI and LCH Transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41 and 54T.

TAKEOFF MINIMUMS
Rwy 16: Standard with minimum climb of 500'/NM to 660.
Rwy 34: Standard with minimum climb of 500'/NM to 1000.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 34: Climb on heading 312° to 2000 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX-FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX-SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
STRYA EIGHT DEPARTURE (RNAV)

NOTE: Chart not to scale.

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400 for RADAR vectors to KNTKY, thence . . .
TAKEOFF RUNWAY 34: Climb on heading 312° to 2000 for RADAR vectors to KNTKY, thence . . .

. . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JBULL TRANSITION (STRYA8.JBULL)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400 for RADAR vectors to BBYSE, thence . . .
TAKEOFF RUNWAY 34: Climb on heading 312° to 2000 for RADAR vectors to BBYSE, thence . . .

. . .on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WTSON TRANSITION (STYCK8.WTSON)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400, for RADAR vectors to WATFO, thence. . . .

TAKEOFF RUNWAY 34: Climb on heading 337° to 2000, for RADAR vectors to WATFO, thence. . . .

. . . .on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6.ANKRR)
KELPP TRANSITION (WATFO6.KELPP)
MUSYL TRANSITION (WATFO6.MUSYL)
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwy 16, 34: Standard with minimum climb of 500' per NM to 660.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 157° to 1400 for RADAR vectors to WYLSN, thence . . .

TAKEOFF RUNWAY 34: Climb on heading 312° to 2000 for RADAR vectors to WYLSN, thence . . .

. . . on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)

NOTE: Chart not to scale.

CLEVELAND, TEXAS
CLEVELAND MUNI (6R3)
RNAV (GPS) RWY 11
EASTERWOOD FLD (CLL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C. Rwy 11 helicopter visibility reduction below ¼ SM NA.

**ELEVATION**: College Station, Texas

**AIRPORT INFORMATION**

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<th>Airport Code</th>
<th>City</th>
<th>State</th>
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<tr>
<td>W11A</td>
<td>College Station</td>
<td>Texas</td>
<td>3000 E 55632 W11A</td>
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**ATIS**

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**EASTWOOD TOWER**

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**CLNC DEL**

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**UNICOM**

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**AIRPORT Facility**

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<td>Field</td>
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**ADVICE**

- **RNAV (GPS) RWY 11**
- **Category**: A
- **LPV DA**: 569-3/4, 250 (300-3/4)
- **LNAV/VNAV DA**: 641-1, 322 (400-1)
- **LNAV MDA**: 740-1, 421 (500-1), 740-1 421 (500-1/4)
- **CIRCLING**: 860-1, 539 (600-1), 880-1, 559 (600-1), 1000-2, 679 (700-2), 1180-2 3/4, 859 (900-2 3/4), 859 (900-3)

**NOTES**

- **Other Services**: MIRL Rwy 11-29, REIL Rwy 29, ICESO (IF), APZIC (FAF), GOVEY (IAF)
- **UNICOM**: 122.95, 128.7 (when twr closed)
- **Approx latitude**: 30°35'N-96°22'W

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

**EDAYA**

7 NM

**EASTERWOOD FLD (CLL)**

**ADVISORY**

- **RNAV (GPS) RWY 11**
- **Category**: A
- **LPV DA**: 569-3/4, 250 (300-3/4)
- **LNAV/VNAV DA**: 641-1, 322 (400-1)
- **LNAV MDA**: 740-1, 421 (500-1), 740-1 421 (500-1/4)
- **CIRCLING**: 860-1, 539 (600-1), 880-1, 559 (600-1), 1000-2, 679 (700-2), 1180-2 3/4, 859 (900-2 3/4), 859 (900-3)

**NOTES**

- **Other Services**: MIRL Rwy 11-29, REIL Rwy 29, ICESO (IF), APZIC (FAF), GOVEY (IAF)
- **UNICOM**: 122.95, 128.7 (when twr closed)
- **Approx latitude**: 30°35'N-96°22'W

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

**EDAYA**

7 NM
RNAV (GPS) RWY 17
EASTERSWOOD FLD (CLL)

ATIS 126.85
HOUSTON APP CON 134.3 360.85
EASTERSWOOD TOWER* 118.5 (CTAF) 284.7
GND CON 128.7 284.7
CLNC DEL 120.4 (when twr closed)
UNICOM 122.95

MISSED APPROACH: Climb to 2000 direct JOTAD and hold.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C. Rwy 17 helicopter visibility reduction below ¾ SM NA.

---

RNAV (GPS) RWY 17

ATIS 126.85
HOUSTON APP CON 134.3 360.85
EASTERSWOOD TOWER* 118.5 (CTAF) 284.7
GND CON 128.7 284.7
CLNC DEL 120.4 (when twr closed)
UNICOM 122.95

MISSED APPROACH: Climb to 2000 direct JOTAD and hold.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C. Rwy 17 helicopter visibility reduction below ¾ SM NA.
RNAV (GPS) RWY 29
EASTERWOOD FLD (CLL)

Baro-VNAV NA when using Caldwell altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C. Rwy 29 helicopter visibility reduction below ¼ SM NA.

MISSED APPROACH: Climb to 2000 direct ICESO and hold.

ATIS 126.85
HOUSTON APP CON 134.3 360.85
EASTERWOOD TOWER 118.5 (CTAF) 284.7
GND CON 128.7 284.7
CLNC DEL 120.4
CLNC DEL (when twr closed) 128.7
UNICOM 122.95

RNAV (GPS) RWY 29
EASTERWOOD FLD (CLL)

2000 ICESO

* LNAV only.

JULIR 1.6 NM to RW29

WELBO

2000

286°

EDAYA

3000

GP 3.00°

CTHC 54

CATEGORY

A

B

C

D

E

LPV DA

564-¾

250 (300-¾)

LNAV/VNAV DA

762-1¾

448 (500-1¾)

LNAV MDA

740-1 426 (500-1)

740-1¼ 426 (500-1¼)

CIRCLING

860-1 539 (600-1)

880-1 559 (600-1)
LOC BC RWY 17
EASTERWOOD FLD (CLL)

DME required.

MISSED APPROACH: Climb to 2000 on heading 166° and
CLL R-127 to HEDIX/CLL 14 DME and hold.

Use I-CLL DME when on the localizer course.

Back Course

Disregard glideslope indications.

COLLEGE STATION, TEXAS

LOC/DME I-CLL
110.55
Chan 42 (Y)

APP CRS
166°

Rwy Idg
7000
TDZE
321
Apt Elev
321

ATIS
126.85
HOUSTON APP CON
134.3 360.85
EASTERWOOD TOWER
118.5 (CTAF) 284.7

GND CON
128.7
CLNC DEL
128.7
CLNC DEL
120.4
(when twr closed)
UNICOM
122.95

180°

MISSED APPROACH: Climb to 2000 on heading 166° and
CLL R-127 to HEDIX/CLL 14 DME and hold.

Use I-CLL DME when on the localizer course.

Back Course

Disregard glideslope indications.

COLLEGE STATION, TEXAS

LOC/DME I-CLL
110.55
Chan 42 (Y)

APP CRS
166°

Rwy Idg
7000
TDZE
321
Apt Elev
321

ATIS
126.85
HOUSTON APP CON
134.3 360.85
EASTERWOOD TOWER
118.5 (CTAF) 284.7

GND CON
128.7
CLNC DEL
128.7
CLNC DEL
120.4
(when twr closed)
UNICOM
122.95

180°

MISSED APPROACH: Climb to 2000 on heading 166° and
CLL R-127 to HEDIX/CLL 14 DME and hold.

Use I-CLL DME when on the localizer course.

Back Course

Disregard glideslope indications.

COLLEGE STATION, TEXAS

LOC/DME I-CLL
110.55
Chan 42 (Y)

APP CRS
166°

Rwy Idg
7000
TDZE
321
Apt Elev
321

ATIS
126.85
HOUSTON APP CON
134.3 360.85
EASTERWOOD TOWER
118.5 (CTAF) 284.7

GND CON
128.7
CLNC DEL
128.7
CLNC DEL
120.4
(when twr closed)
UNICOM
122.95

180°
VOR RWY 29
EASTERTWOOD FLD (CLL)

DME required for procedure entry. DME required.

Rwy 29 helicopter visibility reduction below 3/4 SM NA.

MISSED APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

ATIS
HOUSTON APP CON
EASTERWOOD TOWER
GND CON
CLNC DEL
CLNC DEL
UNICOM

126.85
134.3 360.85
118.5 (CTAF) 284.7
128.7 284.7
128.7
120.4
122.95

COLLEGE STATION, TEXAS
AL-928 (FAA)
23166

VORTAC CLL
113.3
Chan 80
Rwy Idg 5158
TDZE 314
Apt Elev 321

ELEV 321
TDZE 314

COLLEGE STATION
113.3 CLL
Chan 80

UNICOM
122.95

NAVASOTA
115.2 TNV
Chan 106

THONY
CLL 7.5

REM. APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

MISSED APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

ATIS
HOUSTON APP CON
EASTERWOOD TOWER
GND CON
CLNC DEL
CLNC DEL
UNICOM

126.85
134.3 360.85
118.5 (CTAF) 284.7
128.7 284.7
128.7
120.4
122.95

COLLEGE STATION, TEXAS
AL-928 (FAA)
23166

VORTAC CLL
113.3
Chan 80
Rwy Idg 5158
TDZE 314
Apt Elev 321

ELEV 321
TDZE 314

COLLEGE STATION
113.3 CLL
Chan 80

UNICOM
122.95

NAVASOTA
115.2 TNV
Chan 106

THONY
CLL 7.5

REM. APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

MISSED APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

ATIS
HOUSTON APP CON
EASTERWOOD TOWER
GND CON
CLNC DEL
CLNC DEL
UNICOM

126.85
134.3 360.85
118.5 (CTAF) 284.7
128.7 284.7
128.7
120.4
122.95

COLLEGE STATION, TEXAS
AL-928 (FAA)
23166

VORTAC CLL
113.3
Chan 80
Rwy Idg 5158
TDZE 314
Apt Elev 321

ELEV 321
TDZE 314

COLLEGE STATION
113.3 CLL
Chan 80

UNICOM
122.95

NAVASOTA
115.2 TNV
Chan 106

THONY
CLL 7.5

REM. APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

MISSED APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

ATIS
HOUSTON APP CON
EASTERWOOD TOWER
GND CON
CLNC DEL
CLNC DEL
UNICOM

126.85
134.3 360.85
118.5 (CTAF) 284.7
128.7 284.7
128.7
120.4
122.95

COLLEGE STATION, TEXAS
AL-928 (FAA)
23166

VORTAC CLL
113.3
Chan 80
Rwy Idg 5158
TDZE 314
Apt Elev 321

ELEV 321
TDZE 314

COLLEGE STATION
113.3 CLL
Chan 80

UNICOM
122.95

NAVASOTA
115.2 TNV
Chan 106

THONY
CLL 7.5

REM. APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

MISSED APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

ATIS
HOUSTON APP CON
EASTERWOOD TOWER
GND CON
CLNC DEL
CLNC DEL
UNICOM

126.85
134.3 360.85
118.5 (CTAF) 284.7
128.7 284.7
128.7
120.4
122.95

COLLEGE STATION, TEXAS
AL-928 (FAA)
23166

VORTAC CLL
113.3
Chan 80
Rwy Idg 5158
TDZE 314
Apt Elev 321

ELEV 321
TDZE 314

COLLEGE STATION
113.3 CLL
Chan 80

UNICOM
122.95

NAVASOTA
115.2 TNV
Chan 106

THONY
CLL 7.5

REM. APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

MISSED APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

ATIS
HOUSTON APP CON
EASTERWOOD TOWER
GND CON
CLNC DEL
CLNC DEL
UNICOM

126.85
134.3 360.85
118.5 (CTAF) 284.7
128.7 284.7
128.7
120.4
122.95

COLLEGE STATION, TEXAS
AL-928 (FAA)
23166

VORTAC CLL
113.3
Chan 80
Rwy Idg 5158
TDZE 314
Apt Elev 321

ELEV 321
TDZE 314

COLLEGE STATION
113.3 CLL
Chan 80

UNICOM
122.95

NAVASOTA
115.2 TNV
Chan 106

THONY
CLL 7.5

REM. APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

MISSED APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

ATIS
HOUSTON APP CON
EASTERWOOD TOWER
GND CON
CLNC DEL
CLNC DEL
UNICOM

126.85
134.3 360.85
118.5 (CTAF) 284.7
128.7 284.7
128.7
120.4
122.95

COLLEGE STATION, TEXAS
AL-928 (FAA)
23166

VORTAC CLL
113.3
Chan 80
Rwy Idg 5158
TDZE 314
Apt Elev 321

ELEV 321
TDZE 314

COLLEGE STATION
113.3 CLL
Chan 80

UNICOM
122.95

NAVASOTA
115.2 TNV
Chan 106

THONY
CLL 7.5

REM. APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

MISSED APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

ATIS
HOUSTON APP CON
EASTERWOOD TOWER
GND CON
CLNC DEL
CLNC DEL
UNICOM

126.85
134.3 360.85
118.5 (CTAF) 284.7
128.7 284.7
128.7
120.4
122.95

COLLEGE STATION, TEXAS
AL-928 (FAA)
23166

VORTAC CLL
113.3
Chan 80
Rwy Idg 5158
TDZE 314
Apt Elev 321

ELEV 321
TDZE 314

COLLEGE STATION
113.3 CLL
Chan 80

UNICOM
122.95

NAVASOTA
115.2 TNV
Chan 106

THONY
CLL 7.5

REM. APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.

MISSED APPROACH: Climb to 2500 direct CLL VORTAC then on CLL VORTAC R-299 to THONY INT/CLL 7.5 DME and hold.
VOR or TACAN RWY 11
EASTWOOD FLD (CLL)

MISSED APPROACH: Climb to 3100 on CLL VORTAC R-101 to JUDDY INT/CLL 15 DME and hold.

DME required for procedure entry.

- Procedure turn NA for Cat E.
- Rwy 11 helicopter visibility reduction below 3/4 SM NA.

**ATIS**
- COLLEGE STATION, TEXAS
  - 126.85
- HOUSTON APP CON
  - 134.3 360.85
- EASTERWOOD TOWER
  - 118.5 (CTAF) 284.7
- GND CON
  - 128.7 284.7
- CLNC DEL
  - 128.7
- CLNC DEL (when twr closed)
  - 120.4
- UNICOM
  - 122.95

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 50).

Remain within 10 NM

**CATEGORY**
- A
  - 740-1 421 (500-1)
- B
  - 740-1/4 421 (500-1/4)

EASTWOOD FLD
- SC-5, 30 NOV 2023 to 25 JAN 2024

**TWR**
- 118.5

**COLLEGE STATION, TEXAS**

Amdt 19F 15JUN23

**ELEV**
- 321

**TDZE**
- 319

**MISSED APPROACH**
- Climb to 3100 on CLL VORTAC R-101 to JUDDY INT/CLL 15 DME and hold.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.

TERMINAL

HS 1

ELEV 319

JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W

EASTERWOOD FLD
(CLL)
COLLEGE STATION, TEXAS

ATIS
126.85
EASTERWOOD TOWER
118.5  284.7
GND CON
128.7  284.7
CLNC DEL
128.7
120.4 (When Tower Closed)

ELEV 311

HANGAR

SOUTH RAMP

HANGARS

TWR 388

SOUTHEAST RAMP

30°35.5’N

30°35.0’N

ELEV 311

ELEV 304

35

135

RWY 11-29
PCN 14 F/D/X/T
5-37, D-49
RWY 17-35
PCN 29 R/D/X/T
5-78, D-94, 2D-156

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RNAV (GPS) RWY 2
HOUSTON COUNTY (DKR)

DME/DME RNP-0.3 NA. When local altimeter setting not received, use Palestine altimeter setting and increase all MDA 100 feet. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSSED APPROACH: Climb to 1000 then climbing left turn to 4000 direct LOA VORTAC and hold.

Procedure NA for arrivals on LOA VORTAC airway radials 013 CW 131.

Procedure NA for arrivals on LOA VORTAC airway radials 171 CW 318.

Procedure NA for arrivals on LFK VORTAC airway radials 086° 3000 34.7.

 Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

Palestine altimeter setting and increase all MDA 100 feet.

DME/DME RNP-0.3 NA. When local altimeter setting not received, use

LNAV MDA

820-1 479 (500-1) NA

LNAV MDA

840-1 499 (500-1) NA

CIRCLING

880-1 532 (600-1) 632 (700-1) NA

HOUSTON CENTER

134.8 269.6

CTAF

122.9

HOUSTON COUNTY

AL-9412 (FAA)

CROCKETT, TEXAS

Orig-C 24FEB22
Procedure NA at night. Rwy 20 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 4000 direct LOA VORTAC and hold.

Procedure NA for arrival on LOA VORTAC airway radials 323 CW 131.

Procedure NA for arrival on LFK VORTAC airway radials 245 CW 020.
RNAV (GPS) RWY 17
EAGLE LAKE (ELA)

**AWOS-3PT**
128.475

**HOUSTON APP CON**
124.225 306.975

**CTAF**
122.9

**EAGLE LAKE, TEXAS**
ELEV 184

**Amdt 1C  17JUN21**

**WAAS**
CH 40229
W17A

**APP CRS**
166°

**Rwy Idg**
184

**Apt Elev**
184

**RNP APCH-GPS.**

- **Rwy 17** helicopter visibility reduction below ½ SM NA. Circling Rwy 35 NA at night. When local altimeter setting not received, use Wharton altimeter setting and increase all MDA 80 feet, increase LP, LNAV and Circling Cat C visibility ½ SM. VDP NA when using Wharton altimeter setting.

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

**AWOS-3PT**
128.475

**HOUSTON APP CON**
124.225 306.975

**CTAF**
122.9

**EAGLE LAKE, TEXAS**
ELEV 184

**Amdt 1C  17JUN21**

**WAAS**
CH 40229
W17A

**APP CRS**
166°

**Rwy Idg**
184

**Apt Elev**
184

**RNP APCH-GPS.**

- **Rwy 17** helicopter visibility reduction below ½ SM NA. Circling Rwy 35 NA at night. When local altimeter setting not received, use Wharton altimeter setting and increase all MDA 80 feet, increase LP, LNAV and Circling Cat C visibility ½ SM. VDP NA when using Wharton altimeter setting.

**MISSED APPROACH:**
Climb to 2000 direct ZOMVA and hold.
EAGLE LAKE, TEXAS

RNAV (GPS) RWY 35
EAGLE LAKE (E.A.)

MISSED APPROACH: Climb to 2000 direct HIDIM and hold.

Rwy 35 helicopter visibility reduction below 1 SM NA.
Straight-in and Circling Rwy 35 NA at night.

AWOS-3PT 128.475
HOUSTON APP CON 124.225 306.975
CTAF 122.9 0

MISSED APCH FIX
4 NM

HIDIM

UBACO

ZOMVA

 CATEGORY  A  B  C  D
 LP MDA  620-1  436 (500-1)  620-1\frac{1}{4}  436 (500-1\frac{1}{4})  NA
 LNAV MDA  700-1  516 (600-1)  700-1\frac{3}{8}  516 (600-1\frac{3}{8})  NA
 C CIRCLING  760-1  576 (600-1)  1040-2\frac{1}{2}  856 (900-2\frac{1}{2})  NA

SC-5, 30 NOV 2023 to 25 JAN 2024

EAGLE LAKE, TEXAS
Amdt 2 05DEC19

29°36'N-96°19'W
139
Use Victoria altimeter setting; when not received, use Port Lavaca altimeter setting.

**RNAV (GPS)-B**

**JACKSON COUNTY (26R)**

**APP CRS**

- **327°**

- **Rwy Idg** N/A
- **TDZE** N/A
- **Apt Elev** 61

**RNP APCH**

- **T** Use Victoria altimeter setting; when not received, use Port Lavaca altimeter setting.
- **H** N/A

**HOLD** 6000 2200

**MISSED APPROACH**

- Climb to 2000 direct ZEDNA and hold.

**UNICOM**

- **122.8 (CTAF)**

**VCT ASOS**

- **119.025**

**HOUSTON CENTER**

- **135.05**
- **353.6**

**RNAV (GPS)-B**

**ZEDNA**

**RNAV (GPS)-B**

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**141**
TRINITY 114.75 MHF : : : 
 Chan 94(Y)

SCHOLES 113.0 VUH : : : 
 Chan 77

LOCALIZER 111.7 
 I-GLS 

ROCKPORT 
318°

REIL Rwys 18, 32, and 36
MIIR Rwy 18-36
HIRL Rwy 14-32

FAR to MAP 5.5 NM

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

GALVESTON TOWER
2017
2013

R-237
R-212

G-464
131
148

اصة

1200
hgd
360°

1800

VS

1800 to
SWANE
315° (5.6)

1800

SCHOLES INTL AT GALVESTON (GLS)

ILS or LOC RWY 14

GALVESTON, TEXAS

SC-5, 30 NOV 2023 to 25 JAN 2024

GALVESTON, TEXAS

AL-164 (FAA)

MISSED APPROACH: Climb to 1200 then climbing right turn to 2400 on heading 360° and VUH VOR/DME R-315 to SWANE INT/VUH DME required. Inop table does not apply to S-ILS 14 all Cats.

For inop ALS, increase S-LOC 14 Cat A and B visibility to 1 SM. DME from VUH VOR/DME. Simultaneous reception of I-GLS and VUH DME required. Inop table does not apply to S-ILS 14 all Cats.

Radar required for procedure entry at UCENU.

R-315

R-212

310°

160°

360°

Amdt 13 03NOV22

MISSED APPROACH: Climb to 2400 on heading 360° and VUH VOR/DME R-315 to SWANE INT/VUH DME required. Inop table does not apply to S-ILS 14 all Cats.

For inop ALS, increase S-LOC 14 Cat A and B visibility to 1 SM. DME from VUH VOR/DME. Simultaneous reception of I-GLS and VUH DME required. Inop table does not apply to S-ILS 14 all Cats.

Radar required for procedure entry at UCENU.

R-315

R-212

310°

160°

360°

Amdt 13 03NOV22

Circling NA east of Rwy 18 and northeast of Rwy 32.

For inop ALS, increase S-LOC 14 Cat A and B visibility to 1 SM. DME from VUH VOR/DME. Simultaneous reception of I-GLS and VUH DME required. Inop table does not apply to S-ILS 14 all Cats.
RNAV (GPS) RWY 14
SCHOLES INTL AT GALVESTON (GLS)

Circling NA east of Rwy 18 and northeast of Rwy 32.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C or above 54°C.

MISSED APPROACH: Climb to 1200 then climbing right turn to 3000 direct DELVE and hold.

ASOS
123.95

HOUSTON APP CON
134.45 284.0

GALVESTON TOWER
120.575 (CTAF)

GND CON
118.625

CLNC DEL
135.35

(When twr closed)

UNICOM
123.05

3000 (10)
1800 (10)

RNAV (GPS) RWY 14

RNAV (GPS) RWY 14
RNP APCH.

Circling NA east of Rwy 18 and northeast of Rwy 32.

WAAS
CH 82301
W18A
APP CRS 179°
Rwy Idg 6001
TDZE 6
Apt Elev 6

ASOS 123.95
HOUSTON APP CON 134.45 284.0
GALVESTON TOWER* 120.575 (CTAF)
GND CON 118.625
CLNC DEL 135.35
(When twr closed)
UNICOM 123.05

MISSED APPROACH: Climb to 800 then climbing right turn to 3000 direct DELVE and hold.

IAN  MDA (GLS)
SCHOLES INTL AT GALVESTON
GALVESTON, TEXAS
DELVE
WAAS
CH 82301
W18A
APP CRS 179°
Rwy Idg 6001
TDZE 6
Apt Elev 6

ASOS 123.95
HOUSTON APP CON 134.45 284.0
GALVESTON TOWER* 120.575 (CTAF)
GND CON 118.625
CLNC DEL 135.35
(When twr closed)
UNICOM 123.05
When VGSI inop, Straight-in/Circling Rwy 36 procedure NA at night. Circling NA east of Rwy 18 and northeast of Rwy 32. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

When local altimeter setting not received, use William P Hobby altimeter setting; increase all MDA 80 feet. Increase LP Cat C/D/E visibility ¼ SM, LNAV Cat C/D/E visibility ¼ SM and Circling Cat C/D/E visibility ¼ SM.

When VGSI inop, Straight-in/Circling Rwy 36 procedure NA at night. Circling NA east of Rwy 18 and northeast of Rwy 32. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

When local altimeter setting not received, use William P Hobby altimeter setting; increase all MDA 80 feet. Increase LP Cat C/D/E visibility ¼ SM, LNAV Cat C/D/E visibility ¼ SM and Circling Cat C/D/E visibility ¼ SM.

When VGSI inop, Straight-in/Circling Rwy 36 procedure NA at night. Circling NA east of Rwy 18 and northeast of Rwy 32. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

When local altimeter setting not received, use William P Hobby altimeter setting; increase all MDA 80 feet. Increase LP Cat C/D/E visibility ¼ SM, LNAV Cat C/D/E visibility ¼ SM and Circling Cat C/D/E visibility ¼ SM.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ASOS 123.95
CLNC DEL (When twr closed) 130.35
GND CON 118.625
GALVESTON TOWER 120.575 (CTAF)
HOUSTON DEP CON 134.45 284.0

NOTE: Chart not to scale.

NOTE:  Chart not to scale.

NOTE: RADAR required.

NOTE: The following TRANSITIONS are ATC assigned only. Do not file.

CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).

MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14, 18, 36: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 32: Climb on heading 318° to 800 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

...on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36:
Standard with minimum climb of 500' per NM to 520.

 Departure Route Description

TAKEOFF RUNWAY 14: Climb on heading 138° to 520 for RADAR vectors to DREMR, thence ...
TAKEOFF RUNWAY 18: Climb on heading 179° to 520 for RADAR vectors to DREMR, thence ...
TAKEOFF RUNWAY 32: Climb on heading 318° to 520 for RADAR vectors to DREMR, thence ...
TAKEOFF RUNWAY 36: Climb on heading 359° to 520 for RADAR vectors to DREMR, thence ...

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
NOTE: CRGER-TRANSITION ATC assigned only
for aircraft departing 54T, AXH, EFD, GLS,
HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

FOR AIRCRAFT DEPARTING 54T, AXH, EFD, GLS,
HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 138° to 520, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 18: Climb on heading 179° to 520, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 32: Climb on heading 318° to 520, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 36: Climb on heading 359° to 520, for RADAR vectors to BORRN, thence. . . .

. . . . on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36: Standard.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14, 18, 36: When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 32: Climb on heading 318° to 800 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
EL DORADO ONE DEPARTURE

TOP ALTITUDE: ASSIGNED BY ATC

NOTE: RADAR required.
NOTE: For aircraft destined KMEM or filed via Q32 or J42.

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36: Standard.

NOTE: Chart not to scale.

[NARRATIVE ON FOLLOWING PAGE]
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14, 18, 36: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 32: Climb on heading 318° to 800 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.
NOTE: RADAR required. For aircraft destined for the DFW terminal area only.

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36: Standard.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14, 18, 36: When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure. Thence . . . .

TAKEOFF RUNWAY 32: Climb on heading 318° to 800 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure. Thence . . . .

. . . . on IAH R-358 to cross GIFFA INT at or above 10000.
**SCHOLES INTL AT GALVESTON**

**GALVESTON, TEXAS**

**ASSIGNED BY ATC**

**TOP ALTITUDE: ASSIGNED BY ATC**

**NOTE:** Chart not to scale.

**NOTE:** RNAV 1.
**NOTE:** RADAR required.
**NOTE:** ATC assigned only.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** For non-GPS equipped aircraft, LCH, LLA, TBD, and LEV DME's must be operational.

**TAKEOFF MINIMUMS**

Rwys 14, 18, 32, 36: Standard with minimum climb of 500’ per NM to 520.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14:** Climb on heading 138° to 520, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 18:** Climb on heading 179° to 520, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 32:** Climb on heading 318° to 520, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 36:** Climb on heading 359° to 520, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**BOWFN TRANSITION (HOODO7.BOWFN)**

**CFOOD TRANSITION (HOODO7.CFOOD)**

**HARVEY TRANSITION (HOODO7.HRV)**

**LEEVILLE TRANSITION (HOODO7.LEV)**

**SBIRD TRANSITION (HOODO7.SBIRD)**

**NOTE:** For non-GPS equipped aircraft, LCH, LLA, TBD, and LEV DME's must be operational.
INDIE EIGHT DEPARTURE (RNAV)

ASOS
123.95
CLNC DEL
135.35 (when trw closed)
GND CON
118.625
GALVESTON TOWER
120.575 (CTAF)
HOUSTON DEP CON
134.45 284.0

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36:
Standard with minimum climb of 500' per NM to 520.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 138° to 520 for
RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 18: Climb on heading 179° to 520 for
RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 32: Climb on heading 318° to 520 for
RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 36: Climb on heading 359° to 520 for
RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI,
then on track 026° to WWELL, then on track 026° to INDIE,
then on (transition). Maintain ATC assigned altitude. Expect
filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

INDIE EIGHT DEPARTURE (RNAV)
(INDIE8.INDIE) 07OCT21

SCHOLES INTL AT GALVESTON (GLS)
GALVESTON, TEXAS

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14, 18, 36: When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 32: Climb on heading 318° to 800 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
**RNAV SEVEN DEPARTURE (RNAV)**

### Chart notes:
- **RNAV-1 DME/DME/IRU or GPS.**
- **Radar required.**
- **Top Altitude:** Assigned by ATC
- **Takeoff Minimums:**
  - Rwys 14, 18, 32, 36: Standard with minimum climb of 500’ per NM to 520.

### Operational Details:
- **ASOS:** 123.95
- **CNC DEL (When twr closed):** 135.35
- **GND CON:** 118.625
- **GALVESTON TOWER:** 120.575 (CTAF)
- **HOUSTON DEP CON:** 134.45 284.0

---

**SCHOOLS INTL AT GALVESTON (GLS) GALVESTON, TEXAS**

---

138°
179°
318°
520

---

138°
179°
339°
520

---

**NOTE:** Chart not to scale.

**ASSIGNED BY ATC**

**TOP ALTITUDE:**

**ASSIGNED BY ATC**

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

TAKEOFF RUNWAY 14: Climb on heading 138° to 520, for RADAR vectors to KARRR, thence.

TAKEOFF RUNWAY 18: Climb on heading 179° to 520, for RADAR vectors to KARRR, thence.

TAKEOFF RUNWAY 32: Climb on heading 318° to 520, for RADAR vectors to KARRR, thence.

TAKEOFF RUNWAY 36: Climb on heading 359° to 520, for RADAR vectors to KARRR, thence.

... on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

**ARDMORE**
- 116.7 ADM
- Chan 114
- N34°12.69' - W97°10.10'
- L-17, H-6

**TULSA**
- 114.4 TUL
- Chan 91
- N36°11.78' - W95°47.29'

**LEONA**
- 110.8 LOA
- Chan 45
- N31°39.74' - W97°16.14'

**WACO**
- 115.3 ACT
- Chan 100
- N31°39.74' - W97°16.14'

**BONHAM**
- 114.6 BYP
- Chan 93
- N33°32.25' - W96°14.05'
- L-17, H-6

**CEDAR CREEK**
- 114.8 CQY
- Chan 95
- N32°11.14' - W96°13.09'

**DOLEY**
- 334°
- FL180
- 3000
- L-17, H-6

**WILLIS**
- N30°32.08' - W95°39.10'

**NAVASOTA**
- 115.9 TNAV
- Chan 106
- N31°39.74' - W97°16.14'

**HUMBLE**
- 116.6 IAH
- Chan 113
- N31°39.74' - W97°16.14'

**HUMBLE**
- 116.6 IAH
- Chan 113
- N31°39.74' - W97°16.14'

**BONHAM TRANSITION:** For aircraft overflying north/northwest of the DFW terminal area FL240 and above.

**RANGER TRANSITION:** For aircraft overflying west/northwest of the DFW terminal area FL240 and above.

**ARMORE TRANSITION:** For aircraft overflying north/northwest of the DFW terminal area FL240 and above.

**BONHAM TRANSITION:** For aircraft overflying/landing TUL VORTAC FL240 and above.

**NOTE:** RAdar required.

**NOTE:** Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LEONA SID must file one of the published transitions via FUZ (LOA4.FUZ), ADM (LOA4.ADM), or BYP (LOA4.BYP).

**NOTE:** RANGER TRANSITION: For aircraft overflying west/northwest of the DFW terminal area FL240 and above.

**NOTE:** ARMORE TRANSITION: For aircraft overflying north/northwest of the DFW terminal area FL240 and above.

**NOTE:** BONHAM TRANSITION: For aircraft overflying/landing TUL VORTAC FL240 and above.

**NOTE:** Chart not to scale.

(TOP ALTIMETRY: ASSIGNED BY ATC)

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**LEONA FOUR DEPARTURE**

**SCHOLES INTL AT GALVESTON (G.L.S)**

**TOP ALTIMETRY: ASSIGNED BY ATC**

**NOTES:**

**Rwy 14, 18, 32, 36: Standard.**

**NOTE:** RADAR required.

**NOTE:** Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LEONA SID must file one of the published transitions via FUZ (LOA4.FUZ), ADM (LOA4.ADM), or BYP (LOA4.BYP).

**NOTE:** RANGER TRANSITION: For aircraft overflying west/northwest of the DFW terminal area FL240 and above.

**NOTE:** ARMORE TRANSITION: For aircraft overflying north/northwest of the DFW terminal area FL240 and above.

**NOTE:** BONHAM TRANSITION: For aircraft overflying/landing TUL VORTAC FL240 and above.

**NOTE:** Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14, 18, 36: When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 32: Climb on heading 318° to 800 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

TOP ALTITUDE: ASSIGNED BY ATC

ASSIGNED BY ATC

LITTLE ROCK
113°  LIT
N34°40.66'
W92°10.83'
L-18, H-6

SKKIP
N31°14.91'
W94°39.45'

LUFSKIN
112.1 LFK
N31°09.75'
W94°43.01'

SUSHI
N30°35.48'
W95°04.39'

COLET
N30°26.96'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

HUMBLE
116.6 IAH
N30°15.53'
W95°09.66'

DAISETTA
116.9 DAS
N30°35.48'
W95°04.39'

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36: Standard.

NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14, 18, 36: When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 32: Climb on heading 318° to 800 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . .on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
NOTE: Chart not to scale.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 138° to 520 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 18: Climb on heading 179° to 520 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 32: Climb on heading 318° to 520 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 36: Climb on heading 359° to 520 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
NOTE: Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14:** Climb on heading 138° to 520, for RADAR vectors to MMALT, thence.

**TAKEOFF RUNWAY 18:** Climb on heading 179° to 520, for RADAR vectors to MMALT, thence.

**TAKEOFF RUNWAY 32:** Climb on heading 318° to 520, for RADAR vectors to MMALT, thence.

**TAKEOFF RUNWAY 36:** Climb on heading 359° to 520, for RADAR vectors to MMALT, thence.

...on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**GUSTI TRANSITION (MMALT7.GUSTI)**

**LAKE CHARLES TRANSITION (MMALT7.LCH)**

**WHITE LAKE TRANSITION (MMALT7.LLA)**

**NOTE:** GUSTI and LCH Transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41 and 54T.
NOTE: Chart not to scale.

(RADAR and DME required.)

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14, 18, 36: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 32: Climb on heading 318° to 800 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE:  RNAV 1.
NOTE:  DME/DME/IRU or GPS required.
NOTE:  RADAR required.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14:  Climb on heading 138° to 520 for RADAR vectors to KNTKY, thence. . . .
TAKEOFF RUNWAY 18:  Climb on heading 179° to 520 for RADAR vectors to KNTKY, thence. . . .
TAKEOFF RUNWAY 32:  Climb on heading 318° to 520 for RADAR vectors to KNTKY, thence. . . .
TAKEOFF RUNWAY 36:  Climb on heading 359° to 520 for RADAR vectors to KNTKY, thence. . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JBULL TRANSITION (STRYA8.JBULL)
TOP ALTITUDE: ASSIGNED BY ATC

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 138° to 520 for RADAR vectors to BBYSE, thence . . .
TAKEOFF RUNWAY 18: Climb on heading 179° to 520 for RADAR vectors to BBYSE, thence . . .
TAKEOFF RUNWAY 32: Climb on heading 318° to 520 for RADAR vectors to BBYSE, thence . . .
TAKEOFF RUNWAY 36: Climb on heading 359° to 520 for RADAR vectors to BBYSE, thence . . .

.on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WLLIS TRANSITION (STYCK8.WLIS)

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36: Standard with minimum climb of 500’ per NM to 520.

NOTE: Chart not to scale.

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
WATFO SIX DEPARTURE (RNAV)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 138° to 520, for RADAR vectors to WATFO, thence. . . .
TAKEOFF RUNWAY 18: Climb on heading 179° to 520, for RADAR vectors to WATFO, thence. . . .
TAKEOFF RUNWAY 32: Climb on heading 318° to 520, for RADAR vectors to WATFO, thence. . . .
TAKEOFF RUNWAY 36: Climb on heading 359° to 520, for RADAR vectors to WATFO, thence. . . .

. . . .on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6.ANKRR)
KELPP TRANSITION (WATFO6.KELPP)
MUSYL TRANSITION (WATFO6.MUSYL)
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36: Standard with minimum climb of 500’ per NM to 520.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 138° to 520 for RADAR vectors to WYLSN, thence . . .
TAKEOFF RUNWAY 18: Climb on heading 179° to 520 for RADAR vectors to WYLSN, thence . . .
TAKEOFF RUNWAY 32: Climb on heading 318° to 520 for RADAR vectors to WYLSN, thence . . .
TAKEOFF RUNWAY 36: Climb on heading 359° to 520 for RADAR vectors to WYLSN, thence . . .

...on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)

NOTE: Chart not to scale.
RNAV (GPS) RWY 17
GIDDINGS-LEE COUNTY (GYB)

**MISSED APPROACH:**
Climb to 2500 direct RAMOS and hold.

**DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1SM NA.**
Procedure NA at night. When local altimeter setting not received, use Austin-Bergstrom Intl altimeter setting and increase all MDA 100 feet; increase visibility Cat C 1/4 SM.

**AWOS-3**
119.225

**AUSTIN APP CON**
127.225 317.65

**UNICOM**
123.05 (CTAF)

**ELEV** 484
**TDZE** 484

**MISSED APCH FIX**
RAMOS 168°

**VGSI and descent angles not coincident (VGSI Angles 3.75/TCH 34).**

**CATEGORY**

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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>456 (500-1)</td>
<td>940-1/4</td>
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<td>CIRCLING</td>
<td>940-1</td>
<td>1160-1</td>
<td>1240-2/4</td>
<td>756 (800-2/4)</td>
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**GIDDINGS, TEXAS**
Orig-B 27JAN22

**30°10'N-96°59'W**

**RNAV (GPS) RWY 17**
GIDDINGS-LEE COUNTY (GYB)
RNAV (GPS) RWY 35
GIDDINGS-LEE COUNTY (GYB)

**AWOS-3** 119.225  **AUSTIN APP CON** 127.225 317.65  **UNICOM** 123.05 (CTAF)

**MISSED APPROACH:**
- Climb to 2500 direct PPENS and hold.
- Setting and increase all MDA 100 feet; increase visibility Cat C 1/4 SM.

**RNAV (GPS) RWY 35**

**DME/DME RNP-0.3 NA.** Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Austin-Bergstrom Intl altimeter setting and increase all MDA 100 feet; increase visibility Cat C 1/4 SM.

**APP CRS** 348°
- **Rwy Idg:** 4000
- **TDZE:** 473
- **Apt Elev:** 484

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

**LNAV MDA**
- 960-1
- 487 (500-1)
- 960-1 1/4
- 487 (500-1/4)
- NA

**CIRCLING**
- 960-1
- 476 (500-1)
- 1160-1
- 676 (700-1)
- 1240-2 1/4
- 756 (800-2 1/4)
- NA

**GIDDINGS-TEXAS**
AL-6499 (FAA)
22027

**GIDDINGS-LEE COUNTY (GYB)**
SC-5, 30 NOV 2023 to 25 JAN 2024
30°10'N-96°59'W
177
### Category and Circling Details

<table>
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<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
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<td>816 (900-1¼)</td>
<td>1300-2½</td>
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### Approach Details

- **VOR/DME-A**
- **GIDDINGS-LEE COUNTY (GYB)**
- **IDU** 20
- **IUKKA**
- **IDU** 14

#### Approach Instructions
- **Procedure NA at night**.
- **Helicopter visibility reduction** below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Points
- **AWOS-3**
- **119.225**
- **AUSTIN APP CON**
- **127.225 317.65**
- **UNICOM**
- **123.05 (CTAF)**

#### Approach Diagram

- **1.1% U**
- **IDU 20**
- **IUKKA**
- **IDU 14**

#### Approach Notes

- **MISSED APPROACH**: Climbing left turn to 2500 via IDU R-293 to IUKKA 20 DME and hold.

#### Approach Contact Details

- **AWOS-3**
- **119.225**
- **AUSTIN APP CON**
- **127.225 317.65**
- **UNICOM**
- **123.05 (CTAF)**

#### Approach Altitude

- **2500**

#### Approach Elevation

- **484**

#### Approach MSA

- **26 NM**

#### Approach Routes

- **R-293**
- **R-225**
- **R-045**

#### Approach Altitude

- **2500**

#### Approach Waypoints

- **IDU 14**
- **IUKKA**

#### Approach misc

- **GIDDINGS, TEXAS**
- **AL-6499 (FAA)**
- **Amdt 3B 27JAN22**

#### Approach Notes

- Helicopter visibility reduction below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Conditions

- **30°10'N-96°59'W**
- **GIDDINGS-LEE COUNTY (GYB)**

#### Approach Summary

- **Procedure NA at night**.
- **Helicopter visibility reduction** below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Diagram

- **1.1% U**
- **IDU 20**
- **IUKKA**
- **IDU 14**

#### Approach Contact Details

- **AWOS-3**
- **119.225**
- **AUSTIN APP CON**
- **127.225 317.65**
- **UNICOM**
- **123.05 (CTAF)**

#### Approach Altitude

- **2500**

#### Approach Elevation

- **484**

#### Approach MSA

- **26 NM**

#### Approach Routes

- **R-293**
- **R-225**
- **R-045**

#### Approach Altitude

- **2500**

#### Approach Waypoints

- **IDU 14**
- **IUKKA**

#### Approach misc

- **GIDDINGS, TEXAS**
- **AL-6499 (FAA)**
- **Amdt 3B 27JAN22**

#### Approach Notes

- Helicopter visibility reduction below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Conditions

- **30°10'N-96°59'W**
- **GIDDINGS-LEE COUNTY (GYB)**

#### Approach Summary

- **Procedure NA at night**.
- **Helicopter visibility reduction** below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Diagram

- **1.1% U**
- **IDU 20**
- **IUKKA**
- **IDU 14**

#### Approach Contact Details

- **AWOS-3**
- **119.225**
- **AUSTIN APP CON**
- **127.225 317.65**
- **UNICOM**
- **123.05 (CTAF)**

#### Approach Altitude

- **2500**

#### Approach Elevation

- **484**

#### Approach MSA

- **26 NM**

#### Approach Routes

- **R-293**
- **R-225**
- **R-045**

#### Approach Altitude

- **2500**

#### Approach Waypoints

- **IDU 14**
- **IUKKA**

#### Approach misc

- **GIDDINGS, TEXAS**
- **AL-6499 (FAA)**
- **Amdt 3B 27JAN22**

#### Approach Notes

- Helicopter visibility reduction below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Conditions

- **30°10'N-96°59'W**
- **GIDDINGS-LEE COUNTY (GYB)**

#### Approach Summary

- **Procedure NA at night**.
- **Helicopter visibility reduction** below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Diagram

- **1.1% U**
- **IDU 20**
- **IUKKA**
- **IDU 14**

#### Approach Contact Details

- **AWOS-3**
- **119.225**
- **AUSTIN APP CON**
- **127.225 317.65**
- **UNICOM**
- **123.05 (CTAF)**

#### Approach Altitude

- **2500**

#### Approach Elevation

- **484**

#### Approach MSA

- **26 NM**

#### Approach Routes

- **R-293**
- **R-225**
- **R-045**

#### Approach Altitude

- **2500**

#### Approach Waypoints

- **IDU 14**
- **IUKKA**

#### Approach misc

- **GIDDINGS, TEXAS**
- **AL-6499 (FAA)**
- **Amdt 3B 27JAN22**

#### Approach Notes

- Helicopter visibility reduction below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Conditions

- **30°10'N-96°59'W**
- **GIDDINGS-LEE COUNTY (GYB)**

#### Approach Summary

- **Procedure NA at night**.
- **Helicopter visibility reduction** below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Diagram

- **1.1% U**
- **IDU 20**
- **IUKKA**
- **IDU 14**

#### Approach Contact Details

- **AWOS-3**
- **119.225**
- **AUSTIN APP CON**
- **127.225 317.65**
- **UNICOM**
- **123.05 (CTAF)**

#### Approach Altitude

- **2500**

#### Approach Elevation

- **484**

#### Approach MSA

- **26 NM**

#### Approach Routes

- **R-293**
- **R-225**
- **R-045**

#### Approach Altitude

- **2500**

#### Approach Waypoints

- **IDU 14**
- **IUKKA**

#### Approach misc

- **GIDDINGS, TEXAS**
- **AL-6499 (FAA)**
- **Amdt 3B 27JAN22**

#### Approach Notes

- Helicopter visibility reduction below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Conditions

- **30°10'N-96°59'W**
- **GIDDINGS-LEE COUNTY (GYB)**

#### Approach Summary

- **Procedure NA at night**.
- **Helicopter visibility reduction** below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Diagram

- **1.1% U**
- **IDU 20**
- **IUKKA**
- **IDU 14**

#### Approach Contact Details

- **AWOS-3**
- **119.225**
- **AUSTIN APP CON**
- **127.225 317.65**
- **UNICOM**
- **123.05 (CTAF)**

#### Approach Altitude

- **2500**

#### Approach Elevation

- **484**

#### Approach MSA

- **26 NM**

#### Approach Routes

- **R-293**
- **R-225**
- **R-045**

#### Approach Altitude

- **2500**

#### Approach Waypoints

- **IDU 14**
- **IUKKA**

#### Approach misc

- **GIDDINGS, TEXAS**
- **AL-6499 (FAA)**
- **Amdt 3B 27JAN22**

#### Approach Notes

- Helicopter visibility reduction below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.

#### Approach Conditions

- **30°10'N-96°59'W**
- **GIDDINGS-LEE COUNTY (GYB)**

#### Approach Summary

- **Procedure NA at night**.
- **Helicopter visibility reduction** below 1 SM NA.
- Use Austin-Bergstrom altimeter setting.
RNAV (GPS) RWY 18
HEARNE MUNI (LHB)

MISSED APPROACH: Climb to 2100 direct HISEM and hold.

**RNP APCH.**

Baro-VNAV and VDP NA when using College Station altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

**AWOS-3**

<table>
<thead>
<tr>
<th>Category</th>
<th>AWOS-3</th>
<th>HOUSTON APP CON</th>
<th>CTAF</th>
<th>123.3</th>
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<tbody>
<tr>
<td></td>
<td>118.675</td>
<td>134.3 360.85</td>
<td>122.9</td>
<td></td>
</tr>
</tbody>
</table>

**RNAV (GPS) RWY 18**

- **2 NM to WIGVU:** 179°
- **2 NM to RW18:** 178°
- **2 NM to YORDU:** 180°
- **2 NM to JUPAX:** 180°

**Missed Approach Fix**

- **HISEM:** 2100
- **JUPAX:** 2600

**CIRCLING**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>485-3/4</td>
<td>200 (200-3/4)</td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>583-1</td>
<td>298 (300-1)</td>
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<td>LNAV MDA</td>
<td>780-1</td>
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<td>780-1/2</td>
<td>495 (500-1/2)</td>
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<tr>
<td>CIRCLING</td>
<td>800-1</td>
<td>515 (600-1)</td>
<td>920-1</td>
<td>635 (700-1)</td>
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**HEARNE, TEXAS**

Orig-C 19MAY22

30°52'N-96°37'W

179
RNAV (GPS) RWY 36
HEARNE MUNI (LHB)

For uncompensated Baro-VNAV systems, LPV, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use College Station altimeter setting and increase all DA 55 feet and all MDA 60 feet. Increase LPV, LNAV/VNAV all Cats and LNAV Cat C visibility ½ mile. Increase Circling Cat C visibility ¾ mile. Baro-VNAV and VDP NA when using College Station altimeter setting.

MISSED APPROACH: Climb to 2600 direct JUPAX and hold.

AWOS-3
118.675

HOUSTON APP CON
134.3 360.85

CTAF
122.9

123.3

HEARNE, TEXAS
Orig-B 19MAY22

ELEV 285
TDZE 284

RADAR REQUIRED

<table>
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<tr>
<th>CATEGORY</th>
<th>A</th>
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<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>484-3/4</td>
<td>200 (200-3/4)</td>
<td>NA</td>
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<tr>
<td>LNAV/ VNAV DA</td>
<td>534-7/8</td>
<td>250 (300-7/8)</td>
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<td>LNAV MDA</td>
<td>580-1</td>
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<td>580-7/8</td>
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<tr>
<td>CIRCLING</td>
<td>800-1</td>
<td>515 (600-1)</td>
<td>920-1</td>
<td>635 (700-1)</td>
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</tbody>
</table>

30°52'N-96°37'W
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. Rwy 1 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2000 direct IPOME and hold.

ATIS 118.325
HOUSTON APP CON 119.7 281.4
CONROE TOWER* 124.125 (CTAF)
GND CON 120.45
CLNC DEL 120.45
CLNC DEL 119.55
(When twr closed)

MISSED APCH FIX
4 NM
012°
IPOME

HOUSTON, TEXAS
AL-5573 (FAA)

RNAV (GPS) RWY 1
CONROE/NORTH HOUSTON RGNL (CXO)

ATIS 118.325
HOUSTON APP CON 119.7 281.4
CONROE TOWER* 124.125 (CTAF)
GND CON 120.45
CLNC DEL 120.45
CLNC DEL 119.55
(When twr closed)

HOUSTON, TEXAS
AL-5573 (FAA)

RNAV (GPS) RWY 1
CONROE/NORTH HOUSTON RGNL (CXO)

ATIS 118.325
HOUSTON APP CON 119.7 281.4
CONROE TOWER* 124.125 (CTAF)
GND CON 120.45
CLNC DEL 120.45
CLNC DEL 119.55
(When twr closed)

HOUSTON, TEXAS
AL-5573 (FAA)

RNAV (GPS) RWY 1
CONROE/NORTH HOUSTON RGNL (CXO)

ATIS 118.325
HOUSTON APP CON 119.7 281.4
CONROE TOWER* 124.125 (CTAF)
GND CON 120.45
CLNC DEL 120.45
CLNC DEL 119.55
(When twr closed)

HOUSTON, TEXAS
AL-5573 (FAA)

RNAV (GPS) RWY 1
CONROE/NORTH HOUSTON RGNL (CXO)

ATIS 118.325
HOUSTON APP CON 119.7 281.4
CONROE TOWER* 124.125 (CTAF)
GND CON 120.45
CLNC DEL 120.45
CLNC DEL 119.55
(When twr closed)

HOUSTON, TEXAS
AL-5573 (FAA)

RNAV (GPS) RWY 1
CONROE/NORTH HOUSTON RGNL (CXO)

ATIS 118.325
HOUSTON APP CON 119.7 281.4
CONROE TOWER* 124.125 (CTAF)
GND CON 120.45
CLNC DEL 120.45
CLNC DEL 119.55
(When twr closed)

HOUSTON, TEXAS
AL-5573 (FAA)

RNAV (GPS) RWY 1
CONROE/NORTH HOUSTON RGNL (CXO)
For uncompensated Baro-VNAV systems, UNAV/VNAV NA below -6°C (-22°F) or above 54°C (130°F). DME/DME RNP 0.3 NA.

**ATIS**

<table>
<thead>
<tr>
<th>ATIS</th>
<th>HOUSTON APP CON</th>
<th>CONROE TOWER (CTAF)</th>
<th>GND CON</th>
<th>CLNC DEL</th>
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<tbody>
<tr>
<td>118.325</td>
<td>119.7</td>
<td>281.4</td>
<td>124.125</td>
<td>120.45</td>
</tr>
</tbody>
</table>

**Miscellaneous**

- **ATIS**
- **CONROE TOWER (CTAF)**
- **GND CON**
- **CLNC DEL**

**LNAV only.**

**MISSED APPROACH:** Climb to 700 then climbing left turn to 3100 direct CLEEP and hold.

**ATIS**

- 118.325

**CONROE TOWER (CTAF)**

- 124.125

**Houston, Texas**

- Amdt 1B 22JUN17

**Table:**

<table>
<thead>
<tr>
<th>MINIMUM ALT</th>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td><strong>LPV DA</strong></td>
<td></td>
<td>436½</td>
<td>200 (200-1/2)</td>
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<tr>
<td><strong>LNAV/VNAV DA</strong></td>
<td></td>
<td>521½</td>
<td>285 (300-1/2)</td>
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<td><strong>LNAV MDA</strong></td>
<td></td>
<td>640½</td>
<td>404 (400-1/2)</td>
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<tr>
<td><strong>CIRCLING</strong></td>
<td></td>
<td>700-1</td>
<td>455 (500-1)</td>
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</tbody>
</table>

**VFR Minimums:**

- 30°21'N-95°25'W

**Altimeter Setting:**

- 29.92" Hg

**Weather Information:**

- Ceiling: 1500 ft
- Visibility: 7 miles
- Runway: 14-32

**NOTAMs:**

- SC-5, 30 NOV 2023 to 25 JAN 2024

**Runway Information:**

- RW14: 25 NM
- RW14: 25 NM
- RW14: 25 NM

**Instruments:**

- RNAV (GPS) RWY 14
- RNAV (GPS) RWY 14
- RNAV (GPS) RWY 14

**Navigational Aids:**

- MALS
- W14A
- RNAV (GPS) RWY 14
- RNAV (GPS) RWY 14
- RNAV (GPS) RWY 14

**Temperature:**

- Normal: -6°C (-22°F) or above 54°C (130°F)
- Abnormal: 5°C (41°F) or above 7°C (45°F)

**Notices to Airmen:**

- Amdt 1B 22JUN17
- SC-5, 30 NOV 2023 to 25 JAN 2024

**Other Information:**

- HOUSTON, TEXAS
- CONROE/NORTH HOUSTON RGNL (CXO)
- RNAV (GPS) RWY 14
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.
Rwy 19 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3100 direct JEVIB and left turn on track 077° to CLEEP and hold.

**LNAV only.**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>LPV DA</td>
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<td>445 (500-1½)</td>
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<tr>
<td>660-1½</td>
<td>423 (500-1½)</td>
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<tr>
<td>CIRCLING</td>
<td>700-1</td>
<td>455 (500-1)</td>
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<tr>
<td>880-1½</td>
<td>635 (700-1¼)</td>
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<tr>
<td>960-2½</td>
<td>715 (800-2¼)</td>
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CONROE/NORTH HOUSTON RGNL (CXO)

HOUSTON, TEXAS
Orig-A 22JUN17

18°21’N-95°25’25”W

CONROE/NORTH HOUSTON RGNL (CXO)

RNAV (GPS) RWY 19

RNAV (GPS) RWY 19

HOUSTON, TEXAS
AL-5573 (FAA)

WAAS CH 90219
W19A

APP CRS 192°
Rwy Idg TDZE
2000 237
Apt Elev
245

ATIS 118.325
HOUSTON APP CON 119.7 281.4
CONROE TOWER 124.125 (CTAF)
GND CON 120.45
CLNC DEL 120.45
CLNC DEL 119.55
(When twr closed)

CLEEP

1347
278°

1349

4 NM

3100

120°

30°21’N-95°25’25”W

CONROE/NORTH HOUSTON RGNL (CXO)

RNAV (GPS) RWY 19

HOUSTON, TEXAS
AL-5573 (FAA)

WAAS CH 90219
W19A

APP CRS 192°
Rwy Idg TDZE
2000 237
Apt Elev
245

ATIS 118.325
HOUSTON APP CON 119.7 281.4
CONROE TOWER 124.125 (CTAF)
GND CON 120.45
CLNC DEL 120.45
CLNC DEL 119.55
(When twr closed)
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (-22°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.
Rwy 32 helicopter visibility reduction below ¼ SM NA.

MISSED APPROACH: Climb to 2100 direct AXTEP and hold.

ATIS
HOU 118.325
CONROE TOWER 140.125
GND CON 120.45
124.125 (CTAF)
CONROE APP CON 119.7 281.4
CLNC DEL 119.55
(When twr closed)

ELEV 245
TDZE 245

AXTEP
3100

140°
320°

Category A: 495-3/4
Category B: 505-7/8
Category C: 580-1
Category D: 700-1

LNAV/VNAV DA
505-7/8
260 (300-7/8)

LNAV MDA
580-1
335 (400-1)

CIRCLING
700-1
455 (500-1)
880-1 1/4
635 (700-1 1/4)
960-2 1/4

1349°
932°
321°
3100°
324°

RNAV (GPS) RWY 32
CONROE/NORTH HOUSTON RGNL (CXO)
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

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

NOTE: The following TRANSITIONS are ATC assigned only. Do not file.

CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).

MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . .on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
NOTE: Radar required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 1, 14, 19, 32:
Standard with minimum climb of 500' per NM to 760.

TAKEOFF RUNWAY 1: Climb on heading 012° to 760
for Radar vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 14: Climb on heading 140° to 760
for Radar vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 19: Climb on heading 192° to 760
for Radar vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 32: Climb on heading 320° to 760
for Radar vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to
BLTWY, then on (transition). Maintain ATC assigned
altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
NOTE: Chart not to scale.

BORRN SIX DEPARTURE (RNAV)

BORRN SIX DEPARTURE (RNAV)

(30 NOV 23)

ATIS
119.325
CLNC DEL
120.45
CLNC DEL (When twr closed)
119.55
GND CON
120.45
CONROE TOWER* 124.125 (CTAF)
HOUSTON DEP CON
119.7  281.4

JUNCTION JCT

CRGER 12000

*3100 279° (33)

HAYYY 12000

*2900 278° (34)

PUFER 12000

*2100 275° (35)

PSTUR 12000

*2400 275° (36)

ZUUUU

MNURE

10600

*2100 275° (37)

BOCCK

12000

*2600 261° (68)

DILRE

12000

*2100 275° (62)

WEED

12000

*2600 261° (68)

WAILN

10800

*1800 270° (20)

MARCS

12000

*2800 239° (35)

SAN ANTONIO SAT

12000

*2800 239° (35)

NOTE: CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

TOP ALTITUDE: ASSIGNED BY ATC

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

TAKEOFF MINIMUMS
Rwys 1, 14, 19, 32: Standard with minimum climb of 500'/NM to 760.

NARRATIVE ON FOLLOWING PAGE

ASSIGNED BY ATC

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

TAKEOFF MINIMUMS
Rwys 1, 14, 19, 32: Standard with minimum climb of 500'/NM to 760.

NOTE: Chart not to scale.

(30 NOV 23)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 012° to 760, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 14: Climb on heading 140° to 760, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 19: Climb on heading 192° to 760, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 32: Climb on heading 320° to 760, for RADAR vectors to BORRN, thence. . . .

. . . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 1, 14, 19, 32: Standard.

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence...

...on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.

NOTE: RADAR required.
NOTE: For aircraft destined KMEM or filed via Q32 or J42.
NOTE: Radar required. For aircraft destined for the DFW terminal area only.

**TOP ALTITUDE: ASSIGNED BY ATC**

NOTE: Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF ALL RUNWAYS:** When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . . . on IAH R-358 to cross GIFFA INT at or above 10000.

**TAKEOFF MINIMUMS**

Rwys 1, 14, 19, 32: Standard.

**NOTE:** Chart not to scale.
NOTE: RNAL 1.
NOTE: RADAR required.
NOTE: ATC assigned only.
NOTE: DME/DME/IRU or GPS required.
NOTE: For non-GPS equipped aircraft, LCH, LLA, TBD, and LEV DME’s must be operational.

**TAKEOFF MINIMUMS**

Rwys 1, 14, 19, 32: Standard with minimum climb of 500' per NM to 760.

**TAKEOFF RUNWAY 1:** Climb on heading 012° to 760, for RADAR vectors to VUH VOR/DME, thence . . . .
**TAKEOFF RUNWAY 14:** Climb on heading 140° to 760, for RADAR vectors to VUH VOR/DME, thence . . . .
**TAKEOFF RUNWAY 19:** Climb on heading 192° to 760, for RADAR vectors to VUH VOR/DME, thence . . . .
**TAKEOFF RUNWAY 32:** Climb on heading 320° to 760, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**BOWFN TRANSITION (HOODO7.BOWFN)**
**CFOOD TRANSITION (HOODO7.CFOOD)**
**HARVEY TRANSITION (HOODO7.HRV)**
**LEEVILLE TRANSITION (HOODO7.LEV)**
**SBIRD TRANSITION (HOODO7.SBIRD)**
TAKEOFF RUNWAY 1: Climb on heading 012° to 760 for RADAR vectors to RENKK, thence . . .
TAKEOFF RUNWAY 14: Climb on heading 140° to 760 for RADAR vectors to RENKK, thence . . .
TAKEOFF RUNWAY 19: Climb on heading 192° to 760 for RADAR vectors to RENKK, thence . . .
TAKEOFF RUNWAY 32: Climb on heading 320° to 760 for RADAR vectors to RENKK, thence . . .

. . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to CUZZZ INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-276 and JCT R-090 to JCT VORTAC.
RNAV-1 DME/DME/IRU or GPS.
RADAR required.

**Takeoff Minimums**
Rwys 1, 14, 19, 32:
Standard with minimum climb of 500’ per NM to 760.

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

TAKEOFF RUNWAY 1: Climb on heading 012° to 760, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 14: Climb on heading 140° to 760, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 19: Climb on heading 192° to 760, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 32: Climb on heading 320° to 760, for RADAR vectors to KARRR, thence. . . .

. . . . on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
LAKE CHARLES FIVE DEPARTURE

**DEPARTURE ROUTE DESCRIPTION**

When entering controlled airspace, climb on assigned heading for RADAR vectors to WEDRI INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . .on IAH R-082 to HOURN INT, then on LCH R-253 to LCH VORTAC.

**FIGHTING TIGERS TRANSITION (LCH5.LSU):** From over LCH VORTAC on LCH R-070 and LSU R-252 to LSU VORTAC.
TOP ALTITUDE: ASSIGNED BY ATC

ARDMORE
116.7 ADM
Chan 114
N34°12.69' - W97°10.10'
L-17, H-6

RANGER
115.7 FUZ
Chan 104
N32°53.37' - W97°10.77'
L-17, H-6

DOLEY
N32°11.35' - W96°13.09'
10000 FL180 (BYP)
R-172 L-17, H-6

DOLEY
N32°11.35' - W96°13.09'
10000 FL180 (BYP)
R-172 L-17, H-6

WACO
115.3 ACT
Chan 100
N31°39.74' - W97°16.14'

NAVASOTA
115.9 TNV
Chan 106

BONHAM
114.6 BYP
Chan 93
N33°32.25' - W96°14.05'
L-17, H-6

CEDAR CREEK
114.8 CQY
Chan 98
N32°11.14' - W96°13.09'

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

WLLIS
N30°32.08' - W95°39.10'

HUMBLED
116.6 IAH
Chan 113

NOTE: RADAR required.
NOTE: Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LEONA SID must file one of the published transitions via FUZ (LOA4.FUZ), ADM (LOA4.ADM), or BYP (LOA4.BYP).
NOTE: RANGER TRANSITION: For aircraft overflying west/northwest of the DFW terminal area FL240 and above.
NOTE: ARDMORE TRANSITION: For aircraft overflying north/northwest of the DFW terminal area FL240 and above.
NOTE: BONHAM TRANSITION: For aircraft overflying/landing TUL VORTAC FL240 and above.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
**NOTE:** Chart not to scale.

**TOP ALTITUDE:**

**ASSIGNED BY ATC**

**NOTE:** RADAR and DME required.

**NOTE:** For aircraft destined LIT or overflying LIT or PXV.

**TAKEOFF MINIMUMS**

Rwys 1, 14, 19, 32: Standard.

**LUFKIN THREE DEPARTURE**

**CONROE/NORTH HOUSTON RGNL (CXO)**

**HOUSTON, TEXAS**

**NOTE:** Chart not to scale.

**(NARRATIVE ON FOLLOWING PAGE)**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . .on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
LURIC EIGHT DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 012° to 760 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 14: Climb on heading 140° to 760 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 19: Climb on heading 192° to 760 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 32: Climb on heading 320° to 760 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 012° to 760, for RADAR vectors to MMALT, thence . . .
TAKEOFF RUNWAY 14: Climb on heading 140° to 760, for RADAR vectors to MMALT, thence. . . .
TAKEOFF RUNWAY 19: Climb on heading 192° to 760, for RADAR vectors to MMALT, thence. . . .
TAKEOFF RUNWAY 32: Climb on heading 320° to 760, for RADAR vectors to MMALT, thence. . . .

. . . .on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT7.GUSTI)
LAKE CHARLES TRANSITION (MMALT7.LCH)
WHITE LAKE TRANSITION (MMALT7.LLA)

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

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 30 NOV 2023 to 25 JAN 2024
TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
STRYA EIGHT DEPARTURE (RNAV)

NOTE: Chart not to scale.

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

TAKEOFF MINIMUMS
Rwys 1, 14, 19, 32: Standard with minimum climb of 500' per NM to 760.

TAKEOFF RUNWAY 1: Climb on heading 012° to 760 for RADAR vectors to KNTKY, thence.
TAKEOFF RUNWAY 14: Climb on heading 140° to 760 for RADAR vectors to KNTKY, thence.
TAKEOFF RUNWAY 19: Climb on heading 192° to 760 for RADAR vectors to KNTKY, thence.
TAKEOFF RUNWAY 32: Climb on heading 320° to 760 for RADAR vectors to KNTKY, thence.

. . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JBULL TRANSITION (STRYA8.JBULL)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 012° to 760 for RADAR vectors to BBYSE, thence...
TAKEOFF RUNWAY 14: Climb on heading 140° to 760 for RADAR vectors to BBYSE, thence...
TAKEOFF RUNWAY 19: Climb on heading 192° to 760 for RADAR vectors to BBYSE, thence...
TAKEOFF RUNWAY 32: Climb on heading 320° to 760 for RADAR vectors to BBYSE, thence...

...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WTSON TRANSITION (STYCK8.WTSON)

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 1:** Climb on heading 012° to 760, for RADAR vectors to WATFO, thence. . . .

**TAKEOFF RUNWAY 14:** Climb on heading 140° to 760, for RADAR vectors to WATFO, thence. . . .

**TAKEOFF RUNWAY 19:** Climb on heading 192° to 760, for RADAR vectors to WATFO, thence. . . .

**TAKEOFF RUNWAY 32:** Climb on heading 320° to 760, for RADAR vectors to WATFO, thence. . . .

. . . .on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6.ANKRR)
KELPP TRANSITION (WATFO6.KELPP)
MUSYL TRANSITION (WATFO6.MUSYL)
WYLSN EIGHT DEPARTURE (RNAV)

TOP ALTITUDE:
ASSIGNED BY ATC

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

TAKEOFF MINIMUMS
Rwys 1, 14, 19, 32: Standard with minimum climb of 500' per NM to 760.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 1: Climb on heading 012° to 760 for RADAR vectors to WYLSN, thence. . . .
TAKEOFF RUNWAY 14: Climb on heading 140° to 760 for RADAR vectors to WYLSN, thence. . . .
TAKEOFF RUNWAY 19: Climb on heading 192° to 760 for RADAR vectors to WYLSN, thence. . . .
TAKEOFF RUNWAY 32: Climb on heading 320° to 760 for RADAR vectors to WYLSN, thence. . . .

. . . . on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKKK TRANSITION (WYLSN8.MAJKK)

NOTE: Chart not to scale.
HOUSTON, TEXAS

RNP APCH-GPS.

Baro-VNAV NA when using George Bush Int’l/Houston altimeter setting. For uncompensated Baro-VNAV systems, procedure NA below -2°C or above 54°C. Rwy 17R helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use George Bush Int’l/Houston altimeter setting: Increase all DAs 36 feet and visibilities ½ SM; increase all MDAs 40 feet. When control tower closed, LPV visibility 1 SM.

ATIS
HOUSTON APP CON
HOUSTON, TEXAS
128.375
119.7 281.4

HOUSON TOWER
127.4 354.1 EAST
HOUN CTR
118.4 (CTAF) 354.1 WEST

GND CON
CLNC DEL
UNICOM
121.8 239.0
119.45
122.95

Procedure NA for arrivals at ZMSKL on V477 northbound and V306 eastbound.

Procedure NA for arrivals at SEALY on T200 southeast bound, V222 westbound and T200-220 northwest bound.
**RNAV (GPS) RWY 35L**

**DAVID WAYNE HOOKS MEML (DWH)**

---

### HOUSTON, TEXAS

**AI-5457 (FAA)**

**23110**

### RNP APCH-GPS

- **WAAAS CH 45603 W35A**
- **APP CRS 348°**
- **Rwy Idg 6700**
- **TDZE 152**
- **Apt Elev 152**

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**ATIS**

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**CLNC DEL**

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**OILER**

**1.2 NM**

**HIWDE**

**1.2 NM**

**KOHRY**

**3.8 NM**

**HIWDE**

**6 NM**

### CATEGORY

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<td>552-3/8</td>
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<td>560-1/8 408 (500-1/4)</td>
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<td>CIRCLING</td>
<td>640-1 488 (500-1)</td>
<td>660-1 .508 (600-1)</td>
<td>680-1/2 528 (600-1/2)</td>
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### MISSPAP APCH FIX

- **4 NM**
- **348°**
- **OILER**

---

**Baro-VNAV and VDP NA when using George Bush Intcnt/Houston altimeter setting.**

- **For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C.**
- **When local altimeter setting not received, use George Bush Intcnt/Houston altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LPV and LNAV/VNAV visibility all Cats ½ mile, LNAV visibility Cats C/D ¼ mile. Rwy 35L helicopter visibility reduction below ¼ SM NA.**

Circling NA to Rwys 17W and 35W. Circling Rwy 35R NA at night.

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**Amdt 1F 20APR23**

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**30*04'N 95*33'W**

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**IAN HOOKS MEML (DWH)**

**RNAV (GPS) RWY 35L**

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**30*04'N 95*33'W**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: RADAR required.

NOTE: The following TRANSITIONS are ATC assigned only. Do not file.

CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).

MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . .on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17R: Climb on heading 168° to 660 for RADAR vectors to DREMR, thence. . . .

TAKEOFF RUNWAY 35L: Climb on heading 348° to 660 for RADAR vectors to DREMR, thence. . . .

. . . .on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
NOTE: CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

TAKEOFF MINIMUMS
Rwys 17L, 35R: NA - Environmental.
Waterways 17, 35: NA - Air Traffic.
Rwys 17R, 35L: Standard with minimum climb of 500'/NM to 660.

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

TOP ALTITUDE:
ASSIGNED BY ATC

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17R: Climb on heading 168° to 660, for RADAR vectors to BORRN, thence. . . .

TAKEOFF RUNWAY 35L: Climb on heading 348° to 660, for RADAR vectors to BORRN, thence. . . .

. . . . on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 17L, 35R: NA - Environmental.
Waterways 17, 35: NA - Air Traffic.
Rwys 17R, 35L: Standard.

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
NOTE: RADAR required.
NOTE: For aircraft destined KMEM or filed via Q32 or J42.

TAKEOFF MINIMUMS
Rwys 17R, 35L: Standard.
Rwys 17L, 35R: NA - Environmental.
Waterway 17, 35: NA - Air Traffic.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . . on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.
NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence... on IAH R-358 to cross GIFFA INT at or above 10000.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17R:** Climb on heading 168° to 660, for RADAR vectors to VUH VOR/DME, thence . . .

**TAKEOFF RUNWAY 35L:** Climb on heading 348° to 660, for RADAR vectors to VUH VOR/DME, thence . . .

. . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**BOWFN TRANSITION (HOODO7.BOWFN)**
**CFOOD TRANSITION (HOODO7.CFOOD)**
**HARVEY TRANSITION (HOODO7.HRV)**
**LEEVILLE TRANSITION (HOODO7.LEV)**
**SBIRD TRANSITION (HOODO7.SBIRD)**

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

TAKEOFF RUNWAY 17R: Climb on heading 168° to 660 for RADAR vectors to RENNK, thence. . . .

TAKEOFF RUNWAY 35L: Climb on heading 348° to 660 for RADAR vectors to RENNK, thence. . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

NOTE: Chart not to scale.
TAKEOFF MINIMUMS
Rwys 17L, 35R, NA - Environmental.
Waterways 17, 35, NA - Air Traffic.
Rwys 17R, 35L: Standard.

NOTE: RADAR required.
NOTE: JUNCTION TRANSITION: For aircraft overflying JCT VORTAC on J2, J15 or J86.
NOTE: CENTEX TRANSITION: ATC assigned only for aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.
NOTE: CORPUS CHRISTI TRANSITION: ATC assigned only.
NOTE: LAREDO TRANSITION: ATC assigned only.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
JUNCTION ONE DEPARTURE

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to CUZZZ INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

. . . on IAH R-276 and JCT R-090 to JCT VORTAC.

NOTE: For aircraft overflying JCT VORTAC on J86 filing FL240 or above.

NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 17R, 35L: Standard.
Rwys 17L, 35R: NA - Environmental.
Waterway 17, 35: NA - Air Traffic.
RNAV-1 DME/DME/IRU or GPS. 
RADAR required.

TAKEOFF MINIMUMS
Rwys 17L, 35R: NA - Environmental.
Waterways 17, 35: NA - Air Traffic.
Rwys 17R, 35L: Standard with minimum climb of 500' per NM to 660.

NOTE: Chart not to scale.
TAKEOFF RUNWAY 17R: Climb on heading 168° to 660, for RADAR vectors to KARRR, thence . . .
TAKEOFF RUNWAY 35L: Climb on heading 348° to 660, for RADAR vectors to KARRR, thence . . .

. . . on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARR7.CRP)
PALACIOS TRANSITION (KARR7.PSX)
TRUAX TRANSITION (KARR7.NGP)
WWREN TRANSITION (KARR7.WWREN)
YOMOM TRANSITION (KARR7.YOMOM)
**DEPARTURE ROUTE DESCRIPTION**

When entering controlled airspace, climb on assigned heading for RADAR vectors to WEDRI INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . .

. . . on IAH R-082 to HOURN INT, then on LCH R-253 to LCH VORTAC.

**FIGHTING TIGERS TRANSITION (LCH5.LSU):** From over LCH VORTAC on LCH R-070 and LSU R-252 to LSU VORTAC.
TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
NOTE: Chart not to scale.

NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

TOP ALTITUDE: ASSIGNED BY ATC

LUFKIN
112.1 LFK
Chan 58
N31°09.75' W94°43.01'

SUSHI
N30°35.48' W95°04.39'

COLET
N30°26.96' W95°09.66'

KYANN
N30°15.53' W94°13.96'

HUMBLE
116.6 IAH
Chan 113

DAISETTA
116.9 DAS
Chan 116

TOP ALTITUDE: ASSIGNED BY ATC

LITTLE ROCK
113.9 LIT
Chan B6
N34°40.66' W92°10.83'

SKKIP
N31°14.91' W94°39.45'

LIT
113.9 LIT
Chan B6
N34°40.66' W92°10.83'

NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 17L, 35R: NA - Environmental.
Waterways 17, 35: NA - Air Traffic.
Rwys 17R, 35L: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . . . on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17R:** Climb on heading 168° to 660 for RADAR vectors to KNTKY, thence . . . .

**TAKEOFF RUNWAY 35L:** Climb on heading 348° to 660 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**HAWES TRANSITION (LURIC8.HAWES)**

**ORRTH TRANSITION (LURIC8.ORRTH)**
MMALT SEVEN DEPARTURE (RNAV)

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

TOP ALTITUDE: ASSIGNED BY ATC

NOTES:
GUSTI and LCH Transitions ATC assigned only for aircraft departing
AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41 and 54T.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17R: Climb on heading 168° to 660, for RADAR vectors to MMALT, thence . . .

TAKEOFF RUNWAY 35L: Climb on heading 348° to 660, for RADAR vectors to MMALT, thence . . .

. . . on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT7, GUSTI)
LAKE CHARLES TRANSITION (MMALT7, LCH)
WHITE LAKE TRANSITION (MMALT7, LLA)

NOTE: Chart not to scale.
ATIS
128.375
CLNC DEL
119.43
GND CON
121.8 239.0
HOOKS TOWER
127.4 354.1 (EAST)
118.4 (CTAF) 354.1 (WEST)
HOUSTON DEP CON
119.7 281.4 (RWYS 35L/R)
123.8 257.7 (RWYS 17L/R)

FORT STOCKTON
116.9 FST
Chan 116
N30°57.13’
W102°58.54’

ROCKSPRINGS
114.55 RSG
Chan 92 (M)
N30°00.88’-W100°17.99’

SAN ANTONIO
116.8 SAT
Chan 115
N29°38.64’-W98°27.68’

SKUBA
N29°11.72’
W95°47.47’

PALACIOS
117.3 PSX
Chan 120
N28°45.87’-W96°18.37’

NOTE: Chart not to scale.

RADAR and DME required.

TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
RWYS 17L, 35R: NA - Environmental.
Waterways 17, 35: NA - Air Traffic.
RWYS 17R, 35L: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

NOTE: Radar required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17R: Climb on heading 168° to 660 for Radar vectors to KNTKY, thence.

TAKEOFF RUNWAY 35L: Climb on heading 348° to 660 for Radar vectors to KNTKY, thence.

.on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)

Jbull transition (STRYA8.JBull)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17R: Climb on heading 168° to 660 for RADAR vectors to BBYSE, thence . . .
TAKEOFF RUNWAY 35L: Climb on heading 348° to 660 for RADAR vectors to BBYSE, thence . . .

.on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WTSON TRANSITION (STYCK8.WTSON)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17R: Climb on heading 168° to 660, for RADAR vectors to WATFO, thence. . . .

TAKEOFF RUNWAY 35L: Climb on heading 348° to 660, for RADAR vectors to WATFO, thence. . . .

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6,ANKRR)
KELPP TRANSITION (WATFO6,KELPP)
MUSYL TRANSITION (WATFO6,MUSYL)

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

**TAKEOFF RUNWAY 17R:** Climb on heading 168° to 660 for RADAR vectors to WYLSN, thence . . . .
**TAKEOFF RUNWAY 35L:** Climb on heading 348° to 660 for RADAR vectors to WYLSN, thence . . . .

. . . .on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**GIFFA TRANSITION (WYLSN8.GIFFA)**
**MAJKKK TRANSITION (WYLSN8.MAJKK)**

**NOTE:** Chart not to scale.

**WYLSN EIGHT DEPARTURE (RNAV)
(WYLSN8.WYLSN) 07OCT21

**TOP ALTITUDE:**
**ASSIGNED BY ATC

**NOTE:** RADAR required.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** RNAV 1.
ILA-197 (FAA)

ILS Z or LOC Z RWY 17R

ELLENGTON (EFD)

DME required. RADAR required for procedure entry.

Circling NA west of RWY 17R-35L. DME from EFD TACAN. Simultaneous reception of I-ILP and EFD DME required. Inop table does not apply to S-ILS 17R. For inop ALS, increase S-LOC 17R Cat C/D/E visibility to 1 1/2 SM.

MISSED APPROACH: Climb to 700 then climbing left turn to 3100 on VUH VOR/DME R-320 to WATFO INT/VUH 9.3 DME and hold (TACAN aircraft climb to 700 then climbing left turn to 3100 on EFD TACAN R-136 to WATFO INT/EFD 16 DME and hold southeast, left turn, 316° inbound).

ATIS
135.757 269.9

HOU STON APP CON
134.45 284.0

ELLINGTON TOWER
126.05 253.5

GND CON
121.6 275.8

HOUSTON, TEXAS

Amdt 7 15AUG19
ILS Z or LOC Z RWY 22

ELLINGTON (EFD)

RADAR required for procedure entry.

Circling NA west of Rwy 17R-35L. DME from EFD TACAN.

Simultaneous reception of I-FNF and EFD DME required.

For inop ALS, increase S-ILS 22 Cat E visibility to RVR 4000 and S-LOC 22 Cat E visibility to 1 1/2 SM.

MISSED APPROACH: Climb to 700 then climbing left turn to 3100 on VUH VOR/DME R-320 to WATFO INT/VUH 9.3 DME and hold. [TACAN aircraft climb to 700 then climbing left turn to 3100 on EFD TACAN R-136 to WATFO/EFD 16 DME and hold southeast, left turn, 316° inbound.]

**ATIS**

HOUSTON, TEXAS

**HOUSTON APP CON** 135.575 269.9

**ELLINGTON TOWER** 126.05 253.5

**GND CON** 121.6 275.8

**LOC I-FNF** 110.1

**APP CRS** 219°

**Rwy Idg** 8001

**TDZE** 31

**Apt Elev** 33

**TDZE** 31

**ELEV** 33

**MALSR**

TRINITY 114.75 MHF

TACAN MISSED APCH FIX

III...III.

LOCALIZER 110.1

WZDOM INT

EFD 116.6

116.6 IAH

EFD 113

EFD [6.9]

R-177

WZDOM INT

EFD [6.9]

R-120

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]

R-116

WZDOM INT

EFD [6.9]
HOUSTON, TEXAS
ATIS 135.575 269.9

HOUSTON APP CON 134.45 284.0

ELLINGTON TOWER 126.05 253.5

GND CON 121.6 275.8

ELLINGTON (EFD)

ILS Z or LOC Z RWY 35L

Radar required for procedure entry.

Circling NA west of Rwy 17R-35L. DME from EFD TACAN. Simultaneous reception of I-FD and EFD DME required. Inop table does not apply to S-ILS 35L. For inop ALS, increase S-LOC 35L Cat C/D/E visibility to 1½ SM. For inop ALS when using JUVUM fix minimums, increase S-LOC 35L Cat C/D/E visibility to RVR 6000.

MALSF 114.75 MHF... Chan 94(Y)

114.75 MHF... Chan 94(Y)

JUVUM FIX MINIMUMS (DME REQUIRED)

(TACAN aircraft climb to 700 then climbing right turn to 3100 on EFD TACAN R-136 to WATFO/EFD 16 DME and hold southeast, left turn, 316° inbound).

TRINITY

RADAR required for procedure entry.

MISSING APPROACH: Climb to 700 then climbing right turn to 3100 on EFD TACAN. For inop EFD, increase S-LOC 35L Cat C/D/E visibility to 1½ SM. For inop ALS when using JUVUM fix minimums, increase S-LOC 35L Cat C/D/E visibility to RVR 6000.

29°36'N-95°10'W

HOUSTON (EFD)

Ellington (EFD)

Amdt 7 15AUG19

250
Circling NA west of Rwy 17R-35L.
DME/DME RNP-0.3 NA.
Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3100 direct EWOFY
and right turn on track 129° to CEROP and right turn
on track 219° to WATFO and hold.

RADAR REQUIRED

ATIS
135.575 269.9
HOUSTON APP CON
134.45 284.0
ELLINGTON TOWER
126.05 253.5
GND CON
121.6 275.8

APP CRS
039°
Rwy Idg
8001
TDZE
30
Apt Elev
33

RNAV (GPS) RWY 4
ELLINGTON (EFD)

CIRCLING

500-1 467 (500-1)
580-1 547 (600-1½)
640-2 607 (700-2)
700-2 667 (700-2½)

HIRL Rwys 4-22 and 17R-35L
TDZ/CL Rwys 17R, 22 and 35L

10.24°
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). DME/DME RNP-0.3 NA. Inop table does not apply to LPV DA. For inop MALSF, increase LNAV/VNAV all Cats and LNAV Cats A and B visibility to RVR 5500 and Cats C/D/E visibility to 1 ½ miles. Circling NA west of Rwy 17R-35L.

MALSF

MISSING APCH FIX

EIAPP OF Rwy 17R-35L.

LNAV only.

Amdt 1C  08OCT20

HC-5, 30 NOV 2023 to 25 JAN 2024

29°36'N-95°10'W
Circling NA west of Rwy 17R - 35L. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°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 Cats C/D/E visibility to RVR 5500.

MISSED APPROACH: Climb to 500 then climbing left turn to 3100 direct WATFO and hold.

HOUSTON, TEXAS

ATIS
135.575 269.9

HOUSTON APP CON
134.45 284.0

ELLINGTON TOWER
126.05 253.5

GND CON
121.6 275.8

MALSR

**VIAS**

ATIS
135.575 269.9

HOUSTON APP CON
134.45 284.0

ELLINGTON TOWER
126.05 253.5

GND CON
121.6 275.8

MALSR

**VIAS**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 43°C (109°F). Circling NA west of Rwy 17R-35L. DME/DME RNP-0.3 NA. For inop MALSF, increase LNAV/VNAV all Cats visibility to 1 ½ mile, and LNAV Cats A and B visibility to 1 mile and Cats C, D and E visibility to 1 ½ mile. Inop table does not apply to LPV.

**MISSED APPROACH:** Climb to 1500 then climbing right turn to 3100 direct WATFO and hold.

### Category Table

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
<td>LPV DA</td>
<td>228/40</td>
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<td>LNAV/VNAV DA</td>
<td>499/60</td>
<td>471 (500-1 ½)</td>
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<td>LNAV MDA</td>
<td>440/40</td>
<td>412 (500-⅓)</td>
<td>440/50</td>
<td>412 (500-1)</td>
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<tr>
<td>CIRCLING</td>
<td>500-1</td>
<td>468 (500-1)</td>
<td>580-1½</td>
<td>640-2</td>
<td>700-2⅓</td>
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</tbody>
</table>

### Approach Information

- **RNAV (GPS) RWY 35L**
- **HOUSTON, TEXAS (EFD)**
- **ELLINGTON (EFD)**
- **ATIS 135.575 269.9**
- **HOUSTON APP CON 134.45 284.0**
- **ELLINGTON TOWER 126.05 253.5**
- **GND CON 121.6 275.8**

### Approach Details

- **ELEV 33**
- **TDZE 28**
- **HIRL Rwys 4-22 and 17R-35L**
- **TDZ/CL Rwys 17R, 22 and 35L**
- **WATFO 2400**
- **PAHSU 2400**
- **MARZY 2100**
- **WESIM 2017**
- **ZEVAX 2013**

### Table

<table>
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<tr>
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<td>471 (500-1 ½)</td>
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<td>LNAV MDA</td>
<td>440/40</td>
<td>412 (500-⅓)</td>
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<td>412 (500-1)</td>
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<tr>
<td>CIRCLING</td>
<td>500-1</td>
<td>468 (500-1)</td>
<td>580-1½</td>
<td>640-2</td>
<td>700-2⅓</td>
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</tbody>
</table>

### Map

- **WAAS CH W35A**
- **APP CRS 354°**
- **Rwy Idg 9001**
- **APt Elev 33**
- **MALSF**
- **RADAR REQUIRED**

### Additional Information

- **29°36’N-95°10’W**
Circling NA west of Rwy 17R-35L. Helicopter visibility reduction below 1 SM NA.

ATIS
HOUSTON APP CON
ELLINGTON TOWER
GND CON
135.575  269.9
134.45  284.0
126.05  253.5
121.6  275.8

HOUSTON, TEXAS
AL-197 (FAA)

TACAN RWY 4
ELLINGTON (EFD)

RADAR REQUIRED

MISSED APPROACH: Climbing right turn to 3100 on EFD TACAN R-136 to WATFO/EFD 16 DME and hold.

TACAN EFD
Chan 31 (109.4)
APP CRS
028°
Rwy Idg
8001
TDZE
30
Apt Elev
33

ELLINGTON
Chan 31
EFD
(109.4)

HAWZO
EFD
1.5

PEARZ
EFD
6

(IAF)
DUJAR
EFD
15

(IAF)
TAPOW
EFD
15

MISSED APPROACH: Climbing right turn to 3100 on EFD TACAN R-136 to WATFO/EFD 16 DME and hold.

TACAN  EFD
028°
APP CRS
8001
Rwy Idg
109.4

CIRCLING
520-1 1/4 490 (500-1 1/4)
520-1 1/4 490 (500-1 1/4)
520-1 1/4 490 (500-1 1/4)

S-4
520-1 1/4 490 (500-1 1/4)
520-1 1/4 490 (500-1 1/4)
520-1 1/4 490 (500-1 1/4)

C CIRCLING
520-1 1/4 487 (500-1 1/4)
580-1 1/4 547 (600-1 1/2)
640-2 607 (700-2)
700-2 707 (700-2 1/4)

ELLINGTON (EFD)
TACAN RWY 4

HOUSTON, TEXAS
Orig B 08OCT20

29°36'N-95°10'W

255
MISSED APPROACH: Climbing left turn to 3100 on EFD TACAN R-136 to WATFO/EFD 16 DME and hold. When ALS inop, increase visibility Cat A/B to RVR 3500 and Cat C/D/E visibility to 1½ miles. Circling NA west of Rwy 17R-35L.

ATIS
HOUSTON APP CON
ELLINGTON TOWER
GND CON
135.575 269.9
134.45 284.0
126.05 253.5
121.6 275.8

HOUSTON, TEXAS
AL-197 (FAA)

29°36′N-95°10′W
CIRCLING NA west of Rwy 17R-35L. When ALS inop, increase S-35L Cats A/B visibility to RVR 5500 and Cats C/D/E to 1½ miles.

MISSED APPROACH: Climbing right turn to 3100 on EFD TACAN R-136 to WATFO/EFD 16 DME and hold.

**Radar Required**

<table>
<thead>
<tr>
<th>ATIS</th>
<th>HOUSTON APP CON</th>
<th>ELLINGTON TOWER</th>
<th>GND CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>135.575 269.9</td>
<td>134.45 284.0</td>
<td>126.05 253.5</td>
<td>121.6 275.8</td>
</tr>
</tbody>
</table>

**MALSF**

**RS-5, 30 NOV 2023 to 25 JAN 2024**

**TG-109.4**

**VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 32).**

**Category**

<table>
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<tr>
<th>S-35L</th>
<th>520/40</th>
<th>492 (500-¾)</th>
<th>520/60</th>
<th>492 (500-1¼)</th>
</tr>
</thead>
</table>

**35L**

**002°**

**2.91°**

**TCH 54**

**9 NM**

**5.8 NM**

**0.8**

**0.7**

**Botom Plate**

**29°36'N-95°10'W**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: RADAR required.
NOTE: The following TRANSITIONS are ATC assigned only. Do not file.
Crestview Transition (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).
MC Comb Transition (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).

Takeoff Minimums
Rwys 4, 17L/R, 35L/R: Standard.
Rwy 22: 200-1/2 or standard with minimum climb of 214' per NM to 300, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to DER.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF ALL RUNWAYS:** Climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . . on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

**CRESTVIEW TRANSITION (AEX3.CEW):** From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

**MC COMB TRANSITION (AEX3.MCB):** From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
BLTWY SEVEN DEPARTURE (RNAV)

ATIS
135.575  269.9
GND CON
121.6  275.8
ELLINGTON TOWER
126.05  253.5
HOUSTON DEP CON
134.45  284.0

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

TAKEOFF MINIMUMS
 Rwys 4, 17L/R, 22, 35L/R:
 Standard with minimum climb of 500' per NM to 540.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 4: Climb on heading 039° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAYS 17L/R: Climb on heading 174° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 22: Climb on heading 219° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAYS 35L/R: Climb on heading 354° to 540 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)

NOTE: Chart not to scale.
**NOTE:** CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

**TOP ALTITUDE:** ASSIGNED BY ATC

**TAKEOFF MINIMUMS**
Rwys 4, 17L/R, 22, 35L/R: Standard with minimum climb of 500’/NM to 540.

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

TAKEOFF RUNWAY 4: Climb on heading 039° to 540, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAYS 17L/R: Climb on heading 174° to 540, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 22: Climb on heading 219° to 540, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAYS 35L/R: Climb on heading 354° to 540, for RADAR vectors to BORRN, thence. . . .

. . . . on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 4, 17L/R, 35L/R: Standard.
Rwy 22: 200-1 ¼ or Standard with minimum climb of 214' per NM to 300 or alternatively with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to DER.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climbing on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
NOTE: RADAR required.
NOTE: For aircraft destined KMEM or filed via Q32 or J42.

TAKEOFF MINIMUMS
Rwy 4, 17L/R, 35L/R: Standard.
Rwy 22: 200-1/4 or standard with minimum climb of 214' per NM to 300 or alternatively with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to DER.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

. . . . on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.
NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

TAKEOFF MINIMUMS
Rwy 22: 200-1/4 or standard with minimum climb of 214’ per NM to 300 or alternatively with standard takeoff minimums and a normal 200’ per NM climb gradient, takeoff must occur no later then 1400’ prior to DER.

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-358 to cross GIFFA INT at or above 10000.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on heading 039° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .
TAKEOFF RUNWAYS 17L/R: Climb on heading 174° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .
TAKEOFF RUNWAY 22: Climb on heading 219° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .
TAKEOFF RUNWAYS 35L/R: Climb on heading 354° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO7.BOWFN)
CFOOD TRANSITION (HOODO7.CFOOD)
HARVEY TRANSITION (HOODO7.HRV)
LEEVILLE TRANSITION (HOODO7.LEV)
SBIRD TRANSITION (HOODO7.SBIRD)
INDIE EIGHT DEPARTURE (RNAV)

TAKEOFF MINIMUMS
Rwys 4, 17L/R, 22, 35L/R:
Standard with minimum climb of 500’ per NM to 540.

TAKEOFF RUNWAY 4: Climb on heading 039° to 540 for RADAR vectors to RENNK, thence . . .
TAKEOFF RUNWAYS 17L/R: Climb on heading 174° to 540 for RADAR vectors to RENNK, thence . . .
TAKEOFF RUNWAY 22: Climb on heading 219° to 540 for RADAR vectors to RENNK, thence . . .
TAKEOFF RUNWAYS 35L/R: Climb on heading 354° to 540 for RADAR vectors to RENNK, thence . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
RNAV-1 DME/DME/IRU or GPS.
RADAR required.

TAKEOFF MINIMUMS
Rwys 4, 17L/R, 22, 35L/R:
Standard with minimum climb of 500’ per NM to 540.

TOP ALTITUDE:
ASSIGNED BY ATC

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on heading 039° to 540, for RADAR vectors to KARRR, thence.

TAKEOFF RUNWAYS 17L/R: Climb on heading 174° to 540, for RADAR vectors to KARRR, thence.

TAKEOFF RUNWAY 22: Climb on heading 219° to 540, for RADAR vectors to KARRR, thence.

TAKEOFF RUNWAYS 35L/R: Climb on heading 354° to 540, for RADAR vectors to KARRR, thence.

...on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
LEONA FOUR DEPARTURE

(top altitude: assigned by ATC)

ARDMORE
116.7 ADM 
Chan 114
N34°12.69' - W97°10.10'
L-17, H-6

DOLEY
210°
(39)
N32°11.35' - W96°23.08'
L-17, H-6

RANGER
115.7 FUZ 
Chan 104
N32°53.37' - W97°10.77'
L-17, H-6

TULSA
114.4 TUL 
Chan 91
N36°11.78' - W95°47.29'

WACO
115.3 ACT 
Chan 100
N31°39.74' - W97°16.14'

LEONA
110.8 LOA 
Chan 45
N31°07.44' - W95°58.08'

BONHAM
114.6 BYP 
Chan 93
N33°32.25' - W96°14.05'
L-17, H-6

CEDAR CREEK
114.8 CQY 
Chan 95
N32°11.14' - W96°13.09'

WLLIS
N30°32.08' - W95°52.06'

HUMBLE
116.6 IAH 
Chan 113

NOTE: Radar required.
NOTE: Except for aircraft destined ACT or the DFW terminal area,
all aircraft filing the LEONA SID must file one of the published
transitions via FUZ (LOA4.FUZ), ADM (LOA4.ADM), or
BYP (LOA4.BYP).

NOTE: RANGER TRANSITION: For aircraft overflying west/northwest of
the DFW terminal area FL240 and above.

NOTE: ARDMORE TRANSITION: For aircraft overflying north/northwest of
the DFW terminal area FL240 and above.

NOTE: BONHAM TRANSITION: For aircraft overflying/landing TUL
VORTAC FL240 and above.

NOTE: Chart not to scale.

(narrative on following page)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to WILLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

LUFKIN
112.1 LFK
Chan 58
N31°09.75'
W94°43.01'

SUSHI
N30°35.48'
W95°04.39'

COLET
N30°26.96'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

HUMBLE
116.6 IAH
Chan 113

DAISETTA
116.9 DAS
Chan 116

NOTE: Chart not to scale.

TAKETOFF MINIMUMS
Rwys 4, 17L/R, 35L/R: Standard.
Rwy 22: 200-1 1/2 or standard with minimum climb of 214’ per NM to 300 or alternatively with standard takeoff minimums and a normal 200’ per NM climb gradient, takeoff must occur no later than 1400’ prior to DER.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

...on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 4:** Climb on heading 039° to 540 for RADAR vectors to KNTKY, thence . . . .

**TAKEOFF RUNWAYS 17L/R:** Climb on heading 174° to 540 for RADAR vectors to KNTKY, thence . . . .

**TAKEOFF RUNWAY 22:** Climb on heading 219° to 540 for RADAR vectors to KNTKY, thence . . . .

**TAKEOFF RUNWAYS 35L/R:** Climb on heading 354° to 540 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**HAWES TRANSITION (LURIC8.HAWES)**

**ORRTH TRANSITION (LURIC8.ORRTH)**
TAKEOFF MINIMUMS
Rwys 4, 17L/R, 22, 35L/R: Standard with minimum climb of 500’/NM to 540.

NOTE: GUSTI and LCH Transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41 and 54T.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 4: Climb on heading 039° to 540, for RADAR vectors to MMALT, thence. . .
TAKEOFF RUNWAYS 17L/R: Climb on heading 174° to 540, for RADAR vectors to MMALT, thence. . .
TAKEOFF RUNWAY 22: Climb on heading 219° to 540, for RADAR vectors to MMALT, thence. . .
TAKEOFF RUNWAYS 35L/R: Climb on heading 354° to 540, for RADAR vectors to MMALT, thence. . .

. . .on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT7.GUSTI)
LAKE CHARLES TRANSITION (MMALT7.LCH)
WHITE LAKE TRANSITION (MMALT7.LLA)
NOTE: Chart not to scale.

(TOP ALTITUDE: ASSIGNED BY ATC)

RADAR and DME required.

TAKEOFF MINIMUMS
Rwys 4, 17L/R, 35L/R: Standard.
Rwy 22: 200-1\(\frac{1}{4}\) or standard with minimum climb of 214’ per NM to 300 or alternatively with standard takeoff minimums and a normal 200’ per NM climb gradient, takeoff must occur no later than 1400’ prior to DER.

(TOP ALTITUDE: ASSIGNED BY ATC)

RADAR and DME required.

TAKEOFF MINIMUMS
Rwys 4, 17L/R, 35L/R: Standard.
Rwy 22: 200-1\(\frac{1}{4}\) or standard with minimum climb of 214’ per NM to 300 or alternatively with standard takeoff minimums and a normal 200’ per NM climb gradient, takeoff must occur no later than 1400’ prior to DER.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF ALL RUNWAYS:** Climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on PSX R-038 to PSX VORTAC.

**FORT STOCKTON TRANSITION (PSX3.FST):** From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

**SAN ANTONIO TRANSITION (PSX3.SAT):** From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

**NOTE: RADAR required.**
**NOTE: DME/DME/IRU or GPS required.**
**NOTE: RNAV 1.**

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**STRYA EIGHT DEPARTURE (RNAV)**

- **ATIS:** 135.575 269.9
- **GND CON:** 121.6 275.8
- **ELLINGTON TOWER:** 126.05 253.5
- **HOUSTON DEP CON:** 134.45 284.0

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**TOP ALTITUDE: ASSIGNED BY ATC**

**TAKEOFF MINIMUMS**

Rwys 4, 17L/R, 22, 35L/R:
Standard with minimum climb of 500’ per NM to 540.

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**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 4:** Climb on heading 039° to 540 for RADAR vectors to KNTKY, thence.

**TAKEOFF RUNWAYS 17L/R:** Climb on heading 174° to 540 for RADAR vectors to KNTKY, thence.

**TAKEOFF RUNWAY 22:** Climb on heading 219° to 540 for RADAR vectors to KNTKY, thence.

**TAKEOFF RUNWAYS 35L/R:** Climb on heading 354° to 540 for RADAR vectors to KNTKY, thence.

...on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**DPATY TRANSITION (STRYA8.DPATY)**

**JBUll TRANSITION (STRYA8.JBULL)**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 4**: Climb on heading 039° to 540 for RADAR vectors to BBYSE, thence . . .

**TAKEOFF RUNWAYS 17L/R**: Climb on heading 174° to 540 for RADAR vectors to BBYSE, thence . . .

**TAKEOFF RUNWAY 22**: Climb on heading 219° to 540 for RADAR vectors to BBYSE, thence . . .

**TAKEOFF RUNWAYS 35L/R**: Climb on heading 354° to 540 for RADAR vectors to BBYSE, thence . . .

. . . on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**DOLEY TRANSITION (STYCK8.DOLEY)**

**WTSON TRANSITION (STYCK8.WTSON)**

**NOTE**: Chart not to scale.

**TOP ALTITUDE: ASSIGNED BY ATC**

**NOTE**: RADAR required.

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

**NOTE**: RNAV 1.
**WATFO SIX DEPARTURE (RNAV)**

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

**TOP ALTITUDE:**
ASSIGNED BY ATC

135.575 269.9
GND CON
121.6 275.8
ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 4:** Climb on heading 039° to 540, for RADAR vectors to WATFO, thence . . . .

**TAKEOFF RUNWAYS 17L/R:** Climb on heading 174° to 540, for RADAR vectors to WATFO, thence . . . .

**TAKEOFF RUNWAY 22:** Climb on heading 219° to 540, for RADAR vectors to WATFO, thence . . . .

**TAKEOFF RUNWAYS 35L/R:** Climb on heading 354° to 540, for RADAR vectors to WATFO, thence . . . .

. . . .on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

**ANKRR TRANSITION (WATFO6.ANKRR)**
**KELPP TRANSITION (WATFO6.KELPP)**
**MUSYL TRANSITION (WATFO6.MUSYL)**

WATFO SIX DEPARTURE (RNAV)
(WATFO6.WATFO) 10AUG23

HOUSTON, TEXAS
ELLINGTON (EFD)
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 4, 17L/R, 22, 35L/R: Standard with minimum climb of 500' per NM to 540.

V DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on heading 039° to 540 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAYS 17L/R: Climb on heading 174° to 540 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAY 22: Climb on heading 219° to 540 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAYS 35L/R: Climb on heading 354° to 540 for RADAR vectors to WYLSN, thence. . . .

. . . . on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)
ILS or LOC RWY 26L

GEORGE BUSH INTL/HOUSTON (IAH)

DME required. From BOZZZ, GARRR; RNAV 1-GPS required.

Simultaneous approach authorized with Rwys 26R and 27. For inop ALS, increase S-ILS 26L Cat E visibility to RVR 4000, S-LOC 26L Cat C/D/E visibility to RVR 3000.

MISSED APPROACH: Climb to 3000 then left turn heading 240° and IAH VORTAC R-270 to LUCEP INT/IAH 22.9 DME and hold.

LOCALIZER 109.7
I-JYV Channel 34

MISSAPCH FIX
LUCEP INT IAH 22.9

I-JYV 267° 5.8 NM from FAF

GS 3.00° TCH 71

S-ILS 26L 295/18 200 (200-½)
S-LOC 26L 460/24 365 (400-½)

HOUSTON, TEXAS

Amdt 21D 25APR19

29°59'N-95°20'W
ILS or LOC RWY 33R
GEORGE BUSH INTL/HOUSTON (IAH)

MISSED APPROACH: Climb to 2000 on IAH VORTAC R-330 to GOMER INT/TNV 26.8 DME and hold.

**Radar Required**

**Missed Approach Fix:**
- Climb to 2000 on IAH VORTAC R-330 to GOMER INT/TNV 26.8 DME and hold.

**Localizer (I-CDG):**
- Frequency: 111.9
- Chan 106
- **GOMER INT/TNV 26.8**

**ILS or LOC RWY 33R:**
- Frequency: 1500
- Chan 113
- TDZE (H) 33L 90

**Elevation:**
- 96 feet

**TDZ/CL Rwy:**
- 8R, 8L, 26R, 26L, 27, and 33L

**HIRL:**
- All Rwy 8L, 26R, 26L, 27, and 33L

**Sidestep:**
- Rwy 33L

**SIDESTEP:**
- 540-1 450 (500-1)
- 540-1/2 450 (500-1/2)
- 540-2 450 (500-2)
- NA

**Category DME:**
- 1.3 NM
- 3.3 NM
- 6 NM

**Knots:**
- 60
- 90
- 120
- 150
- 180

**Min:Sec:**
- 4.36
- 3.04
- 2.18
- 1.50
- 1.32

**TDZE 33L 90:**
- 329° 4.6 NM from FAF
- 0.76°
- 256°
- 116.6 IAH
- Chan 113

**HUMBLE:**
- Chan 113

**Localization:**
- 111.9
- I-CDG

**Approach Fix:**
- 120.05
- 379.1
- **EAST**

**APP CRS:**
- 289/24
- 540/24
- 1.4

**FAF to MAP:**
- 4.6 NM

**29°59'N-95°20'W**

**VHF:**
- 121.7
- 128.1

**Radio:**
- Required for inop MALSR, increase S-ILS 33R Cat E visibility to RVR 4000 and S-LOC 33R Cat E visibility to 1 1/2 mile. DME or RADAR Required.

**MISSED APPROACH FIX:**
- Climb to 2000 on IAH VORTAC R-330 to GOMER INT/TNV 26.8 DME and hold.
MISSED APPROACH: Climb to 560 then climbing left turn to 3000 on IAH VORTAC R-215 to TICOY/IAH 20 DME and hold.

Simultaneous approach authorized. Use of FD or AP required during simultaneous operations. Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.
ILS RWY 8R (SA CAT I & II)

GEORGE BUSH INTNL/HOUSTON (IAH)

SA CATEGORY I and II ILS SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HOUSTON, TEXAS

Amdt 26A 10OCT19

ELEV 96  TDZE 95

SA CATEGORY I and II ILS SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys

HOUSTON, TEXAS

Amdt 26A 10OCT19

ILS RWY 8R (SA CAT I & II)

GEORGE BUSH INTNL/HOUSTON (IAH)

29°59'N-95°20'W

HOUSTON, TEXAS

Amdt 26A 10OCT19
**ILS RWY 8L (CAT II & III)**

**GEORGE BUSH INTL/HOUSTON (IAH)**

**AL-5461 (FAA)**

**LOC/DME I-BZU**

- **111.55**
- **087°**

**Rwy Idg**

- **9000**
- **TDZE**
- **94**
- **Apri Elev**
- **96**

**DME required. From GUSHR: RNAV 1-GPS required.**

**Simultaneous approach authorized with Rwy 8R and Rwy 9. CAT II; RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.**

**MISSED APPROACH:** Climb to 600 then climbing left turn to 4000 on IAH VORTAC R-019 to CLEEP INT/IAH 22.1 DME and hold.

**Atis**

- **124.05**

**Houston App Con**

- **120.05 379.1 East**
- **124.35 316.15 West**

**Houston Tower**

- **120.725 290.2**

**Gnd Con**

- **118.575**

**Clnc Del**

- **128.1**

**Cpdlc**

- **(IAF) 111.55 Channel 52**

**Sc-5,** **30 NOV 2023 to 25 JAN 2024**

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

**Houston, Texas**

Amdt 4E 20JUN19

29°59'N-95°20'W

**ILS RWY 8L (CAT II & III)**

**George Bush Intcntl/Houston (IAH)**

**22083**
ILS RWY 26L (CAT II & III)

GEORGE BUSH INT’L/HOUSTON (IAH)

DME required. From BOZZZ, GARRR: RNAV 1-GPS required.

Simultaneous approach authorized with Rwy 26R and Rwy 27. Cat II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

MISSED APPROACH: Climb to 3000 then left turn heading 240° and IAH VORTAC R-270 to LUCEP INT/IAH 22.9 DME and hold.

D-ATIS
124.05

HOUSTON APP CON
120.05 379.1 EAST
124.35 316.15 WEST

HOUSTON TOWER
125.35 290.2

GND CON
118.575

CLNC DEL
128.1

CPDLC

LOCALIZER 109.7
I-JYV
Chan 34

LOCALIZER 109.7
I-JYV
Chan 34

MISSED APCH FIX
LUCEP INT
IAH 22.9

Rwy Idg
9402
TDZE
95
Apt Elev
96

MISSED APPROACH: Climb to 3000 then left turn heading 240° and IAH VORTAC R-270 to LUCEP INT/IAH 22.9 DME and hold.

ILS RWY 26L (CAT II & III)

GEORGE BUSH INT’L/HOUSTON (IAH)

DME required. From BOZZZ, GARRR: RNAV 1-GPS required.

Simultaneous approach authorized with Rwy 26R and Rwy 27. Cat II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

MISSED APPROACH: Climb to 3000 then left turn heading 240° and IAH VORTAC R-270 to LUCEP INT/IAH 22.9 DME and hold.

3000 267°

ELEV 96

TDZE 95

CATEGORY II & III ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED

AL-5461 (FAA) 22083

HOUSTON, TEXAS

Amdt 21D 25APR19

29°59’N-95°20’W

ILS RWY 26L (CAT II & III)
Simultaneous approach authorized. Use of FD or AP required during simultaneous operations. Autopilot coupled approach NA below 290.

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

MISSED APPROACH: Climb to 580 then climbing right turn to 3000 direct JEBOX and hold.
Simultaneous approach authorized. Use of FD or AP required during simultaneous operations. Autopilot coupled approach NA below 295.

Climb to 3000 direct LUCEP and hold.
**RNP APCH - GPS.**

- **NA** Simultaneous approach authorized. Use of FD or AP required during simultaneous operations. Autopilot coupled approach NA below 295.

**Missed Approach Fix**

- **4 NM**
  - **646**
  - **267°**
  - **PEPBI**

**GND CON**

- **118.575**

**HOUSTON APP CON**

- **124.35 316.15**
  - **EAST**
  - **200°**
  - **3000**

**HOUSTON TOWER**

- **120.725 290.2**

**CLNC DEL**

- **128.1**

**CPDLC**

**Missed Approach: Climb to 600 then climbing right turn to 3000 direct PEPBI and hold.**

**Category**

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<th>A</th>
<th>B</th>
<th>C</th>
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<td>GLS DA</td>
<td>295/18</td>
<td>200 (200-1/2)</td>
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**TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L**

**HIRM all Rwys**

**Amdt 2A  20APR23**

**29°59'N-95°20'W**

**AL-5461 (FAA)**

**GEORGE BUSH FEDERAL AIRPORT (IAH)**
Simultaneous approach authorized. Use of FD or AP required during simultaneous operations. Autopilot coupled approach NA below 286.

MISSED APPROACH: Climb to 560 then climbing left turn to 3100 direct TICOY and hold.

VGSI and GLS glidepath not coincident (VGSI Angle 3.00/TCH 70).

GLS RWY 27

HOUSTON, TEXAS

GBAS CH 22306
G27A

APP CRS 267°
Rwy Idg 10000
TDZE 86

Apt Elev 96

HOUSTON APP CON
120.05 379.1 EAST
124.35 316.15 WEST

HOUSTON TOWER
135.15 290.2

GND CON 118.575

CLNC DEL 128.1

ELEV 96 D
TDZE 86

TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L

HIRL all Rwys

27° north of 3100 direct TICOY and hold.

VGSI and GLS glidepath not coincident (VGSI Angle 3.00/TCH 70).

267° north of 3100 direct TICOY and hold.

4000 210K

GBAS RPI

GEORGE BUSH INTCTL/HOUSTON (IAH)

Amdt 2 23FEB23

29°59'N-95°20'W
RNAV (RNP) Y RWY 8L
GEORGE BUSH INTL/HOUSTON (IAH)

Simultaneous approach authorized. For uncompensated Baro-VNAV systems, procedure NA below -2°C or above 54°C. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For inop ALS, increase RNP 0.30 all CATS visibility to RVR 5500.

MISSED APPROACH: Climb to 580 then climbing left turn to 4000 direct CLEEP and hold.

See planview for multiple IF locations.

AUTHORIZATION REQUIRED

HOUSTON, TEXAS
Amdt 1 19MAY22

GEORGE BUSH INTNL/HOUSTON (IAH)
RNAV (RNP) Y RWY 8L
RNAV (RNP) Y RWY 8R
GEORGE BUSH INTCTRL/ HOUSTON (IAH)

For uncompensated Baro-VNAV systems, procedure NA below -3°C or above 54°C. For inop ALS increase RNP 0.13 all Cats visibility to RVR 4500, RNP 0.14 all Cats visibility to RVR 5600, RNP 0.30 all Cats visibility to 1/4 SM. Simultaneous approach authorized.

 Authorization Required.
For uncompensated Baro-VNAV systems, procedure NA below -3°C (27°F) or above 54°C (130°F). GPS required. For inop MALSR, increase all Cats visibility to 1.5 mile. Simultaneous approach authorized. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

**MALSR**

**MISSED APPROACH:** Climb to 3000 then climbing right turn to Jebox and hold.

**Authorization Required**

**Category**

- A
- B
- C
- D

- **RNP 0.30 DA**
  - 516/49
  - 425 (500-1)

**GEOGE BUSH INTCTL/HOUSTON (IAH)**

**RNAV (RNP) Y RWY 9**

**HOUSTON, TEXAS**

**29°59'N-95°20'W**

**Orig-B 13SEP18**

**APP CRS**

- 087°

**Rwy Idg**

- 10000

**TDZE**

- 91

**Apt Elev**

- 96

**HOUSTON APP CON**

- 120.05 379.1 EAST

- 124.35 316.15 WEST

**HOUSTON TOWER**

- 135.15

- 290.2

**GND CON**

- 118.575

**CLNC DEL**

- 128.1

**TDZE**

- 91

**GND CON**

- 118.575

**CLNC DEL**

- 128.1

**CPDLC**

**D-ATIS**

- 124.05

**HOUSTON APP CON**

- 120.05 379.1 EAST

- 124.35 316.15 WEST

**HOUSTON TOWER**

- 135.15

- 290.2

**GND CON**

- 118.575

**CLNC DEL**

- 128.1

**CPDLC**

**D-ATIS**

- 124.05
RNAV (RNP) Y RWY 26L

GEORGE BUSH INTL/ HOUSTON (IAH)

MISSED APPROACH: Climb to 3000 on track 267° to LUCEP and hold.

For uncompensated Baro-VNAV systems, procedure NA below -3°C or above 54°C. Simultaneous approach authorized. For inop ALS, increase RNP 0.13 all Cats visibility to RVR 5100, and RNP 0.30 all Cats visibility to 1/2 SM.

DCPA 5 NM

LGTE 2.5 NM

TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys

RNP AR APCH - GPS.

APP CRS
Rwy Idg 9402
TDZE 95
Apt Elev 96

POWERED BY

HOUSTON, TEXAS
AL-5461 (FAA) 22139

RNAV (RNP) Y RWY 26L

GEORGE BUSH INTL/ HOUSTON (IAH)

MISSED APPROACH: Climb to 3000 on track 267° to LUCEP and hold.

For uncompensated Baro-VNAV systems, procedure NA below -3°C or above 54°C. Simultaneous approach authorized. For inop ALS, increase RNP 0.13 all Cats visibility to RVR 5100, and RNP 0.30 all Cats visibility to 1/2 SM.

DCPA 5 NM

LGTE 2.5 NM

TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys

RNP AR APCH - GPS.

APP CRS
Rwy Idg 9402
TDZE 95
Apt Elev 96

AUTHORIZATION REQUIRED

GEORGE BUSH INTL/ HOUSTON (IAH)

29°59’N- 95°20’W

RNAV (RNP) Y RWY 26L

HOU

HOU

HOUSTON, TEXAS
Orig-E 19MAY22

HOUSTON, TEXAS

HOUSTON, TEXAS

HOUSTON, TEXAS

HOUSTON, TEXAS
For uncompensated Baro-VNAV systems, procedure NA below -3°C (27°F) or above 54°C (130°F). GPS required. Simultaneous approach authorized. For inop ALS, increase RNP 0.11 all Cats visibility to RVR 5000 and increase RNP 0.15 all Cats visibility to 1/4 SM. Use of FD or AF providing RNAV track guidance required during simultaneous operations.

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct PEPBI and hold.

### RADAR REQUIRED

**600**

**3000**

**PEPBI**

See planview for multiple IF locations.

### AUTHORIZATION REQUIRED

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<tr>
<th>CATEGORY</th>
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<td>429/40</td>
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<td>RNP 0.15 DA</td>
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<td>RNP 0.30 DA</td>
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**TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys**

**HOUSTON, TEXAS**

**Orig-D 13SEP18**

**29°59’N-95°20’W**

**RNAV (RNP) Y RWY 26R**

**GEORGE BUSH INTL/HOUSTON (IAH)**

**RNAV (RNP) Y RWY 26R**

**GEORGE BUSH INTL/HOUSTON (IAH)**

**29°59’N-95°20’W**

**315**
RNAV (RNP) Y RWY 27
GEORGE BUSH INTL/HOUSTON (IAH)

**Authorization Required**

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

**RNAV (RNP) Y RWY 27**

**Simultaneous approach authorized. Use of FD or AP required during simultaneous operations.** For uncompensated Baro-VNAV systems, procedure NA below -2°C or above 54°C. For inop ALS, increase RNP 0.30 all Cats visibility to RVR 4500.

**MISSING APPROACH:** Climb to 560 then climbing left turn to 3000 direct TICOY and hold.
HOUSTON, TEXAS

RNAV (GPS) RWY 15R

GEORGE BUSH INT’L/HOUSTON (IAH)

HOUSTON, TEXAS

Amdt 2C 30 JAN 2024

TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys

29°59’N 95°20’W

RNAV (GPS) RWY 15R

RNAP APRCH.

RADAR required for procedure entry.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C. For inop ALS, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV all Cats visibility to RVR 5500, and LNAV Cat C/D/E visibility to 1/2 SM.

D-ATIS
124.05

HOUSTON APP CON
120.05 379.1 EAST
124.35 316.15 WEST

HOUSTON TOWER
GND CON
CLNC DEL
CPDLC

127.3 288.25 121.7 128.1

MAISR

MISSED APCH: Climb to 2000 direct JINIP and left turn on track 079° to COSBI and hold.

ELEV 96 TDZE 95

LPV DA 295/18 200 (200-1/2)

LNAV/VNAV DA 460/35 365 (400-1/2)

LNAV MDA 580/24 485 (500-1/2) 580/50 485 (500-1)

VGSi and RNAV glidepath not coincident (VGSi Angle 3.00/TCH 71).

GEORGE BUSH INT’L/HOUSTON (IAH)

29°59’N 95°20’W

RNAV (GPS) RWY 15R

Amdt 2C 30 JAN 2024

TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys
RNAV (GPS) RWY 33R
GEORGE BUSH INT’L/Houston (IAH)

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C (27°F) or above 54°C (130°F). For inop MALSR, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1%, and LNAV Cat E visibility to 1%. DME/DME RNP-0.3 NA. ** RVR 1800 authorized with use of FD or AP or HUD to DA.**

**MISSED APPROACH:** Climb to 2000 direct NALIE and on track 333° to GOMER and hold.

**LNAV only.**

- **1.3 NM to RW33R**
- **3.3 NM**
- **6 NM**

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

- **LPV DA**: 289/24 200 (200-½)
- **LNAV/ VNAV DA**: 490/45 401 (400-½)
- **LNAV MDA**: 540/24 451 (500-½) 540/45 451 (500-½)
- **SIDESTEP 33L**: 540-1 450 (500-1) 540-1/2 450 (500-½) 540-2 450 (500-2) NA
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C (27°F) or above 54°C (130°F). For inop ALSF, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1/4, and LNAV Cat C/D/E visibility to 1/4.

Simultaneous approach authorized with Rwy 8R and Rwy 9. DME/DME RNP-0.3 NA. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C (27°F) or above 54°C (130°F). For inop ALSF, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1/4, and LNAV Cat C/D/E visibility to 1/4.

Simultaneous approach authorized with Rwy 8R and Rwy 9. DME/DME RNP-0.3 NA. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations.

Missed approach: Climb to 580 then climbing left turn to 4000 direct CLEEP and hold.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C (27°F) or above 54°C (130°F). For inap MALSR, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV all Cats visibility to RVR 6000, and LNAV Cat C/D/E visibility to 1½. Simultaneous approach authorized with Rwy 8L and Rwy 9. DME/DME RNP-0.3 NA. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations.

MISSED APPROACH: Climb to 3000 direct MKAYE and hold.

MALSR

[Diagram of approach path with various waypoints and distances]

MISSED APCH FIX
4 NM
-087°
MKAYE

RADAR REQUIRED

[Additional details and annotations on the diagram]

ELEV 96
TDZE 96
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C (27°F) or above 54°C (130°F). For inop MALSR, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1/2 mile, and LNAV Cat C/D/E visibility to 1 1/2 mile. Simultaneous approach authorized with Rwys 8L/R. DME/DME RNP-0.3 NA. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. ** RVR 1800 authorized with use of FD or AP or HUD to DA.

MISSED APPROACH: Climb to 580 then climbing right turn to 3000 direct JEBOX and hold.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C (27°F) or above 54°C (130°F). For inap ALSF, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1½, and LNAV Cat E visibility to 1¾. DME/DME RNP-0.3 NA. Simultaneous approach authorized with Rwy 26R and Rwy 27. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

**RASTER REQUIRED**

VGS and RNAV glidepath not coincident (VGS Angle 3.00/TCH 71).

**MISSING APPROACH:**

Climb to 3000 direct LUCEP and hold.

**CPDLC**
NOTE: RADAR required.

NOTE: The following TRANSITIONS are ATC assigned only. Do not file.

CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).

MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).

TAKEOFF MINIMUMS

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to RAECN INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence.

...on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

TAKEOFF MINIMUMS:
Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R:
Standard with minimum climb of 500' per NM to 600.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb on heading 087° to 600 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAYS 15L/R: Climb on heading 149° to 600 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAYS 26L/R, 27: Climb on heading 267° to 600 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAYS 33L/R: Climb on heading 329° to 600 for RADAR vectors to DREMR, thence . . . .

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
NOTE: Chart not to scale.

**BN DTO FIVE DEPARTURE (RNAV)**

**TOP ALTITUDE:**

16000

**NOTE:** FOR USE DURING WEST FLOW AT IAH, FOR EAST FLOW FILE THE PITZZ DEPARTURE.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** FOR USE DURING WEST FLOW AT IAH, FOR EAST FLOW FILE THE PITZZ DEPARTURE.

**NOTE:** Minimum climb of 500’ per NM to 1200.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.

**NOTE:** TAKEOFF MINIMUMS

Rwys 15L/R, 26L/R, 27, 33L/R: Standard with minimum climb of 500’ per NM to 1200.

**NOTE:** RADAR REQUIRED.

**NOTE:** DME/DME/IRU OR GPS REQUIRED.

**NOTE:** RNAV 1.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 15L/R: Climb heading 149° to 600, then right turn direct to cross SCAMM at or below 5000, then on track 277° to SHAAK, thence . . . .
TAKEOFF RUNWAYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to SHAAK, thence . . . .
TAKEOFF RUNWAYS 33L/R: Climb heading 329° to 600, expect RADAR vectors to SHAAK, thence . . . .

. . . . on track 277° to BNDTO, then on (transition). Maintain 16000. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BNDTO5.CRGER)
MNURE TRANSITION (BNDTO5.MNURE)
SAN ANTONIO TRANSITION (BNDTO5.SAT)
WAILN TRANSITION (BNDTO5.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to LITLD INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to RAECN INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . .

. . . . on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.

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

(TOP ALTITUDE:

FLYZA FIVE DEPARTURE (RNAV)

NOTE: GPS required.

NOTE: RADAR required.

NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R:
Standard with minimum climb of 500' per NM to 800.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to cross BOTLL at or below 5000, thence . . . .
TAKEOFF RUNWAYS 15L/R: Climb heading 149° to 600, then left turn direct to cross TTAPS at or below 4000, then on track 123° to cross BOTLL at or below 5000, thence . . . .
TAKEOFF RUNWAYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to cross BOTLL at or below 5000, thence . . . .
TAKEOFF RUNWAYS 33L/R: Climb heading 329° to 600, expect RADAR vectors to cross BOTLL at or below 5000, thence . . . .

. . . . on track 139° to cross FLYZA at or above 7000, then on (transition). Maintain 16000. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (FLYZA5.ANKRR)
KELPP TRANSITION (FLYZA5.KELPP)
MUSYL TRANSITION (FLYZA5.MUSYL)
NOTE: Chart not to scale.

TAKEOFF MINIMUMS

NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to MONNT INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-358 to cross GIFFA INT at or above 10000.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to cross DWSUN at or below 4000, thence . . .
TAKEOFF RUNWAYS 15L/R: Climb heading 149° to 600, then left turn direct CRTMN, then on track 086° to cross DWSUN at or below 4000, thence . . .

. . . .on track 086° to cross GUMBY at or below 5000, then on (transition). Maintain 16000. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (GUMBY3.GUSTI)
LAKE CHARLES TRANSITION (GUMBY3.LCH)
WHITE LAKE TRANSITION (GUMBY3.LLA)
HoHoOd Seven Departure (RNAV) 07Oct21

NOTE: Chart not to scale.

**D-ATIS**
124.05

**CINC DEL**
128.1

**CPDLC**

**GND CON**
118.575 (Rwys 8L/R, 9, 26L/R, 27)
121.7 (Rwys 15L/R, 33L/R)

**HOUSTON TOWER**
120.725  290.2 (Rwys 8L/R, 26L/R)
125.35  290.2 (Rwys 9, 27)
127.3  288.25 (Rwys 15L/R, 26L/R, 27)
135.15  290.2 (Rwys 9, 27)

**HOUSTON DEP CON**
127.125  269.075

**NOTE:** RNAV 1.

**NOTE:** RADAR required.

**NOTE:** ATC assigned only.

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

**NOTE:** For non-GPS equipped aircraft, LCH, LLA, TBD, and LEV DME’s must be operational.

**TAKEOFF MINIMUMS**
Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R:
Standard with minimum climb of 500’ per NM to 600.

**(NARRATIVE ON FOLLOWING PAGE)**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb on heading 087° to 600, for RADAR vectors to VUH VOR/DME, thence . . .
TAKEOFF RUNWAYS 15L/R: Climb on heading 149° to 600, for RADAR vectors to VUH VOR/DME, thence . . .
TAKEOFF RUNWAYS 26L/R, 27: Climb on heading 267° to 600, for RADAR vectors to VUH VOR/DME, thence . . .
TAKEOFF RUNWAYS 33L/R: Climb on heading 329° to 600, for RADAR vectors to VUH VOR/DME, thence . . .

. . . . on track 118° to HOODO, then on (transition). Maintain 16000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO7.BOWFN)
CFOOD TRANSITION (HOODO7.CFOOD)
HARVEY TRANSITION (HOODO7.HRV)
LEEVILLE TRANSITION (HOODO7.LEV)
SBIRD TRANSITION (HOODO7.SBIRD)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb on heading 087° to 600 for RADAR vectors to RENNK, thence . . . .

TAKEOFF RUNWAYS 15L/R: Climb on heading 149° to 600 for RADAR vectors to RENNK, thence . . . .

TAKEOFF RUNWAYS 26L/R, 27: Climb on heading 267° to 600 for RADAR vectors to RENNK, thence . . . .

TAKEOFF RUNWAYS 33L/R: Climb on heading 329° to 600 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to SHYNR INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to CUZZZ INT. Maintain 16000. Expect filed altitude 10 minutes after departure. Thence . . . .

. . . . . on IAH R-276 and JCT R-090 to JCT VORTAC.

NOTE: For aircraft overflying JCT VORTAC on J86 filing FL240 or above.
DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to WEDRI INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence.

... on IAH R-082 to HOURN INT, then on LCH R-253 to LCH VORTAC.

FIGHTING TIGERS TRANSITION (LCH5.LSU): From over LCH VORTAC on LCH R-070 and LSU R-252 to LSU VORTAC.
**TOP ALTITUDE:**

**16000**

**TULSA**

114.4 TUL

Chan 91

N36°11.78’ - W95°47.29’

**BONHAM**

114.6 BYP

Chan 93

N33°32.25’ - W96°14.05’

**CEDAR CREEK**

114.8 COY

Chan 95

N32°11.14’ - W96°13.09’

**D O L E Y**

115.7 FUZ

Chan 104

N32°11.35’ - W97°23.08’

**RANGER**

115.7 FUZ

Chan 104

N32°53.37’ - W97°10.77’

**ARDO MORE**

116.7 ADM

Chan 114

N34°12.69’ - W97°10.10’

**B Y P**

116.7 ADM

Chan 114

N34°12.69’ - W97°10.10’

**W A C O**

115.3 ACT

Chan 100

N31°39.74’ - W97°16.14’

**B Y P (L O A 4 . B Y P )**

115.9 TNV

Chan 106

N33°32.08’ - W95°39.10’

**N A V A S O T A**

115.9 TNV

Chan 106

N31°39.74’ - W97°16.14’

**R A N G E R**

115.7 FUZ

Chan 104

N32°53.37’ - W97°10.77’

**R A N G E R T R A N S I T I O N**

For aircraft overflying north/northwest of BYP (LOA4.BYP).

**A R D M O R E T R A N S I T I O N**

For aircraft overflying west/northwest of the DFW terminal area FL240 and above.

**B O N H A M T R A N S I T I O N**

For aircraft overflying landing TUL VORTAC FL240 and above.

**L E O N A T R A N S I T I O N**

For aircraft overflying/landing TUL VORTAC FL240 and above.

**H U M B L E**

116.6 IAH

Chan 113

N31°39.74’ - W97°16.14’

**L E O N A F O U R D E P A R T U R E**

**T A K E O F F M I N I M U M S**


**N O T E : R A D A R r e q u i r e d**

**N O T E : E x c e p t f o r a i r c r a f t d e s t i n e d A C T o r t h e D F W t e r m i n a l a r e a,**

all aircraft filing the LEONA SID must file one of the published transitions via FUZ (LOA4.FUZ), ADM (LOA4.ADM), or BYP (LOA4.BYP).

**N O T E : R A N G E R T R A N S I T I O N**

For aircraft overflying west/northwest of the DFW terminal area FL240 and above.

**N O T E : A R D M O R E T R A N S I T I O N**

For aircraft overflying north/northwest of the DFW terminal area FL240 and above.

**N O T E : B O N H A M T R A N S I T I O N**

For aircraft overflying/landing TUL VORTAC FL240 and above.

**N O T E : C h a r t n o t t o s c a l e**

**L E O N A F O U R D E P A R T U R E**

**N O T E : C h a r t n o t t o s c a l e**

**G E O R G E B U S H I N T C N T L / H O U S T O N ( I A H )**

**H O U S T O N , T E X A S**

**G E O R G E B U S H I N T C N T L / H O U S T O N ( I A H )**

**H O U S T O N , T E X A S**

**D A T I S**

124.05

**C L I C N C D E L**

128.1

**C P D L C**

**H O U S T O N D E P C O N**

132.25 285.425

**G N D C O N**

118.575 (Rwys 8L/R, 26L/R, 9/27)

121.7 (Rwys 15L/R, 33L/R)

120.725 290.2 (Rwys 8L/R, 26L/R)

127.3 288.25 (Rwys 15L/R, 33L/R)

135.15 290.2 (Rwys 9/27)

**G E O R G E B U S H I N T C N T L / H O U S T O N ( I A H )**

**H O U S T O N , T E X A S**

**G E O R G E B U S H I N T C N T L / H O U S T O N ( I A H )**

**H O U S T O N , T E X A S**

**D A T I S**

124.05

**C L I C N C D E L**

128.1

**C P D L C**

**H O U S T O N D E P C O N**

132.25 285.425

**G N D C O N**

118.575 (Rwys 8L/R, 26L/R, 9/27)

121.7 (Rwys 15L/R, 33L/R)

120.725 290.2 (Rwys 8L/R, 26L/R)

127.3 288.25 (Rwys 15L/R, 33L/R)

135.15 290.2 (Rwys 9/27)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to WLLIS INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
NOTE: Chart not to scale.

TOP ALTITUDE: 16000

NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

LUFKIN 112.1 LFK
Chan 58
N31°09.75’
W94°43.01’

SUSHI
N30°35.48’
W95°04.39’

COLET
N30°26.96’
W95°09.66’

KYANN
N30°15.53’
W95°13.96’

HUMBLE 116.6 IAH
Chan 113

DAISETTA 116.9 DAS
Chan 116

TOP ALTITUDE:

LITTLE ROCK 113.9 LIT
Chan B6
N34°40.66’
W92°10.83’
L-18, H-6

NOTE: Chart not to scale.

TAKEOFF MINIMUMS:

(NARRATIVE ON FOLLOWING PAGE)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF ALL RUNWAYS:** Climb on assigned heading for RADAR vectors to KYANN INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence. . . .

. . . .on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

**LITTLE ROCK TRANSITION (LFK3.LIT):** From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb on heading 087° to 600 for RADAR vectors to KNTKY, thence . . .
TAKEOFF RUNWAYS 15L/R: Climb on heading 149° to 600 for RADAR vectors to KNTKY, thence . . .
TAKEOFF RUNWAYS 26L/R, 27: Climb on heading 267° to 600 for RADAR vectors to KNTKY, thence . . .
TAKEOFF RUNWAYS 33L/R: Climb on heading 329° to 600 for RADAR vectors to KNTKY, thence . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: For use during west flow at IAH.

For east flow file the GUMBY RNAV DEPARTURE.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 15L/R: Climb heading 149° to 600, then left turn direct to cross TTAPS at or below 4000, then on track 123° to cross BOTLL at or below 5000, thence . . . .

TAKEOFF RUNWAYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to cross BOTLL at or below 5000, thence . . . .

TAKEOFF RUNWAYS 33L/R: Climb heading 329° to 600, expect RADAR vectors to cross BOTLL at or below 5000, thence . . . .

. . . . on track 090° to MMUGS, then on (transition). Maintain 16000. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMUGS4.GUSTI)
LAKE CHARLES TRANSITION (MMUGS4.LCH)
WHITE LAKE TRANSITION (MMUGS4.LLA)
NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for RADAR vectors to SKUBA, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
TAKEOFF MINIMUMS
Rwys 8L/R, 9, 15L/R: Standard with minimum climb of 500’ per NM to 1500.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to RODKL, thence. . . .
TAKEOFF RUNWAYS 15L/R: Climb heading 149° to 600, then right turn direct to cross JAYLO at or below 5000, then on track 237° to RODKL, thence. . . .

. . . .on track 238° to cross PITZZ at or above 7000, then on (transition).
Maintain 16000. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (PITZZ4.CRGER)
MNURE TRANSITION (PITZZ4.MNURE)
SAN ANTONIO TRANSITION (PITZZ4.SAT)
WAILN TRANSITION (PITZZ4.WAILN)
RITAA SEVEN DEPARTURE (RNAV)

NOTE: Chart not to scale.

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

TOP ALTITUDE: 16000

TAKEOFF MINIMUMS
Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R:
Standard with minimum climb of 500’ per NM to 800.

(37) 1600
12000
RITAA
10000

HOUSTON, TEXAS

AL-5461 (FAA)

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

TOP ALTITUDE: 16000

TAKEOFF MINIMUMS
Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R:
Standard with minimum climb of 500’ per NM to 800.

(37) 1600
12000
RITAA
10000

HOUSTON, TEXAS

AL-5461 (FAA)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb on heading 087° to 600, for RADAR vectors to cross BOTLL at or below 5000, thence . . . .
TAKEOFF RUNWAYS 15L/R: Climb on heading 149° to 600, then left turn direct to cross TTAPS at or below 4000, then on track 123° to cross BOTLL at or below 5000, thence . . . .
TAKEOFF RUNWAYS 26L/R, 27: Climb on heading 267° to 600, for RADAR vectors to cross BOTLL at or below 5000, thence . . . .
TAKEOFF RUNWAYS 33L/R: Climb on heading 329° to 600, for RADAR vectors to cross BOTLL at or below 5000, thence . . . .

. . . . on track 139° to cross FLYZA at or above 7000, then on track 216° to cross WINEO at or above 9000, then on track 221° to cross RITAA at or above 10000, then on (transition). Maintain 16000. Expect filed altitude 10 minutes after departure.

CORPORUS CHRISTI TRANSITION (RITAA7.CRP)
PALACIOS TRANSITION (RITAA7.PSX)
TRUAX TRANSITION (RITAA7.NGP)
WWREN TRANSITION (RITAA7.WWREN)
YOMOM TRANSITION (RITAA7.YOMOM)
### DEPARTURE ROUTE DESCRIPTION

**TAKEOFF RUNWAYS 8L/R, 9:** Climb on heading 087° to 600 for RADAR vectors to KNTKY, thence . . .

**TAKEOFF RUNWAYS 15L/R:** Climb on heading 149° to 600 for RADAR vectors to KNTKY, thence . . .

**TAKEOFF RUNWAYS 26L/R, 27:** Climb on heading 267° to 600 for RADAR vectors to KNTKY, thence . . .

**TAKEOFF RUNWAYS 33L/R:** Climb on heading 329° to 600 for RADAR vectors to KNTKY, thence . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

**DPATY TRANSITION (STRYA8.DPATY)**

**JBULL TRANSITION (STRYA8.JBULL)**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb on heading 087° to 600 for RADAR vectors to BBYSE, thence... 

TAKEOFF RUNWAYS 15L/R: Climb on heading 149° to 600 for RADAR vectors to BBYSE, thence... 

TAKEOFF RUNWAYS 26L/R, 27: Climb on heading 267° to 600 for RADAR vectors to BBYSE, thence... 

TAKEOFF RUNWAYS 33L/R: Climb on heading 329° to 600 for RADAR vectors to BBYSE, thence... 

...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY) 
WTSON TRANSITION (STYCK8.WTSON)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb on heading 087° to 600 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAYS 15L/R: Climb on heading 149° to 600 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAYS 26L/R, 27: Climb on heading 267° to 600 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAYS 33L/R: Climb on heading 329° to 600 for RADAR vectors to WYLSN, thence. . . .

. . . on track 360° to MONNT, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)
Baro-VNAV NA when using David Wayne Hooks Meml altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 15°C (59°F) or above 48°C (118°F). DME/DME RNP 0.3 NA. VDP NA when using David Wayne Hooks Meml altimeter setting. Helicopter visibility reduction below 3/4 SM NA. When local altimeter setting not received, use David Wayne Hooks Meml altimeter setting and increase all DA 57 feet and all MDA 60 feet; increase LNAV/VNAV all Cats and LNAV Cat C/D visibility 1/4 mile, and Circling Cat C/D visibility 1/4 mile and hold.

**MISSED APPROACH:** Climb to 2000 direct ZUXUG and on track 203° to EBERE and hold.

### Executive Tower (CTAF)
- **ATIS**: 119.525
- **HOU APP CON**: 123.8 257.7
- **EXECUTIVE TOWER**: 126.975 (CTAF)
- **GND CON**: 132.075
- **CLNC DEL**: 132.075
- **UNICOM**: 122.975
- **RNAV (GPS) RWY 18**: 119.525
- **RNP 0.3**: 416-1 250 (300-1)
- **LNAV**: 708.2 542 (600-2)
- **LNAV MDA**: 780-1 614 (700-1) 780-1 1/4 614 (700-1/4)
- **CIRCLING**: 820-1 654 (700-1) 860-1 694 (700-2) 1000-2 834 (900-2/3)

### Houston Exec (TME)
- **ATIS**: 119.525
- **HOU APP CON**: 123.8 257.7
- **EXECUTIVE TOWER**: 126.975 (CTAF)
- **GND CON**: 132.075
- **CLNC DEL**: 132.075
- **UNICOM**: 122.975
- **RNAV (GPS) RWY 18**: 119.525
- **RNP 0.3**: 416-1 250 (300-1)
- **LNAV**: 708.2 542 (600-2)
- **LNAV MDA**: 780-1 614 (700-1) 780-1 1/4 614 (700-1/4)
- **CIRCLING**: 820-1 654 (700-1) 860-1 694 (700-2) 1000-2 834 (900-2/3)

### HOU EXEC (TME)
- **ATIS**: 119.525
- **HOU APP CON**: 123.8 257.7
- **EXECUTIVE TOWER**: 126.975 (CTAF)
- **GND CON**: 132.075
- **CLNC DEL**: 132.075
- **UNICOM**: 122.975
- **RNAV (GPS) RWY 18**: 119.525
- **RNP 0.3**: 416-1 250 (300-1)
- **LNAV**: 708.2 542 (600-2)
- **LNAV MDA**: 780-1 614 (700-1) 780-1 1/4 614 (700-1/4)
- **CIRCLING**: 820-1 654 (700-1) 860-1 694 (700-2) 1000-2 834 (900-2/3)
Baro-VNAV NA when using David Wayne Hooks Mmnl altimeter setting. 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. VDP NA when using David Wayne Hooks Mmnl altimeter setting. When local altimeter setting not received, use David Wayne Hooks Mmnl altimeter setting and increase LPV DA to 471 feet, LNAV/VNAV DA to 719 feet; increase all MDA 60 feet. Increase LNAV/VNAV visibility ½ mile all Cats and LNAV and circling Cat C/D ¼ mile.

ATIS  | HOUSTON APP CON | EXECUTIVE TOWER | GND CON | CLNC DEL | UNICOM
-----|----------------|-----------------|---------|----------|--------
119.525 | 123.8 257.7 | 126.975 (CTAF) | 132.075 | 132.075 | 122.975

**MISSED APPROACH:**
Climb to 2000 direct AGAXE and via 328° track to BIMTE and hold.

**RADAR REQUIRED**

**ATIS** | **HOUSTON APP CON** | **EXECUTIVE TOWER** | **GND CON** | **CLNC DEL** | **UNICOM**
---------|---------------------|--------------------|-------------|-------------|--------
119.525 | 123.8 257.7 | 126.975 (CTAF) | 132.075 | 132.075 | 122.975

**TWR** | **P** | **ELEV** | **CIRCLING** | **820-1** | **654 (700-1)** |
---------|-------|---------|---------------|----------|-----------------|
WAXUG (IAF) | 694 (500-1) | 456 (500-1) | 456 (500-1) | 456 (500-1) | 456 (500-1) |
WAXUG (IAF) | 694 (500-1) | 456 (500-1) | 456 (500-1) | 456 (500-1) | 456 (500-1) |
WAXUG (IAF) | 694 (500-1) | 456 (500-1) | 456 (500-1) | 456 (500-1) | 456 (500-1) |

**HOUSTON, TEXAS**
Amdt 1A 30DEC21

**HOUSTON EXEC (TME)**

**RNAV (GPS) RWY 36**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W

HOUSTON EXEC (TME)
HOUSTON, TEXAS

21112 AL-10328 (FAA)

ATIS
119.525
EXECUTIVE TOWER *
126.975
GND CON
132.075
CLNC DEL
132.075

TWR

ELEV
81
166

132.075

TERMINAL

HANGARS

HANGARS

FUEL
FARM

RWY 18-36
D-101

95°54.5'W
95°54.0'W

363
ALEXANDRIA THREE DEPARTURE

TAKEOFF RUNWAY 18: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . .

TAKEOFF RUNWAY 36: Climb on heading 355° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . .

. . . on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwy 18, 36: Standard with minimum climb of 500' per NM to 680.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 18: Climb on heading 175° to 680 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 36: Climb on heading 355° to 680 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
**Takeoff Minimums**
Rwys 18, 36: Standard with minimum climb of 500'/NM to 680.

**Note:** CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: Climb on heading 175° to 680, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 36: Climb on heading 355° to 680, for RADAR vectors to BORRN, thence. . . .

. . . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: Radar required.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 36: Climb on heading 355° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
EL DORADO ONE DEPARTURE

TOP ALTITUDE: ASSIGNED BY ATC

NOTE: RADAR required.
NOTE: For aircraft destined KMEM or filed via Q32 or J42.

TAKEOFF RUNWAY 18: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 36: Climb on heading 355° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

... on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.
NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

TAKEOFF MINIMUMS
 Rwys 18, 36: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

TAKEOFF RUNWAY 36: Climb on heading 355° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-358 to cross GIFFA INT at or above 10000.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: ATC assigned only.
NOTE: DME/DME/IRU or GPS required.
NOTE: For non-GPS equipped aircraft, LCH, LLA, TBD, and LEV DME's must be operational.

TAKING MINIMUMS
Rwys 18, 36: Standard with minimum climb of 500' per NM to 680.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: Climb on heading 175° to 680, for RADAR vectors to VUH VOR/DME, thence . . . .

TAKEOFF RUNWAY 36: Climb on heading 355° to 700, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO7.BOWFN)
CFOOD TRANSITION (HOODO7.CFOOD)
HARVEY TRANSITION (HOODO7.HRV)
LEEVILLE TRANSITION (HOODO7.LEV)
SBIOD TRANSITION (HOODO7.SBIOD)
**INDIE EIGHT DEPARTURE (RNAV)**

**TAKEOFF MINIMUMS**
Rwy 18, 36: Standard with minimum climb of 500’ per NM to 680.

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 18:** Climb on heading 175° to 680 for RADAR vectors to RENNK, thence . . .

**TAKEOFF RUNWAY 36:** Climb on heading 355° to 680 for RADAR vectors to RENNK, thence . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition).

Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**TPAKK TRANSITION (INDIE8.TPAKK)**

**NOTE:** RADAR required.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** RNAV 1.

**NOTE:** TPAKK TRANSITION: For non GPS equipped aircraft TNV DME must be operational.
NOTE: Chart not to scale.

(INDUATION ONE DEPARTURE)

INDUSTRY ONE DEPARTURE

HOUSTON EXEC (TME)

HOUSTON, TEXAS

SC-5, 30 NOV 2023 to 25 JAN 2024

TOP ALTITUDE: ASSIGNED BY ATC

ATIS 119.525
CLNC DEL 132.075
GND CON 132.075
EXECUTIVE TOWER 126.975 (CTAF)
HOUSTON DEP CON 123.8 257.7

NOTE: LAREDO TRANSITION: ATC assigned only.
NOTE: CORPUS CHRISTI TRANSITION: ATC assigned only.
to the DFW Metroplex area that are being rerouted due to bad weather.
NOTE: CENTEX TRANSITION: ATC assigned only for aircraft inbound on J2, J15 or J86.
NOTE: JUNCTION TRANSITION: For aircraft overflying JCT VORTAC

NOTE: RADAR required.
NOTE: JUNCTION TRANSITION: For aircraft overflying JCT VORTAC

TAKES MINIMUMS

Rwys 18, 36: Standard.

NOTE: RADAR required.
NOTE: JUNCTION TRANSITION: For aircraft overflying JCT VORTAC

(INDUATION ONE DEPARTURE)

INDUSTRY ONE DEPARTURE

HOUSTON EXEC (TME)

HOUSTON, TEXAS

SC-5, 30 NOV 2023 to 25 JAN 2024

NOTE: Chart not to scale.

(INDUATION ONE DEPARTURE)

INDUSTRY ONE DEPARTURE

HOUSTON EXEC (TME)

HOUSTON, TEXAS

SC-5, 30 NOV 2023 to 25 JAN 2024

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 36: Climb on heading 355° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
TAKOFF MINIMUMS
Rwys 18, 36:
Standard with minimum climb of 500’ per NM to 680.

ASSIGNED BY ATC
(TOP ALTITUDE:)

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

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: Climb on heading 175° to 680, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 36: Climb on heading 355° to 680, for RADAR vectors to KARRR, thence. . . .

. . . on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
NOTE: Chart not to scale.

LEONA FOUR DEPARTURE

(TOP ALTITUDE: ASSIGNED BY ATC)

NOTE: RADAR required.
NOTE: Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LEONA SID must file one of the published transitions via FUZ (LOA4.FUZ) ADM (LOA4.ADM) or BYP (LOA4.BYP).

NOTE: RANGER TRANSITION: For aircraft overflying west/northwest of the DFW terminal area FL240 and above.
NOTE: ARDMORE TRANSITION: For aircraft overflying north/northwest of the DFW terminal area FL240 and above.
NOTE: BONHAM TRANSITION: For aircraft overflying/landing TUL VORTAC FL240 and above.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 36: Climb on heading 355° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
**NOTE:** Radar and DME required.

**NOTE:** For aircraft destined LIT or overflying LIT or PXV.

**NOTE:** Chart not to scale.

**TOP ALTITUDE:**
ASSIGNED BY ATC

**TAKEOFF MINIMUMS**
Rwys 18, 36: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: When entering controlled airspace, climb on assigned heading for
RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude
10 minutes after departure, thence. . .
TAKEOFF RUNWAY 36: Climb on heading 355° to 700 before turning. When entering
controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT.
Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . .

. . .on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026
to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS:
Rwys 18, 36: Standard with minimum climb of 500’ per NM to 680.

TAKEOFF RUNWAY 18: Climb on heading 175° to 680 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 36: Climb on heading 355° to 680 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: Climb on heading 175° to 680, for RADAR vectors to MMALT, thence . . .

TAKEOFF RUNWAY 36: Climb on heading 355° to 680, for RADAR vectors to MMALT, thence . . .

. . . . on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT7.GUSTI)
LAKE CHARLES TRANSITION (MMALT7.LCH)
WHITE LAKE TRANSITION (MMALT7.LLA)
NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 36: Climb on heading 355° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

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

TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwys 18, 36: Standard with minimum climb of 500' per NM to 680.

TAKEOFF ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: Climb on heading 175° to 680 for RADAR vectors to KNTKY, thence.
TAKEOFF RUNWAY 36: Climb on heading 355° to 680 for RADAR vectors to KNTKY, thence.

...on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JBULL TRANSITION (STRYA8.JBULL)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: Climb on heading 175° to 680 for RADAR vectors to BBYSE, thence...  
TAKEOFF RUNWAY 36: Climb on heading 355° to 680 for RADAR vectors to BBYSE, thence...  
...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)  
WTSON TRANSITION (STYCK8.WTSON)
TAKEOFF RUNWAY 18: Climb on heading 175° to 680, for RADAR vectors to WATFO, thence. . . .

TAKEOFF RUNWAY 36: Climb on heading 355° to 680, for RADAR vectors to WATFO, thence. . . .

...on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6.ANKRR)
KELPP TRANSITION (WATFO6.KELPP)
MUSYL TRANSITION (WATFO6.MUSYL)
NOTE: Radar required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwy 18, 36: Standard with minimum climb of 500' per NM to 680.

TAKEOFF RUNWAY 18: Climb on heading 175° to 680 for RADAR vectors to WYLSON, thence . . .
TAKEOFF RUNWAY 36: Climb on heading 355° to 680 for RADAR vectors to WYLSON, thence . . .

. . . . on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSON8.GIFFA)
MAJJKK TRANSITION (WYLSON8.MAJKK)
RNAV (GPS) RWY 9
HOUSTON/SOUTHWEST (AXH)

Circling Rwy 27 NA at night.
Rwy 9 helicopter visibility reduction below 3/4 SM NA.

AWOS-3
HOUSTON APP CON
CLNC DEL
UNICOM

123.625
123.8  257.7
120.8
123.0 (CTAF)

RNAV (GPS) RWY 9

MISSED APPROACH: Climb to 2700 direct WENPI and on track 179° to HEBUR and on track 267° to KEEDS and hold.

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<th>B</th>
<th>C</th>
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REIL Rwy 9 and 27
MIRL Rwy 9-27

SC-5, 30 NOV 2023 to 25 JAN 2024

HOUSTON/SOUTHWEST (AXH)

RNAV (GPS) RWY 9

HOUSTON, TEXAS

Amdt 2B  15JUL21

29°30'N-95°29'W

391
**RNAV (GPS) RWY 27**

**HOUSTON/SOUTHWEST (AXH)**

**RADAR REQUIRED**

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). Rwy 27 helicopter visibility reduction below ½ SM NA. Obtain local altimeter setting on CTAF; when not received use William P. Hobby altimeter setting and increase all DAs/MDA’s 40 feet, and LPV, LNAV Cat C visibility ½ mile. Baro-VNAV NA when using William P. Hobby altimeter setting.

**MISSED APPROACH:** Climb to 2700 direct RUPRE and via 200° track to KEEDS.

---

**AWOS-3**

**HOUSTON APP CON**

**CLNC DEL**

**UNICOM**

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<th>123.8 257.7</th>
<th>120.8</th>
<th>123.0 (CTAF)</th>
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**ELEV 68**

**TDZE 67**

---

**HOU**

**T**

**A**

**R**

**W**

**2**

**7**

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**SC-5, 30 NOV 2023 to 25 JAN 2024**

**29°30′N-95°29′W**

**392**
**LOC RWY 9**

**HOUSTON/SOUTHWEST (AXH)**

- **LOC/DME**: I-AXH 108.9
- **App Crs**: 089°
- **Rwy Idg**: TDZE 69
- **Apt Elev**: 69

**RNAV 1-GPS.**

- **NA**: Rwy 9 helicopter visibility reduction below ¾ SM NA.
- **AWOS-3**: 123.625
- **HOUSTON APP CON**: 123.8 257.7
- **CLNC DEL**: 120.8
- **UNICOM**: 123.0 (CTAF)

**LOCALIZER 108.9**

- **Channel**: 26

**MISSED APPROACH:** Climbing right turn to 2500 direct KEEDS.

**TABLE**

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**DIAGRAM**

- **ELEV**: 69
- **TDZE**: 69
- **KEEDS**: 2500
- **LOCALIZER**: 108.9
- **CHANNEL**: 26

**NOTES**

- HOUSTON, TEXAS
- Amdt 4 20JUN19
- **29°30’N-95°29’W**

**SC-5, 30 NOV 2023 to 25 JAN 2024**

- **MISSED APPROACH:** Climbing right turn to 2500 direct KEEDS.

- **NUMBER OF INSTRUMENT APPROACHES**
  - 5
  - 1

- **REIL RWYS 9 and 27**
  - **MIRL Rwy 9-27**
NOTE: RADAR required.  
NOTE: The following TRANSITIONS are ATC assigned only. Do not file.  
CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).  
MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).  

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
**NOTE:** Radar required.

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

**NOTE:** RNAV 1.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb on heading 089° to 2000 for RADAR vectors to DREMR, thence . . . .

**TAKEOFF RUNWAY 27:** Climb on heading 269° to 2200 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).

Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**CRIED TRANSITION (BLTWY7.CRIED)**

**NOTE:** Chart not to scale.
BORRN SIX DEPARTURE (RNAV)

NOTE: CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

TOP ALTITUDE: ASSIGNED BY ATC

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000, for RADAR vectors to BORRN, thence . . .
TAKEOFF RUNWAY 27: Climb on heading 269° to 2200, for RADAR vectors to BORRN, thence . . .

. . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 9, 27: Standard.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

...on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.
NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

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

NOTE: Top altitude: Assigned by ATC
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-358 to cross GIFFA INT at or above 10000.
**HOUSTON DEP CON**

123.8  CTAF
123.0  HOUSTON DEP CON
123.8  257.7

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb on heading 089° to 2000, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 27:** Climb on heading 269° to 2200, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**BOWFN TRANSITION (HOODO7.BOWFN)**

**CFOOD TRANSITION (HOODO7.CFOOD)**

**HARVEY TRANSITION (HOODO7.HRV)**

**LEEVILLE TRANSITION (HOODO7.LEV)**

**SBIRD TRANSITION (HOODO7.SBIRD)**
INDIE EIGHT DEPARTURE (RNAV)

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

NOTE: Chart not to scale.
INDUSTRY ONE DEPARTURE

NOTE: Chart not to scale.

INDUSTRY ONE DEPARTURE

NOTE: RADAR required.
NOTE: JUNCTION TRANSITION: For aircraft overflying JCT VORTAC on J2, J15 or J86.
NOTE: CENTEX TRANSITION: ATC assigned only for aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.
NOTE: CORPUS CHRISTI TRANSITION: ATC assigned only.
NOTE: LAREDO TRANSITION: ATC assigned only.

(INDUSTRY ONE DEPARTURE)

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

. . . on IDU R-085 to BOCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
RNAV-1 DME/DME/IRU or GPS.
RADAR required.

NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 9, 27: Standard with minimum climb of 500’ per NM to 580.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 27: Climb on heading 269° to 2200, for RADAR vectors to KARRR, thence. . . .

. . . on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
LEONA FOUR DEPARTURE

TOP ALTITUDE: ASSIGNED BY ATC

ARDMORE
116.7 ADM
Chan 114
N34°12.69' - W97°10.10'
L-17, H-6

DOLEY
114.4 TUL
Chan 91
N36°11.78' - W95°47.29'

TULSA
114.8 CQY
Chan 95
N32°11.14' - W96°13.09'

WACO
115.3 ACT
Chan 100
N31°39.74' - W97°16.14'

CEDAR CREEK
114.8 CQY
Chan 95
N32°11.14' - W96°13.09'

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

HUMBLE
116.6 IAH
Chan 113
N30°32.08' - W95°39.10'

BONHAM
114.6 BDP
Chan 93
N33°22.25' - W96°14.05'

RANGER
115.7 FUZ
Chan 104
N32°53.37' - W97°10.77'
L-17, H-6

NOTE: RADAR required.
NOTE: Except for aircraft destined ACT or the DFW terminal area,
all aircraft filing the LEONA SID must file one of the published
transitions via FUZ (LOA4.FUZ), ADM (LOA4.ADM), or
BYP (LOA4.BYP).
NOTE: RANGER TRANSITION: For aircraft overflying west/northwest of
the DFW terminal area FL240 and above.
NOTE: ARDMORE TRANSITION: For aircraft overflying north/northwest of
the DFW terminal area FL240 and above.
NOTE: BONHAM TRANSITION: For aircraft overflying/landing TUL
VORTAC FL240 and above.

TAKEOFF MINIMUMS
Rwys 9, 27: Standard.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

. . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
NOTE: Chart not to scale.

NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

LUFKIN
112.1 LFK
Chan 58
N31°09.75'
W94°43.01'

SKKIP
N31°14.91'
W94°39.45'

COLET
N30°26.96'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

HUMBLE
116.6 IAH
Chan 113

DAISETTA
116.9 DAS
Chan 116

TOP ALTITUDE:
ASSIGNED BY ATC

LITTLE ROCK
113.9 LIT
Chan B6
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: For aircraft destined LIT or overflying LIT or PXV.

NOTE: RADAR and DME required.

TAKEOFF MINIMUMS
Rwys 9, 27: Standard.

(LF3.LFK) 21336
LUFKIN THREE DEPARTURE

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7

HOUSTON/SOUTHWEST (AXH)
HOUSTON, TEXAS

(SC-5, 30 NOV 2023 to 25 JAN 2024)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
NOTE: Chart not to scale.

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb on heading 089° to 2000, for RADAR vectors to MMALT, thence.

**TAKEOFF RUNWAY 27:** Climb on heading 269° to 2200, for RADAR vectors to MMALT, thence.

. . . . . on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**GUSTI TRANSITION (MMALT7, GUSTI)**

**LAKE CHARLES TRANSITION (MMALT7, LCH)**

**WHITE LAKE TRANSITION (MMALT7, LLA)**

**NOTE:** Chart not to scale.
PALACIOS THREE DEPARTURE

NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

RAISER and DME required.

TAKOE OFF MINIMUMS
Rwys 9, 27: Standard.

ASSIGNED BY ATC

TOP ALTITUDE:

NOTE: Chart not to scale.

NUCLEAR ON FOLLOWING PAGE

PALACIOS THREE DEPARTURE

(PSX3:PSX) 03NOV22

PALACIOS THREE DEPARTURE

(PSX3:PSX) 22307

NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

RAISER and DME required.

TAKOE OFF MINIMUMS
Rwys 9, 27: Standard.

ASSIGNED BY ATC

TOP ALTITUDE:

NOTE: Chart not to scale.

NUCLEAR ON FOLLOWING PAGE

PALACIOS THREE DEPARTURE

(PSX3:PSX) 03NOV22

PALACIOS THREE DEPARTURE

(PSX3:PSX) 22307

NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

RAISER and DME required.

TAKOE OFF MINIMUMS
Rwys 9, 27: Standard.

ASSIGNED BY ATC

TOP ALTITUDE:

NOTE: Chart not to scale.

NUCLEAR ON FOLLOWING PAGE

PALACIOS THREE DEPARTURE

(PSX3:PSX) 03NOV22

PALACIOS THREE DEPARTURE

(PSX3:PSX) 22307

NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

RAISER and DME required.

TAKOE OFF MINIMUMS
Rwys 9, 27: Standard.

ASSIGNED BY ATC

TOP ALTITUDE:

NOTE: Chart not to scale.

NUCLEAR ON FOLLOWING PAGE

PALACIOS THREE DEPARTURE

(PSX3:PSX) 03NOV22

PALACIOS THREE DEPARTURE

(PSX3:PSX) 22307

NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

RAISER and DME required.

TAKOE OFF MINIMUMS
Rwys 9, 27: Standard.

ASSIGNED BY ATC

TOP ALTITUDE:

NOTE: Chart not to scale.

NUCLEAR ON FOLLOWING PAGE

PALACIOS THREE DEPARTURE

(PSX3:PSX) 03NOV22

PALACIOS THREE DEPARTURE

(PSX3:PSX) 22307

NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

RAISER and DME required.

TAKOE OFF MINIMUMS
Rwys 9, 27: Standard.

ASSIGNED BY ATC

TOP ALTITUDE:

NOTE: Chart not to scale.

NUCLEAR ON FOLLOWING PAGE

PALACIOS THREE DEPARTURE

(PSX3:PSX) 03NOV22

PALACIOS THREE DEPARTURE

(PSX3:PSX) 22307

NOTE: Chart not to scale.

TOP ALTITUDE: ASSIGNED BY ATC

RAISER and DME required.

TAKOE OFF MINIMUMS
Rwys 9, 27: Standard.

ASSIGNED BY ATC

TOP ALTITUDE:

NOTE: Chart not to scale.

NUCLEAR ON FOLLOWING PAGE
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTES: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 2000 for RADAR vectors to KNTKY, thence . . .

TAKEOFF RUNWAY 27: Climb on heading 269° to 2200 for RADAR vectors to KNTKY, thence . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)

J BULL TRANSITION (STRYA8.JBULL)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb on heading 089° to 2000 for RADAR vectors to BBYSE, thence.

**TAKEOFF RUNWAY 27:** Climb on heading 269° to 2200 for RADAR vectors to BBYSE, thence.

. . . on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**DOLEY TRANSITION (STYCK8.DOLEY)**

**WTSON TRANSITION (STYCK8.WTSON)**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb on heading 089° to 2000, for RADAR vectors to WATFO, thence.

**TAKEOFF RUNWAY 27:** Climb on heading 269° to 2200, for RADAR vectors to WATFO, thence.

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**ANKRR TRANSITION (WATFO6.ANKRR)**
**KELPP TRANSITION (WATFO6.KELPP)**
**MUSYL TRANSITION (WATFO6.MUSYL)**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb on heading 089° to 2000 for RADAR vectors to WYLSN, thence... . . .

**TAKEOFF RUNWAY 27:** Climb on heading 269° to 2200 for RADAR vectors to WYLSN, thence... . . .

...on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**GIFFA TRANSITION (WYLSN8.GIFFA)**

**MAJKK TRANSITION (WYLSN8.MAJKK)**

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb on heading 089° to 2000 for RADAR vectors to WYLSN, thence... . . .

**TAKEOFF RUNWAY 27:** Climb on heading 269° to 2200 for RADAR vectors to WYLSN, thence... . . .

...on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**GIFFA TRANSITION (WYLSN8.GIFFA)**

**MAJKK TRANSITION (WYLSN8.MAJKK)**

**NOTE:** Chart not to scale.
HOU32  RNAV (GPS) RWY 32
PEARLAND RGNL (L.V.J)

Circling to Rwy 14 NA at night. For uncompensated Baro-VNAV systems, UNAV/VNAV NA below -1°C (31°F) or above 54°C (130°F). When local altimeter setting not received, use William P Hobby altimeter setting and increase all DA 18 feet and all MDA 20 feet, increase UNAV/VNAV visibilities all Cats ⅓ mile. VDP and Baro-VNAV NA when using William P Hobby altimeter setting. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ⅓ SM NA.

ASOS
118.525
HOUSTON APP CON
134.45 284.0
CLNC DEL
124.0
UNICOM
122.725 (CTAF)

Radar Required

LNAV only.

Category

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

TAKEOFF MINIMUMS
Rwys 14, 32: Standard with minimum climb of 500' per NM to 560.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 142° to 1600 for RADAR vectors to DREMR, thence . . .
TAKEOFF RUNWAY 32: Climb on heading 322° to 700 for RADAR vectors to DREMR, thence . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)

NOTE: Chart not to scale.
JUNCTION JCT
CRGER 12000 279° (33)
3100 279° (33)
FOWLR 12000 278° (33)
PSTUR 12000 275° (34)
PUFER 12000 275° (34)
MNURE 10600 275° (44)
ZUUUU 8600 271° (44)
BOCCK 7600 271° (44)
WAILN 10800 270° (20)
WEEED 7700 255° (16)
DILRE 4400 267° (7)
BORN 1600

NOTE: CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

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

**TAKEOFF RUNWAY 14:** Climb on heading 142° to 1600, for RADAR vectors to BORRN, thence. . . .

**TAKEOFF RUNWAY 32:** Climb on heading 322° to 900, for RADAR vectors to BORRN, thence. . . .

. . . on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**CRGER TRANSITION (BORRN6.CRGER)**
**JUNCTION TRANSITION (BORRN6.JCT)**
**MNURE TRANSITION (BORRN6.MNURE)**
**SAN ANTONIO TRANSITION (BORRN6.SAT)**
**WAILN TRANSITION (BORRN6.WAILN)**
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: ATC assigned only.
NOTE: DME/DME/IRU or GPS required.
NOTE: For non-GPS equipped aircraft, LCH, LLA, TBD, and LEV DME's must be operational.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14:** Climb on heading 142° to 1600, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 32:** Climb on heading 322° to 700, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**BOWFN TRANSITION (HOODO7.BOWFN)**

**CFOOD TRANSITION (HOODO7.CFOOD)**

**HARVEY TRANSITION (HOODO7.HRV)**

**LEEVILLE TRANSITION (HOODO7.LEV)**

**SBIRD TRANSITION (HOODO7.SBIRD)**

NOTE: Chart not to scale.
INDIE EIGHT DEPARTURE (RNAV)

INDIE EIGHT DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 142° to 1600 for RADAR vectors to RENKK, thence . . . .

TAKEOFF RUNWAY 32: Climb on heading 322° to 700 for RADAR vectors to RENKK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition).

Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

NOTE: Chart not to scale.
RNAV-1 DME/DME/IRU or GPS.
RADAR required.

NOTE: Chart not to scale.

**KARRR SEVEN DEPARTURE (RNAV)**

**TRUAX**
**NGP**

**CORPUS CHRISTI CRP**
12,000
247° (17)

**HOUSTON, TEXAS HOUSTON DEP CON**
118.525
CTAF 122.725
CLNC DEL 124.0

**PEARLAND RGNL (LVJ)**

**TOP ALTITUDE: ASSIGNED BY ATC**

**KARRR SEVEN DEPARTURE (RNAV)**

**YOMOM**
12,000
228°
219° (64)

**PALACIOS PSX**
12,000
222° (37)

**RIIGG**
7,800
1,500

**SKUBA**
1,200
1,900 (18)

**KAVCY**

**Rwys 14, 32: Standard with minimum climb of 500’ per NM to 560.**

**TAKEOFF MINIMUMS**

**ASSIGNED BY ATC**

**(NARRATIVE ON FOLLOWING PAGE)**

**NOTE: Chart not to scale.**

---

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

**TOP ALTITUDE: ASSIGNED BY ATC**

**KARRR SEVEN DEPARTURE (RNAV)**

**TRUAX**
**NGP**

**CORPUS CHRISTI CRP**
12,000
247° (17)

**HOUSTON, TEXAS HOUSTON DEP CON**
118.525
CTAF 122.725
CLNC DEL 124.0

**PEARLAND RGNL (LVJ)**

**TOP ALTITUDE: ASSIGNED BY ATC**

**KARRR SEVEN DEPARTURE (RNAV)**

**YOMOM**
12,000
228°
219° (64)

**PALACIOS PSX**
12,000
222° (37)

**RIIGG**
7,800
1,500

**SKUBA**
1,200
1,900 (18)

**KAVCY**

**Rwys 14, 32: Standard with minimum climb of 500’ per NM to 560.**

**TAKEOFF MINIMUMS**

**ASSIGNED BY ATC**

**(NARRATIVE ON FOLLOWING PAGE)**

**NOTE: Chart not to scale.**

---

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

**TOP ALTITUDE: ASSIGNED BY ATC**

**KARRR SEVEN DEPARTURE (RNAV)**

**TRUAX**
**NGP**

**CORPUS CHRISTI CRP**
12,000
247° (17)

**HOUSTON, TEXAS HOUSTON DEP CON**
118.525
CTAF 122.725
CLNC DEL 124.0

**PEARLAND RGNL (LVJ)**

**TOP ALTITUDE: ASSIGNED BY ATC**

**KARRR SEVEN DEPARTURE (RNAV)**

**YOMOM**
12,000
228°
219° (64)

**PALACIOS PSX**
12,000
222° (37)

**RIIGG**
7,800
1,500

**SKUBA**
1,200
1,900 (18)

**KAVCY**

**Rwys 14, 32: Standard with minimum climb of 500’ per NM to 560.**

**TAKEOFF MINIMUMS**

**ASSIGNED BY ATC**

**(NARRATIVE ON FOLLOWING PAGE)**

**NOTE: Chart not to scale.**

---

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

**TOP ALTITUDE: ASSIGNED BY ATC**

**KARRR SEVEN DEPARTURE (RNAV)**

**TRUAX**
**NGP**

**CORPUS CHRISTI CRP**
12,000
247° (17)

**HOUSTON, TEXAS HOUSTON DEP CON**
118.525
CTAF 122.725
CLNC DEL 124.0

**PEARLAND RGNL (LVJ)**

**TOP ALTITUDE: ASSIGNED BY ATC**

**KARRR SEVEN DEPARTURE (RNAV)**

**YOMOM**
12,000
228°
219° (64)

**PALACIOS PSX**
12,000
222° (37)

**RIIGG**
7,800
1,500

**SKUBA**
1,200
1,900 (18)

**KAVCY**

**Rwys 14, 32: Standard with minimum climb of 500’ per NM to 560.**

**TAKEOFF MINIMUMS**

**ASSIGNED BY ATC**

**(NARRATIVE ON FOLLOWING PAGE)**

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

TAKEOFF RUNWAY 14: Climb on heading 142° to 1600, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 32: Climb on heading 322° to 900, for RADAR vectors to KARRR, thence. . . .

. . . .on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWRREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
LURIC EIGHT DEPARTURE (RNAV)

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

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 142° to 1600 for RADAR vectors to KNTKY, thence . . . .

TAKEOFF RUNWAY 32: Climb on heading 322° to 700 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
Orrth TRANSITION (LURIC8.Orrth)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 142° to 1600, for RADAR vectors to MMALT, thence. . . .

TAKEOFF RUNWAY 32: Climb on heading 322° to 900, for RADAR vectors to MMALT, thence. . . .

. . . . on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT7.GUSTI)
LAKE CHARLES TRANSITION (MMALT7.LCH)
WHITE LAKE TRANSITION (MMALT7.LLA)
NOTE: Chart not to scale.

(RADAR and DME required.)

(TOP ALTITUDE: ASSIGNED BY ATC)

(TAKEOFF MINIMUMS
Rwys 14, 32: Standard.)

(PALACIOS THREE DEPARTURE)

FORT STOCKTON
116.9 FST
W102°58.54' N30°57.13'
L-19, H-6

SAN ANTONIO
116.8 SAT
L-19, H-7

ROCKSPRINGS
114.55 RSG
N30°00.88' W100°17.99'

N29°38.64'W98°27.68'

COTULLA
115.8 COT
N28°27.72'W99°07.11'

THREE RIVERS
111.4 THX
N28°30.30'W98°09.03'

SKUBA
N29°11.72' W95°47.47'

PALACIOS
117.3 PSX
N28°45.87'W96°18.37'

(433)

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 142° to 1600 before turning, when entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 32: Climb on heading 322° to 700 before turning, when entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

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

**TOP ALTITUDE: ASSIGNED BY ATC**

**TAKEOFF MINIMUMS**
Rwys 14, 32: Standard with minimum climb of 500' per NM to 560.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14**: Climb on heading 142° to 1600 for RADAR vectors to KNTKY, thence. . . .
**TAKEOFF RUNWAY 32**: Climb on heading 322° to 700 for RADAR vectors to KNTKY, thence. . . .

. . . .on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**DPATY TRANSITION (STRYA8.DPATY)**
**JBULL TRANSITION (STRYA8.JBULL)**
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 142° to 1600 for RADAR vectors to BBYSE, thence...  
TAKEOFF RUNWAY 32: Climb on heading 322° to 700 for RADAR vectors to BBYSE, thence...  
...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)  
WTSON TRANSITION (STYCK8.WTSON)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 142° to 1600, for RADAR vectors to WATFO, thence.

TAKEOFF RUNWAY 32: Climb on heading 322° to 900, for RADAR vectors to WATFO, thence.

...on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6.ANKRR)
KELPP TRANSITION (WATFO6.KELPP)
MUSYL TRANSITION (WATFO6.MUSYL)
THREE TAKES OF MINIMUMS

Rwy 14, 32: Standard with minimum climb of 500' per NM to 560.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 142° to 1600 for RADAR vectors to WYLSN, thence . . .

TAKEOFF RUNWAY 32: Climb on heading 322° to 700 for RADAR vectors to WYLSN, thence . . . .

. . . on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.
ILS or LOC RWY 35
SUGAR LAND RGNL (SGR)

Different altimeter settings are used for different minimums:
- S-LOC 35 Cat C/D visibility 8 miles.
- DA 51 feet and all MDA 60 feet and S-LOC 35 Cat C/D visibility ½ mile, and Circling Cat C/D visibility ¼ mile.

At FAF to 5.2 NM, remain within 0.7 NM of course line.

Vehicle Description:
- Sidestep: 350° 5.2 NM from FAF
- LOC only.
Rwy 17 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

**ATTENTION:**

- **ATIS**
  - HOUSTON APP CON: 118.125
  - SUGAR LAND TOWER: 118.65 (CTAF) 118.65
  - GND CON: 121.4
  - CLNC DEL: 121.4 (when hwr closed)
  - CLNC DEL: 119.25
  - UNICOM: 122.95

**RNP APCH:**

- RNAV (GPS) RWY 17

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

- GP 3.00° TCH 52

**VGSI and RNAV glidepath not coincident** (VGSI Angle 3.5°/TCH 52).

**CATEGORY**

- A
  - LPV
  - 398-1
  - 581 (400-1)

- B
  - LNAV
  - 398-1
  - 581 (400-1)
  - 704-2
  - 622 (700-2)

- C
  - LNAV
  - 640-1
  - 558 (600-1)
  - 720-1
  - 638 (700-1)

- D
  - LNAV
  - 640-1
  - 558 (600-1)
  - 720-1
  - 638 (700-1)

**CLNC DEL**

- 121.4 (when hwr closed)

**TDZE**

- 35

**ELEV**

- 50

**SUGAR LAND RGNL (SGR)**
RNAV (GPS) RWY 35
SUGAR LAND RGNL (SGR)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). Baro-VNAV and VDP NA when using William P Hobby altimeter setting. When local altimeter setting not received, use William P Hobby altimeter setting: increase all DA 51 feet; increase all MDA 60 feet and increase LNAV-VNAV all Cats visibility to 1/4 LNAV Cat C/D visibility to 1/3, and Circling Cat C visibility to 2, Cat D to 2 ½. When VGSI inop, Circling Rwy 17 NA at night.

ATIS*  118.125
HOUSTON APP CON  123.8  257.7
SUGAR LAND TOWER*  118.65 (CTAF)  0
GND CON  121.4
CLNC DEL  121.4
CLNC DEL  119.25
(when hwr closed)
UNICOM  122.95

ELEV 82
TDZE 78

**LNAV only.**

RADAR REQUIRED

2000  UPAQI  tr  019°  DREWZ

- 1.7 NM to RW35

- 3.5 NM to RW35

- 6.7 NM

**CATEGORY**

A  B  C  D

**LPV DA**

278-3/4  200 (200-3/4)

**LNAV/VNAV DA**

567-1  582 (600-1)

489 (500-1 3/4)

**LNAV MDA**

660-1  582 (600-1)

660-1 3/4  582 (600-1 3/4)

**CIRCLING**

720-1  638 (700-1)

720-1 3/4  638 (700-1 3/4)

720-2

638 (700-2)

SUGAR LAND RGNL (SGR)

RNAV (GPS) RWY 35
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SUGAR LAND RGNL (SGR)
HOUSTON, TEXAS
ALEXANDRIA THREE DEPARTURE

NOTE: RADAR required.

NOTE: The following TRANSITIONS are ATC assigned only. Do not file.

CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).

MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).

TOP ALTITUDE: ASSIGNED BY ATC

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . . . on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
NOTE: Chart not to scale.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 for RADAR vectors to DREMR, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)

BLTWY SEVEN DEPARTURE (RNAV) (BLTWY7.BLTWY) 07OCT21
**NOTE:** Chart not to scale.

**BORRN SIX DEPARTURE (RNAV) BORRN SIX DEPARTURE (RNAV)**

**JUNCTION**

**CRGER**

**FOWLR**

**PSTUR**

**PUFER**

**ZUUUU**

**MNURE**

**BOCK**

**DILRE**

**WAILN**

**WEEED**

**MARCS**

**SAN ANTONIO**

**SUGAR LAND RGNL (SGR)**

**HOUSTON, TEXAS**

**TOP ALTITUDE:**

**ASSIGNED BY ATC**

**NOTE:** CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

**TAKEOFF MINIMUMS**

Rwys 17, 35: Standard with minimum climb of 500’/NM to 600.

**NOTE:**

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

**SUGAR LAND TOWER**

118.65 (CTAF)

**HOUSTON DEP CON**

123.8 257.7

**ATIS**

- 118.125
- CINC DEL
- 121.4
- CINC DEL (When twr closed)
- 119.25
- GND CON
- 121.4

**SUGAR LAND RGNL (SGR)**

**MFA SGR 25 NM**

3100

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

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 35: Climb on heading 350° to 1100, for RADAR vectors to BORRN, thence. . . .

. . . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
NOTE: Radar required.
NOTE: For aircraft destined KMEM or filed via Q32 or J42.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.
NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-358 to cross GIFFA INT at or above 10000.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500, for RADAR vectors to VUH VOR/DME, thence . . .
TAKEOFF RUNWAY 35: Climb on heading 350° to 1100, for RADAR vectors to VUH VOR/DME, thence . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO7.BOWFN)
CFOOD TRANSITION (HOODO7.CFOOD)
HARVEY TRANSITION (HOODO7.HRV)
LEEVILLE TRANSITION (HOODO7.LEV)
SBIRD TRANSITION (HOODO7.SBIRD)
INDIE EIGHT DEPARTURE (RNAV)

**NOTE:** RADAR required.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** RNAV 1.
**NOTE:** TPAKK TRANSITION: For non GPS equipped aircraft TNV DME must be operational.

**TAKEOFF MINIMUMS**
Rwys 17, 35: Standard with minimum climb of 500’ per NM to 600.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17:** Climb on heading 170° to 1500 for RADAR vectors to RENNK, thence . . . .

**TAKEOFF RUNWAY 35:** Climb on heading 350° to 1100 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**TPAKK TRANSITION (INDIE8.TPAKK)**
NOTE: Chart not to scale.

INDUSTRY ONE DEPARTURE

INDUSTRY ONE DEPARTURE

HUMBLE

JUNCTION

CENTEX

NAVASOTA

TOP ALTITUDE:
ASSIGNED BY ATC

ATIS
118.125

CNC DEL
121.4

CNC DEL
119.25 (when twr closed)

SUGAR LAND TOWER
118.65 (CTAF)

HOUSTON DEP CON
123.8  257.7

NOTE: LAREDO TRANSITION: ATC assigned only.

NOTE: CORPUS CHRISTI TRANSITION: ATC assigned only.

NOTE: CENTEX TRANSITION: ATC assigned only for aircraft inbound on J2, J15 or J86.

NOTE: JUNCTION TRANSITION: For aircraft overflying JCT VORTAC to the DFW Metroplex area that are being rerouted due to bad weather.

NOTE: RADAR required.

TAKING OFF MINIMUMS
Rws 17, 35: Standard.

NOTE: LAREDO TRANSITION: ATC assigned only.

NOTE: CORPUS CHRISTI TRANSITION: ATC assigned only.

NOTE: CENTEX TRANSITION: ATC assigned only for aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.

SC-5, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
TAKEOFF RUNWAY 17: Climb on heading 170° to 1500, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 35: Climb on heading 350° to 1100, for RADAR vectors to KARRR, thence. . . .

. . . .on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPORUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
NOTE: Chart not to scale.

LEONA FOUR DEPARTURE
(LOA4.LOA) 07OCT21

TOP ALTITUDE: ASSIGNED BY ATC

MANY MINIMUMS
Rwys 17, 35: Standard.

LEONA DEPARTURE
(LOA4.LOA) 07OCT21 SUGAR LAND RGNL (SGR)
HOUSTON, TEXAS

NOTE: RADAR required.
NOTE: Except for aircraft destined ACT or the DFW terminal area,
all aircraft filing the LEONA SID must file one of the published
transitions via FUZ (LOA4.FUZ) ADM (LOA4.ADM) or
BYP (LOA4.BYP).
NOTE: RANGER TRANSITION: For aircraft overflying west/northwest of
the DFW terminal area FL240 and above.
NOTE: ARDMORE TRANSITION: For aircraft overflying north/northwest of
the DFW terminal area FL240 and above.
NOTE: BONHAM TRANSITION: For aircraft overflying/landing TUL
VORTAC FL240 and above.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
LEONA FOUR DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
ATIS*
118.125
CLNC DEL
121.4
CLNC DEL
119.25 (when twr closed)
GND CON
121.4
SUGAR LAND TOWER*
118.65 (CTAF)
HOUSTON DEP CON
123.8 257.7

NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

TOP ALTITUDE
ASSIGNED BY ATC

LITTLE ROCK
113.9 LIT
Channel B6
N34°40.66'
W92°10.83'
L-18, H-6

SKKIP
N31°14.91'
W94°39.45'

SUSHI
N30°35.48'
W95°04.39'

COLET
N30°26.96'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

HUMBLE
116.6 IAH
Channel 113

DASSETTA
116.9 DAS
Channel 116

LUFKIN
112.1 LFK
Channel 58
N31°09.75'
W94°43.01'

NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . . on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
NOTE: Radar required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 170° to 1500
for RADAR vectors to KNTKY, thence . . . .

TAKEOFF RWY 35: Climb on heading 350° to 1100
for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to
DARTR, then on track 031° to MUSIQ, then on track
031° to CLAVN, then on track 031° to VELCO, then
on track 031° to ENJOY, then on track 031° to LURIC,
then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

HAWE8 TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 for RADAR vectors to KNTKY, thence . . .
TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 for RADAR vectors to KNTKY, thence . . .

. . . .on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JBULL TRANSITION (STRYA8.JBULL)
TOP ALTITUDE: ASSIGNED BY ATC

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 for RADAR vectors to BBYSE, thence. . .
TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 for RADAR vectors to BBYSE, thence. . .
.on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WTSON TRANSITION (STYCK8.WTSON)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500, for RADAR vectors to WATFO, thence.

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100, for RADAR vectors to WATFO, thence.

...on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6.ANKRR)
KELPP TRANSITION (WATFO6.KELPP)
MUSYL TRANSITION (WATFO6.MUSYL)
WYLSN EIGHT DEPARTURE (RNAV)

NOTE: Chart not to scale.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwy 17, 35: Standard with minimum climb of 500’ per NM to 600.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 for RADAR vectors to WYLSN, thence. . . .
TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 for RADAR vectors to WYLSN, thence. . . .

. . . . on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION [WYLSN8.GIFFA]
MAJKK TRANSITION [WYLSN8.MAJKK]

NOTE: Chart not to scale.
Procedure NA at night.
Rwy 15 helicopter visibility reduction below 1 SM NA.
Use George Bush Intcntl/Houston altimeter setting.

**HOUSTON APP CON** 123.8 257.7  **CLNC DEL** 121.15  **UNICOM** 123.05 (CTAF)

**RNAV (GPS) RWY 15**
**WEST HOUSTON (IWS)**

**HOUSTON, TEXAS**

**Amdt 1D  15JUL21**

**Use George Bush Intcntl/Houston altimeter setting.**
Rwy 33 helicopter visibility reduction below 1 SM NAA. Use George Bush Intcntl/Houston altimeter setting. Circling Rwy 15 NA at night.

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

**HOUSTON APP CON**
- 123.8
- 257.7

**CLNC DEL**
- 121.15

**UNICOM**
- 123.05 (CTAF)

**EMULE**
- 300°
- 120°
- 4 NM

**SHYNR**
- 300°
- 120°
- 4 NM

**HG N M P**
- 171

**Category**

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<td>529 (600-1)</td>
<td>689 (700-2)</td>
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TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . .on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwy 15, 33: Standard with minimum climb of 500' per NM to 620.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 150° to 620 for RADAR vectors to DREMR, thence . . . .

TAKEOFF RUNWAY 33: Climb on heading 330° to 620 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
BORRN SIX DEPARTURE (RNAV)

CTAF
123.05
CLNC DEL
121.15
HOUSTON DEP CON
123.8 257.7

NOTE: Chart not to scale.

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

TOP ALTITUDE:
ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwys 15, 33: Standard with minimum climb of 500’/NM to 620.

NOTE: CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

(NARRATIVE ON FOLLOWING PAGE)
TAKEOFF RUNWAY 15: Climb heading 150° to 620, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 33: Climb heading 330° to 620, for RADAR vectors to BORRN, thence. . . .

. . . on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 15, 33: Standard.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
EL DORADO ONE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . .

. . . on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.

NOTE: Chart not to scale.
NOTE: RADAR required. For aircraft destined for the DFW terminal area only.

NOTE: Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF ALL RUNWAYS:** When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence, . . .

. . . . on IAH R-358 to cross GIFFA INT at or above 10000.

**TAKEOFF MINIMUMS**
Rwys 15, 33: Standard

**TOP ALTITUDE:**
ASSIGNED BY ATC

**NOTE:** For aircraft destined for the DFW terminal area only.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 15:** Climb on heading 150° to 620, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 33:** Climb on heading 330° to 620, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**BOWFN TRANSITION (HOODO7.BOWFN)**

**CFOOD TRANSITION (HOODO7.CFOOD)**

**HARVEY TRANSITION (HOODO7.HRV)**

**LEEVILLE TRANSITION (HOODO7.LEV)**

**SBIRD TRANSITION (HOODO7.SBIRD)**

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 150° to 620 for RADAR vectors to RENNK, thence . . . .

TAKEOFF RUNWAY 33: Climb on heading 330° to 620 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)
NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 15, 33: Standard.

NOTE: RADAR required.
NOTE: JUNCTION TRANSITION: For aircraft overflying JCT VORTAC on J2, J15 or J86.
NOTE: CENTEX TRANSITION: ATC assigned only for aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.
NOTE: CORPUS CHRISTI TRANSITION: ATC assigned only.
NOTE: LAREDO TRANSITION: ATC assigned only.
DEPARTMENT ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
**RNAV-1 DME/DME/IRU or GPS.**
**RADAR required.**

**NOTE: Chart not to scale.**

**TAKEOFF MINIMUMS**
Rwys 15, 33: Standard with minimum climb of 500’ per NM to 620.

(NARRATIVE ON FOLLOWING PAGE)
TAKEOFF RUNWAY 15: Climb on heading 150° to 620, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 33: Climb on heading 330° to 620, for RADAR vectors to KARRR, thence. . . .

. . . .on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
NOTE: Chart not to scale.

TOP ALTITUDE:
ASSIGNED BY ATC

NOTE: RADAR and DME required.

NOTE: For aircraft destined LIT or overlying LIT or PXV.

LUFKIN
112.1 LFK
Chan 58
N31°09.75'
W94°43.01'

SUSHI
N30°35.48'
W95°04.39'

COLET
N30°26.96'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

HUMBLE
116.6 IAH
Chan 113

SKKIP
N31°14.91'
W94°39.45'

LITTLE ROCK
113.9 LIT
Chan B6
N34°40.66'
W92°10.83'
L-18, H-6

LUFKIN THREE DEPARTURE
(LFK3.LFK) 07OCT21

TAKEOFF MINIMUMS
Rwys 15, 33: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

. . . on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
LURIC EIGHT DEPARTURE (RNAV)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 150°
to 620 for RADAR vectors to KNTKY, thence . . . .

TAKEOFF RUNWAY 33: Climb on heading 330°
to 620 for RADAR vectors to KNTKY, thence . . . .

. . . on track 032° to PEETY, then on track 032° to
DARTR, then on track 031° to MUSIQ, then on track
031° to CLAVN, then on track 031° to VELCO, then
on track 031° to ENJOY, then on track 031° to LURIC,
then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)

NOTE:  RNAV 1.
NOTE:  RADAR required.
NOTE:  DME/DME/IRU or GPS required.
NOTE:  RNAV 1.
**DEPARTURE ROUTE DESCRIPTION**

- **TAKEOFF RUNWAY 15:** Climb on heading 150° to 620 for RADAR vectors to MMALT, thence.
- **TAKEOFF RUNWAY 33:** Climb on heading 330° to 620 for RADAR vectors to MMALT, thence.

**NOTE:** GUSTI and LCH Transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T, T41 and 54T.

**NOTE:** Chart not to scale.

**NOTE:** Expect filed altitude 10 minutes after departure.

**NOTE:** Takeoff minimums 150° for runway 15, 33° for runway 33.

**NOTE:** Standard with minimum climb of 500’/NM to 620.

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

TAKEOFF ALL RUNWAYS: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

**TOP ALTITUDE: ASSIGNED BY ATC**

**NOTE: RADAR required.**
**NOTE: DME/DME/IRU or GPS required.**
**NOTE: RNAV 1.**

**TAKEOFF MINIMUMS**
Rwys 15, 33: Standard with minimum climb of 500' per NM to 620.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 15:** Climb on heading 150° to 620 for RADAR vectors to KNTKY, thence . . .

**TAKEOFF RUNWAY 33:** Climb on heading 330° to 620 for RADAR vectors to KNTKY, thence. . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**DPATY TRANSITION (STRYA8.DPATY)**

**JBULL TRANSITION (STRYA8.JBULL)**

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 150° to 620 for RADAR vectors to BBYSE, thence... 
TAKEOFF RUNWAY 33: Climb on heading 330° to 620 for RADAR vectors to BBYSE, thence... 
...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY) 
WTSON TRANSITION (STYCK8.WTSON)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 15:** Climb on heading 150° to 620, for RADAR vectors to WATFO, thence.

**TAKEOFF RUNWAY 33:** Climb on heading 330° to 620, for RADAR vectors to WATFO, thence.

...on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**ANKRR TRANSITION (WATFO6.ANKRR)**
**KELPP TRANSITION (WATFO6.KELPP)**
**MUSYL TRANSITION (WATFO6.MUSYL)**
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 150° to 620 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAY 33: Climb on heading 330° to 620 for RADAR vectors to WYLSN, thence. . . .

. . . . on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
Aircraft not GPS equipped - RADAR required for procedure entry.
From GEEEO: RNAV 1 - GPS required.

**ILS or LOC RWY 4**

**HOPPY TOWER**

**AL-198 (FAA)**

**WILLIAM P HOBBY**

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**Amdt 43A 25APR19**

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**29°39'N-95°17'W**
ILS or LOC RWY 13R
WILLIAM P HOBBY (HOU)

MALSR

MISSED APPROACH: Climb to 800 then climbing right turn to 2200 direct VUH VOR/DME.

ATIS
124.6

HOUSTON APPROACH
120.05 379.1 EAST
124.35 316.15 WEST

HOBBY TOWER
118.7 256.9

GND CON
121.9

CLNC DEL
125.45

CPDLC

LOCALIZER 111.3
I-PRQ

MISSAPCH FIX
SCHOLES
VUH

TDZE 46

ELEV 46

R-211 Channel 113

ABF Channel 113

ILS or LOC RWY 13R

RADAR required for LOC only.
RADAR required for procedure entry.

Inop table does not apply to S-ILS Rwy 13R. Rwy 13R helicopter visibility reduction below 3/4 SM NA. For inop ALS, increase S-LOC 13R Cats A/B visibility to RVR 5500, Cats C/D/E to 1 1/2 SM.

Category
A
B
C
D
E

Missed Approach: Climb to 800 then climbing right turn to 2200 direct VUH VOR/DME.

Amdt 12D 25APR19

William P Hobby (HOU)

ILS or LOC RWY 13R

29°39′N-95°17′W

501
ILS Rwy 4 (Cat II & III)

WILLIAM P HOBBY (HOU)

Aircraft not GPS equipped - RADAR required for procedure entry.
From GEEEO: RNAV 1 - GPS required.

\[ \text{CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.} \]

\[ \text{Amdt 43A 25APR19} \]

**TWR**

**PAP**

**5**

\[ \text{7 NM} \]

\[ \text{2.9 NM} \]

\[ \text{4.4 NM} \]

\[ \text{1081' F.} \]

\[ \text{CATEGORY II & III ILS - SPECIAL AIRCREW} \]

\[ \text{& AIRCRAFT CERTIFICATION REQUIRED} \]

\[ \text{HOUSTON, TEXAS} \]

\[ \text{Amld 43A 25APR19} \]

\[ \text{29°39'N-95°17'W} \]

\[ \text{SC-5, 30 NOV 2023 to 25 JAN 2024} \]

\[ \text{HOUSTON, TEXAS} \]

\[ AL-198 \]
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C (29°F) or above 54°C (130°F). For inop ALSF-2, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV all Cats visibility to 1/4 miles and LNAV Cat C/D/E visibility to 1/8 mile. DME/DME RNP-0.3 NA.

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

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</table>
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 43°C (109°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct EDTED and on track 283° to DREWZ and hold.

RADAR REQUIRED

EPV 46 BDZ 43

283°

2000

EDTED

DREWZ

283°

1049

1049

2049

2049

2049

2049

1049

4 NM

GND CON

CLNC DEL

CPDLC

WAAS

CH 77510

W31A

APP CRS

311°

Rwy Idg

7602

TDZE

43

Apt Elev

46

HOU

HOUSTON, TEXAS

AL-198 (FAA)

RNAV (GPS) RWY 31L

WILLIAM P HOBBY (HOU)

D-ATIS

124.6

HOUSTON APP CON

120.05 379.1 EAST

124.35 316.15 WEST

HOBBY TOWER

118.7 256.9

GND CON

121.9

CLNC DEL

125.45

508
For inop ALS, increase S-LOC 22 Cat C/D/E visibility to 1/4 SM.

MISSED APPROACH: Climb to 3000 direct EISEN and on track 225° to ACOLA and hold.

For inop ALS, increase S-LOC 22 Cat C/D/E visibility to 1/4 SM.

MISSED APPROACH: Climb to 3000 direct EISEN and on track 225° to ACOLA and hold.
ASDE-X in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READERBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
TAKEOFF MINIMUMS
Rwy 22: Standard with minimum climb of 290’ per NM to 1500.

NOTE: RADAR required.
NOTE: The following TRANSITIONS are ATC assigned only. Do not file.
CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).
MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L/R, 22: Climb on assigned heading for RADAR vectors to RAECN INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence...

TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 800 before turning, then climb on assigned heading for RADAR vectors to RAECN INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence...

...on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 4, 13L/R, 31L/R: Standard with minimum climb of 500' per NM to 560.
Rwy 22: Standard with minimum climb of 500' per NM to 700.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on heading 041° to 560 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAYS 13L/R: Climb on heading 131° to 560 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 22: Climb on heading 221° to 700 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560 for RADAR vectors to DREMR, thence . . . .

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwy 22: Standard with minimum climb of 290' per NM to 1500.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L/R, 22: Climb on assigned heading for RADAR vectors to LITLD INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 800 before turning, then climb on assigned heading for RADAR vectors to LITLD INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
NOTE: RADAR required.
NOTE: For aircraft destined KMEM or filed via Q32 or J42.

NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwy 22: Standard with minimum climb of 290’ per NM to 1500.

EL DORADO ONE DEPARTURE
HOUSTON, TEXAS
WILLIAM P HOBBY (HOU)

(TOP ALTITUDE: 16000)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L/R, 22: Climb on assigned heading for RADAR vectors to RAECN INT, maintain 16000, expect filed altitude 10 minutes after departure, thence...

TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 800 before turning, then climb on assigned heading for RADAR vectors to RAECN INT, maintain 16000, expect filed altitude 10 minutes after departure, thence...

...on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.
ELOCO SIX DEPARTURE (RNAV)

TOP ALTITUDE: 16000

TAKEOFF MINIMUMS
Rwys 4, 13L/R, 22, 31L/R:
Standard with minimum climb of 500’ per NM to 560.

TAKEOFF RUNWAY 4: Climb on heading 041° to 560, expect RADAR vectors to ELOCO, thence . . .
TAKEOFF RUNWAYS 13L/R: Climb on heading 131° to 560, expect RADAR vectors to ELOCO, thence . . .
TAKEOFF RUNWAY 22: Climb on heading 221° to 560, expect RADAR vectors to ELOCO, thence . . .
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560, expect RADAR vectors to ELOCO, thence . . .

. . . on track 070° to CHPEE, then on (transition). Maintain 16000, expect filed altitude 10 minutes after departure.

WHITE LAKE TRANSITION (ELOCO6.LLA)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L/R, 22: Climb on assigned heading for RADAR vectors to MONNT INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 800 before turning, then climb on assigned heading for RADAR vectors to MONNT INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-358 to cross GIFFA INT at or above 10000.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: ATC assigned only.
NOTE: DME/DME/IRU or GPS required.
NOTE: For non-GPS equipped aircraft, LCH, LLA, TBD, and LEV DME's must be operational.

TAKENOFF MINIMUMS
Rwys 4, 13L/R, 31L/R: Standard with minimum climb of 500' per NM to 560.
Rwy 22: Standard with minimum climb of 500' per NM to 700.

TAKEOFF RUNWAY 4: Climb on heading 041° to 560, for RADAR vectors to VUH VOR/DME, thence . . . .
TAKEOFF RUNWAYS 13L/R: Climb on heading 131° to 560, for RADAR vectors to VUH VOR/DME, thence . . . .
TAKEOFF RUNWAY 22: Climb on heading 221° to 700, for RADAR vectors to VUH VOR/DME, thence . . . .
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain 16000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO7.BOWFN)
CFOOD TRANSITION (HOODO7.CFOOD)
HARVEY TRANSITION (HOODO7.HRV)
LEEVILLE TRANSITION (HOODO7.LEV)
SBIRD TRANSITION (HOODO7.SBIRD)

NOTE: Chart not to scale.
INDIE EIGHT DEPARTURE (RNAV)

TAKEOFF MINIMUMS
Rwys 4, 13L/R, 31L/R:
Standard with minimum climb of 500’ per NM to 560.
Rwy 22:
Standard with minimum climb of 500’ per NM to 700.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 4: Climb on heading 041° to 560 for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAYS 13L/R: Climb on heading 131° to 560 for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 22: Climb on heading 221° to 700 for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L/R, 22: Climb on assigned heading for RADAR vectors to SHYNR INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 800 before turning, then climb on assigned heading for RADAR vectors to SHYNR INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
**LEONA FOUR DEPARTURE**

**TOP ALTITUDE: 16000**

**TAKING OFF MINIMUMS**
- Rwy 22: Standard with minimum climb of 290’ per NM to 1500.

**NOTE:** Radar required.
**NOTE:** Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LEONA SID must file one of the published transitions via FUZ (LOA4.FUZ), ADM (LOA4.ADM), or BYP (LOA4.BYP).
**NOTE:** Ranger Transition: For aircraft overflying west/northwest of the DFW terminal area FL240 and above.
**NOTE:** Ardmore Transition: For aircraft overflying north/northwest of the DFW terminal area FL240 and above.
**NOTE:** Bonham Transition: For aircraft overflying/landing TUL VORTAC FL240 and above.

**NOTE:** Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L/R, 22: Climb on assigned heading for RADAR vectors to WLLIS INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 800 before turning, then climb on assigned heading for RADAR vectors to WLLIS INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
NOTE: Chart not to scale.

(TOP ALTITUDE: 16000)

LUFKIN
112.1 LFK
Chan 58
N31°09.75'
W94°43.01'

SUSHI
N30°35.48'
W95°04.39'

COLET
N30°26.96'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

HUMBLE
116.6 IAH
Chan 113

DAISETTA
116.9 DAS
Chan 116

NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

NOTE: Chart not to scale.

(TOP ALTITUDE: 16000)

LITTLE ROCK
113.9 LIT
Chan B6
N34°40.66'
W92°10.83'
L-18, H-6

SKKIP
N31°14.91'
W94°39.45'

LUFKIN THREE DEPARTURE
(LFK3.LFK) 07OCT21

TOP ALTITUDE: 16000

NOTE: Chart not to scale.

(TOP ALTITUDE: 16000)

LITTLE ROCK
113.9 LIT
Chan B6
N34°40.66'
W92°10.83'
L-18, H-6

SKKIP
N31°14.91'
W94°39.45'

LUFKIN
112.1 LFK
Chan 58
N31°09.75'
W94°43.01'

SUSHI
N30°35.48'
W95°04.39'

COLET
N30°26.96'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

HUMBLE
116.6 IAH
Chan 113

DAISETTA
116.9 DAS
Chan 116

NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L/R, 22: Climb on assigned heading for RADAR vectors to KYANN INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence...

TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 800 before turning, then climb on assigned heading for RADAR vectors to KYANN INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence...

. . . . on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
NOTE: Chart not to scale

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

TAKEOFF MINIMUMS
Rwys 4, 13L/R, 31L/R: Standard with minimum climb of 500’ per NM to 560.
Rwy 22: Standard with minimum climb of 500’ per NM to 700.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 4: Climb on heading 041° to 560 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAYS 13L/R: Climb on heading 131° to 560 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 22: Climb on heading 221° to 700 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560 for RADAR vectors to KNTKY, thence . . . .
. . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
NOTE: Chart not to scale.

RAFAR and DME required.

TOP ALTITUDE: 16000

TAKEOFF MINIMUMS

Rwy 22: Standard with minimum climb of 290' per NM to 1500.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4, 13L/R, 22: Climb on assigned heading for RADAR vectors to SKUBA, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 800 before turning, then climb on assigned heading for RADAR vectors to SKUBA, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

PEECE SIX DEPARTURE (RNAV)

TOP ALTITUDE: 16000

TAKEOFF MINIMUMS
Rwy 4: Standard with minimum climb of 500' per NM to 3800.
Rwy 13L: Standard with minimum climb of 500' per NM to 4200.
Rwy 13R: Standard with minimum climb of 500' per NM to 4400.
Rwy 22: Standard with minimum climb of 500' per NM to 3900.
Rwys 31L/R: Standard with minimum climb of 500' per NM to 3300.

NOTE: GPS required for ANKRR, KELPP, and MUSYL TRANSITIONS.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on heading 041° to 560, expect RADAR vectors to PEECE, thence. . . .
TAKEOFF RUNWAYS 13L/R: Climb on heading 131° to 560, expect RADAR vectors to PEECE, thence. . . .
TAKEOFF RUNWAY 22: Climb on heading 221° to 560, expect RADAR vectors to PEECE, thence. . . .
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560, expect RADAR vectors to PEECE, thence. . . .

. . . . . . . . on track 131° to VUH VOR/DME, then on (transition). Maintain 16000, expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (PEECE6.ANKRR)
KELPP TRANSITION (PEECE6.KELPP)
MUSYL TRANSITION (PEECE6.MUSYL)
PTRON NINE DEPARTURE (RNAV)

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

TOP ALTITUDE: 16000

D-ATIS
124.6
CLNC DEL
125.45
CPDLC
GND CON
121.9
HOBBY TOWER
118.7 256.9
HOUSTON DEP CON
127.125 269.075

TAKEOFF MINIMUMS
Rwy 4: Standard with minimum climb of 500' per NM to 900.
Rwy 13L: Standard with minimum climb of 500' per NM to 3600.
Rwy 13R: Standard with minimum climb of 500' per NM to 3600.
Rwy 22: Standard with minimum climb of 500' per NM to 1900.
Rwy 31L/R: Standard with minimum climb of 500' per NM to 560.

NOTE: Chart not to scale.

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

TOP ALTITUDE: 16000

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on heading 041° to 560, expect RADAR vectors to SAALT, thence. . . .
TAKEOFF RUNWAYS 13L/R: Climb on heading 131° to 560, expect RADAR vectors to SAALT, thence. . . .
TAKEOFF RUNWAY 22: Climb on heading 221° to 560, expect RADAR vectors to SAALT, thence. . . .
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560, expect RADAR vectors to SAALT, thence. . . .

. . . . on track 191° to PTRON, then on (transition). Maintain 16000, expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (PTRON9.CRP)
PALACIOS TRANSITION (PTRON9.PSX)
TRUAX TRANSITION (PTRON9.NGP)
WWREN TRANSITION (PTRON9.WWREN)
YOMOM TRANSITION (PTRON9.YOMOM)
RNAV 1 - DME/DME/IRU or GPS.
RADAR required.

TOP ALTITUDE: 16000

NOTE: CRGER Transition ATC assigned only.

TAKEOFF MINIMUMS
Rwys 4, 13L/R, 31L/R: Standard with minimum climb of 500’ per NM to 560.
Rwy 22: Standard with minimum climb of 500’ per NM to 800.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on heading 041° to 560, expect RADAR vectors to RETYR, thence . . . .
TAKEOFF RUNWAYS 13L/R: Climb on heading 131° to 560, expect RADAR vectors to RETYR, thence . . . .
TAKEOFF RUNWAY 22: Climb on heading 221° to 560, expect RADAR vectors to RETYR, thence . . . .
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560, expect RADAR vectors to RETYR, thence . . . .

.... on track 298° to MNNKE, then on (transition). Maintain 16000, expect filed altitude 10 minutes after departure.

CRGER TRANSITION (RETYR8.CRGER)
JUNCTION TRANSITION (RETYR8.JCT)
MNURE TRANSITION (RETYR8.MNURE)
SAN ANTONIO TRANSITION (RETYR8.SAT)
WAILN TRANSITION (RETYR8.WAILN)
NOTE: Chart not to scale.

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on heading 041° to 560 for RADAR vectors to KNTKY, thence.
TAKEOFF RUNWAYS 13L/R: Climb on heading 131° to 560 for RADAR vectors to KNTKY, thence.
TAKEOFF RUNWAY 22: Climb on heading 221° to 700 for RADAR vectors to KNTKY, thence.
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560 for RADAR vectors to KNTKY, thence.

.on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JBULL TRANSITION (STRYA8.JBULL)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 4:** Climb on heading 041° to 560 for RADAR vectors to BBYSE, thence. . .

**TAKEOFF RUNWAYS 13L/R:** Climb on heading 131° to 560 for RADAR vectors to BBYSE, thence. . .

**TAKEOFF RUNWAY 22:** Climb on heading 221° to 700 for RADAR vectors to BBYSE, thence. . .

**TAKEOFF RUNWAYS 31L/R:** Climb on heading 311° to 560 for RADAR vectors to BBYSE, thence. . .

...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain 16000 or as assigned by ATC.

**DOLEY TRANSITION (STYCK8.DOLEY)**

**WTSON TRANSITION (STYCK8.WTSON)**

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

TAKEOFF RUNWAY 4: Climb on heading 041° to 560 for RADAR vectors to WYLSN, thence . . .
TAKEOFF RUNWAYS 13L/R, 31L/R: Climb on heading 131° to 560 for RADAR vectors to WYLSN, thence . . .
TAKEOFF RUNWAY 22: Climb on heading 221° to 700 for RADAR vectors to WYLSN, thence . . .
TAKEOFF RUNWAYS 31L/R: Climb on heading 311° to 560 for RADAR vectors to WYLSN, thence . . .

. . . on track 360° to MONNT, then on (transition). Maintain 16000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)
### RNAV (GPS) RWY 18

**HUNTSVILLE MUNI (UTS)**

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**WAAS CH 72811**

**Rwy Idg**

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**HOUSTON CENTER**

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### Holding Pattern

**4 NM**

**CALEX**

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**SHAEE**

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#### MISSED APPROACH

Climb to 4000 direct HINET and right turn via track 297° to OSCER and hold.

#### LNAV/VNAV all Cats and Circling Cat C visibility

Mile.

#### Notice

Baro-VNAV NA when using Conroe/North Houston Rgnl 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. Visibility reduction by helicopters NA. VDP NA when using Conroe/North Houston Rngl altimeter setting. When local altimeter setting not received, use Conroe/North Houston Rngl altimeter setting and increase all DA 75 feet and all MDA 80 feet; increase LPV and LNAV/VNAV all Cats and Circling Cat C visibility ¼ mile.

#### VGSI and RNAV glidepath not coincident

(VGSI Angle 3.00°/TCH 26).

#### VNAV

LNAV/VNAV all Cats and Circling Cat C visibility.

**LPV**

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**LNAV/VNAV**

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**LNAV MDA**

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**CIRCLING**

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**CATEGORIES**

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</table>

**Notes**

- **CALEX**
  - 270°
  - 360°
  - 090°

- **OSCER**
  - 270°
  - 360°
  - 090°

- **HINET**
  - 270°
  - 360°

- **Rwy Idg**
  - 180° to RW18

- **REIL**
  - RWys 18 and 36

- **MIRL**
  - RWy 18:36

- **HUNTSVILLE, TEXAS**

<table>
<thead>
<tr>
<th>Orig-B</th>
<th>15JUL21</th>
<th>SC-5, 30 NOV 2023 to 25 JAN 2024</th>
<th>SC-5, 30 NOV 2023 to 25 JAN 2024</th>
<th>SC-5, 30 NOV 2023 to 25 JAN 2024</th>
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<tr>
<td>30°45'N-95°35'W</td>
<td>30°45'N-95°35'W</td>
<td>30°45'N-95°35'W</td>
<td>30°45'N-95°35'W</td>
<td>30°45'N-95°35'W</td>
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</table>

**HUNTSVILLE MUNI (UTS)**

**RNAV (GPS) RWY 18**
HUNTSVILLE, TEXAS

VOR/LOA 110.8
Chan 45

APP CRS 131°
Rwy Idg TDZE
Apt Elev NA

NA 363

ELEV 1000-1
MIRL Rwy 18-36

When local altimeter setting not received, use Conroe/North Houston Rgnl altimeter setting and increase MDA 80 feet, increase Circling Cat C visibility 3/4 mile.

MISSED APPROACH: Climbing right turn to 2000 via LOA VORTAC R-131 to KASHE/25 DME and hold.

ASOS
HOUSTON CENTER
UNICOM

119.425
134.8 269.6
122.8 [CTAF] 0

VOR/DME-A
HUNTSVILLE MUNI (UTS)

Procedure NA for arrivals at LOA VORTAC via V477 northwest bound.

LEONA

110.8 LOA 19
Chan 45

2000
131°

LOA 19 Arc

KASHE

2000
131°

1120-2
757 (800-2)

LOA VORTAC

R-131

MAFAP

685

29.7

Procedure
Turn NA

SC-5, 30 NOV 2023 to 25 JAN 2024

U.S. DEPARTMENT OF TRANSPORTATION
FAA

VOR/DME-A
HUNTSVILLE MUNI (UTS)

30°45’N-95°35’W

541

HUNTSVILLE, TEXAS
Amdt 6A 15JUL21
RNAV (GPS) RWY 14  
CHEROKEE COUNTY (JSO)  

Baro-VNAV NA when using Nacogdoches altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). When local altimeter setting not received, use Nacogdoches altimeter setting and increase all DA to 1046 feet and increase LPV visibility ½ SM and LNAV/VNAV visibility ¼ SM; increase all MDA 120 feet and LNAV visibility Cat C ¾ SM. Circling visibility Cat C ⅛ SM. DME/DME RNP 0.3 NA. VDP NA with Nacogdoches altimeter setting.

**MISSED APPROACH:**
Climb to 3100 direct NOPCI and hold.

**AWOS-3**
119.075

**LONGVIEW APP CON**
128.75 379.15

**UNICOM**
122.7 (CTAF)

---

**SC-5, 30 NOV 2023 to 25 JAN 2024**

---

** CATEGORY**

<table>
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<th>A</th>
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<th>D</th>
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<tr>
<td>LPV DA</td>
<td>928-1</td>
<td>250 (300-1)</td>
<td>NA</td>
<td></td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>928-1</td>
<td>250 (300-1)</td>
<td>NA</td>
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<tr>
<td>LNAV MDA</td>
<td>1080-1</td>
<td>402 (500-1)</td>
<td>1080-1½</td>
<td>402 (500-1½)</td>
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<tr>
<td>CIRCLING</td>
<td>1080-1</td>
<td>402 (500-1)</td>
<td>1140-1</td>
<td>602 (700-1¼)</td>
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</table>

---

**WAAS**
CH 56429
W14A

**APP CRS**
135°

**Rwy Idg**
TDZE

**Apt Elev**
678

**MISSED APCH FIX**
 NOPCI & hold.

**ELEV**
678

**TDZE**
678

---

**NALNAV MDA**

**LPV**

**VNAV**

---

**SC-5, 30 NOV 2023 to 25 JAN 2024**

---

**AWOS-3**
119.075  
**LONGVIEW APP CON**
128.75 379.15  
**UNICOM**
122.7 (CTAF)

---

**SC-5, 30 NOV 2023 to 25 JAN 2024**

---

**AWOS-3**
119.075  
**LONGVIEW APP CON**
128.75 379.15  
**UNICOM**
122.7 (CTAF)

---

**SC-5, 30 NOV 2023 to 25 JAN 2024**

---

**AWOS-3**
119.075  
**LONGVIEW APP CON**
128.75 379.15  
**UNICOM**
122.7 (CTAF)

---

**SC-5, 30 NOV 2023 to 25 JAN 2024**

---

**AWOS-3**
119.075  
**LONGVIEW APP CON**
128.75 379.15  
**UNICOM**
122.7 (CTAF)

---

**SC-5, 30 NOV 2023 to 25 JAN 2024**

---

**AWOS-3**
119.075  
**LONGVIEW APP CON**
128.75 379.15  
**UNICOM**
122.7 (CTAF)
RNAV (GPS) RWY 32
CHEROKEE COUNTY (JSO)

Baro-VNAV NA when using Nacogdoches altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). When local altimeter setting not received, use Nacogdoches altimeter setting and increase DA 118 feet, increase all MDA 120 feet and LPV, LNAV/VNAV visibility all Cats ¼ mile, LNAV and Circling Cat C visibility ½ mile. When VGSI inop, Straight-in/Circling Rw 32 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3100 direct WOSUL and hold.

AWOS-3 119.075
LONGVIEW APP CON* 128.75 379.15
UNICOM 122.7 (CTAF)
AWOS-3
119.075

LONGVIEW APP CON*
128.75 379.15

UNICOM
122.7 (CTAF)

DME required.

Procedure NA for arrivals at FZT VOR/DME on V69 northwest bound.

MISSED APPROACH: Climbing right turn to 2500 direct FZT VOR/DME and hold.

VOR RWY 14
CHEROKEE COUNTY (JSO)

SC-5, 30 NOV 2023 to 25 JAN 2024
**RNAV (GPS) RWY 36**

**JASPER COUNTY/BELL FLD (JAS)**

**AWOS-3**

<table>
<thead>
<tr>
<th>HOUSTON CENTER</th>
<th>UNICOM</th>
</tr>
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<tbody>
<tr>
<td>118.375</td>
<td>122.8 (CTAF)</td>
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</table>

**BARO-VNAV NA** when using De Ridder altimeter setting. For uncompensated BARO-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Rwy 36 helicopter visibility reduction below 1/4 SM NA. VDP NA when using De Ridder altimeter setting. When local altimeter setting not received, use De Ridder altimeter setting and increase LPV DA to 681 feet and all visibilities 1/4 SM, increase LNAV/VNAV DA to 762 feet and all visibilities 1/4 SM, increase all MDAs 100 feet and LNAV visibility Cat C 1/4 SM, and Circling visibility Cat C 1/4 SM.

**MISSING APPROACH:**

- Climb to 4000 direct MOWHI and via track 357° to RAFTO and hold.

**Procedure NA for arrival at ROMER on V569 northwest bound.**

**APP CRS**

**Rwy Idg** | **TDZE** | **Apt Elev**
---|---|---
357° | 192 | 213

**SC-5, 30 NOV 2023 to 25 JAN 2024**

JASPER, TEXAS

**30°53'N-94°02'W**
RNAV (GPS) RWY 13
HAWTHORNE FLD (45R)

BPT ASOS 126.3
HOUSTON APP CON 121.3 377.1
UNICOM 122.8 (CTAF)

**Procedure NA at night. RWY 13 helicopter visibility reduction below 1 SM NA. Use Beaumont/Port Arthur altimeter setting; when not received use Orange altimeter setting.**

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

**Visual Segment - Obstacles.**

**Category**

<table>
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<tr>
<th></th>
<th>A</th>
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<tbody>
<tr>
<td>LP MDA</td>
<td>700-1 629 (700-1)</td>
<td>700-13/4 629 (700-13/4)</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>LNAV MDA</td>
<td>720-1 649 (700-1)</td>
<td>720-13/8 649 (700-13/8)</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>720-1 649 (700-1)</td>
<td>880-2 809 (900-2)</td>
<td>NA</td>
<td>NA</td>
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</tbody>
</table>

**KOUNTZE/SILSBEE, TEXAS**

**Amdt 1C 07OCT21**

**30°20'N-94°15'W**

**547**
When local altimeter setting not received, use Giddings-Lee altimeter setting and increase DA 59 feet, all MDA 60 feet, increase LNAV Cat C visibility ½ mile. Rwy 16 helicopter visibility reduction below ½ SM NA.

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

**AWOS-3**
124.175

**AUSTIN APP CON**
120.875 270.25

**GCO**
121.725

**UNICOM**
122.7 (CTAF)

**RNAV (GPS) RWY 16**

**FAYETTE RGNL AIR CENTER (3T5)**

**RNP APCH**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>560-1</td>
<td>250 (300-1)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>680-1</td>
<td>362 (400-1)</td>
<td>NA</td>
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</table>

**ELEV 324**

**TDZE 318**
RNAV (GPS) RWY 34
FAYETTE RGNL AIR CENTER (3T5)

AWOS-3
124.175

AUSTIN APP CON
120.875 270.25

GCO
121.725

UNICOM
122.7 (CTAF)

MISSING APCH FIX

When local altimeter setting not received, use Giddings-Lee altimeter setting and increase all MDA 60 feet, increase LP and LNAV Cat C visibility 1/4 mile. Rwy 34 helicopter visibility reduction below 3/4 SM NA.

MISSING APPROACH: Climb to 2600 direct BOKKE and hold.

AWOS-3
124.175

AUSTIN APP CON
120.875 270.25

GCO
121.725

UNICOM
122.7 (CTAF)

REIL Rwys 16 and 34
MIRL Rwy 16-34

LA GRANGE, TEXAS
Amdt 2C 07NOV19

29°54'N-96°57'W
549
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
Amdt 2D 04NOV21

RNP APCH.

Baro-VNAV NA. Use Ellington altimeter setting. Rwy 30 helicopter visibility reduction below ¾ SM NA. Circling Rwy 5, 23 NA at night.

AWOS-3PT
120.275

HOUSTON APP CON
134.45 284.0

CLNC DEL
125.6

UNICOM
122.7 (CTAF)

BARGED REQUIREMENT

ELEV 25
TDZE 25

Baro-VNAV NA. Use Ellington altimeter setting. Rwy 30 helicopter visibility reduction below ¾ SM NA. Circling Rwy 5, 23 NA at night.

AWOS-3PT
120.275

HOUSTON APP CON
134.45 284.0

CLNC DEL
125.6

UNICOM
122.7 (CTAF)

RNP APCH.

Baro-VNAV NA. Use Ellington altimeter setting. Rwy 30 helicopter visibility reduction below ¾ SM NA. Circling Rwy 5, 23 NA at night.

AWOS-3PT
120.275

HOUSTON APP CON
134.45 284.0

CLNC DEL
125.6

UNICOM
122.7 (CTAF)
NOTE: RADAR required.

NOTE: The following TRANSITIONS are ATC assigned only. Do not file.

CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).

MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).

TAKEOFF MINIMUMS

Rwys 5, 12, 23, 30: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 23: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . . .on IAH R-028 to VELCO INT, cross VELCO INT at or above 10000, then right turn on LFK R-082 and AEX R-265 to AEX VORTAC.

CRESTVIEW TRANSITION (AEX3.CEW): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-095 and CEW R-277 to CEW VORTAC.

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30:
Standard with minimum climb of 500' per NM to 540.

TAKEOFF RUNWAY 5: Climb on heading 046° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 12: Climb on heading 121° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 23: Climb on heading 226° to 540 for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 30: Climb on heading 301° to 540 for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)

NOTE: Chart not to scale.
TAKKOFF MINIMUMS
Rwys 5, 12, 23, 30: Standard with minimum
climb of 500'/NM to 540.

NOTE: CRGER-TRANSITION ATC assigned only
for aircraft departing 54T, AXH, EFD, GLS,
HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 540, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 12: Climb on heading 121° to 540, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 23: Climb on heading 226° to 540, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 30: Climb on heading 301° to 540, for RADAR vectors to BORRN, thence. . . .

. . . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30: Standard.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 23: When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.
NOTE: RADAR required.
NOTE: For aircraft destined KMEM or filed via Q32 or J42.

EL DORADO ONE DEPARTURE

NOTE: Chart not to scale.

(TOP ALTITUDE: ASSIGNED BY ATC)

NOTE: Takeoff minimums
Rwys 5, 12, 23, 30: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 23: When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . .on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.
NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30: Standard.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 23: When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . . . on IAH R-358 to cross GIFFA INT at or above 10000.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

TAKEOFF RUNWAY 23: Climb on heading 226° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 540, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO7.BOWFN)
CFOOD TRANSITION (HOODO7.CFOOD)
HARVEY TRANSITION (HOODO7.HRV)
LEEVILLE TRANSITION (HOODO7.LEV)
SBIRD TRANSITION (HOODO7.SBIRD)
TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30:
Standard with minimum climb of 500’ per NM to 540.

TAKEOFF RUNWAY 5: Climb on heading 046° to 540
for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 12: Climb on heading 121° to 540
for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 23: Climb on heading 226° to 540
for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 30: Climb on heading 301° to 540
for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to
SUSHI, then on track 026° to WWELL, then on track 026°
to INDIE, then on (transition). Maintain ATC assigned
altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

DEPARTURE ROUTE DESCRIPTION

INDIE EIGHT DEPARTURE (RNAV)

INDIE EIGHT DEPARTURE (RNAV) 07OCT21
NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30: Standard.

NOTE: RADAR required.
NOTE: JUNCTION TRANSITION: For aircraft overflying JCT VORTAC on J2, J15 or J86.
NOTE: CENTEX TRANSITION: ATC assigned only for aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.
NOTE: CORPUS CHRISTI TRANSITION: ATC assigned only.
NOTE: LAREDO TRANSITION: ATC assigned only.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 23: Climb on heading 301° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IDU R-085 to BOCCK INT, then on IDU R-085 to IDU VORTAC.

CENTEX TRANSITION (IDU1.CWK): From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU1.CRP): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-145 and CRP R-324 to CRP VORTAC.

JUNCTION TRANSITION (IDU1.JCT): From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.
RNAV-1 DME/DME/IRU or GPS.
RADAR required.

TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30:
Standard with minimum climb of 500' per NM to 540.

NOTE: Chart not to scale.
KARR SEVEN DEPARTURE (RNAV)

TAKEOFF RUNWAY 5: Climb on heading 046° to 540, for RADAR vectors to KARRR, thence. . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 540, for RADAR vectors to KARRR, thence. . . .

TAKEOFF RUNWAY 23: Climb on heading 226° to 540, for RADAR vectors to KARRR, thence. . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 540, for RADAR vectors to KARRR, thence. . . .

. . .on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAZ TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
TOP ALTITUDE: ASSIGNED BY ATC

ARDMORE
116.7 ADM
Chan 114
N34°12.69' - W97°10.10'
L-17, H-6

TULSA
114.4 TUL
Chan 91
N36°11.78' - W95°47.29'

WACO
115.3 ACT
Chan 100
N31°39.74' - W97°16.14'

DOLEY
N32°11.35' - W96°23.08'

ARDMORE TRANSITION: For aircraft overflying north/northwest of
the DFW terminal area FL240 and above.

NOTE: RANGER TRANSITION: For aircraft overflying west/northwest of
the DFW terminal area FL240 and above.

NOTE: ARDMORE TRANSITION: For aircraft overflying north/northwest of
the DFW terminal area FL240 and above.

NOTE: BONHAM TRANSITION: For aircraft overflying/landing TUL
VORTAC FL240 and above.

NOTE: CHART NOT TO SCALE.

LEONA FOUR DEPARTURE
(LOA4.LOA) 07OCT21
LA PORTE, TEXAS

CTAF
122.7
CLNC DEL
125.6
HOUSTON DEP CON
134.45 284.0

NOTE: Chart not to scale.

(NAARITIV ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 23: When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on LOA R-147 to LOA VORTAC.

ARDMORE TRANSITION (LOA4.ADM): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA4.BYP): From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.
NOTE: Chart not to scale.

TOP ALTITUDE:
ASSIGNED BY ATC

NOTE: RADAR and DME required.
NOTE: For aircraft destined LIT or
overflying LIT or PXV.

LUFKIN
112.1 LFK
Chan 58
N31°09.75'
W94°43.01'

SKKIP
N31°14.91'
W94°39.45'

SUSHI
N30°35.48'
W95°04.39'

COLET
N30°26.96'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

HUMBLE
116.6 IAH
Chan 113

DAISETTA
116.9 DAS
Chan 116

TOP ALTITUDE:
ASSIGNED BY ATC

LITTLE ROCK
113.9 LIT
Chan B6
N34°40.66'
W92°10.83'
L-18, H-6

LA PORTE MUNI (T41)
LA PORTE, TEXAS

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 23: When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 5:** Climb on heading 046° to 540 for RADAR vectors to KNTKY, thence . . . .

**TAKEOFF RUNWAY 12:** Climb on heading 121° to 540 for RADAR vectors to KNTKY, thence . . . .

**TAKEOFF RUNWAY 23:** Climb on heading 226° to 540 for RADAR vectors to KNTKY, thence . . . .

**TAKEOFF RUNWAY 30:** Climb on heading 301° to 540 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**HAWES TRANSITION (LURIC8.HAWES)**

**ORRTH TRANSITION (LURIC8.ORRTH)**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 540, for RADAR vectors to MMALT, thence...

TAKEOFF RUNWAY 12: Climb on heading 226° to 540, for RADAR vectors to MMALT, thence...

TAKEOFF RUNWAY 23: Climb on heading 301° to 540, for RADAR vectors to MMALT, thence...

TAKEOFF RUNWAY 30: Climb on heading 086° to 540, for RADAR vectors to MMALT, thence...

...on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

NOTE: Chart not to scale.

Minimum climb of 500'/NM to 540.

Rwys 5, 12, 23, 30: Standard with minimum climb of 300'/NM to 540.

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

NOTE: MMALT Transitions ATC assigned only for aircraft departing.

AXH, EFD, GLS, HPY, IWS, SGR, TME, T41 and 54T.

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

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 12: Climb on heading 121° to 500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 23: When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

TAKEOFF RUNWAY 30: Climb on heading 301° to 700 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence.

...on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

**TAKEOFF MINIMUMS**
Rwys 5, 12, 23, 30: Standard with minimum climb of 500' per NM to 540.

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

**DEPARTURE ROUTE DESCRIPTION**

- **TAKEOFF RUNWAY 5:** Climb on heading 046° to 540 for RADAR vectors to KNTKY, thence... . .
- **TAKEOFF RUNWAY 12:** Climb on heading 121° to 540 for RADAR vectors to KNTKY, thence... . .
- **TAKEOFF RUNWAY 23:** Climb on heading 226° to 540 for RADAR vectors to KNTKY, thence... . .
- **TAKEOFF RUNWAY 30:** Climb on heading 301° to 540 for RADAR vectors to KNTKY, thence... . .

. . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**DPATY TRANSITION (STRYA8.DPATY)**

**JBULL TRANSITION (STRYA8.JBULL)**
STYCK EIGHT DEPARTURE (RNAV)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 540 for RADAR vectors to BBYSE, thence . . .
TAKEOFF RUNWAY 12: Climb on heading 121° to 540 for RADAR vectors to BBYSE, thence . . .
TAKEOFF RUNWAY 23: Climb on heading 226° to 540 for RADAR vectors to BBYSE, thence . . .
TAKEOFF RUNWAY 30: Climb on heading 301° to 540 for RADAR vectors to BBYSE, thence . . .

. . .on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WTSON TRANSITION (STYCK8.WTSON)
WATFO SIX DEPARTURE (RNAV)

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

TOP ALTITUDE:
ASSIGNED BY ATC

CTAF
122.7
CLNC DEL
125.6
HOUSTON DEP CON
134.45 284.0

TAKEOFF MINIMUMS:
Rwy 5, 12, 23, 30: Standard with minimum climb of 500'/NM to 540.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 540, for RADAR vectors to WATFO, thence.
TAKEOFF RUNWAY 12: Climb on heading 121° to 540, for RADAR vectors to WATFO, thence.
TAKEOFF RUNWAY 23: Climb on heading 226° to 540, for RADAR vectors to WATFO, thence.
TAKEOFF RUNWAY 30: Climb on heading 301° to 540, for RADAR vectors to WATFO, thence.

. . . .on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO6.ANKRR)
KELPP TRANSITION (WATFO6.KELPP)
MUSYL TRANSITION (WATFO6.MUSYL)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on heading 046° to 540 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAY 12: Climb on heading 121° to 540 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAY 23: Climb on heading 226° to 540 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 540 for RADAR vectors to WYLSN, thence. . . .

. . . . on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)
**RNAV (GPS) RWY 16**

**LIBERTY MUNI (T78)**

**WAAS**
- CH 78130
- W16A
- APP CRS 161°
- Rwy Idg 3801
- TDZE 70
- Apt Elev 70

**Procedure NA at night. Use George Bush Intcntl/Houston altimeter setting, DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.**

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

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<th>HOUSTON APP CON</th>
<th>CTAF</th>
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<td>119.7 281.4</td>
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**RADAR REQUIRED**

**387** (IAF) ZAVAK

**3000** WOVOL

**ELEV 70**
**TDZE 70**

**VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 23).**

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

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<th>LNAV MDA</th>
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**MISSED APCH FIX**
- WOVOL

**387** (IF) PADDI

**529** (FAF) PADDI

**555** MSA RW 16 25 NM

**161° 2000 2000**

**3.00° TCH 40**

**555** WOVOL

**3000**

**ELEV 70**

**TDZE 70**

**MIRL Rwy 16-34**

**Amdt 2B 23JUN16**

**30°05'N-94°42'W**

**581**
Use George Bush Intcntl/Houston altimeter setting. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000, then left turn direct DAS VORTAC.

AWOS: 3PT 120.775
HOUSTON APP CON 119.7 281.4
CTAF 122.9
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 16, 34: Standard with minimum climb of 500’ per NM to 580.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 161° to 1700 for RADAR vectors to DREMR, thence . . .
TAKEOFF RUNWAY 34: Climb on heading 341° to 1000 for RADAR vectors to DREMR, thence . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
CTAF 122.9
HOUSTON DEP CON 119.7 281.4

BORRN SIX DEPARTURE (RNAV)

BORRN SIX DEPARTURE (RNAV)

TAKEOFF MINIMUMS
Rwys 16, 34: Standard with minimum climb of 500'/NM to 580.

NOTE: CRGER-TRANSITION ATC assigned only for aircraft departing 54T, AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 161° to 1700, for RADAR vectors to BORRN, thence. . . .
TAKEOFF RUNWAY 34: Climb on heading 341° to 1000, for RADAR vectors to BORRN, thence. . . .

. . . .on track 267° to DILRE, then on (transition). Maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN6.CRGER)
JUNCTION TRANSITION (BORRN6.JCT)
MNURE TRANSITION (BORRN6.MNURE)
SAN ANTONIO TRANSITION (BORRN6.SAT)
WAILN TRANSITION (BORRN6.WAILN)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb on heading 161° to 1700, for RADAR vectors to VUH VOR/DME, thence . . . .

**TAKEOFF RUNWAY 34:** Climb on heading 341° to 1000, for RADAR vectors to VUH VOR/DME, thence . . . .

. . . . on track 118° to HOODO, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

- **BOWFN TRANSITION (HOODO7.BOWFN)**
- **CFOOD TRANSITION (HOODO7.CFOOD)**
- **HARVEY TRANSITION (HOODO7.HRV)**
- **LEEVILLE TRANSITION (HOODO7.LEV)**
- **SBIRD TRANSITION (HOODO7.SBIRD)**
INDIE EIGHT DEPARTURE (RNAV)

CTAF
HOUSTON DEP CON
119.7 281.4

TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwys 16, 34: Standard with minimum climb of 500’ per NM to 580.

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: TPAKK TRANSITION: For non GPS equipped aircraft TNV DME must be operational.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 16: Climb on heading 161° to 1700 for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 34: Climb on heading 341° to 1000 for RADAR vectors to RENNK, thence . . . .

. . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

NOTE: Chart not to scale.
RNAV-1 DME/DME/IRU or GPS. RADAR required.

TAKEOFF MINIMUMS
Rwys 16, 34: Standard with minimum climb of 500' per NM to 580.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 161° to 1700, for RADAR vectors to KARRR, thence. . . .
TAKEOFF RUNWAY 34: Climb on heading 341° to 1000, for RADAR vectors to KARRR, thence. . . .

. . . on track 218° to KAVCY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR7.CRP)
PALACIOS TRANSITION (KARRR7.PSX)
TRUAX TRANSITION (KARRR7.NGP)
WWREN TRANSITION (KARRR7.WWREN)
YOMOM TRANSITION (KARRR7.YOMOM)
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 161° to 1700 for RADAR vectors to KNTKY, thence....

TAKEOFF RUNWAY 34: Climb on heading 341° to 1000 for RADAR vectors to KNTKY, thence....

.... on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC8.HAWES)
ORRTH TRANSITION (LURIC8.ORRTH)
NOTE: GUSTI and LCH Transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41 and T44.

TAKEOFF MINIMUMS
Rwy 16, 34: Standard with minimum climb of 500'/NM to 580.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 161° to 1700, for RADAR vectors to MMALT, thence.

TAKEOFF RUNWAY 34: Climb on heading 341° to 1000, for RADAR vectors to MMALT, thence.

... on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT7.GUSTI)
LAKE CHARLES TRANSITION (MMALT7.LCH)
WHITE LAKE TRANSITION (MMALT7.LLA)
TOP ALTITUDE:
ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwys 16, 34: Standard.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 161° to 1700 before turning, when entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 34: Climb on heading 341° to 1000 before turning, when entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . . on PSX R-038 to PSX VORTAC.

FORT STOCKTON TRANSITION (PSX3.FST): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-259 and COT R-078 to COT VORTAC, then on COT R-318 and RSG R-136 to RSG VORTAC, then on RSG R-283 and FST R-100 to FST VORTAC.

SAN ANTONIO TRANSITION (PSX3.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on SAT R-158 to SAT VORTAC.
NOTE: Chart not to scale.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: Radar required.

NOTE: RNAV 1.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 161° to 1700 for RADAR vectors to KNTKY, thence. . . .

TAKEOFF RUNWAY 34: Climb on heading 341° to 1000 for RADAR vectors to KNTKY, thence. . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)

JBULL TRANSITION (STRYA8.JBULL)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 161° to 1700 for RADAR vectors to BBYSE, thence. . .
TAKEOFF RUNWAY 34: Climb on heading 341° to 1000 for RADAR vectors to BBYSE, thence. . .

. . .on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK8.DOLEY)
WTSON TRANSITION (STYCK8.WTSON)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16:** Climb on heading 161° to 1700, for RADAR vectors to WATFO, thence . . .

**TAKEOFF RUNWAY 34:** Climb on heading 341° to 1000, for RADAR vectors to WATFO, thence . . .

... on track 141° to VUH VOR/DME, then on (transition). Maintain ATC assigned altitude.

Expect filed altitude 10 minutes after departure.

**ANKRR TRANSITION (WATFO6.ANKRR)**

**KELPP TRANSITION (WATFO6.KELPP)**

**MUSYL TRANSITION (WATFO6.MUSYL)**
WYLSN EIGHT DEPARTURE (RNAV)

CTAF
122.9
HOUSTON DEP CON
119.7 281.4

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

TAKEOFF MINIMUMS
Rwy 16, 34: Standard with minimum climb of 500' per NM to 580.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 161° to 1700 for RADAR vectors to WYLSN, thence... . . .

TAKEOFF RUNWAY 34: Climb on heading 341° to 1000 for RADAR vectors to WYLSN, thence... . . .

... on track 360° to MONNT, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)
Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

Use Conroe/North Houston Rgnl altimeter setting. Rwy 30 helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.
Circling Rwy 16, 25 NA at night.

MISSED APPROACH: Climb to 800 then climbing right turn to 2000 direct LFK VORTAC and hold, continue climb-in-hold.

**CIRCLING**

<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 7</td>
<td>537-1/2 250 (300-1/2)</td>
<td>393 (400-1/2)</td>
<td>680-1/2 393 (400-1/2)</td>
<td>880-1/2 1140-2-3/4</td>
</tr>
<tr>
<td>S-LOC 7</td>
<td>680-1/2 393 (400-1/2)</td>
<td>680-1/2 393 (400-1/2)</td>
<td>880-1/2 1140-2-3/4</td>
<td></td>
</tr>
</tbody>
</table>

**FAF to MAP 3.6 NM**

**ELEV** 296 **TDZE** 287

**ASOS** 120.625 **HOUSTON CENTER** 125.175 285.575 **UNICOM** 123.0 (CTAF)

**Category 537-250 (300-1/2) - 1140-2-3/4**

**599**
RNAV (GPS) RWY 7
ANGELINA COUNTY (LFK)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C (25°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.
Circling Rwy 16, 25 NA at night.

ASOS
120.625

HOUSTON CENTER
125.175 285.575

UNICOM
123.0 (CTAF)

Procedure NA for arrival on LFK
VORTAC airway radials 199 CW 354.

<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>537-½</td>
<td>250 (300-½)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>563-½</td>
<td>276 (300-½)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>660-½</td>
<td>373 (400-½)</td>
<td>660-½</td>
<td>373 (400-½)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>740-½</td>
<td>760-1</td>
<td>880-1½</td>
<td>1140-2½</td>
</tr>
</tbody>
</table>

Amdt 1 07DEC17

31°14'N-94°45'W
### RNAV (GPS) RWY 16

**Category:** A

**LNAV MDA:**
- **680-1** (400-1)
- **680-1/8** (400-1/8)

**CIRCLING:**
- **740-1** (500-1)
- **760-1** (500-1)
- **880-1/2** (600-1/2)
- **1140-2 3/4** (900-2 3/4)

**UNICOM:** 123.0 (CTAF)

**ASOS:** 120.625

**HOUSTON CENTER:** 125.175 285.575

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

---

**Amdt 1 07DEC17**

**LUFKIN, TEXAS**

SC-5, 30 NOV 2023 to 25 JAN 2024
DME/DME RNP: 0.3 NA. Straight-in Rwy 25 NA at night, Circling Rwy 16, 25 NA at night. Rwy 25 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000 direct SIRTE and hold.

ASOS
120.625

HOUSTON CENTER
125.175 285.575

UNICOM
123.0 [CTAF]

Procedure NA for arrivals on LFK VORTAC airway radials 354 CW 082.
RNAV (GPS) RWY 34
ANGELINA COUNTY (LFK)

APP CRS
338°

Rwy Idg
TDZE
Apt Elev

4204
286
296

ASOS
120.625

HOUSTON CENTER
125.175 285.575

UNICOM
123.0 [CTAF]

DME/DME RNP-0.3 NA. Circling Rwy 16, 25 NA at night. Rwy 34 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2100 direct POLEH and hold.

Procedure NA for arrival on LFK VORTAC airway radials 082 CW 245.

EXISE
PAICE
(JFA/IAF)

Procedure NA for arrival on LFK VORTAC airway radials 082 CW 245.
Rwy 16 helicopter visibility reduction below 1 SM NA. DME Required. Straight-in Rwy 16 NA at night, Circling Rwy 16, 25 NA at night.

**ASOS**
- LUFKIN, TEXAS: 120.625

**HOUSTON CENTER**
- 125.175
- 285.575

**UNICOM**
- LUFKIN (LFK): 123.0 [CTAF]

**DME REQUIRED**

**LUFKIN, TEXAS**
AL-870 (FAA)

**VOR RWY 16**
ANGELINA COUNTY (LFK)

**TDZE**: 289

**ELEV**: 296

**MISSED APPROACH**: Climb to 2000 on LFK VORTAC R-332 to LFK VORTAC and hold.

**ASOS**
- LUFKIN, TEXAS: 120.625

**HOUSTON CENTER**
- 125.175
- 285.575

**UNICOM**
- LUFKIN (LFK): 123.0 [CTAF]

**DME REQUIRED**

**LUFKIN, TEXAS**
AL-870 (FAA)

**VOR RWY 16**
ANGELINA COUNTY (LFK)

**TDZE**: 289

**ELEV**: 296

**MISSED APPROACH**: Climb to 2000 on LFK VORTAC R-332 to LFK VORTAC and hold.

**ASOS**
- LUFKIN, TEXAS: 120.625

**HOUSTON CENTER**
- 125.175
- 285.575

**UNICOM**
- LUFKIN (LFK): 123.0 [CTAF]
VOR RWY 34
ANGELINA COUNTY (LFK)

**MISSED APPROACH:** Climb to 900 then climbing left turn to 2000 direct LFK VORTAC and hold.

ASOS
LUFKIN, TEXAS
120.625

HOUSTON CENTER
125.175 285.575

UNICOM
123.0 (CTAF)

**ELEV** 296 **TDZE** 286

**CATEGORY**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-34</td>
<td>680-1 394 (400-1)</td>
<td>680-1 394 (400-1)</td>
<td>680-1 394 (400-1)</td>
</tr>
</tbody>
</table>

**FAF to MAP 4.2 NM**

<table>
<thead>
<tr>
<th>Knots</th>
<th>Min:Sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>2:48</td>
</tr>
<tr>
<td>90</td>
<td>2:06</td>
</tr>
<tr>
<td>120</td>
<td>1:41</td>
</tr>
<tr>
<td>150</td>
<td>1:24</td>
</tr>
</tbody>
</table>

**VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 55).**

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**LUKFIN, TEXAS**

Amdt 15 07DEC17

**AL-870 (FAA)**

20142
RNAV (GPS) RWY 18
MADISONVILLE MUNI (51R)

Use Huntsville Muni altimeter setting.
Procedure NA at night.
Rwy 18 helicopter visibility reduction below 1 SM NA.

RNAV (GPS) RWY 18
MADISONVILLE, TEXAS

SC-5, 30 NOV 2023 to 25 JAN 2024
RNAV (GPS) RWY 36
MADISONVILLE MUNI (51R)

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

UTS ASOS
119.425

HOUSTON CENTER
134.8  269.6

CTAF
122.9

RNP APCH.

MADISONVILLE, TEXAS
AL-6843 (FAA)

RNAV (GPS) RWY 36
MADISONVILLE MUNI (51R)

Rwy Idg 3202
TDZE 283
Apt Elev 287

003°

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct NAMIL WP and hold.

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

COLLEGE STATION
CIL
3000
063°
(23.9)

NAMIL

1000  3000  NAMIL

4 NM
Holding Pattern

3000
183°
003°

TELYN

3000
003°

3.01°
TCH 40

1900

003° to RW36

0.8% UP

MIRL Rwy 18-36

4.01°

Rwy 36 helicopter visibility reduction below 1 SM NA.
Procedure NA at night.
Use Huntsville Muni altimeter setting.
**VOR/DME RWY 18**

**MADISONVILLE MUNI (51R)**

**Use Huntsville Muni altimeter setting.**

**Procedure NA at night.**

**Helicopter visibility reduction below 1 SM NA.**

**MISSED APPROACH:** Climb to 1500, then climbing right turn to 2000 direct LOA VORTAC and hold.

**UTS ASOS**

119.425

**HOUSTON APP CON**

134.8 269.6

**CTAF**

122.9

**Amdt 2C  22APR21**

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**30°55'N-95°57'W**
Use Waco Rgnl altimeter setting.

WACO APP CON *

127.65 352.0

Circling

123° 5.6 NM from FAF

MARLIN, TEXAS

AL-5854 (FAA)

VOR/DME or GPS-A

MARLIN (T15)

19115

SC-5, 30 NOV 2023 to 25 JAN 2024
**RNAV (GPS) RWY 36**

**MEXIA-LIMESTONE COUNTY (LXY)**

**AWOS-3**  
127.275  
**WACO APP CON**  
127.65 352.0  
**UNICOM**  
122.8 (CTAF)

**DME/DME RNP-0.3 NA.** Helicopter visibility reduction below ¾ SM NA. Obtain local altimeter setting on CTAF; when not received, use Waco Rgnl altimeter setting and increase all MDA 100 feet; increase LP Cat C visibility ½ mile and LNAV and circling Cat C visibility ¼ mile.

**MISSED APPROACH:** Climb to 2400 direct JUVOT and hold.

**Category**  
<table>
<thead>
<tr>
<th>LP MDA</th>
<th>LNAV MDA</th>
<th>CIRCLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>860-1</td>
<td>880-1</td>
<td>960-1</td>
</tr>
<tr>
<td>319 (400-1)</td>
<td>339 (400-1)</td>
<td>415 (500-1)</td>
</tr>
</tbody>
</table>

**Visibility:**
- Visibility 3.00°
- Visibility 7 NM
- Visibility 1.6 NM
- Visibility 4 NM

**ELEV 545**  
**TDZE 541**  
**RAIL 940**  
**WIVAP 1.6 NM to RW36**

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**SC-5, 30 NOV 2023 to 25 JAN 2024**

**MEXIA, TEXAS**

**Origin-C 04NOV21**

**31°38'N-96°31'W**
When local altimeter setting not received, use Lufkin altimeter setting:

- Increase S-ILS 36 DA to 599 feet; increase all MDA 60 feet and visibility for S-LOC 36 and Circling CAT C and CATEB fix minimums S-LOC 36 and Circling CAT C 1/2 SM. VDP NA when using Lufkin altimeter setting. Localizer unusable inside 0.3 NM from threshold. Autopilot coupled approach NA below 740.

Procedure NA for arrival on LFK VOR/TAC:
- Airway radials 318 CW 082.
- ADF or DME required.
- When local altimeter setting not received, use Lufkin altimeter setting.
- Locators usable with Lufkin altimeter setting.

**820 when using Lufkin altimeter setting.**

**ALTERNATE MISSED APCH FIX**

**LUFKIN**

- LFK 112.1 Chan 58

**LOCALIZER**

- LFK 123.0 (CTAF)

- **AWOS-3PT** 135.625
- **HOUSTON CENTER** 125.175 285.575
- **UNICOM** 123.0 (CTAF)

**MALSR**

**MISSED APPROACH:** Climb to 1000 then climbing left turn to 2100 direct NADOS/OC NDB and hold.

**CATEB FIX MINIMUMS**

<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 36</td>
<td>543 - 1/2</td>
<td>200 (200 - 1/2)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>S-LOC 36</td>
<td>760 - 1/2</td>
<td>417 (500 - 1/2)</td>
<td>760 - 3/4</td>
<td>417 (500 - 3/4)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>860 - 1</td>
<td>517 (600 - 1)</td>
<td>1080 - 2</td>
<td>737 (800 - 2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-LOC 36</td>
<td>700 - 1/2</td>
<td>357 (400 - 1/2)</td>
<td>700 - 1/2</td>
<td>357 (400 - 1/2)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>860 - 1</td>
<td>517 (600 - 1)</td>
<td>1080 - 2</td>
<td>737 (800 - 2)</td>
</tr>
</tbody>
</table>

**AWOS-3PT** 135.625

**HOUSTON CENTER** 125.175 285.575

**UNICOM** 123.0 (CTAF)
RNAV (GPS) RWY 18
NACOGDOCHES A L MANGHAM JR RGNL (OCH)

AWOS-3PT
135.625

HOUSTON CENTER
125.175 285.575

UNICOM
123.0(CTAF)

Final approach course offset 6.00°.

Procedure NA for arrival on LFK VORTAC airway radials 318 CW 082.

Category A

LNAV MDA 980-1 637 (700-1)
CIRCLING 980-1 637 (700-1)

Category B

LNAV MDA 980-1 637 (700-1)
CIRCLING 980-1 637 (700-1)

Category C

LNAV MDA 980-1 637 (700-1)
CIRCLING 1080-2 737 (800-2)

Category D

LNAV MDA NA
CIRCLING NA
RNAV (GPS) RWY 36

WAAS
CH 93528
W36A

APP CRS 359°
Rwy Idg 5000
TDZE 343
Apt Elev 343

CIRCLING
ELEV UNICOM

HOUSTON CENTER 125.175 285.575

AWOS: 3PT 135.625
UNICOM 123.0 (CTAF)

MALSR

HOUSTON CENTER 125.175 285.575

UNICOM 123.0 (CTAF)

ELEV 343
TDZE 343

MISSP APCH FIX
DRBOB
4 NM

ZIVIM
179° 359°
2400

173° 353°
359°

MISSED APCH FIX: Climb to 2400 direct XOWNNU and on track 352° to DRBOB and hold.

NACOGDOCHES, TEXAS
Orig-D 03NOV22

RNAV (GPS) RWY 36
NACOGDOCHES A L MANGHAM JR RGNL (OCH)

135°-145°

700°-1000°

31°35'N-94°43'W

30 NOV 2023 to 25 JAN 2024
**RNAV (GPS) RWY 17**

**NAVASOTA MUNI (60R)**

**RNPA PCH.**
- Use Brenham altimeter setting; when not received, use College Station altimeter setting and increase all DA 6 feet and all MDA 20 feet.
- Baro-VNAV NA. RW 17 helicopter visibility reduction below ½ SM NA.

**Category:**
- **LPV** DA: 529-1 300 (300-1)
- **LNAV/ VNAV** DA: 635-1¾ 406 (500-1¾)
- **LNAV MDA:** 620-1 391 (400-1) 620-1¾ 391 (400-1¾)

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

**RADAR REQUIRED**

**CTAF:** 122.9

**11R AWOS-3**
- 121.125

**HOUSTON APP CON**
- 134.3 360.85

**RADAR REQUIRED**

**CTAF:** 123.3

**CTAF:** 134.3 360.85

**LNAV only.**

**VGSI and RNAV glidepath not coincident**

(VGSI Angle 3.00/TCH 45).

**ELEV 229**

**TDZE 229**

**0.7%**

**U**

**P**

**P**

**ELEV**

**APP CRS**

**5003**

**Rwy ldg**

**TDZE 229**

**Apt Elev 229**

**NAVOSA, TEXAS**

**AL-6576 (FAA)**

**21056**

**RNAV (GPS) RWY 17**

**NAVASOTA MUNI (60R)**

**30°22′N-96°07′W**

**NAVOSA, TEXAS**

**Orig-C 07NOV19**

**30 NOV 2023 to 25 JAN 2024**

**614**
NAVASOTA, TEXAS

RNAV (GPS) RWY 35
NAVASOTA MUNI (60R)

Use Brenham altimeter setting, when not received use College Station altimeter setting and increase all DA 6 feet and all MDA 20 feet.
Rwy 35 helicopter visibility reduction below 3/4 SM NA. Baro-VNAV NA.

MISSED APPROACH: Climb to 3000 direct HOXID and hold.

V

11R AWOS-3
121.125

HOUSTON APP CON
134.3 360.85

CTAF
122.9

123.3

RADAR REQUIRED

[Diagram showing navigation points and procedures for RNAV (GPS) RWY 35]

SA-5, 30 NOV 2023 to 25 JAN 2024

RNAV (GPS) RWY 35

NAVASOTA MUNI (60R)

Orig-C 07NOV19

30°22'N-96°07'W

615
**Use Brenham altimeter setting; when not received, use College Station altimeter setting and increase all MDAs 20 feet, increase Circling Cats C/D visibility ¼ SM.**

**MISSED APPROACH:** Climb to 2000 then left turn direct TNV VOR/DME and hold.
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. Visibility reduction by helicopters NA. When local altimeter setting not received, use Jack Brooks Rgnl altimeter setting and increase all DA 32 feet and all MDA 40 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ mile, and LNAV and Circling Cat C visibility ½ mile. Baro-VNAV and VDP NA when using Jack Brooks Rgnl altimeter setting. Circling NA to Rwy 13/31.

MISSED APPROACH: Climb to 2000 direct KEDKY and left turn via track 116° to POPEY and hold.
Visibility reduction by helicopters NA. Circling NA to Rwy 13/31. VDP NA when using Jack Brooks Rgnl altimeter setting. When local altimeter setting not received, use Jack Brooks Rgnl altimeter setting and increase all MDA 40 feet and increase S-22 and Circling Cat C visibility ¼ mile.

Misced Approach: Climb to 1000 then climbing left turn to 2000 via BPT R-049 to HEMPI/18.8 DME and hold.

AWOS-3
118.975

HOUSTON APP CON
121.3 377.1

UNICOM
122.8 (CTAF) 0
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C. When local altimeter setting not received, use Port Lavaca altimeter setting: Increase DA to 319 feet and visibility all Cats ½ SM; increase all MDA 60 feet and LNAV Cat C/D and Circling Cat C/D visibility ½ SM. Baro-VNAV and VDP NA when using Port Lavaca altimeter setting. Rwy 13 helicopter visibility reduction below ¾ SM NA. Circling Rwy 8, 18, 26, 31, 36 NA at night.

MISSED APPROACH: Climb to 500 then climbing right turn to 2100 direct NAPTE and hold.
**VOR RWY 13**

**PALACIOS, TEXAS**

**VORTAC PSX**

- **APP CRS**: 117.3
- **Rwy Idg**: 120
- **Apt Elev**: 14

**ASOS**

- **Location**: PALACIOS MUNI (PSX)
- **Latitude**: 28°44'N
- **Longitude**: 96°15'W

**HOUSTON CENTER**

- **Frequency**: 135.05
- **Call Sign**: UNICOM

**UNICOM**

- **Frequency**: 122.8

**MISSING APPROACH**: Climbing right turn to 2000 direct PSX VORTAC and hold.

**When local altimeter setting not received, use Port Lavaca altimeter setting:**
- Increase all MDAs 60 feet and S-13 Cat C/D and Circling Cat C/D visibility ¼ SM. Rwy 13 helicopter visibility reduction below ¾ SM NA. Circling Rwy 8, 18, 26, 31, 36 NA at night.

**Category**

- **A**: 380-1 367 (400-1)
- **B**: 480-1
- **C**: 560-1½
- **D**: 700-2½

**Adm 10H 10AUG23**

**28°44'N-96°15'W**

**AL-309 (FAA)**

**Amdt 10H 10AUG23**

**HOUSTON CENTER**

- **Frequency**: 135.05
- **Call Sign**: UNICOM

**UNICOM**

- **Frequency**: 122.8

**MISSING APPROACH**: Climbing right turn to 2000 direct PSX VORTAC and hold.

**When local altimeter setting not received, use Port Lavaca altimeter setting:**
- Increase all MDAs 60 feet and S-13 Cat C/D and Circling Cat C/D visibility ¼ SM. Rwy 13 helicopter visibility reduction below ¾ SM NA. Circling Rwy 8, 18, 26, 31, 36 NA at night.

**Category**

- **A**: 380-1 367 (400-1)
- **B**: 480-1
- **C**: 560-1½
- **D**: 700-2½

**Adm 10H 10AUG23**

**28°44'N-96°15'W**

**AL-309 (FAA)**

**Amdt 10H 10AUG23**

**HOUSTON CENTER**

- **Frequency**: 135.05
- **Call Sign**: UNICOM

**UNICOM**

- **Frequency**: 122.8

**MISSING APPROACH**: Climbing right turn to 2000 direct PSX VORTAC and hold.

**When local altimeter setting not received, use Port Lavaca altimeter setting:**
- Increase all MDAs 60 feet and S-13 Cat C/D and Circling Cat C/D visibility ¼ SM. Rwy 13 helicopter visibility reduction below ¾ SM NA. Circling Rwy 8, 18, 26, 31, 36 NA at night.
RNP APCH-GPS

VDP NA with C David Campbell Fld-Corsicana Muni altimeter setting. Circling to Rwy 9-27, NA at night. When local altimeter setting not received, use Corsicana altimeter setting and increase all MDAs 100 feet and visibility Cat C ¾ SM.

MISSED APPROACH: Climb to 3000 direct FERES and hold.

AWOS-3PT 118.025
FORT WORTH CENTER 135.25 265.1
UNICOM 122.7 (CTAF)

PALESTINE MUNI (PSN)

RNAV (GPS) RWY 18

APC RS 177°

Rwy Idg 5005
TDZE 416
Apt Elev 423

CIRCLING LNAV MDA
RNAV (GPS) RWY 18
PALESTINE, TEXAS
(PSN)

MIRL Rwys 18-36 and 9-27

REIL Rwys 36
MIRL Rwys 18-36 and 9-27

PALESTINE, TEXAS
Orig-C 15JUL21

31°47'N-95°42'W
621

SC-5, 30 NOV 2023 to 25 JAN 2024

22139
### RNAV (GPS) RWY 36

**PALESTINE MUNI (PSN)**

**AWOS-3PT**

| 118.025 |

**FORT WORTH CENTER**

| 135.25 | 265.1 |

**UNICOM**

| 122.7 (CTAF) |

### RNAV (GPS) RWY 36 Specifications

- **APP CRS**
  - 357°

- **Rwy Ldg**
  - 5005

- **TDZE**
  - 415

- **Apt Elev**
  - 423

### RNAV APCH-GPS

- **MISSED APPROACH:** Climb to 2500 direct CERBU WP and hold.

- **VDP NA with C David Campbell Fld-Corsicana Muni altimeter setting. When local altimeter setting not received, use Corsicana altimeter setting and increase all MDAs 100 feet and visibility LNAV Cat C/D ½ SM and Circling Cat C ¼ SM. Circling Rwy 9, 27 NA at night.**

### Category

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LNAV MDA</td>
<td>820-1</td>
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<td>537 (600-1)</td>
<td>617 (700-1)</td>
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### Navigation Points

- **AVUYA**
- **FERES**
- **HEPEX**
- **TDZE**
- **CERBU**
- **ECEBA**
- **MIRL Rwy 36**

### Diagram

- Holding Pattern at 3000 feet.
- VGS and descent angles not coincident (VGS Angle 3.00/TCH 35).
- 6 NM to CERBU WP.

### Amdt

- SC-5, 30 Nov 2023 to 25 Jan 2024

### PALESTINE, TEXAS

Amdt 1C 15JUL21

### PALESTINE MUNI (PSN)

31°47'N-95°42'W
PALESTINE, MUNI (PSN)

VOR RWY 18

MISSING APPROACH: Climbing right turn to 2500 direct FZT VOR/DME and hold.

AWOS-3PT 118.025

FORT WORTH CENTER 135.25 265.1

UNICOM 122.7 (CTAF)

DME required.

Rwy 18 helicopter visibility reduction below ¾ SM NA.

PALESTINE, TEXAS

AL-871 (FAA)

20083

ELEV 423 TDZE 416

202° 5.3 NM from FAF

REIL Rwy 36
MIRL Rwys 18-36 and 9-27

CATEGORY
A 1320-1 ¼ 904 (900-1 ¼) 1360-2 ¼ 937 (1000-2 ¼)
B 1320-1 ¼ 904 (900-1 ¼) 1360-3 937 (1000-3)
C 1360-2 ¼ 937 (1000-2 ¼) 1360-3
D

FILMA FZT 19.3

555

5002 X 100

2049 (IAF)

FZT 8

MIGDE

JOLLY FZT 14

KIKKE (IF)

30 NOV 2023 to 25 JAN 2024

SC-5

Amdt 6 15AUG19

904 (900-1 ¼) 1360-2 ¼ 937 (1000-2 ¼)

REV 3

20083

ELEV 423

TDZE 416

202° 5.3 NM from FAF

REIL Rwy 36
MIRL Rwys 18-36 and 9-27

CATEGORY
A 1320-1 ¼ 904 (900-1 ¼) 1360-2 ¼ 937 (1000-2 ¼)
B 1320-1 ¼ 904 (900-1 ¼) 1360-3 937 (1000-3)
C 1360-2 ¼ 937 (1000-2 ¼) 1360-3
D

FILMA FZT 19.3

555

5002 X 100

2049 (IAF)

FZT 8

MIGDE

JOLLY FZT 14

KIKKE (IF)

30 NOV 2023 to 25 JAN 2024

SC-5

Amdt 6 15AUG19

904 (900-1 ¼) 1360-2 ¼ 937 (1000-2 ¼)

REV 3
RNAV (GPS) RWY 14
CALHOUN COUNTY (PKV)

AWOS-3
118.275

HOUSTON CENTER
135.05 353.6

UNICOM
122.8 (CTAF)

GNSS A-632E

30 NM to VULCE [NoPT]
VULCE

2200

4 NM

VULCE

2200

30 NM to VULCE

[IF/IAF] VULCE

2200

30 NM to VULCE

Holding Pattern

VULCE

2200

4 NM

2200

30°

1049

1053

VULCE

[FAF] HENHU

2200

2 NM to VULCE

JODUK

2 NM to RW14

HENHU

2.8 NM

VULCE

(FAF)

JODUK

2 NM to RW14

1.1 NM to RW14

RW14

MIRL Rwy 14-32

PORT LAVACA, TEXAS

AL-5904 (FAA)

23278

PORT LAVACA, TEXAS

Amdt 2B 11AUG22

28°39’N-96°41’W

RNAV (GPS) RWY 14

CALHOUN COUNTY (PKV)

Apt Elev

TDZE 30

30 NOV 2023 to 25 JAN 2024

MISSED APPROACH:
Climb to 2200 direct TOVEE and hold.

Baro- VNAV and VDP NA when using Victoria altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Victoria altimeter setting and increase LPV DA and LNAV/VNAV DA to 331 feet and all visibilities 1/8 SM; increase all MDAs 60 feet and LNAV visibility Cat C 1/4 SM. Circling Rwy 32 NA at night. Circling NA to Rwys 5 and 23.

4 NM

Holding Pattern

VULCE

2200

30°

1049

1053

VULCE

[FAF] HENHU

2200

2 NM to VULCE

JODUK

2 NM to RW14

HENHU

2.8 NM

VULCE

(FAF)

JODUK

2 NM to RW14

1.1 NM to RW14

RW14

MIRL Rwy 14-32

PORT LAVACA, TEXAS

Amdt 2B 11AUG22

28°39’N-96°41’W
RNAV (GPS) RWY 32
CALHOUN COUNTY (PKV)

When local altimeter setting not received, use Victoria altimeter setting and increase all MDAs 60 feet and LNAV visibility Cat C 1/4 SM and LP visibility Cat C 1/8 SM. Rwy 32 helicopter visibility reduction below 1 SM NA. Straight-In Rwy 32 NA at night, Circling Rwy 32 NA at night.

AWOS-3
118.275

HOUSTON CENTER
135.05 353.6

UNICOM
122.8 (CTAF)

MISSED APPROACH:
Climb to 2200 direct
VULCE and hold.

ELEV 32
TDZE 30

PORT LAVACA, TEXAS
Orig-B 11AUG22

WAAS
APPR CRS
Rwy Idg
TDZE
Apt Elev

CH 58037
319°
5004
30
32

560-1/2
528 (600-1/2)
NA

320°

2200
VULCE

140°

2200

VULCE

4 NM

VULCE and hold.

Climb to 2200
direct

340-7/8
310 (400-1/2)
NA

340-1
310 (400-1)
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<th>5 NM</th>
<th>10 NM</th>
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<tr>
<td>D</td>
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**When local altimeter setting not received, use Victoria altimeter setting. Circling NA to Rwys 3 and 23. Night landing: Rwy 32 NA.**

**MISSED APPROACH:** Climb to 2100, then right turn via PSX VORTAC R-244 to CATOS/PSX 15 DME and hold.

**AWOS-3**

| 118.275 |

**HOUSTON CENTER**

| 135.05  | 353.6 |

**UNICOM**

| 122.8  | (CTAF) |

**VOR/DME-A**

**CALHOUN COUNTY (PKV)**

**PORT LAVACA, TEXAS**

**AL-5904 (FAA)**

**2327B**

**28°39'N - 96°41'W**
For inop ALS, increase S-ILS 13 Cat E visibility to ¾ SM and S-LOC 13 Cat E visibility to 1 SM.

**MISSED APPROACH**: Climb to 2100 then left turn direct VCT VOR/DME and hold. (TACAN aircraft climb to 2100 then left turn on heading 120° and PSX VORTAC R-260 to GUDNY/PSX 14 DME and hold W, RT, 080° inbound).

**Procedure NA for arrival on PSX VORTAC airway radials 218 CW 233.**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 54°C. For inop ALS, increase LPV Cat E and LNAV/VNAV all Cats visibility to ½ SM and LNAV Cat E visibility to 1 SM.
### ATIS

<table>
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<th>Houston Center</th>
<th>Victoria Tower</th>
<th>GND Con</th>
<th>Unicom</th>
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<td>135.05 353.6</td>
<td>126.075 (CTAF)</td>
<td>120.525</td>
<td>122.7</td>
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### MISSED APPROACH FIX

- **7 NM** to **CUDKO**
- **1182°**

### RNP Approach GPS

- **WAAS CH 45545 W314**
- **APP CRS 308°**
- **Rwy ldg 9111**
- **TDZE 106**
- **Apt Elev 115**

### For uncompensated Baro-VNAV systems, procedure NA below -15°C or above 54°C.

### Holding Pattern

- **6000 2200**
- **129° 309°**
- **30° to SEYOG**

### 30 NM to SEYOG

- **SEYOG**
- **2200**

### Holding Pattern

- **1053 (IF/IAF)**
- **SEYOG**
- **2200**

### 30 NM to SEYOG (NPT)

- **SEYOG**
- **2200**

### 7 NM

- **HOLD 6000**
- **2200**

### Category

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<td>MDH</td>
<td>880-2/3</td>
<td>765 (800-2/3)</td>
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<tr>
<td>NA</td>
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</table>
For inop ALS, increase Cat C/D/E visibility to 1.3 SM.

MISSED APPROACH: Climbing left turn to 2200 direct VCT VOR/DME and hold, continue climb-in-hold to 2200.

Procedure NA for arrival on PSX VORTAC airway radials 218 CW 233.

Remain within 1.5 NM

VCT VOR/DME

2200 VCT

307° 127° 1300

2200 VCT

3.31° TCH 53

VCT 3.2

MIRL Rwy 18-36
REIL Rwy 18 and 36
HIRL Rwy 13-31

FAF to MAP 3.2 NM

Knots 60 90 120 150 180
Min:Sec 3:12 2:08 1:36 1:17 1:04

VICTORIA, TEXAS
Orig-A 27JAN22
28°51′N-96°55′W

SC-5, 30 NOV 2023 to 25 JAN 2024
VICTORIA, TEXAS

VOR/DME VCT
109.0
Chan 27

APP CRS
307°

Rwy Idg
106

TDZE
115

Apt Elev
9111

ATIS
119.025

HOUSTON CENTER
135.05

353.6

VICTORIA TOWER *
126.075 (CTAF) 257.95

GND CON
120.525

239.25

UNICOM
122.7

ELEV 115

TDZE 106

R -127

352°

1800 NoPT to RADOY
287° hdg (4.9)
and 307° (5.4)

IF
RADOY

307°

1800

2100
to FENCE
127° (10)

VICTORIA RGNL (VCT)

VOR RWY 31

TDZE

347°

262°

555°

1182

592°

2260

R-307

307°

1151°

Chan 27

MISSED APPROACH: Climb to 2000 direct VCT VOR/DME and hold.

Procedure NA for arrivals at TANNA on V13-407 northeast bound.

Remain within 1.5 NM

2000

VCT

127°

FENCE

2100

1800

VCT

4.7

5.9

1.2 NM

4.1 NM

2.93°

TCH 55

MIRL Rwy 18-36
REIL Rwy 18 and 36
HIRL Rwy 13-31

CIRCLING

580-1

465 (500-1)

S-31

540-1

434 (500-1)

540-1/4

434 (500-1/4)

CATEGORY
A
B
C
D
E

13

18

36

X

X

X

X

X

NA

9111 X 150

4908 X 75

X

X

H

PSX 17.3

9111

307°

106

115

27JAN22

Orig-A

22363

AL-438 (FAA)

28°51'N-96°55'W

631

SC-5, 30 NOV 2023 to 25 JAN 2024

SC-5, 30 NOV 2023 to 25 JAN 2024
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

MISSED APPROACH: Climb to 2000 direct GOGOZ and hold.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwy 14, 32: Standard with minimum climb of 500’ per NM to 600.

TAKEOFF RUNWAY 14: Climb on heading 148° or as assigned by ATC for RADAR vectors to DREMR, thence . . . .
TAKEOFF RUNWAY 32: Climb on heading 328° or as assigned by ATC for RADAR vectors to DREMR, thence . . . .

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY7.CRIED)
INDIE EIGHT DEPARTURE (RNAV)

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: TPAKK TRANSITION: For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF MINIMUMS
Rwys 14, 32: Standard with minimum climb of 500' per NM to 600.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 148° to 600 for RADAR vectors to RENNK, thence . . . .
TAKEOFF RUNWAY 32: Climb on heading 328° to 600 for RADAR vectors to RENNK, thence . . . .

. . . . on track 016° to COLET, then on track 025° to SUSHI, then on track 026° to WWELL, then on track 026° to INDIE, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE8.TPAKK)

NOTE: Chart not to scale.
LURIC EIGHT DEPARTURE (RNAV)

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14:** Climb on heading 148° to 600 for RADAR vectors to KNTKY, thence . . . .

**TAKEOFF RUNWAY 32:** Climb on heading 328° to 600 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 031° to VELCO, then on track 031° to ENJOY, then on track 031° to LURIC, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**HAWES TRANSITION (LURIC8.HAWES)**

**ORRTH TRANSITION (LURIC8.ORRTH)**
NOTE: GUSTI and LCH Transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41 and 54T.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14:** Climb on heading 148° to 600, for RADAR vectors to MMALT, thence...

**TAKEOFF RUNWAY 32:** Climb on heading 328° to 600, for RADAR vectors to MMALT, thence...

...on track 086° to MOOKI, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**GUSTI TRANSITION (MMALT7.GUSTI)**
**LAKE CHARLES TRANSITION (MMALT7.LCH)**
**WHITE LAKE TRANSITION (MMALT7.LLA)**
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 148° to 600 for RADAR vectors to KNTKY, thence . . . .
TAKEOFF RUNWAY 32: Climb on heading 328° to 600 for RADAR vectors to KNTKY, thence . . . .

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSIQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA8.DPATY)
JBULL TRANSITION (STRYA8.JBULL)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 14:** Climb on heading 148° to 600 for RADAR vectors to BBYSE, thence...  
**TAKEOFF RUNWAY 32:** Climb on heading 328° to 600 for RADAR vectors to BBYSE, thence...  

...on track 331° to SPICR, then on track 331° to WLLIS, then on track 332° to STYCK, then on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**DOLEY TRANSITION (STYCK8.DOLEY)**  
**WTSON TRANSITION (STYCK8.WTSON)**

**NOTE:** Chart not to scale.

**TOP ALTITUDE:**  
**ASSIGNED BY ATC**

**NOTE:** RADAR required.  
**NOTE:** DME/DME/IRU or GPS required.  
**NOTE:** RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwy 14, 32: Standard with minimum climb of 500' per NM to 600.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 148° to 600 for RADAR vectors to WYLSN, thence . . .
TAKEOFF RUNWAY 32: Climb on heading 328° to 600 for RADAR vectors to WYLSN, thence . . .

. . . on track 360° to MONNT, then on (transition).
Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN8.GIFFA)
MAJKK TRANSITION (WYLSN8.MAJKK)
RNAV (GPS)-A
CHAMBERS COUNTY/WINNIE STOWELL (T9)

APP CRS 178°
Rwy Idg NA
TDZE NA
Apt Elev 24

RNP APCH - GPS.

Procedure NA at night. Rwy 17 and 35 helicopter visibility reduction below 1 SM NA. Use Beaumont altimeter setting; when not received, use Liberty altimeter setting and increase all MDAs 20 feet.

MISSED APPROACH: Climb to 900 then climbing left turn to 2500 direct JOSHA and hold.

BMT AWOS-3PT 118.425
HOUSTON APP CON 121.3 377.1
CTAF 122.9 📈

Use Liberty altimeter setting and increase all MDAs 20 feet. Below 1 SM NA. Use Beaumont altimeter setting; when not received, Procedure NA at night. Rwy 17 and 35 helicopter visibility reduction.

RNAV (GPS) - GPS.

MIRL Rwys 17-35

CATEGORY C

CIRCLING 480-1 456 (500-1) NA

WINNIE/STOWELL, TEXAS
Orig 05OCT23

CHAMBERS COUNTY/WINNIE STOWELL (T9)
RNAV (GPS)-A
A rate of climb/descent table is provided for use in planning and executing climbs or descents under known or approximate ground speed conditions. It will be especially useful for approaches when the localizer only is used for course guidance. A best speed, power, altitude combination can be programmed which will result in a stable glide rate and altitude favorable for executing a landing if minimums exists upon breakout. Care should always be exercised so that minimum descent altitude and missed approach point are not exceeded.

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<thead>
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<th>ft/NM</th>
<th>%</th>
<th>GROUND SPEED (knots)</th>
<th>ANGLE</th>
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