



U.S. Terminal Procedures Publication

South Central (SC) Vol 5 of 5

Effective: 0901Z

10 NOV 2016

to: 0901Z

05 JAN 2017

Consult the Change Notice (CN) effective 08 DEC 2016 for revised Instrument Procedure Charts for this volume



Consult NOTAMs for latest information

Consult/Subscribe to FAA Safety Alerts and Charting Notices at:

http://www.faa.gov/air_traffic/flight_info/aeronav/safety_alerts/

Published from digital files compiled in accordance with Interagency Air Cartographic Committee specifications and agreements approved by

Department of Defense - Federal Aviation Administration



TABLE OF CONTENTS

Inoperative Components or Visual Aids Table.....	A1
Explanation of Terms/Landing Minima Data.....	B1
General Information.....	C1
Abbreviations.....	D1
Legend — IAP Planview.....	E1
Legend — IAP Profile.....	F1
Legend — Departure Procedures and Standard Terminal Arrival Charts.....	G1
Legend — Airport Diagram/Sketch.....	H1
Legend — Approach Lighting Systems.....	I1
Frequency Pairing.....	J1
Index of Terminal Charts and Minimums.....	K1
IFR Takeoff Minimums, Departure Procedures, and Diverse Vector Area (Radar Vectors).....	L1
IFR Alternate Airport Minimums.....	M1
Radar Minimums.....	N1
Land and Hold-Short Operations (LAHSO).....	O1
Hot Spots.....	P1
Standard Terminal Arrival Charts.....	Z1
Terminal Charts.....	Page 1
Rate of Climb/Descent Table.....	Inside Back Cover
Area of Coverage.....	Outside Back Cover

CORRECTIONS, COMMENTS AND/OR PROCUREMENT

**FOR CHARTING ERRORS,
OR FOR CHANGES, ADDITIONS,
RECOMMENDATIONS ON
PROCEDURAL ASPECTS CONTACT:**

FAA, Aeronautical Information Services
Customer Operations Team
1305 East-West Highway
SSMC 4, Suite 4400
Silver Spring, MD 20910-3281
Telephone 1-800-638-8972
Email 9-AMC-Aerochart@faa.gov

FOR PROCUREMENT:

For a list of approved FAA Print Providers,
visit our website at [http://www.faa.gov/
air_traffic/flight_info/aeronav/print_providers/](http://www.faa.gov/air_traffic/flight_info/aeronav/print_providers/)
For digital products, visit
[http://www.faa.gov/air_traffic/flight_info/
aeronav/digital_products/](http://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/)

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

Request for the creation or revisions to Airport Diagrams should be in accordance with FAA Order 7910.4.

INOP COMPONENTS

INOPERATIVE COMPONENTS OR VISUAL AIDS TABLE

Landing minimums published on instrument approach procedure charts are based upon full operation of all components and visual aids associated with the particular instrument 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 glide slope inoperative minimums are published on the instrument approach charts as localizer minimums. This table may be amended by notes on the approach chart. Such notes apply only to the particular approach category(ies) as stated. See legend page for description of components indicated below.

(1) ILS, PAR, RNAV (LPV line of minima) and GLS

Inoperative Component or Aid	Approach Category	Increase Visibility
ALSF 1 & 2, MALSR, & SSALR	ABCD	¼ mile

(2) ILS with visibility minimum of 1,800 RVR

ALSF 1 & 2, MALSR, & SSALR	ABCD	To 4000 RVR
TDZL RCLS	ABCD	To 2400 RVR*
RVR	ABCD	To ½ mile

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

(3) VOR, VOR/DME, TACAN, LOC, LOC/DME, LDA, LDA/DME, SDF, SDF/DME, GPS, ASR, RNAV (LNAV/VNAV, LP, LNAV lines of minima) and RNP

Inoperative Visual Aid	Approach Category	Increase Visibility
ALSF 1 & 2, MALSR, & SSALR	ABCD	½ mile
SSALS, MALS, & ODALS	ABC	¼ mile

(4) NDB

ALSF 1 & 2, MALSR, & SSALR	C	½ mile
MALS, SSALS, ODALS	ABD	¼ mile
	ABC	¼ mile

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.

CATEGORY	A		B	C	D
	S-ILS 27	1352/24			200
S-LOC 27	1440/24		288	(300-½)	1440/50 288 (300-1)
CIRCLING	1540-1 361 (400-1)	1640-1 461 (500-1)	1640-1½ 461 (500-1½)	1740-2 561 (600-2)	

DA: Visibility (RVR 100's of feet)
 Aircraft Approach Category: HAT/HATH
 MDA: Minimum Descent Altitude
 HAA: Height Above Airports
 Visibility in Statute Miles

Straight-in ILS to Runway 27
 Straight-in with Glide Slope Inoperative or not used to Runway 27
 All weather minimums in parentheses not applicable to Civil Pilots.
 Military Pilots refer to appropriate regulations.

COPTER MINIMA ONLY

CATEGORY	COPTER	
H-176°	680-½	363 (400-½)

Copter Approach Direction
 Height of MDA/DA Above Landing Area (HAL)
 No circling minimums are provided

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

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

COLD TEMPERATURE RESTRICTED AIRPORTS

NOTE: A **⊗** -12°C/10°F symbol and associated temperature indicates a cold temperature altitude correction is required at this airport when reported temperature is at or below the published restricted temperature. Advise ATC when altitude correction is made in the intermediate and/or missed approach segment. Reporting correction to ATC in final segment is not required. See following Cold Temperature Error Table to make manual corrections. See Notices to Airman Publication (NTAP) Graphic Notices General for complete list of published airports, temperature/s, segments and procedure information. www.faa.gov/air_traffic/publications/notices

COLD TEMPERATURE ERROR TABLE

HEIGHT ABOVE AIRPORT IN FEET

REPORTED TEMP °C	200	300	400	500	600	700	800	900	1000	1500	2000	3000	4000	5000
+10	10	10	10	10	20	20	20	20	20	30	40	60	80	90
0	20	20	30	30	40	40	50	50	60	90	120	170	230	280
-10	20	30	40	50	60	70	80	90	100	150	200	290	390	490
-20	30	50	60	70	90	100	120	130	140	210	280	420	570	710
-30	40	60	80	100	120	140	150	170	190	280	380	570	760	950
-40	50	80	100	120	150	170	190	220	240	360	480	720	970	1210
-50	60	90	120	150	180	210	240	270	300	450	590	890	1190	1500

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. However, if it is necessary to operate at a speed in excess of the upper limit of the speed range for an aircraft's category, the minimums for the category for that speed shall be used. For example, an airplane which fits into Category B, but is circling to land at a speed of 145 knots, shall use the approach Category D minimums. As an additional example, a Category A airplane (or helicopter) which is operating at 130 knots on a straight-in approach shall use the approach Category C minimums. See following category limits:

MANEUVERING TABLE

Approach Category	A	B	C	D	E
Speed (Knots)	0-90	91-120	121-140	141-165	Abv 165

TERMS/LANDING MINIMA DATA

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.

Circling MDA in feet MSL	Approach Category and Circling Radius (NM)				
	CAT A	CAT B	CAT C	CAT D	CAT E
All Altitudes	1.3	1.5	1.7	2.3	4.5

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.

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

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 1800 RVR, use 2400 RVR with the resultant visibility of 1/2 mile.

RVR (feet)	Visibility (statute miles)	RVR (feet)	Visibility (statute miles)
1600	1/4	4500	3/8
2400	1/2	5000	1
3200	5/8	6000	1 1/4
4000	3/4		

RADAR MINIMA

	RWY	GP/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
PAR	10	2.5°/42/1000	ABCDE	195/16	100	(100-1/4)				
	28	2.5°/48/1068	ABCDE	187/16	100	(100-1/4)				
ASR	10		ABC	560/40	463	(500-3/4)	DE	560/50	463	(500-1)
	28		AB	600/50	513	(600-1)	CDE	600/60	513	(600-1 1/4)
CIR	10		AB	560-1/4	463	(500-1 1/4)	CDE	560-1 1/2	463	(500-1 1/2)
	28		AB	600-1 1/4	503	(600-1 1/4)	CDE	600-1 1/2	503	(600-1 1/2)

Visibility in Statute Miles ↙

↘ All minima in parentheses not applicable to Civil Pilots. Military Pilots refer to appropriate regulations.

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 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

(M) VHF emergency frequency (121.5) monitored

(U) UHF emergency frequency (243.0) monitored

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

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

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

⚠ Takeoff Minima not standard and/or Departure Procedures are published. Refer to tabulation.

TERMS/LANDING MINIMA DATA

GENERAL INFO

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 contains information on civil operations at military airports.

STANDARD TERMINAL ARRIVALS AND DEPARTURE PROCEDURES

The use of the associated codified STAR/DP and transition identifiers are requested of users when filing flight plans via teletype and are required for users filing flight plans via computer interface. It must be noted that when filing a STAR/DP with a transition, the first three coded characters of the STAR and the last three coded characters of the DP are replaced by the transition code. Examples: ACTON SIX ARRIVAL, file (AQN.AQN6); ACTON SIX ARRIVAL, EDNAS TRANSITION, file (EDNAS.AQN6). FREEHOLD THREE DEPARTURE, file (FREQ3.RBV), FREEHOLD THREE DEPARTURE, ELWOOD CITY TRANSITION, file (FREQ3.EWC).

RNAV DP and STAR. Effective March 15, 2007, these procedures, formerly identified as Type-A and Type-B, will be designated as RNAV 1 in accordance with amended Advisory Circular (AC) and ICAO terminology.

Refer to AC 90-100A U.S. TERMINAL AND EN ROUTE AREA NAVIGATION (RNAV) OPERATIONS and the Aeronautical Information Manual for additional guidance regarding these procedures.

Standard RNAV 1 Procedure Chart Notes

NOTE: RNAV 1

NOTE: DME/DME/IRU or GPS required

Some procedures may require use of GPS and will be identified by a "GPS required" note.

RNAV 1 Procedure Characteristics and Operations

1. Require use of an RNAV system with DME/DME/IRU, and/or GPS inputs.
2. Require use of a CDI, flight director, and/or autopilot, in lateral navigation mode, for flight guidance while operating on RNAV paths (track, course, or direct leg). Other methods providing an equivalent level of performance may be acceptable.
3. RNAV paths may start as low as 500 feet above airport elevation.

GENERAL INFO

GENERAL INFO

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

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

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

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

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)

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.



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.

NOTE: Inclusion of the "Procedure Amendment Effective Date" will be phased in as procedures are amended. As this occurs, the Julian date will be relocated to the upper right corner of the chart.

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 in nautical miles (except visibility in statute miles and Runway Visual Range in hundreds of feet). Runway Dimensions in feet. Elevations in feet. Mean Sea Level (MSL). Ceilings 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.

GENERAL INFO

GENERAL INFO

ABBREVIATIONS

AAUP.....	Attention All Users Page	HAA.....	Height above Airport
ADF.....	Automatic Direction Finder	HAL.....	Height above Landing
ADIZ.....	Air Defense Identification Zone	HAT.....	Height above Touchdown
AFIS.....	Automatic Flight Information Service	HATH.....	Height Above Threshold
ALS.....	Approach Light System	HGS.....	Head-up Guidance System
ALSF.....	Approach Light System with Sequenced Flashing Lights	HIRL.....	High Intensity Runway Lights
AP.....	Autopilot System	HUD.....	Head-up Display
APCH.....	Approach	IAF.....	Initial Approach Fix
APP CON.....	Approach Control	ICAO.....	International Civil Aviation Organization
ARR.....	Arrival	IF.....	Intermediate Fix
ASOS.....	Automated Surface Observing System	IM.....	Inner Marker
ASR/PAR.....	Published Radar Minimums at this Airport	INOP.....	Inoperative
ASSC.....	Airport Surface Surveillance Systems	INT.....	Intersection
ATIS.....	Automatic Terminal Information Service	K.....	Knots
AUNICOM.....	Automated UNICOM	KLAS.....	Knots Indicated Airspeed
AWOS.....	Automated Weather Observing System	LAAS.....	Local Area Augmentation System
AZ.....	Azimuth	LDA.....	Localizer Type Directional Aid
BC.....	Back Course	Ldg.....	Landing
BND.....	Bound	LRL.....	Low Intensity Runway Lights
C.....	Circling	LNAV.....	Lateral Navigation
CAT.....	Category	LOC.....	Localizer
CCW.....	Counter Clockwise	LP.....	Localizer Performance
CDI.....	Course Deviation Indicator	LPV.....	Localizer Performance with Vertical Guidance
Chan.....	Channel	LR.....	Lead Radial. Provides at least 2 NM (Copter 1 NM) of lead to assist in turning onto the intermediate/final course.
CIFP.....	Coded Instrument Flight Procedures	MAA.....	Maximum Authorized Altitude
CIR.....	Circling	MALS.....	Medium Intensity Approach Light System
CLNC DEL.....	Clearance Delivery	MALSR.....	Medium Intensity Approach Light System with RAIL
CNF.....	Computer Navigation Fix	MAP.....	Missed Approach Point
CTAF.....	Common Traffic Advisory Frequency	MDA.....	Minimum Descent Altitude
CW.....	Clockwise	MIRL.....	Medium Intensity Runway Lights
DA.....	Decision Altitude	MM.....	Middle Marker
DER.....	Departure End of Runway	MRA.....	Minimum Reception Altitude
DH.....	Decision Height	N/A.....	Not Applicable
DME.....	Distance Measuring Equipment	NA.....	Not Authorized
DTHR.....	Displaced Threshold	NDB.....	Non-directional Radio Beacon
DVA.....	Diverse Vector Area	NFD.....	National Flight Database
ELEV.....	Elevation	NM.....	Nautical Mile
EMAS.....	Engineered Material Arresting System	NoPT.....	No Procedure Turn Required (Procedure Turn shall not be executed without ATC clearance)
FAF.....	Final Approach Fix	ODALS.....	Omnidirectional Approach Light System
FD.....	Flight Director System	ODP.....	Obstacle Departure Procedure
FM.....	Fan Marker	OM.....	Outer Marker
FMS.....	Flight Management System	PRM.....	Precision Runway Monitor
GBAS.....	Ground Based Augmentation System		
GCO.....	Ground Communications Outlet		
GLS.....	Ground Based Augmentation System Landing System		
GP.....	Glidepath		
GPI.....	Ground Point of Interception		
GPS.....	Global Positioning System		
GS.....	Glide Slope		

GENERAL INFO

GENERAL INFO

ABBREVIATIONS

R.....	Radial
RA.....	Radio Altimeter setting height
RAIL.....	Runway Alignment Indicator Lights
RCLS.....	Runway Centerline Light System
REIL.....	Runway End Identifier Lights
RF.....	Radius-to-Fix
RLLS.....	Runway Lead-in Light System
RNAV.....	Area Navigation
RNP.....	Required Navigation Performance
RPI.....	Runway Point of Intercept(ion)
RRL.....	Runway Remaining Lights
Rwy.....	Runway
RVR.....	Runway Visual Range
S.....	Straight-in
SALS.....	Short Approach Light System
SSALR.....	Simplified Short Approach Light System with RAIL
SDF.....	Simplified Directional Facility
SM.....	Statute Mile
SOIA.....	Simultaneous Offset Instrument Approach
TAA.....	Terminal Arrival Area
TAC.....	TACAN
TCH.....	Threshold Crossing Height (height in feet Above Ground level)
TDZ.....	Touchdown Zone
TDZE.....	Touchdown Zone Elevation
TDZ/CL.....	Touchdown Zone and Runway Centerline Lighting
TDZL.....	Touchdown Zone Lights
THR.....	Threshold
THRE.....	Threshold Elevation
TODA.....	Takeoff Distance Available
TORA.....	Takeoff Run Available
TR.....	Track
VASI.....	Visual Approach Slope Indicator
VCOA.....	Visual Climb Over Airport
VDP.....	Visual Descent Point
VGSI.....	Visual Glide Slope Indicator
VNAV.....	Vertical Navigation
WAAS.....	Wide Area Augmentation System
WP/WPT.....	Waypoint (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

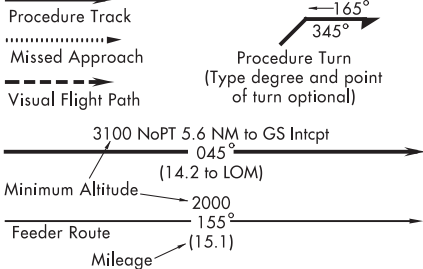
GENERAL INFO

LEGEND

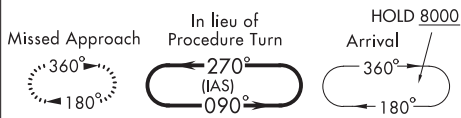
INSTRUMENT APPROACH PROCEDURES (CHARTS)

PLANVIEW SYMBOLS

TERMINAL ROUTES



HOLDING PATTERNS

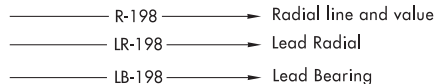


Holding pattern with max. restricted airspeed: (175K) applies to all altitudes. (210K) applies to altitudes above 6000' and including 14000'. Arrival Holding Pattern altitude restrictions will be indicated when they deviate from the adjacent leg. Limits will only be specified when they deviate from the standard. DME fixes may be shown.

FIXES/ATC REPORTING REQUIREMENTS



Computer Navigation Fix (CNF)
x (NAME) ("x" omitted when it conflicts with runway pattern)



ALTITUDES

<u>5500</u> Mandatory Altitude	3000 Recommended Altitude
<u>2500</u> Minimum Altitude	<u>5000</u> Mandatory Block Altitude
<u>4300</u> Maximum Altitude	<u>3000</u> Altitude

INDICATED AIRSPEED

<u>175K</u>	120K	250K	180K
Mandatory Airspeed	Minimum Airspeed	Maximum Airspeed	Recommended Airspeed

RADIO AIDS TO NAVIGATION

110.1 Underline indicates No Voice transmitted on this frequency

Compulsory:



Non-Compulsory:



LOM/LMM (Compass locator at Outer Marker/Middle Marker)

Marker Beacon

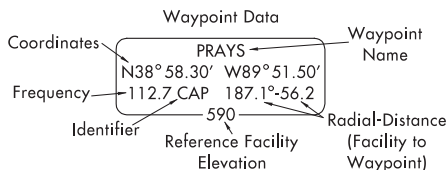
Marker beacons that are not specifically part of the procedure but underlie the final approach course are shown in screened color.

Localizer (LOC/LDA) Course
Right side shading- Front course; Left side shading- Back Course

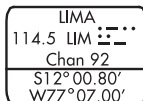
SDF Course

LOC/DME

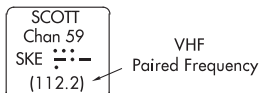
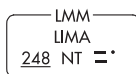
LOC/LDA/SDF Transmitter
(shown when installation is offset from its normal position off the end of the runway.)



Primary Navaid with Coordinate Values



Secondary Navaid



LEGEND

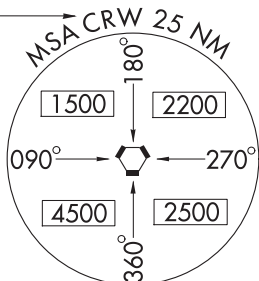
LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

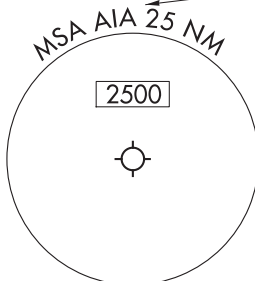
PLANVIEW SYMBOLS

MINIMUM SAFE ALTITUDE (MSA)

Facility Identifier

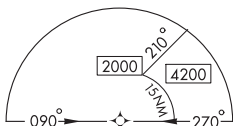


Airport Identifier

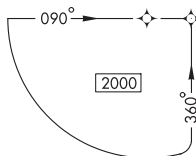


(arrows on distance circle identify sectors)

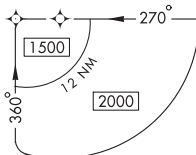
TERMINAL ARRIVAL AREA (TAA)



Straight-in Area

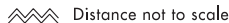
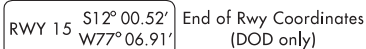


Right Base Area



Left Base Area

MISCELLANEOUS



AIRPORTS



SPECIAL USE AIRSPACE



R-Restricted

P-Prohibited

W-Warning

A-Alert

OBSTACLES



LEGEND

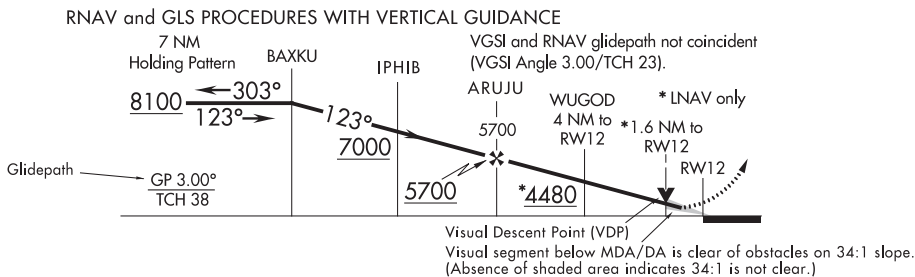
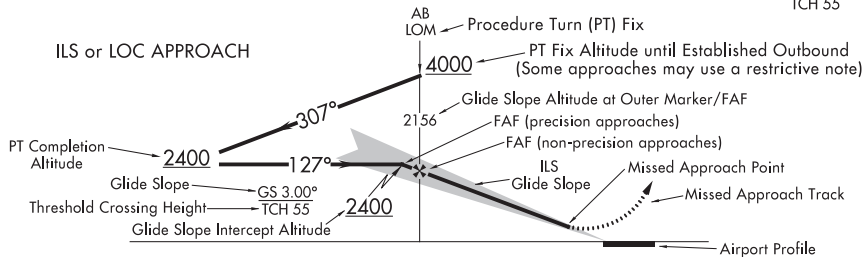
PROFILE VIEW

Three different methods are used to depict either electronic or vertical guidance: "GS", "GP", or "VDA".

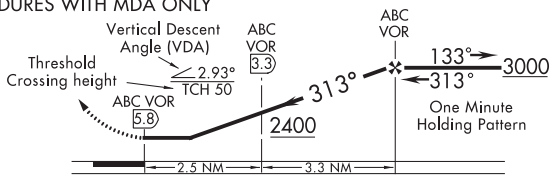
1. "GS" indicates that an Instrument Landing System (ILS) electronic glide slope (a ground antenna) provides vertical guidance. The profile section of ILS procedures depict a GS angle and TCH in the following format: $GS\ 3.00^\circ$. TCH 55

2. "GP" on GLS and RNAV procedures indicates that either electronic vertical guidance (via Wide Area Augmentation System - WAAS or Ground Based Augmentation System - GBAS) or barometric vertical guidance is provided. GLS and RNAV procedures with a published decision altitude (DA/H) depict a GP angle and TCH in the following format: $GP\ 3.00^\circ$. TCH 50

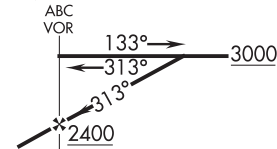
3. An advisory vertical descent angle (VDA) is provided on non-vertically guided conventional procedures and RNAV procedures with only a minimum descent altitude (MDA) to assist in preventing controlled flight into terrain. On Civil (FAA) procedures, this information is placed above or below the procedure track following the fix it is based on. Absence of a VDA or a note that the VDA is not authorized indicates that the prescribed obstacle clearance surface is not clear and the VDA must not be used below MDA. VDA is depicted in the following format: $\leq 3.00^\circ$. TCH 55



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



DESCENT FROM HOLDING PATTERN



ALTITUDES	
<u>5500</u> Mandatory Altitude	<u>3000</u> Recommended Altitude
<u>2500</u> Minimum Altitude	<u>5000</u> Mandatory Block Altitude
<u>4300</u> Maximum Altitude	<u>3000</u> Altitude

PROFILE SYMBOLS

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

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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEGEND

LEGEND STANDARD TERMINAL ARRIVAL (STAR) CHARTS DEPARTURE PROCEDURE (DP) CHARTS

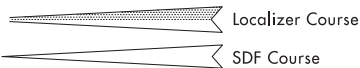
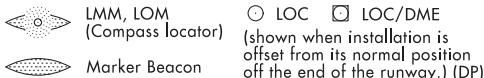
Applies to both STAR and DP Charts unless otherwise noted.

RADIO AIDS TO NAVIGATION

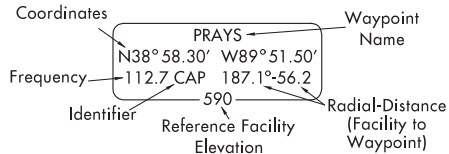
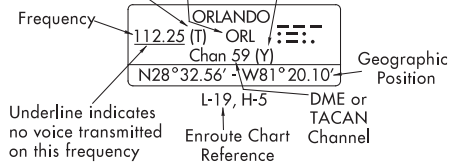
Compulsory:



Non-Compulsory:



(T) indicates frequency protection range (STAR) Identifier (Y) TACAN must be placed in "Y" mode to receive distance information



FIXES/ATC REPORTING REQUIREMENTS

Reporting Points
N00°00.00' W00°00.00' (75) → DME Mileage (when not obvious)

▲ Fix-Compulsory and
△ Non-Compulsory Position Report



X Computer Navigation Fix (CNF)
N00°00.00' W00°00.00'

ROUTES

4500 MEA-Minimum Enroute Altitude
*3500 MOCA-Minimum Obstruction Clearance Altitude
270° → Departure Route - Arrival Route
(65) Mileage between Radio Aids, Reporting Points, and Route Breaks



V12 J80 Airway/Jet Route Identification
DP Holding Pattern STAR Holding Pattern



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

SPECIAL USE AIRSPACE



ALTITUDES

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

15000 12000 Altitude change at other than Radio Aids (STAR)
Block Altitude

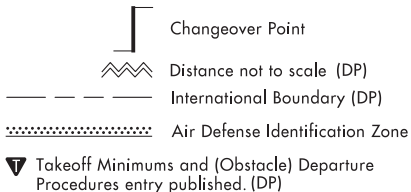
INDICATED AIRSPEED

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

AIRPORTS



MISCELLANEOUS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

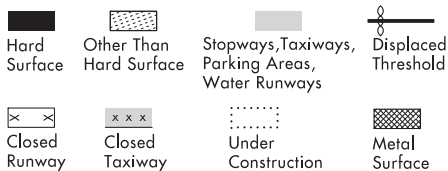
LEGEND

LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

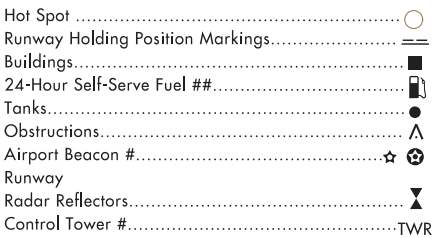
Runways



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



REFERENCE FEATURES



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

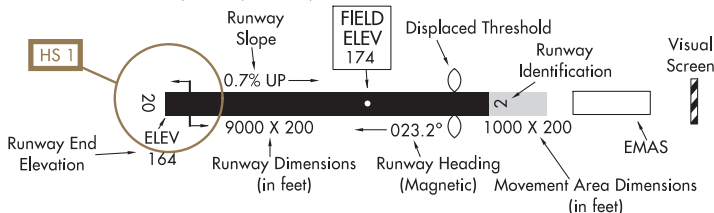
A fuel symbol is shown to indicate 24-hour self-serve fuel available, see appropriate Chart Supplement for information.

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.

Runway Weight Bearing Capacity/ or PCN Pavement Classification Number is shown as a codified expression.

Refer to the appropriate Supplement/Directory for applicable codes e.g., RWY 14-32 PCN 80 F/D/X/U S-75, D-185, 2S-175, 2D-325



SCOPE

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

Helicopter Alighting Areas (H) (+) (H) (A) (+)
 Negative Symbols used to identify Copter Procedures landing point..... (H) (+) (H) (A) (+)

Runway Threshold elevation.....THRE 123
 Runway TDZ elevation.....TDZE 123
 Runway Slope.....0.8% UP →
 (shown when runway slope is greater than or equal to 0.3%)
 ← 0.3% DOWN

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

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

Approach light symbols are shown in the Flight Information Handbook.

Airport diagram scales are variable.

True/magnetic North orientation may vary from diagram to diagram

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

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

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 FLIP. (Foreign Only)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEGEND

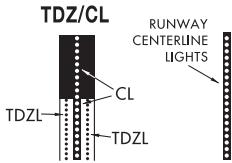
15344
LEGEND

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, e.g., (A2), (V), etc.

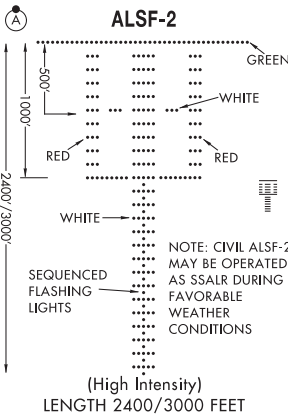
A dot "•" portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g., (A1). Negative symbology, e.g., (A1), (V) indicates Pilot Controlled Lighting (PCL).

RUNWAY TOUCHDOWN ZONE AND CENTERLINE LIGHTING SYSTEMS

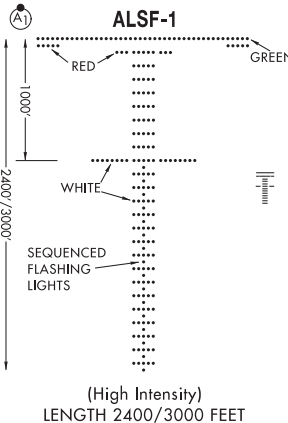


AVAILABILITY of TDZ/CL will be shown by NOTE in SKETCH e.g. "TDZ/CL Rwy 15"

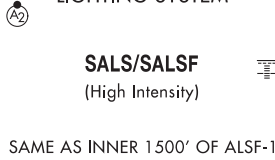
APPROACH LIGHTING SYSTEM



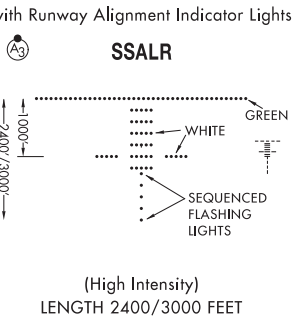
APPROACH LIGHTING SYSTEM



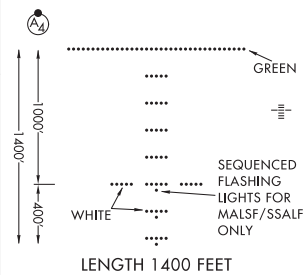
SHORT APPROACH LIGHTING SYSTEM



SIMPLIFIED SHORT APPROACH LIGHTING SYSTEM with Runway Alignment Indicator Lights



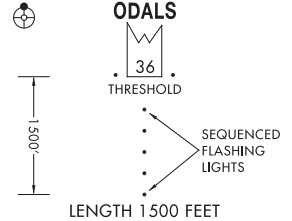
MEDIUM INTENSITY (MALS and MALSF) OR SIMPLIFIED SHORT (SSALS and SSALF) APPROACH LIGHTING SYSTEMS



MEDIUM INTENSITY APPROACH LIGHTING SYSTEM with Runway Alignment Indicator Lights



OMNIDIRECTIONAL APPROACH LIGHTING SYSTEM

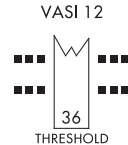
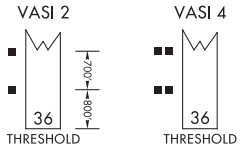


VISUAL APPROACH SLOPE INDICATOR

VASI

VISUAL APPROACH SLOPE INDICATOR WITH STANDARD THRESHOLD CLEARANCE PROVIDED.

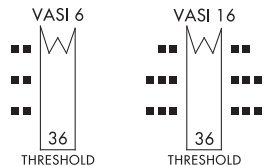
ALL LIGHTS WHITE — TOO HIGH
FAR LIGHTS RED — ON GLIDE SLOPE
NEAR LIGHTS WHITE — TOO LOW
ALL LIGHTS RED — TOO LOW



VISUAL APPROACH SLOPE INDICATOR

VASI

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



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEGEND

04330
LEGEND

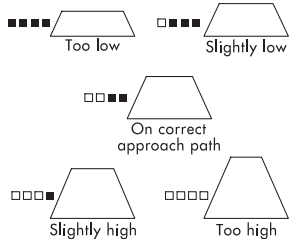
INSTRUMENT APPROACH PROCEDURES (CHARTS)
APPROACH LIGHTING SYSTEM - UNITED STATES

Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, (A₂), (V) etc.

A dot "•" portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g., (A₁F). Negative symbology, e.g., (A₁), (V) indicates Pilot Controlled Lighting (PCL).

(P) **PRECISION APPROACH PATH INDICATOR**

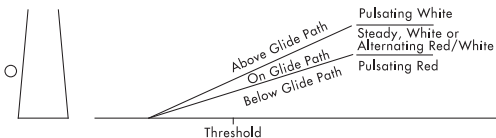
PAPI



Legend: □ White ■ Red

(V₂) **PULSATING VISUAL APPROACH SLOPE INDICATOR**

PVASI



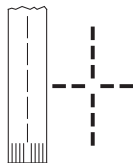
CAUTION: When viewing the pulsating visual approach slope indicators in the pulsating white or pulsating red sectors, it is possible to mistake this lighting aid for another aircraft or a ground vehicle. Pilots should exercise caution when using this type of system.

(V₁) **"T"-VISUAL APPROACH SLOPE INDICATOR**

"T"-VASI

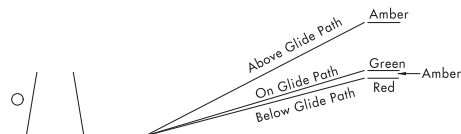


"T" ON BOTH SIDES OF RWY
ALL LIGHTS VARIABLE WHITE.
CORRECT APPROACH SLOPE-
ONLY CROSS BAR VISIBLE.
UPRIGHT "T"- FLY UP.
INVERTED "T"- FLY DOWN.
RED "T"- GROSS
UNDERSHOOT.



(V₄) **TRI-COLOR VISUAL APPROACH SLOPE INDICATOR**

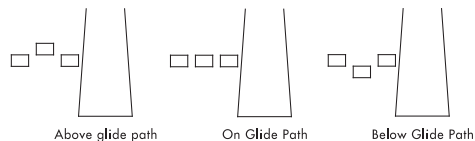
TRCV



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

(V₅) **ALIGNMENT OF ELEMENTS SYSTEMS**

APAP



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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEGEND

FREQ PAIRING

FREQUENCY PAIRING TABLE

TACAN CHANNEL	VHF FREQUENCY	TACAN CHANNEL	VHF FREQUENCY	TACAN CHANNEL	VHF FREQUENCY
17Y	108.05	40X	110.30	88Y	114.15
18X	108.10	40Y	110.35	89Y	114.25
18Y	108.15	41Y	110.45	90Y	114.35
19Y	108.25	42X	110.50	91Y	114.45
20X	108.30	42Y	110.55	92Y	114.55
20Y	108.35	43Y	110.65	93Y	114.65
21Y	108.45	44X	110.70	94Y	114.75
22X	108.50	44Y	110.75	95Y	114.85
22Y	108.55	45Y	110.85	96Y	114.95
23Y	108.65	46X	110.90	97Y	115.05
24X	108.70	46Y	110.95	98Y	115.15
24Y	108.75	47Y	111.05	99Y	115.25
25Y	108.85	48X	111.10	100Y	115.35
26X	108.90	48Y	111.15	101Y	115.45
26Y	108.95	49Y	111.25	102Y	115.55
27Y	109.05	50X	111.30	103Y	115.65
28X	109.10	50Y	111.35	104Y	115.75
28Y	109.15	51Y	111.45	105Y	115.85
29Y	109.25	52X	111.50	106Y	115.95
30X	109.30	52Y	111.55	107Y	116.05
30Y	109.35	53Y	111.65	108Y	116.15
31Y	109.45	54X	111.70	109Y	116.25
32X	109.50	54Y	111.75	110Y	116.35
32Y	109.55	55Y	111.85	111Y	116.45
33Y	109.65	56X	111.90	112Y	116.55
34X	109.70	56Y	111.95	113Y	116.65
34Y	109.75	80Y	113.35	114Y	116.75
35Y	109.85	81Y	113.45	115Y	116.85
36X	109.90	82Y	113.55	116Y	116.95
36Y	109.95	83Y	113.65	117Y	117.05
37Y	110.05	84Y	113.75	118Y	117.15
38X	110.10	85Y	113.85	119Y	117.25
38Y	110.15	86Y	113.95		
39Y	110.25	87Y	114.05		

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

FREQ PAIRING

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME PROC SECT PG NAME PROC SECT PG

A L MANGHAM JR RGNL
---SEE NACOGDOCHES, TX

ANAHUAC, TX

CHAMBERS COUNTY(T00)

Table listing takeoff and alternate minimums for Chambers County, TX, including STARs, IAPS, and DPS procedures with their respective altitudes.

ANGELINA COUNTY

---SEE LUFKIN, TX

ANGLETON/LAKE JACKSON, TX
TEXAS GULF COAST RGNL(LBX)

Table listing takeoff and alternate minimums for Atleton/Lake Jackson, TX, including STARs, IAPS, and DPS procedures with their respective altitudes.

BAY CITY, TX

BAY CITY MUNI(BYY)

Table listing takeoff and alternate minimums for Bay City, TX, including STARs, IAPS, and DPS procedures with their respective altitudes.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME	PROC	SECT PG	NAME	PROC	SECT PG
------	------	---------	------	------	---------

BAYTOWN, TX

BAYTOWN(HPY)
 TAKEOFF MINIMUMSL
 STARS BLUBELL THREE Z4
 CESAN THREE (RNAV) Z5
 HUDZY TWO Z18
 OHIO THREE Z27
 TCHDN TWO Z38
 TKNIQ TWO (RNAV) Z42
 WAPPL THREE (RNAV) Z45
 IAPS RNAV (GPS) RWY 14 74
 RNAV (GPS) RWY 32 75
 DPS BLTWY THREE (RNAV) 76
 BORRN TWO (RNAV) 78
 HOODO FOUR (RNAV) 80
 INDIE FOUR (RNAV) 82
 KARRR THREE (RNAV) 84
 LURIC FOUR (RNAV) 86
 MMALT TWO (RNAV) 88
 STRYA FOUR (RNAV) 90
 STYCK FOUR (RNAV) 92
 WATFO THREE (RNAV) 93
 WYLSN FOUR (RNAV) 94

RWJ AIRPARK(54T)

TAKEOFF MINIMUMSL
 STARS BLUBELL THREE Z4
 CESAN THREE (RNAV) Z5
 HUDZY TWO Z18
 OHIO THREE Z27
 TCHDN TWO Z38
 TKNIQ TWO (RNAV) Z42
 WAPPL THREE (RNAV) Z45
 IAPS RNAV (GPS) RWY 26 96
 RNAV (GPS) RWY 32 97
 DPS BLTWY THREE (RNAV) 98
 BORRN TWO (RNAV) 100
 HOODO FOUR (RNAV) 102
 INDIE FOUR (RNAV) 104
 KARRR THREE (RNAV) 106
 LURIC FOUR (RNAV) 108
 MMALT TWO (RNAV) 110
 STRYA FOUR (RNAV) 112
 STYCK FOUR (RNAV) 114
 WATFO THREE (RNAV) 116
 WYLSN FOUR (RNAV) 118

BEAUMONT, TX

BEAUMONT MUNI(BMT)
 TAKEOFF MINIMUMSL
 IAPS RNAV (GPS) RWY 13 120
 RNAV (GPS) RWY 31 121
 VOR/DME RWY 13 122
 VOR/DME RWY 31 123

BEAUMONT/PORT ARTHUR, TX

JACK BROOKS RGNL(BPT)
 TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 HOT SPOTP
 IAPS ILS OR LOC RWY 12 124
 RNAV (GPS) RWY 12 125
 RNAV (GPS) RWY 16 126
 RNAV (GPS) RWY 30 127
 RNAV (GPS) RWY 34 128
 LOC BC RWY 30 129
 VOR/DME RWY 34 130
 VOR RWY 12 131
 AIRPORT DIAGRAM 132

BRENHAM, TX

BRENHAM MUNI(11R)
 TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 IAPS RNAV (GPS) RWY 16 133
 RNAV (GPS) RWY 34 134

BRYAN, TX

COULTER FIELD(CFD)
 TAKEOFF MINIMUMSL
 IAPS RNAV (GPS) RWY 15 135
 RNAV (GPS) RWY 33 136
 VOR/DME-A 137

CALDWELL, TX

CALDWELL MUNI(RWV)
 TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 IAPS RNAV (GPS) RWY 15 138
 RNAV (GPS) RWY 33 139
 VOR/DME-A 140

CALHOUN COUNTY

---SEE PORT LAVACA, TX

CENTER, TX

CENTER MUNI(F17)
 TAKEOFF MINIMUMSL
 IAPS RNAV (GPS) RWY 17 141
 RNAV (GPS) RWY 35 142
 NDB RWY 17 143

CHAMBERS COUNTY

---SEE ANAHUAC, TX

CHEROKEE COUNTY

---SEE JACKSONVILLE, TX

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME	PROC	SECT PG	NAME	PROC	SECT PG
------	------	---------	------	------	---------

CLEVELAND, TX

CLEVELAND MUNI(6R3)					
TAKEOFF MINIMUMS		L			
ALTERNATE MINIMUMS		M			
STARS	HUDZY TWO	Z18			
	OHIO THREE	Z27			
	RIICE SEVEN	Z32			
	WHAEL TWO	Z48			
IAPS	RNAV (GPS) RWY 16	144			
	VOR-A	145			
DPS	BLTWY THREE (RNAV)	146			
	BORRN TWO (RNAV)	148			
	HOODO FOUR (RNAV)	150			
	INDIE FOUR (RNAV)	152			
	KARRR THREE (RNAV)	154			
	LURIC FOUR (RNAV)	156			
	MMALT TWO (RNAV)	158			
	STRYA FOUR (RNAV)	160			
	STYCK FOUR (RNAV)	162			
	WATFO THREE (RNAV)	163			
	WYLSN FOUR (RNAV)	164			

COLLEGE STATION, TX

EASTERWOOD FIELD(CLL)					
TAKEOFF MINIMUMS		L			
ALTERNATE MINIMUMS		M			
IAPS	ILS OR LOC RWY 34	166			
	RNAV (GPS) RWY 10	167			
	RNAV (GPS) RWY 16	168			
	RNAV (GPS) RWY 28	169			
	RNAV (GPS) RWY 34	170			
	LOC BC RWY 16	171			
	VOR/DME RWY 28	172			
	VOR OR TACAN RWY 10	173			
AIRPORT DIAGRAM		174			

COULTER FIELD

---SEE BRYAN, TX

CROCKETT, TX

HOUSTON COUNTY(DKR)					
TAKEOFF MINIMUMS		L			
ALTERNATE MINIMUMS		M			
IAPS	RNAV (GPS) RWY 02	175			
	RNAV (GPS) RWY 20	176			

DAVID WAYNE HOOKS MEMORIAL

---SEE HOUSTON, TX

EAGLE LAKE, TX

EAGLE LAKE(ELA)					
TAKEOFF MINIMUMS		L			
IAPS	RNAV (GPS) RWY 17	177			
	RNAV (GPS) RWY 35	178			
	VOR RWY 17	179			

EASTERWOOD FIELD

---SEE COLLEGE STATION, TX

EDNA, TX

JACKSON COUNTY(26R)					
TAKEOFF MINIMUMS		L			
IAPS	RNAV (GPS)-A	180			
	RNAV (GPS)-B	181			

ELLINGTON

---SEE HOUSTON, TX

FAYETTE RGNL AIR CENTER

---SEE LA GRANGE, TX

GALVESTON, TX

SCHOLES INTL AT GALVESTON(GLS)					
TAKEOFF MINIMUMS		L			
ALTERNATE MINIMUMS		M			
STARS	BLUBELL THREE	Z4			
	CESAN THREE (RNAV)	Z5			
	HUDZY TWO	Z18			
	OHIO THREE	Z27			
	QTRBK ONE	Z30			
	TCHDN TWO	Z38			
	TKNIQ TWO (RNAV)	Z42			
	WAPPL THREE (RNAV)	Z45			
IAPS	ILS OR LOC RWY 14	182			
	RNAV (GPS) RWY 14	183			
	RNAV (GPS) RWY 18	184			
	RNAV (GPS) RWY 32	185			
	RNAV (GPS) RWY 36	186			
	VOR RWY 14	187			
AIRPORT DIAGRAM		188			
DPS	ALEXANDRIA NINE	189			
	BLTWY THREE (RNAV)	191			
	BORRN TWO (RNAV)	193			
	CRID EIGHT	195			
	EL DORADO EIGHT	196			
	GIFFA EIGHT	198			
	HOODO FOUR (RNAV)	200			
	INDIE FOUR (RNAV)	202			
	INDUSTRY EIGHT	204			
	KARRR THREE (RNAV)	206			
	LEONA TWO	208			
	LUFKIN ONE	210			
	LURIC FOUR (RNAV)	212			
	MMALT TWO (RNAV)	214			
	PALACIOS EIGHT	216			
	STRYA FOUR (RNAV)	218			
	STYCK FOUR (RNAV)	220			
	TRUAX SIX	221			
	WATFO THREE (RNAV)	222			
	WYLSN FOUR (RNAV)	223			

GEORGE BUSH INTERCONTINENTAL/HOUSTON

---SEE HOUSTON, TX

INDEX

16315

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME	PROC	SECT PG	NAME	PROC	SECT PG
GIDDINGS, TX			HOUSTON, TX		
GIDDINGS-LEE COUNTY(GYB)			DAVID WAYNE HOOKS MEMORIAL(DWH)		
TAKEOFF MINIMUMS		L	TAKEOFF MINIMUMS		L
ALTERNATE MINIMUMS		M	ALTERNATE MINIMUMS		M
IAPS	RNAV (GPS) RWY 17	225	HOT SPOT		P
	RNAV (GPS) RWY 35	226	STARS	HUDZY TWO	Z18
	VOR/DME-A	227		OHIO THREE	Z27
				RIICE SEVEN	Z32
HAWTHORNE FIELD				WHAEL TWO	Z48
---SEE KOUNTZE/SILSBEE, TX			IAPS	RNAV (GPS) RWY 17R	230
HEARNE, TX				RNAV (GPS) RWY 35L	231
HEARNE MUNI(LHB)				LOC RWY 17R	232
ALTERNATE MINIMUMS		M	AIRPORT DIAGRAM		233
IAPS	RNAV (GPS) RWY 18	228	DPS	ALEXANDRIA NINE	234
	RNAV (GPS) RWY 36	229		BLTWY THREE (RNAV)	236
				BORRN TWO (RNAV)	238
				CRID EIGHT	240
				EL DORADO EIGHT	241
				GIFFA EIGHT	243
				HOODO FOUR (RNAV)	245
				INDIE FOUR (RNAV)	247
				INDUSTRY EIGHT	249
				JUNCTION NINE	251
				KARRR THREE (RNAV)	252
				LAKE CHARLES FOUR	254
				LEONA TWO	255
				LUFKIN ONE	257
				LURIC FOUR (RNAV)	259
				MMALT TWO (RNAV)	261
				PALACIOS EIGHT	263
				STRYA FOUR (RNAV)	265
				STYCK FOUR (RNAV)	267
				WATFO THREE (RNAV)	268
				WYLSN FOUR (RNAV)	269

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME PROC SECT PG NAME PROC SECT PG

HOUSTON, TX(CON'T)

ELLINGTON(EFD)
 TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 STARS BLUBELL THREE Z4
 CESAN THREE (RNAV) Z5
 HUDZY TWO Z18
 OHIO THREE Z27
 QTRBK ONE Z30
 TCHDN TWO Z38
 TKNIQ TWO (RNAV) Z42
 WAPPL THREE (RNAV) Z45
 IAPS ILS OR LOC RWY 17R Z71
 ILS OR LOC RWY 22 Z72
 ILS OR LOC RWY 35L Z73
 RNAV (GPS) RWY 04 Z74
 RNAV (GPS) RWY 17R Z75
 RNAV (GPS) RWY 22 Z76
 RNAV (GPS) RWY 35L Z77
 TACAN RWY 04 Z78
 TACAN RWY 17R Z79
 TACAN RWY 22 Z80
 TACAN RWY 35L Z81
 AIRPORT DIAGRAM Z82
 DPS ALEXANDRIA NINE Z83
 BLTWY THREE (RNAV) Z85
 BORRN TWO (RNAV) Z87
 CRIED EIGHT Z89
 EL DORADO EIGHT Z90
 GIFFA EIGHT Z92
 HOODO FOUR (RNAV) Z94
 INDIE FOUR (RNAV) Z96
 INDUSTRY EIGHT Z98
 KARRR THREE (RNAV) Z300
 LEONA TWO Z302
 LUFKIN ONE Z304
 LURIC FOUR (RNAV) Z306
 MMALT TWO (RNAV) Z308
 PALACIOS EIGHT Z310
 STRYA FOUR (RNAV) Z312
 STYCK FOUR (RNAV) Z314
 TRUAX SIX Z315
 WATFO THREE (RNAV) Z316
 WYLSN FOUR (RNAV) Z317

HOUSTON, TX(CON'T)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
 TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 LAHSOO
 STARS DOOBI TWO (RNAV) Z7
 DRLLR FIVE (RNAV) Z8
 DUUUK TWO Z10
 GESNR ONE (RNAV) Z12
 GILCO FOUR Z14
 GUSHR THREE (RNAV) Z16
 HTOWN TWO (RNAV) Z17
 HUDZY TWO Z18
 LINKK ONE (RNAV) Z22
 MSCOT FOUR (RNAV) Z24
 NNCEE ONE (RNAV) Z25
 OHIO THREE Z27
 RIICE SEVEN Z32
 SKNRD FOUR (RNAV) Z34
 SOULL ONE (RNAV) Z36
 TEJAS FOUR (RNAV) Z40
 TTORO THREE (RNAV) Z44
 ZEEKK ONE (RNAV) Z49

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME	PROC	SECT PG	NAME	PROC	SECT PG
HOUSTON, TX(CON'T)			HOUSTON, TX(CON'T)		
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)(CON'T)			GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)(CON'T)		
IAPS	ILS OR LOC RWY 08L	319	DPS	ALEXANDRIA NINE	358
	ILS OR LOC RWY 08R	320		BLTWY THREE (RNAV)	360
	ILS OR LOC RWY 09	321		BNDTO FIVE (RNAV)	362
	ILS OR LOC RWY 15R	322		CRIED EIGHT	364
	ILS OR LOC RWY 26L	323		EL DORADO EIGHT	365
	ILS OR LOC RWY 26R	324		FLYZA FIVE (RNAV)	367
	ILS OR LOC RWY 27	325		GIFFA EIGHT	369
	ILS OR LOC RWY 33R	326		GUMBY THREE (RNAV)	371
	ILS RWY 08L (SA CAT I)	327		HOODO FOUR (RNAV)	373
	ILS RWY 26L (SA CAT I)	328		INDIE FOUR (RNAV)	375
	ILS RWY 26R (SA CAT I)	329		INDUSTRY EIGHT	377
	ILS RWY 27 (SA CAT I)	330		JUNCTION NINE	379
	ILS RWY 08R (SA CAT I - II)	331		LAKE CHARLES FOUR	380
	ILS RWY 09 (SA CAT I - II)	332		LEONA TWO	381
	ILS RWY 08L (CAT II - III)	333		LUFKIN ONE	383
	ILS RWY 26L (CAT II - III)	334		LURIC FOUR (RNAV)	385
	ILS RWY 26R (CAT II - III)	335		MNUGS FOUR (RNAV)	387
	ILS RWY 27 (CAT II - III)	336		PALACIOS EIGHT	389
	GLS RWY 08L	337		PITZZ FOUR (RNAV)	391
	GLS RWY 08R	338		RITAA FIVE (RNAV)	393
	GLS RWY 09	339		STRYA FOUR (RNAV)	395
	GLS RWY 26L	340		STYCK FOUR (RNAV)	397
	GLS RWY 26R	341		TRUAX SIX	398
	GLS RWY 27	342		WYLSN FOUR (RNAV)	399
	RNAV (RNP) Y RWY 08L	343	HOUSTON EXECUTIVE(TME)		
	RNAV (RNP) Y RWY 08R	344	TAKEOFF MINIMUMS L		
	RNAV (RNP) Y RWY 09	345	STARS	BLUBELL THREE	24
	RNAV (RNP) Y RWY 26L	346		HUDZY TWO	218
	RNAV (RNP) Y RWY 26R	347		OHIO THREE	227
	RNAV (RNP) Y RWY 27	348		TCHDN TWO	238
	RNAV (GPS) RWY 15R	349		TKNIQ TWO (RNAV)	242
	RNAV (GPS) RWY 33R	350		WAPPL THREE (RNAV)	245
	RNAV (GPS) Z RWY 08L	351	IAPS	RNAV (GPS) RWY 18	401
	RNAV (GPS) Z RWY 08R	352		RNAV (GPS) RWY 36	402
	RNAV (GPS) Z RWY 09	353	AIRPORT DIAGRAM		403
	RNAV (GPS) Z RWY 26L	354	DPS	ALEXANDRIA NINE	404
	RNAV (GPS) Z RWY 26R	355		BLTWY THREE (RNAV)	406
	RNAV (GPS) Z RWY 27	356		BORRN TWO (RNAV)	408
AIRPORT DIAGRAM		357		CRIED EIGHT	410
				EL DORADO EIGHT	411
				GIFFA EIGHT	413
				HOODO FOUR (RNAV)	415
				INDIE FOUR (RNAV)	417
				INDUSTRY EIGHT	419
				KARRR THREE (RNAV)	421
				LEONA TWO	423
				LUFKIN ONE	425
				LURIC FOUR (RNAV)	427
				MMALT TWO (RNAV)	429
				PALACIOS EIGHT	431
				STRYA FOUR (RNAV)	433
				STYCK FOUR (RNAV)	435
				WATFO THREE (RNAV)	436
				WYLSN FOUR (RNAV)	437

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME	PROC	SECT PG	NAME	PROC	SECT PG
HOUSTON, TX(CON'T)			HOUSTON, TX(CON'T)		
HOUSTON-SOUTHWEST(AXH)			LONE STAR EXECUTIVE(CXO)		
TAKEOFF MINIMUMS		L	TAKEOFF MINIMUMS		L
STARS	BLUBELL THREE	Z4	ALTERNATE MINIMUMS		M
	CESAN THREE (RNAV)	Z5	HOT SPOT		P
	HUDZY TWO	Z18	STARS	CESAN THREE (RNAV)	Z5
	OHIO THREE	Z27		HUDZY TWO	Z18
	TCHDN TWO	Z38		OHIO THREE	Z27
	TKNIQ TWO (RNAV)	Z42		RIICE SEVEN	Z32
	WAPPL THREE (RNAV)	Z45		WHAEL TWO	Z48
IAPS	RNAV (GPS) RWY 09	439	IAPS	ILS OR LOC RWY 14	477
	RNAV (GPS) RWY 27	440		RNAV (GPS) RWY 01	478
	LOC/DME RWY 09	441		RNAV (GPS) RWY 14	479
DPS	ALEXANDRIA NINE	442		RNAV (GPS) RWY 19	480
	BLTWY THREE (RNAV)	444		RNAV (GPS) RWY 32	481
	BORRN TWO (RNAV)	446		NDB RWY 14	482
	CRIED EIGHT	448	AIRPORT DIAGRAM		483
	EL DORADO EIGHT	449	DPS	ALEXANDRIA NINE	484
	GIFFA EIGHT	451		BLTWY THREE (RNAV)	486
	HOODO FOUR (RNAV)	453		BORRN TWO (RNAV)	488
	INDIE FOUR (RNAV)	455		CRIED EIGHT	490
	INDUSTRY EIGHT	457		EL DORADO EIGHT	491
	KARRR THREE (RNAV)	459		GIFFA EIGHT	493
	LEONA TWO	461		HOODO FOUR (RNAV)	495
	LUFKIN ONE	463		INDIE FOUR (RNAV)	497
	LURIC FOUR (RNAV)	465		INDUSTRY EIGHT	499
	MMALT TWO (RNAV)	467		JUNCTION NINE	501
	PALACIOS EIGHT	469		KARRR THREE (RNAV)	502
	STRYA FOUR (RNAV)	471		LAKE CHARLES FOUR	504
	STYCK FOUR (RNAV)	473		LEONA TWO	505
	WATFO THREE (RNAV)	474		LUFKIN ONE	507
	WYLSN FOUR (RNAV)	475		LURIC FOUR (RNAV)	509
				MMALT TWO (RNAV)	511
				PALACIOS EIGHT	513
				STRYA FOUR (RNAV)	515
				STYCK FOUR (RNAV)	517
				WATFO THREE (RNAV)	518
				WYLSN FOUR (RNAV)	519
			PEARLAND RGNL(LVJ)		
			TAKEOFF MINIMUMS		L
			ALTERNATE MINIMUMS		M
			STARS	BLUBELL THREE	Z4
				CESAN THREE (RNAV)	Z5
				HUDZY TWO	Z18
				OHIO THREE	Z27
				TCHDN TWO	Z38
				TKNIQ TWO (RNAV)	Z42
				WAPPL THREE (RNAV)	Z45
IAPS				RNAV (GPS) RWY 32	521
				VOR-B	522
DPS				BLTWY THREE (RNAV)	523
				BORRN TWO (RNAV)	525
				HOODO FOUR (RNAV)	527
				INDIE FOUR (RNAV)	529
				KARRR THREE (RNAV)	531
				LURIC FOUR (RNAV)	533
				MMALT TWO (RNAV)	535
				STRYA FOUR (RNAV)	537
				STYCK FOUR (RNAV)	539
				WATFO THREE (RNAV)	540
				WYLSN FOUR (RNAV)	541

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME	PROC	SECT PG	NAME	PROC	SECT PG
HOUSTON, TX(CON'T)			HOUSTON, TX		
SUGAR LAND RGNL(SGR)			WEST HOUSTON(IWS)		
TAKEOFF MINIMUMS		L	TAKEOFF MINIMUMS		L
ALTERNATE MINIMUMS		M	STARS	BLUBELL THREE	Z4
HOT SPOT		P		CESAN THREE (RNAV)	Z5
STARS	BLUBELL THREE	Z4		HUDZY TWO	Z18
	CESAN THREE (RNAV)	Z5		OHIO THREE	Z27
	HUDZY TWO	Z18		TCHDN TWO	Z38
	OHIO THREE	Z27		TKNIQ TWO (RNAV)	Z42
	TCHDN TWO	Z38		WAPPL THREE (RNAV)	Z45
	TKNIQ TWO (RNAV)	Z42	IAPS	RNAV (GPS) RWY 15	584
	WAPPL THREE (RNAV)	Z45		RNAV (GPS) RWY 33	585
IAPS	ILS OR LOC RWY 35	543		VOR-D	586
	RNAV (GPS) RWY 17	544	DPS	ALEXANDRIA NINE	587
	RNAV (GPS) RWY 35	545		BLTWY THREE (RNAV)	589
	VOR/DME-A	546		BORRN TWO (RNAV)	591
AIRPORT DIAGRAM		547		CRIED EIGHT	593
DPS	ALEXANDRIA NINE	548		EL DORADO EIGHT	594
	BLTWY THREE (RNAV)	550		GIFFA EIGHT	596
	BORRN TWO (RNAV)	552		HOODO FOUR (RNAV)	598
	CRIED EIGHT	554		INDIE FOUR (RNAV)	600
	EL DORADO EIGHT	555		INDUSTRY EIGHT	602
	GIFFA EIGHT	557		KARRR THREE (RNAV)	604
	HOODO FOUR (RNAV)	559		LEONA TWO	606
	INDIE FOUR (RNAV)	561		LUFKIN ONE	608
	INDUSTRY EIGHT	563		LURIC FOUR (RNAV)	610
	KARRR THREE (RNAV)	565		MMALT TWO (RNAV)	612
	LEONA TWO	567		PALACIOS EIGHT	614
	LUFKIN ONE	569		STRYA FOUR (RNAV)	616
	LURIC FOUR (RNAV)	571		STYCK FOUR (RNAV)	618
	MMALT TWO (RNAV)	573		WATFO THREE (RNAV)	619
	PALACIOS EIGHT	575		WYLSN FOUR (RNAV)	620
	STRYA FOUR (RNAV)	577			
	STYCK FOUR (RNAV)	579			
	TRUAX SIX	580			
	WATFO THREE (RNAV)	581			
	WYLSN FOUR (RNAV)	582			
WEISER AIR PARK(EYQ)					
STARS	BLUBELL THREE	Z4			

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME PROC SECT PG NAME PROC SECT PG

HOUSTON, TX

WILLIAM P HOBBY(HOU)
 TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 HOT SPOTP
 STARS BAYYY THREE (RNAV)Z1
 BELLR THREE (RNAV)Z3
 BLUBELL THREEZ4
 CESAN THREE (RNAV)Z5
 HUDZY TWOZ18
 KIDDD THREE (RNAV)Z20
 OHIOO THREEZ27
 PUCKS THREE (RNAV)Z28
 QTRBK ONEZ30
 TCHDN TWOZ38
 TKNIQ TWO (RNAV)Z42
 WAPPL THREE (RNAV)Z45
 IAPS ILS OR LOC RWY 04622
 ILS OR LOC RWY 13R623
 ILS OR LOC RWY 31L624
 ILS RWY 04 (SA CAT I)625
 ILS RWY 04 (CAT II - III)626
 RNAV (GPS) RWY 04627
 RNAV (GPS) RWY 13R628
 RNAV (GPS) RWY 17629
 RNAV (GPS) RWY 22630
 RNAV (GPS) RWY 31L631
 RNAV (GPS) RWY 35632
 LOC RWY 22633
 AIRPORT DIAGRAM634
 DPS ALEXANDRIA NINE635
 BLTWY THREE (RNAV)637
 CRIED EIGHT639
 EL DORADO EIGHT641
 ELOCO FOUR (RNAV)643
 GIFFA EIGHT645
 HOODO FOUR (RNAV)647
 INDIE FOUR (RNAV)649
 INDUSTRY EIGHT651
 LEONA TWO653
 LUFKIN ONE655
 LURIC FOUR (RNAV)657
 PALACIOS EIGHT659
 PEECE FOUR (RNAV)661
 PTRON FIVE (RNAV)663
 RETYR FIVE (RNAV)665
 STRYA FOUR (RNAV)667
 STRYCK FOUR (RNAV)669
 TRUAX SIX671
 WYLSN FOUR (RNAV)673

HOUSTON COUNTY
---SEE CROCKETT, TX

HUNTSVILLE, TX

HUNTSVILLE MUNI(UTS)
 TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 IAPS RNAV (GPS) RWY 18675
 VOR/DME-A676
 NDB RWY 18677

JACK BROOKS RGNL
---SEE BEAUMONT/PORT ARTHUR, TX

JACKSON COUNTY
---SEE EDNA, TX

JACKSONVILLE, TX
CHEROKEE COUNTY(JSO)

TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 IAPS RNAV (GPS) RWY 14678
 RNAV (GPS) RWY 32679
 VOR/DME RWY 14680

JASPER, TX

JASPER COUNTY BELL FIELD(JAS)

TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 IAPS RNAV (GPS) RWY 18681
 RNAV (GPS) RWY 36682

KOUNTZE/SILSBEE, TX

HAWTHORNE FIELD(45R)

TAKEOFF MINIMUMSL
 IAPS RNAV (GPS) RWY 13683
 NDB RWY 13684

LA GRANGE, TX

FAYETTE RGNL AIR CENTER(3T5)

TAKEOFF MINIMUMSL
 ALTERNATE MINIMUMSM
 IAPS RNAV (GPS) RWY 16685
 RNAV (GPS) RWY 34686
 VOR/DME-A687
 AIRPORT DIAGRAM688

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME	PROC	SECT PG	NAME	PROC	SECT PG
LA PORTE, TX			LUFKIN, TX		
LA PORTE MUNI(T41)			ANGELINA COUNTY(LFK)		
TAKEOFF MINIMUMS		L	TAKEOFF MINIMUMS		L
STARS	BLUBELL THREE	Z4	ALTERNATE MINIMUMS		M
	CESAN THREE (RNAV)	Z5	IAPS	ILS OR LOC RWY 07	751
	HUDZY TWO	Z18		RNAV (GPS) RWY 07	752
	OHIO THREE	Z27		RNAV (GPS) RWY 15	753
	TCHDN TWO	Z38		RNAV (GPS) RWY 25	754
	TKNIQ TWO (RNAV)	Z42		RNAV (GPS) RWY 33	755
	WAPPL THREE (RNAV)	Z45		VOR/DME RWY 15	756
IAPS	RNAV (GPS) RWY 30	689		VOR RWY 33	757
	VOR-A	690	MADISONVILLE, TX		
DPS	ALEXANDRIA NINE	691	MADISONVILLE MUNI(51R)		
	BLTWY THREE (RNAV)	693	TAKEOFF MINIMUMS		L
	BORRN TWO (RNAV)	695	IAPS	RNAV (GPS) RWY 18	758
	CRIED EIGHT	697		RNAV (GPS) RWY 36	759
	EL DORADO EIGHT	698		VOR/DME RWY 18	760
	GIFFA EIGHT	700	MARLIN, TX		
	HOODO FOUR (RNAV)	702	MARLIN(T15)		
	INDIE FOUR (RNAV)	704	TAKEOFF MINIMUMS		L
	INDUSTRY EIGHT	706	IAPS	VOR/DME OR GPS-A	761
	KARRR THREE (RNAV)	708	MEXIA, TX		
	LEONA TWO	710	MEXIA-LIMESTONE COUNTY(LXY)		
	LUFKIN ONE	712	TAKEOFF MINIMUMS		L
	LURIC FOUR (RNAV)	714	IAPS	RNAV (GPS) RWY 36	762
	MMALT TWO (RNAV)	716		NDB-A	763
	PALACIOS EIGHT	718	NACOGDOCHES, TX		
	STRYA FOUR (RNAV)	720	A L MANGHAM JR RGNL(OCH)		
	STYCK FOUR (RNAV)	722	TAKEOFF MINIMUMS		L
	WATFO THREE (RNAV)	724	ALTERNATE MINIMUMS		M
	WYLSN FOUR (RNAV)	726	IAPS	ILS OR LOC RWY 36	764
				RNAV (GPS) RWY 18	765
				RNAV (GPS) RWY 36	766
				NDB RWY 18	767
LIBERTY, TX			NAVASOTA, TX		
LIBERTY MUNI(T78)			NAVASOTA MUNI(60R)		
TAKEOFF MINIMUMS		L	TAKEOFF MINIMUMS		L
STARS	HUDZY TWO	Z18	ALTERNATE MINIMUMS		M
	OHIO THREE	Z27	IAPS	ILS OR LOC RWY 36	764
	RIICE SEVEN	Z32		RNAV (GPS) RWY 18	765
	WHAEL TWO	Z48		RNAV (GPS) RWY 36	766
IAPS	RNAV (GPS) RWY 16	728		NDB RWY 18	767
	VOR-A	729	ORANGE, TX		
DPS	BLTWY THREE (RNAV)	730	ORANGE COUNTY(ORG)		
	BORRN TWO (RNAV)	732	TAKEOFF MINIMUMS		L
	HOODO FOUR (RNAV)	734	ALTERNATE MINIMUMS		M
	INDIE FOUR (RNAV)	736	IAPS	RNAV (GPS) RWY 22	771
	KARRR THREE (RNAV)	738		VOR/DME RWY 22	772
	LURIC FOUR (RNAV)	740	PALACIOS, TX		
	MMALT TWO (RNAV)	742	PALACIOS MUNI(PSX)		
	STRYA FOUR (RNAV)	744	TAKEOFF MINIMUMS		L
	STYCK FOUR (RNAV)	746	ALTERNATE MINIMUMS		M
	WATFO THREE (RNAV)	747	IAPS	RNAV (GPS) RWY 13	773
	WYLSN FOUR (RNAV)	748		VOR RWY 13	774
LIVINGSTON, TX			LONE STAR EXECUTIVE		
LIVINGSTON MUNI(00R)			---SEE HOUSTON, TX		
TAKEOFF MINIMUMS		L			
IAPS	RNAV (GPS) RWY 30	750			

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

INDEX

16315

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME	PROC	SECT PG	NAME	PROC	SECT PG
PALESTINE, TX			WHARTON, TX		
PALESTINE MUNI(PSN)			WHARTON RGNL(ARM)		
TAKEOFF MINIMUMS		L	TAKEOFF MINIMUMS		L
ALTERNATE MINIMUMS		M	ALTERNATE MINIMUMS		M
IAPS	RNAV (GPS) RWY 18	775	STARS	CESAN THREE (RNAV)	Z5
	RNAV (GPS) RWY 36	776		WAPPL THREE (RNAV)	Z45
	VOR/DME RWY 18	777	IAPS	RNAV (GPS) RWY 14	788
	NDB RWY 36	778		RNAV (GPS) RWY 32	789
				VOR/DME-A	790
				NDB RWY 14	791
				NDB RWY 32	792
PEARLAND RGNL			DPS	BLTWY THREE (RNAV)	793
---SEE HOUSTON, TX				INDIE FOUR (RNAV)	795
				LURIC FOUR (RNAV)	797
PORT LAVACA, TX				MMALT TWO (RNAV)	799
CALHOUN COUNTY(PKV)				STRYA FOUR (RNAV)	801
ALTERNATE MINIMUMS		M		STYCK FOUR (RNAV)	803
IAPS	RNAV (GPS) RWY 14	779		WYLSN FOUR (RNAV)	804
	RNAV (GPS) RWY 32	780			
	VOR/DME-A	781			
			WILLIAM P HOBBY		
RWJ AIRPARK			---SEE HOUSTON, TX		
---SEE BAYTOWN, TX					
SCHOLES INTL AT GALVESTON					
---SEE GALVESTON, TX					
SUGAR LAND RGNL					
---SEE HOUSTON, TX					
TEXAS GULF COAST RGNL					
---SEE ANGLETON/LAKE JACKSON, TX					
VICTORIA, TX					
VICTORIA RGNL(VCT)					
TAKEOFF MINIMUMS		L			
ALTERNATE MINIMUMS		M			
IAPS	ILS OR LOC/DME RWY 13L	782			
	RNAV (GPS) RWY 13L	783			
	RNAV (GPS) RWY 31R	784			
	VOR/DME RWY 31R	785			
	VOR RWY 13L	786			
AIRPORT DIAGRAM		787			
WEISER AIR PARK					
---SEE HOUSTON, TX					
WEST HOUSTON					
---SEE HOUSTON, TX					

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDEX

16315

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

16315

INSTRUMENT APPROACH PROCEDURE CHARTS



IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR takeoff minimums other than standard, are listed below. Takeoff Minimums and Departure Procedures apply to all runways unless otherwise specified. 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 VCOA 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 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.

NAME	TAKEOFF MINIMUMS
------	------------------

ANAHUAC, TX

CHAMBERS COUNTY (T00)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 11069 (FAA)

TAKEOFF MINIMUMS: **Rwys 17,35**, NA-
Environmental.

NOTE: **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. Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL. Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

NAME	TAKEOFF MINIMUMS
------	------------------

ANGLETON/LAKE JACKSON, TX

TEXAS GULF COAST RGNL (LBX)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 1 08157 (FAA)

NOTE: **Rwy 35**, tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

BAY CITY, TX

BAY CITY MUNI (BYY)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 11349 (FAA)

NOTE: **Rwy 13**, trees beginning 51' from DER, left and right of centerline, up to 55' AGL/92' MSL. Poles beginning 635' from DER, 402' left of centerline, 31' AGL/68' MSL. **Rwy 31**, trees beginning 102' from DER, left and right of centerline, up to 34' AGL/80' MSL.

16315

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

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

16315

BAYTOWN, TX

BAYTOWN (HPY)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 10210 (FAA)

TAKEOFF MINIMUMS: **Rwy 14**, 300-1 or std. w/min.
climb of 420' per NM to 300.

NOTE: **Rwy 14**, multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL. Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL. Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL. **Rwy 32**, vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL. Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL. Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

R W J AIRPARK (54T)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 1 14149 (FAA)

TAKEOFF MINIMUMS: **Rwys 14, 32**, Standard-NA at night.

NOTE: **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 14**, vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL. Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL. Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL. Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL. **Rwy 32**, vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL. Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL. Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL. Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL. Power lines beginning 259' from DER, 139' left of centerline, up to 32' AGL/66' MSL. Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

16315

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

BEAUMONT, TX

BEAUMONT MUNI (BMT)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 09015 (FAA)

TAKEOFF MINIMUMS: **Rwys 16,34**, NA - Obstacles.

NOTE: **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 signs 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.

BEAUMONT/PORT ARTHUR, TX

JACK BROOKS RGNL (BPT)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 09351 (FAA)

NOTE: **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. **Rwy 34**, building 770' from DER, 386' right of centerline, 28' AGL/38' 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.

BRENHAM, TX

BRENHAM MUNI (11R)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 1 10042 (FAA)

NOTE: **Rwy 16**, trees and poles beginning 45' from DER, 272' right of centerline to 305' left of centerline, up to 89' AGL/299' MSL. **Rwy 34**, trees beginning 18' from DER, 325' right of centerline to 380' left of centerline, up to 61' AGL/351' MSL.

BRYAN, TX

COULTER FIELD (CFD)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 07186 (FAA)

NOTE: **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.

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

16315

CALDWELL, TX

CALDWELL MUNI (RWV)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 1 12264 (FAA)

TAKEOFF MINIMUMS: **Rwy 33**, 300-1 or std. w/min. climb of 778' per NM to 800.

NOTE: **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 10210 (FAA)

DEPARTURE PROCEDURE: **Rwy 17**, climb heading 167° to 1000 before turning right.

NOTE: **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 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.

NOTE: **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 100' AGL/220' MSL. Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

COLLEGE STATION, TX

EASTERWOOD FIELD (CLL)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 3 11097 (FAA)

TAKEOFF MINIMUMS: **Rwy 4**, 300-1½ or std. w/min. climb of 243' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 34**, climb heading 343° to 1000 before turning right.

NOTE: **Rwy 4**, trees beginning 247' from DER, 103' right of centerline, up to 75' AGL/384' MSL. Trees beginning 765' from DER, 120' left of centerline, up to 41' AGL/341' MSL. **Rwy 10**, multiple trees beginning 24' from DER, 251' right of centerline, up to 40' AGL/350' MSL. Multiple trees and OL on elevator beginning 498' from DER, 100' left of centerline, up to 66' AGL/366' MSL. **Rwy 16**, tree 969' from DER, 705' left of centerline, up to 75' AGL/374' MSL. **Rwy 22**, trees beginning 108' from DER, 83' right of centerline, up to 75' AGL/394' MSL. Trees beginning 124' from DER, 10' left of centerline, up to 75' AGL/384' MSL. **Rwy 28**, multiple trees beginning 474' from DER, 86' right of centerline, up to 75' AGL/404' MSL. Multiple trees and light poles beginning 187' from DER, 283' left of centerline, up to 75' AGL/404' MSL. **Rwy 34**, trees beginning 775' from DER, 474' right of centerline, up to 75' AGL/394' MSL. Vehicles on roads beginning 748' from DER, 97' right of centerline, up to 17' AGL/346' MSL. Trees and terrain beginning 136' from DER, 235' left of centerline, up to 50' AGL/380' MSL. Vehicles on road 1112' from DER, 175' left of centerline, up to 15' AGL/354' MSL.

CROCKETT, TX

HOUSTON COUNTY (DKR)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 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.

NOTE: **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

EAGLE LAKE (ELA)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 1 04330 (FAA)

TAKEOFF MINIMUMS: **Rwy 17**, 200-1, or std. with a min. climb of 420' per NM to 500.

NOTE: **Rwy 17**, tower 3068' from DER, 793' left of centerline, 192' AGL/317' MSL.

16315

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

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

16315

EDNA, TX

JACKSON COUNTY (26R)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 15344 (FAA)

NOTE: **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 13234 (FAA)

DEPARTURE PROCEDURE: **Rwy 32**, climb heading 318° to 800 before turning left.

NOTE: **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 10210 (FAA)

NOTE: **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.

HOUSTON, TX

DAVID WAYNE HOOKS MEMORIAL (DWH)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 3 08157 (FAA)

TAKEOFF MINIMUMS: **Rwys 17L, 35R**, NA- Environmental. **Waterways 17, 35**, NA- air traffic. NOTE: **Rwy 17R**, multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL. Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL. DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL. Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL. **Rwy 35L**, multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL. Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL. Multiple trees, towers and pole beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL. Vehicle and road 315' from DER, on centerline 15' AGL/166' MSL. Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

ELLINGTON (EFD)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 3 13010 (FAA)

TAKEOFF MINIMUMS: **Rwy 22**, 200-1/4 or std w/min. 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: **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, 1635' right of centerline, 159' AGL/192' MSL. **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 INTERCONTINENTAL/

HOUSTON (IAH)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 2 08157 (FAA)

NOTE: **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. **Rwy 15L**, multiple trees 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL. **Rwy 15R**, tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL. Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL. **Rwy 26R**, pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL. **Rwy 33R**, tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

16315

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

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

16315

HOUSTON, TX (CON'T)

HOUSTON EXECUTIVE (TME)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 07242 (FAA)

DEPARTURE PROCEDURE: **Rwy 36**, Climb heading 355° to 700 before turning east.
NOTE: **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 08157 (FAA)

DEPARTURE PROCEDURE: **Rwy 9**, climb heading 089° to 2000 before turning left. **Rwy 27**, climb heading 269° to 2200 before turning right.
NOTE: **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 hangars 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.

LONE STAR EXECUTIVE (CXO)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 3 10266 (FAA)

NOTE: **Rwy 1**, trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL. Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL. **Rwy 14**, trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL. Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL. **Rwy 19**, trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL. Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL. **Rwy 32**, trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL. Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

HOUSTON, TX (CON'T)

PEARLAND RGNL (LVJ)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 4 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.

NOTE: **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, 107' 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.

SUGAR LAND RGNL (SGR)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 7A 12264 (FAA)

DEPARTURE PROCEDURE: **Rwy 17**, climb heading 170° to 1500 before turning eastbound. **Rwy 35**, climb heading 350° to 1100 before turning southbound.

NOTE: **Rwy 17**, multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL. Railroad 110' from DER, 100' 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. **Rwy 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 12264 (FAA)

NOTE: **Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL. Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL. **Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

16315

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

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

16315

HOUSTON, TX (CON'T)

WILLIAM P. HOBBY (HOU)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 6B 16315 (FAA)

TAKEOFF MINIMUMS: **Rwy 4**, 300-1 or std. w/min.
climb of 270' per NM to 300. **Rwy 17**, 300-1. **Rwy 22**,
std. w/min. climb of 290' per NM to 1500.

DEPARTURE PROCEDURE: **Rwy 17**, climb heading
176° to 700 before turning westbound. **Rwys 30L**,
30R, climb heading 311° to 800 before turning
westbound.

NOTE: **Rwy 4**, pole 4403' from DER, 1609' right of
centerline, 121' AGL/166' MSL. Light on building 1562'
from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline,
139' AGL/174' MSL. Light on flagpole 4618' from
DER, 768' right of centerline, 117' AGL/161' MSL.
Rwy 13L, antenna on hanger 1548' from DER, 424'
left of centerline, 45' AGL/85' MSL. **Rwy 13R**, vehicle
and road 514' from DER, 543' right of centerline, 17'
AGL/55' MSL. Tree 1217' from DER, 756' right of
centerline, 43' AGL/89' MSL. Fence 85' from DER,
492' left of centerline, 4' AGL/45' MSL. Vehicle and
road 176' from DER, 497' left of centerline, 17'
AGL/55' MSL. Pole 1011' from DER, 696' left of
centerline, 33' AGL/73' MSL. Tree 1256' from DER,
783' left of centerline, 38' AGL/78' MSL. **Rwy 17**,
multiple poles beginning 606' from DER, 393' right of
centerline, up to 79' AGL/124' MSL. Crane 1795' from
DER, 689' right of centerline, 100' AGL/150' MSL. Ant
on building 620' from DER, 312' left of centerline, 27'
AGL/72' MSL. Multiple trees beginning 721' from
DER, 260' left of centerline, up to 71' AGL/116' MSL.
Radar fltr 1214' from DER, 258' left of centerline, 32'
AGL/77' MSL. **Rwy 22**, pole 727' from DER, 626'
right of centerline, 28' AGL/77' MSL. Tree 1310' from
DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on lt pole 1805' from DER, 968' right of
centerline, 60' AGL/109' MSL. **Rwy 31L**, antenna on
building 547' from DER, 274' right of centerline, 23'
AGL/69' MSL. Multiple poles beginning 341' from
DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of
centerline, up to 78' AGL/118' MSL. **Rwy 31R**, pole
1096' from DER, 785' right of centerline, 29' AGL/75'
MSL. Antenna on building 500' from DER, 525' left of
centerline, 33' AGL/69' MSL. **Rwy 35**, antenna on lt
pole 738' from DER, 519' right of centerline, 40'
AGL/86' MSL. Lt pole 1119' from DER, 353' right of
centerline, 31' AGL/77' MSL. Antenna on building 66'
from DER, 471' left of centerline, 33' 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 06047 (FAA)
DEPARTURE PROCEDURE: **Rwy 14**, climb via heading
135° to 1200 before proceeding on course.

JASPER, TX

JASPER COUNTY-BELL FIELD (JAS)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 09239 (FAA)

NOTE: **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, 6' 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 FIELD (45R)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 08045 (FAA)

NOTE: **Rwy 13**, Terrain 3' from DER, 81' right of
centerline, 0' AGL/69' MSL. Trees beginning 64' 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.

LA GRANGE, TX

FAYETTE RGNL AIR CENTER (3T5)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 08157 (FAA)
NOTE: **Rwy 16**, tree 140' from DER, 276' right of
centerline, 100' AGL/432' MSL. Tree 612' from DER, 551'
left of centerline, 100' AGL/422' MSL. Road with vehicle
942' from DER, 667' left of centerline, 15' AGL/350' MSL.

16315

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

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

16315

LA PORTE, TX

LA PORTE MUNI (T41)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 6 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.

NOTE: **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.

LIBERTY, TX

LIBERTY MUNI (T78)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 1 14149 (FAA)

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

NOTE: **Rwy 16**, hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL. Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL. Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL. Trees and poles 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.

16315

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

LIVINGSTON, TX

LIVINGSTON MUNI (00R)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 1 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.

NOTE: **Rwy 12**, trees beginning at DER, right and left 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.

LUFKIN, TX

ANGELINA COUNTY (LFK)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 07074 (FAA)

NOTE: **Rwy 7**, multiple trees and terrain beginning 75' from DER, 39' left of centerline, up to 85' AGL/381' MSL. Multiple trees beginning 148' from DER, 334' right of centerline, up to 75' AGL/371' MSL. **Rwy 15**, multiple trees beginning 261' from DER, 142' right of centerline, up to 53' AGL/327' MSL. Multiple trees and terrain beginning 21' from DER, 146' left of centerline, up to 53' AGL/327' MSL. **Rwy 25**, multiple trees beginning 1767' from DER, 283' right of centerline, up to 78' AGL/362' MSL. Multiple trees beginning 1366' from DER, 145' left of centerline, up to 69' AGL/353' MSL. **Rwy 33**, multiple trees and pole beginning 289' from DER, 247' right of centerline, up to 71' AGL/360' MSL. Multiple trees and road beginning 574' from DER, 4' left of centerline, up to 74' AGL/363' MSL.

MADISONVILLE, TX

MADISONVILLE MUNI (51R)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 12152 (FAA)

NOTE: **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 13010 (FAA)

NOTE: **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. Building 309' from DER, 100' left of centerline, 30' AGL/439' 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/469' 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

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

16315

MEXIA, TX

MEXIA-LIMESTONE CO (LXY)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 11125 (FAA)

TAKEOFF MINIMUMS: **Rwy 36**, 300-2¼ or std. w/min. climb of 212' per NM to 1000, or alternatively, with standard takeoff minimums and a normal 200' per NM wind gradient, takeoff must occur no later than 1600' prior to DER.

NOTE: **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

A L MANGHAM JR RGNL (OCH)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 2 12152 (FAA)

DEPARTURE PROCEDURE: **Rwy 36**, climb heading 359° to 1000 before turning right.

NOTE: **Rwy 18**, 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, 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 84033 (FAA)

DEPARTURE PROCEDURE: **Rwy 35**, climb runway heading to 2100 before turning eastbound.

ORANGE, TX

ORANGE COUNTY (ORG)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 09295 (FAA)

TAKEOFF MINIMUMS: **Rwy 4**, 400-1¼ or std. w/min. climb of 425' per NM to 500. **Rwys 13, 31**, NA-Environmental.

NOTE: **Rwy 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. **Rwy 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 16147 (FAA)

DEPARTURE PROCEDURE: **Rwy 8**, climbing right turn heading 125° to 1800 before proceeding on course.

Rwy 13, climb heading 132° to 1100 before turning left.
Rwy 36, climb heading 357° to 1100 before turning right.
NOTE: **Rwy 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 2 04274 (FAA)

TAKEOFF MINIMUMS: **Rwy 9**, std. with a min. climb of 313' per NM to 1200, or 600-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 9**, for climb in visual conditions: cross Palestine Municipal Airport at or above 1200.

NOTE: **Rwy 9**, multiple trees and terrain beginning 1.5 NM from DER, 2404' left of centerline, up to 100' AGL/739' MSL. Terrain 1.6 NM from DER, 1545' right of centerline, 601' MSL.

VICTORIA, TX

VICTORIA RGNL (VCT)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 1 12152 (FAA)

TAKEOFF MINIMUMS: **Rwys 6, 24**, NA - environmental.

NOTE: **Rwy 13R**, poles, railroad, and tower beginning 796' from DER, 61' right of centerline, up to 59' AGL/161' MSL. Hopper and tank beginning 1124' from DER, 407' left of centerline, up to 32' AGL/134' MSL.

Rwy 18, DME on building 588' from DER, 414' left centerline, 15' AGL/118' MSL. **Rwy 36**, bush 104' from DER, 165' right of centerline, 10' AGL/116' MSL.

WHARTON, TX

WHARTON RGNL (ARM)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 09239 (FAA)

NOTE: **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, 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.

16315

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



INSTRUMENT APPROACH PROCEDURE CHARTS



IFR ALTERNATE AIRPORT MINIMUMS

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

NAME ALTERNATE MINIMUMS

ANGLETON/LAKE JACKSON, TX
TEXAS GULF
COAST RGNL (LBX) ILS or LOC Rwy 17
RNAV (GPS) Rwy 17
RNAV (GPS) Rwy 35
NA when local weather not available.

BAY CITY, TX

BAY CITY MUNI (BYY) RNAV (GPS) Rwy 13^1
RNAV (GPS) Rwy 31^1
VOR/DME-A^2
^1NA when local weather not available.
^2Categories A, B, 1100-2; Category C, 1100-3.

BEAUMONT/PORT ARTHUR, TX

JACK BROOKS
RGNL (BPT) ILS or LOC Rwy 12^12
LOC BC Rwy 30^23
RNAV (GPS) Rwy 12^4
RNAV (GPS) Rwy 16^4
RNAV (GPS) Rwy 30^4
RNAV (GPS) Rwy 34^4
VOR/DME Rwy 34^4
VOR Rwy 12^4

NA when local weather not available.
^1ILS, LOC, Categories A, B, 900-2; Category C, D, 900-2½; Category E, 900-2¾.
^2NA when control tower closed.
^3Category D, 800-2¼; Category E, 900-2¾.
^4Category E, 900-2¾.

BRENHAM, TX

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

NAME ALTERNATE MINIMUMS

CALDWELL, TX
CALDWELL
MUNI (RWV) RNAV (GPS) Rwy 15
RNAV (GPS) Rwy 33
VOR/DME-A
NA when local weather not available.

CLEVELAND, TX

CLEVELAND
MUNI (6R3) RNAV (GPS) Rwy 16
NA when local weather not available.

COLLEGE STATION, TX

EASTERWOOD
FIELD (CLL) ILS or LOC Rwy 34^12
LOC BC Rwy 16^23
RNAV (GPS) Rwy 10^34
RNAV (GPS) Rwy 16^34
RNAV (GPS) Rwy 28^34
RNAV (GPS) Rwy 34^34
VOR/DME Rwy 28^5
VOR or TACAN Rwy 10^3

^1ILS, Category D, 700-2¼; Category E, 900-3.
LOC, Category D, 800-2¼; Category E, 900-3.
^2NA when control tower closed.
^3Category D, 800-2¼; Category E, 900-3.
^4NA when local weather not available.
^5Category D, 800-2¼.

CROCKETT, TX

HOUSTON
COUNTY (DKR) RNAV (GPS) Rwy 2
RNAV (GPS) Rwy 20
NA when local weather not available.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017





ALTERNATE MINS

16315

M2



NAME **ALTERNATE MINIMUMS**

GALVESTON, TX
 SCHOLES INTL
 AT GALVESTON (GLS) **RNAV (GPS) Rwy 14**
 RNAV (GPS) Rwy 18
 RNAV (GPS) Rwy 32
 RNAV (GPS) Rwy 36

Category E 800-2¼.

GIDDINGS, TX
 GIDDINGS-
 LEE COUNTY (GYB)..... **RNAV (GPS) Rwy 17**
 RNAV (GPS) Rwy 35

NA when local weather not available.

HEARNE, TX
 HEARNE MUNI (LHB) **RNAV (GPS) Rwy 18**
 RNAV (GPS) Rwy 36

NA when local weather not available.

HOUSTON, TX
 DAVID WAYNE HOOKS
 MEMORIAL (DWH) **RNAV (GPS) Rwy 17R**
 RNAV (GPS) Rwy 35L

NA when local weather not available.

ELLINGTON (EFD)..... **ILS or LOC Rwy 17R**¹
 ILS or LOC Rwy 35L²
 RNAV (GPS) Rwy 4³
 RNAV (GPS) Rwy 17R³
 RNAV (GPS) Rwy 22³
 RNAV (GPS) Rwy 35L³

¹Categories A, B, 1100-2, Categories C, D, E, 1100-3
²ILS, Category E, 700-2¼. LOC, Category E, 800-2¼.
³Category E, 800-2¼.

GEORGE BUSH INTERCONTINENTAL/
 HOUSTON (IAH) **ILS or LOC Rwy 8R**¹
 ILS or LOC Rwy 26L²

¹ILS, LOC, Categories A, B, 900-2; Categories C, D, E, 900-2½.
²ILS, Categories A, B, 800-2; Categories C, D, E, 800-2½; LOC, Categories C, D, E, 800-2½.

LONE STAR
 EXECUTIVE (CXO) **NDB Rwy 14**¹
 RNAV (GPS) Rwy 1
 RNAV (GPS) Rwy 14¹
 RNAV (GPS) Rwy 19
 RNAV (GPS) Rwy 32¹

NA when local weather not available.
¹Category D, 800-2¼.

PEARLAND RGNL (LVJ).... **RNAV (GPS) Rwy 32**
VOR-B

NA when local weather not available.

NAME **ALTERNATE MINIMUMS**

HOUSTON, TX (CON'T)
 SUGAR LAND
 RGNL (SGR) **ILS or LOC Rwy 35**¹²
 RNAV (GPS) Rwy 17
 RNAV (GPS) Rwy 35
 VOR/DME-A

NA when local weather not available.
¹NA when control tower closed.
²ILS, Categories A, B, C, D, 700-2.

WILLIAM P
 HOBBY (HOU) **ILS or LOC Rwy 4**²
 ILS or LOC Rwy 13R⁴
 ILS or LOC Rwy 31L⁵
 LOC Rwy 22¹
 RNAV (GPS) Rwy 4³
 RNAV (GPS) Rwy 13R³
 RNAV (GPS) Rwy 22¹
 RNAV (GPS) Rwy 31L⁶

¹Category E, 900-3.
²ILS, Category D, 700-2¼; Category E, 900-3. LOC, Category D, 800-2¼; Category E, 900-3.
³Categories C, D, 800-2¼; Category E, 900-3.
⁴ILS, Categories C, D, 700-2¼; Category E, 900-3. LOC, Categories C, D, 800-2¼; Category E, 900-3.
⁵ILS, Categories C, D, 700-2¼. LOC, Categories C, D, 800-2¼.
⁶Categories C, D, 800-2¼;

HUNTSVILLE, TX
 HUNTSVILLE
 MUNI (UTS) **RNAV (GPS) Rwy 18**
VOR/DME-A

NA when local weather not available.

JACKSONVILLE, TX
 CHEROKEE
 COUNTY (JSO) **RNAV (GPS) Rwy 14**
 RNAV (GPS) Rwy 32
 VOR /DME Rwy 14

NA when local weather not available.

JASPER, TX
 JASPER COUNTY-
 BELL FIELD (JAS) **RNAV (GPS) Rwy 18**
 RNAV (GPS) Rwy 36

NA when local weather not available.

LA GRANGE, TX
 FAYETTE RGNL
 AIR CENTER (3T5)..... **RNAV (GPS) Rwy 16**
 RNAV (GPS) Rwy 34

NA when local weather not available.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



ALTERNATE MINS

16315

M2

SC-5





16315

NAME	ALTERNATE MINIMUMS	NAME	ALTERNATE MINIMUMS
------	--------------------	------	--------------------

LUFKIN, TX

ANGELINA COUNTY (LFK) **VOR Rwy 33**
NA when local weather not available.

NACOGDOCHES, TX

A L MANGHAM
JR RGNL (OCH)..... **RNAV (GPS) Rwy 36**
NA when local weather not available.

ORANGE, TX

ORANGE
COUNTY (ORG)..... **RNAV (GPS) Rwy 22**
VOR/DME Rwy 22
NA when local weather not available.

PALACIOS, TX

PALACIOS
MUNI (PSX)..... **RNAV (GPS) Rwy 13**
NA when local weather not available.

PALESTINE, TX

PALESTINE
MUNI (PSN) **RNAV (GPS) Rwy 18**
RNAV (GPS) Rwy 36
NA when local weather not available.

PORT LAVACA, TX

CALHOUN
COUNTY (PKV)..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

VICTORIA, TX

VICTORIA
RGNL (VCT)..... **RNAV (GPS) Rwy 13L**
RNAV (GPS) Rwy 31R
VOR Rwy 13L
VOR/DME Rwy 31R
NA when local weather not available.

WHARTON, TX

WHARTON
RGNL (ARM)..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
VOR/DME-A
NA when local weather not available.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



16315

**THERE ARE NO RADAR PROCEDURES
FOR SOUTHEAST TEXAS (SC-5)**

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5

12264

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.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	AVBL LDG DIST
HOUSTON, TX			
GEORGE BUSH INTERCONTINENTAL/ HOUSTON (IAH)	26L 08R	TWY NE TWY NP	9,010 feet 9,019 feet

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

12264

16315

HOT SPOTS

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

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

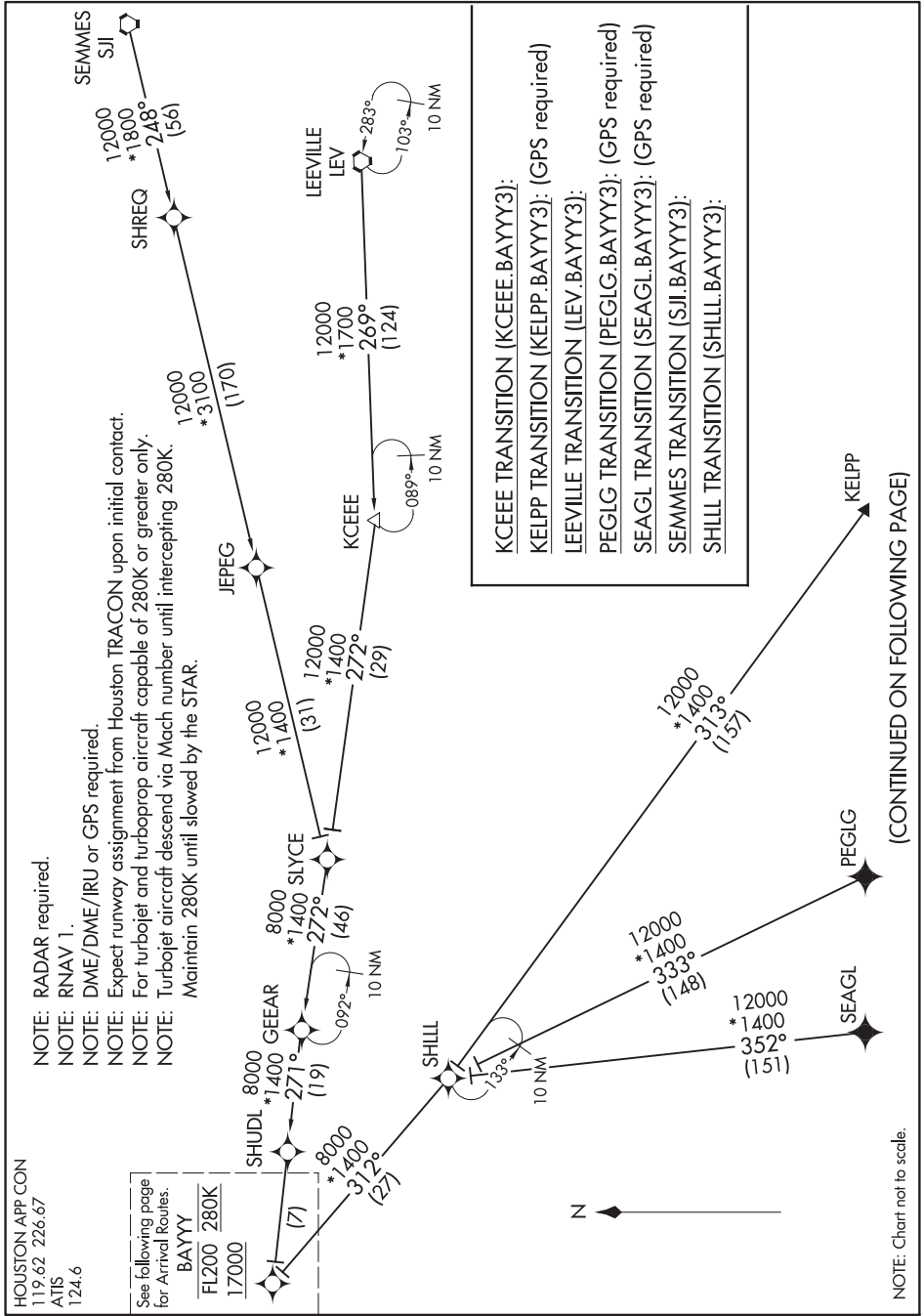
CITY/AIRPORT	HOT SPOT	DESCRIPTION*
BEAUMONT/PORT ARTHUR, TX JACK BROOKS RGNL (BPT)	HS 1	South end of Twy B not visible from control twr.
HOUSTON, TX DAVID WAYNE HOOKS MEMORIAL (DWH)	HS 1 HS 2 HS 3	Ramp A and Twy C at Rwy 17R. Twy E, Twy D, Twy K at Rwy 17L. Twy E at Rwy 17R-35L.
HOUSTON, TX LONE STAR EXECUTIVE (CXO)	HS 1	Twy F west of Twy D.
HOUSTON, TX SUGAR LAND RGNL (SGR)	HS 1	Twy C int with Twy F, Twy C2 from Rwy 17-35.
HOUSTON, TX WILLIAM P. HOBBY (HOU)	HS 1 HS 2 HS 3	Twy D at Rwy 13L, Rwy 17, & Rwy 13R. Twy G at Rwy 13R. Twy K1 at Rwy 35 & Rwy 04.

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

16315

BAYYY THREE ARRIVAL (RNAV) Transition Routes

SC-5, 10 NOV 2016 to 05 JAN 2017



BAYYY THREE ARRIVAL (RNAV) Transition Routes

(CONTINUED ON FOLLOWING PAGE)

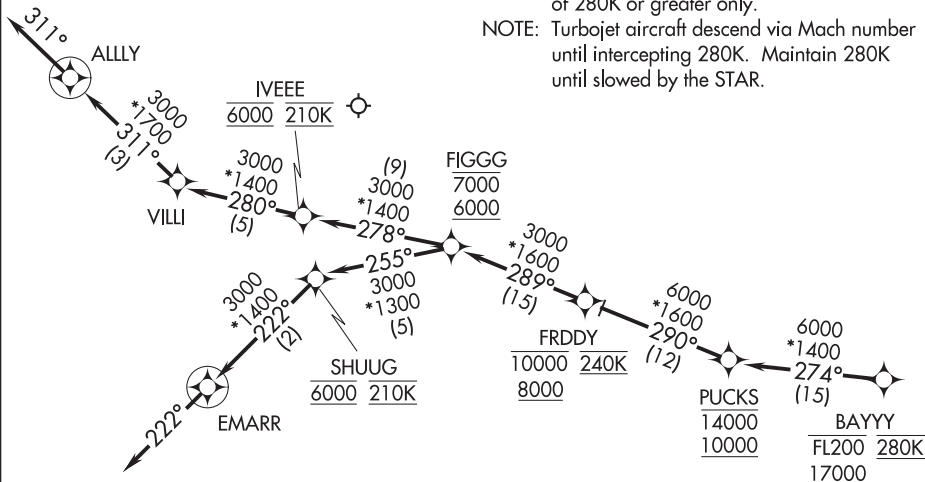
SC-5, 10 NOV 2016 to 05 JAN 2017

BAYYY THREE ARRIVAL (RNAV) Arrival Routes

HOUSTON, TEXAS

HOUSTON APP CON
119.62 226.67
ATIS
124.6

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

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 vectors to final approach course.

LANDING RUNWAYS 13L/R, 17: 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 IVEE at 6000 and at 210K, then on track 280° to VILLI, then on track 311° to ALLY, then on track 311°. Expect vectors to final approach course.

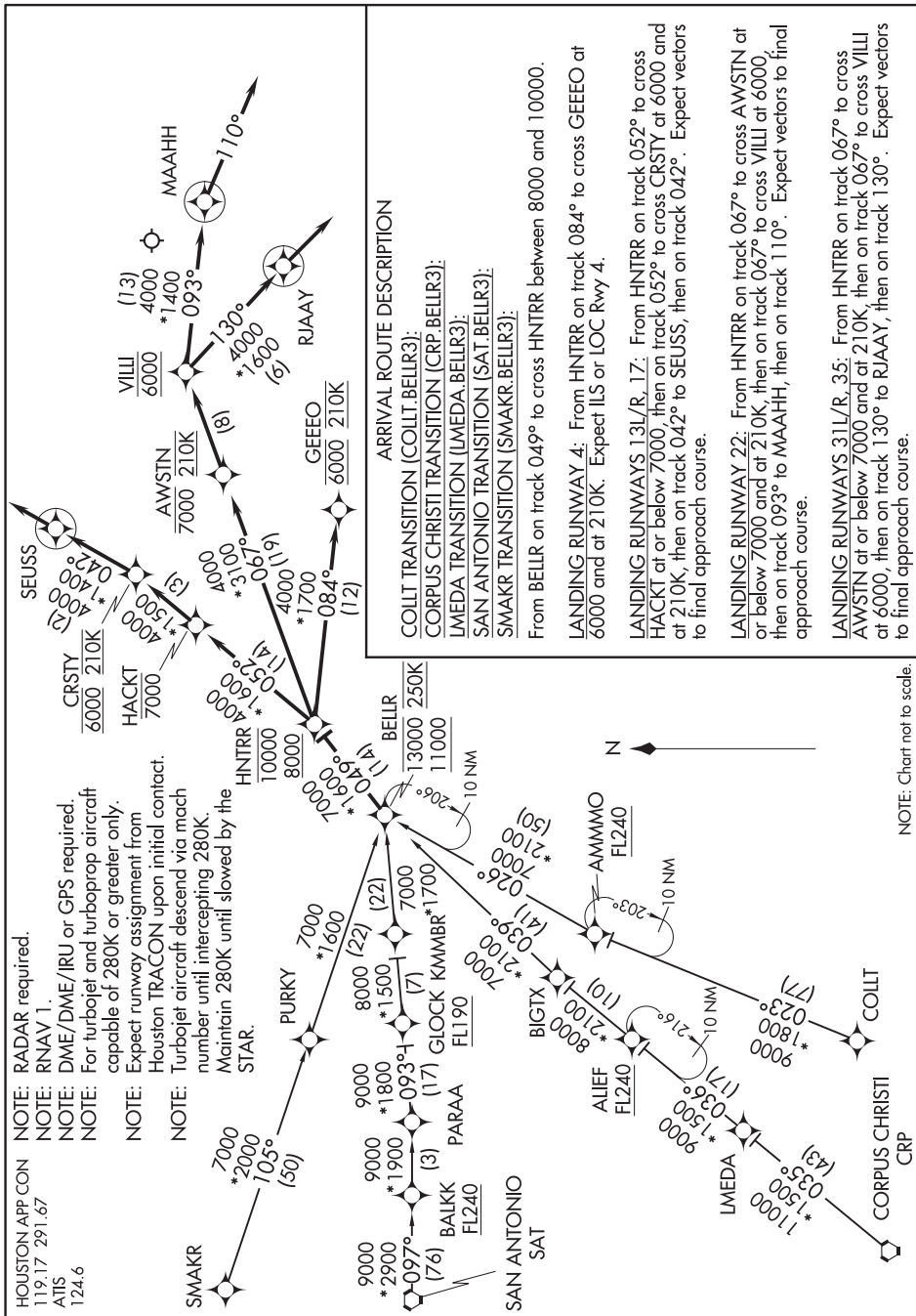
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BELL THREE ARRIVAL (RNAV)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



BELL THREE ARRIVAL (RNAV)

(BELLR.BELLR3) 10NOV16

HOUSTON, TEXAS

WILLIAM P. HOBBY (HOU)

SC-5, 10 NOV 2016 to 05 JAN 2017

BLUBELL THREE ARRIVAL

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL ROUTE DESCRIPTION

ELLVR TRANSITION (ELLVR.BLUBL3): From over ELLVR INT via CLL R-334 to CLL VORTAC, then on CLL R-153 to BLUBL INT. Thence

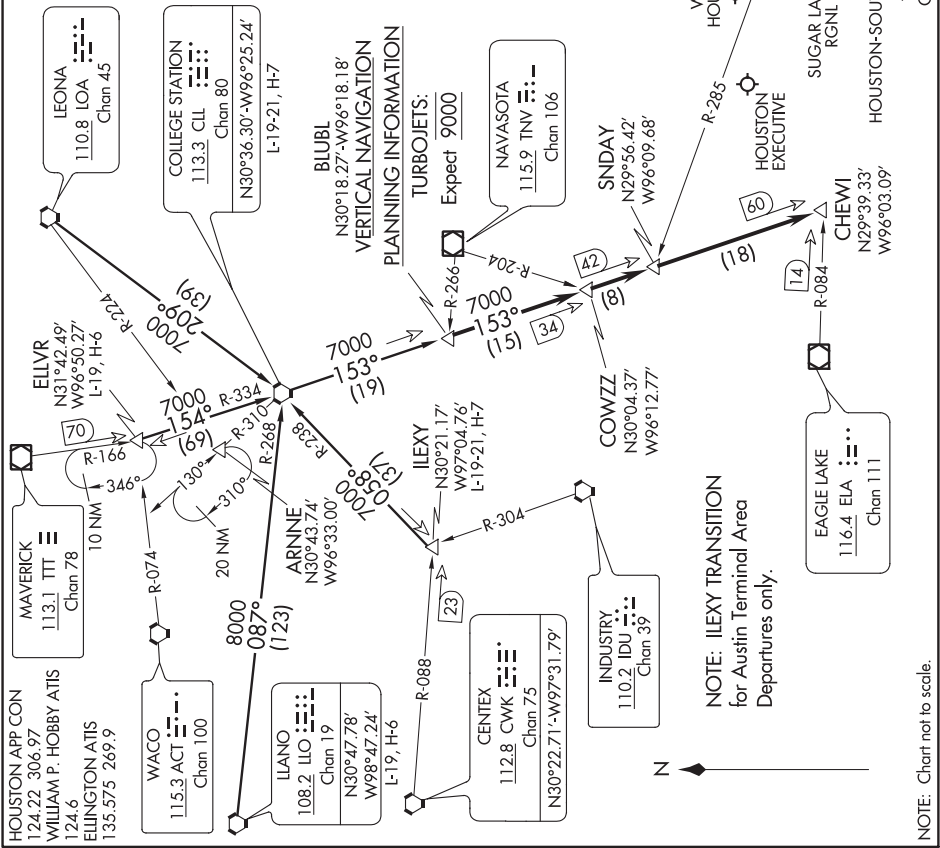
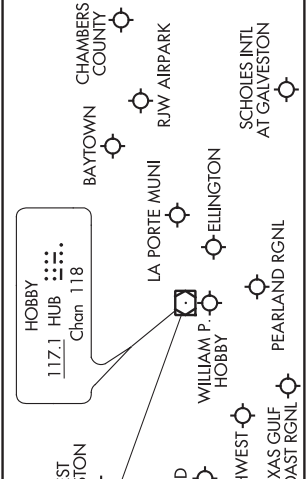
COLLEGE STATION TRANSITION (CLL.BLUBL3): From over CLL VORTAC on CLL R-153 to BLUBL INT. Thence

LEONA TRANSITION (LOA.BLUBL3): From over LOA VORTAC on R-209 to CLL VORTAC, then on CLL R-153 to BLUBL INT. Thence

IILEXY TRANSITION (IILEXY.BLUBL3): From over IILEXY INT via CLL R-238 to CLL VORTAC, then on CLL R-153 to BLUBL INT. Thence

LLANO TRANSITION (LLO.BLUBL3): From over LLO VORTAC on LLO R-087 via CLL R-268 to CLL VORTAC, then on CLL R-153 to BLUBL INT. Thence

From over BLUBL INT on CLL R-153 to COWZZ INT, to SNDAY INT, to CHEWI INT. Expect vectors to final approach course at or prior to CHEWI INT.



SC-5, 10 NOV 2016 to 05 JAN 2017

BLUBELL THREE ARRIVAL

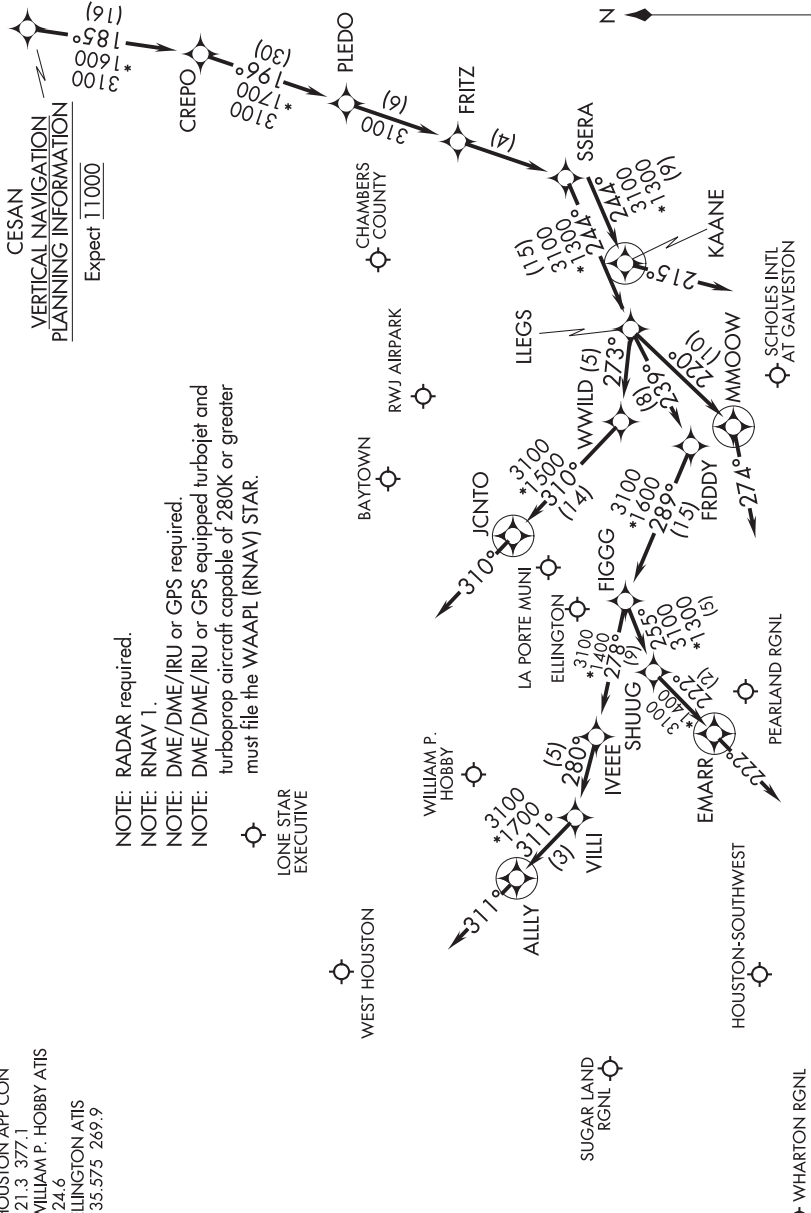
HOUSTON, TEXAS

NOTE: Chart not to scale.

CESAN THREE ARRIVAL (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON APP CON
121.3 377.1
WILLIAM P. HOBBY ATIS
124.6
ELLINGTON ATIS
135.575 269.9



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

CESAN THREE ARRIVAL (RNAV)

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 LLEGS, then on track 239° 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 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 LLEGS, 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 LLEGS, then on track 273° to WWILD, then on track 310° to JCNT0, 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 LLEGS, 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL ROUTE DESCRIPTION

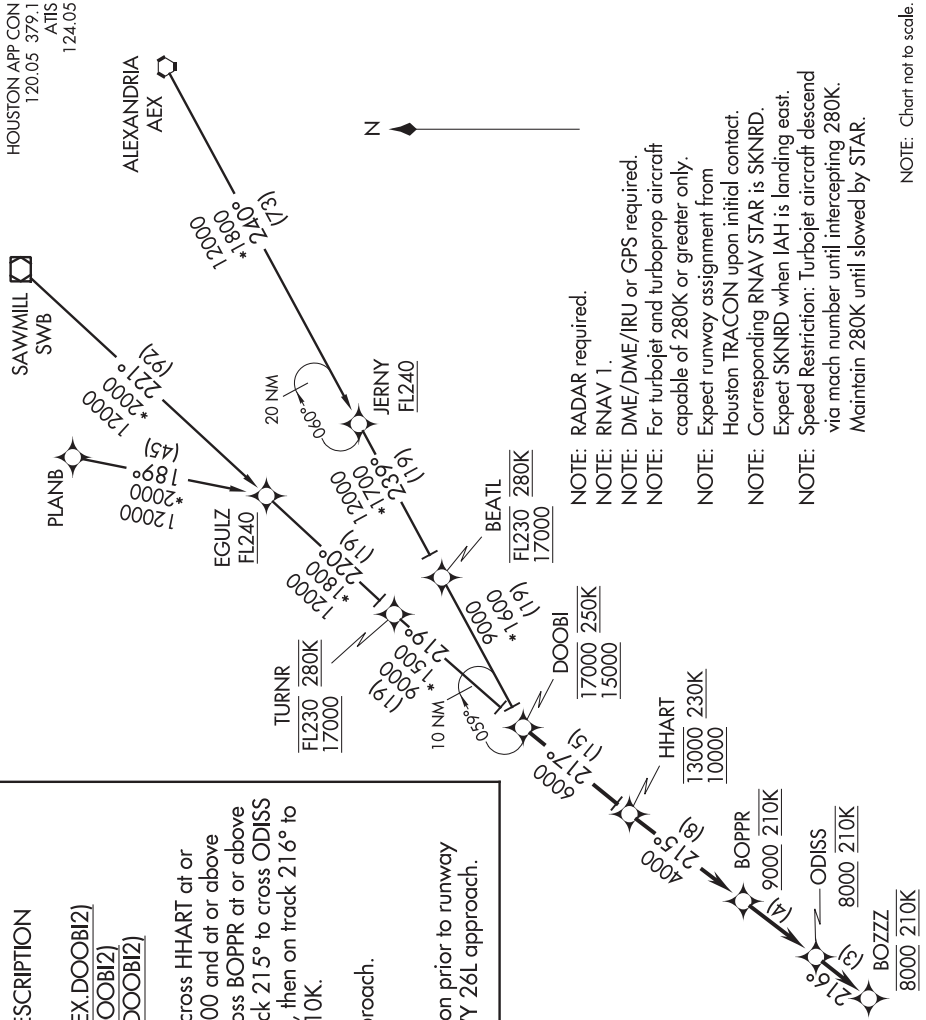
- ALEXANDRIA TRANSITION (AEX.DOOB12)
- PLANB TRANSITION (PLANB.DOOB12)
- SAWMILL TRANSITION (SWB.DOOB12)

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.

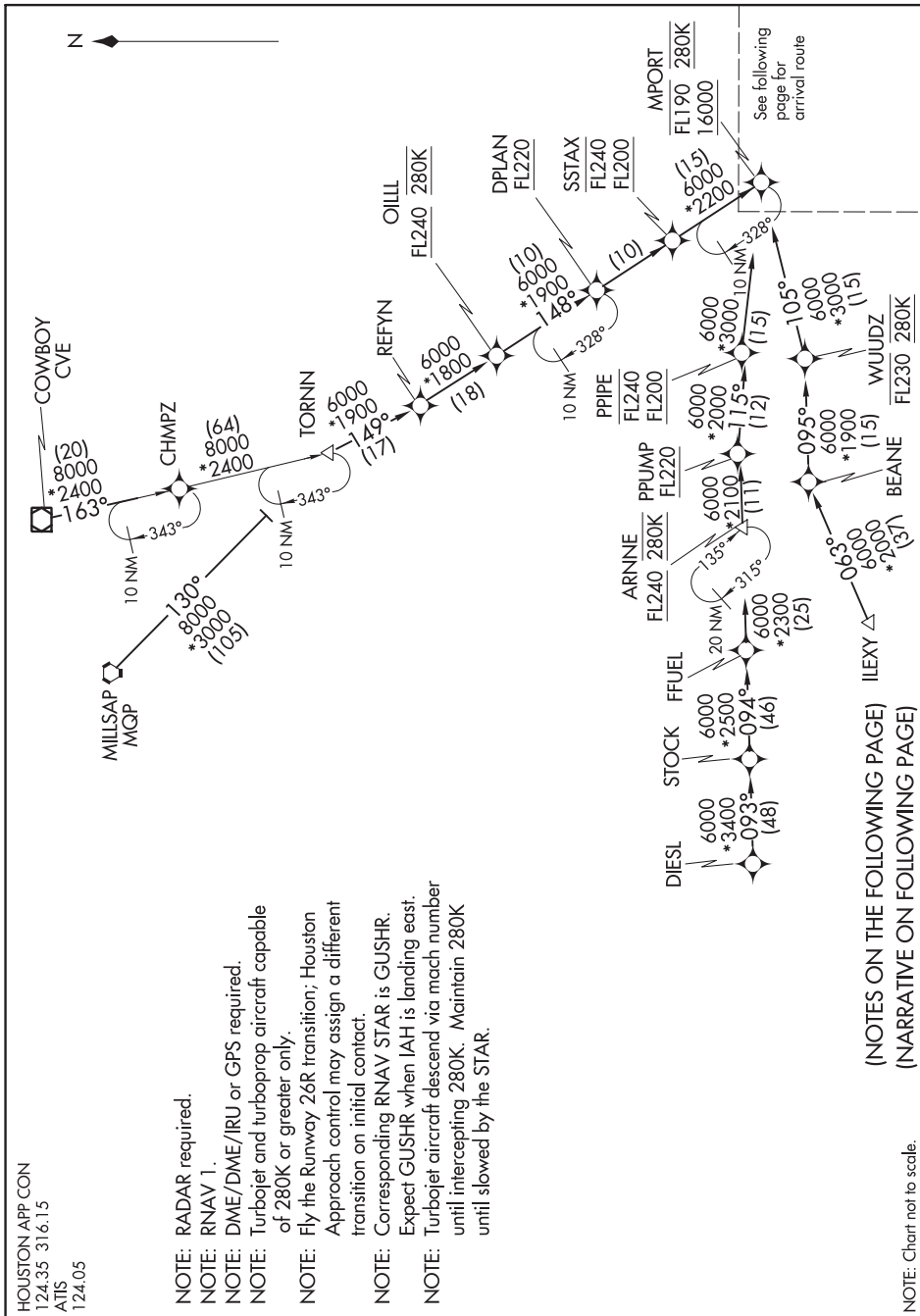


- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: For turbojet and turboprop aircraft capable of 280K or greater only.
- NOTE: Expect runway assignment from Houston TRACON upon initial contact.
- NOTE: Corresponding RNAV STAR is SKNRD.
- NOTE: Expect SKNRD when IAH is landing east.
- NOTE: Speed Restriction: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by STAR.

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



HOUSTON APP CON
 124.35 316.15
 ATIS
 124.05

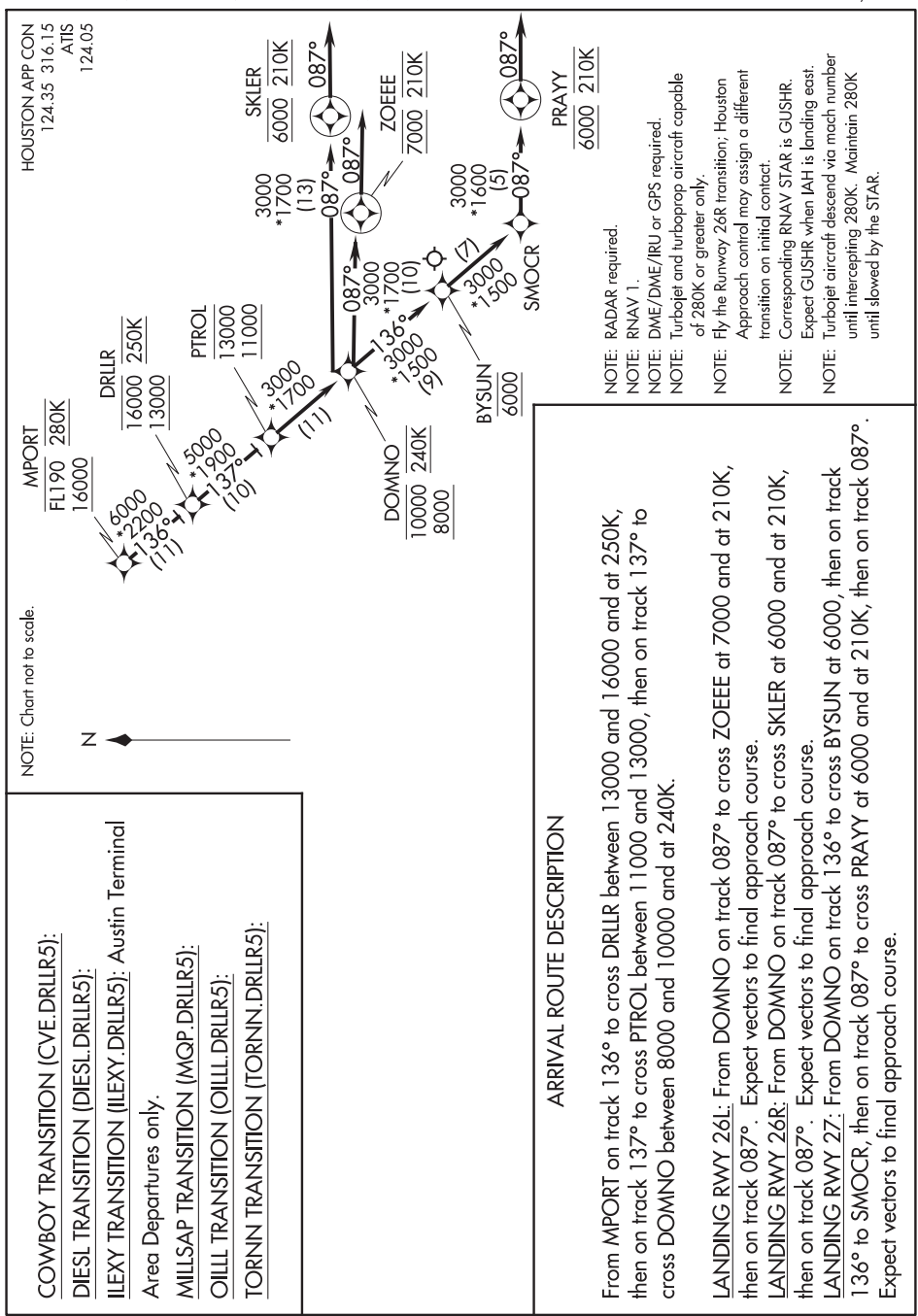
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: Turbojet and turboprop aircraft capable of 280K or greater only.
- NOTE: Fly the Runway 26R transition; Houston Approach control may assign a different transition on initial contact.
- NOTE: Corresponding RNAV STAR is GUSHR.
- NOTE: Expect GUSHR when IAH is landing east.
- NOTE: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.

(NOTES ON THE FOLLOWING PAGE)
 (NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

(MPORT.DRLLR5) 16203 ST-5461 (FAA) GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
DRLLR FIVE ARRIVAL (RNAV) Arrival Routes HOUSTON, TEXAS



COWBOY TRANSITION (CVE.DRLLR5):
DIESEL TRANSITION (DIESL.DRLLR5):
IILEXY TRANSITION (IILEXY.DRLLR5): Austin Terminal
 Area Departures only.
MILLSAP TRANSITION (MQP.DRLLR5):
OIILL TRANSITION (OIILL.DRLLR5):
TORNN TRANSITION (TORNN.DRLLR5):

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.

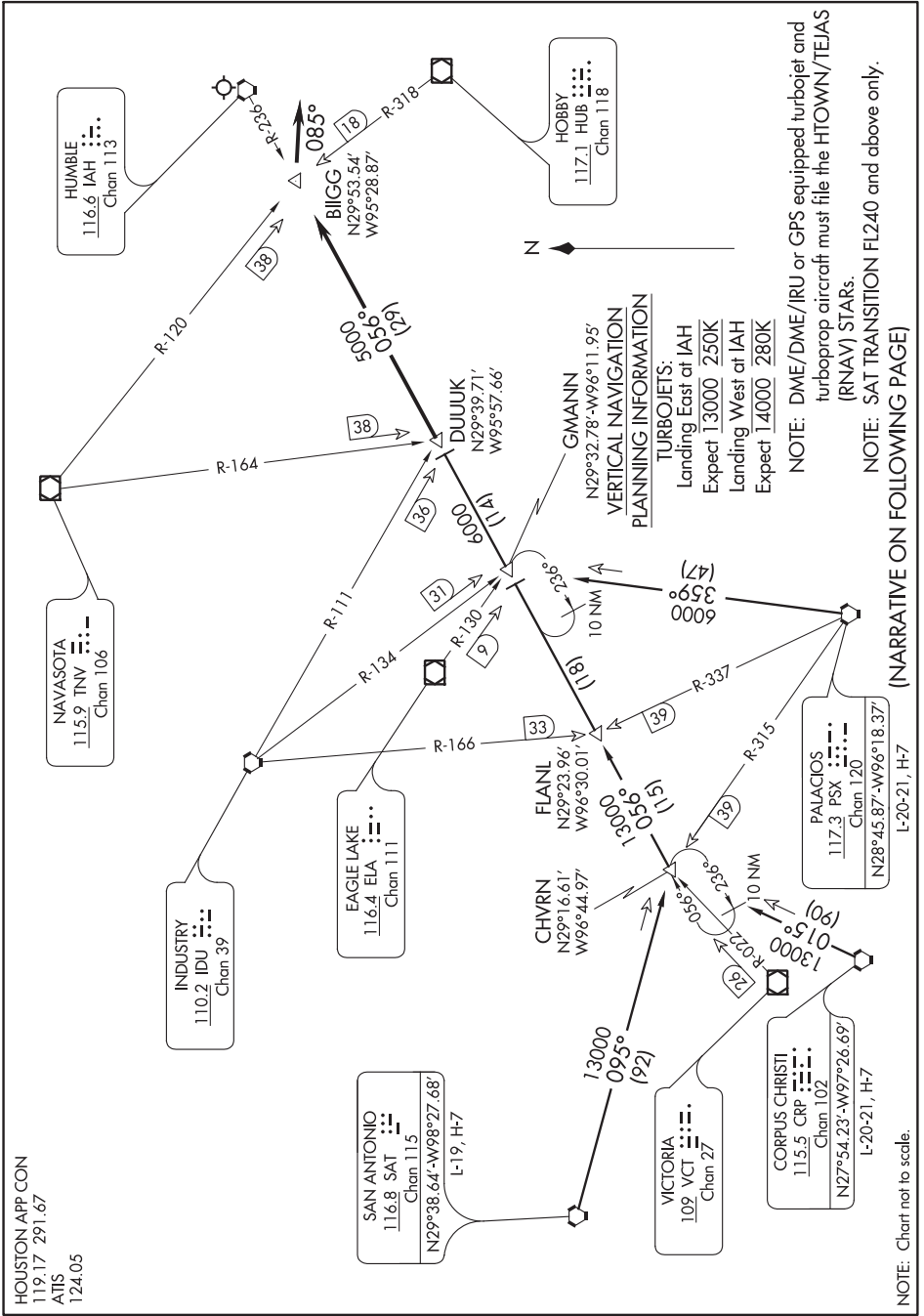
LANDING RWY 26L: From DOMNO on track 087° to cross ZOEFE at 7000 and at 210K, then on track 087°. Expect vectors to final approach course.

LANDING RWY 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 RWY 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: 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: Expect GUSHR when IAH is landing east.
- NOTE: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.

SC-5, 10 NOV 2016 to 05 JAN 2017



SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL ROUTE DESCRIPTION

SAN ANTONIO TRANSITION (SAT.DUUUK2): From over SAT VORTAC via SAT R-095 to CHVRN INT, then via IAH R-236 to DUUUK INT.

Thence

CORPUS CHRISTI TRANSITION (CRP.DUUUK2): From over CRP VORTAC via CRP R-015 to CHVRN INT, then via IAH R-236 to DUUUK INT.

Thence

PALACIOS TRANSITION (PSX.DUUUK2): From over PSX VORTAC via PSX R-359 to GMANN INT, then via IAH R-236 to DUUUK INT.

Thence

. . . . From over DUUUK via IAH R-236 to BIIGG INT. Depart BIIGG heading 085° for vectors to final approach course.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON APP CON
120.05 379.1
ATIS
124.05

NOTE: RADAR required.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: Turbojet and turboprop aircraft only.

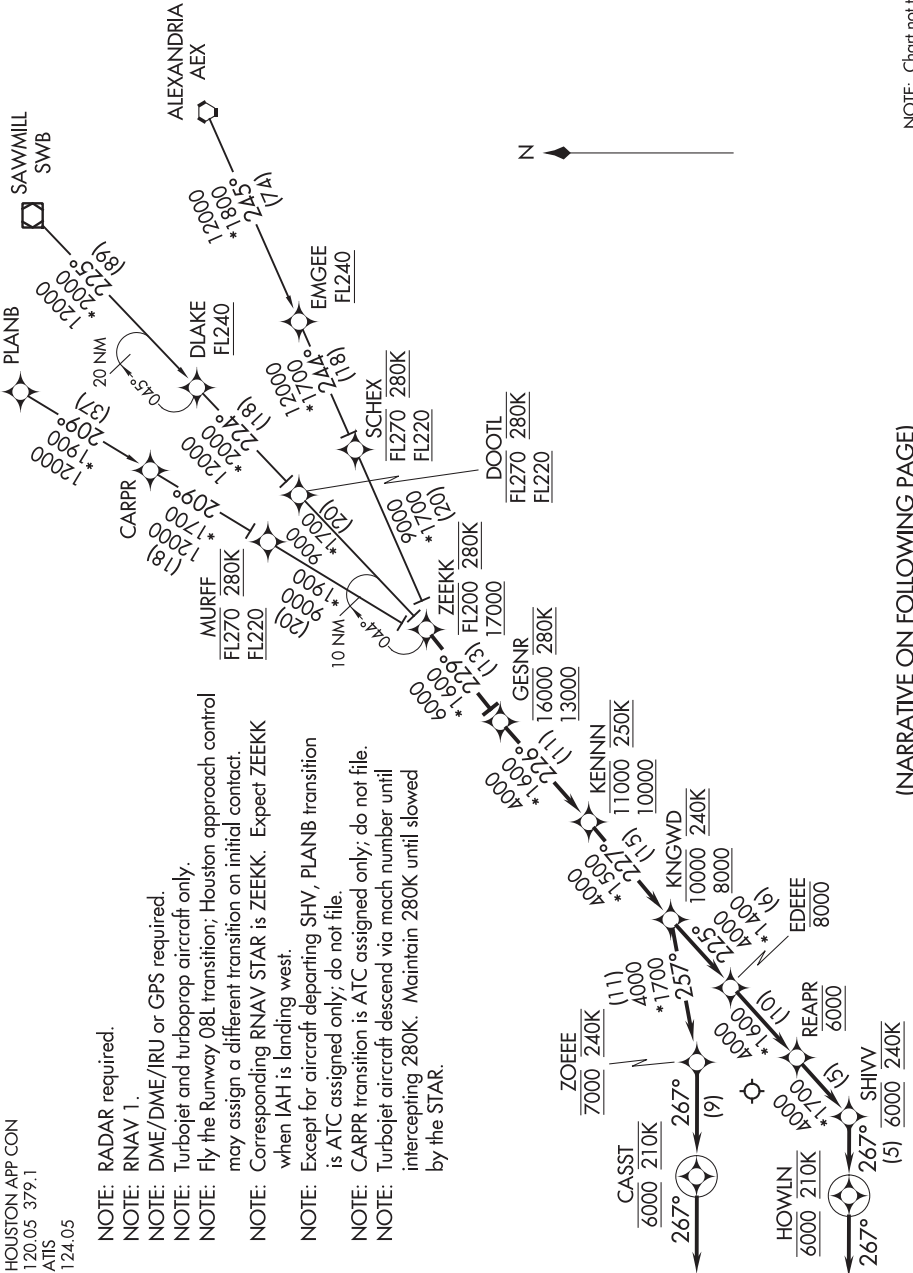
NOTE: Fly the Runway 08L transition; Houston approach control may assign a different transition on initial contact.

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: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

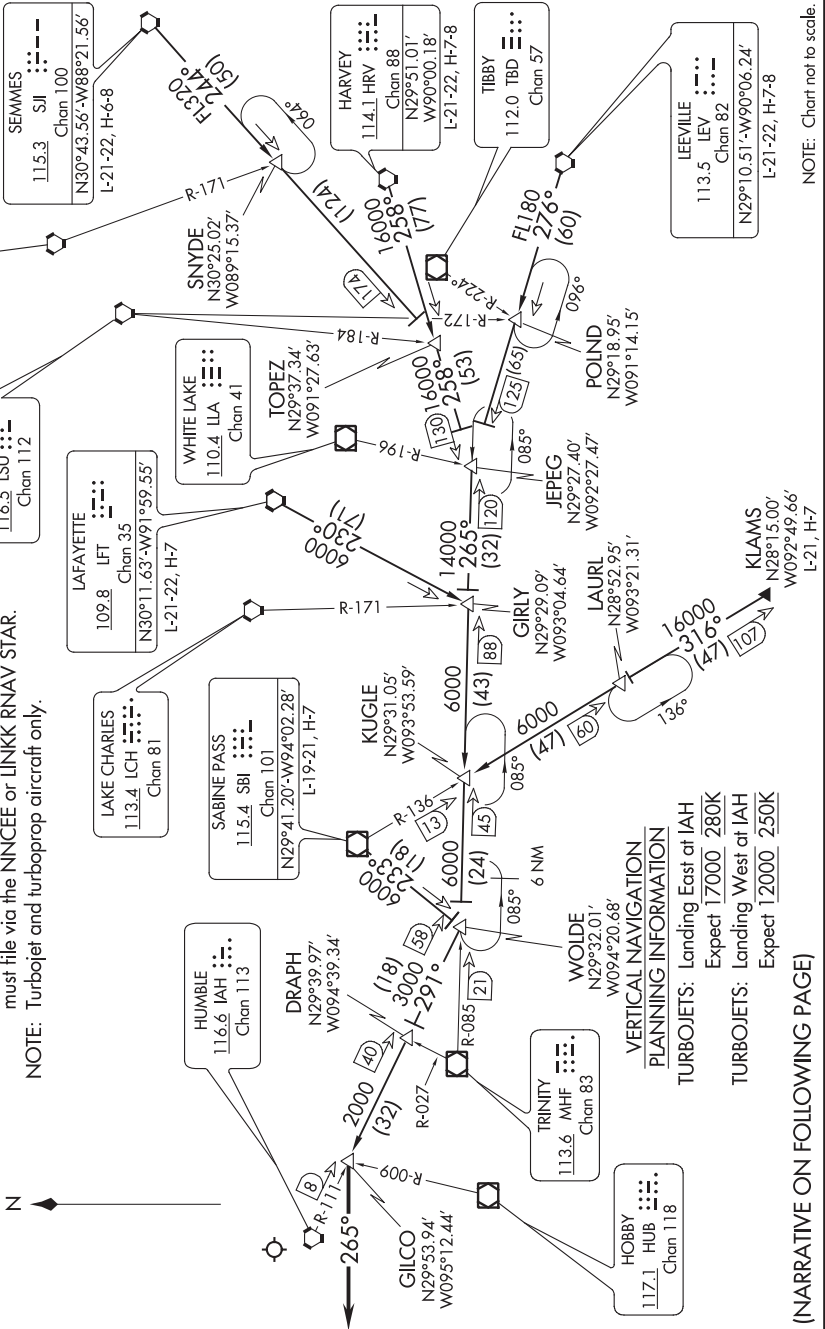
SC-5, 10 NOV 2016 to 05 JAN 2017

GILCO FOUR ARRIVAL

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON APP CON
119.62 226.67
ATIS
124.05

NOTE: For conventional navigation aircraft only.
DME/DME/IRU or GPS equipped aircraft
must file via the NNCEE or LINKK RNAV STAR.
NOTE: Turbojet and turboprop aircraft only.



NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

GILCO FOUR ARRIVAL

ARRIVAL ROUTE DESCRIPTION

HARVEY TRANSITION (HRV.GILCO4): From over HRV VORTAC on HRV R-258 to JEPEG INT, then on MHF R-085 to WOLDE INT, then on IAH R-111 to GILCO INT. Thence

JEPEG TRANSITION (JEPEG.GILCO4): From over JEPEG INT on MHF R-085 to WOLDE INT, then on IAH R-111 to GILCO INT. Thence

KLAMS TRANSITION (KLAMS.GILCO4): (DME Required). From over KLAMS INT on SBI R-136 to KUGLE INT, then on MHF R-085 to WOLDE INT, then on IAH R-111 to GILCO INT. Thence

LAFAYETTE TRANSITION (LFT.GILCO4): From over LFT VORTAC on LFT R-230 to GIRLY INT, then on MHF R-085 to WOLDE INT, then on IAH R-111 to GILCO INT. Thence

LEEVILLE TRANSITION (LEV.GILCO4): From over LEV VORTAC on LEV R-276 to JEPEG INT, then on MHF R-085 to WOLDE INT, then on IAH R-111 to GILCO INT. Thence

SABINE PASS TRANSITION (SBI.GILCO4): (ATC assigned only. DO NOT FILE). From over SBI VOR/DME on SBI R-233 to WOLDE INT, then on IAH R-111 to GILCO INT. Thence

SEMMES TRANSITION (SJI.GILCO4): From SJI VORTAC on SJI R-244 to TOPEZ INT, then on HRV R-258 to JEPEG INT, then on MHF R-085 to WOLDE INT, then on IAH R-111 to GILCO INT. Thence

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH):

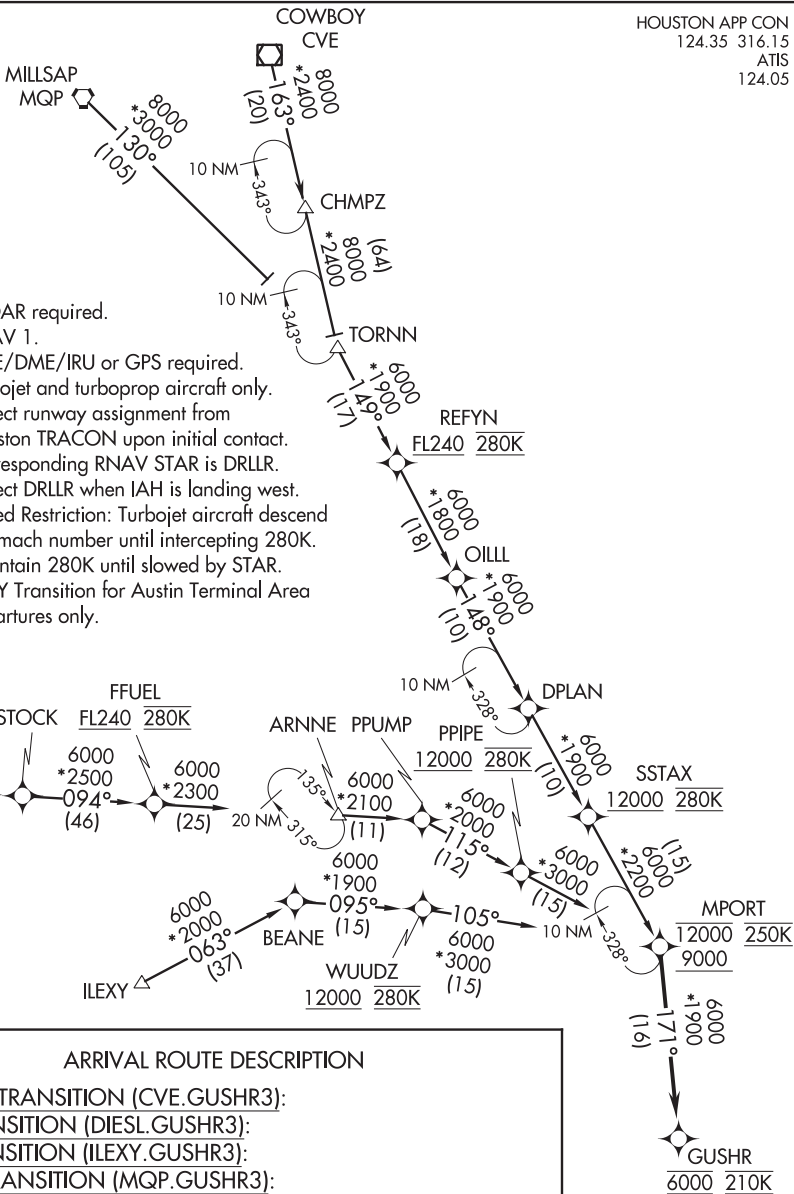
LANDING RUNWAYS 8L/R, 9:
. . . . From GILCO INT fly heading 265° for vectors to final approach course.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON APP CON
124.35 316.15
ATIS
124.05



- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: Turbojet and turboprop aircraft only.
- NOTE: Expect runway assignment from Houston TRACON upon initial contact.
- NOTE: Corresponding RNAV STAR is DRLLR. Expect DRLLR when IAH is landing west.
- NOTE: Speed Restriction: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by STAR.
- NOTE: ILEXY Transition for Austin Terminal Area departures only.

ARRIVAL ROUTE DESCRIPTION

- COWBOY TRANSITION (CVE.GUSHR3):
- DIESEL TRANSITION (DIESEL.GUSHR3):
- ILEXY TRANSITION (ILEXY.GUSHR3):
- MILLSAP TRANSITION (MQP.GUSHR3):
- OILL TRANSITION (OILL.GUSHR3):
- TORNN TRANSITION (TORNN.GUSHR3):

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(GMANN.HTOWN2) 15008

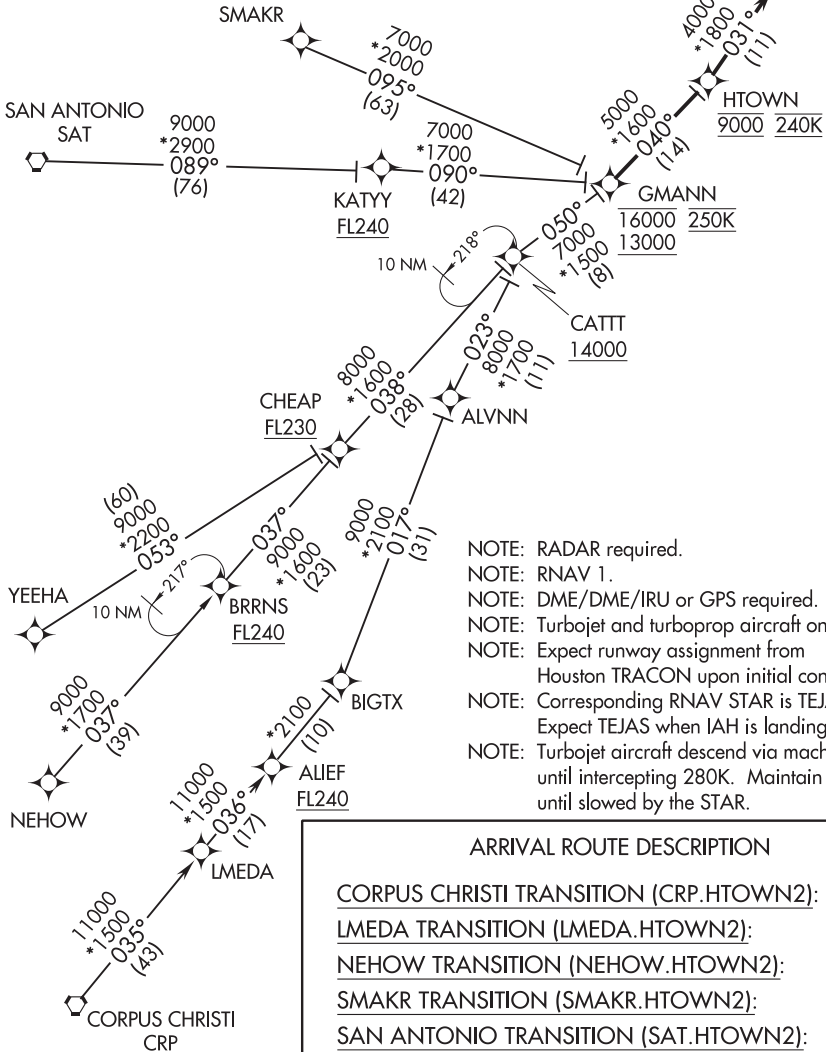
Z17
ST-5461 (FAA)
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

HTOWN TWO ARRIVAL(RNAV)

HOUSTON, TEXAS

HOUSTON APP CON
119.17 291.67
ATIS
124.05

WDLNS
7000 210K



- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: Turbojet and turboprop aircraft only.
- NOTE: Expect runway assignment from Houston TRACON upon initial contact.
- NOTE: Corresponding RNAV STAR is TEJAS. Expect TEJAS 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

- CORPUS CHRISTI TRANSITION (CRP.HTOWN2):
- LMEDA TRANSITION (LMEDA.HTOWN2):
- NEHOW TRANSITION (NEHOW.HTOWN2):
- SMAKR TRANSITION (SMAKR.HTOWN2):
- SAN ANTONIO TRANSITION (SAT.HTOWN2):
- YEEHA TRANSITION (YEEHA.HTOWN2):

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 08R.

NOTE: Chart not to scale.

HTOWN TWO ARRIVAL(RNAV)

HOUSTON, TEXAS

(GMANN.HTOWN2) 15008

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

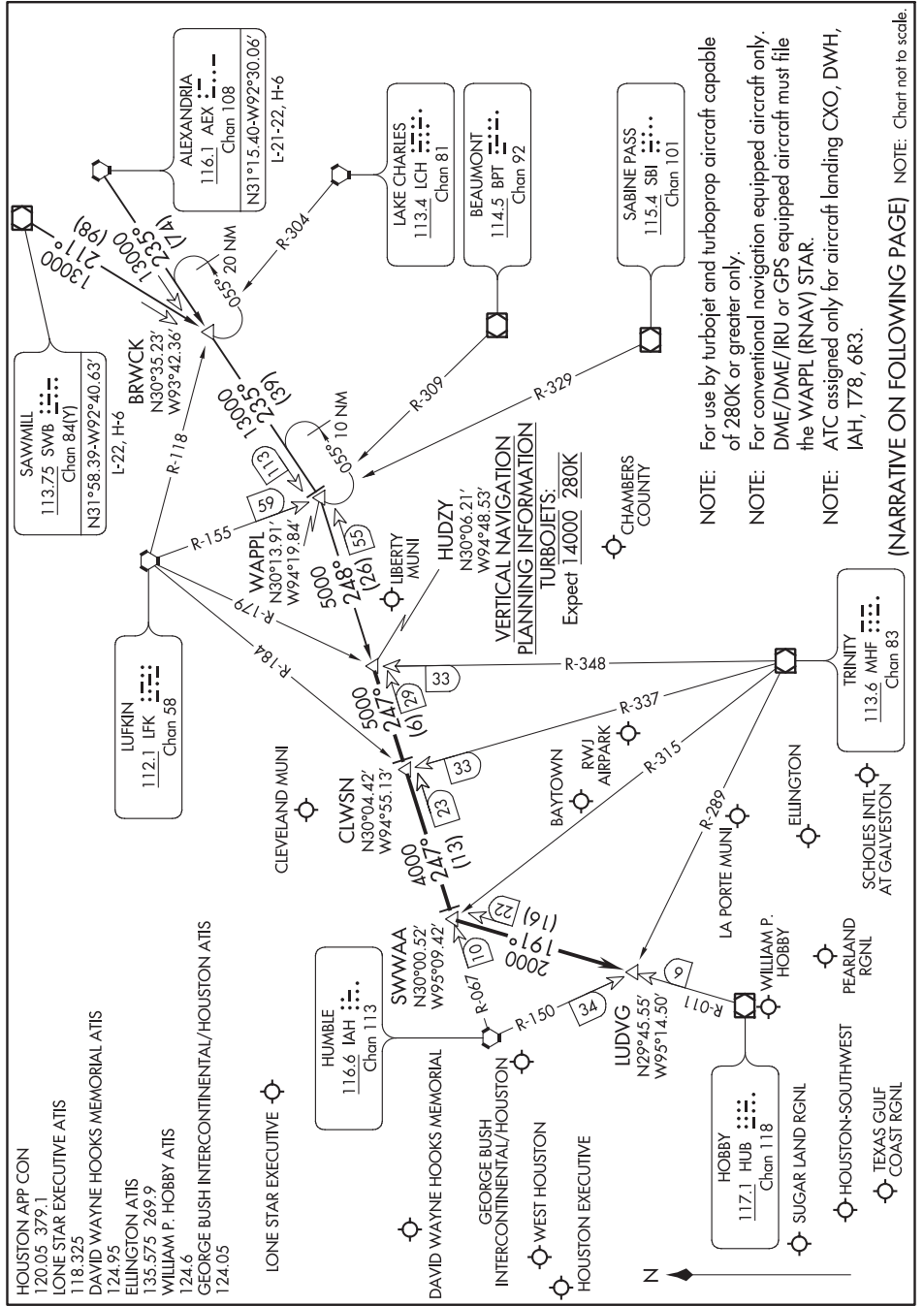
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HUDZY TWO ARRIVAL

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



HUDZY TWO ARRIVAL

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL ROUTE DESCRIPTION

ALEXANDRIA TRANSITION (AEX.HUDZY2): From over AEX VORTAC on AEX R-235 to WAPPL INT, then on IAH R-067 to HUDZY INT.

Thence

SAWMILL TRANSITION (SWB.HUDZY2): From over SWB VOR/DME on SWB R-211, then on AEX R-235 to WAPPL INT, then on IAH R-067 to HUDZY INT. Thence

. . . . From over HUDZY INT on IAH R-067 to CLWSN INT, then on IAH R-067 to SWAAA INT, on HUB R-011 to LUDVG INT.

Expect vectors to final approach course at or prior to LUDVG INT.

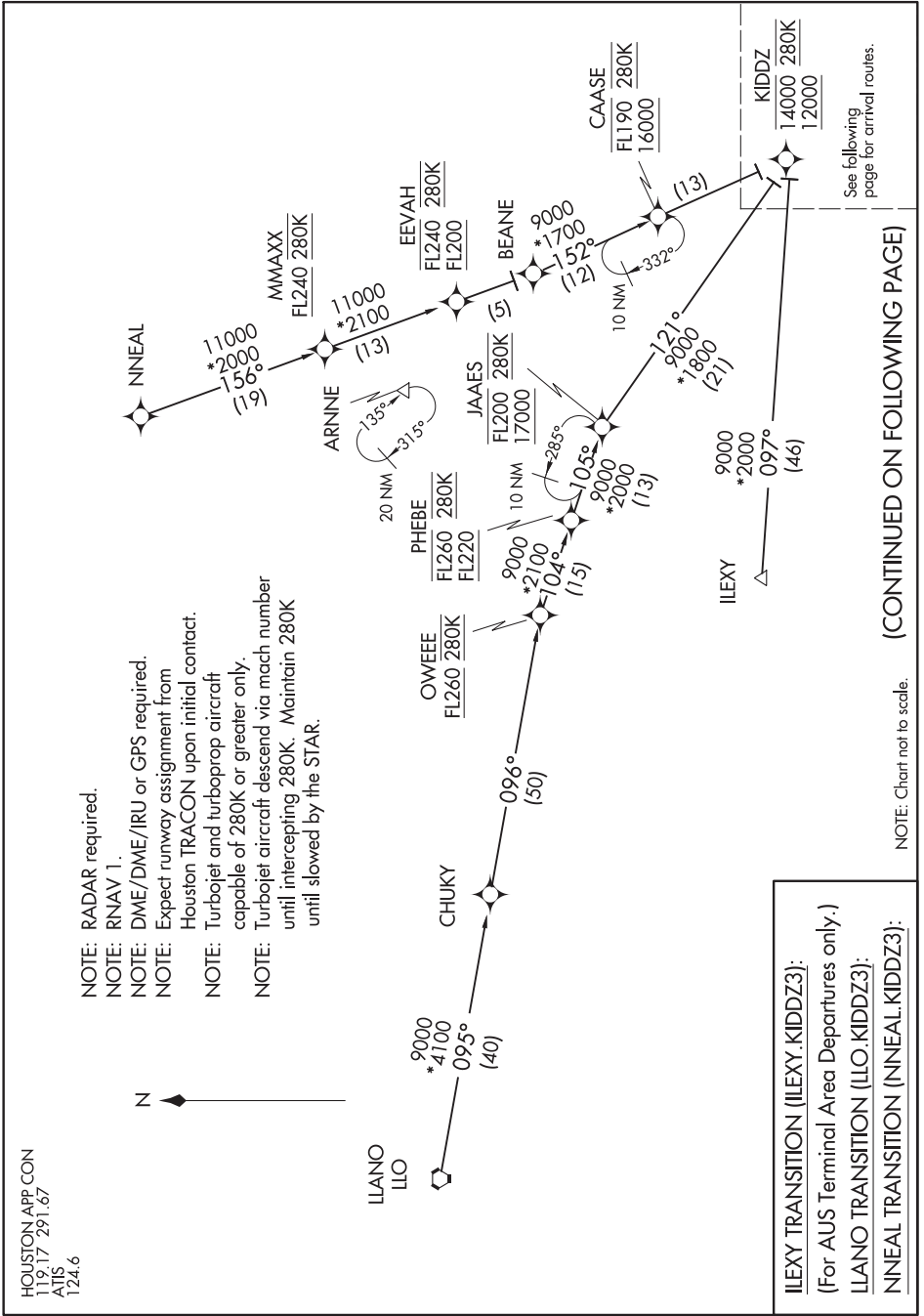
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KIDDZ THREE ARRIVAL (RNAV) Transition Routes

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



KIDDZ THREE ARRIVAL (RNAV) Transition Routes

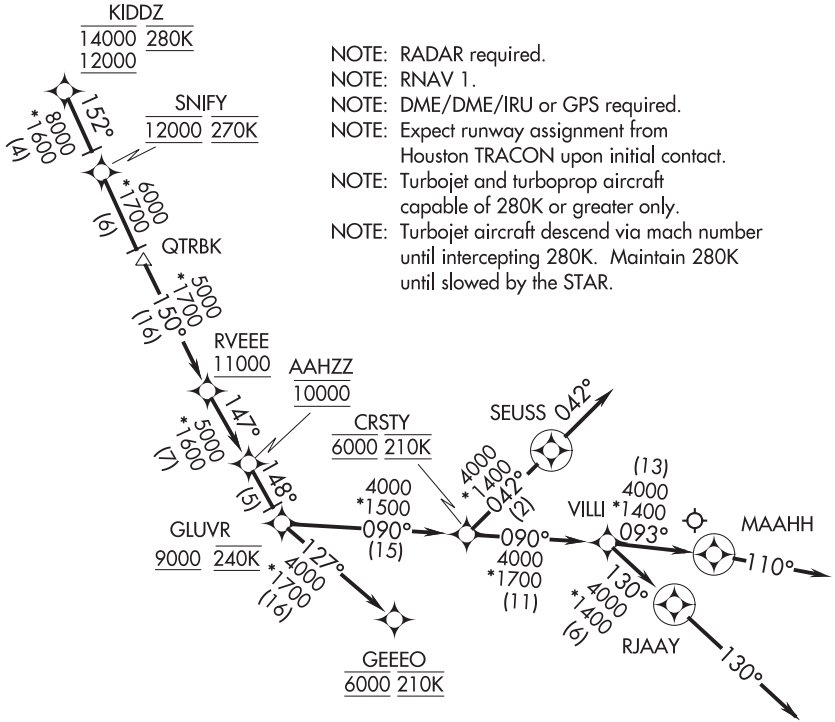
HOUSTON, TEXAS

WILLIAM P. HOBBY (HOU)

SC-5, 10 NOV 2016 to 05 JAN 2017

KIDDZ THREE ARRIVAL (RNAV) Arrival Routes

HOUSTON APP CON
119.17 291.67
ATIS
124.6



NOTE: Chart not to scale.

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.

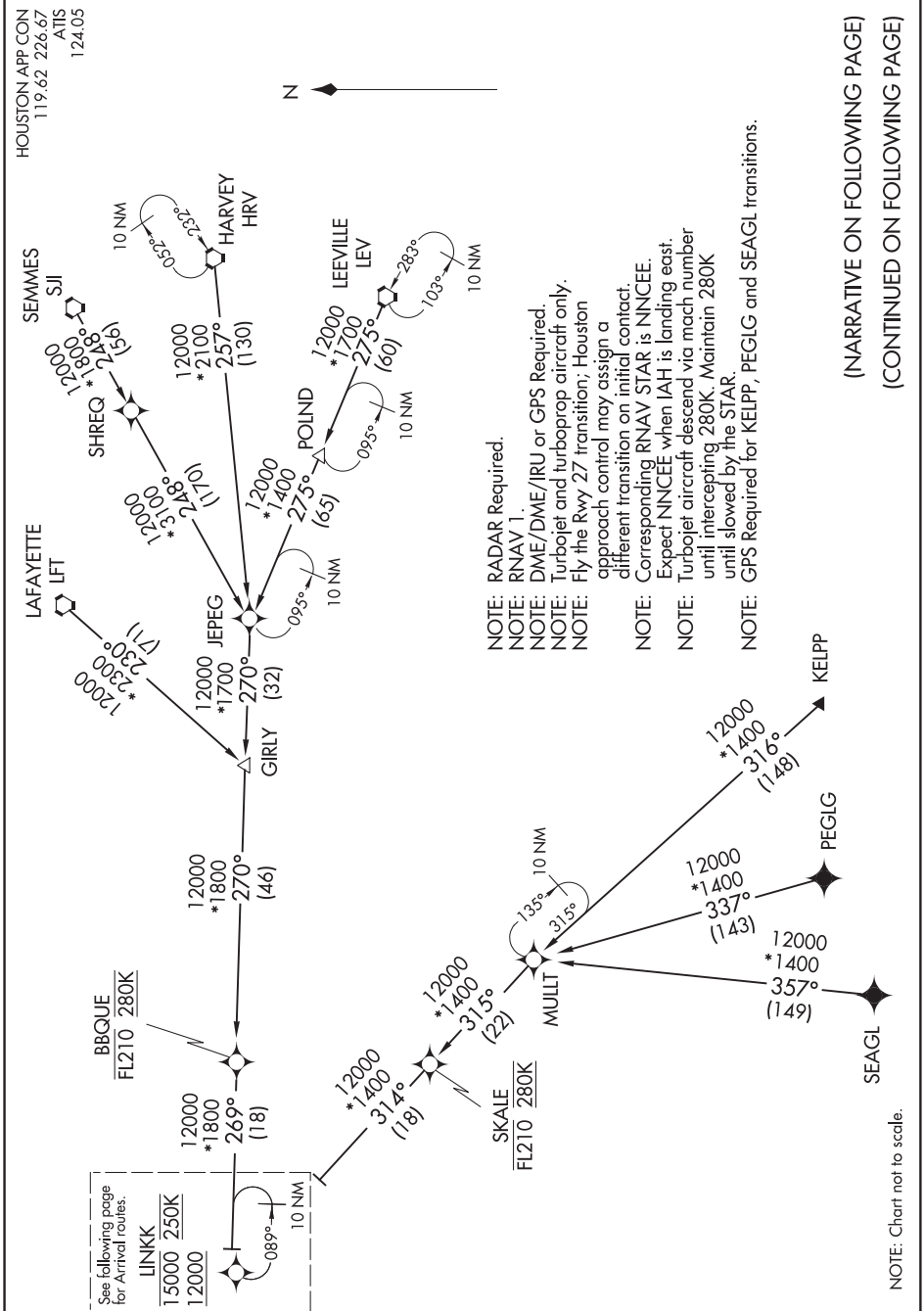
LANDING RUNWAY 4: From GLUVR on track 127° to cross GEEEO at 6000 and at 210K. Expect ILS or LOC Rwy 04.

LANDING RUNWAY 13L/R, 17: From GLUVR on track 090° to cross CRSTY at 6000 and at 210K, then on track 042° to SEUSS, then on track 042°. Expect 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 vectors to final approach course.

LANDING RUNWAY 31L/R/35: 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 vectors to final approach course.

SC-5, 10 NOV 2016 to 05 JAN 2017

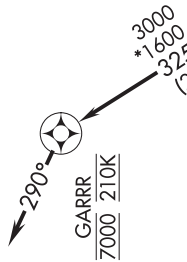


SC-5, 10 NOV 2016 to 05 JAN 2017

LINKK ONE ARRIVAL (RNAV) Arrival Routes

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON APP CON
119.62 226.67
ATIS
124.05



- 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 NNCCE. Expect NNCCE 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.

ARRIVAL ROUTE DESCRIPTION

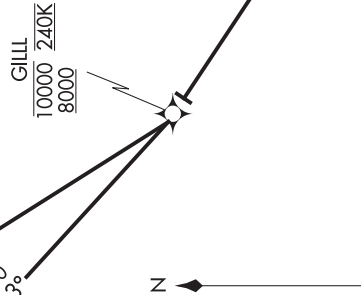
- GIRLY TRANSITION (GIRLY.LINKK1);
- HARVEY TRANSITION (HRV.LINKK1);
- JEPeg TRANSITION (JEPeg.LINKK1);
- KELPP TRANSITION (KELPP.LINKK1);
- LEVILLE TRANSITION (LEV.LINKK1);
- LAFAYETTE TRANSITION (LFT.LINKK1);
- MULTI TRANSITION (MULTI.LINKK1);
- PEGLG TRANSITION (PEGLG.LINKK1);
- SEAGL TRANSITION (SEAGL.LINKK1);
- SEMMES TRANSITION (SJJ.LINKK1);

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

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

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

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

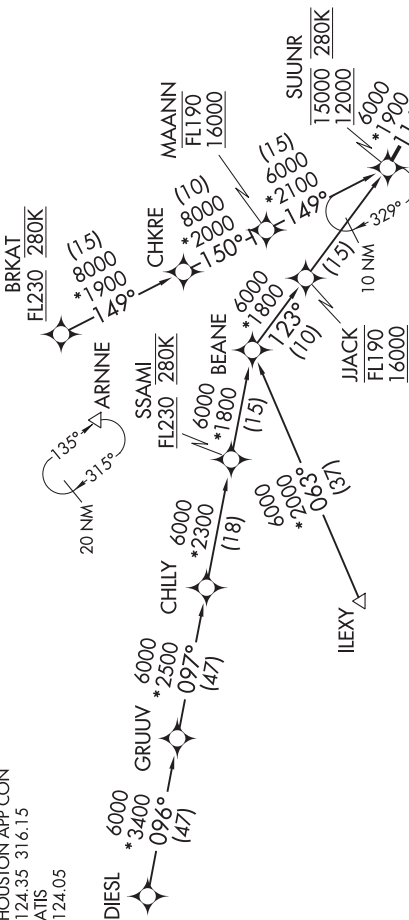


NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON APP CON
124.35 316.15
ATIS
124.05



- NOTE: RADAR Required.
- NOTE: RNAV 1.
- NOTE: DME/DME/RU or GPS Required.
- NOTE: Turboprop and turboprop aircraft only.
- NOTE: Fly the Rwy 26R transition; Houston approach control may assign a different transition on initial contact.
- NOTE: Corresponding RNAV STAR is ITORO. Expect ITORO when IAH is landing east.
- NOTE: BRKAT transition ATC assigned only.
- NOTE: ILEXY transition for Austin terminal area departures only.
- NOTE: Turboprop aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by STAR.



NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

- BRKAT TRANSITION (BRKAT.MSCOT4);
- CHILY TRANSITION (CHILY.MSCOT4);
- DIESEL TRANSITION (DIESEL.MSCOT4);
- ILEXY TRANSITION (ILEXY.MSCOT4);

From SUUNR on track 116° to cross MSCOT at 10000, then on track 116° to HWKII, then on track 116° to cross DOMNO between 8000 and 10000 and at 240K.

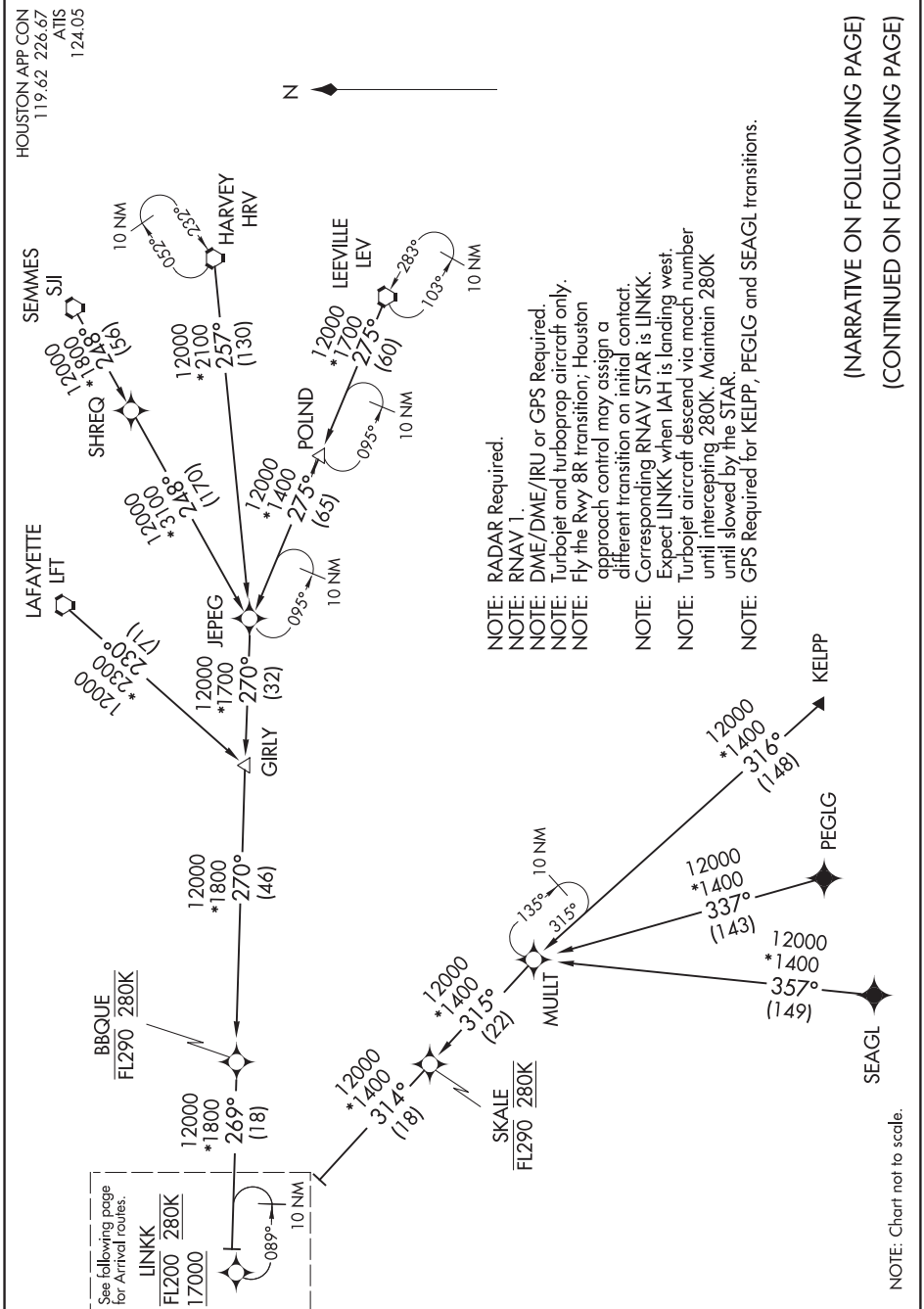
LANDING RWY 26L: From DOMNO on track 087° to cross ZOEEE at 7000 and at 210K, then on track 087°. Expect vectors to final approach course.

LANDING RWY 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 RWY 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.

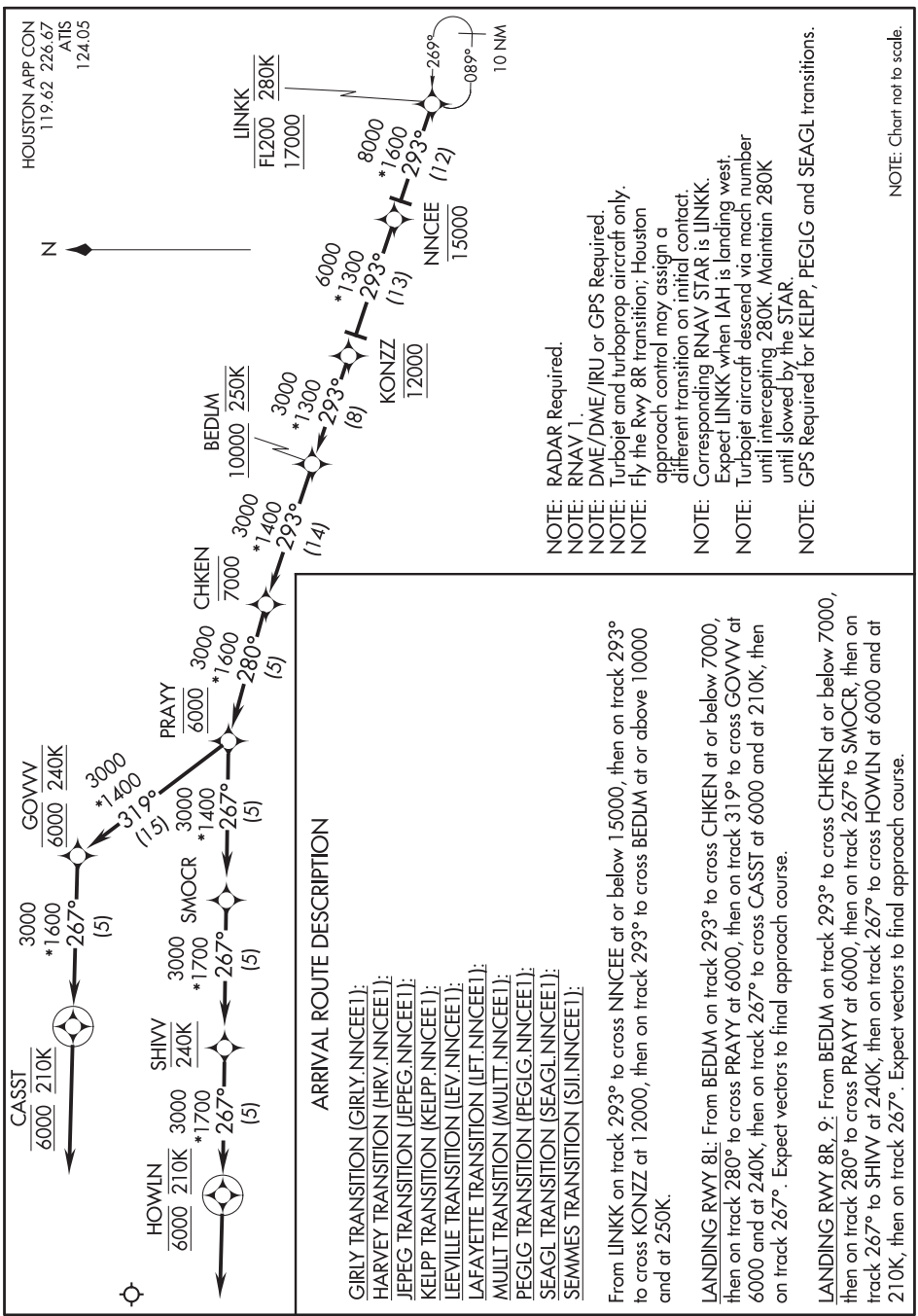
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



(NARRATIVE ON FOLLOWING PAGE)
(CONTINUING ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017



SC-5, 10 NOV 2016 to 05 JAN 2017

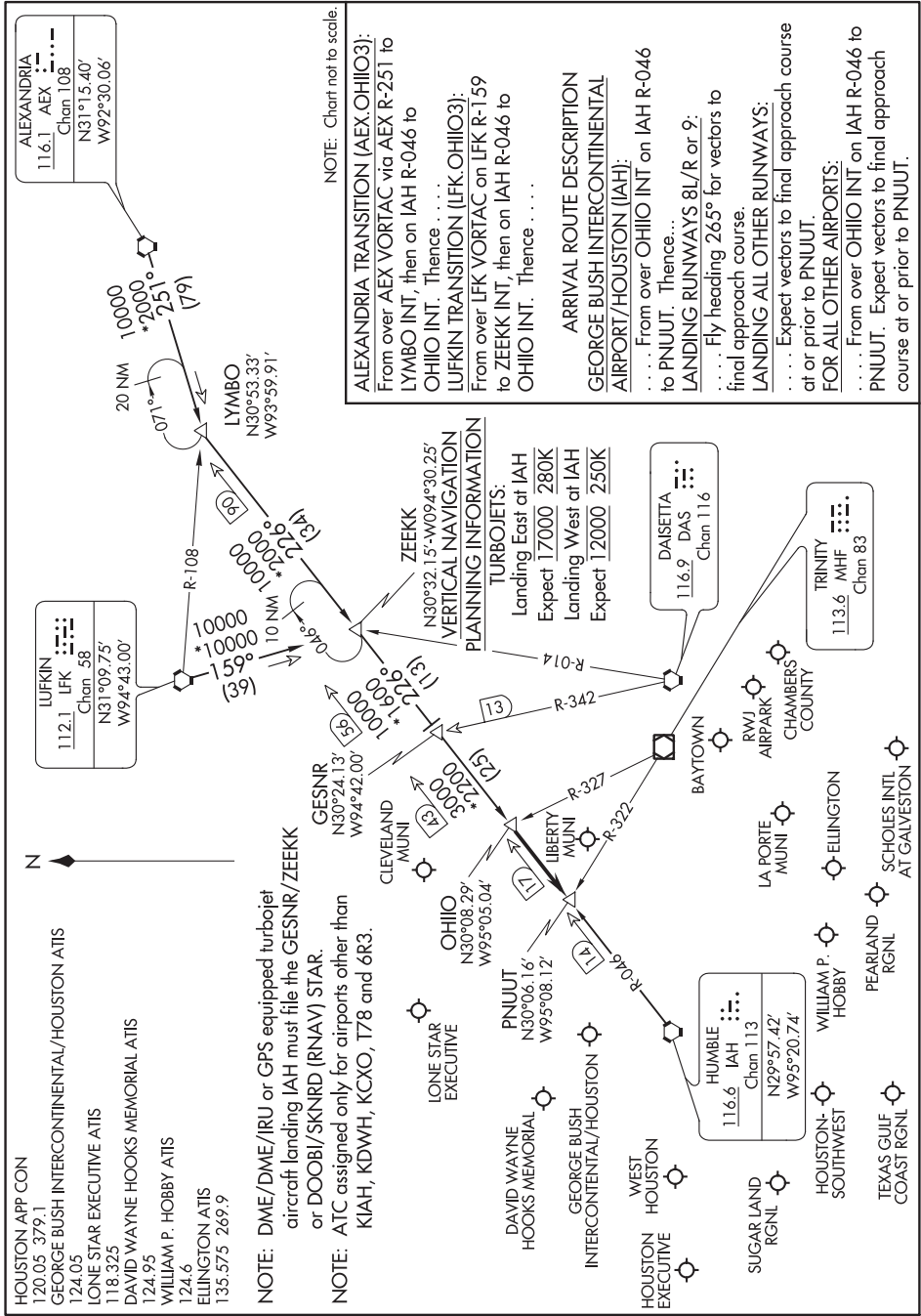
SC-5, 10 NOV 2016 to 05 JAN 2017

- NOTE: RADAR Required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS Required.
- NOTE: Turbojet and turboprop aircraft only.
- NOTE: Fly the Rwy 8R 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: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.
- NOTE: GPS Required for KEPPP, PEGLG and SEAGL transitions.

NOTE: Chart not to scale.

OHIO THREE ARRIVAL

ZLZ 10 NOV 2016 to 05 JAN 2017



OHIO THREE ARRIVAL

SC-5, 10 NOV 2016 to 05 JAN 2017

PUCKS THREE ARRIVAL (RNAV) Transition Routes

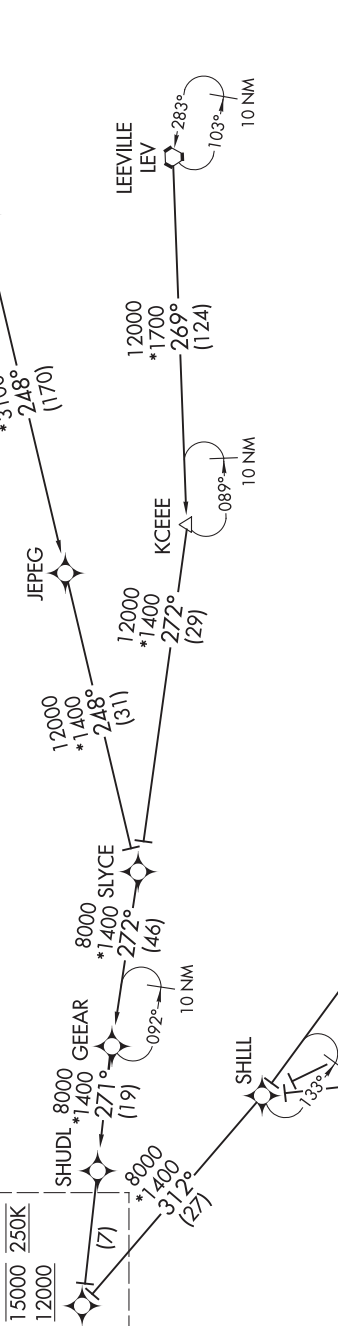
WILLIAM P. HOBBY (HOU)
HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON APP CON
119.62 226.67
ATIS
124.6

See following page
for Arrival Routes.
BAYYY
15000 250K
12000

- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: Expect runway assignment from Houston TRACON upon initial contact.
- NOTE: Corresponding RNAV STAR is BAYYY. Expect BAYYY when HOU is landing 4/13/17.
- NOTE: For turboprop aircraft capable of 280K or greater only.
- NOTE: Turboprop aircraft descend via mach number until intercepting 280K.
- NOTE: Maintain 280K until slowed by the STAR.



- KCEEE TRANSITION (KCEEE.PUCKS3):
- KELPP TRANSITION (KELPP.PUCKS3):
(GPS required)
- LEEVILLE TRANSITION (LEV.PUCKS3):
- PEGIG TRANSITION (PEGIG.PUCKS3):
(GPS required)
- SEAGL TRANSITION (SEAGL.PUCKS3):
(GPS required)
- SEMMES TRANSITION (SJI.PUCKS3):
- SHILL TRANSITION (SHILL.PUCKS3):

NOTE: Chart not to scale.

(CONTINUED ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

PUCKS THREE ARRIVAL (RNAV) Transition Routes

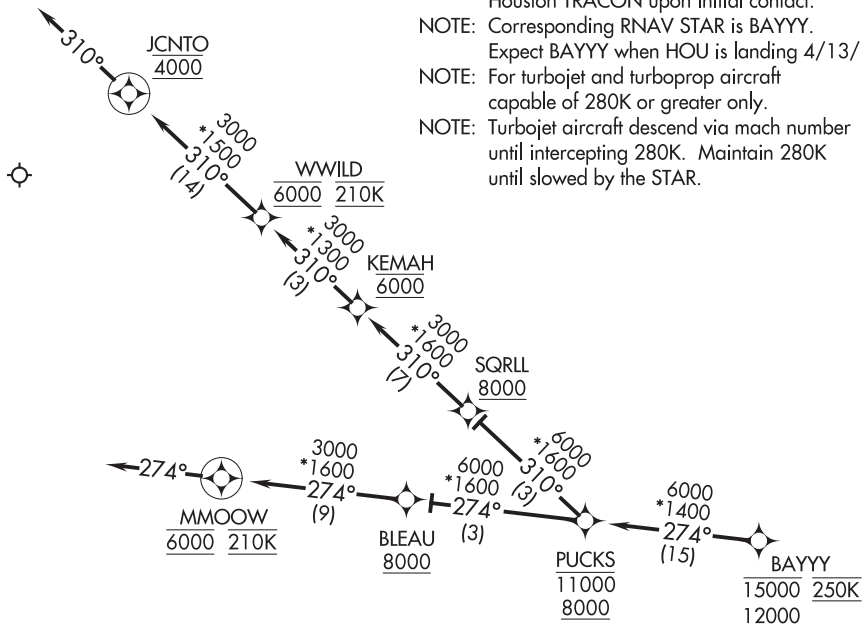
(BAYYY.PUCKS3) 10NOV16

HOUSTON, TEXAS
WILLIAM P. HOBBY (HOU)

PUCKS THREE ARRIVAL (RNAV) Arrival Routes

HOUSTON APP CON
119.62 226.67
ATIS
124.6

- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: Expect runway assignment from Houston TRACON upon initial contact.
- NOTE: Corresponding RNAV STAR is BAYYY. Expect BAYYY when HOU is landing 4/13/17.
- 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: Chart not to scale.

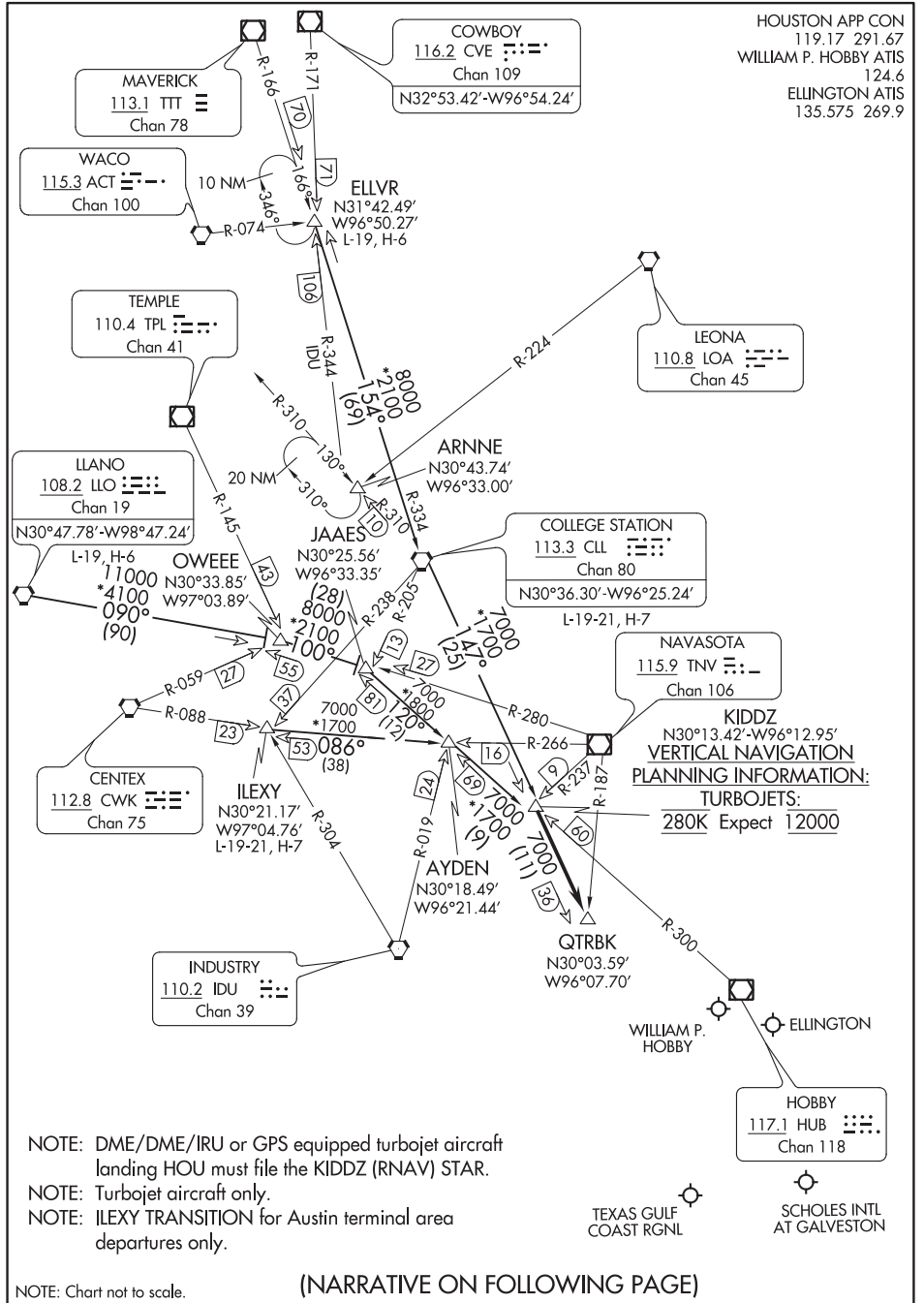
ARRIVAL ROUTE DESCRIPTION

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 JCNT0 at 4000, then on track 310°. Expect vectors to final approach course.

LANDING RUNWAYS 31L/R, 35: 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 vectors to final approach course.

QTRBK ONE ARRIVAL



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

NOTE: DME/DME/IRU or GPS equipped turbojet aircraft landing HOU must file the KIDDZ (RNAV) STAR.
 NOTE: Turbojet aircraft only.
 NOTE: ILEXY TRANSITION for Austin terminal area departures only.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

QTRBK ONE ARRIVAL

ARRIVAL ROUTE DESCRIPTION

COLLEGE STATION TRANSITION (CLL.QTRBK1): From over CLL VORTAC on CLL R-147 to KIDDZ. Thence

ELLVR TRANSITION (ELLVR.QTRBK1): From over ELLVR on CLL R-334 to CLL VORTAC, then on CLL R-147 to KIDDZ. Thence

ILEXY TRANSITION (ILEXY.QTRBK1): From over ILEXY on TNV R-266 to AYDEN, then on HUB R-300 to KIDDZ. Thence

LLANO TRANSITION (LLO.QTRBK1): From over LLO VORTAC on LLO R-090 to OWEEE, then on TNV R-280 to JAAES, then on HUB R-300 to KIDDZ. Thence

. . . . From over KIDDZ on the CLL R-147 to QTRBK. Expect vectors to final approach course at or prior to QTRBK.

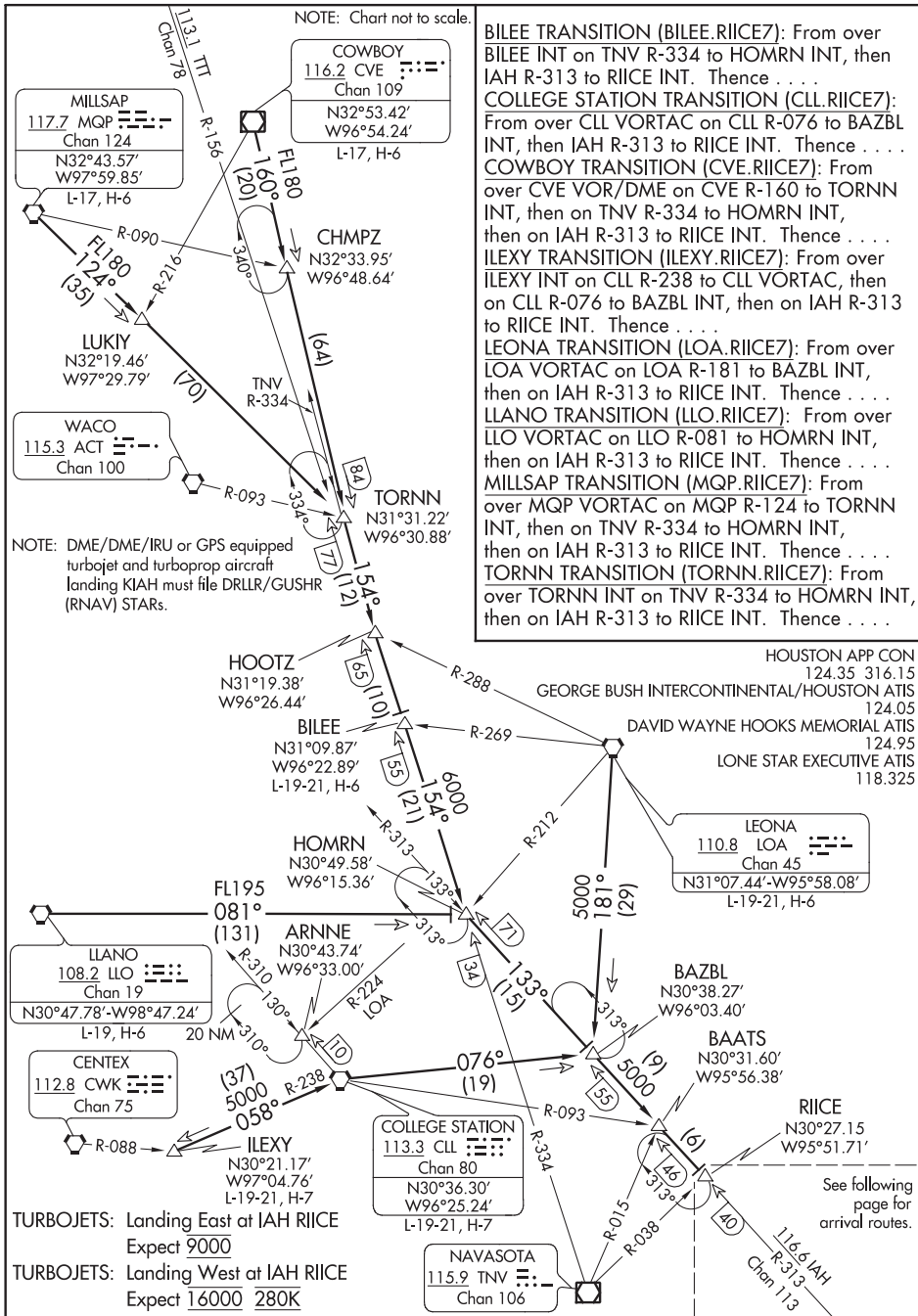
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

RIICE SEVEN ARRIVAL

Transition Routes

HOUSTON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

RIICE SEVEN ARRIVAL

Transition Routes

HOUSTON, TEXAS

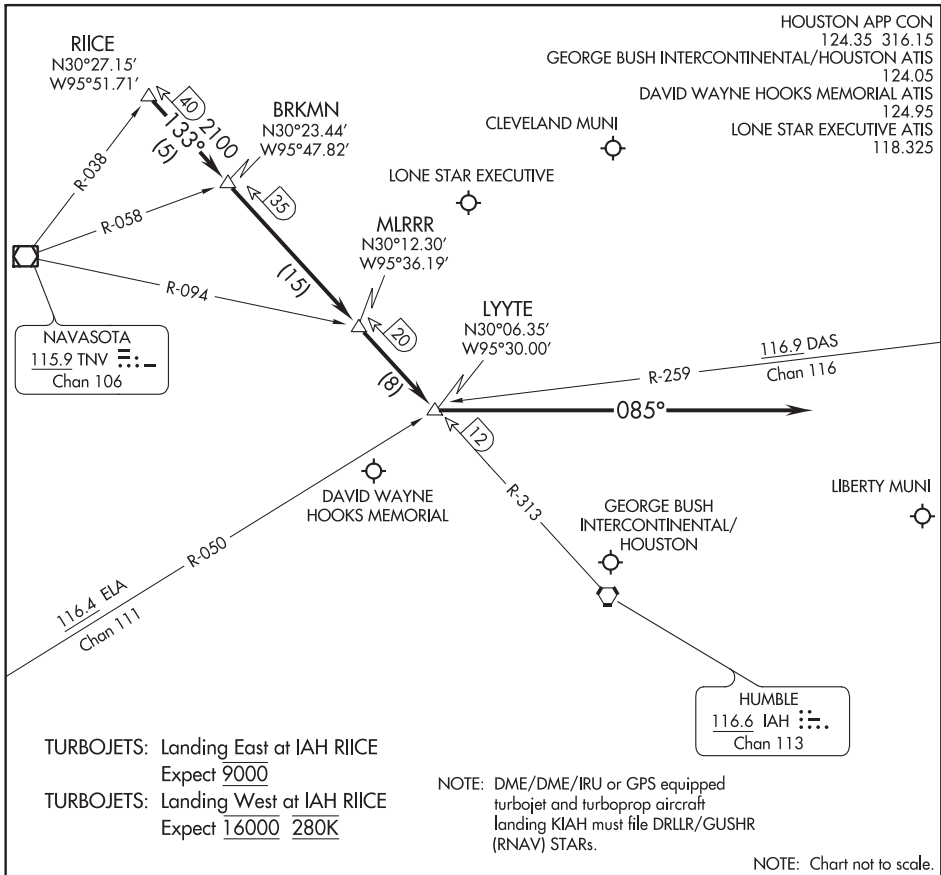
(BAZBL.RIICE7) 16315

Z33
ST-5461 (FAA)

RIICE SEVEN ARRIVAL

Arrival Routes

HOUSTON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL ROUTE DESCRIPTION

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH):

.... From over RIICE INT on IAH R-313 to BRKMN INT, to MLRRR INT, to LYYTE INT.

LANDING RUNWAYS 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 INT.

FOR ALL OTHER AIRPORTS:

.... From over RIICE INT on IAH R-313 to BRKMN INT, thence as depicted to LYYTE INT.
Expect vectors to final approach course at or prior to LYYTE INT.

RIICE SEVEN ARRIVAL

Arrival Routes

HOUSTON, TEXAS

(BAZBL.RIICE7) 24JUL14

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON APP CON
120.05 379.1
ATIS
124.05

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

NOTE: Control may assign a different transition on

initial contact.

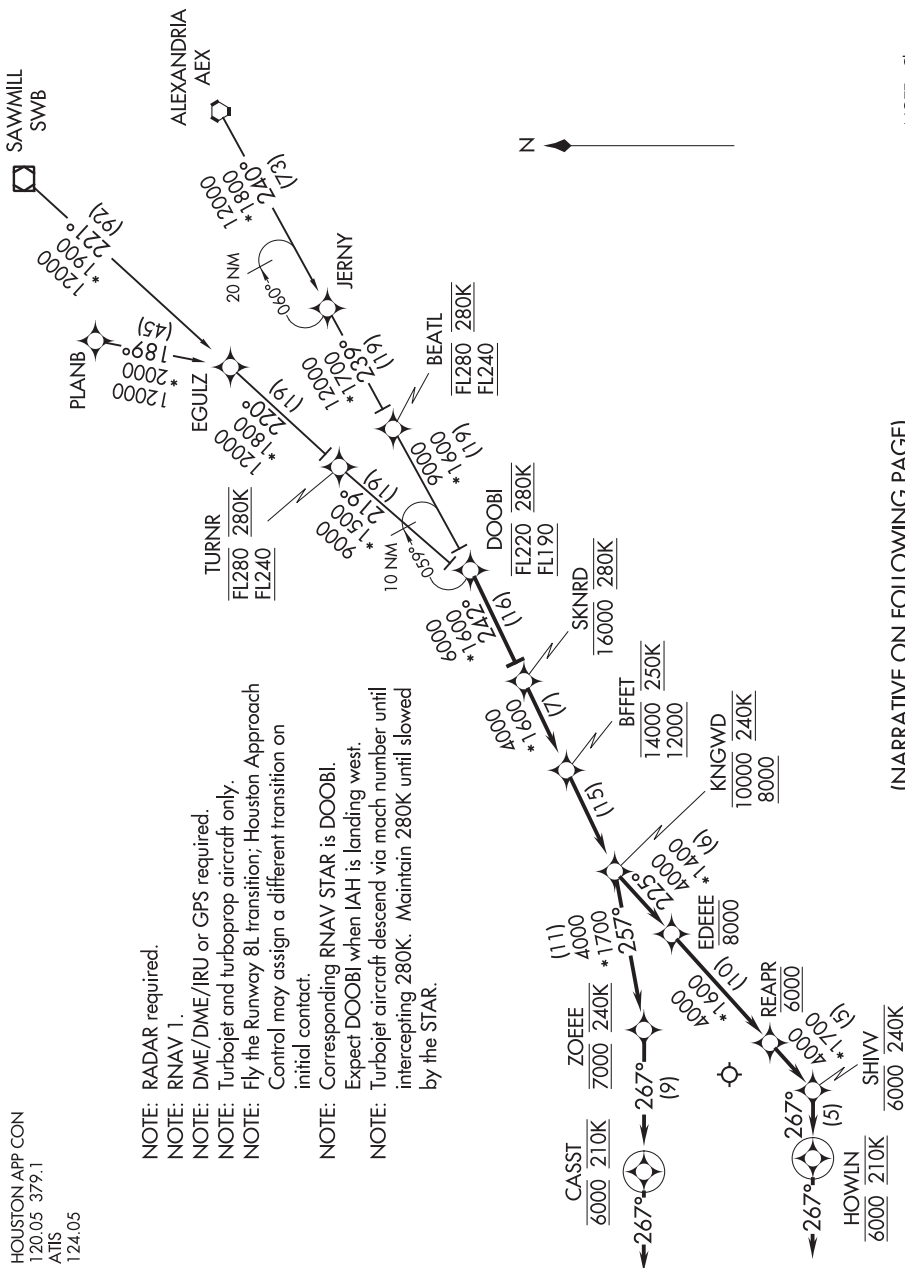
NOTE: Corresponding RNAV STAR is DOOBI.

NOTE: Expect DOOBI when IAH is landing west.

NOTE: Turbojet aircraft descend via mach number until

NOTE: intercepting 280K. Maintain 280K until slowed

NOTE: by the STAR.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

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.

(BAYYY.SOULL1) 15008

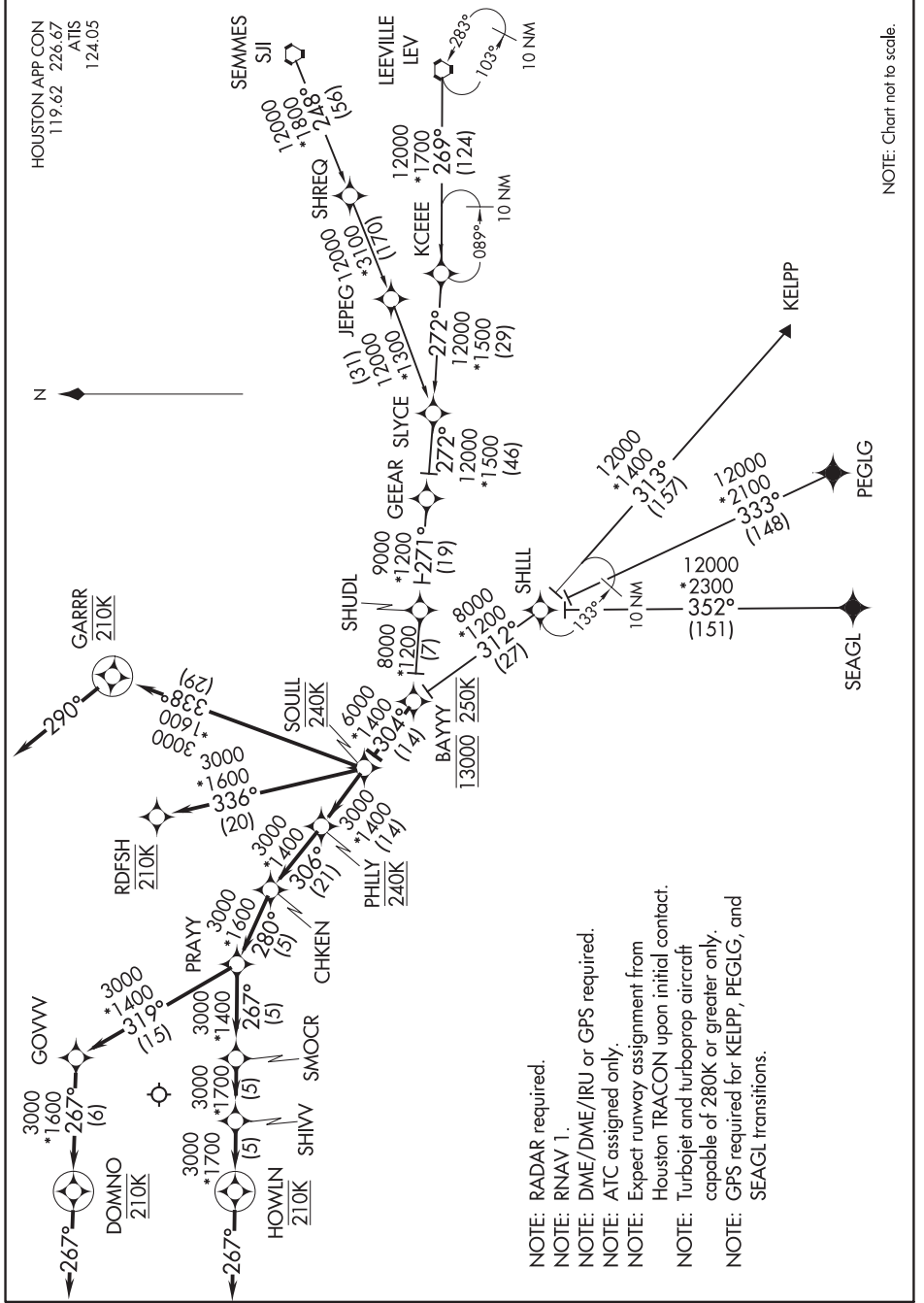
SOULL ONE ARRIVAL (RNAV)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

ST-5461 (FAA)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



SOULL ONE ARRIVAL (RNAV)

(BAYYY.SOULL1) 15008

HOUSTON, TEXAS

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SC-5, 10 NOV 2016 to 05 JAN 2017

KCEEE TRANSITION (KCEEE.SOULL1):

KELPP TRANSITION (KELPP.SOULL1):

LEEVILLE TRANSITION (LEV.SOULL1):

PEGLG TRANSITION (PEGLG.SOULL1):

SEAGL TRANSITION (SEAGL.SOULL1):

SHLLL TRANSITION (SHLLL.SOULL1):

SEMMES TRANSITION (SJI.SOULL1):

ARRIVAL ROUTE DESCRIPTION

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

LANDING RWY 08L: 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 RWY 08R: 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 RWY 09: 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 RWY 26L: From SOULL on track 338° to GARRR at 210K. Expect ILS or LOC Rwy 26L.

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

LANDING RWY 27: From SOULL on track 336° to RDFSH at 210K. Expect ILS or LOC Rwy 27.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TCHDN TWO ARRIVAL

Transition Routes

HOUSTON, TEXAS

HOUSTON APP CON
 119.17 291.67
 WILLIAM P. HOBBY ATIS
 124.6
 ELLINGTON ATIS
 135.575 269.9

EAGLE LAKE
 116.4 ELA :■■■■
 Chan 111

SAN ANTONIO
 116.8 SAT :■■■■
 Chan 115
 N29°38.64'
 W98°27.68'
 L-19, H-7

DUUDE
 N29°09.79'
 W96°28.77'

116.6 IAH
 R-221
 Chan 113
 R-240
 117.1 HUB
 Chan 118
 See following page for arrival routes.

VICTORIA
 109 VCT :■■■■
 Chan 27

BIGTX
 N28°49.30'
 W96°36.94'

BELLR
 N29°19.49'
 W096°05.32'
 VERTICAL
 NAVIGATION
 PLANNING
 INFORMATION
 TURBOJET:
 Expect 12000 250K

PALACIOS
 117.3 PSX :■■■■
 Chan 120
 N28°45.87'
 W96°18.37'
 L-20-21, H-7

ALIEF
 N28°41.23'
 W96°44.31'

LMEDA
 N28°27.95'
 W96°56.37'

CORPUS CHRISTI
 115.5 CRP :■■■■
 Chan 102
 N27°54.23'
 W97°26.69'
 L-20-21, H-7

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

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

(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

TCHDN TWO ARRIVAL

Transition Routes

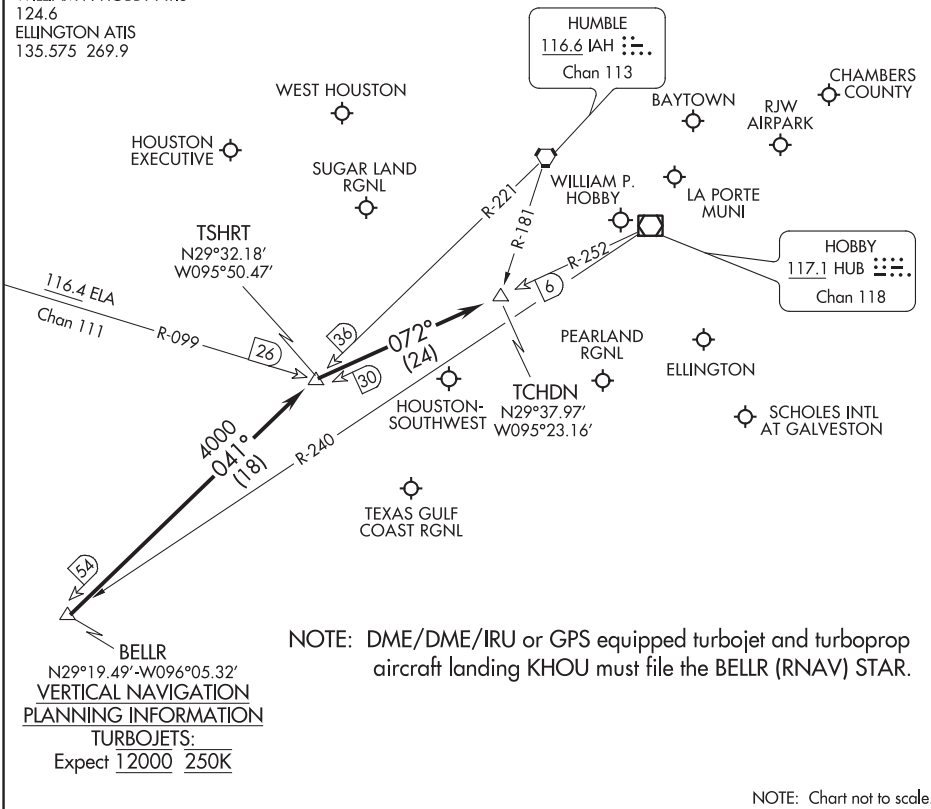
HOUSTON, TEXAS

TCHDN TWO ARRIVAL

Arrival Routes

HOUSTON, TEXAS

HOUSTON APP CON
 119.17 291.67
 WILLIAM P. HOBBY ATIS
 124.6
 ELLINGTON ATIS
 135.575 269.9



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

**VERTICAL NAVIGATION
 PLANNING INFORMATION**
 TURBOJET:
 Expect 12000 250K

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

SAN ANTONIO TRANSITION (SAT.TCHDN2): From over SAT VORTAC on SAT R-097 to DUUDE INT, then via HUB R-240 to BELLR INT.

Thence

CORPUS CHRISTI TRANSITION (CRP.TCHDN2): From over CRP VORTAC via CRP R-029 to HYDRL INT, then via IAH R-221 to BELLR INT.

Thence

PALACIOS TRANSITION (PSX.TCHDN2): From over PSX VORTAC via PSX R-011 to BELLR INT. Thence

. . . . From over BELLR INT via the IAH R-221 to TSHRT INT, thence via the HUB R-252 to TCHDN INT. Expect vectors to final approach course at or prior to TCHDN INT.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TEJAS FOUR ARRIVAL (RNAV) Transition Routes

HOUSTON APP CON
119.17 291.67
ATIS
124.05

SAN ANTONIO
SAT

SMAKR
7000
*2000
095°
(63)

9000
*2900
089°
(76)

KATYY
FL240

090°
(42)
7000
*1700

See following page
for Arrival Routes.

GMANN	
FL190	280K
16000	

CATT
FL190

10 NM

218°

*8000
1500
038°
(28)

*1700
8000
023°
(11)

ALVNN

*9000
2100
017°
(31)

CHEAP
FL230

9000
*2200
053°
(60)

9000
*1600
023°
(23)

10 NM

217°

*9000
1700
037°
(59)

11000
*1500
035°
(43)

CORPUS CHRISTI
CRP

YEEHA

BRRNS
FL240

NEHOW

LMEDA

ALIEF
FL240

BIGTX

(CONTINUED ON FOLLOWING PAGE)

CORPUS CHRISTI TRANSITION (CRP.TEJAS4):
LMEDA TRANSITION (LMEDA.TEJAS4):
NEHOW TRANSITION (NEHOW.TEJAS4):
SMAKR TRANSITION (SMAKR.TEJAS4):
SAN ANTONIO TRANSITION (SAT.TEJAS4):
YEEHA TRANSITION (YEEHA.TEJAS4):

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 HTOWN.

Expect HTOWN when IAH is landing east.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TEJAS FOUR ARRIVAL (RNAV) Arrival Routes

SC-5, 10 NOV 2016 to 05 JAN 2017

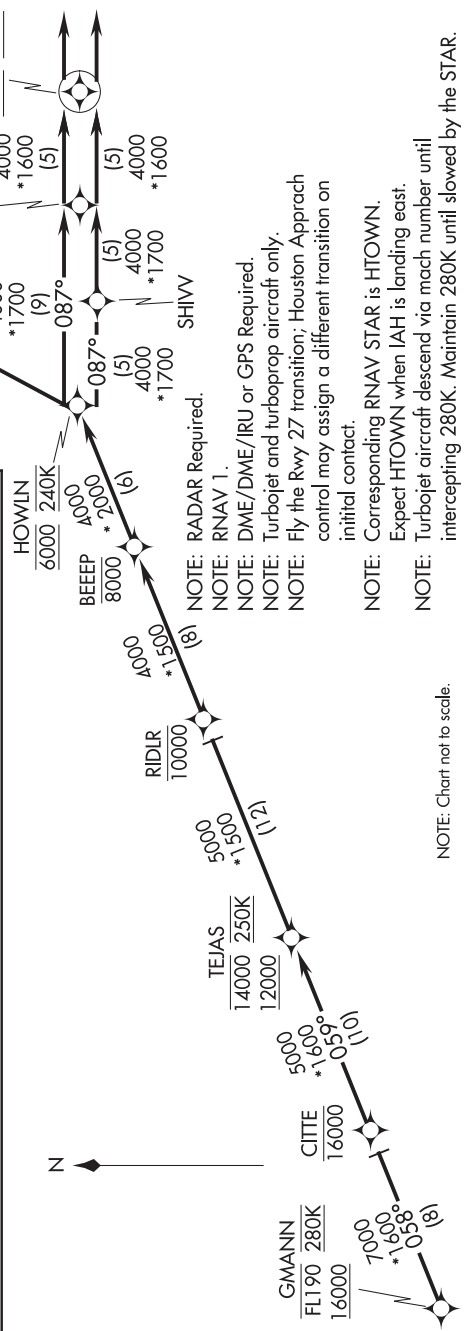
ARRIVAL ROUTE DESCRIPTION

From GMANN on track 058° to cross CITTE at or below 16000, then on track 059° to cross TEJAS at or above 12000, at or below 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 HOWLIN 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 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 HOWLIN at 6000 and at 240K, then on track 034° to ZOEEEE, then 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 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 HOWLIN at 6000 and at 240K, then on track 087° to SHIV, then on track 087° to SMOCR, then on track 087° to cross PRAYY at 6000 and at 210K, then on track 087°. Expect vectors to final approach course.



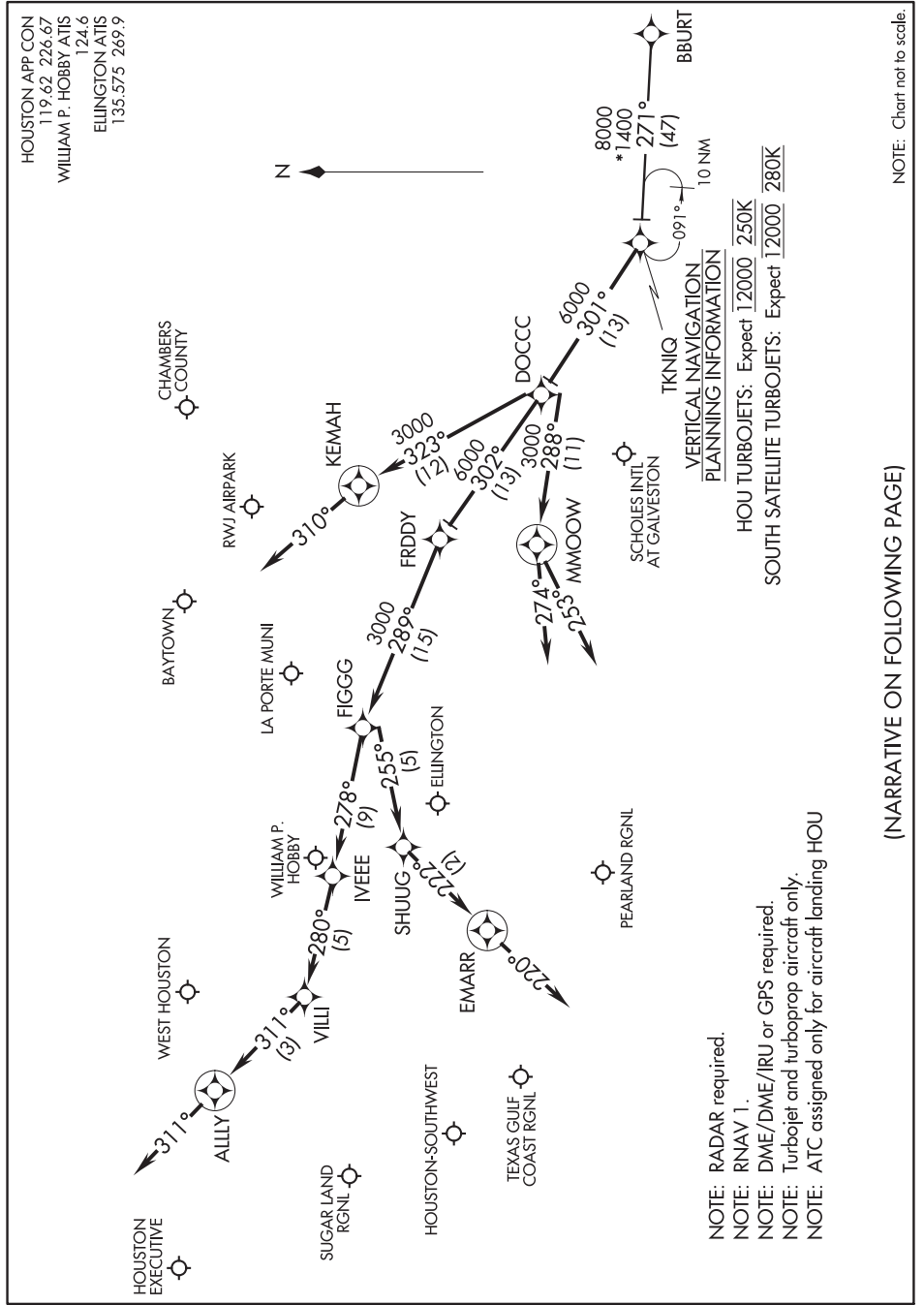
TEJAS FOUR ARRIVAL (RNAV) Arrival Routes

SC-5, 10 NOV 2016 to 05 JAN 2017

TKNIQ TWO ARRIVAL (RNAV)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



TKNIQ TWO ARRIVAL (RNAV)

HOUSTON, TEXAS

(TKNIQ.TKNIQ2) 10NOV16

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL ROUTE DESCRIPTION

BBURT TRANSITION (BBURT.TKNIQ2)

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 vectors to final approach course.

LANDING RUNWAYS 13L/R, 17: 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 vectors to final approach course.

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

LANDING RUNWAYS 31L/R, 35: From DOCCC on track 288° to MMOOW, then on track 274°. Expect vectors to final approach course.

LANDING AXH, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41, 54T:
From DOCCC on track 288° to MMOOW, then on track 253°. Expect vectors to final approach course.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

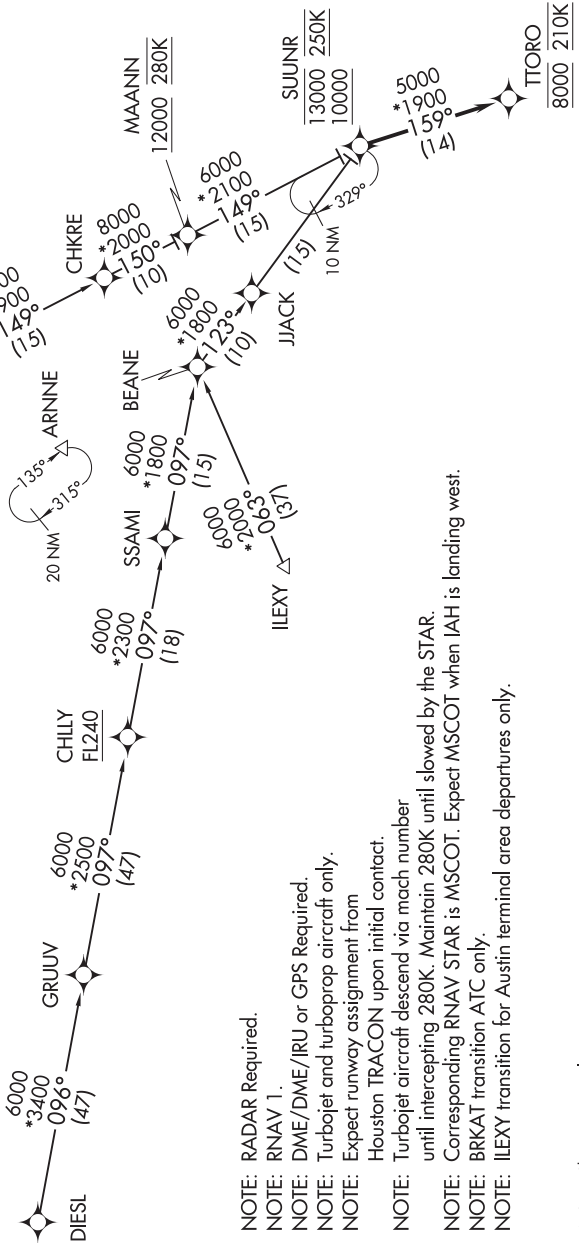


SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL ROUTE DESCRIPTION

- BRKAT TRANSITION (BRKAT.TTORO3):
- CHILLY TRANSITION (CHILLY.TTORO3):
- DIESL TRANSITION (DIESL.TTORO3):
- IILEXY TRANSITION (IILEXY.TTORO3):

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



- NOTE: RADAR Required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS Required.
- NOTE: Turbojet and turbo-prop aircraft only.
- NOTE: Expect runway assignment from Houston TRACON upon initial contact.
- NOTE: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.
- NOTE: Corresponding RNAV STAR is MSCOT. Expect MSCOT when IAH is landing west.
- NOTE: BRKAT transition ATC only.
- NOTE: IILEXY transition for Austin terminal area departures only.

NOTE: Chart not to scale.

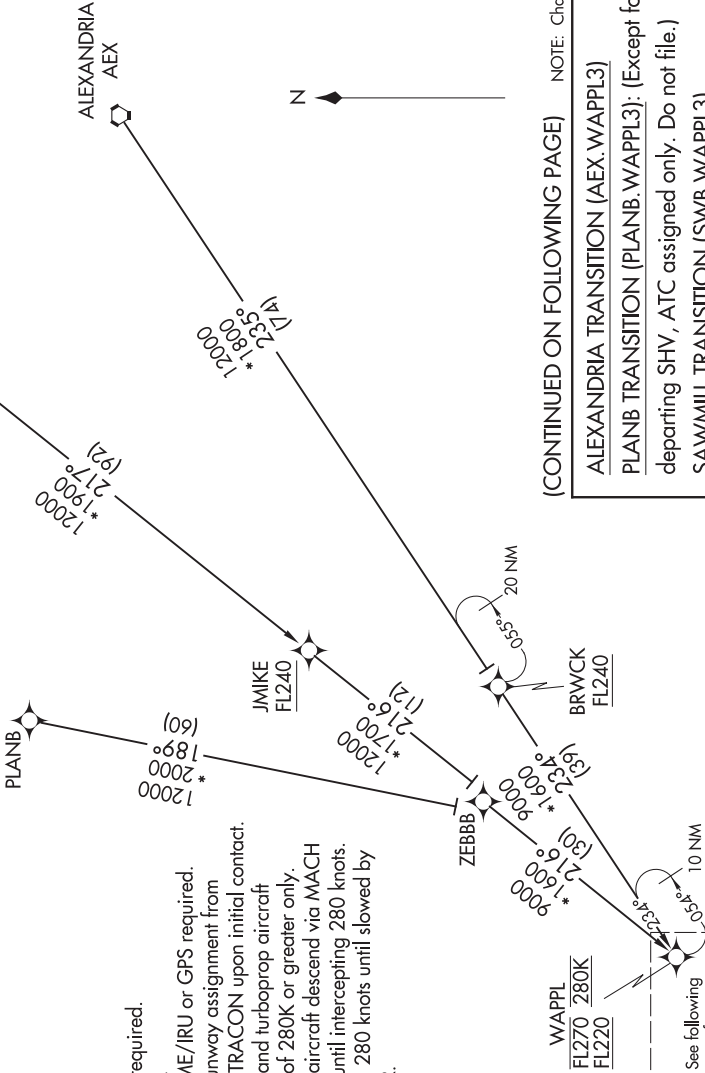
SC-5, 10 NOV 2016 to 05 JAN 2017

WAPPL THREE ARRIVAL (RNAV) Transition Routes

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON APP CON
120.05 379.1
WILLIAM P. HOBBY ATIS
124.6
ELLINGTON ATIS
135.575 269.9



- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: Expect runway assignment from Houston TRACON upon initial contact.
- NOTE: Turbojet and turboprop aircraft capable of 280K or greater only.
- NOTE: Turbojet aircraft descend via MACH number until intercepting 280 knots. Maintain 280 knots until slowed by the STAR.

(CONTINUED ON FOLLOWING PAGE) NOTE: Chart not to scale.

ALEXANDRIA TRANSITION (AEX.WAPL3)
 PLANB TRANSITION (PLANB.WAPL3); (Except for aircraft departing SHV, ATC assigned only. Do not file.)
 SAWMILL TRANSITION (SWB.WAPL3)
 ZEBBB TRANSITION (ZEBBB.WAPL3); (ATC assigned only)

See following page for Arrival Routes.

WAPPL THREE ARRIVAL (RNAV) Transition Routes

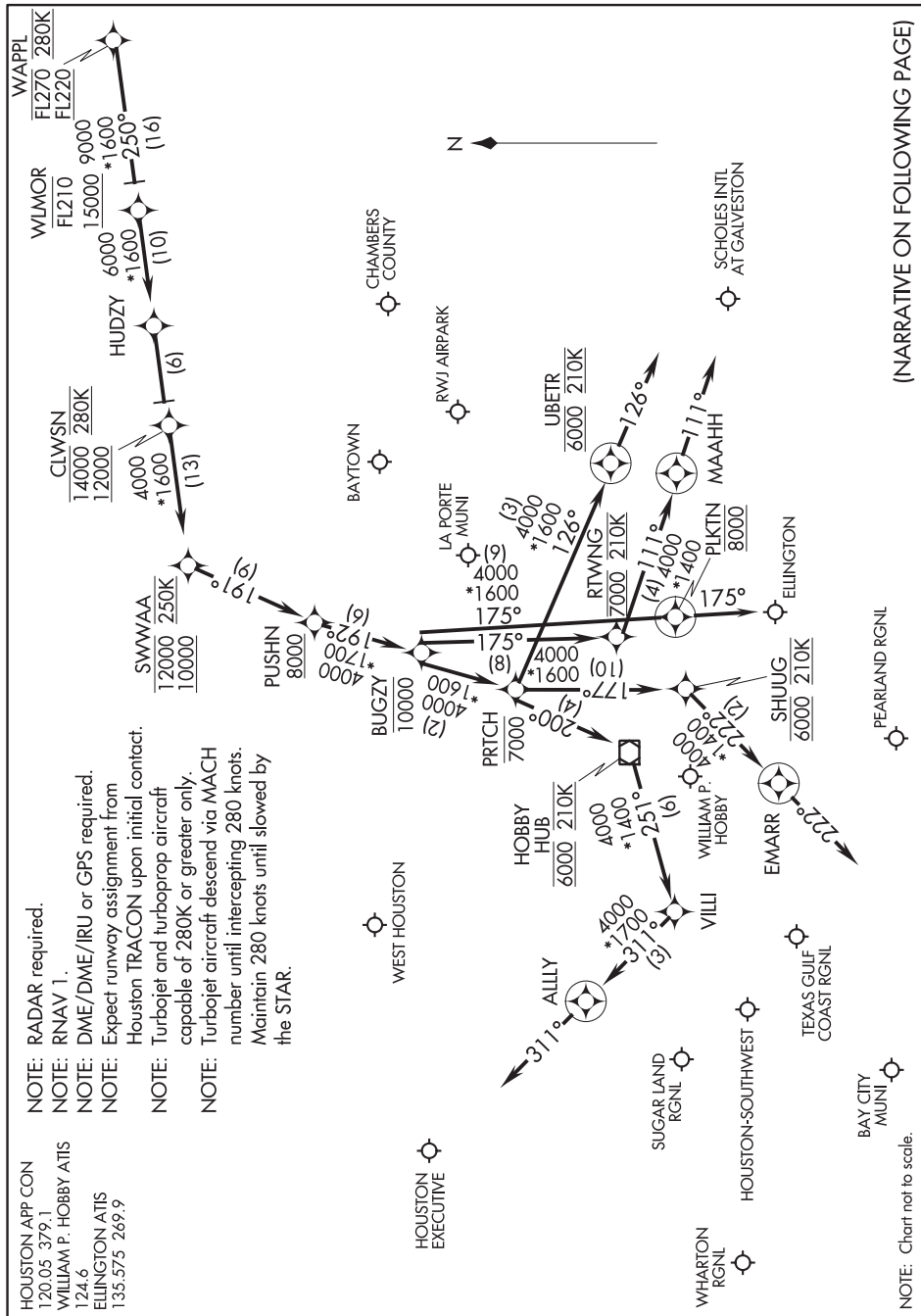
HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

WAPPL THREE ARRIVAL (RNAV) Arrival Routes

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL ROUTE DESCRIPTION

From WAPPL on track 250° to cross WLMOR at or above 15000, at or below FL210, then on track 250° to HUDZY, then on track 250° to cross CLWSN at or above 12000, at or below 14000 and at 280K, then on track 250° to cross SWWAA at or above 10000, at or below 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 PRITCH 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 vectors to final approach course.

LANDING HOU RUNWAYS 13L/R, 17: From PUSHN on track 192° to cross BUGZY at or below 10000, then on track 192° to cross PRITCH at or below 7000, then on track 200° to cross HUB VOR/DME at 6000 and at 210K, then on track 251° to VILLI, then on track 311° to ALLY, then on track 311°. Expect 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 vectors to final approach course.

LANDING HOU RUNWAYS 31L/R, 35: From PUSHN on track 192° to cross BUGZY at or below 10000, then on track 192° to cross PRITCH at or below 7000, then on track 126° to cross UBETR at 6000 and at 210K, then on track 126°. Expect vectors to final approach course.

LANDING ARM, AXH, BYY, EFD, GLS, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41, 54T
From WAPPL on track 250° to cross WLMOR at or above 15000 and at or below 21000, then on track 250° to HUDZY, then on track 250° to cross CLWSN at or above 12000, at or below 14000 and at 280K, then on track 250° to cross SWWAA at or above 10000, at or below 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 vectors to final approach course.

WHAEL TWO ARRIVAL

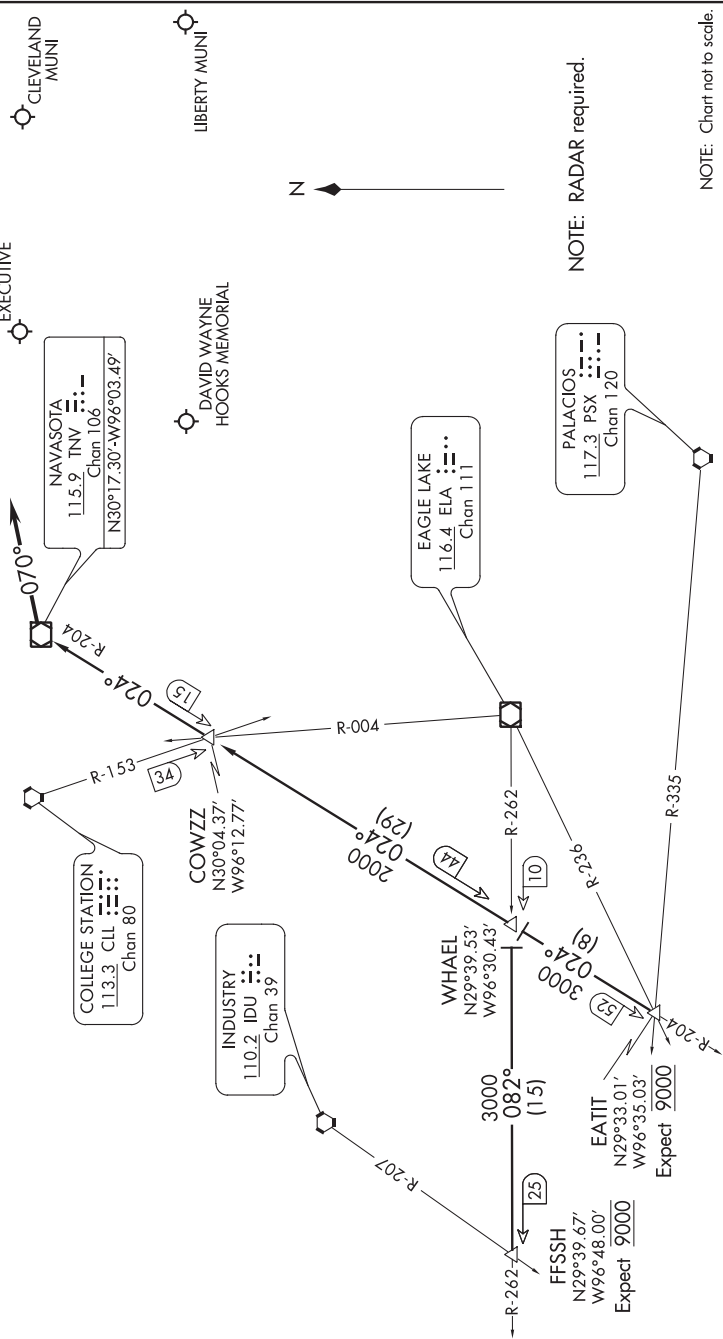
SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL DESCRIPTION

FFSSH TRANSITION (FFSSH.WHAEL2): From over FFSSH INT on ELA R-262 to WHAEL INT. Thence,

EATIT TRANSITION (EATIT.WHAEL2): From over EATIT INT on TNV R-204 to WHAEL INT. Thence,

. from over WHAEL INT on TNV R-204 to COWZZ INT, then on TNV R-204 to TNV VOR/DME. Depart TNV VOR/DME heading 070° for vectors to final approach course.



NOTE: RADAR required.

NOTE: Chart not to scale.

WHAEL TWO ARRIVAL

SC-5, 10 NOV 2016 to 05 JAN 2017

(ZEEKK.ZEEKK1) 15288

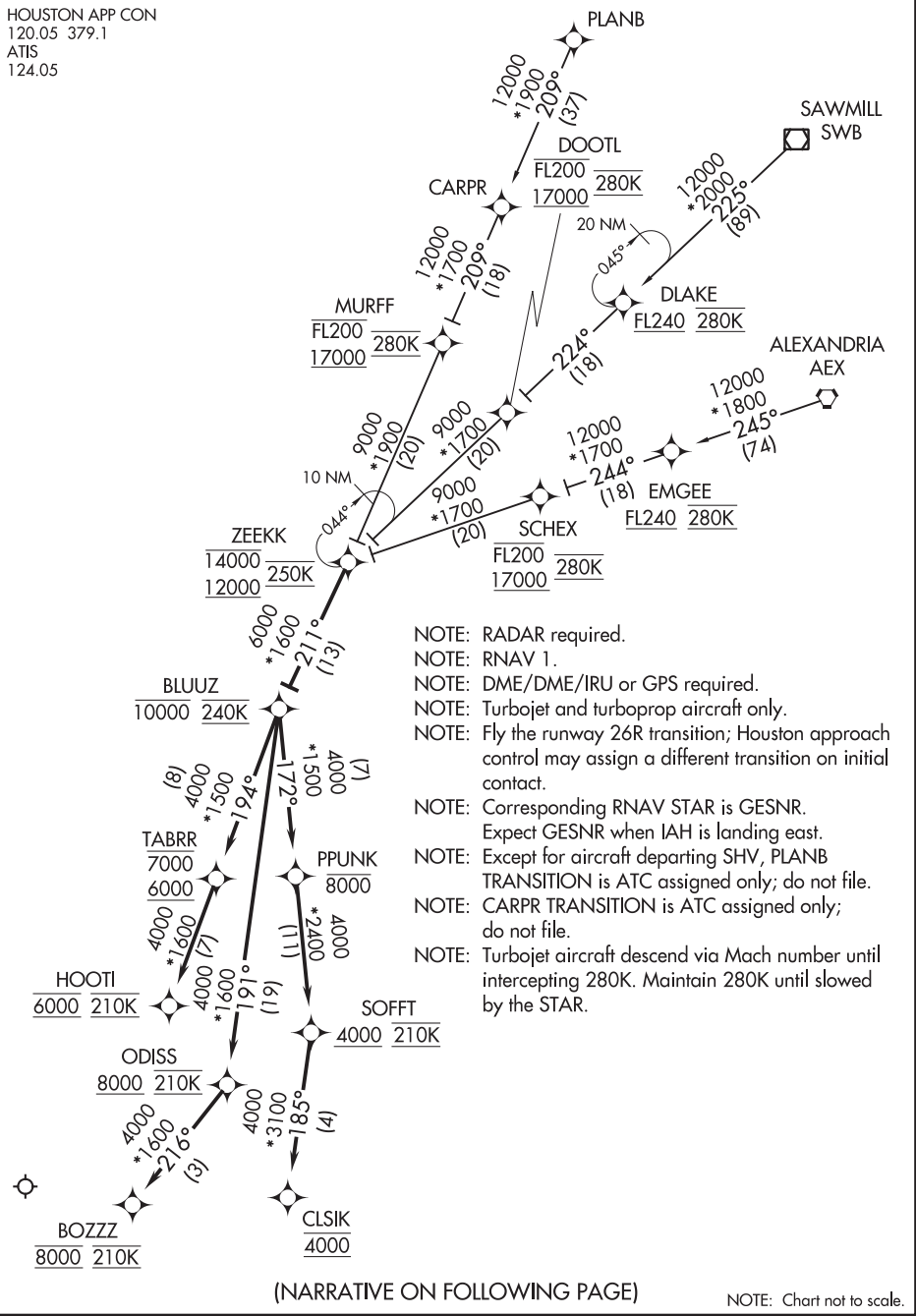
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

ZEEKK ONE ARRIVAL (RNAV)

ST-5461 (FAA)

HOUSTON, TEXAS

HOUSTON APP CON
120.05 379.1
ATIS
124.05



- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: Turbojet and turboprop aircraft only.
- NOTE: Fly the runway 26R transition; Houston approach control may assign a different transition on initial contact.
- NOTE: Corresponding RNAV STAR is GESNR. Expect GESNR when IAH is landing east.
- 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.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

ZEEKK ONE ARRIVAL (RNAV)

(ZEEKK.ZEEKK1) 15288

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ARRIVAL ROUTE DESCRIPTION

ALEXANDRIA TRANSITION (AEX.ZEEKK1):

CARPR TRANSITION (CARPR.ZEEKK1):

PLANB TRANSITION (PLANB.ZEEKK1):

SAWMILL TRANSITION (SWB.ZEEKK1):

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

LANDING RWY 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.

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

LANDING RWY 27: From BLUUZ on track 172° to cross PPUNK at or below 8000, then on track 172° to cross SOFFT at or above 4000 and at 210K, then on track 185° to cross CLSIK at 4000. Expect ILS or LOC RWY 27.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ANAHUAC, TEXAS

AL-6395 (FAA)

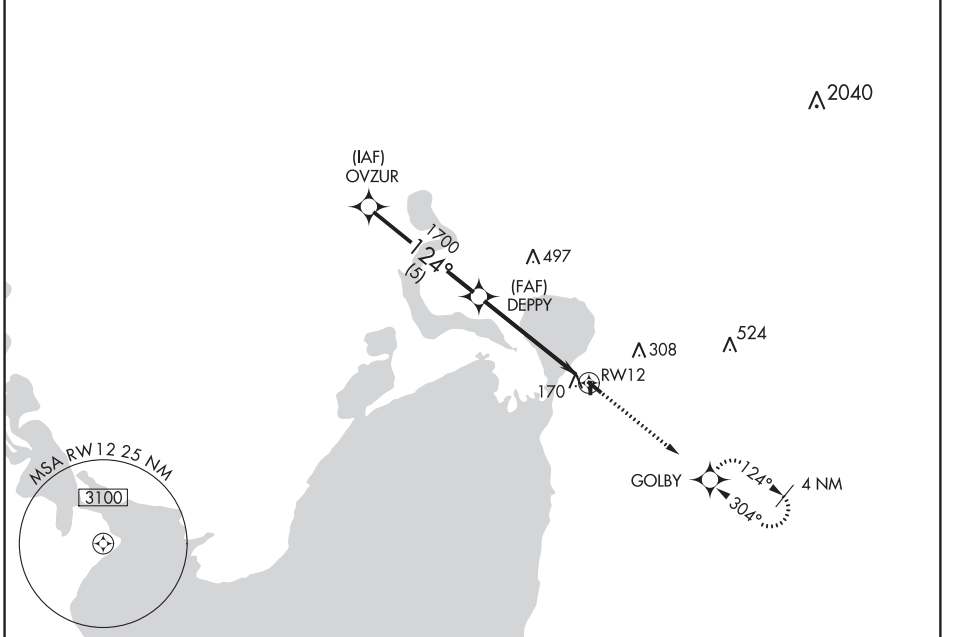
RNAV (GPS) RWY 12

ANAHUAC/CHAMBERS COUNTY (T00)

APP CRS 124°	Rwy Idg 3005 TDZE 21 Apt Elev 21
------------------------	---

<p>▽ Use Houston William P. Hobby altimeter setting. ▲ NA GPS or RNP-0.3 Required. DME/DME RNP-0.3 NA</p>	<p>MISSED APPROACH: Climb to 3000 direct GOLBY WP and hold.</p>
---	---

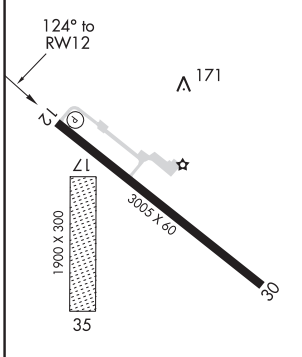
<p>HOUSTON APP CON 134.45 281.4</p>	<p>CTAF 122.9 0</p>
--	--------------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 21	TDZE 21
---------	---------



MIRL Rwy 12-30 0
LIRL Rwy 12-30



	OVZUR	DEPPY	RWY 12
	2000	1700	3000
	124°		30°
	3.09°		TCH 40
	5 NM	5 NM	

CATEGORY	A	B	C	D
LNAV MDA	560-1	539 (600-1)	560-1½ 539 (600-1½)	NA
CIRCLING	620-1	599 (600-1)	620-1½ 599 (600-1½)	NA

ANAHUAC, TEXAS
Orig-B 11069

29°46'N-94°40'W

ANAHUAC/CHAMBERS COUNTY (T00)

RNAV (GPS) RWY 12

(BLTWY3.BLTWY) 16315

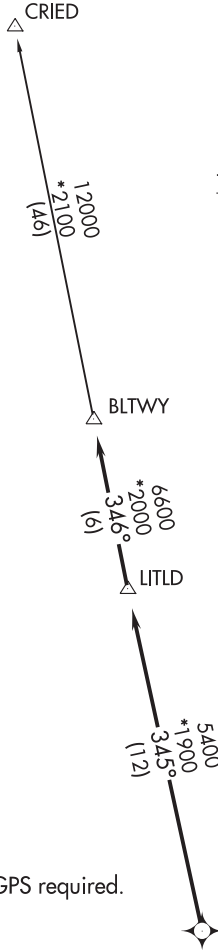
BLTWY THREE DEPARTURE (RNAV)

2
SL-6395 (FAA)

CHAMBERS COUNTY (T00)
ANAHUAC, TEXAS

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

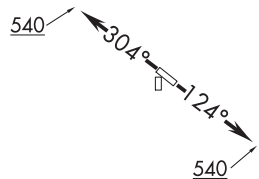
**TOP ALTITUDE:
4000**



TAKEOFF MINIMUMS

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

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



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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

ANAHUAC, TEXAS
CHAMBERS COUNTY (T00)

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb heading 124° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 30: Climb heading 304° to 540, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

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.
Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL.
Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

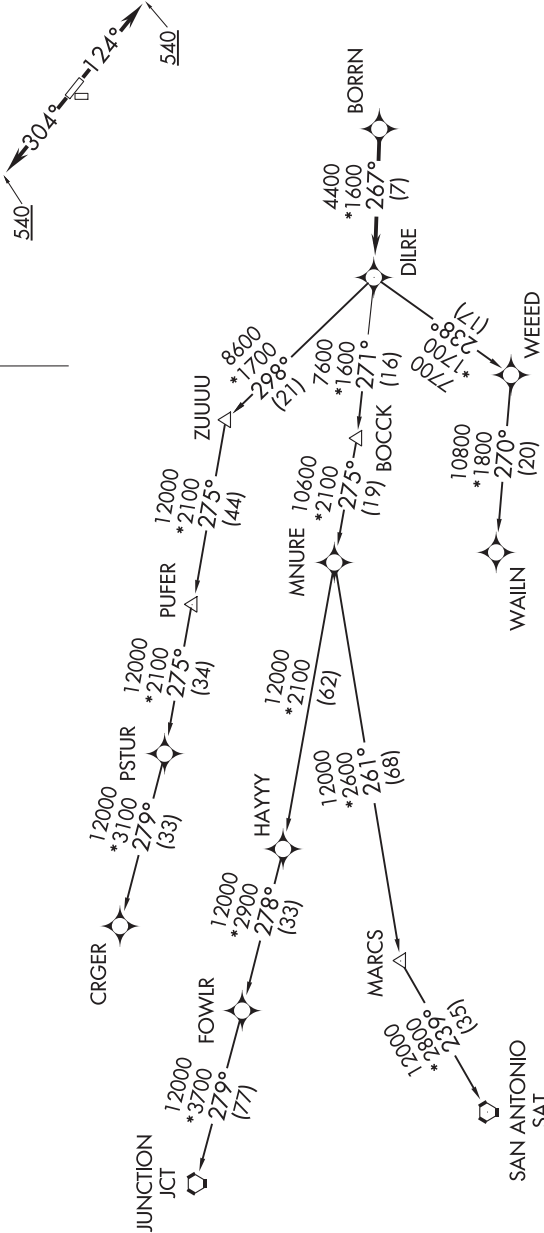
SC-5, 10 NOV 2016 to 05 JAN 2017

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

TAKEOFF MINIMUMS

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

TOP ALTITUDE:
4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb on heading 124° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 30: Climb on heading 304° to 540, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

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.

Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL.

Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

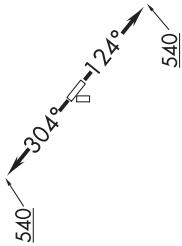
SC-5, 10 NOV 2016 to 05 JAN 2017

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

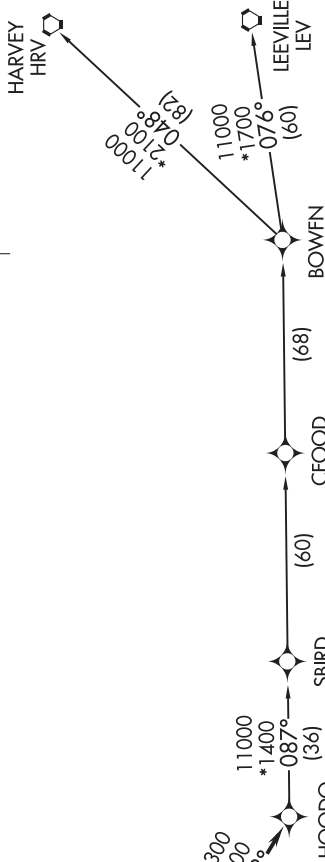
TOP ALTITUDE:
4000



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



SCHOLES
VUH



TAKEOFF MINIMUMS

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

NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb heading 124° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 30: Climb heading 304° to 540, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000. Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

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.

Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL.

Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

INDIE FOUR DEPARTURE (RNAV)

8
SL-6395 (FAA)

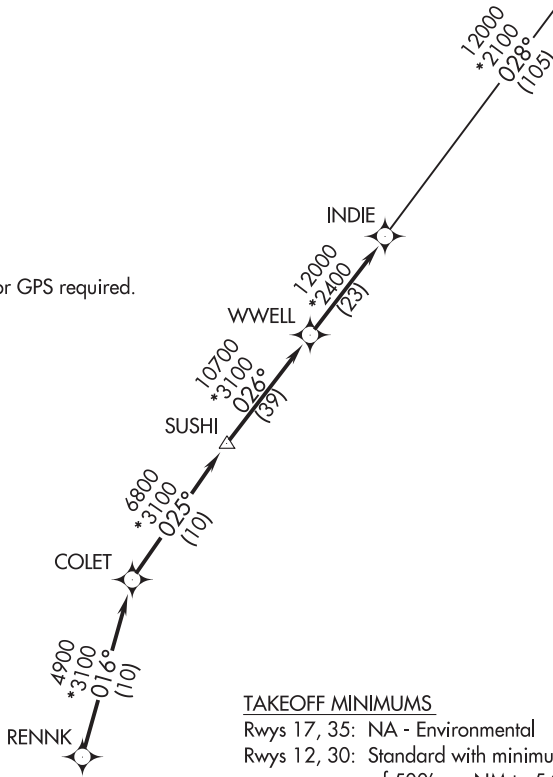
CHAMBERS COUNTY (T00)
ANAHUAC, TEXAS

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

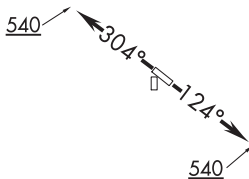
TPAKK

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.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

ANAHUAC, TEXAS
CHAMBERS COUNTY (T00)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb heading 124° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 30: Climb heading 304° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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.
Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL.
Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

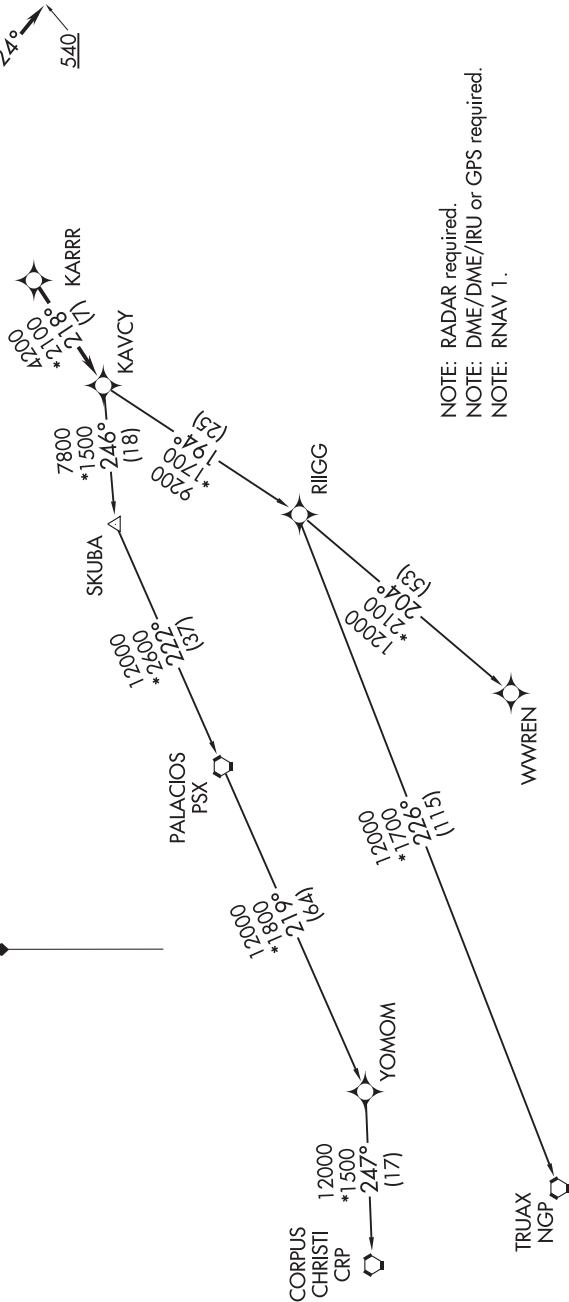
TOP ALTITUDE:
4000

TAKEOFF MINIMUMS

Rwys 17, 35: NA - Environmental

Rwys 12, 30: Standard with minimum climb of 500' per NM to 540.

HOUSTON DEP CON
134.45 284.0
CTAF
122.9



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

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

NOTE: Chart not to scale.

KARR THREE DEPARTURE (RNAV)

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb on heading 124° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 30: Climb on heading 304° to 540, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

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.
Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL.
Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

12
SL-6395 (FAA)

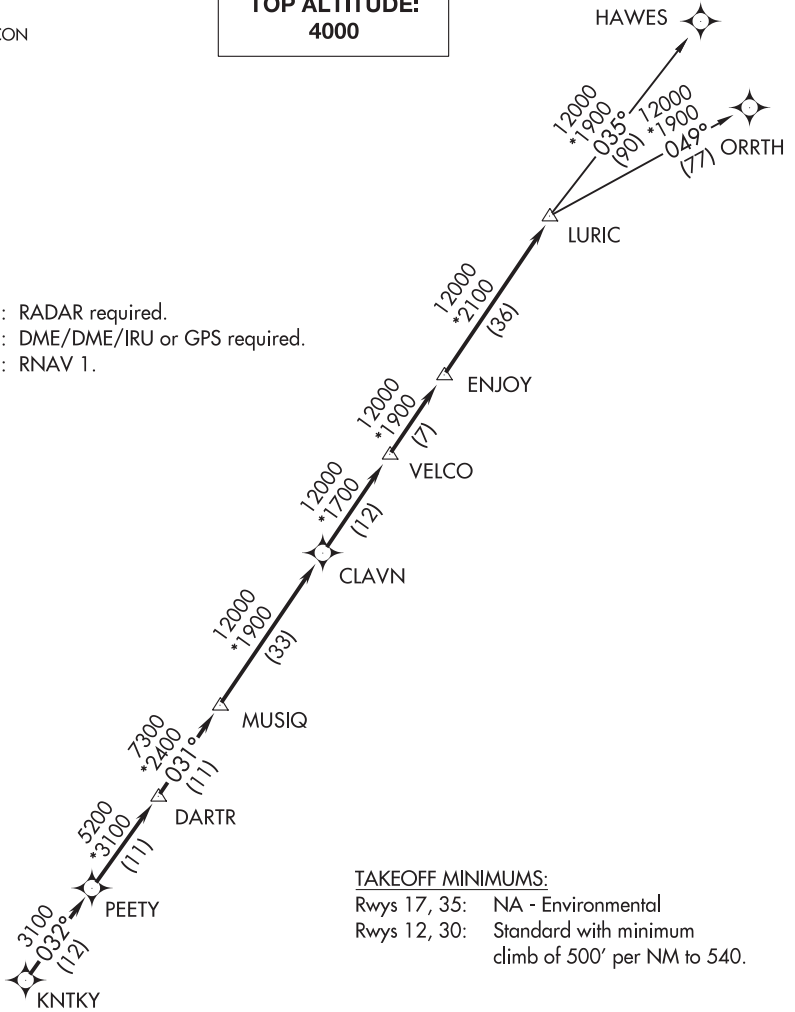
CHAMBERS COUNTY (T00)
ANAHUAC, TEXAS

LURIC FOUR DEPARTURE (RNAV)

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

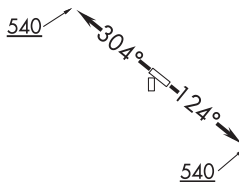
**TOP ALTITUDE:
4000**

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.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)
(LURIC4.LURIC) 10NOV16

ANAHUAC, TEXAS
CHAMBERS COUNTY (T00)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb heading 124° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 30: Climb heading 304° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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.

Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL.

Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

SL-6395 (FAA)

ANAHUAC, TEXAS

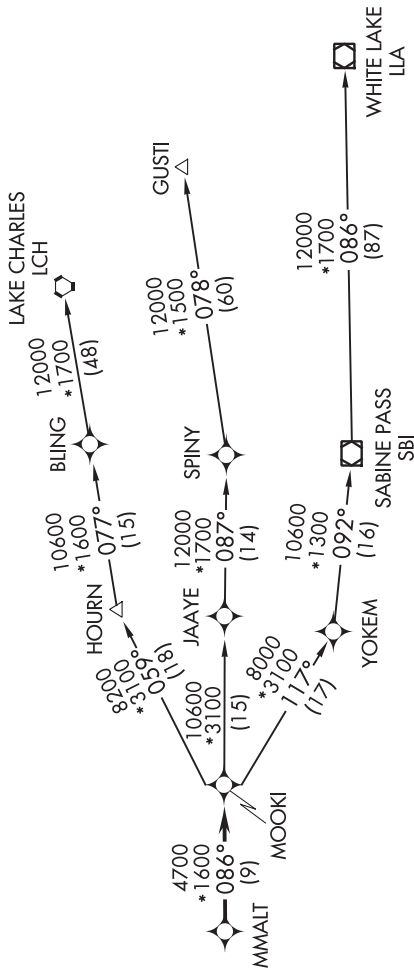
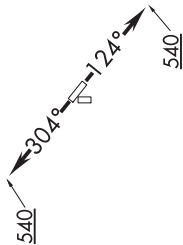
2102 NAT 01 9102 AON 01 05 JAN 2017

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS:

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



NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

NOTE: RNAV 1.

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

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb on heading 124° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 30: Climb on heading 304° to 540, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

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.

Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL.

Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

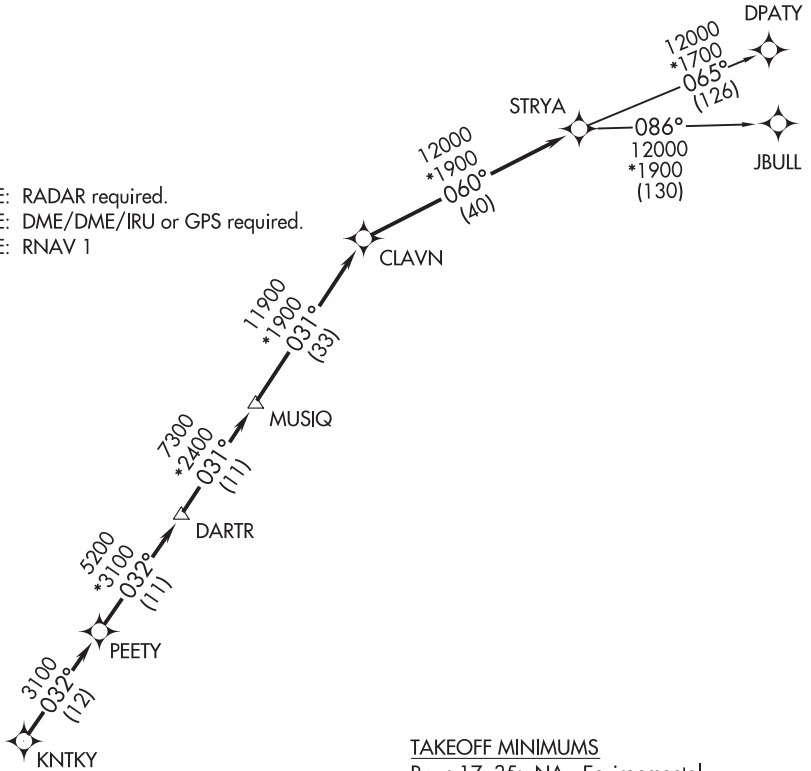
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

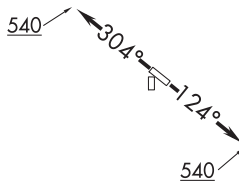
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1



TAKEOFF MINIMUMS

Rwys 17, 35: NA - Environmental.

Rwys 12, 30: Standard with minimum
climb of 500' per NM to 540.



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

NOTE: Chart not to scale.

STRYA FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb heading 124° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 30: Climb heading 304° to 540, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

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.

Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL.

Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 16315

SL-6395 (FAA)

CHAMBERS COUNTY (T00)
ANAHUAC, TEXAS

STYCK FOUR DEPARTURE (RNAV)

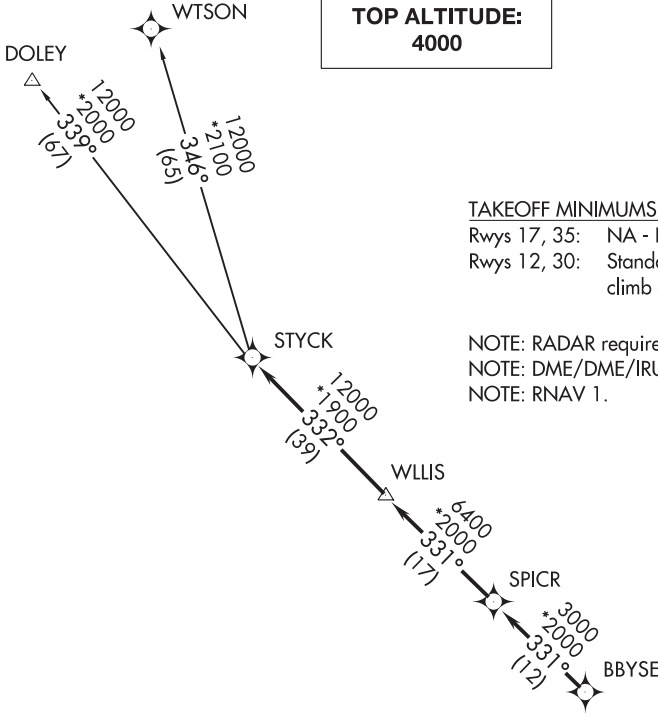
**TOP ALTITUDE:
4000**

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

TAKEOFF MINIMUMS:

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

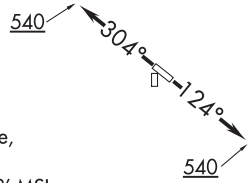
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.



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. Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL. Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb heading 124° to 540, expect RADAR vectors to BBYSE, thence. . .
TAKEOFF RWY 30: Climb heading 304° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)
WTSON TRANSITION (STYCK4.WTSON)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

ANAHUAC, TEXAS
CHAMBERS COUNTY (T00)

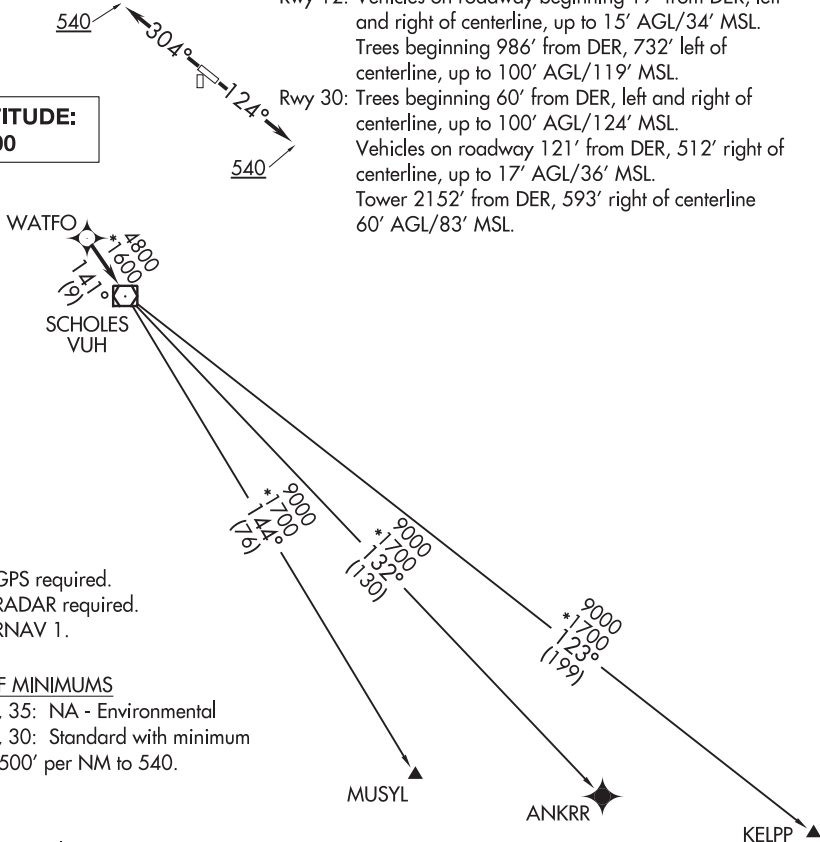
WATFO THREE DEPARTURE (RNAV)

HOUSTON DEP CON
134.45 284.0
CTAF
122.9

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. Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL. Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

**TOP ALTITUDE:
4000**



NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS

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

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb on heading 124° to 540, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 30: Climb on heading 304° to 540, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

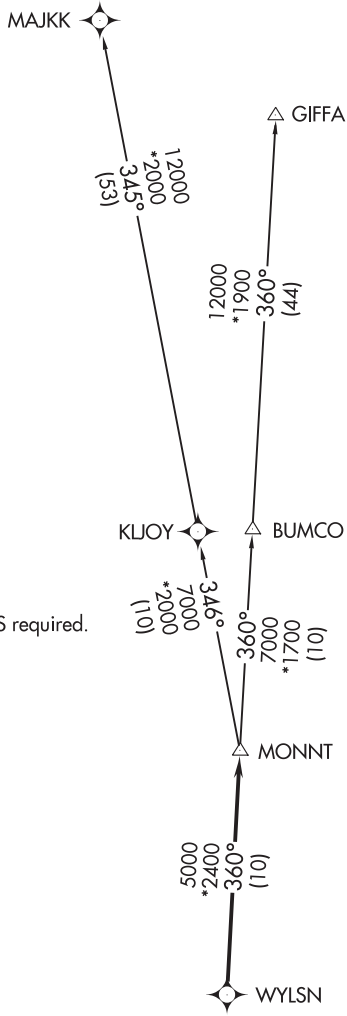
SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

ANAHUAC, TEXAS

CTAF
122.9
HOUSTON DEP CON
134.45 284.0

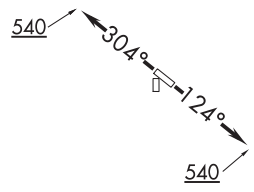
**TOP ALTITUDE:
4000**



- 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.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 12: Climb on heading 124° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 30: Climb on heading 304° to 540, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJKK)

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.

Vehicles on roadway 121' from DER, 512' right of centerline, up to 17' AGL/36' MSL.

Tower 2152' from DER, 593' right of centerline 60' AGL/83' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC I-LBX 109.1	APP CRS 175°	Rwy Idg 7000	TDZE 25
		Apt Elev 25	

ILS or LOC RWY 17

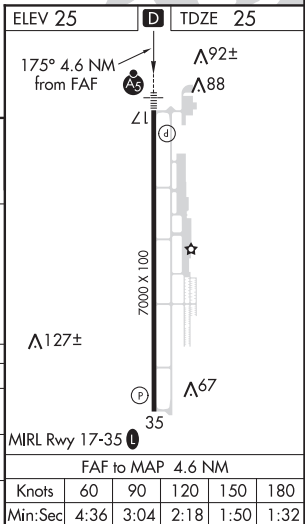
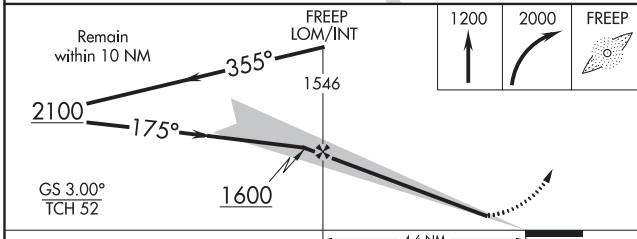
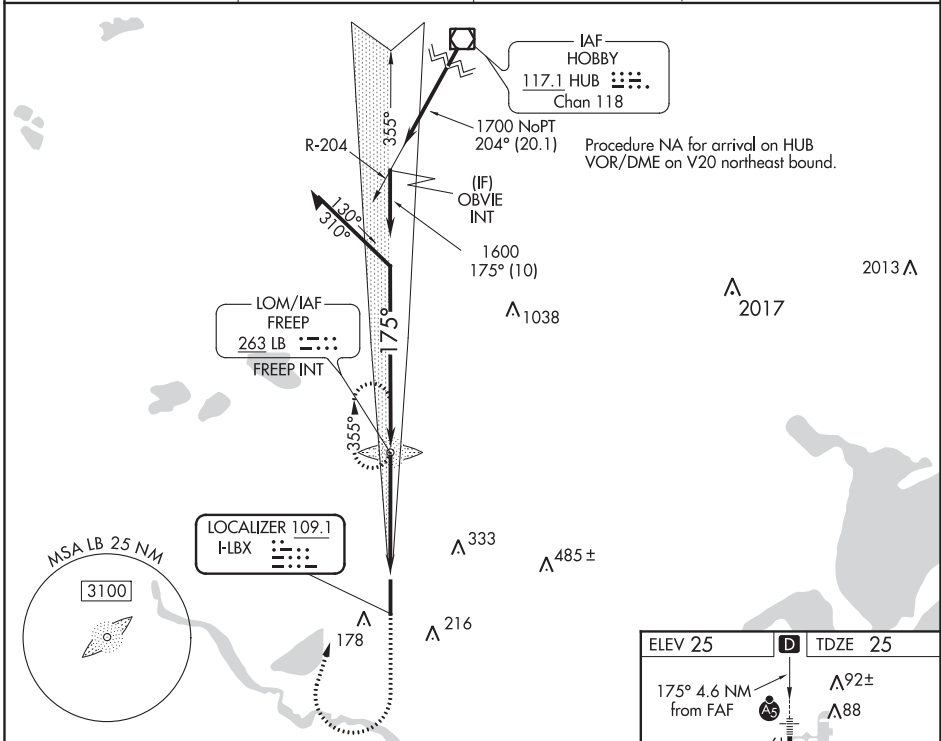
TEXAS GULF COAST RGNL (L.B.X)

⚠ Circling NA East of Rwy 17-35. When local altimeter setting not received, use William P. Hobby altimeter setting and increase all DA 81 feet and all MDA 100 feet, increase S-LOC 17 Cats C/D visibility to 1/4, increase Circling Cat C to 1/8. ADF required. For inoperative MALSR, when using William P Hobby altimeter setting, increase S-ILS 17 visibility to 2/3 all Cats.



MISSED APPROACH: Climb to 1200, then climbing right turn to 2000 direct FREEP LOM and hold.

ASOS 119,925	HOUSTON APP CON 134.45 284.0	CLNC DEL 125.2	UNICOM 123.0 (CTAF) 0
------------------------	--	--------------------------	---------------------------------



CATEGORY	A	B	C	D
S-ILS 17	225-1/2 200 (200-1/2)			
S-LOC 17	500-1/2	475 (500-1/2)	500-1	475 (500-1)
CIRCLING	500-1	475 (500-1)	500-1/2	580-2 475 (500-1/2) 555 (600-2)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

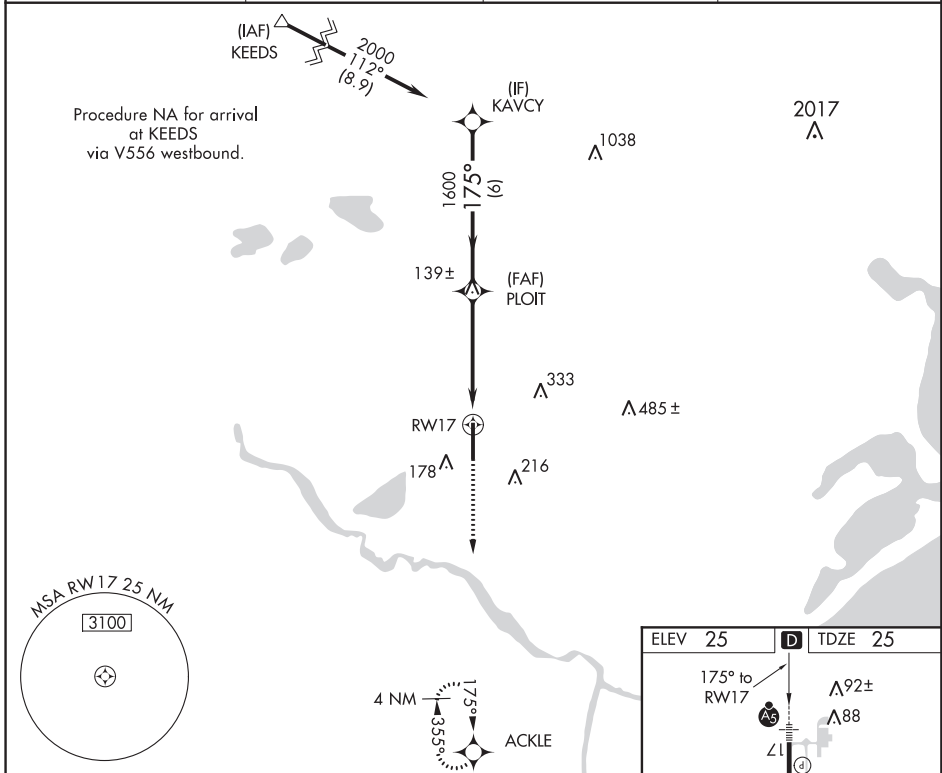
WAAS CH 70316 W17A	APP CRS 175°	Rwy Idg TDZE Apt Elev	7000 25 25
--	------------------------	-----------------------------	---------------------------------------

RNAV (GPS) RWY 17

ANGLETON/ TEXAS GULF COAST RGNL (L.B.X)

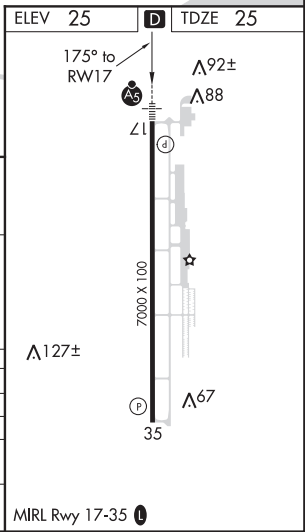
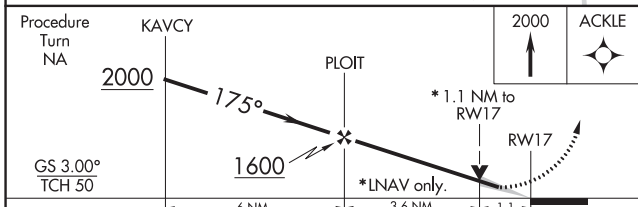
<p>▼ DME/DME RNP-0.3 NA. Baro-VNAV NA below -16°C (4°F). If local altimeter setting not received, use William P Hobby altimeter setting and increase all DAs/MDAs 100 feet. Baro-VNAV and VDP NA when using William P Hobby altimeter setting. Circling NA east of Rwy 17-35. For inop MALSR, increase LPV visibility to 1 mile all Cats, LNAV Cat D visibility to 1½ mile.</p>	<p>MALSR</p>	<p>MISSED APPROACH: Climb to 2000 direct ACKLE and hold.</p>
--	--------------	--

ASOS 119.925	HOUSTON APP CON 134.45 284.0	CLNC DEL 125.2	UNICOM 123.0 (CTAF) ①
------------------------	--	--------------------------	---------------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D
LPV DA		282-1/2	257 (300-1/2)	
LNAV/VNAV DA		360-3/4	335 (400-3/4)	
LNAV MDA		420-1/2	395 (400-1/2)	420-1 395 (400-1)
CIRCLING	480-1/4	455 (500-1/4)	480-1/2 455 (500-1/2)	580-2 555 (600-2)

WAAS CH 77516 W35A	APP CRS 355°	Rwy Idg TDZE Apt Elev	7000 25 25
--	------------------------	-----------------------------	---------------------------------------

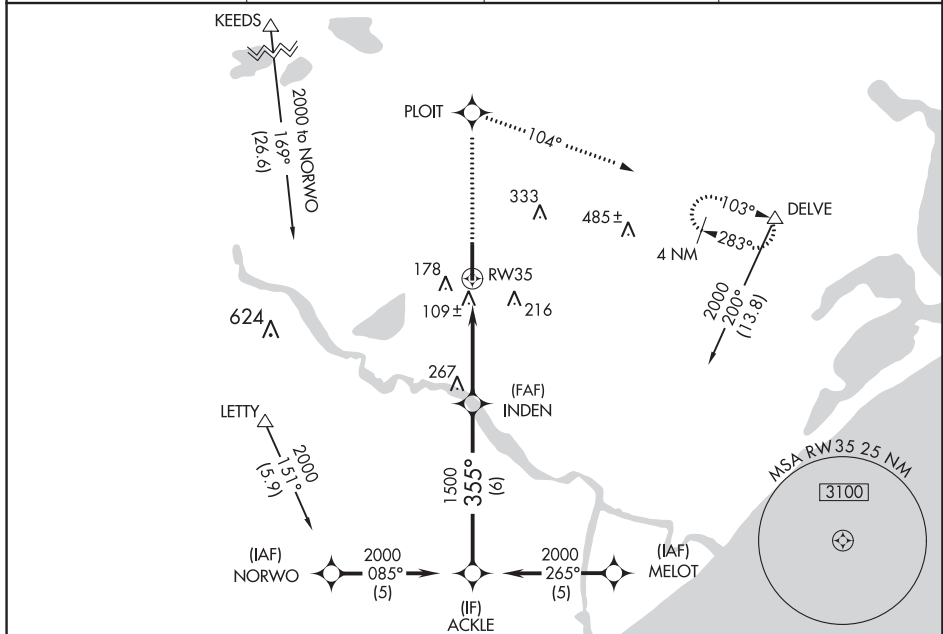
RNAV (GPS) RWY 35

ANGLETON/ TEXAS GULF COAST RGNL (L.B.X)

▽ DME/DME RNP-0.3 NA. Baro-VNAV NA below -1.6°C (4°F). If local altimeter setting not received, use William P Hobby altimeter setting and increase all DAs/MDAs 100 feet. Baro-VNAV and VDP NA when using William P Hobby altimeter setting. Circling NA east of Rwy 17-35.

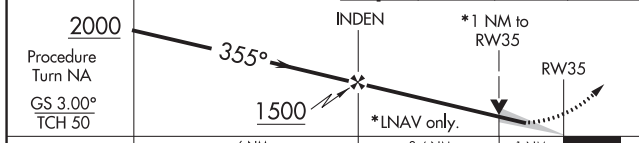
▲ MISSED APPROACH: Climb to 2000 direct PLOT and right turn via 104° track to DELVE and hold.

ASOS 119.925	HOUSTON APP CON 134.45 284.0	CLNC DEL 125.2	UNICOM 123.0 (CTAF)
------------------------	--	--------------------------	-------------------------------

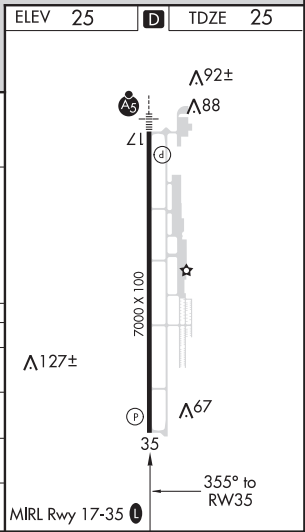


ELEV	25	D	TDZE	25
------	----	---	------	----

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 40).
 Procedure Turn NA
 GS 3.00°
 TCH 50



CATEGORY	A	B	C	D
LPV DA		275-¾	250 (300-¾)	
LNAV/ VNAV DA		428-1½	403 (500-1½)	
LNAV MDA	420-1	395 (400-1)		420-1¼ 395 (400-1¼)
CIRCLING	480-1½	455 (500-1½)		580-2 555 (600-2)

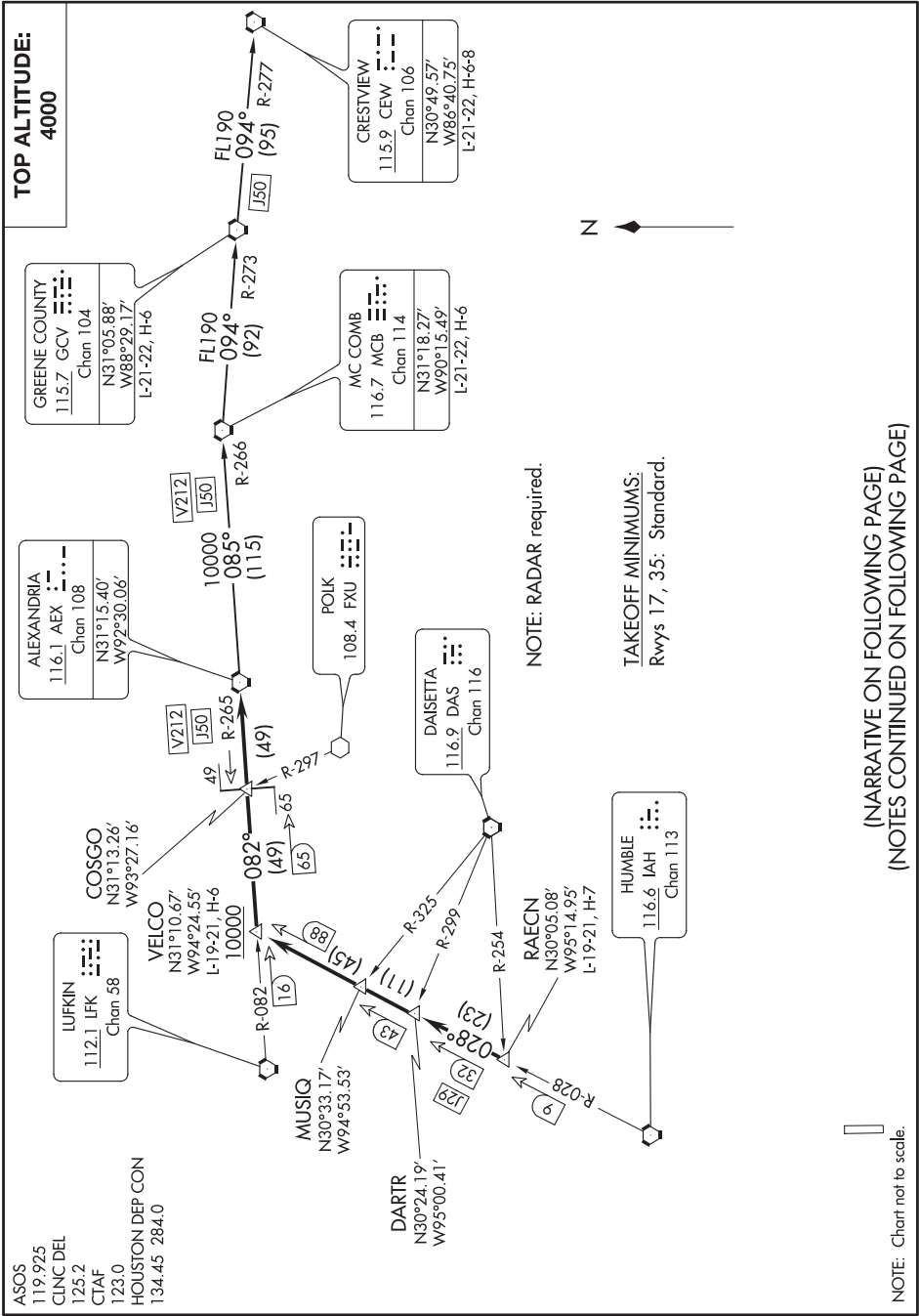


SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



ALEXANDRIA NINE DEPARTURE

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

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAE CN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

TAKEOFF OBSTACLE NOTES

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

BLTWY THREE DEPARTURE (RNAV)

SL-6453 (FAA)

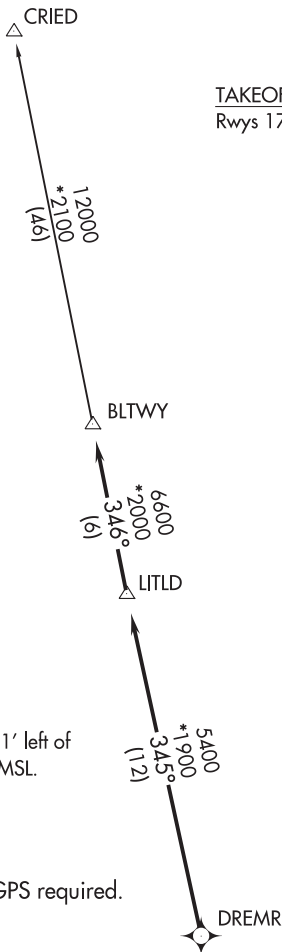
TEXAS GULF COAST RGNL (L.B.X)
ANGLETON/LAKE JACKSON, TEXAS

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

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS

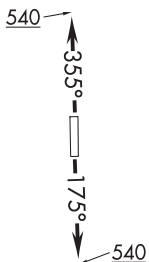
Rwys 17, 35: Standard with minimum climb
of 500' per NM to 540.



TAKEOFF OBSTACLES NOTES

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

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



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 175° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 35: Climb heading 355° to 540, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

ANGLETON/LAKE JACKSON, TEXAS
TEXAS GULF COAST RGNL (L.B.X)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

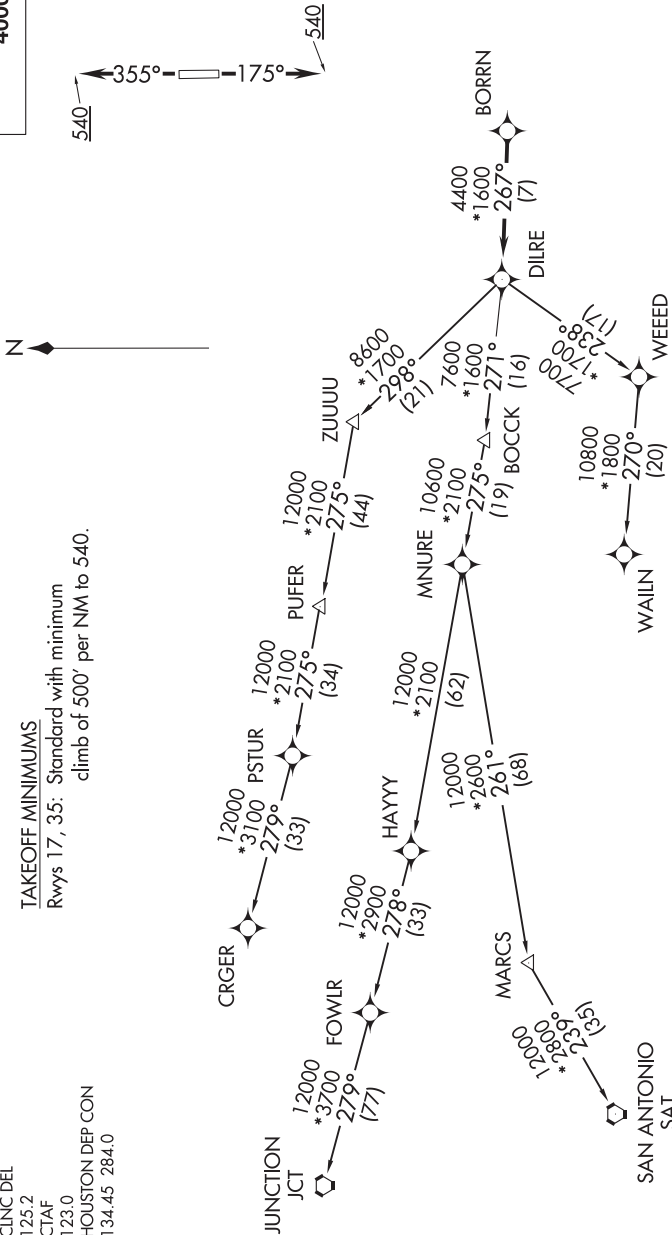
BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

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

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

TOP ALTITUDE:
 4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 175° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 35: Climb on heading 355° to 540, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

TAKEOFF OBSTACLE NOTES

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(CRIED8.CRIED) 16315

CRIED EIGHT DEPARTURE

SL-6453 (FAA)

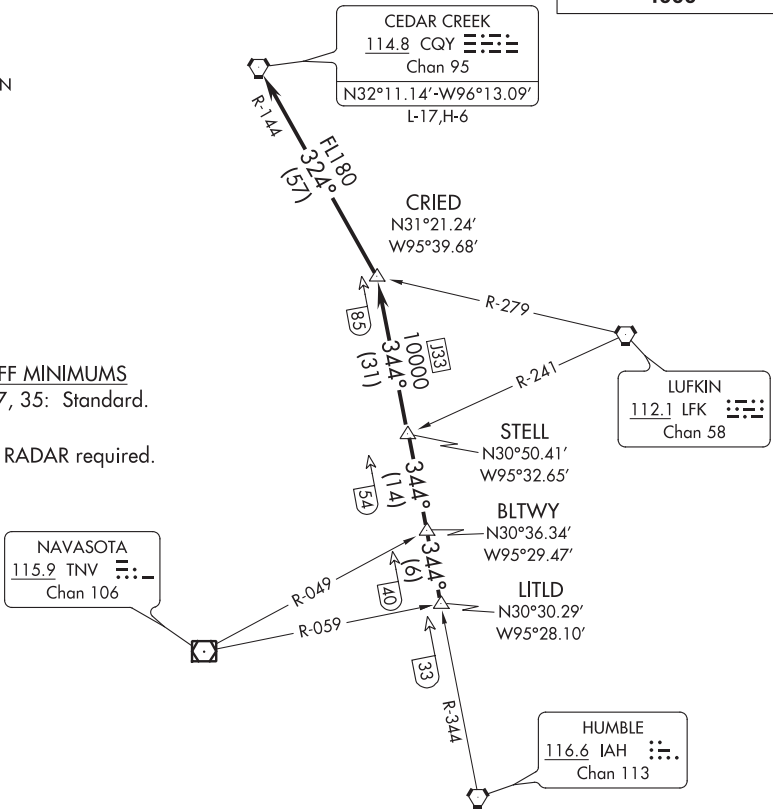
TEXAS GULF COAST RGNL (L,BX)
ANGLETON/LAKE JACKSON, TEXAS

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

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

NOTE: RADAR required.



TAKEOFF OBSTACLE NOTES

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT, maintain 4000. 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.

CRIED EIGHT DEPARTURE

(CRIED8.CRIED) 10NOV16

ANGLETON/LAKE JACKSON, TEXAS
TEXAS GULF COAST RGNL (L,BX)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE

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

**TOP ALTITUDE:
4000**

EL DORADO
115.5 ELD
Chan 102
N33°15.37'-W92°44.64'
L-17, H-6

NOTE: RADAR required.
NOTE: For aircraft destined MEM
or filed via Q32 or J42.

LUFKIN
112.1 LFK
Chan 58

R-208
028°
(143)

ENJOY
N31°16.73'
W94°19.82'

MUSIQ
N30°33.17'
W94°53.53'

VELCO
N31°10.67'
W94°24.55'
10000

DARTR
N30°24.19'
W95°00.41'

RAECN
N30°05.08'
W95°14.95'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

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

NOTE: Chart not to scale.

EL DORADO EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

TAKEOFF OBSTACLE NOTES

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

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

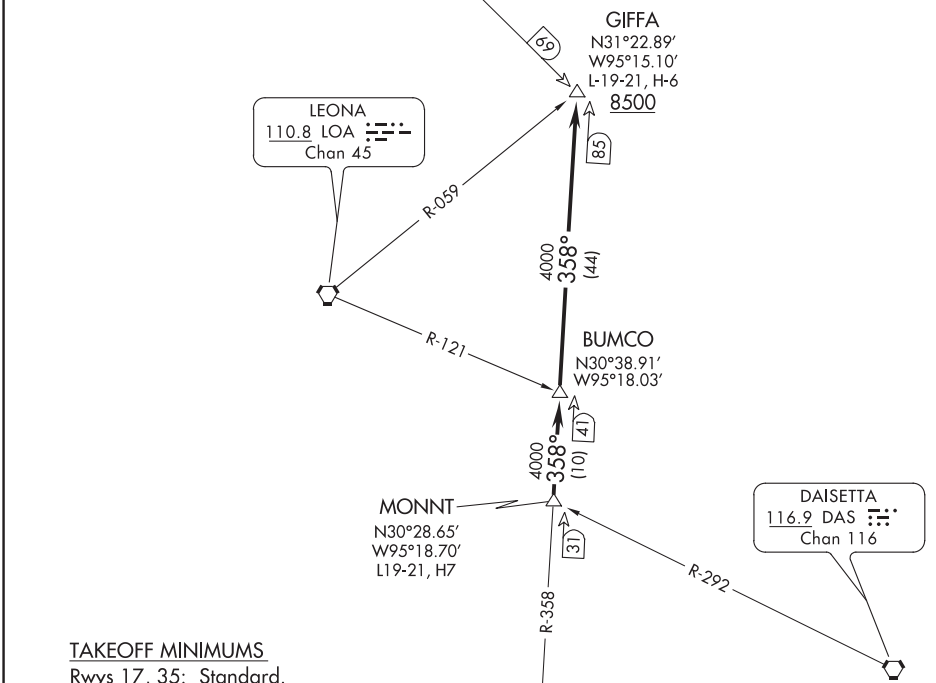
CEDAR CREEK
114.8 CQY
Chan 95

LEONA
110.8 LOA
Chan 45

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113

**TOP ALTITUDE:
4000**



TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

TAKEOFF OBSTACLE NOTES

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)

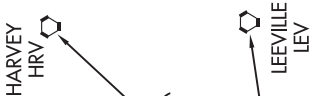
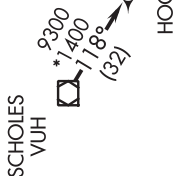
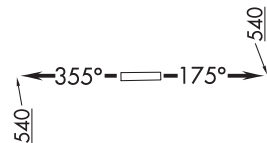
SC-5, 10 NOV 2016 to 05 JAN 2017

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

TOP ALTITUDE:
4000



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



TAKEOFF MINIMUMS

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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 175° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 35: Climb heading 355° to 540, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

(INDIE4.INDIE) 16315

SL-6453 (FAA)

TEXAS GULF COAST RGNL (LBX)
ANGLETON/LAKE JACKSON, TEXAS

INDIE FOUR DEPARTURE (RNAV)

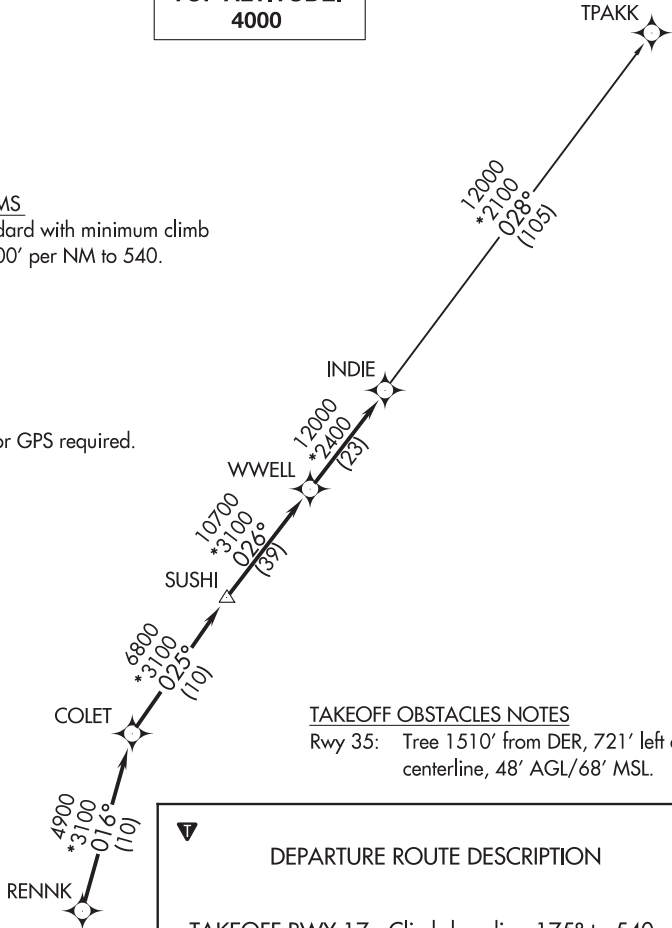
**TOP ALTITUDE:
4000**

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

TAKEOFF MINIMUMS

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

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



TAKEOFF OBSTACLES NOTES

Rwy 35: Tree 1510' from DER, 721' left of
centerline, 48' AGL/68' MSL.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 175° to 540,
expect RADAR vectors to RENNK, thence . . .

TAKEOFF RWY 35: Climb heading 355° to 540,
expect 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
4000 or as assigned by ATC. Expect filed altitude
10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS
equipped aircraft TNV DME must be operational.

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

ANGLETON/LAKE JACKSON, TEXAS
TEXAS GULF COAST RGNL (LBX)

SC-5, 10 NOV 2016 to 05 JAN 2017

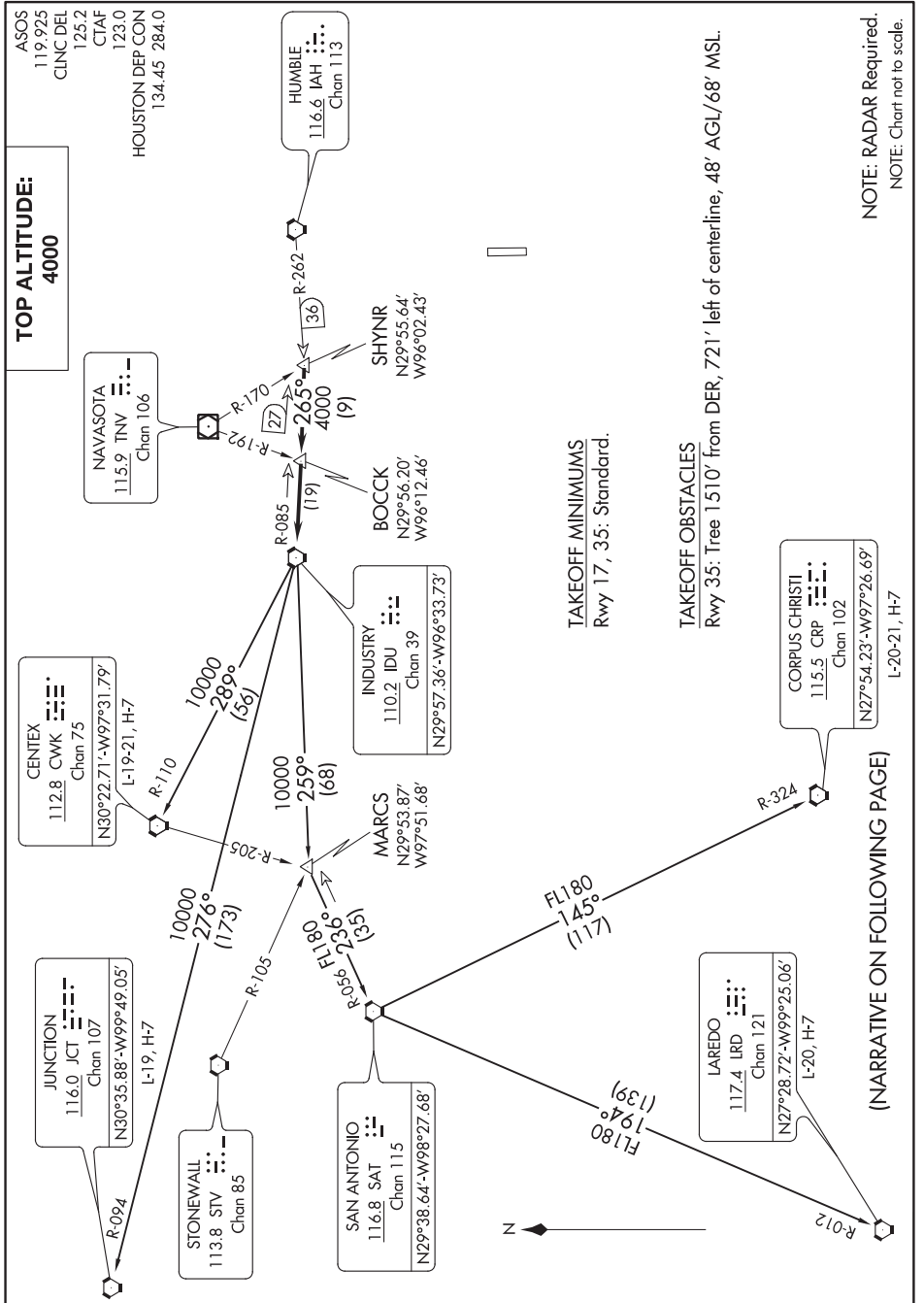
SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SL-6453 (FAA)

TEXAS GULF COAST RGNL (L.B.X)
ANGLETON/LAKE JACKSON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



INDUSTRY EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

(NARRATIVE ON FOLLOWING PAGE)



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

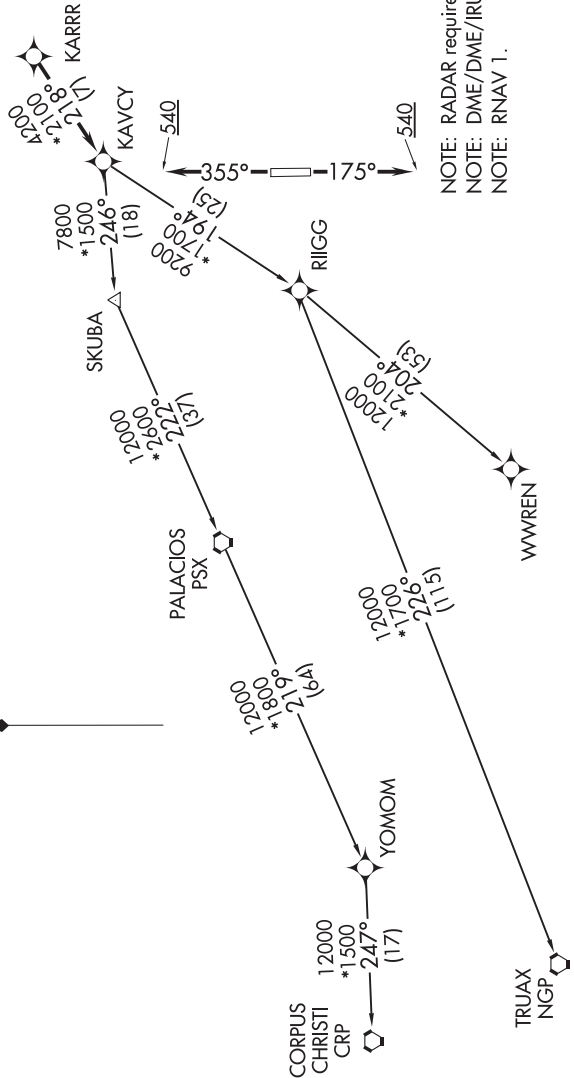
KARR THREE DEPARTURE (RNAV)

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS

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

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



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

NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 175° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 35: Climb on heading 355° to 540, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

TAKEOFF OBSTACLE NOTE:

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LOA2.LOA) 16315

LEONA TWO DEPARTURE

SL-6453 (FAA)

TEXAS GULF COAST RGNL (LBX)
ANGLETON/LAKE JACKSON, TEXAS

**TOP ALTITUDE:
4000**

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

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'

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'

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

DOLEY
N32°11.35'
W96°23.08'

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

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

WLLIS
N30°32.08'
W95°39.10'

NAVASOTA
115.9 TNV
Chan 106

HUMBLE
116.6 IAH
Chan 113

NOTE: RADAR required.
NOTE: Except for aircraft destined
ACT or the DFW terminal area,
all aircraft filing the LOA2 SID
must file one of the published
transitions via FUZ (LOA2.FUZ)
ADM (LOA2.ADM) or
BYP (LOA2.BYP).

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

(NOTES ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

LEONA TWO DEPARTURE

(LOA2.LOA) 10NOV16

ANGLETON/LAKE JACKSON, TEXAS
TEXAS GULF COAST RGNL (LBX)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

TAKEOFF OBSTACLE NOTES

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LFK1.LFK) 16315

LUFKIN ONE DEPARTURE

SL-6453 (FAA)

TEXAS GULF COAST RGNL (LBX)
ANGLETON/LAKE JACKSON, TEXAS

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

**TOP ALTITUDE:
4000**

LITTLE ROCK
113.9 LIT
Chan 86
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: RADAR required.
NOTE: For aircraft destined LIT or overflying LIT or PXV.

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

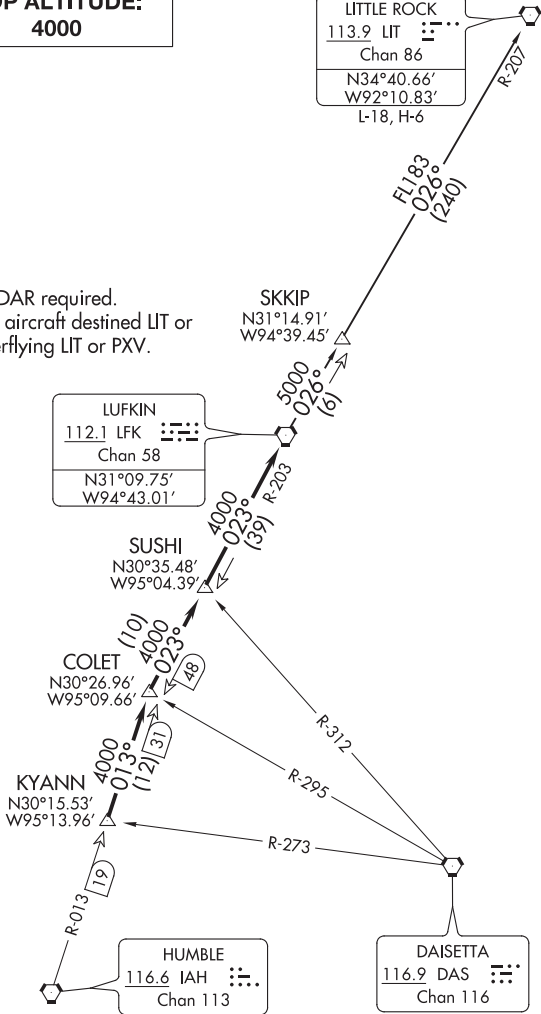
SUSHI
N30°35.48'
W95°04.39'

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



TAKEOFF MINIMUMS:
Rwys 17, 35: Standard.

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

NOTE: Chart not to scale.

LUFKIN ONE DEPARTURE

(LFK1.LFK) 10NOV16

ANGLETON/LAKE JACKSON, TEXAS
TEXAS GULF COAST RGNL (LBX)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

TAKEOFF OBSTACLE NOTES:

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

46
SL-6453 (FAA)

TEXAS GULF COAST RGNL (L.B.X)

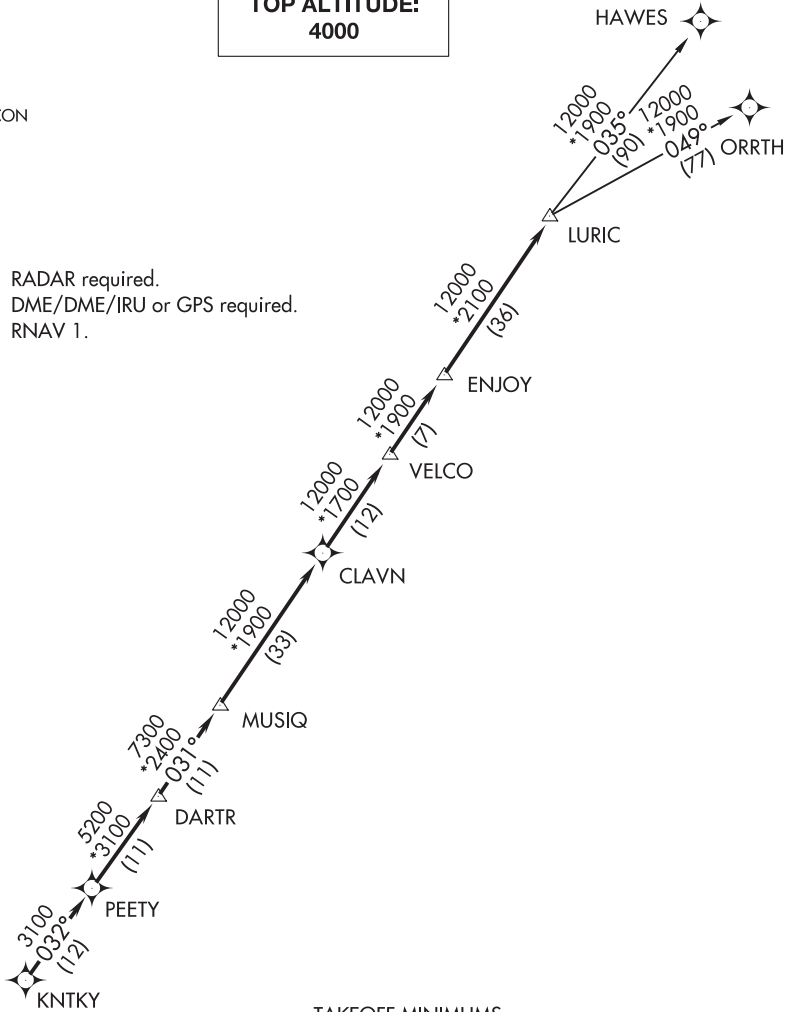
LURIC FOUR DEPARTURE (RNAV)

ANGLETON/LAKE JACKSON, TEXAS

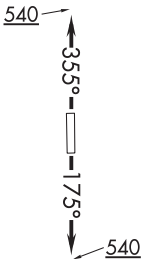
ASOS
119.925
CLNC DEL
125.2
CTAF
123.0
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

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.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)
(LURIC4.LURIC) 10NOV16

ANGLETON/LAKE JACKSON, TEXAS
TEXAS GULF COAST RGNL (L.B.X)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 175° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 35: Climb heading 355° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

TAKEOFF OBSTACLE NOTES:

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(MMALT2.MMALT) 15008

TEXAS GULF COAST RGNL (L.BX)

MMALT TWO DEPARTURE (RNAV)

SL-6453 (FAA)

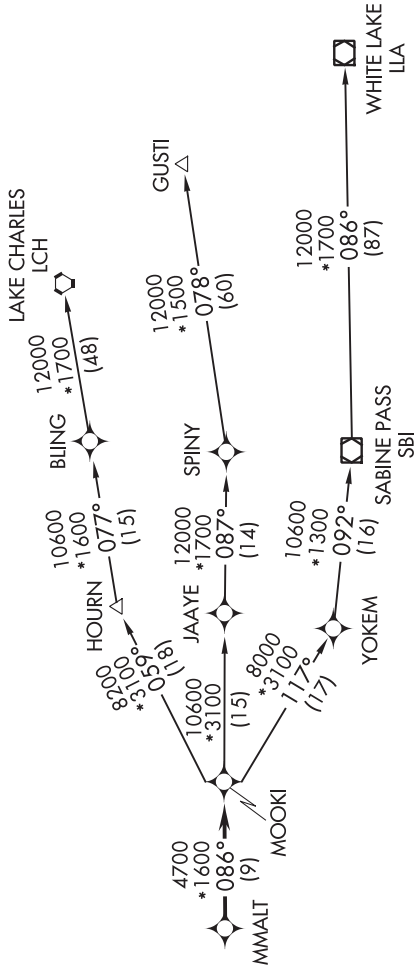
ANGLETON/LAKE JACKSON, TEXAS

210Z NOV 01 910Z NOV 2017 10:05 JAN 2017

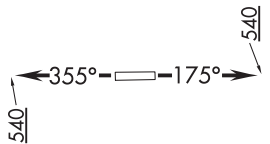
ASOS
119.925
CLNC DEL
125.2
CTAF
123.0
HOUSTON DEP CON
134.45 284.0

TOP ALTITUDE:
4000

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



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41 and 54T.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

(MMALT2.MMALT) 15008

ANGLETON/LAKE JACKSON, TEXAS

TEXAS GULF COAST RGNL (L.BX)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 175° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 35: Climb on heading 355° to 540, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

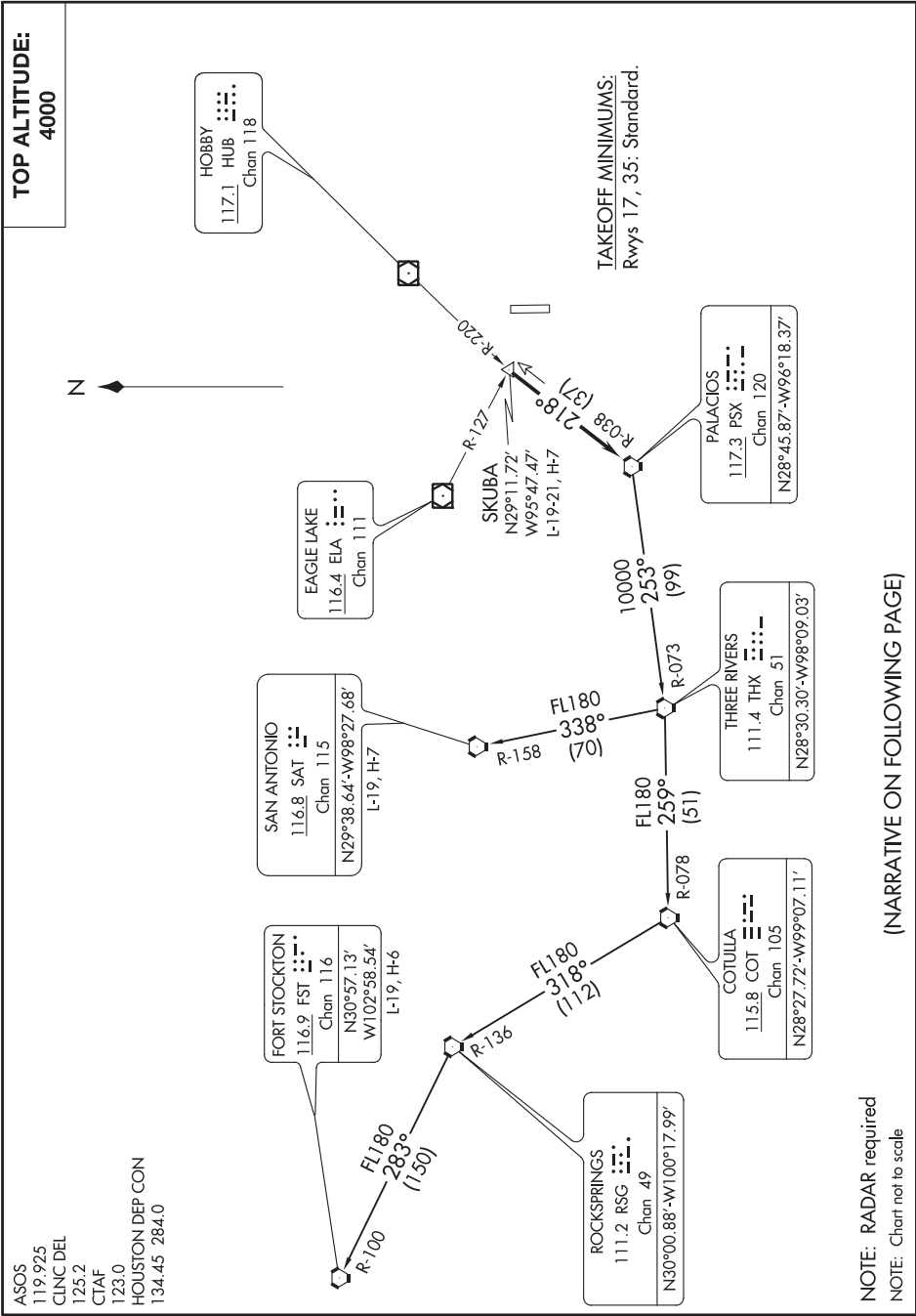
TAKEOFF OBSTACLE NOTES:

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

TAKEOFF OBSTACLE NOTES:

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(STRYA4.STRYA) 16315

52
SL-6453 (FAA)

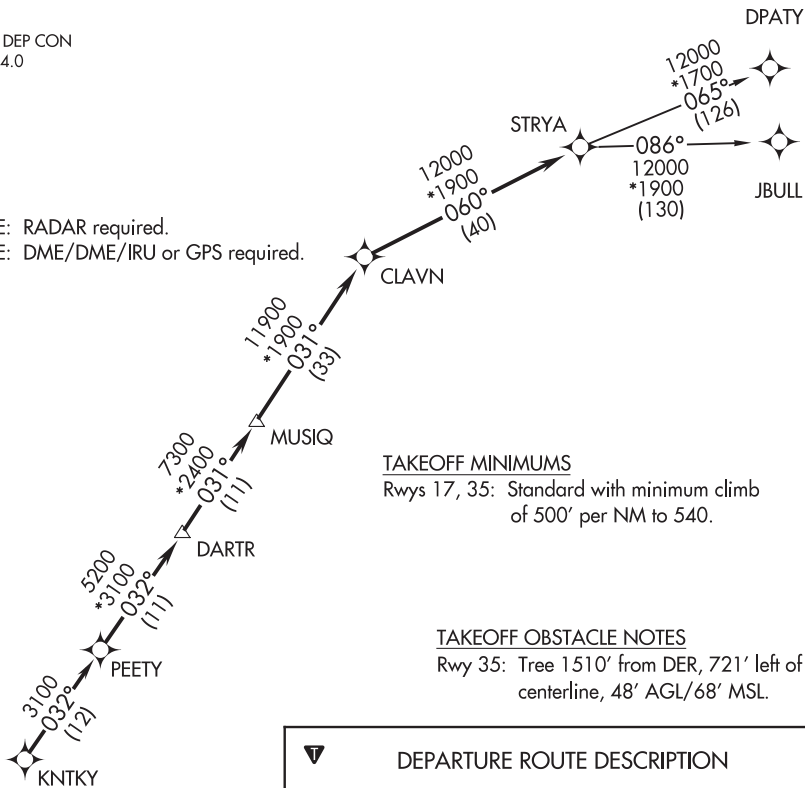
TEXAS GULF COAST RGNL (LBX)
ANGLETON/LAKE JACKSON, TEXAS

STRYA FOUR DEPARTURE (RNAV)

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

**TOP ALTITUDE:
4000**

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



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

TAKEOFF OBSTACLE NOTES
Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

DEPARTURE ROUTE DESCRIPTION

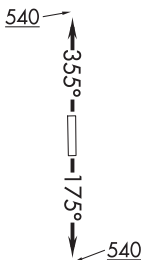
TAKEOFF RWY 17: Climb heading 175° to 540, expect RADAR vectors to KNTKY, thence . . .

TAKEOFF RWY 35: Climb heading 355° to 540, expect RADAR vectors to KNTKY, thence . . .

. . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)



NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

(STRYA4.STRYA) 10NOV16

ANGLETON/LAKE JACKSON, TEXAS
TEXAS GULF COAST RGNL (LBX)

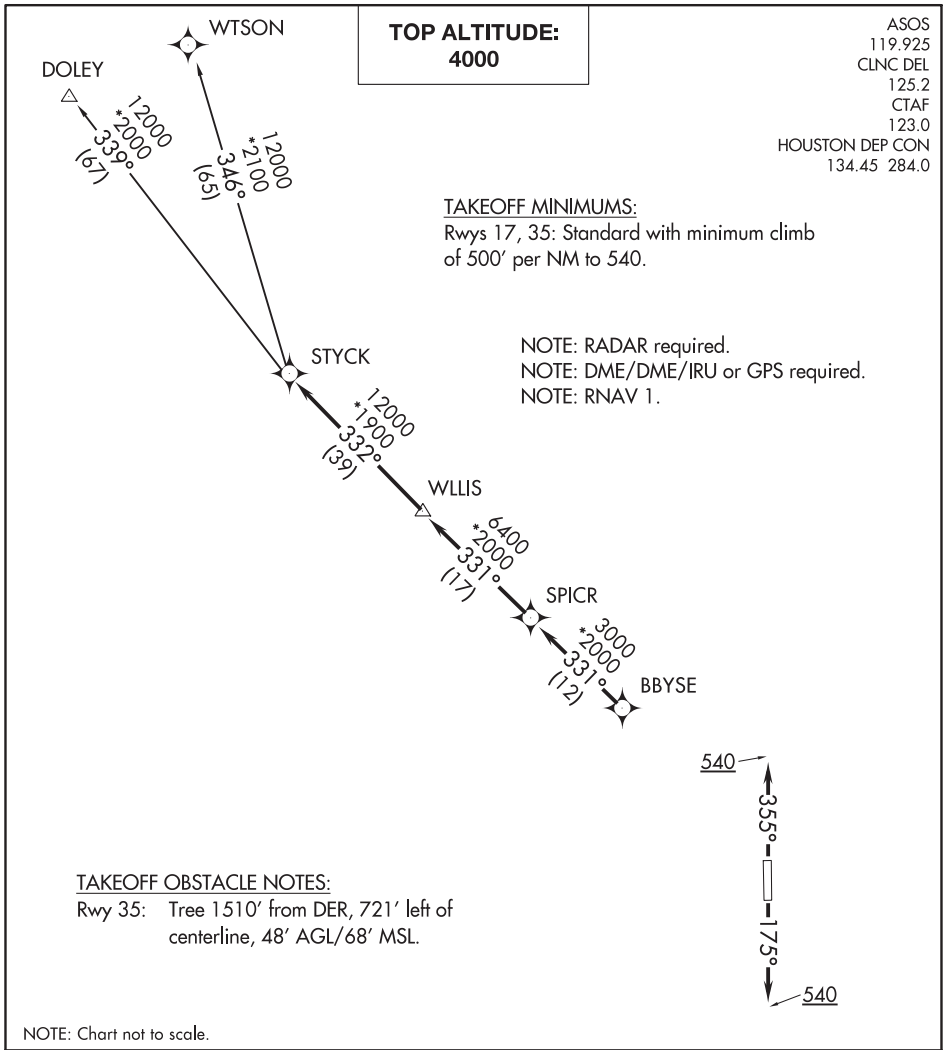
(STYCK4.STYCK) 16315

SL-6453 (FAA)

TEXAS GULF COAST RGNL (L.B.X)

STYCK FOUR DEPARTURE (RNAV)

ANGLETON/LAKE JACKSON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 175° to 540, expect RADAR vectors to BBYSE, thence. . .

TAKEOFF RWY 35: Climb heading 355° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

ANGLETON/LAKE JACKSON, TEXAS

TEXAS GULF COAST RGNL (L.B.X)

(NGP6.NGP) 16315

TRUAX SIX DEPARTURE

SL-6453 (FAA)

TEXAS GULF COAST RGNL (L.B.X)
ANGLETON/LAKE JACKSON, TEXAS

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

**TOP ALTITUDE:
4000**

HOBBY
117.1 HUB
Chan 118

EAGLE LAKE
116.4 ELA
Chan 111

SCHOLES
113.0 VUH
Chan 77

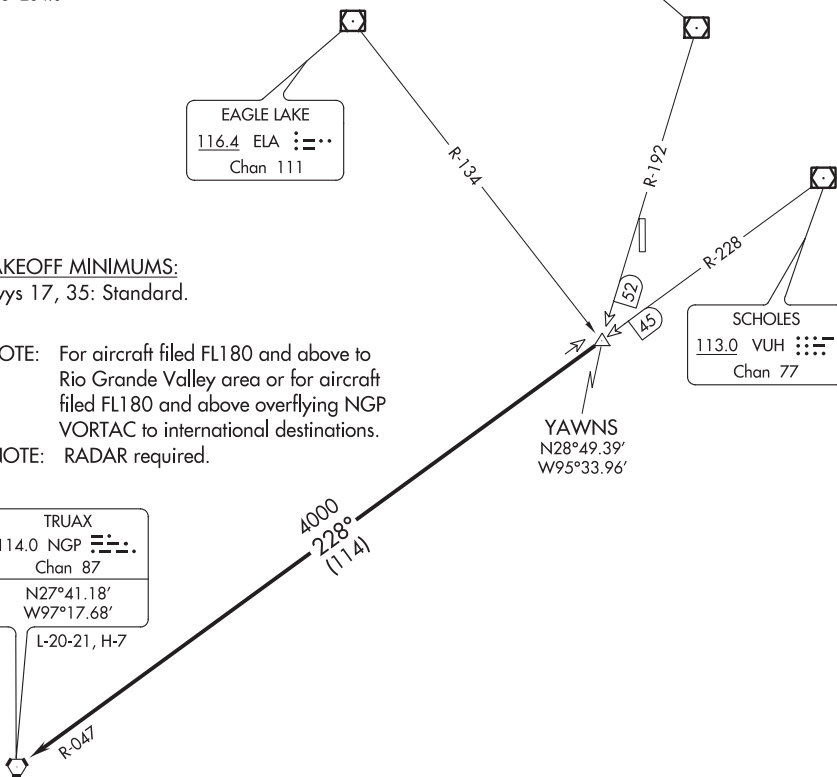
TAKEOFF MINIMUMS:
Rwys 17, 35: Standard.

NOTE: For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP VORTAC to international destinations.
NOTE: RADAR required.

TRUAX
114.0 NGP
Chan 87
N27°41.18'
W97°17.68'

L-20-21, H-7

YAWNS
N28°49.39'
W95°33.96'



TAKEOFF OBSTACLE NOTES:

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to YAWNS INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .
. . . .on VUH R-228 and NGP R-047 to NGP VORTAC.

TRUAX SIX DEPARTURE
(NGP6.NGP) 10NOV16

ANGLETON/LAKE JACKSON, TEXAS
TEXAS GULF COAST RGNL (L.B.X)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

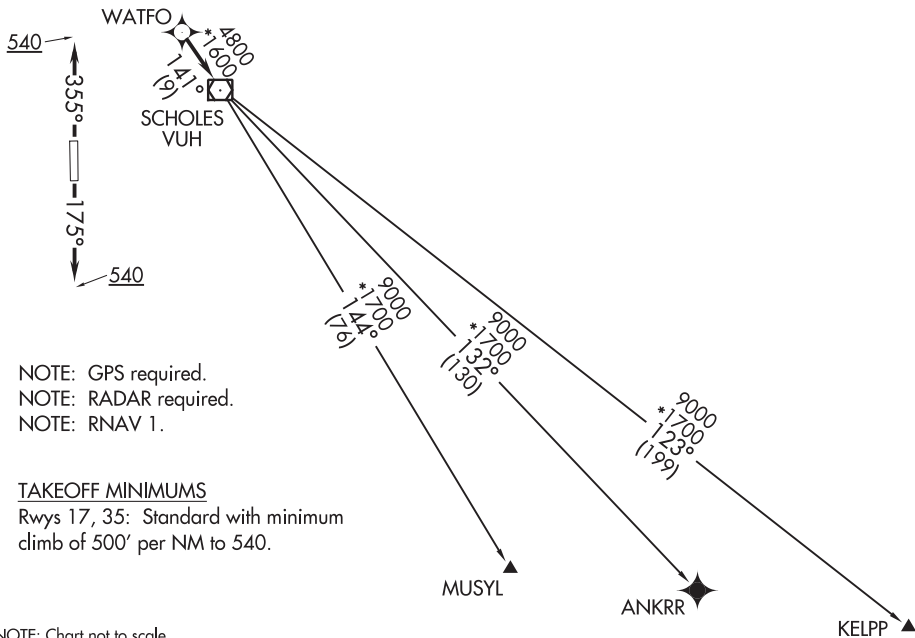
WATFO THREE DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

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

TAKEOFF OBSTACLE NOTES

Rwy 35: Tree 1510' from DER, 721' left of centerline,
48' AGL/68' MSL.



NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS

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

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 175° to 540, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 35: Climb on heading 355° to 540, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

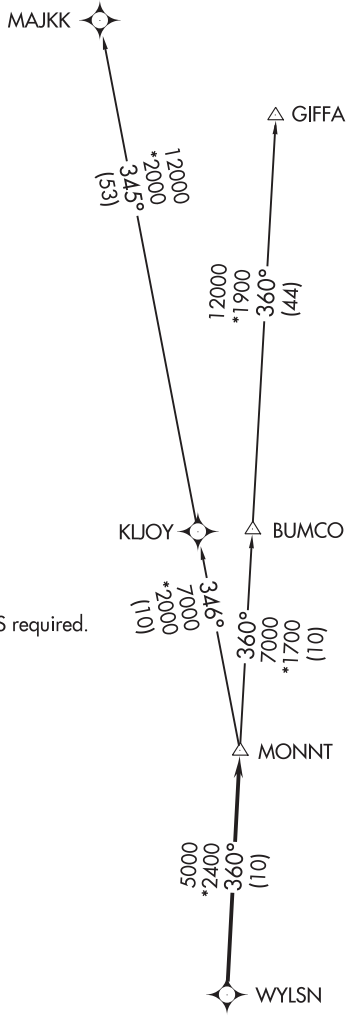
SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

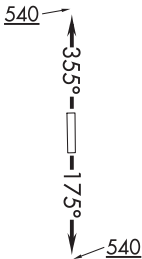
ANGLETON/LAKE JACKSON, TEXAS

**TOP ALTITUDE:
4000**

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



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.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

WYLSN FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

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

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

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJJK)

TAKEOFF OBSTACLE NOTES:

Rwy 35: Tree 1510' from DER, 721' left of centerline, 48' AGL/68' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BAY CITY, TEXAS

AI-5824 (FAA)

14261

WAAS CH 40127 W13A	APP CRS 128°	Rwy Idg 5107 TDZE 45 Apt Elev 45
--	------------------------	---

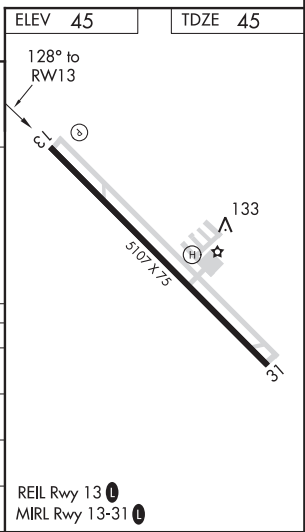
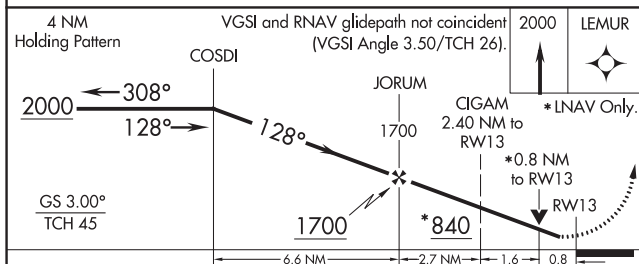
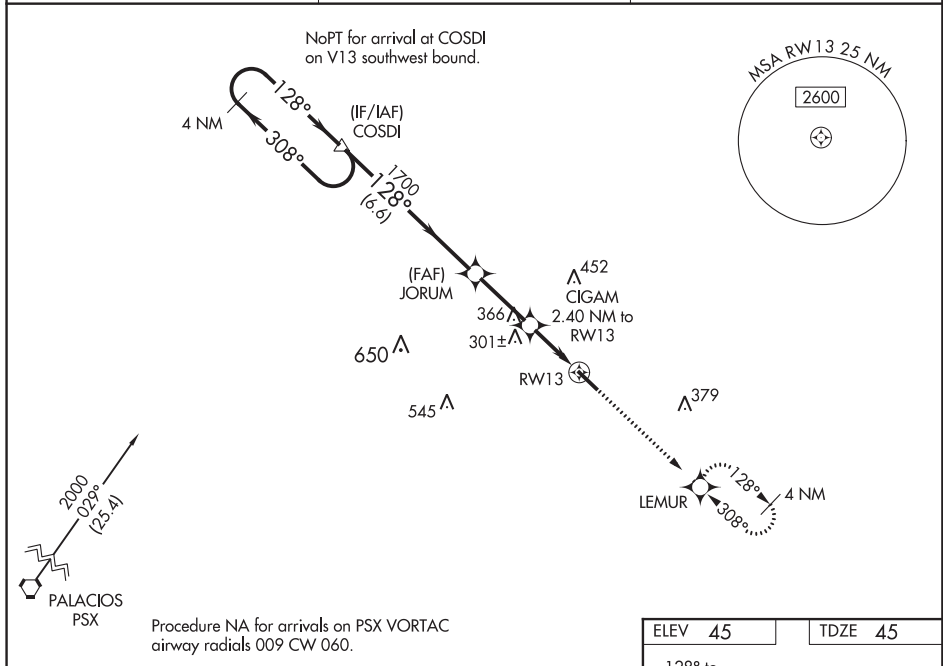
RNAV (GPS) RWY 13

BAY CITY MUNI (BYY)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).
 ▲ DME/DME RNP-0.3 NA. RADAR required. Visibility reduction by helicopters 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 LEMUR and hold.

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



CATEGORY	A	B	C	D
LPV DA	295-1	250 (300-1)		NA
LNAV/VNAV DA	295-1	250 (300-1)		NA
LNAV MDA	460-1	415 (500-1)	460-1½ 415 (500-1½)	NA
CIRCLING	500-1	455 (500-1)	500-1½ 455 (500-1½)	NA

BAY CITY, TEXAS
 Orig-A 18SEP14

28°58'N-95°52'W

RNAV (GPS) RWY 13

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 78326 W31A	APP CRS 308°	Rwy Idg 5107 TDZE 44 Apt Elev 45
--	------------------------	---

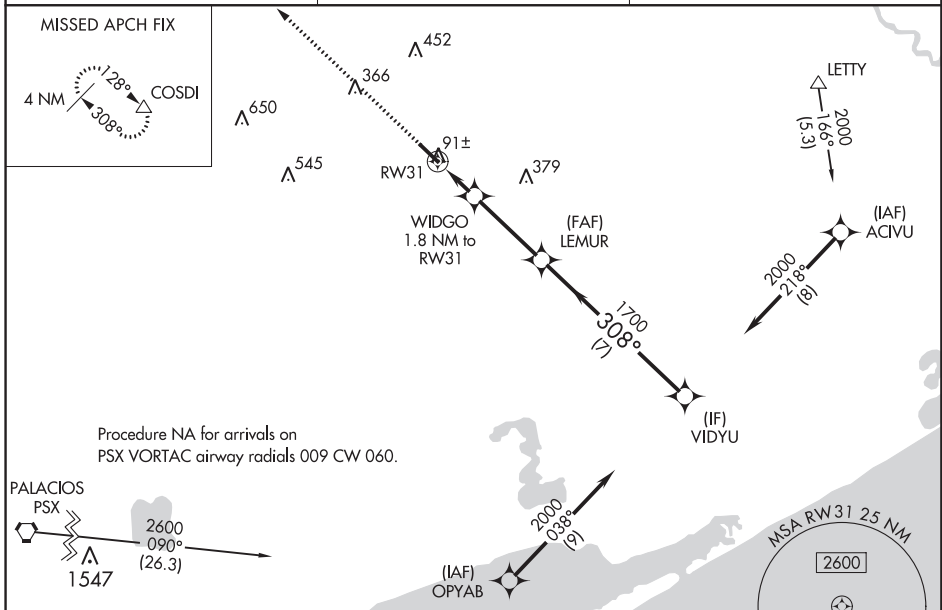
RNAV (GPS) RWY 31

BAY CITY MUNI (BY Y)

⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
⚠ When local altimeter setting not received, use 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 NA when using Palacios altimeter setting.

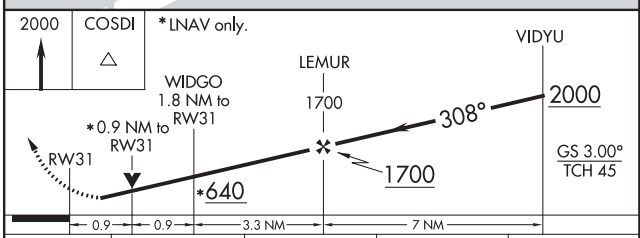
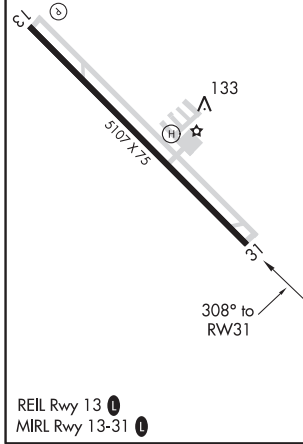
MISSED APPROACH: Climb to 2000 direct COSDI and hold.

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



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

ELEV 45	TDZE 44
----------------	----------------



CATEGORY	A	B	C	D
LPV DA		294-1 250 (300-1)		NA
LNAV/VNAV DA		294-1 250 (300-1)		NA
LNAV MDA		360-1 316 (400-1)		NA
CIRCLING	500-1	455 (500-1)	500-1½ 455 (500-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

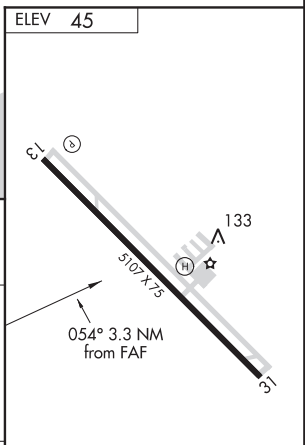
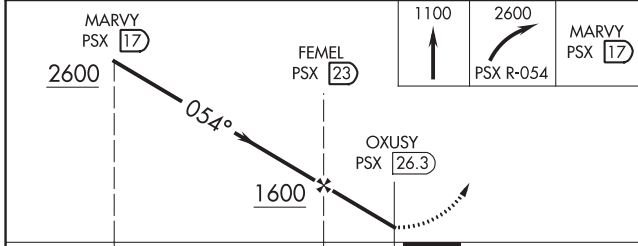
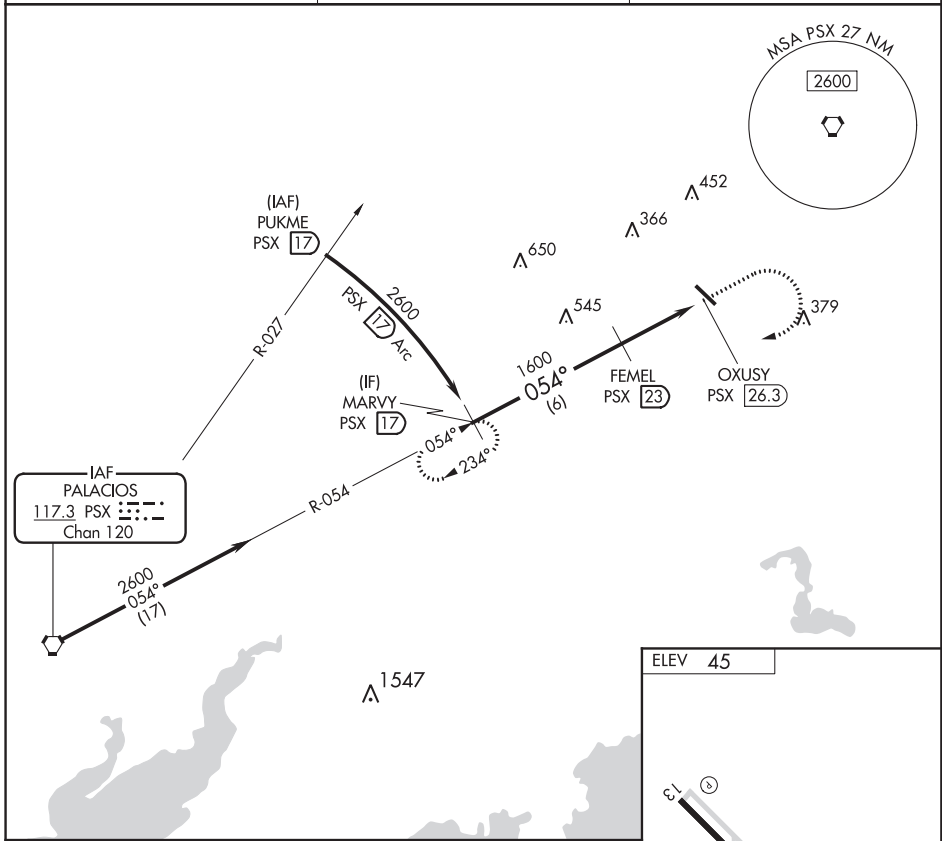
VOR PSX 117.3 Chan 120	APP CRS 054°	Rwy Idg TDZE Apt Elev	N/A N/A 45
--	------------------------	-----------------------------	---------------------------------------

VOR/DME-A
BAY CITY MUNI (BY Y)

▼ When local altimeter setting not received, use Palacios Muni
▲ 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 MARYV/17 DME and hold.

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



CATEGORY	A	B	C	D
📍 CIRCLING	1060-1¼ 1035 (1100-1¼)	1080-1½ 1035 (1100-1½)	1080-3 1035 (1100-3)	NA

REIL Rwy 13 **📞**
MIRL Rwy 13-31 **📞**

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

SL-5824 (FAA)

BAY CITY MUNI (BY Y)

BAY CITY, TEXAS

BLTWY THREE DEPARTURE (RNAV)

HOUSTON CENTER
128.6 360.8

**TOP ALTITUDE:
4000**

△ CRIED

12000
*2100
(46)

△ BLTWY

6600
*2000
346°
(6)

△ LITLD

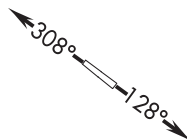
5400
*1900
345°
(12)

⊙ DREMR

TAKEOFF MINIMUMS

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

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



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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)

(BLTWY3.BLTWY) 10NOV16

BAY CITY, TEXAS

BAY CITY MUNI (BY Y)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 13: Climb heading 128° or as assigned by ATC, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 31: Climb heading 308° or as assigned by ATC, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

TAKEOFF OBSTACLE NOTES

Rwy 13: Trees beginning 51' from DER, left and right of centerline, up to 55' AGL/92' MSL.
Poles beginning 635' from DER, 402' left of centerline, 31' AGL/68' MSL.

Rwy 31: Trees beginning 102' from DER, left and right of centerline, up to 34' AGL/80' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

INDIE FOUR DEPARTURE (RNAV)

SL-5824 (FAA)

BAY CITY MUNI (BY Y)

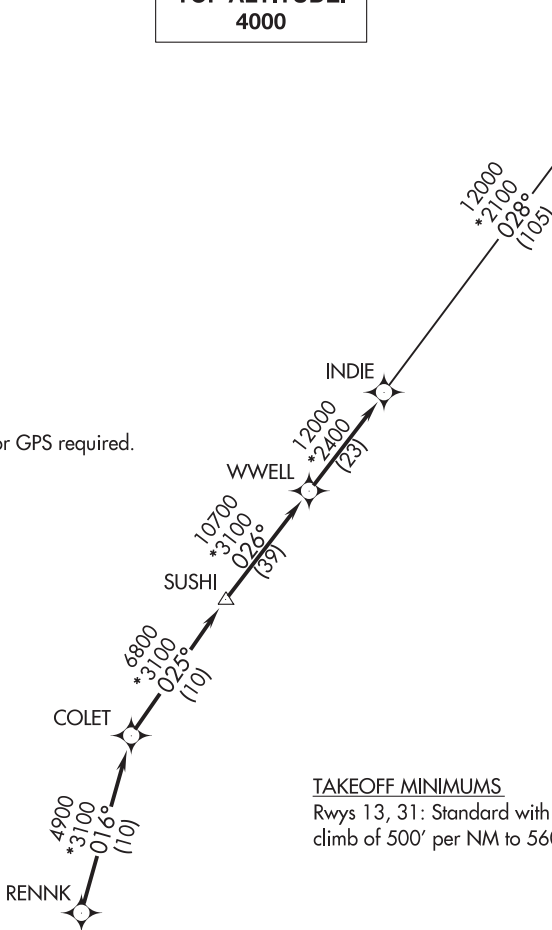
BAY CITY, TEXAS

AWOS-3
118.075
CTAF
122.8
HOUSTON CENTER
128.6 360.8

**TOP ALTITUDE:
4000**

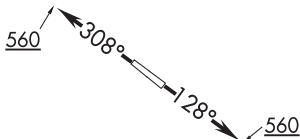
TPAKK

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.



(NARRATIVE ON FOLLOWING PAGE)

(NOTE CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

BAY CITY, TEXAS

BAY CITY MUNI (BY Y)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 13: Climb heading 128° to 560, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 31: Climb heading 308° to 560, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF OBSTACLE NOTES

Rwy 13: Trees beginning 51' from DER, left and right of centerline, up to 55' AGL/92' MSL.
Poles beginning 635' from DER, 402' left of centerline, 31' AGL/68' MSL.

Rwy 31: Trees beginning 102' from DER, left and right of centerline, up to 34' AGL/80' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

SL-5824 (FAA)

BAY CITY MUNI (BYY)

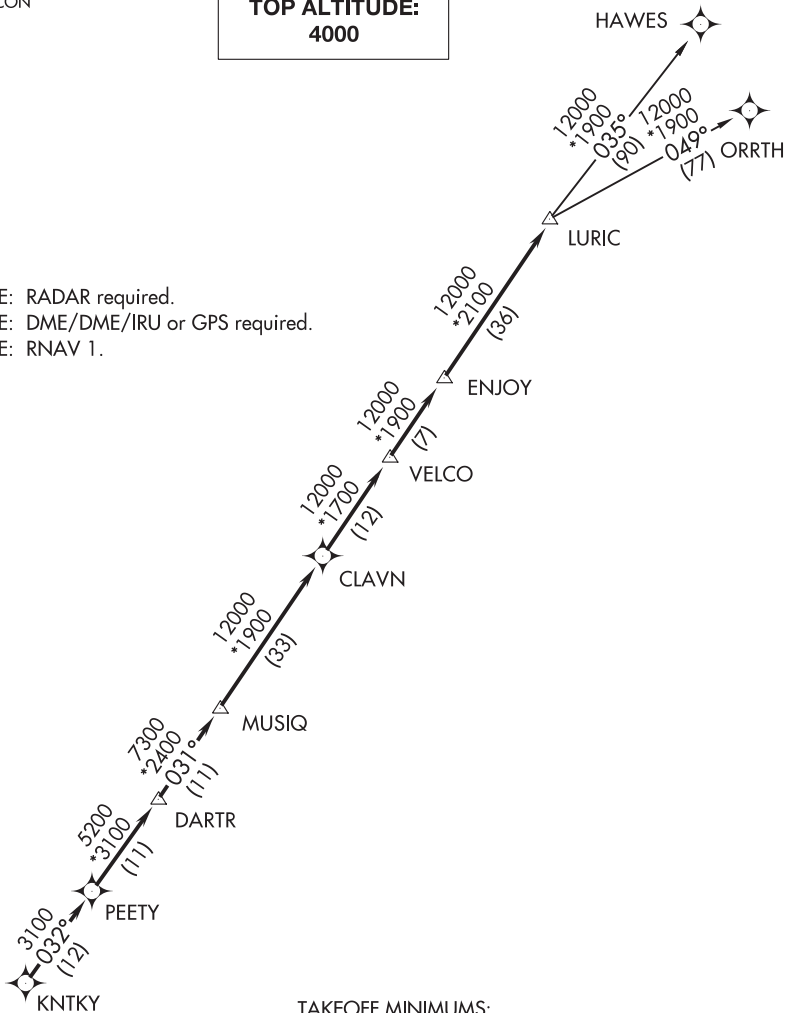
LURIC FOUR DEPARTURE (RNAV)

BAY CITY, TEXAS

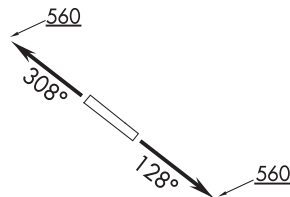
HOUSTON DEP CON
128.6 360.8

**TOP ALTITUDE:
4000**

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.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)

(LURIC4.LURIC) 10NOV16

BAY CITY, TEXAS

BAY CITY MUNI (BYY)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 13: Climb heading 128° to 560, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 31: Climb heading 308° to 560, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

TAKEOFF OBSTACLE NOTES:

Rwy 13: Trees beginning 51' from DER, left and right of centerline, up to 55' AGL/92' MSL.
Poles beginning 635' from DER, 402' left of centerline, 31' AGL/68' MSL.

Rwy 31: Trees beginning 102' from DER, left and right of centerline, up to 34' AGL/80' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

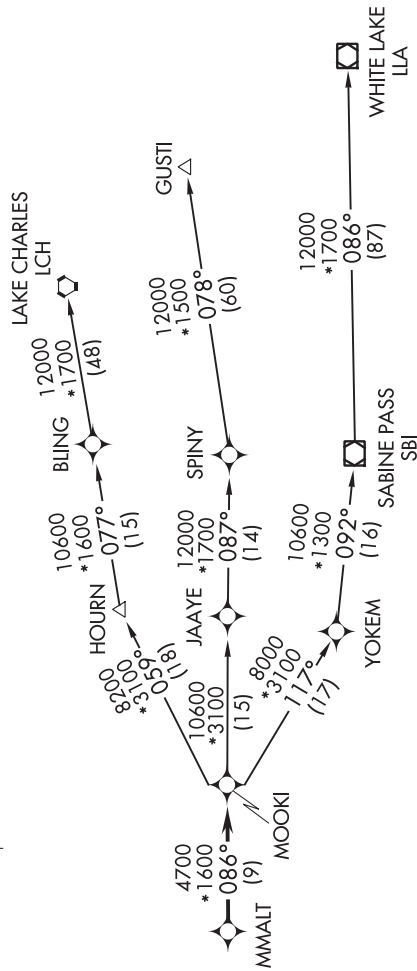
210Z NAV 01 910Z AON 10 10 'S-CS

HOUSTON CENTER
128.6 360.8

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS:

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



NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

NOTE: RNAV 1.

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

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 13: Climb on heading 128° to 560, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 31: Climb on heading 308° to 560, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

TAKEOFF OBSTACLES NOTES:

Rwy 13: Trees beginning 51' from DER, left and right of centerline, up to 55' AGL/92' MSL.
Poles beginning 635' from DER, 402' left of centerline, 31' AGL/68' MSL.

Rwy 31: Trees beginning 102' from DER, left and right of centerline, up to 34' AGL/80' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

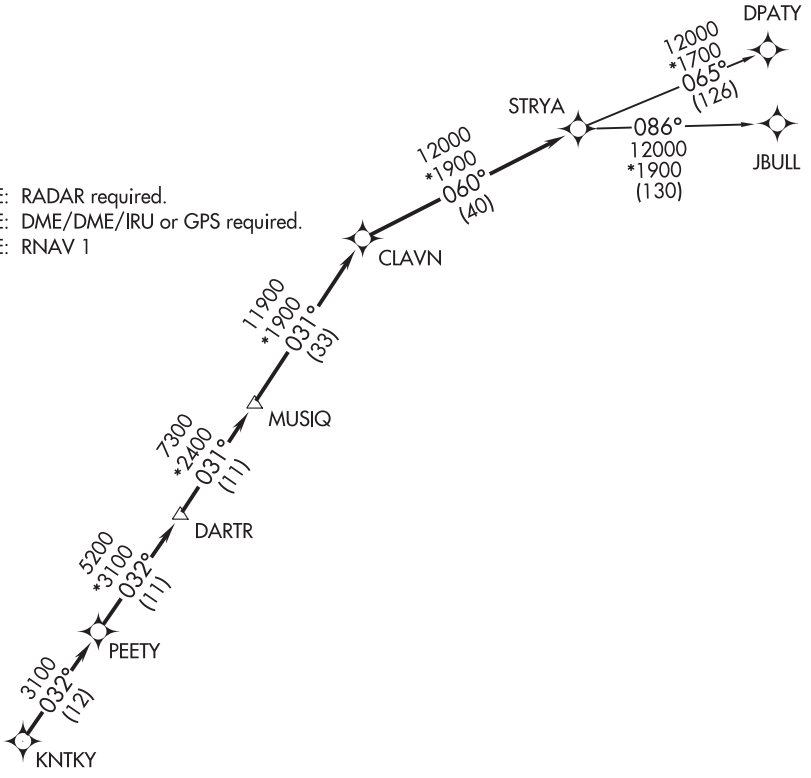
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

HOUSTON DEP CON
128.6 360.8

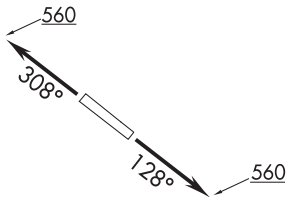
**TOP ALTITUDE:
4000**

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.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 13: Climb heading 128° to 560, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 31: Climb heading 308° to 560, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

Rwy 13: Trees beginning 51' from DER, left and right of centerline, up to 55' AGL/92' MSL.

Poles beginning 635' from DER, 402' left of centerline, 31' AGL/68' MSL.

Rwy 31: Trees beginning 102' from DER, left and right of centerline, up to 34' AGL/80' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

HOUSTON DEP CON
128.6 360.8

**TOP ALTITUDE:
4000**

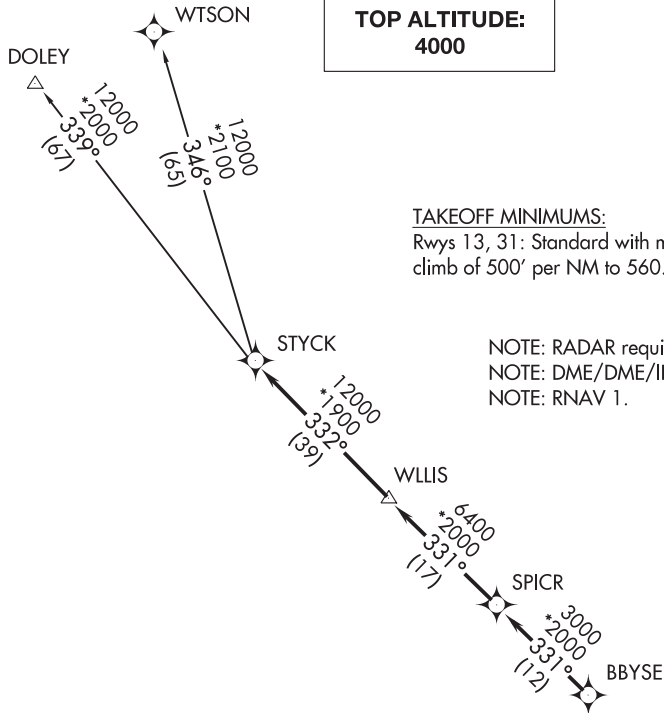
TAKEOFF MINIMUMS:

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

NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.



TAKEOFF OBSTACLE NOTES:

Rwy 13: Trees beginning 51' from DER, left and right of centerline, up to 55' AGL/92' MSL.
Poles beginning 635' from DER, 402' left of centerline, 31' AGL/68' MSL.

Rwy 31: Trees beginning 102' from DER, left and right of centerline, up to 34' AGL/80' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 13: Climb heading 128° to 560, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 31: Climb heading 308° to 560, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

STYCK FOUR DEPARTURE (RNAV)

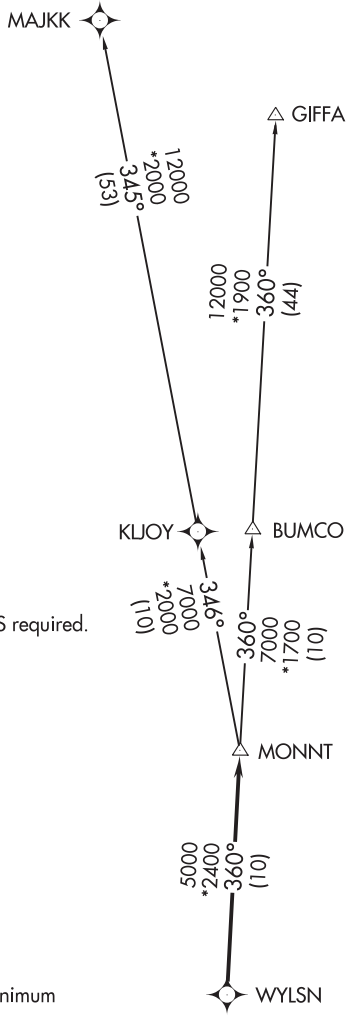
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON DEP CON
128.6 360.8

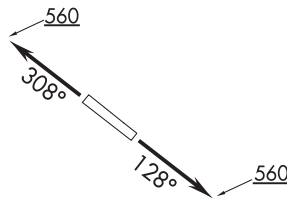
**TOP ALTITUDE:
4000**



- 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.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 13: Climb heading 128° to 560, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 31: Climb heading 308° to 560, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJKK)

TAKEOFF OBSTACLE NOTES:

Rwy 13: Trees beginning 51' from DER, left and right of centerline, up to 55' AGL/92' MSL.

Poles beginning 635' from DER, 402' left of centerline, 31' AGL/68' MSL.

Rwy 31: Trees beginning 102' from DER, left and right of centerline, up to 34' AGL/80' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BAYTOWN, TEXAS

AL-5757 (FAA)

15344

APP CRS 140°	Rwy Idg 3320
	TDZE 32
	Apt Elev 34

RNAV (GPS) RWY 14

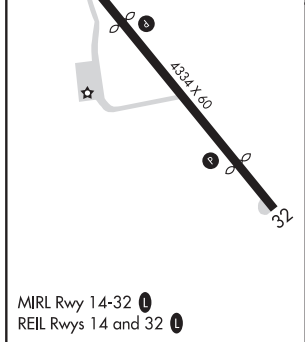
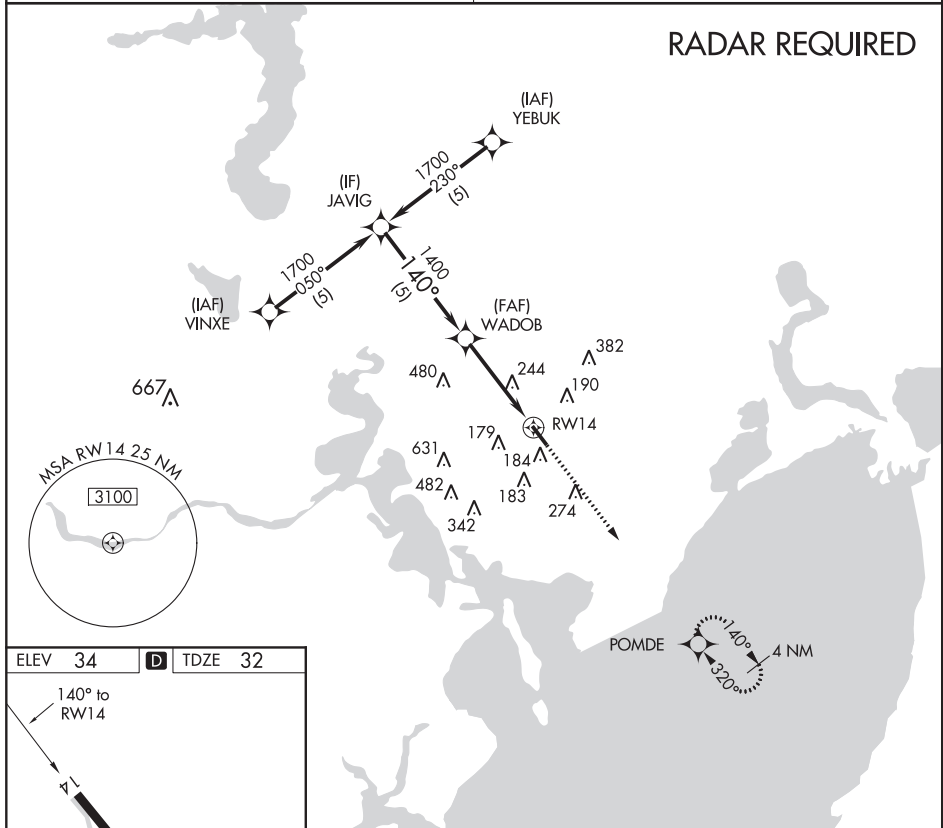
BAYTOWN (HPY)

⚠ Circling NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received, use William P Hobby altimeter setting and increase all MDA 60 feet.

⚠ NA

MISSED APPROACH: Climb to 2000 direct to POMDE and hold.

HOUSTON APP CON 134.45 281.4	UNICOM 122.8 (CTAF) 0
--	---------------------------------



JAVIG	1700	140°	WADOB	1400	3.04°	TCH 40	RW14
5 NM		4.1 NM					
CATEGORY	A	B	C	D			
LNAV MDA	500-1	468 (500-1)	NA				
CIRCLING	500-1	466 (500-1)	NA				

2000 ↑ POMDE ⚠

BAYTOWN, TEXAS
Orig 29JUL10

29°47'N-94°57'W

RNAV (GPS) RWY 14

BAYTOWN (HPY)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS 320°	Rwy Idg 3283 TDZE 28 Apt Elev 34
------------------------	---

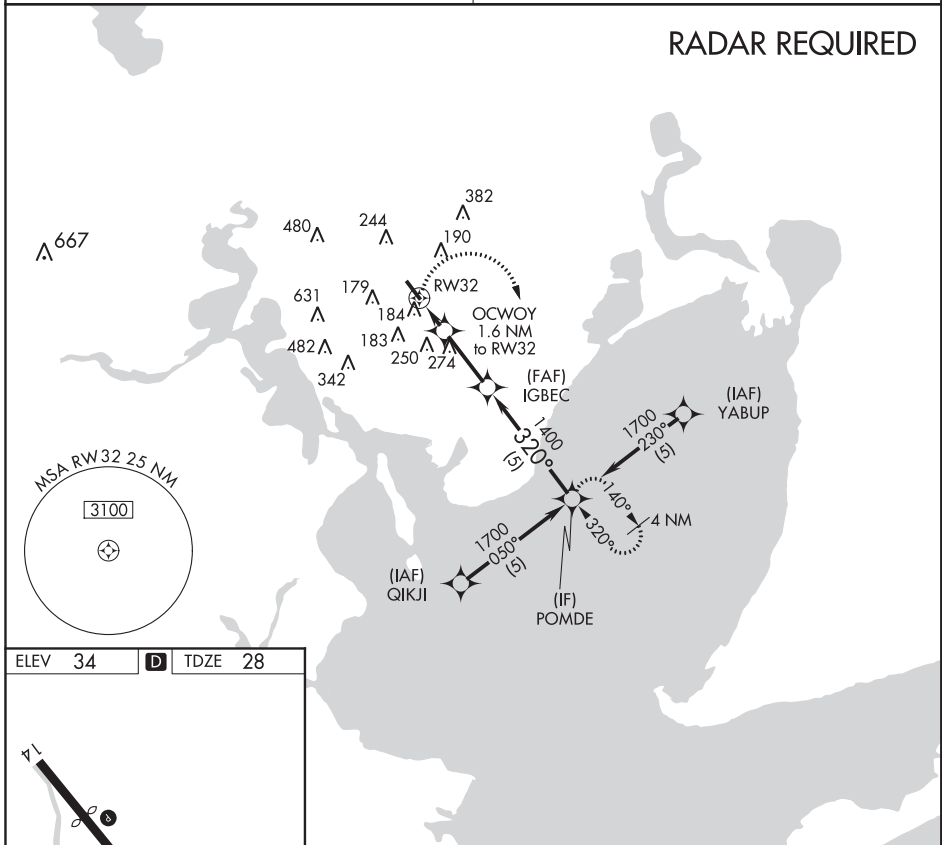
RNAV (GPS) RWY 32

BAYTOWN (HPY)

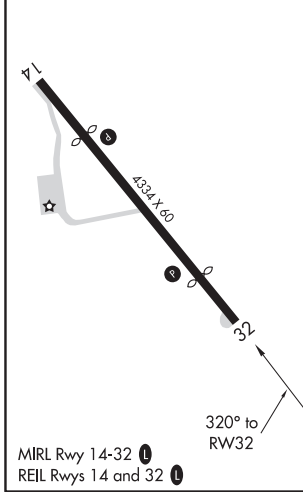
<p>▼ Circling NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received, use William P Hobby altimeter setting and increase all MDA 60 feet.</p>	<p>MISSED APPROACH: Climbing right turn to 2000 direct to POMDE and hold.</p>
--	--

HOUSTON APP CON 134.45 281.4	UNICOM 122.8 (CTAF) 0
--	---------------------------------

RADAR REQUIRED



ELEV 34	D	TDZE 28
---------	----------	---------



2000	POMDE	VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 20).	POMDE
		IGBEC	1700
OCWOY 1.6 NM to RW32		1400	
RW32		640	
1.6 NM		2.5 NM	5 NM
CATEGORY	A	B	C D
LNAV MDA	440-1	412 (500-1)	NA
CIRCLING	500-1	466 (500-1)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

76
SL-5757 (FAA)

BAYTOWN (HPY)
BAYTOWN, TEXAS

BLTWY THREE DEPARTURE (RNAV)

CTAF
122.8
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

△ CRIED

12000
*2100
(46)

△ BLTWY

6600
*2000
346°
(6)

△ LITLD

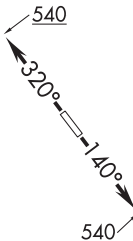
5400
*1900
345°
(12)

⊙ DREMR

TAKEOFF MINIMUMS

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

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



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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

BAYTOWN, TEXAS
BAYTOWN (HPY)

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 140° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 32: Climb heading 320° to 540, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

TAKEOFF OBSTACLE NOTES

Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.

Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.

Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.

Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.

Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.

Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

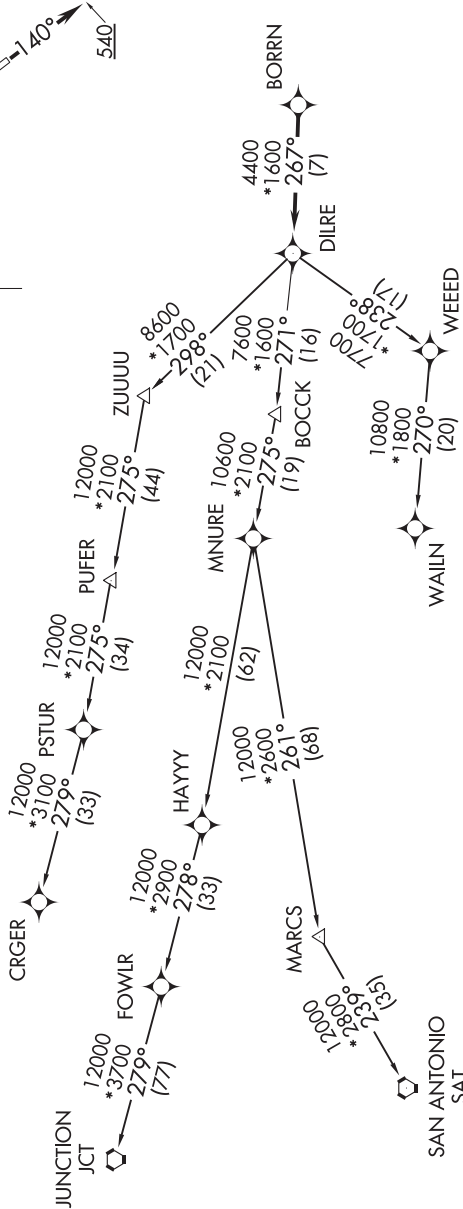
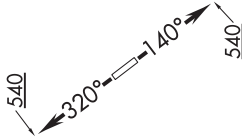
SC-5, 10 NOV 2016 to 05 JAN 2017

CTAF
122.8
HOUSTON DEP CON
134.45 284.0

TAKEOFF MINIMUMS

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

TOP ALTITUDE:
4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 140° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 32: Climb on heading 320° to 540, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

TAKEOFF OBSTACLE NOTES

Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.

Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.

Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.

Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.

Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.

Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

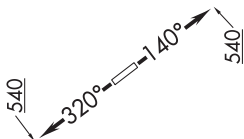
HOODO FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

CTAF
122.8
HOUSTON DEP CON
134.45 284.0

TOP ALTITUDE:
4000

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



SCHOLES
VUH



9300
*1400
118°
(32)

11000
*1400

087°
(36)

HOODO

SBIRD

(60)

CFOOD

(68)

BOWFN

11000
*1700

076°
(60)

LEEVILLE
LEV

1821
048°
*1000

HARVEY
HRV

TAKEOFF MINIMUMS

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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)

HOODO FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 140° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 32: Climb heading 320° to 540, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.

Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.

Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.

Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.

Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.

Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

INDIE FOUR DEPARTURE (RNAV)

82
SL-5757 (FAA)

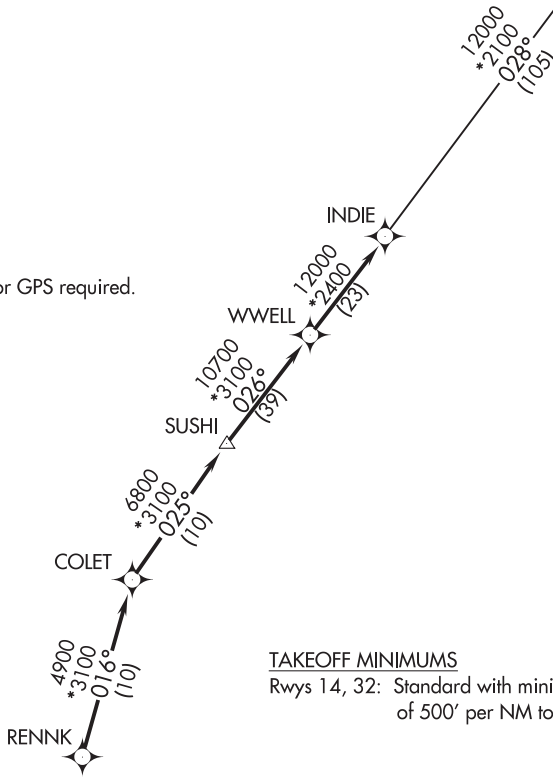
BAYTOWN (HPY)
BAYTOWN, TEXAS

CTAF
122.8
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

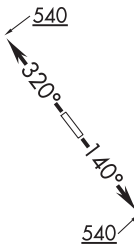
TPAKK

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 540.



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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)
(INDIE4.INDIE) 10NOV16

BAYTOWN, TEXAS
BAYTOWN (HPY)

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 140° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 32: Climb heading 320° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF OBSTACLE NOTES

Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.

Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.

Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.

Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.

Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.

Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

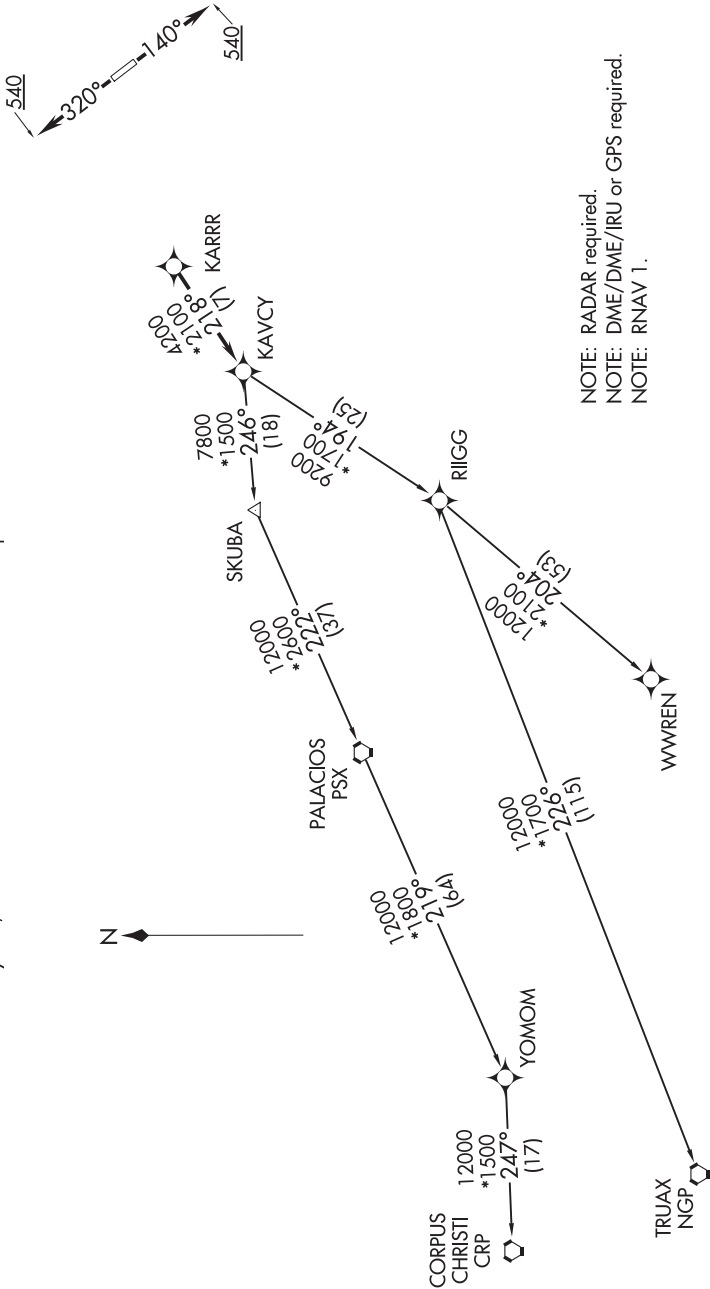
SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON DEP CON
134.45 284.0
CTAF
122.8

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS

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



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

NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 140° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 32: Climb on heading 320° to 540, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

TAKEOFF OBSTACLE NOTES:

Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.

Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.

Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.

Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.

Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.

Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

86
SL-5757 (FAA)

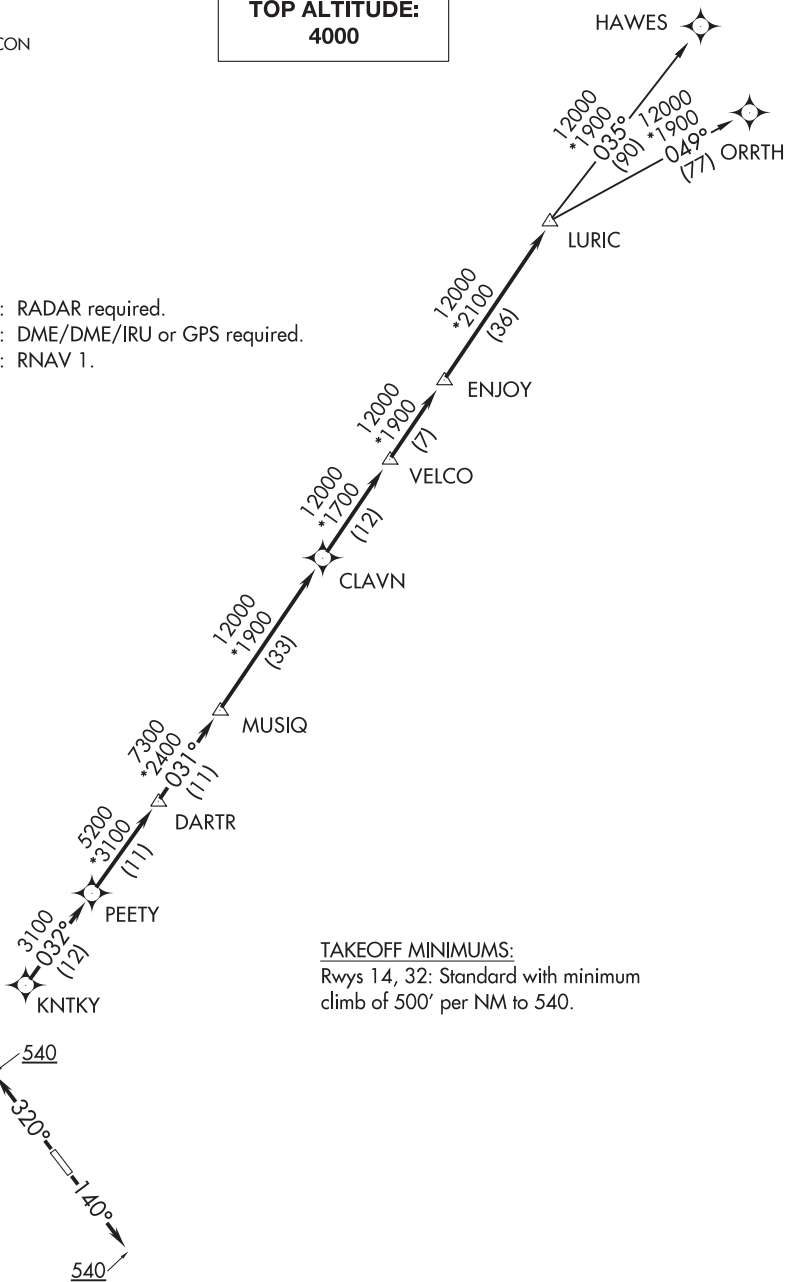
BAYTOWN (HPY)
BAYTOWN, TEXAS

LURIC FOUR DEPARTURE (RNAV)

CTAF
122.8
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)
(LURIC4.LURIC) 10NOV16

BAYTOWN, TEXAS
BAYTOWN (HPY)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 140° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 32: Climb heading 320° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

TAKEOFF OBSTACLE NOTES:

Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.

Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.

Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.

Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.

Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.

Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(MMALT2.MMALT) 15008

MMALT TWO DEPARTURE (RNAV)

SL-5757 (FAA)

BAYTOWN (HPY)

BAYTOWN, TEXAS

2102 NAT 01 9102 VON 10 10 'S-CS

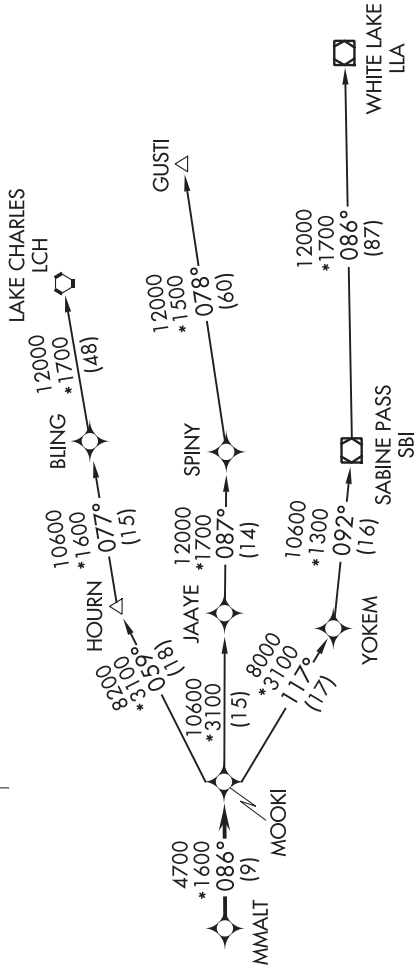
CTAF
122.8
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS:

Rwys 14, 32:

Standard with minimum
climb of 500' per NM to 540.



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, IBX, LVJ, SGR, TME, T00, T41 and 54T.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

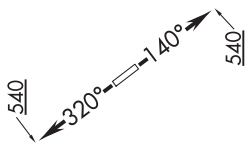
SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

(MMALT2.MMALT) 15008

BAYTOWN, TEXAS

BAYTOWN (HPY)





DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 140° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 32: Climb on heading 320° to 540, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

TAKEOFF OBSTACLE NOTES:

Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.

Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.

Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.

Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.

Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.

Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

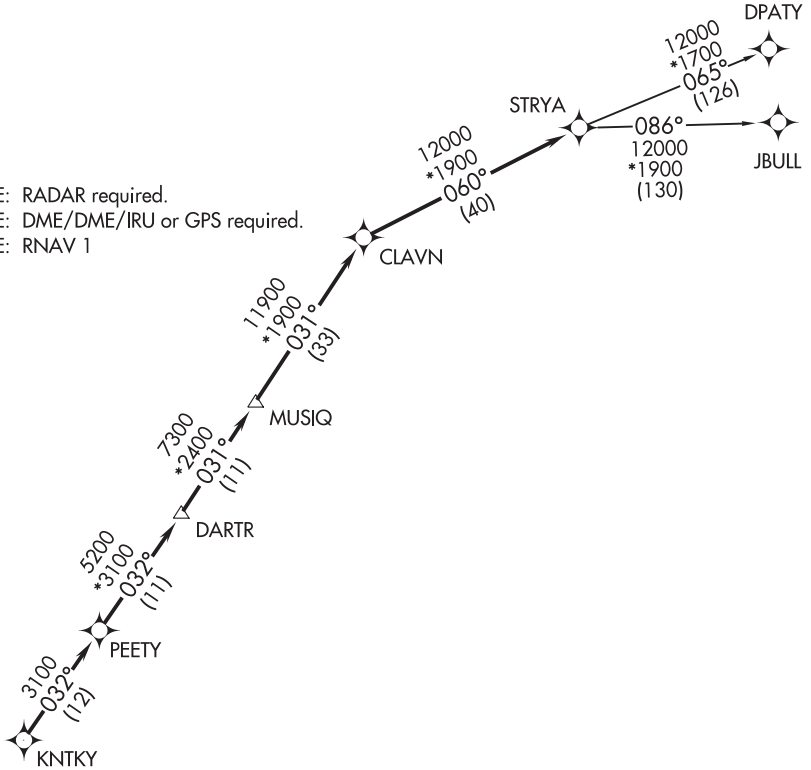
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

CTAF
122.8
HOUSTON DEP CON
134.45 284.0

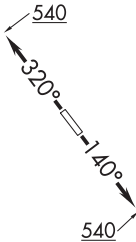
**TOP ALTITUDE:
4000**

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 540.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 140° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 32: Climb heading 320° to 540, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

- Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.
 Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.
 Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.
- Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.
 Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.
 Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

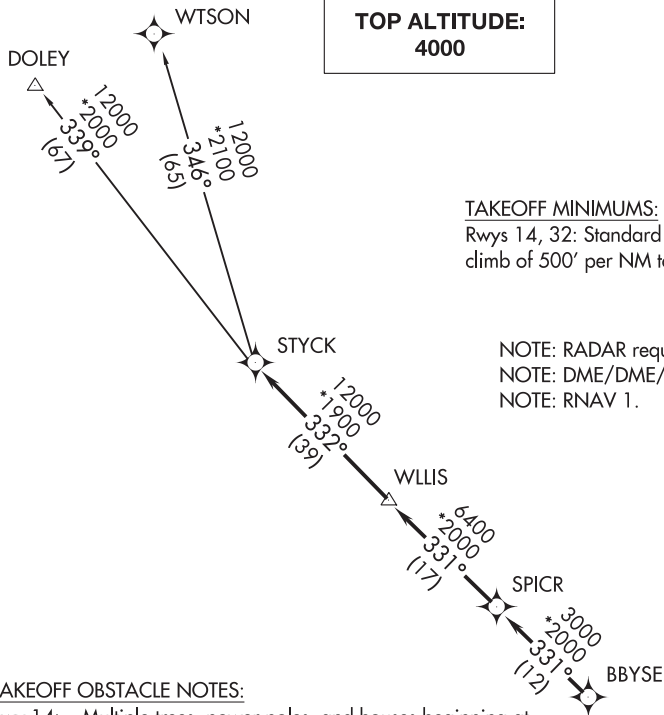
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

STYCK FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

CTAF
122.8
HOUSTON DEP CON
134.45 284.0



TAKEOFF MINIMUMS:

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

NOTE: RADAR required.

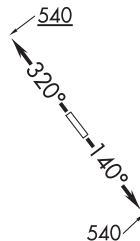
NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

TAKEOFF OBSTACLE NOTES:

Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL. Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL. Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.

Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL. Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL. Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 140° to 540, expect RADAR vectors to BBYSE, thence. . .

TAKEOFF RWY 32: Climb heading 320° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

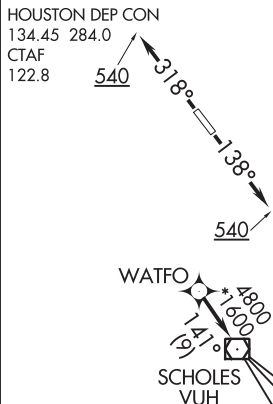
WTSON TRANSITION (STYCK4.WTSON)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

WATFO THREE DEPARTURE (RNAV)



TAKEOFF OBSTACLE NOTES

- Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.
 Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.
 Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.
- Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.
 Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.
 Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

TOP ALTITUDE:
4000

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

TAKEOFF MINIMUMS

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

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 138° to 540, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 32: Climb on heading 318° to 540, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

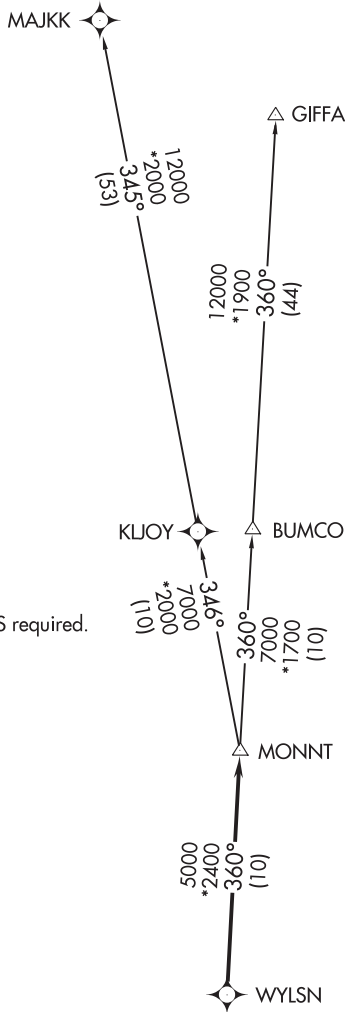
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

CTAF
122.8
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**



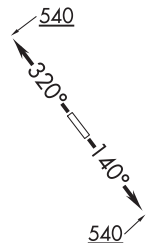
- NOTE: RADAR required.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: RNAV 1.

TAKEOFF MINIMUMS:

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

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

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

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

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJKK)

TAKEOFF OBSTACLE NOTES:

- Rwy 14: Multiple trees, power poles, and houses beginning at DER, left and right of centerline, up to 60' AGL/89' MSL.
 Vehicle 187' from DER, 47' right of centerline, 15' AGL/44' MSL.
 Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.
- Rwy 32: Vehicle 53' from DER, 23' right of centerline, 15' AGL/49' MSL.
 Buildings beginning 104' from DER, left and right of centerline, up to 30' AGL/59' MSL.
 Trees beginning 116' from DER, left and right of centerline, up to 60' AGL/94' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

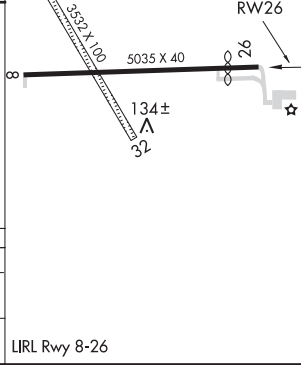
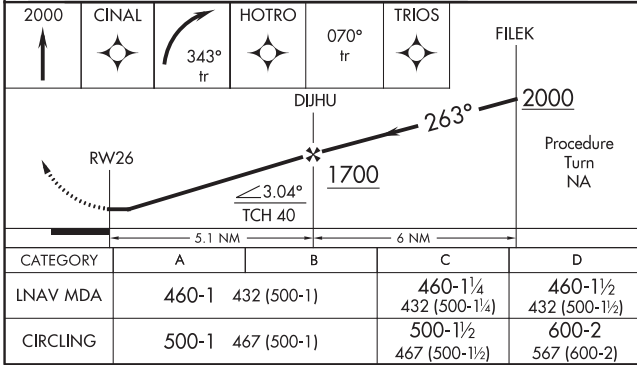
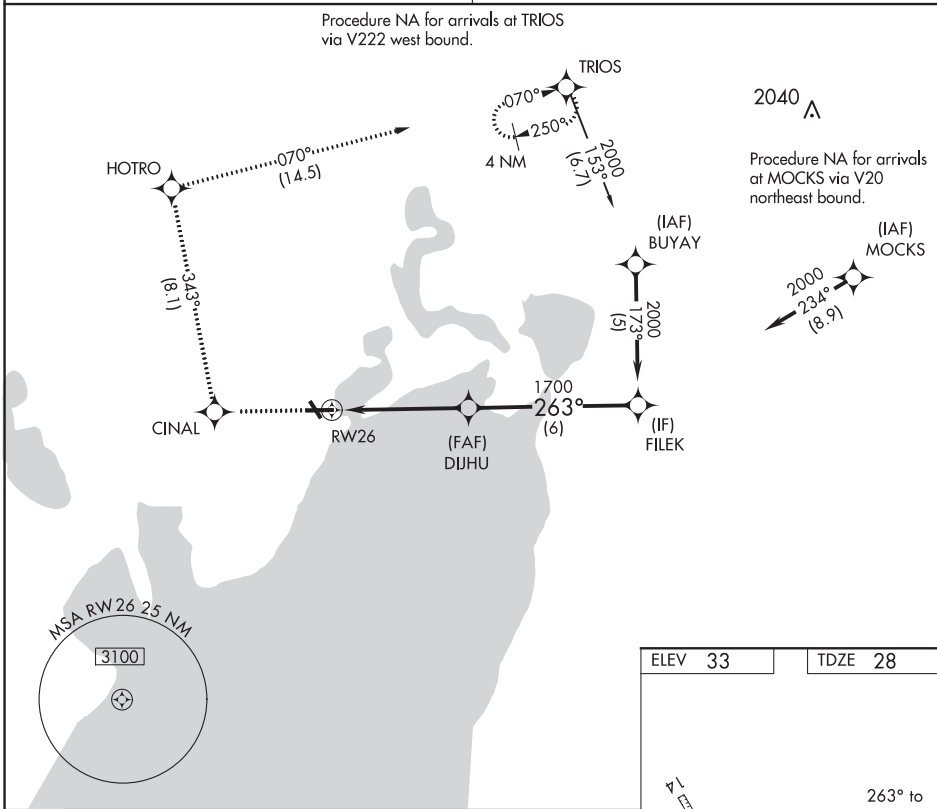
APP CRS	Rwy Idg	4096
263°	TDZE	28
	Apt Elev	33

RNAV (GPS) RWY 26

BAYTOWN/RWJ AIRPARK (54T)

<p>NA Use William P. Hobby altimeter setting. DME/DME RNP-0.3 NA. Procedure NA at night.</p>	<p>MISSED APPROACH: Climb to 2000 direct CINAL then right turn via 343° track to HOTRO and via 070° track to TRIOS and hold.</p>
---	---

<p>HOUSTON APP CON 134.45 284.0</p>	<p>UNICOM 122.7 (CTAF)</p>
--	---------------------------------------



ELEV 33	TDZE 28
---------	---------

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

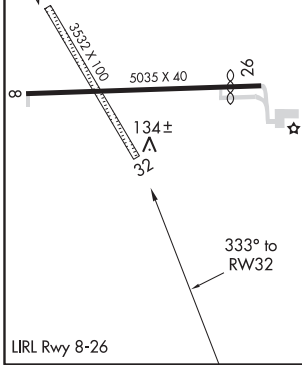
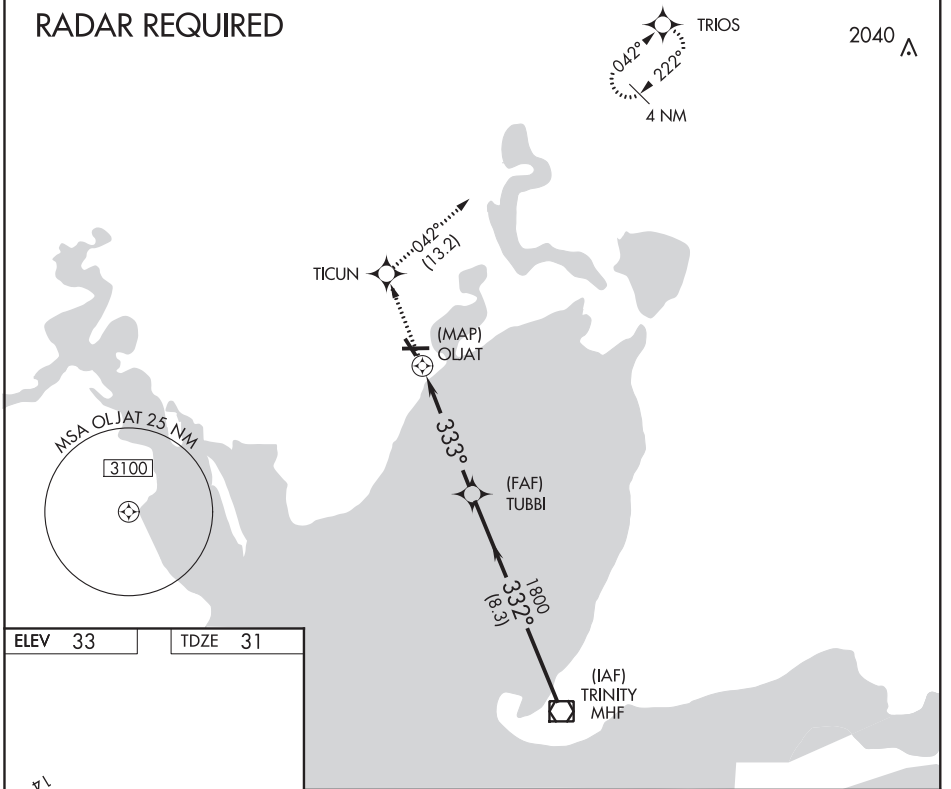
APP CRS	Rwy Idg	3532
333°	TDZE	31
	Apt Elev	33

RNAV (GPS) RWY 32

BAYTOWN/ RWJ AIRPARK (54T)

<p>▽ Use William P. Hobby altimeter setting. △ NA DME/DME RNP-0.3 NA. Procedure NA at night.</p>	<p>MISSED APPROACH: Climb to 2000 direct TICUN then via 042° track to TRIOS and hold.</p>
<p>HOUSTON APP CON 134.45 284.0</p>	<p>UNICOM 122.7 (CTAF)</p>

RADAR REQUIRED



ELEV 33	TDZE 31				
2000	TICUN	042° tr	TRIOS	VOR/DME	
	OLJAT	333°	TUBBI	332°	2000
		3.05° TCH 40			
	0.5	4.9 NM	8.3 NM		
CATEGORY	A	B	C	D	
LNAV MDA	460-1	429 (500-1)	NA		
CIRCLING	500-1	467 (500-1)	NA		

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

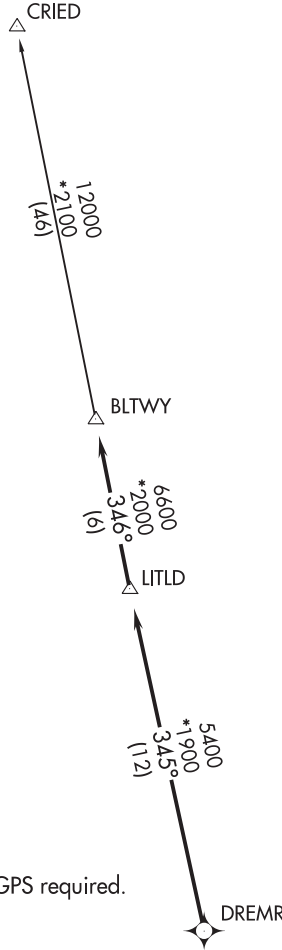
BLTWY THREE DEPARTURE (RNAV)

98
SL-6674 (FAA)

RWJ AIRPARK (54T)
BAYTOWN, TEXAS

CTAF
122.7
HOUSTON DEP CON
134.45 284.0

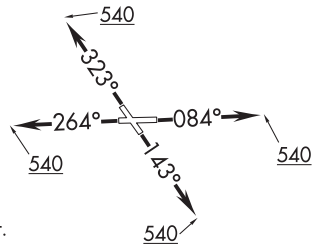
**TOP ALTITUDE:
4000**



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

TAKEOFF MINIMUMS

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



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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)
 (BLTWY3.BLTWY) 10NOV16

BAYTOWN, TEXAS
 RWJ AIRPARK (54T)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb heading 084° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 14: Climb heading 143° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 26: Climb heading 264° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 32: Climb heading 323° to 540, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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.
- Rwy 32: Quarry equipment 2800' from DER, 193' right of centerline, up to 100' AGL/134' MSL.
Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
Power lines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

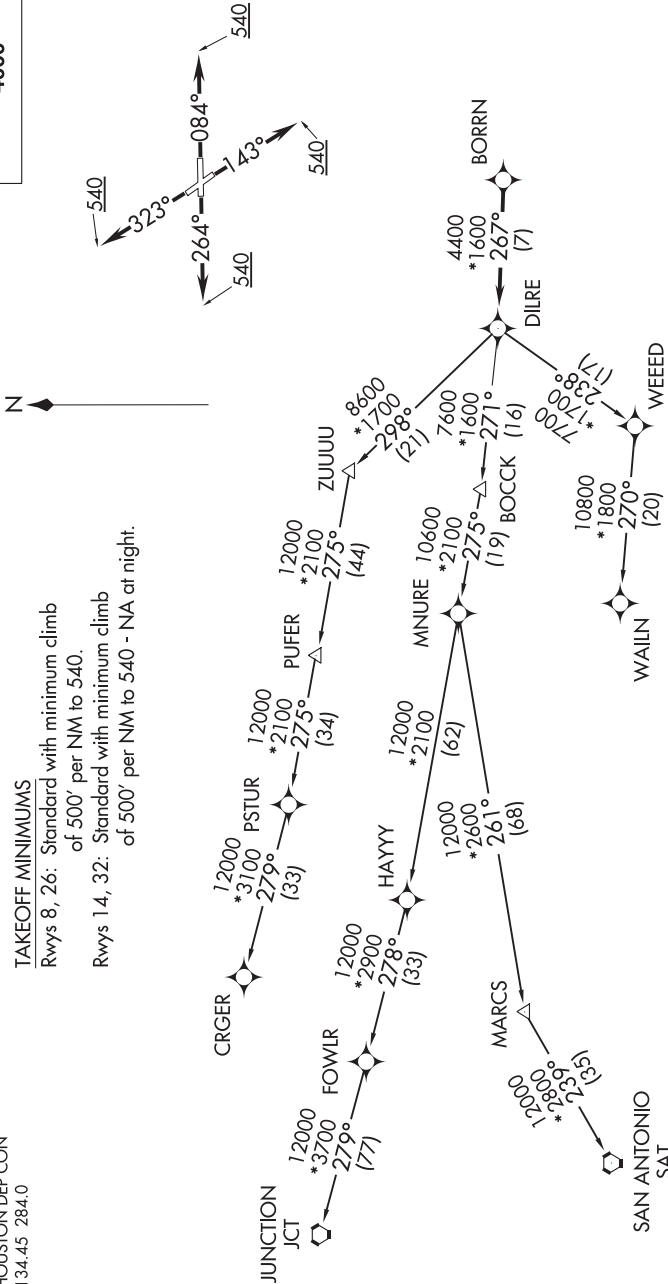
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

TAKEOFF MINIMUMS

Rwys 8, 26: Standard with minimum climb of 500' per NM to 540.

Rwys 14, 32: Standard with minimum climb of 500' per NM to 540 - NA at night.

TOP ALTITUDE:
4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb on heading 084° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 14: Climb on heading 143° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 26: Climb on heading 264° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 32: Climb on heading 323° to 540, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL.

Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
Powerlines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

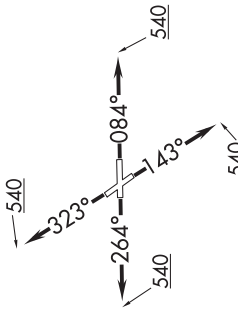
SC-5, 10 NOV 2016 to 05 JAN 2017

CTAF
122.7
HOUSTON DEP CON
134.45 284.0

TOP ALTITUDE:
4000



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



SCHOLES
VUH



SBIRD



CFOOD



BOWFN



TAKEOFF MINIMUMS

Rwys 8, 26:

Standard with minimum climb of 500' per NM to 540.

Rwys 14, 32:

Standard with minimum climb of 500' per NM to 540 - NA at night.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb heading 084° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAY 14: Climb heading 143° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAY 26: Climb heading 264° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAY 32: Climb heading 323° to 540, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000. Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
 Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
 Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
 Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL.
- Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
 Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
 Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
 Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
 Power lines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
 Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

104
SL-6674 (FAA)

RWJ AIRPARK (54T)
BAYTOWN, TEXAS

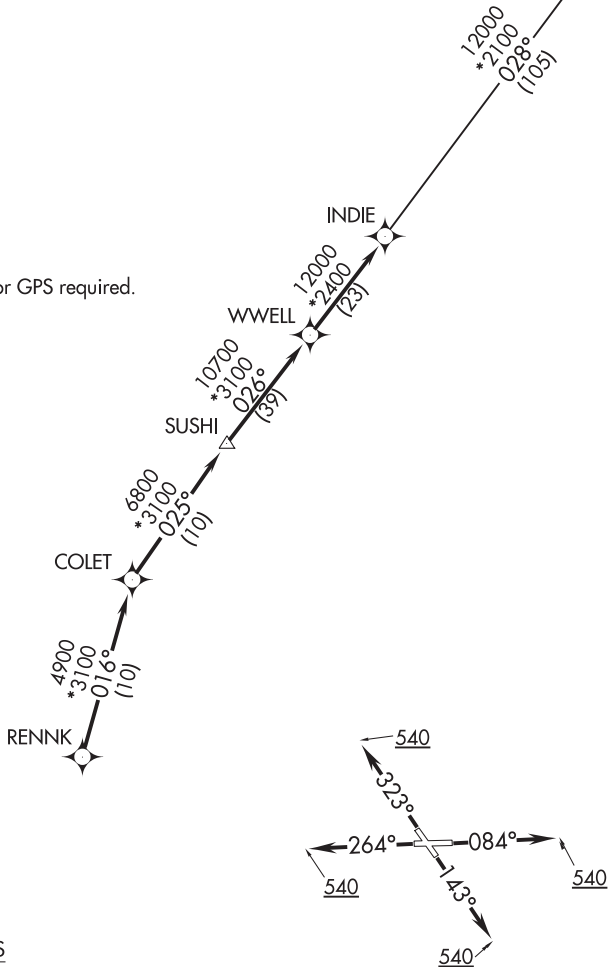
INDIE FOUR DEPARTURE (RNAV)

HOUSTON DEP CON
134.45 284.0
CTAF
122.7

**TOP ALTITUDE:
4000**

TPAKK

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



TAKEOFF MINIMUMS

Rwys 8, 26:

Standard with minimum climb of 500' per NM to 540.

Rwys 14, 32:

Standard with minimum climb of 500' per NM to 540 - NA at night.

(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

BAYTOWN, TEXAS
RWJ AIRPARK (54T)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb heading 084° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 14: Climb heading 143° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 26: Climb heading 264° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 32: Climb heading 323° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL.
- Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
Power lines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

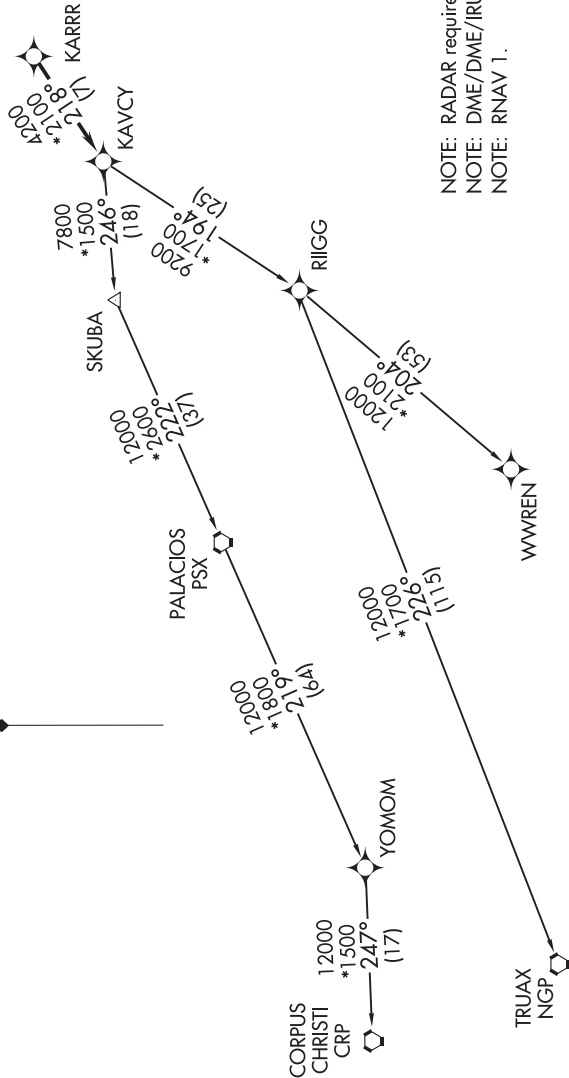
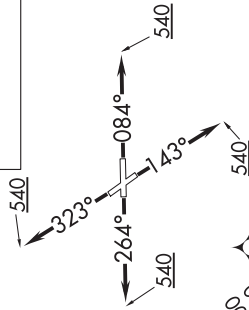
SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON DEP CON
134.45 284.0
CTAF
122.7

TAKEOFF MINIMUMS

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

TOP ALTITUDE:
4000



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

NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb on heading 084° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 14: Climb on heading 143° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 26: Climb on heading 264° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 32: Climb on heading 323° to 540, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude .

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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, 973' left and right of centerline, up to 100' AGL/134' MSL.
Quarry equipment 2800' from DER, 193' right of centerline, up to 100' AGL/134' MSL.
- Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
Power lines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

108
SL-6674 (FAA)

RWJ AIRPARK (54T)

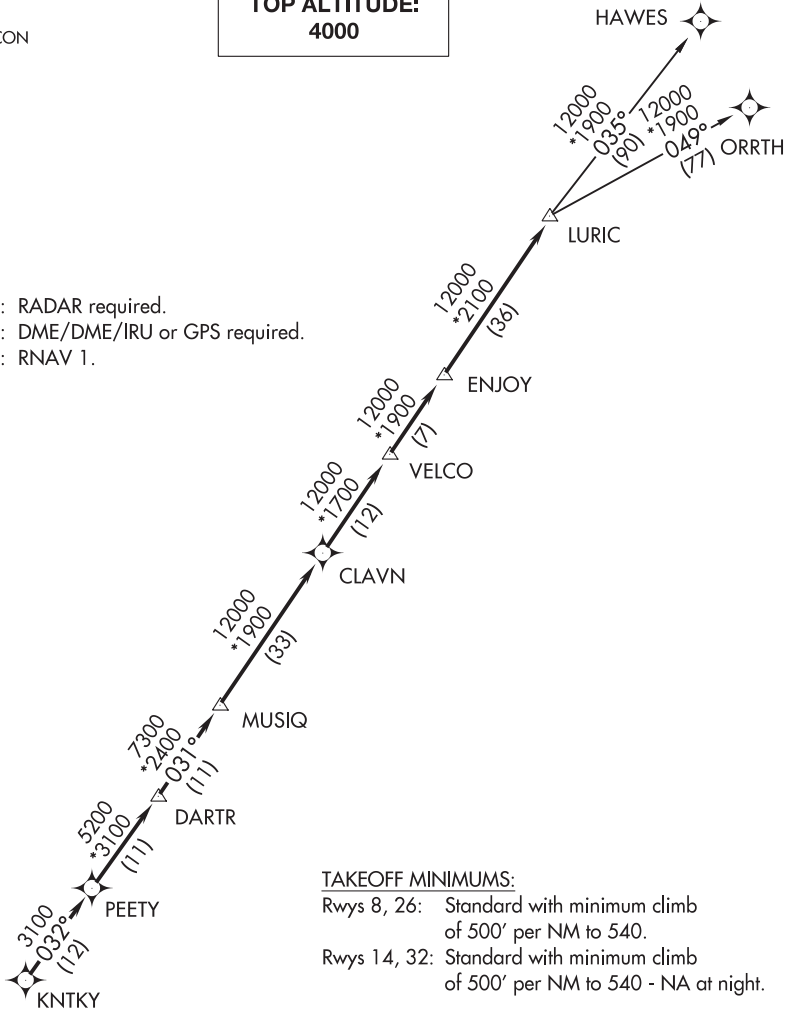
LURIC FOUR DEPARTURE (RNAV)

BAYTOWN, TEXAS

CTAF
122.7
HOUSTON DEP CON
134.45 284.0

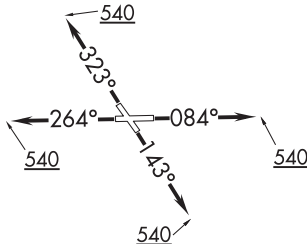
**TOP ALTITUDE:
4000**

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



TAKEOFF MINIMUMS:

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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)
(LURIC4.LURIC) 10NOV16

BAYTOWN, TEXAS
RWJ AIRPARK (54T)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb heading 084° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 14: Climb heading 143° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 26: Climb heading 264° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 32: Climb heading 323° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL.
- Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
Power lines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

210Z NAT 01 910Z AON 10 10 15CS

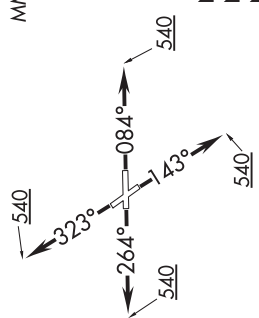
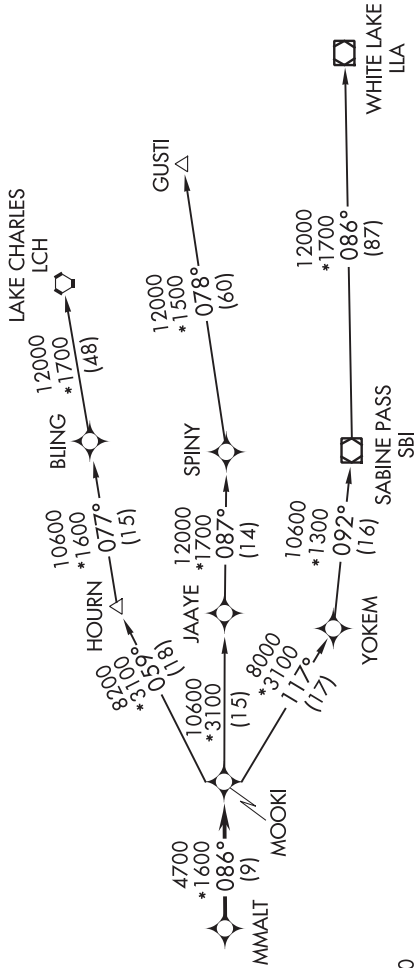
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:

Rwys 8, 26: Standard with minimum climb of 500' per NM to 540.

Rwys 14, 32: Standard with minimum climb of 500' per NM to 540 - NA at night.



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, IBX, LVJ, SGR, TME, T00, T41 and 54T.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb on heading 084° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 14: Climb on heading 143° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 26: Climb on heading 264° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 32: Climb on heading 323° to 540, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL.

Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
Powerlines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

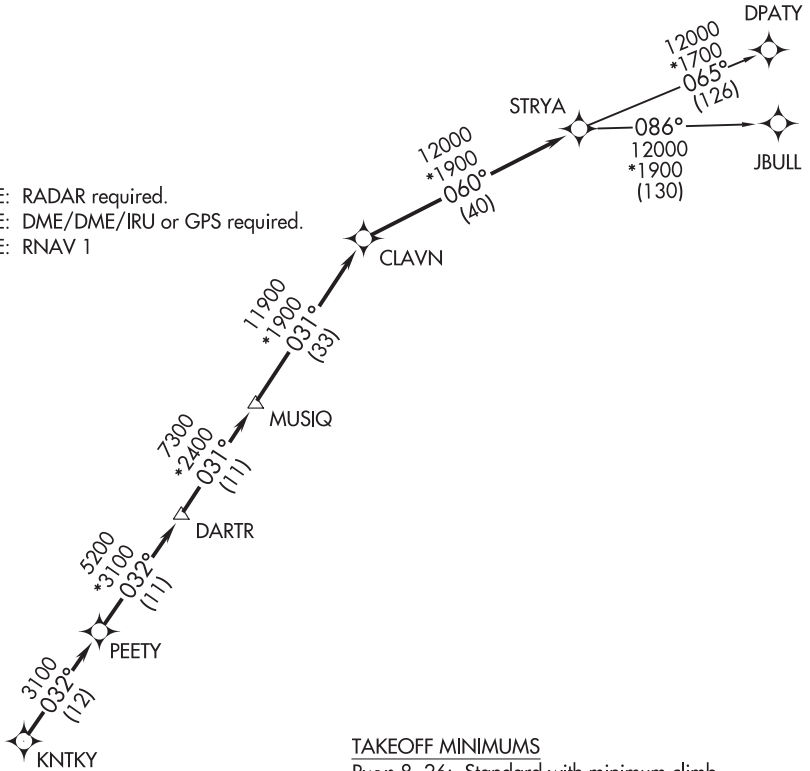
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

CTAF
122.7
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

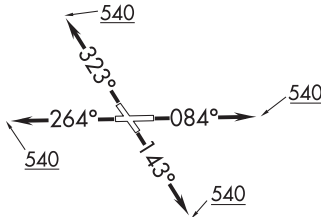
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1



TAKEOFF MINIMUMS

Rwys 8, 26: Standard with minimum climb of 500' per NM to 540.

Rwys 14, 32: Standard with minimum climb of 500' per NM to 540 - NA at night.



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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb heading 084° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 14: Climb heading 143° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 26: Climb heading 264° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 32: Climb heading 323° to 540, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL.
- Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
Power lines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(STYCK4.STYCK) 16315

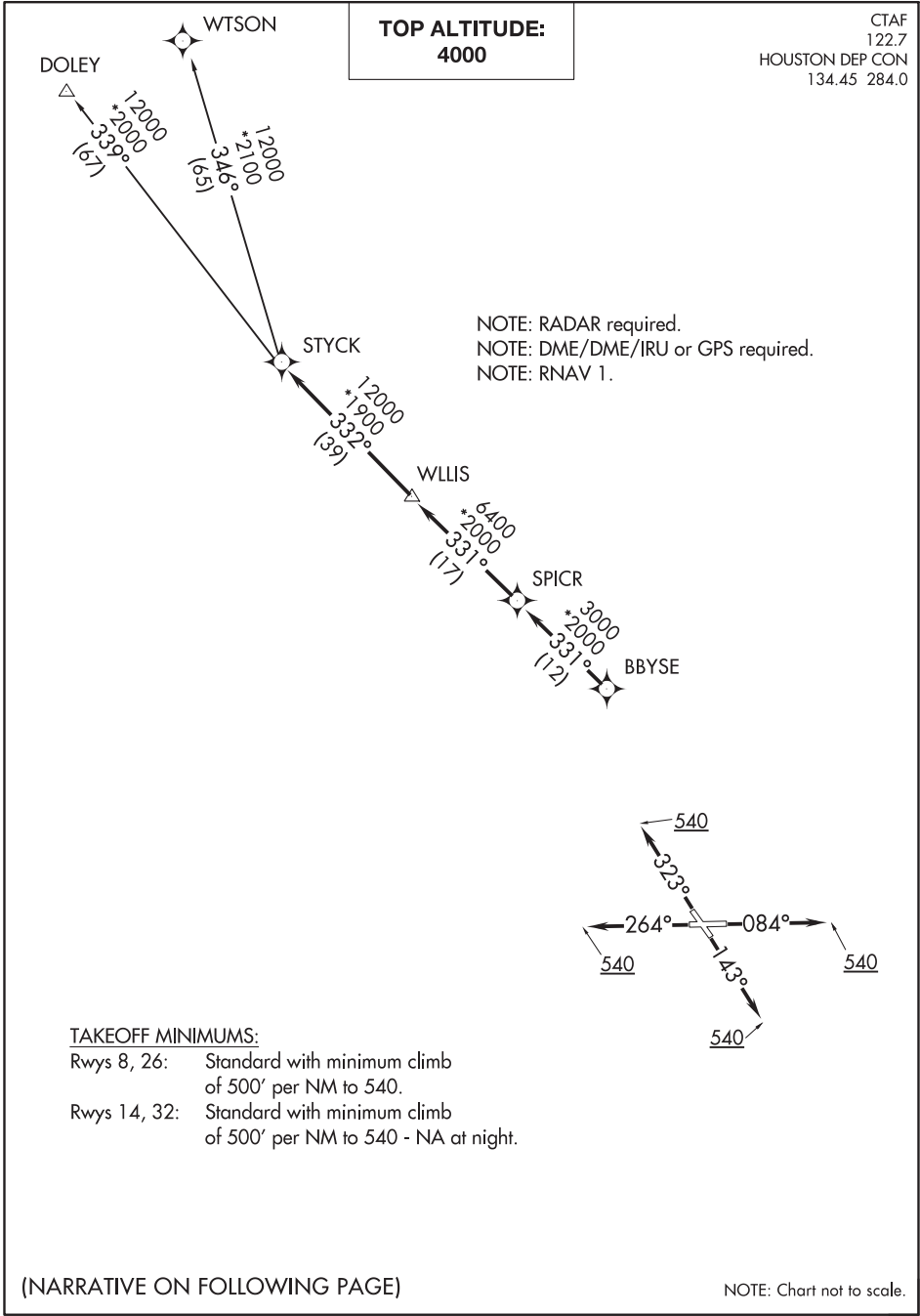
SL-6674 (FAA)

RWJ AIRPARK (54T)
BAYTOWN, TEXAS

STYCK FOUR DEPARTURE (RNAV)

CTAF
122.7
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

BAYTOWN, TEXAS
RWJ AIRPARK (54T)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb heading 084° to 540, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 14: Climb heading 143° to 540, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 26: Climb heading 264° to 540, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 32: Climb heading 323° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

TAKEOFF OBSTACLES 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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL.
- Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
Buildings beginning 29' from DER, 223 left of centerline, up to 30' AGL/64' MSL.
Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
Power lines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

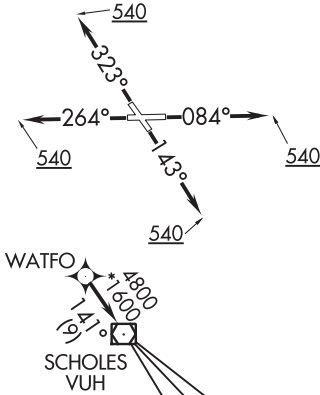
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WATFO THREE DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

HOUSTON DEP CON
134.45 284.0
CTAF
122.7



TAKEOFF MINIMUMS

Rwys 8, 26: Standard with minimum climb of 500' per NM to 540.

Rwys 14, 32: Standard with minimum climb of 500' per NM to 540 - NA at night.

NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

MUSYL

ANKRR

KELPP

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb on heading 084° to 540, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 14: Climb on heading 143° to 540, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 26: Climb on heading 264° to 540, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 32: Climb on heading 323° to 540, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WATFO THREE DEPARTURE (RNAV)

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
 Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
 Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
 Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL.
- Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
 Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
 Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
 Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
 Power lines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
 Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

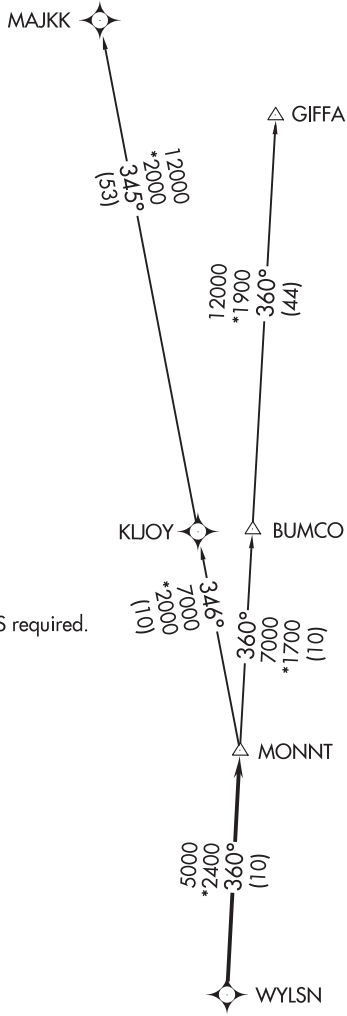
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

CTAF
122.7
HOUSTON DEP CON
134.45 284.0

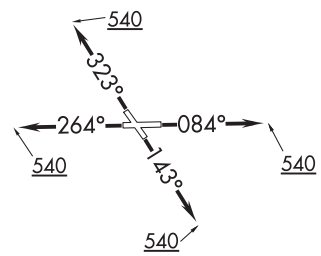
**TOP ALTITUDE:
4000**



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

TAKEOFF MINIMUMS:

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



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

WYLSN FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 8: Climb on heading 084° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 14: Climb on heading 143° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 26: Climb on heading 264° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 32: Climb on heading 323° to 540, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJKK)

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 14: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/44' MSL.
Buildings beginning 35' from DER, left and right of centerline, up to 30' AGL/59' MSL.
Trees beginning 30' from DER, crossing centerline, up to 100' AGL/129' MSL.
Power lines beginning 341' from DER, crossing centerline, up to 32' AGL/61' 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' right of centerline, up to 100' AGL/134' MSL.
- Rwy 32: Vehicle on road beginning 10' from DER, crossing centerline, up to 15' AGL/49' MSL.
Fence beginning 30' from DER, crossing centerline, up to 6' AGL/40' MSL.
Buildings beginning 29' from DER, 223' left of centerline, up to 30' AGL/64' MSL.
Buildings beginning 31' from DER, 146' right of centerline, up to 30' AGL/64' MSL.
Power lines beginning 259' from DER, 139' left centerline, up to 32' AGL/66' MSL.
Trees beginning 620' from DER, left and right of centerline, up to 100' AGL/139' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BEAUMONT, TEXAS

AL-42 (FAA)

16259

APP CRS 128°	Rwy Idg 3669 TDZE 31 Apt Elev 32
------------------------	---

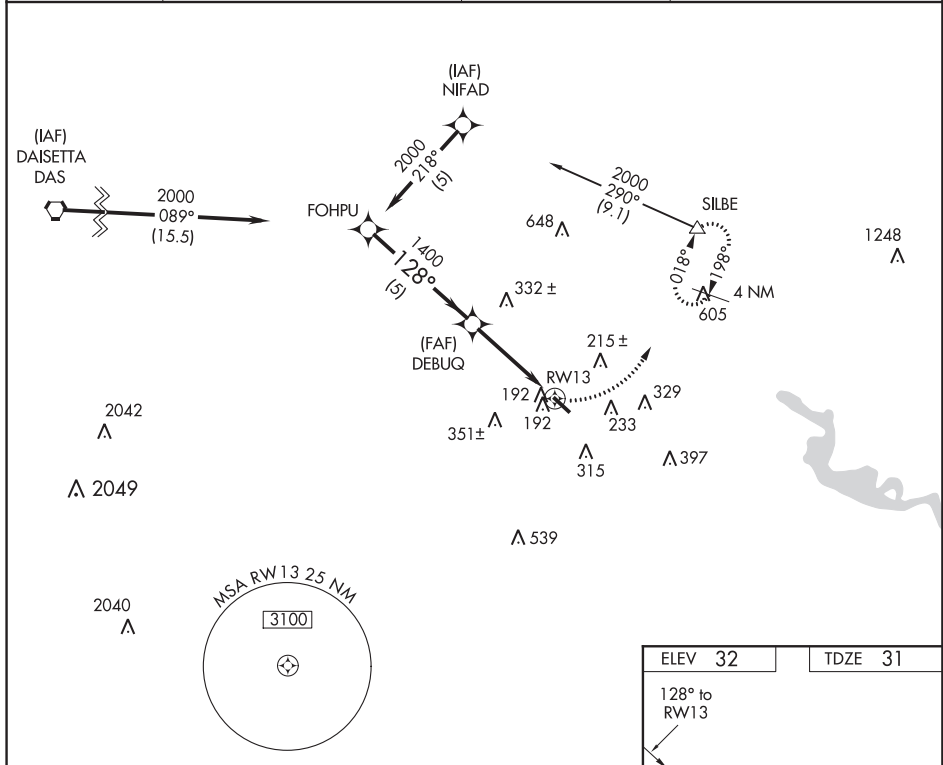
RNAV (GPS) RWY 13

BEAUMONT MUNI (BMT)

▼ Use Beaumont-Port Arthur, TX (Jack Brooks Rgnl) altimeter setting.
▲ NA Circling NA Rwy 16-34. DME/DME RNP-0.3 NA.
 Visibility reduction by helicopters NA.

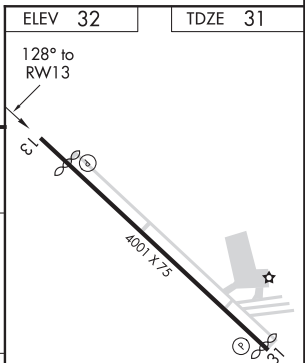
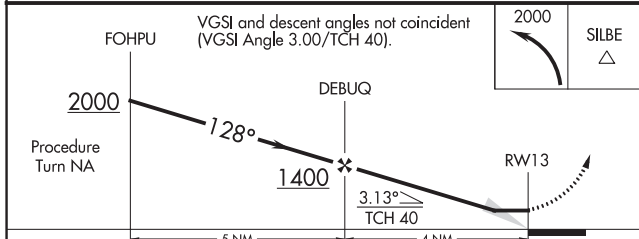
MISSED APPROACH: Climbing left turn to 2000 direct SILBE WP and hold.

AWOS-3P/T 118.425	HOUSTON APP CON 121.3 377.1	CLNC DEL 121.75	UNICOM 123.0 (CTAF) 1
-----------------------------	---------------------------------------	---------------------------	--



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D
GLS PA DA			NA	
LNAV/VNAV DA			NA	
LNAV MDA	540-1	509 (600-1)	540-1½	509 (600-1½)
CIRCLING	580-1	548 (600-1)	620-1½ 588 (600-1½)	720-2¼ 688 (700-2¼)

REIL Rwy 13
 MIRL Rwy 13-31 **1**

BEAUMONT, TEXAS
 Orig-C 11MAR10

30°04'N-94°13'W

BEAUMONT MUNI (BMT)

RNAV (GPS) RWY 13

RNAV (GPS) RWY 31

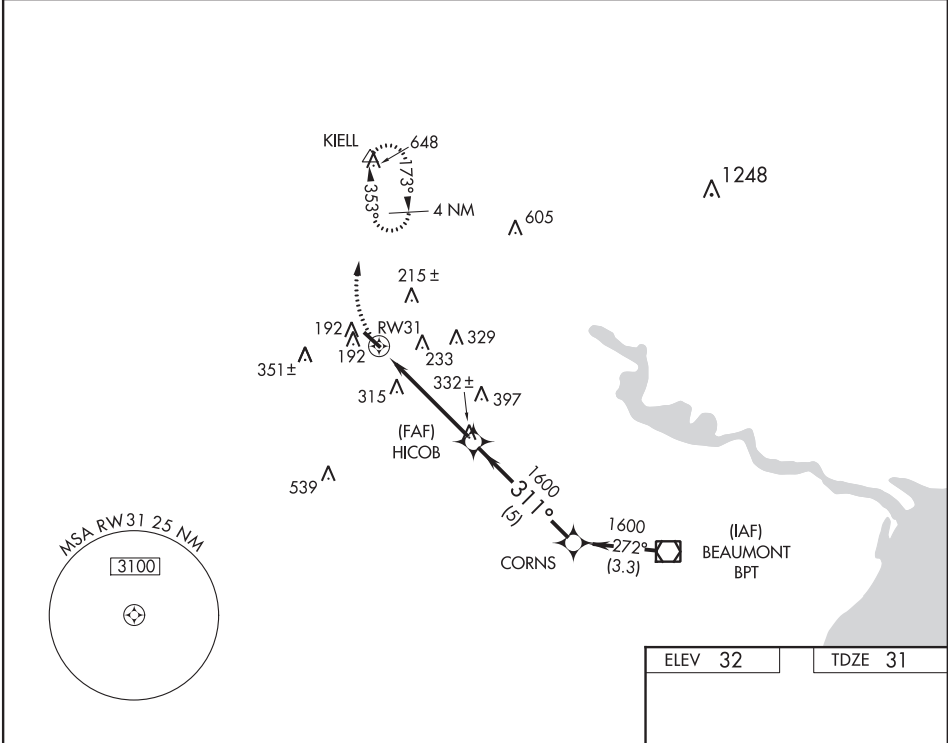
BEAUMONT MUNI (BMT)

APP CRS 311°	Rwy Idg TDZE Apt Elev	3934 31 32
------------------------	-----------------------------	---------------------------------------

NA Use Beaumont-Port Arthur, TX (Jack Brooks Rgnl) altimeter setting. Circling NA to Rwy 16-34. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

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

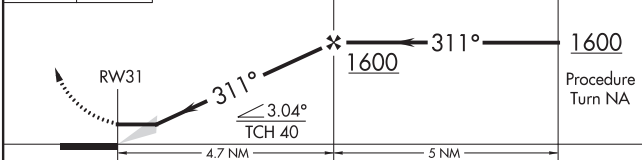
AWOS-3P/T 118.425	HOUSTON APP CON 121.3 377.1	CLNC DEL 121.75	UNICOM 123.0 (CTAF) 0
-----------------------------	---------------------------------------	---------------------------	---------------------------------



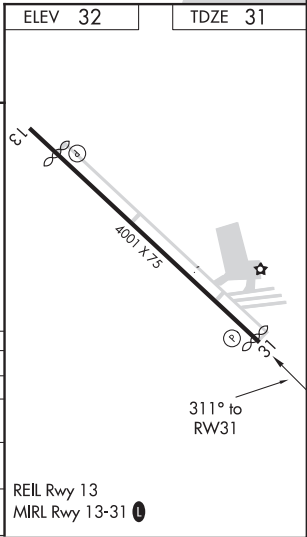
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

2000 KIELL Δ VGSI and descent angles not coincident (VGSI Angle 4.00/TCH 40).



CATEGORY	A	B	C	D
GLS PA DA			NA	
LNAV/VNAV DA			NA	
LNAV MDA	600-1 568 (600-1)		600-1½ 568 (600-1½)	600-1¾ 568 (600-1¾)
CIRCLING	600-1 568 (600-1)		620-1½ 588 (600-1½)	720-2¼ 688 (700-2¼)



BEAUMONT, TEXAS

AL-42 (FAA)

16259

VOR/DME BPT 114.5 Chan 92	APP CRS 119°	Rwy Idg TDZE 31 Apt Elev 32
--	------------------------	---

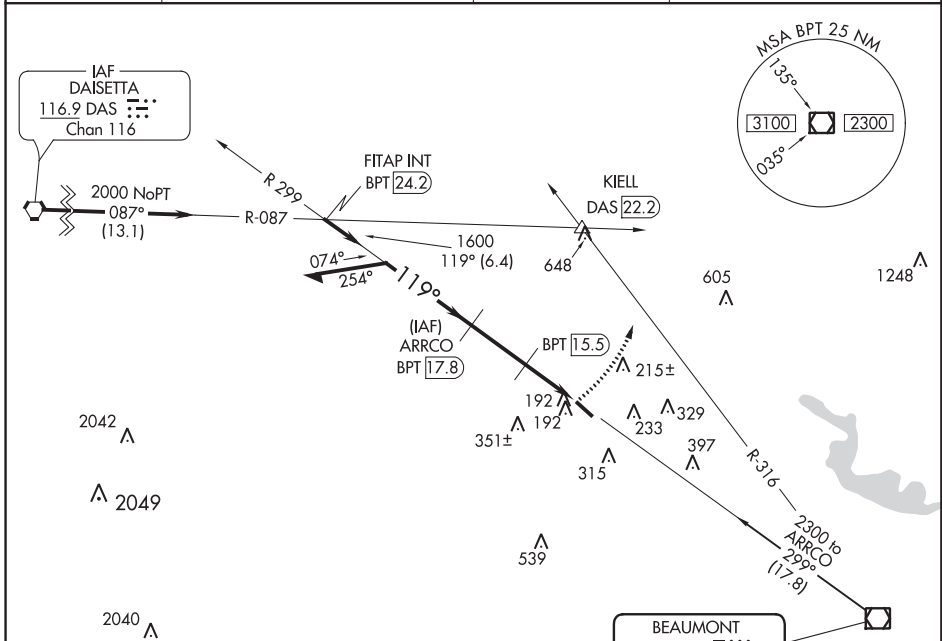
VOR/DME RWY 13

BEAUMONT MUNI (BMT)

NA Use Beaumont-Port Arthur, TX (Jack Brooks Rgnl) altimeter setting. Circling NA Rwy 16-34. Visibility reduction by helicopters NA.

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

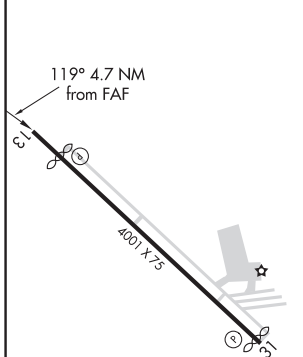
AWOS-3P/T 118.425	HOUSTON APP CON 121.3 377.1	CLNC DEL 121.75	UNICOM 123.0 (CTAF) 1
-----------------------------	---------------------------------------	---------------------------	--



SC-5, 10 NOV 2016 to 05 JAN 2017

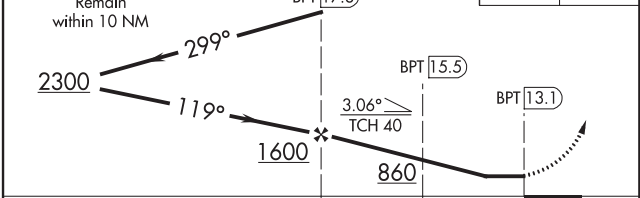
SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 32	TDZE 31
---------	---------



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

2300 KIELL BPT R-316



CATEGORY	A	B	C	D
S-13	580-1 549 (600-1)		580-1½ 549 (600-1½)	580-1¾ 549 (600-1¾)
CIRCLING	580-1 548 (600-1)		620-1½ 588 (600-1½)	720-2¼ 688 (700-2¼)

BEAUMONT, TEXAS
Amdt 3C 26AUG10

30°04'N-94°13'W

BEAUMONT MUNI (BMT) VOR/DME RWY 13

VOR/DME BPT 114.5 Chan 92	APP CRS 299°	Rwy Idg 3934 TDZE 32 Apt Elev 32
--	------------------------	---

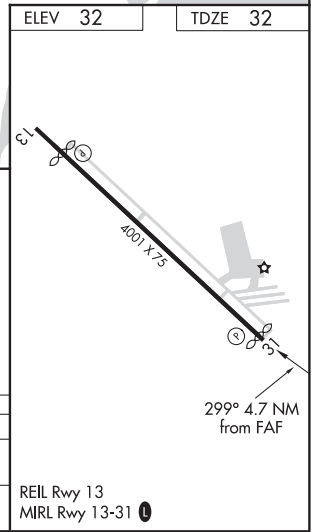
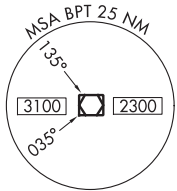
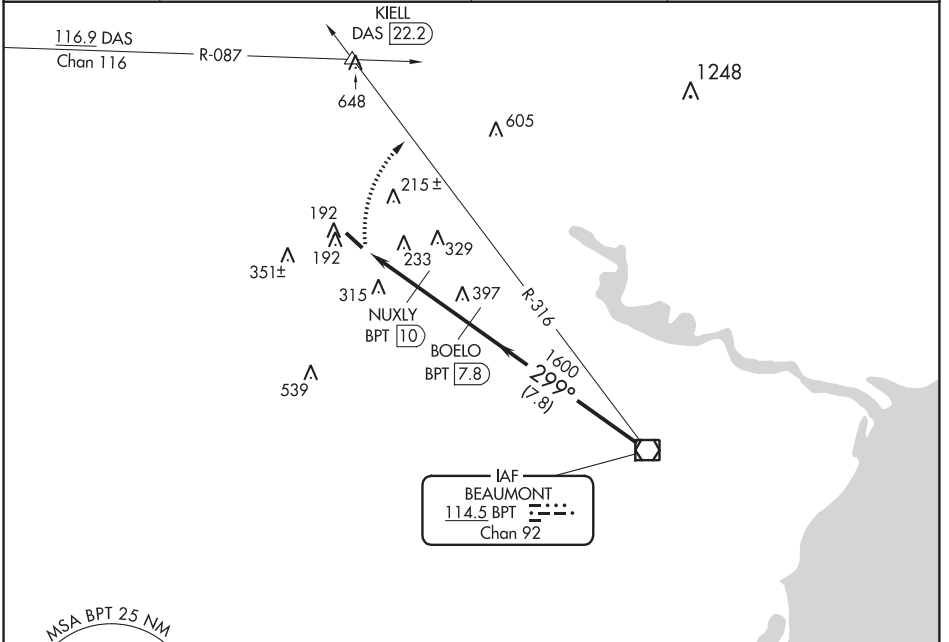
VOR/DME RWY 31

BEAUMONT MUNI (BMT)

NA Use Beaumont-Port Arthur, TX (Jack Brooks Rgnl) altimeter setting. Circling NA Rwy 16-34. Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing right turn to 2000 via BPT R-316 to KIELL INT/DAS 22.2 DME.

AWOS-3P/T 118.425	HOUSTON APP CON 121.3 377.1	CLNC DEL 121.75	UNICOM 123.0 (CTAF) 1
-----------------------------	---------------------------------------	---------------------------	--



2000 BPT R-316	KIELL △	NUXLY BPT 10	BOELO BPT 7.8	VOR/DME
	BPT 12.5	3.04° TCH 40	299°	1600
	2.5 NM	2.2 NM	7.8 NM	
CATEGORY	A	B	C	D
S-31	600-1 568 (600-1)		600-1½ 568 (600-1½)	600-1¾ 568 (600-1¾)
CIRCLING	600-1 568 (600-1)		620-1½ 588 (600-1½)	720-2¼ 688 (700-2¼)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-BPT 110.15 Chan 38(Y)	APP CRS 116°	Rwy Idg TDZE 15 Apt Elev 15	6675
---	------------------------	---	-------------

ILS or LOC RWY 12

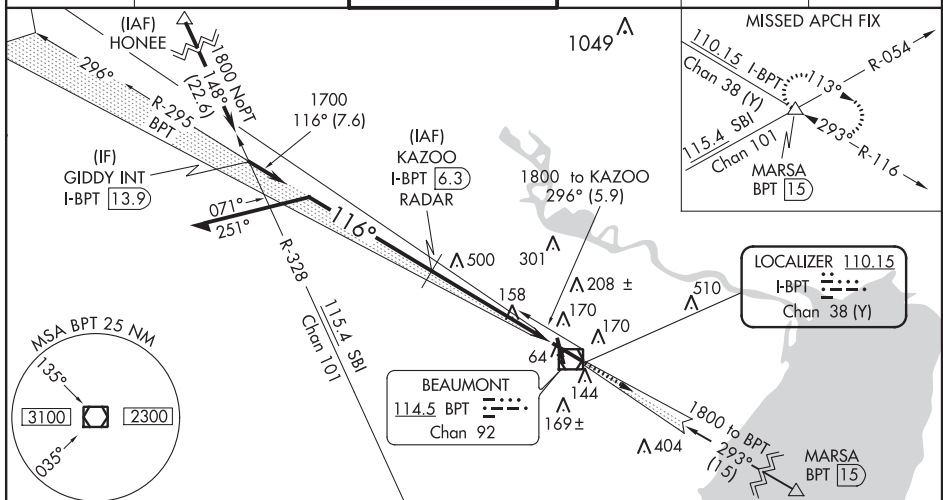
JACK BROOKS RGNL (BPT)

▼ When local altimeter setting not received, use Orange County altimeter setting and increase all DA 31 feet and all MDA 40 feet, increase Circling Cat A/D/E visibility ¼ mile. COUGS Fix Minimums: increase S-LOC Cat C/D/E visibility to RVR 5000, Circling Cat E visibility ¼ mile. For inop MALSRL, increase S-ILS 12 Cat E visibility to RVR 4000, S-LOC 12 Cat E visibility to 2½ miles, COUGS Fix Minimums increase S-LOC 12 Cat C/D/E visibility to 1½ mile. For inop MALSRL, when using Orange County altimeter setting, increase S-ILS 12 Cat E visibility to RVR 4000, S-LOC 12 Cat C/D/E to 2½ miles. COUGS Fix Minimums: increase S-LOC 12 Cat C/D/E to 1½ miles. VDP NA when using Orange County altimeter setting. DME or RADAR Required.

MALSRL

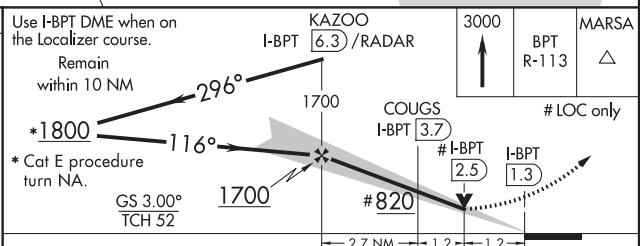
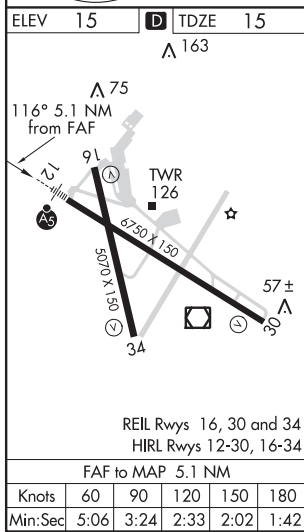
MISSED APPROACH:
Climb to 3000 on BPT VOR/DME R-113 to MARSA INT/BPT 15 DME and hold.

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
----------------------	---------------------------------------	---	--------------------------	--------------------------	-------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D	E
S-ILS 12	215/24 200 (200-½)				
S-LOC 12	820/24 805 (900-½)	820/40 805 (900-¾)	820-1½ 805 (900-1½)		
CIRCLING	820-1 805 (900-1)	820-1¼ 805 (900-1¼)	820-2½ 805 (900-2½)	820-2¾ 805 (900-2¾)	
COUGS FIX MINIMUMS (DME REQUIRED)					
S-LOC 12	460/24 445 (500-½)		460/45 445 (500-¾)		
CIRCLING	480-1 465 (500-1)		480-1½ 465 (500-1½)	580-2 565 (600-2)	820-2¾ 805 (900-2¾)

WAAS CH 99715 W12A	APP CRS 116°	Rwy Idg TDZE Apt Elev	6675 15 15
--	------------------------	-----------------------------	---------------------------------------

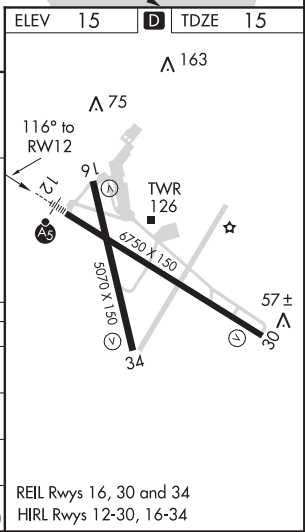
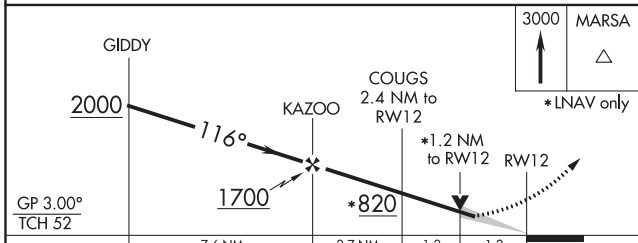
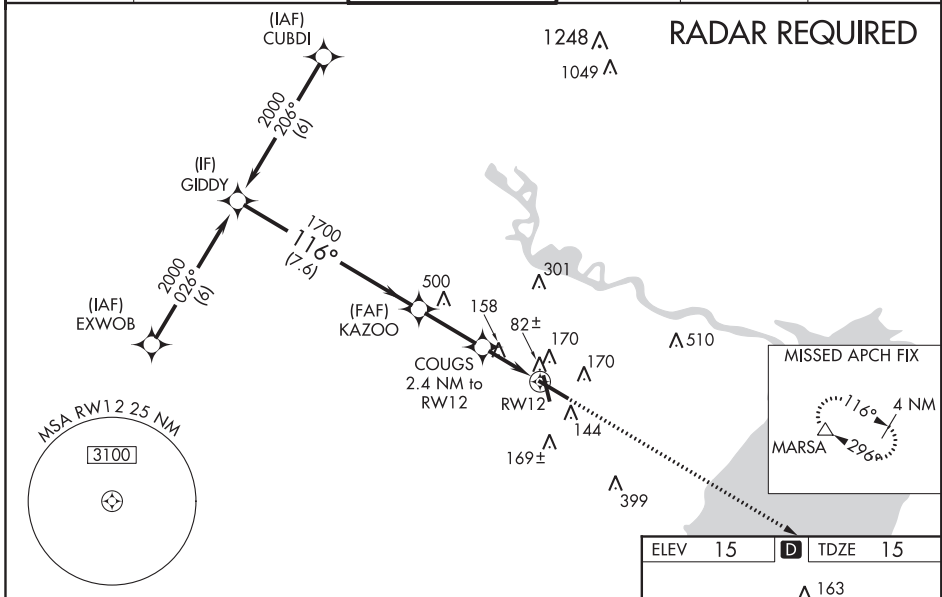
RNAV (GPS) RWY 12

JACK BROOKS RGNL (BPT)

⚠ 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 all DA 32 feet and all MDA 40 feet, increase LNAV/VNAV Cat E, LNAV Cat E and Circling Cat E visibility ¼ mile. For inoperative MALSR, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E to RVR 6000 and LNAV Cat E to 1½ miles. For inoperative MALSR when using Orange County altimeter setting, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E to 1½ miles, and LNAV Cat E to 1¾ miles. VDP NA when using Orange County altimeter setting.

MALSR
MISSED APPROACH: Climb to 3000 direct MARSA 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
----------------------	---------------------------------------	---	--------------------------	--------------------------	-------------------------



CATEGORY	A	B	C	D	E
LPV DA		215/24	200 (200-½)		
LNAV/VNAV DA		375/40	360 (400-¾)		
LNAV MDA	460/24	445 (500-½)	460/40 445 (500-¾)	460/50	445 (500-1)
CIRCLING	480-1	465 (500-1)	480-1½ 465 (500-1½)	580-2 565 (600-2)	820-2¾ 805 (900-2¾)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 82316 W16A	APP CRS 161°	Rwy Idg 5070 TDZE 15 Apt Elev 15
--	------------------------	---

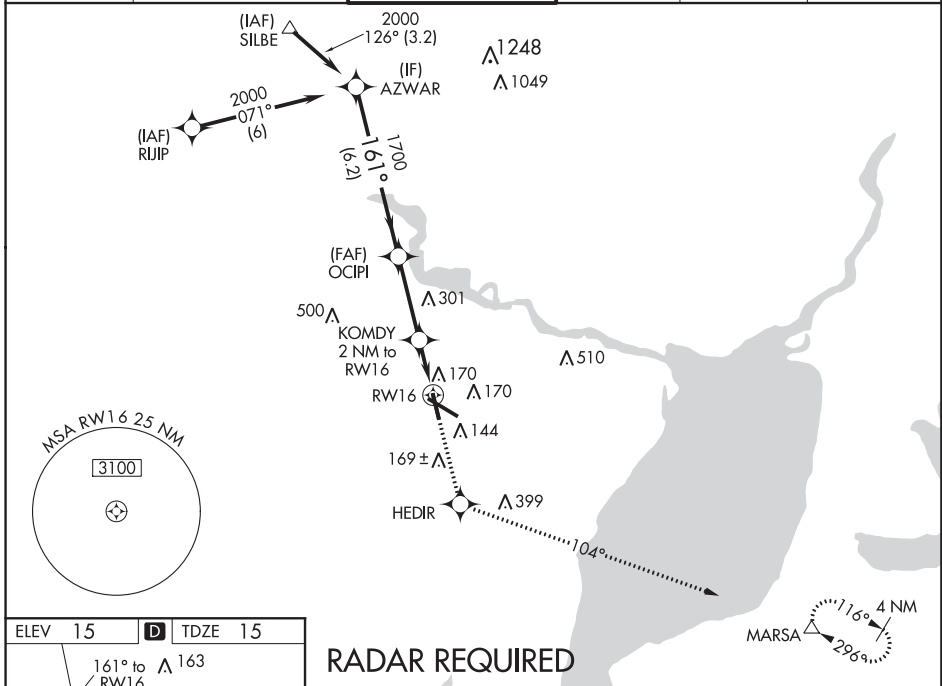
RNAV (GPS) RWY 16

JACK BROOKS RGNL (BPT)

⚠ 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.
⚠ Visibility reduction by helicopters NA. When local altimeter setting not received, use Orange County altimeter setting and increase all DA 32 feet and all MDA 40 feet, increase LPV all Cats visibility ¼ mile, LNAV Cat D and Circling Cat E visibility ¼ mile. VDP NA when using Orange County altimeter setting.

MISSED APPROACH: Climb to 3000 direct HEDIR and via track 104° to MARSA and hold.

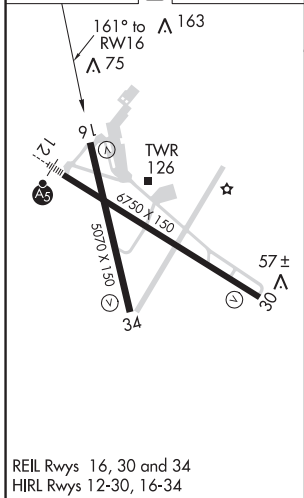
ATIS 126.3	HOUSTON APP CON 121.3 377.1	BEAUMONT TOWER* 119.5 (CTAF) 0	GND CON 124.85	CLNC DEL 118.3	UNICOM 122.95
----------------------	---------------------------------------	--	--------------------------	--------------------------	-------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 15	D	TDZE 15
---------	----------	---------



RADAR REQUIRED

	AZWAR	3000	HEDIR	tr 104°	MARSA	
	2000		OCIPI	KOMDY		*LNAV only
			2 NM to RWY 16	*1.1 NM to RWY 16		
GP 3.00°						
TCH 52						
		6.2 NM	3.1 NM	0.9	1.1	
CATEGORY	A	B	C	D	E	
LPV DA		273-¾	258 (300-¾)			
LNAV/VNAV DA		422-1½	407 (500-1½)			
LNAV MDA	420-1	405 (500-1)	420-1¼	405 (500-1¼)	420-1½	405 (500-1½)
CIRCLING	480-1	465 (500-1)	480-1½	580-2	820-2¾	805 (900-2¾)

BEAUMONT/PORT ARTHUR, TEXAS
Orig 17DEC09

29°57'N-94°01'W

RNAV (GPS) RWY 16

WAAS CH 69216 W30A	APP CRS 296°	Rwy Idg TDZE Apt Elev	6750 12 15
--	------------------------	-----------------------------	---------------------------------------

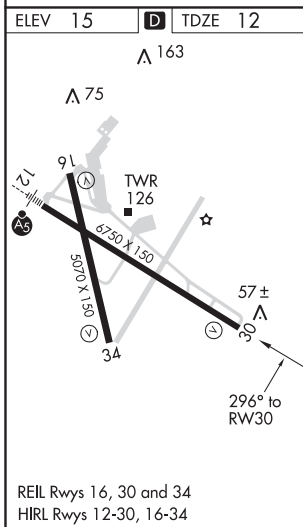
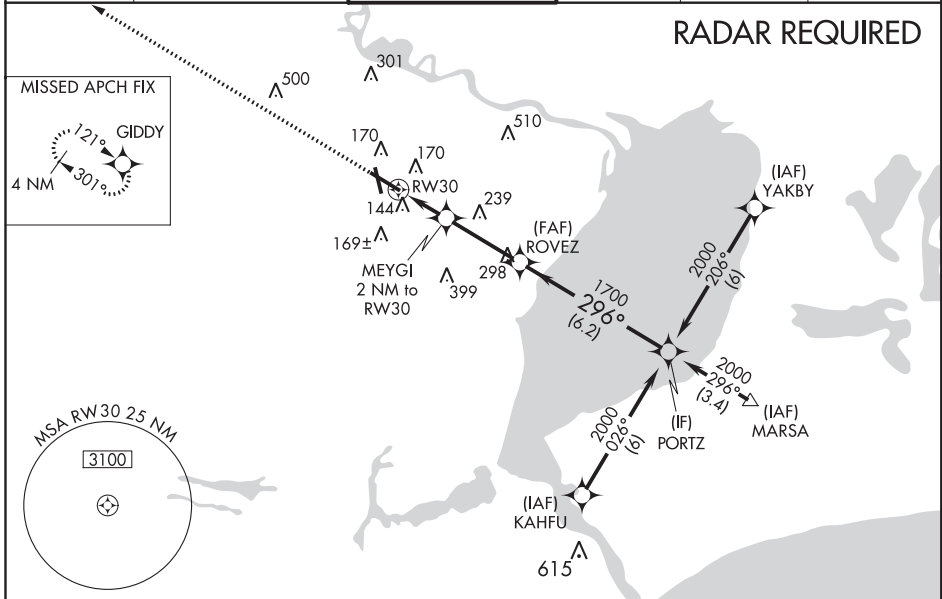
RNAV (GPS) RWY 30

JACK BROOKS RGNL (BPT)

▼ Baro-VNAV NA when using Orange County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA.
▲ Visibility reduction by helicopters NA. When local altimeter setting not received, use Orange County altimeter setting and increase all DA 32 feet and all MDA 40 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat E and Circling Cat E visibility ¼ mile.

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	D	TDZE 12																														
*LNAV only																																
<table border="1"> <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 colspan="5">263-¾ 251 (300-¾)</td> </tr> <tr> <td>LNAV/VNAV DA</td> <td colspan="4">404-1¼ 392 (400-1¼)</td> <td>404-1½ 392 (400-1½)</td> </tr> <tr> <td>LNAV MDA</td> <td>540-1 528 (600-1)</td> <td colspan="2">540-1½ 528 (600-1½)</td> <td>540-1¾ 528 (600-1¾)</td> <td></td> </tr> <tr> <td>CIRCLING</td> <td>540-1 525 (600-1)</td> <td>540-1½ 525 (600-1½)</td> <td>580-2 565 (600-2)</td> <td colspan="2">820-2¾ 805 (900-2¾)</td> </tr> </tbody> </table>	CATEGORY	A	B	C	D	E	LPV DA	263-¾ 251 (300-¾)					LNAV/VNAV DA	404-1¼ 392 (400-1¼)				404-1½ 392 (400-1½)	LNAV MDA	540-1 528 (600-1)	540-1½ 528 (600-1½)		540-1¾ 528 (600-1¾)		CIRCLING	540-1 525 (600-1)	540-1½ 525 (600-1½)	580-2 565 (600-2)	820-2¾ 805 (900-2¾)			
CATEGORY	A	B	C	D	E																											
LPV DA	263-¾ 251 (300-¾)																															
LNAV/VNAV DA	404-1¼ 392 (400-1¼)				404-1½ 392 (400-1½)																											
LNAV MDA	540-1 528 (600-1)	540-1½ 528 (600-1½)		540-1¾ 528 (600-1¾)																												
CIRCLING	540-1 525 (600-1)	540-1½ 525 (600-1½)	580-2 565 (600-2)	820-2¾ 805 (900-2¾)																												

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 72616 W34A	APP CRS 341°	Rwy Idg TDZE Apt Elev	5070 15 15
--	------------------------	-----------------------------	---------------------------------------

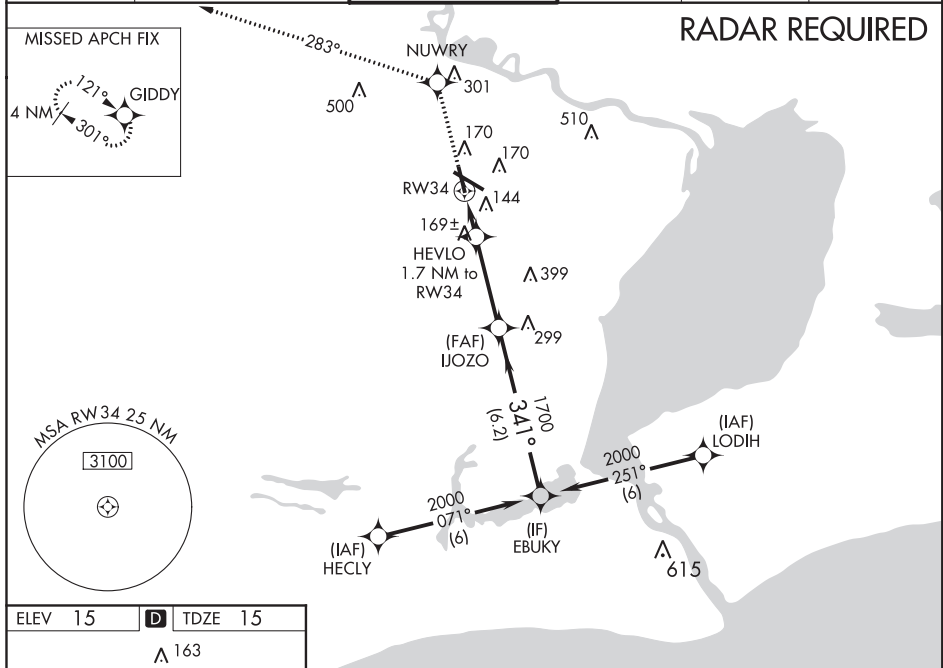
RNAV (GPS) RWY 34

JACK BROOKS RGNL (BPT)

▼ Baro-VNAV NA when using Orange County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°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 all DA 32 feet and all MDA 40 feet, increase LNAV Cat C and Circling Cat E visibility ¼ mile.

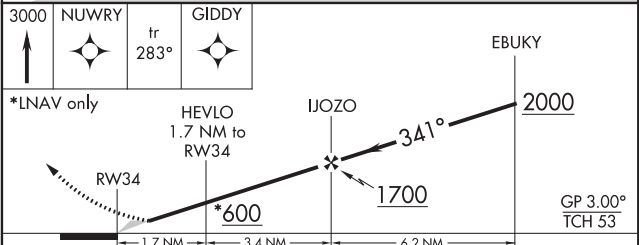
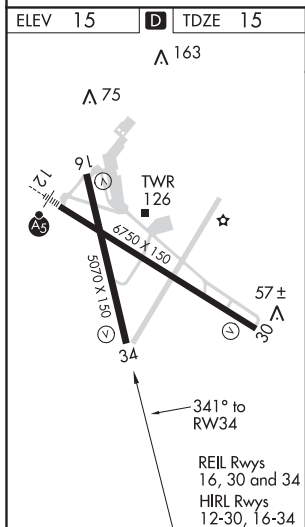
MISSED APPROACH:
Climb to 3000 direct NUWRY and via track 283° to GIDDY and hold.

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
----------------------	---------------------------------------	--	--------------------------	--------------------------	-------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D	E
LPV DA	215-¾		200 (200-¾)		
LNAV/VNAV DA	437-1½		422 (500-1½)		
LNAV MDA	480-1	465 (500-1)	480-1¼ 465 (500-1¼)	480-1½ 465 (500-1½)	480-1¾ 465 (500-1¾)
CIRCLING	480-1	465 (500-1)	480-1½ 465 (500-1½)	580-2 565 (600-2)	820-2¾ 805 (900-2¾)

LOC I-BPT 110.15 Chan 38(Y)	APP CRS 296°	Rwy Idg 6750 TDZE 12 Apt Elev 15
---	------------------------	---

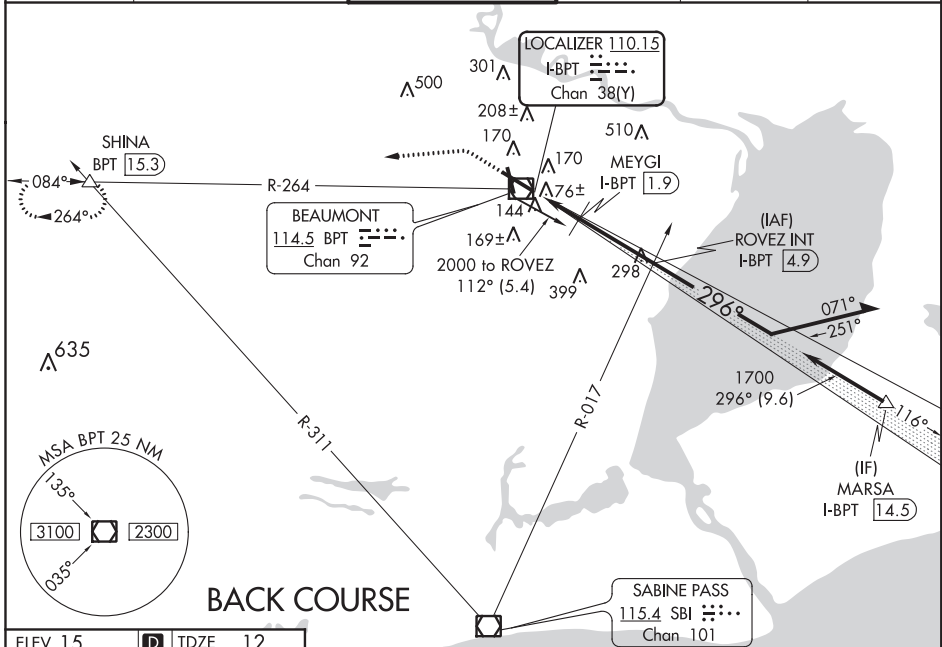
LOC BC RWY 30

JACK BROOKS RGNL (BPT)

⚠ Visibility reduction by helicopters NA. When local altimeter setting not received, use Orange County altimeter setting and increase all MDA 40 feet, increase Circling Cat E visibility ¼ mile, MEYGI fix minimums: increase S-30 Cat C/D/E visibility ¼ mile and Circling Cat E ¼ mile.

⚠ MISSED APPROACH: Climb to 500 then climbing left turn to 3000 via BPT VOR/DME R-264 to SHINA Int/BPT 15.3 DME and hold.

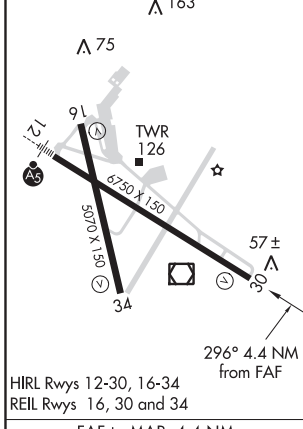
ATIS 126.3	HOUSTON APP CON 121.3 377.1	BEAUMONT TOWER* 119.5 (CTAF)	GND CON 124.85	CLNC DEL 118.3	UNICOM 122.95
----------------------	---------------------------------------	--	--------------------------	--------------------------	-------------------------



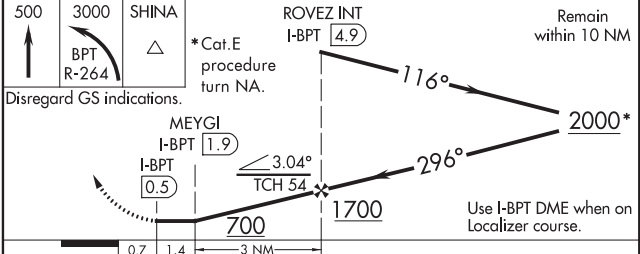
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 15	TDZE 12
---------	---------



FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28



CATEGORY	A	B	C	D	E
S-30	700-1	688 (700-1)	700-2 688 (700-2)	700-2¼ 688 (700-2¼)	700-2½ 688 (700-2½)
CIRCLING	700-1	685 (700-1)	700-2 685 (700-2)	700-2¼ 685 (700-2¼)	820-2¾ 805 (900-2¾)
MEYGI FIX MINIMUMS					
S-30	400-1 388 (400-1)			400-1¼ 388 (400-1¼)	
CIRCLING	480-1	465 (500-1)	480-1½ 465 (500-1½)	580-2 565 (600-2)	820-2¾ 805 (900-2¾)

VOR/DME BPT 114.5 Chan 92	APP CRS 359°	Rwy Idg 5070 TDZE 16 Apt Elev 16
---	------------------------	---

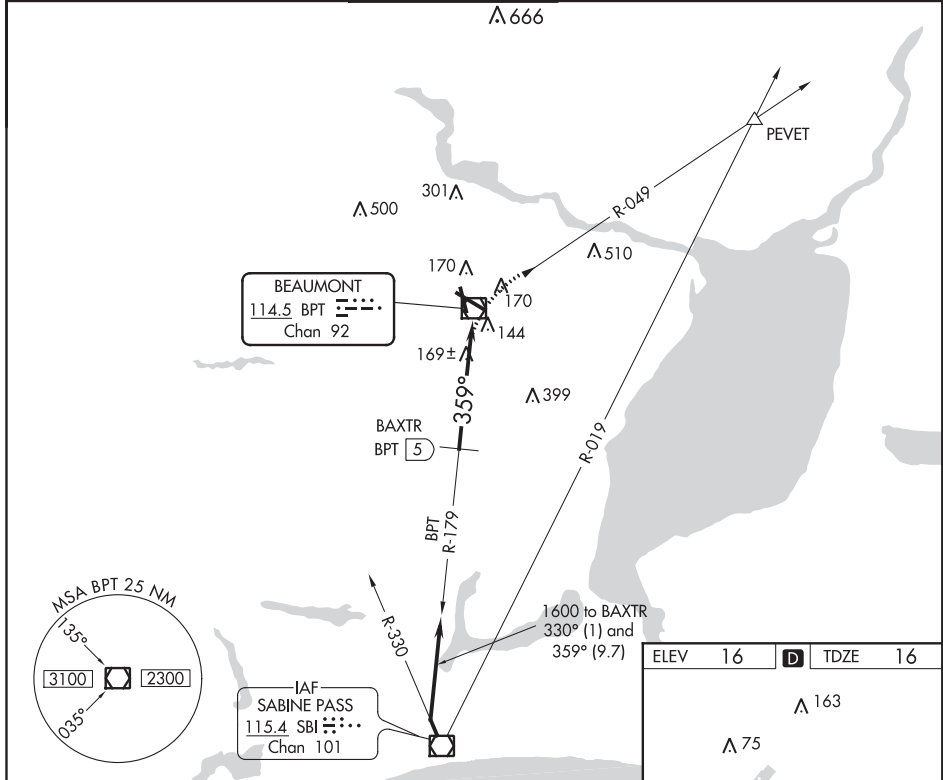
VOR/DME RWY 34

JACK BROOKS RGNL (BPT)

▽ When local altimeter setting not received, use Orange County altimeter setting and increase all MDA 40 feet, increase S-34 visibility Cat C and D ¼ mile and Circling Cat E visibility ¼ mile.

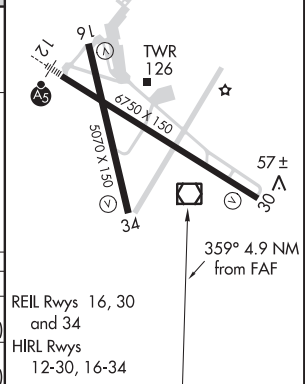
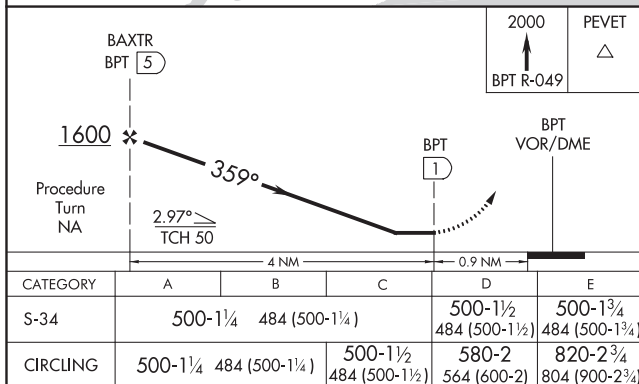
▲ MISSED APPROACH: Climb to 2000 via BPT VOR/DME R-049 to PEVET INT.

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



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



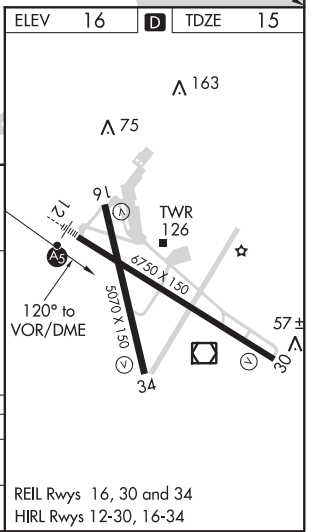
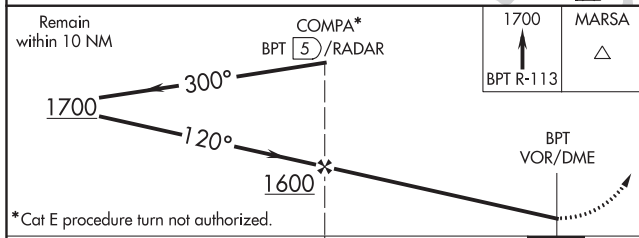
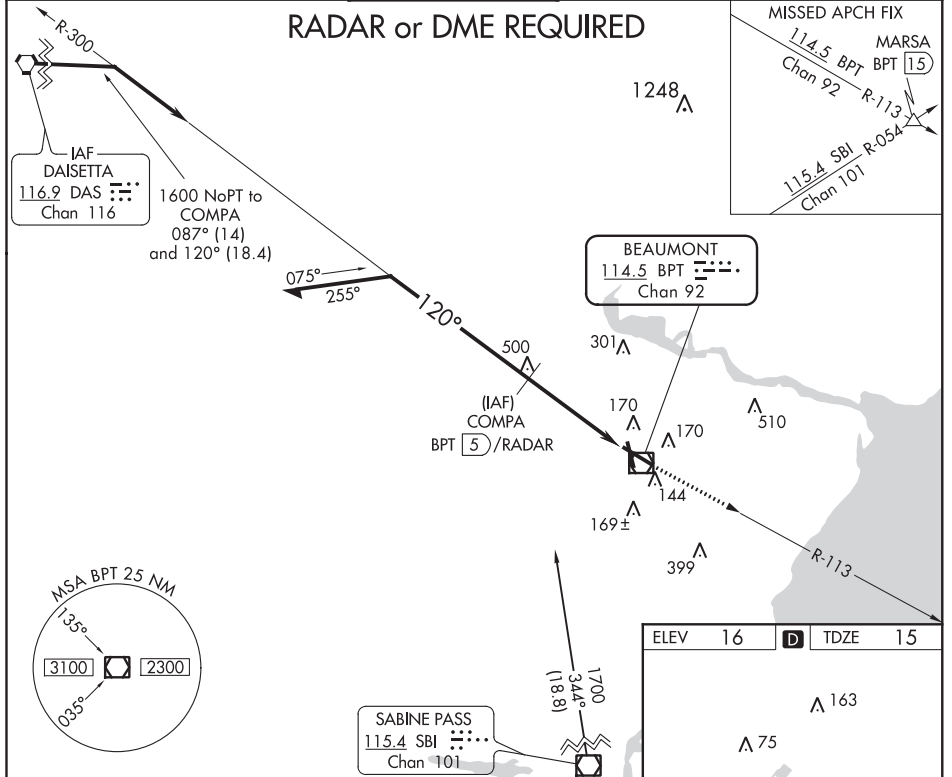
VOR/DME BPT 114.5 Chan 92	APP CRS 120°	Rwy Idg 6675 TDZE 15 Apt Elev 16
---	------------------------	---

VOR RWY 12
JACK BROOKS RGNL (BPT)

⚠ For inoperative MALSRL, 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 and Circling Cat E ¼ mile. For inop MALSRL when using Orange County altimeter setting, increase S-12 Cat E visibility to 1½ mile.

MALSRL MISSED APPROACH: Climb to 1700 via BPT R-113 to MARSA Int/BPT 15 DME.

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
----------------------	---------------------------------------	--	--------------------------	--------------------------	-------------------------



*Cat E procedure turn not authorized.

CATEGORY	A	B	C	D	E
S-12	420/24	405 (500-½)	420/40	405 (500-¾)	
CIRCLING	480-1	464 (500-1)	480-1½ 464 (500-1½)	580-2 564 (600-2)	820-2¾ 804 (900-2¾)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

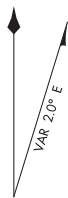
AIRPORT DIAGRAM

AL-521 (FAA)

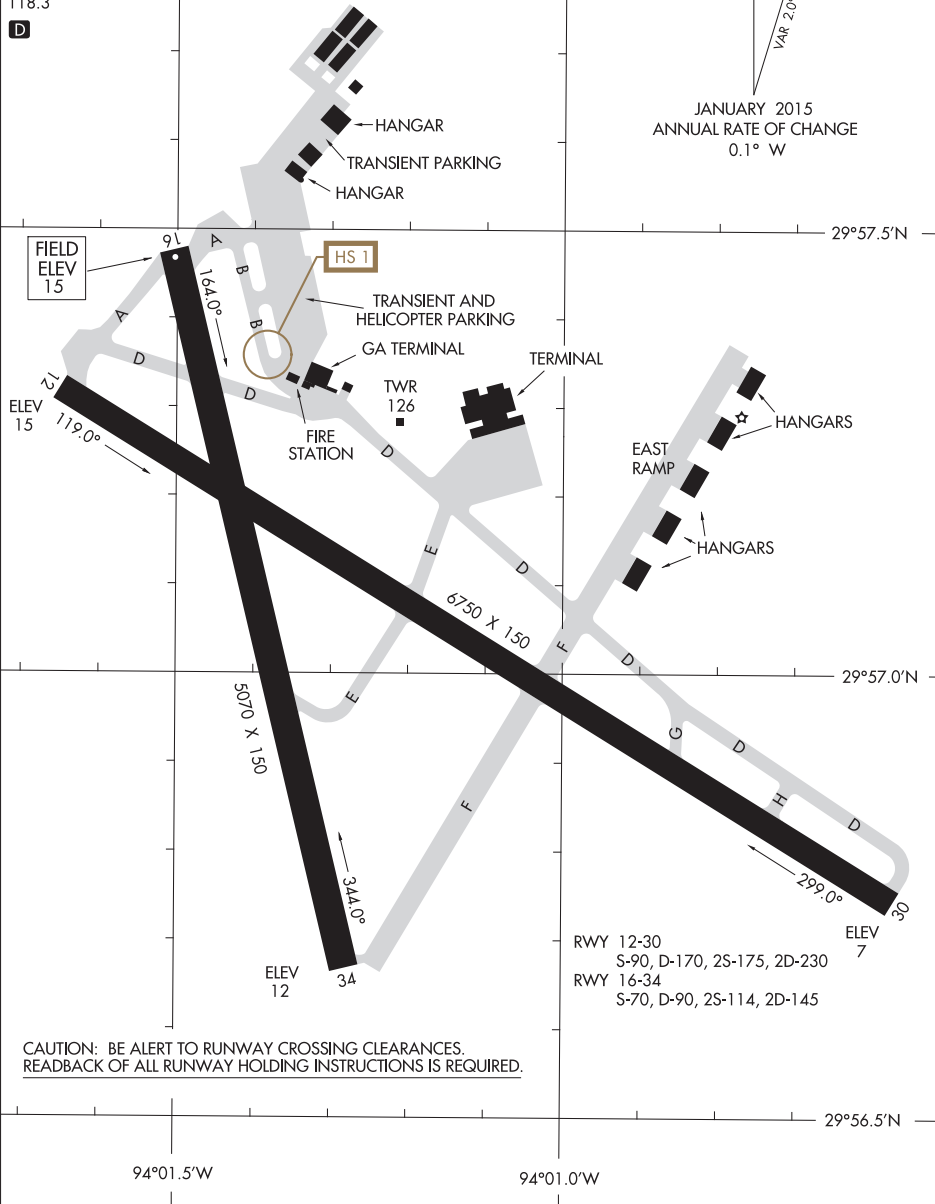
JACK BROOKS RGNL (BPT)
BEAUMONT/PORT ARTHUR, TEXAS

ATIS
126.3
BEAUMONT TOWER *
119.5
GND CON
124.85
CLNC DEL
118.3

D



JANUARY 2015
ANNUAL RATE OF CHANGE
0.1° W



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

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

AIRPORT DIAGRAM

16147

BEAUMONT/PORT ARTHUR, TEXAS
JACK BROOKS RGNL (BPT)

WAAS CH 86316 W16A	APP CRS 165°	Rwy Idg TDZE Apt Elev	6003 318 318
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 16

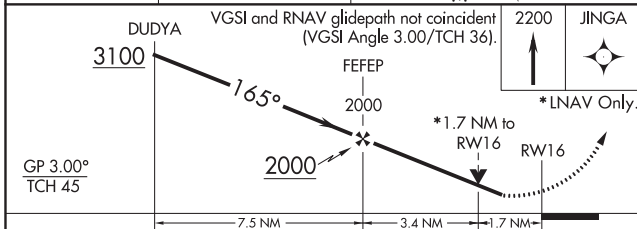
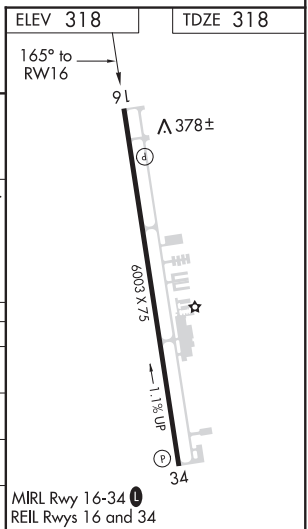
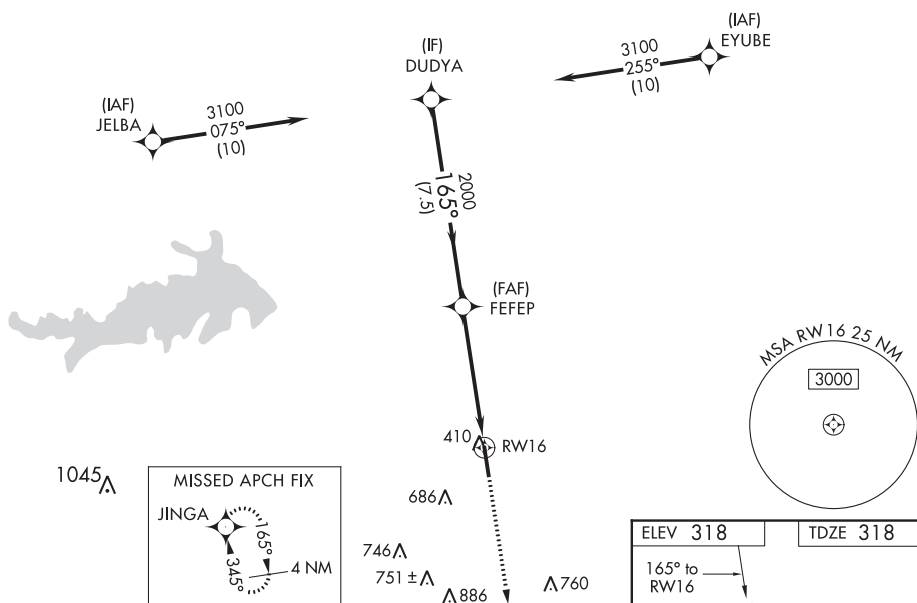
BRENHAM MUNI (11R)

⚠ DME/DME RNP-0.3 NA. Helicopter visibility reduction below $\frac{3}{4}$ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 37°C (98°F). 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, LNAV Cats C/D and Circling Cats C/D visibility $\frac{1}{4}$ mile. VDP and Baro-VNAV NA with College Station altimeter setting.

MISSED APPROACH:
Climb to 2200 direct JINGA and hold.

AWOS-3 121.125	HOUSTON APP CON 134.3 360.85	UNICOM 123.075 (CTAF) 0
--------------------------	--	-----------------------------------

RADAR REQUIRED



CATEGORY	A	B	C	D
LPV DA		594- $\frac{7}{8}$	276 (300- $\frac{7}{8}$)	
LNAV/VNAV DA		680-1 $\frac{1}{4}$	362 (400-1 $\frac{1}{4}$)	
LNAV MDA	880-1	562 (600-1)	880-1 $\frac{5}{8}$	562 (600-1 $\frac{5}{8}$)
CIRCLING	880-1	562 (600-1)	880-1 $\frac{5}{8}$ 562 (600-1 $\frac{5}{8}$)	1040-2 $\frac{1}{4}$ 722 (800-2 $\frac{1}{4}$)

BRENHAM, TEXAS

AL-6271 (FAA)

15176

WAAS CH 77616 W34A	APP CRS 345°	Rwy Idg TDZE Apt Elev	6003 269 318
--	------------------------	-----------------------------	---

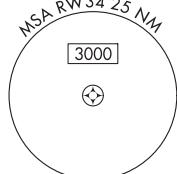
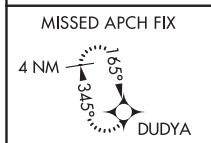
RNAV (GPS) RWY 34

BRENHAM MUNI (11R)

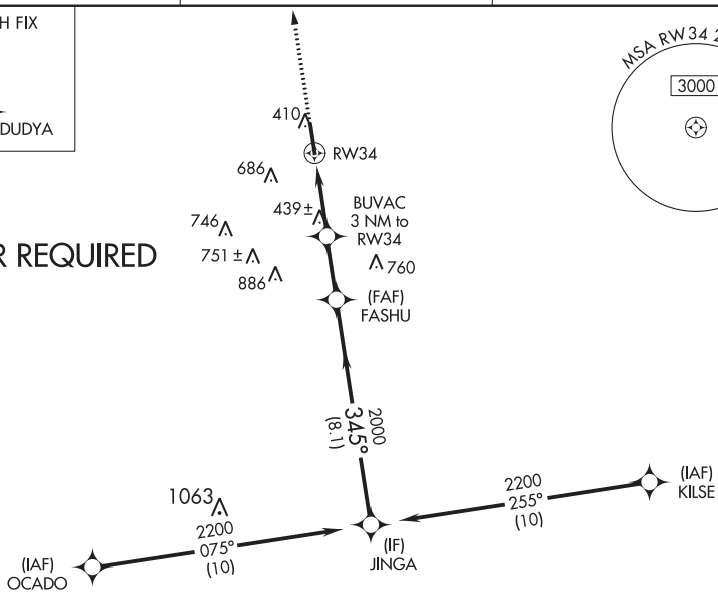
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 37°C (98°F).
⚠ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use College Station altimeter setting and increase all DA 52 feet, and all MDA 60 feet; increase LPV and LNAV/VNAV all Cats and circling Cat D visibility ¼ mile. VDP and Baro-VNAV NA with College Station altimeter setting.

MISSED APPROACH:
Climb to 3100 direct DUDYA and hold.

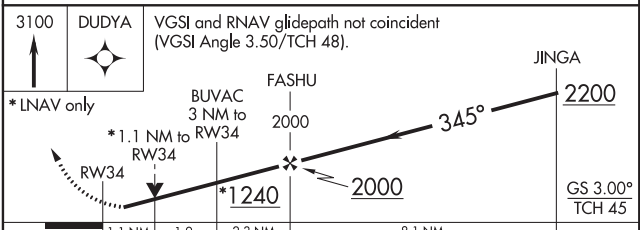
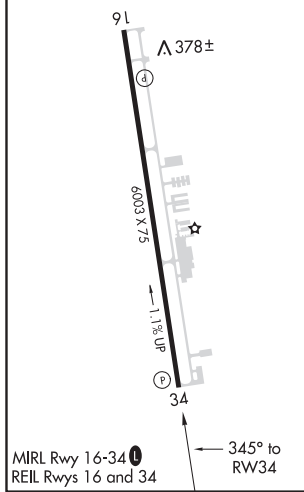
AWOS-3 121.125	HOUSTON APP CON 134.3 360.85	UNICOM 123.075 (CTAF) 0
--------------------------	--	-----------------------------------



RADAR REQUIRED



ELEV 318	TDZE 269
----------	----------



CATEGORY	A	B	C	D
LPV DA		519-3/4	250 (200-3/4)	
LNAV/VNAV DA		718-1 1/2	449 (400-1 1/2)	
LNAV MDA	700-1	431 (400-1)	700-1 3/8	431 (400-1 3/8)
CIRCLING	780-1	462 (500-1)	800-1 1/2	1040-2 1/4
			482 (500-1 1/2)	722 (800-2 1/4)

BRENHAM, TEXAS
Amdt 2A 16OCT14

30°13'N-96°22'W

BRENHAM MUNI (11R) RNAV (GPS) RWY 34

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 69403 W15A	APP CRS 148°	Rwy Idg TDZE Apt Elev	4000 361 367
---------------------------------	------------------------	-----------------------------	---

RNAV (GPS) RWY 15

COULTER FIELD (CFD)

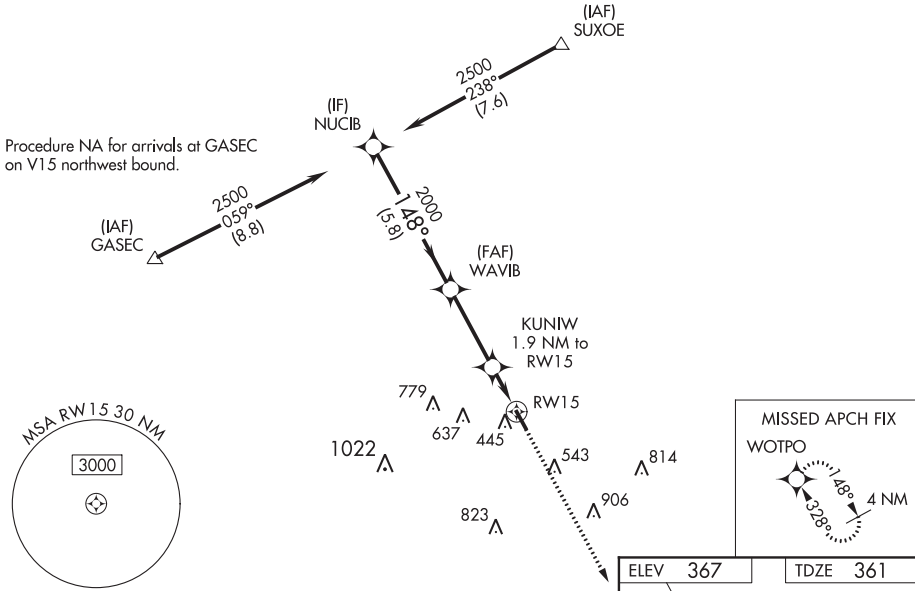
⚠ NA	Baro-VNAV NA. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use College Station altimeter setting; when not received, use Caldwell altimeter setting and increase all DA 31 feet and all MDA 40 feet.	MISSED APPROACH: Climb to 2000 direct WOTPO and hold.
-------------	---	--

AWOS-3PT 125.975	COLLEGE STATION ASOS 126.85	HOUSTON CENTER 134.3 360.85	UNICOM 123.0 (CTAF) ⓪
----------------------------	---------------------------------------	---------------------------------------	--

RADAR REQUIRED

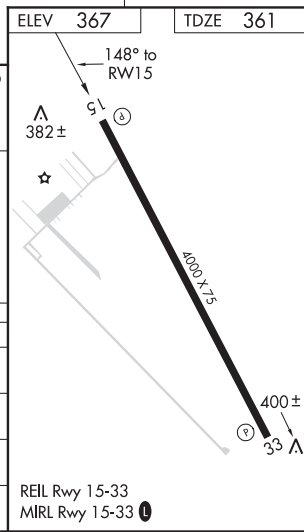
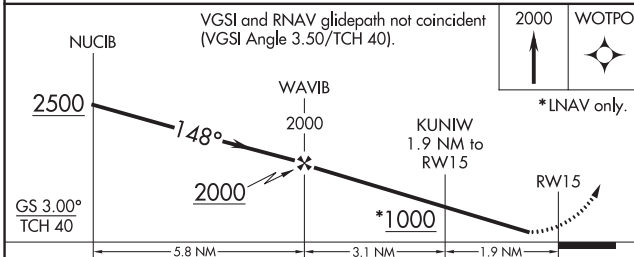
Procedure NA for arrivals at SUOXE on V369 northwest bound.

Procedure NA for arrivals at GASEC on V15 northwest bound.



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D
LPV DA	636-1	275 (300-1)		NA
LNAV/VNAV DA	636-1	275 (300-1)		NA
LNAV MDA	720-1	359 (400-1)		NA
CIRCLING	780-1 413 (500-1)	820-1 453 (500-1)		NA

BRYAN, TEXAS

AL-6276 (FAA)

15092

WAAS CH 70603 W33A	APP CRS 328°	Rwy Idg TDZE Apt Elev	4000 367 367
---------------------------------	------------------------	-----------------------------	---

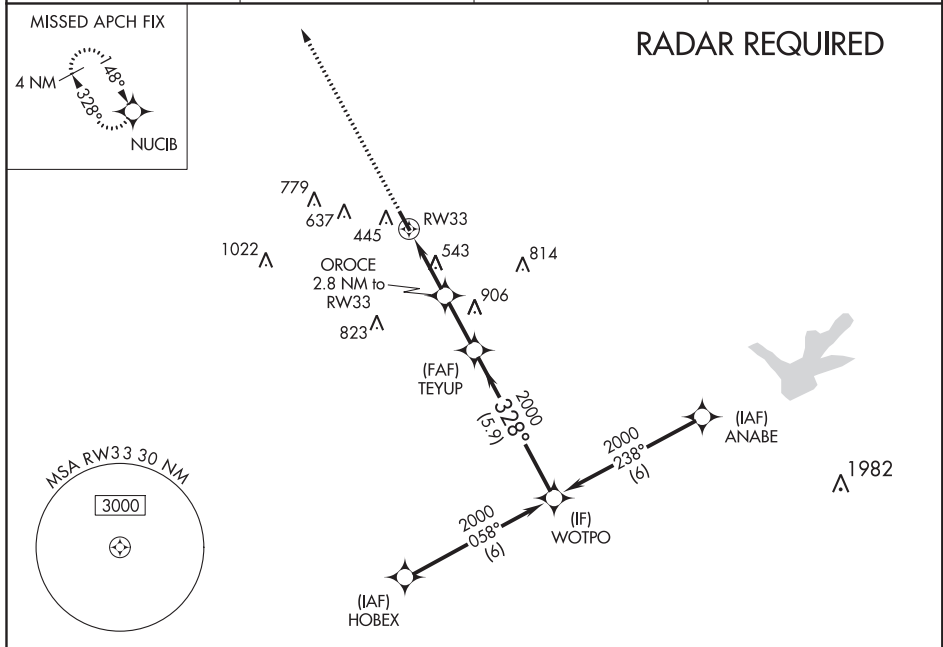
RNAV (GPS) RWY 33

COULTER FIELD (CFD)

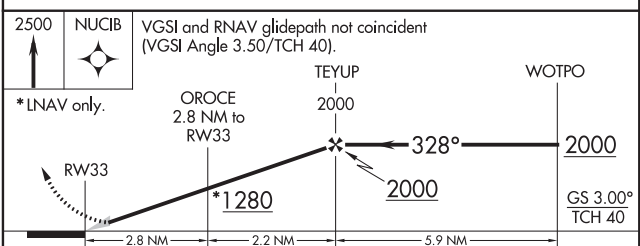
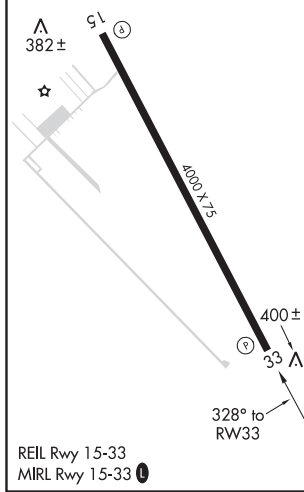
NA Baro-VNAV NA. DME/DME RNP-0.3 NA. Use College Station altimeter setting; when not received, use Caldwell altimeter setting and increase all DA 31 feet and all MDA 40 feet.

MISSED APPROACH: Climb to 2500 direct NUCIB and hold.

AWOS-3PT 125.975	COLLEGE STATION ASOS 126.85	HOUSTON CENTER 134.3 360.85	UNICOM 123.0 (CTAF)
----------------------------	---------------------------------------	---------------------------------------	-------------------------------



ELEV	367	TDZE	367
------	-----	------	-----



CATEGORY	A	B	C	D
LPV DA	642-1	275 (300-1)		NA
LNAV/VNAV DA	642-1	275 (300-1)		NA
LNAV MDA	880-1	513 (600-1)		NA
CIRCLING	880-1	513 (600-1)		NA

BRYAN, TEXAS
Amdt 1A 02APR15

30°43'N-96°20'W

RNAV (GPS) RWY 33

COULTER FIELD (CFD)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

VORTAC CLL 113.3 Chan 80	APP CRS 207°	Rwy Idg TDZE Apt Elev N/A N/A 367
--	------------------------	---

VOR/DME-A
COULTER FIELD (CFD)

▼ Use College Station altimeter setting; if not received, use Caldwell Muni altimeter setting and increase all MDAs 40 feet.
▲ NA

MISSED APPROACH: Climb to 2100 direct CLL VORTAC and hold.

AWOS-3PT 125.975	COLLEGE STATION ASOS 126.85	HOUSTON CENTER 134.3 360.85	UNICOM 123.0 (CTAF) 0
----------------------------	---------------------------------------	---------------------------------------	---------------------------------

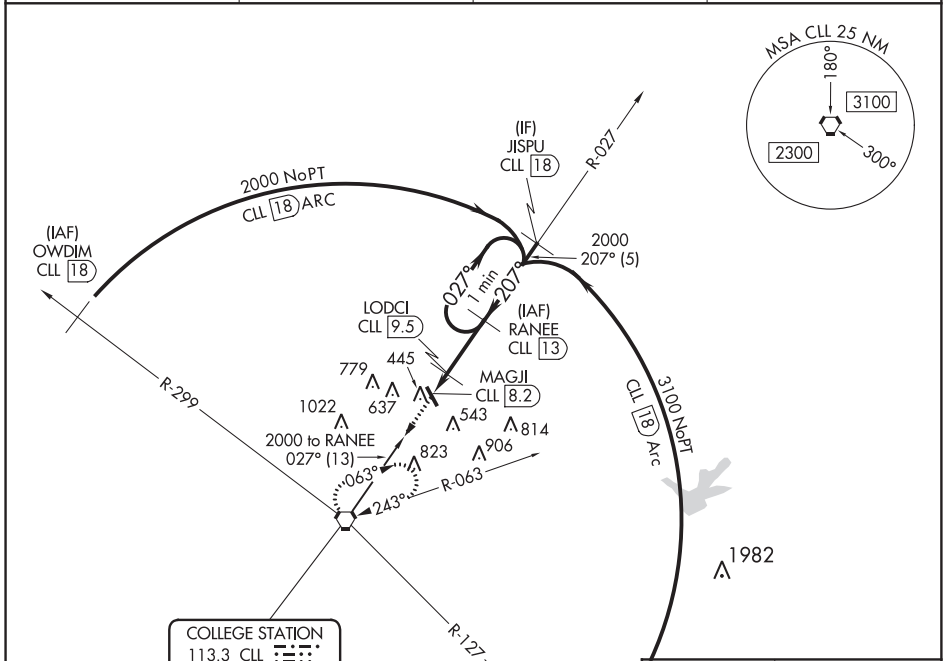
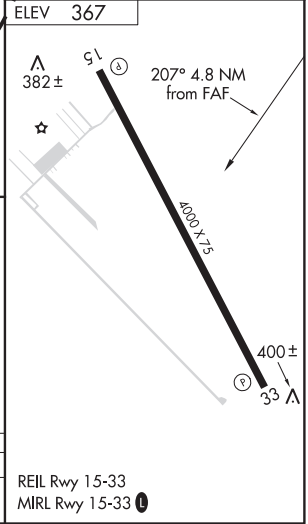


Diagram showing the RANEE CLL 13 One Minute Holding Pattern. Key features include:

- Pattern: One Minute Holding Pattern
- Altitudes: 2100, 1100, 400±
- Angles: 027°, 207°
- Distances: 1.3 NM, 3.5 NM
- Waypoints: MAGJI CLL 8.2, LODCI CLL 9.5, RANEE CLL 13

2100	CLL	RANEE CLL 13	One Minute Holding Pattern
MAGJI CLL 8.2	LODCI CLL 9.5	1100	2000
-1.3 NM-		3.5 NM-	
CATEGORY	A	B	C D
CIRCLING	800-1 433 (500-1)	820-1 453 (500-1)	NA



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CALDWELL, TEXAS

AL-6743 (FAA)

16091

APP CRS 146°	Rwy Idg 3252
	TDZE 391
	Apt Elev 391

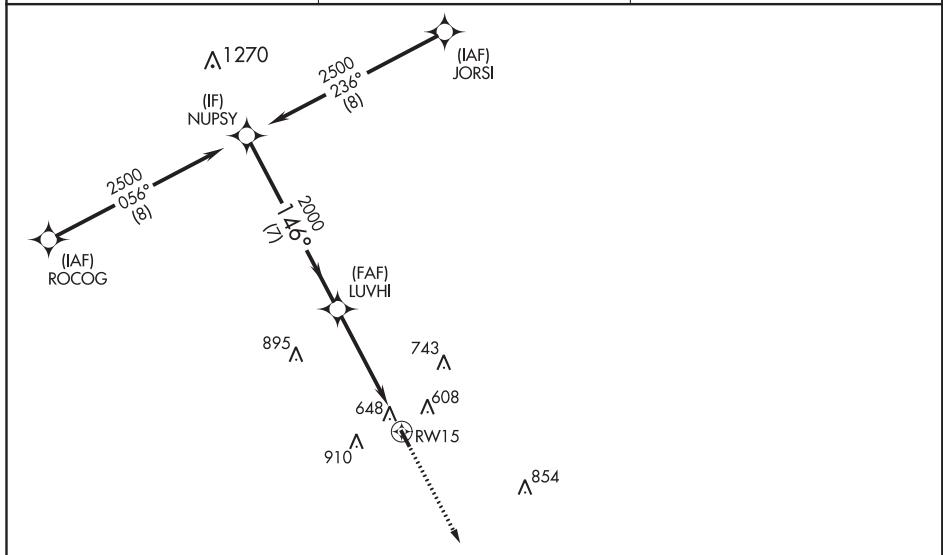
RNAV (GPS) RWY 15

CALDWELL MUNI (RWV)

⚠ 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.

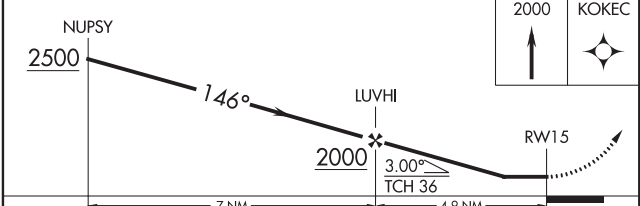
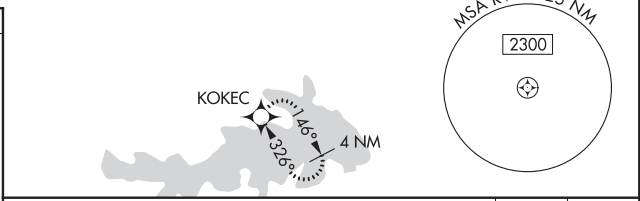
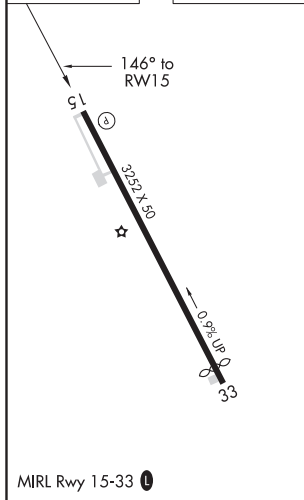
MISSED APPROACH: Climb to 2000 direct KOKEC and hold.

AWOS-3 118,35	HOUSTON APP CON 134.3 360,85	CTAF 122.9
-------------------------	--	----------------------



RADAR REQUIRED

ELEV 391	TDZE 391
----------	----------



CATEGORY	A	B	C	D
LNAV MDA	960-1	569 (600-1)	NA	
CIRCLING	1000-1	609 (700-1)	NA	

CALDWELL, TEXAS
Orig-A 29MAY14

30°31'N-96°42'W

RNAV (GPS) RWY 15

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS	Rwy Idg	3010
326°	TDZE	390
	Apt Elev	391

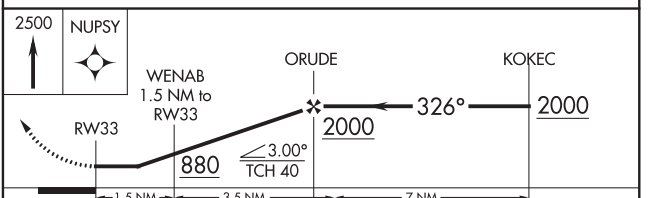
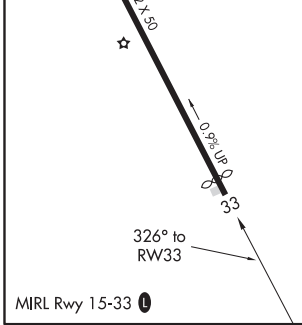
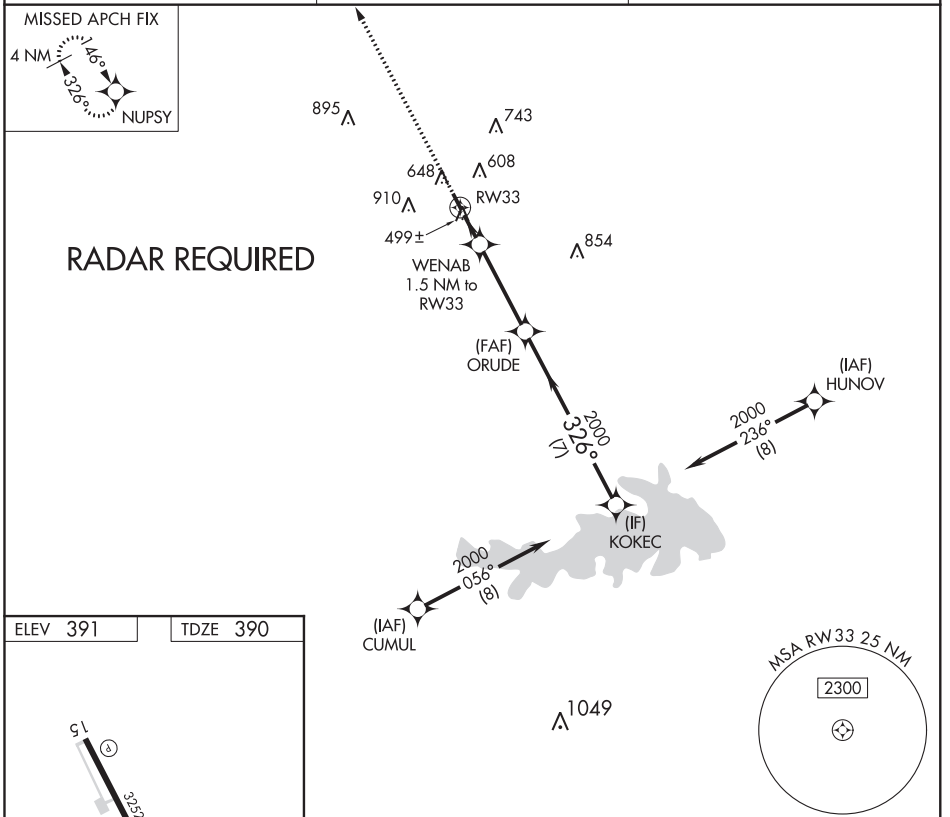
RNAV (GPS) RWY 33

CALDWELL MUNI (RWV)

⚠ 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. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2500 direct NUPSY and hold.

AWOS-3 118.35	HOUSTON APP CON 134.3 360.85	CTAF 122.9
-------------------------	--	----------------------



CATEGORY	A	B	C	D
LNAV MDA	760-1	370 (400-1)	NA	
CIRCLING	1000-1	609 (700-1)	NA	

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CALDWELL, TEXAS

AL-6743 (FAA)

16091

VORTAC CLL 113.3 Chan 80	APP CRS 243°	Rwy Idg TDZE Apt Elev	N/A N/A 391
--	------------------------	-----------------------------	--

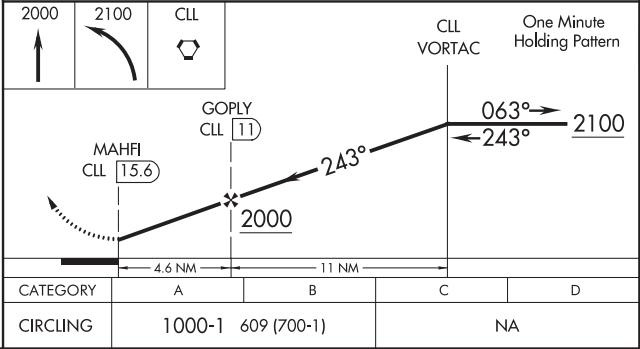
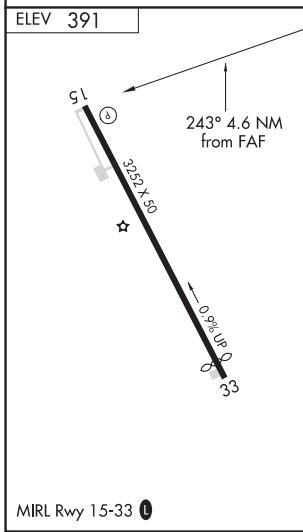
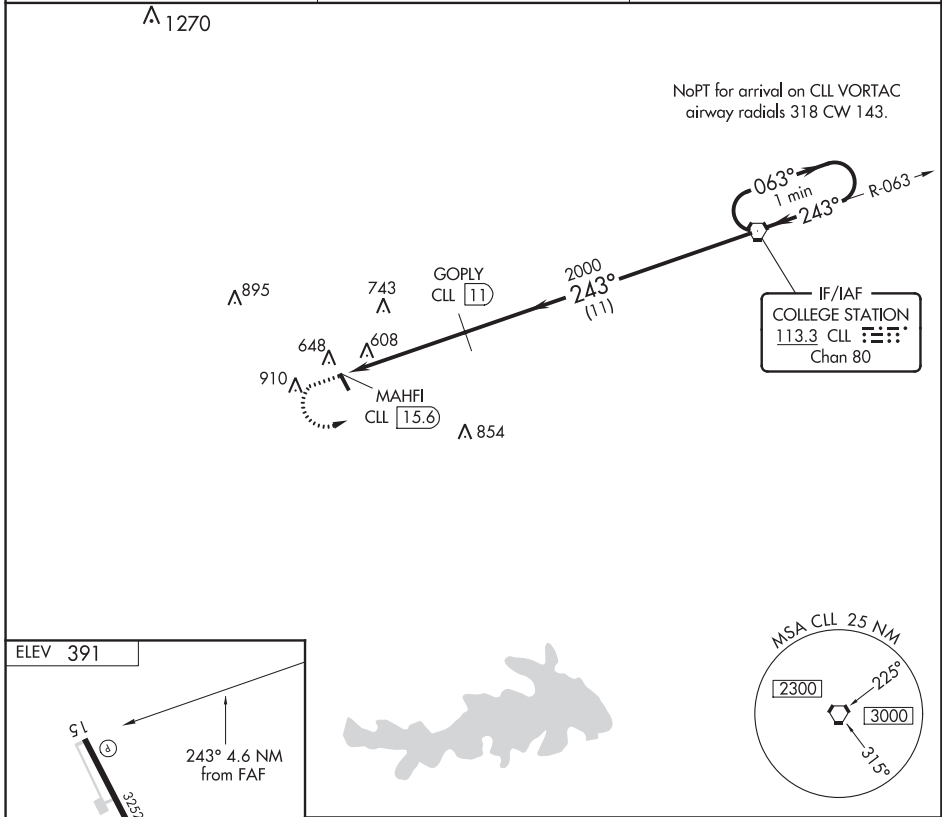
VOR/DME-A

CALDWELL MUNI (RWV)

⚠ 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.

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

AWOS-3 118.35	HOUSTON APP CON 134.3 360.85	CTAF 122.9
-------------------------	--	----------------------



CATEGORY	A	B	C	D
CIRCLING	1000-1	609 (700-1)	NA	

CALDWELL, TEXAS
Amdt 3 20SEP12

30°31'N-96°42'W

CALDWELL MUNI (RWV)
VOR/DME-A

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS	Rwy Idg	5501
167°	TDZE	319
	Apt Elev	319

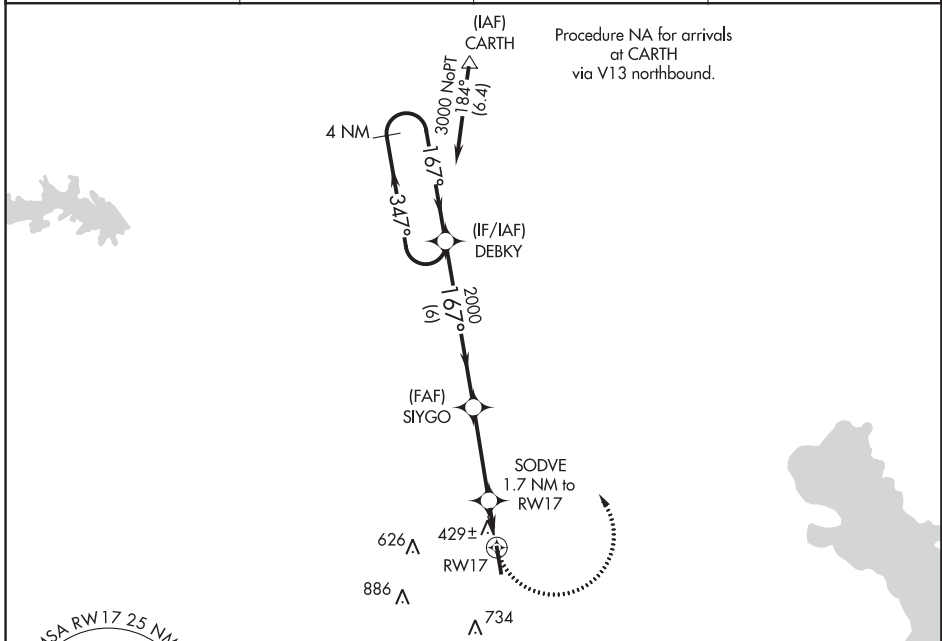
RNAV (GPS) RWY 17

CENTER MUNI (F17)

NA DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. Use Nacogdoches altimeter setting; when not received, use Henderson altimeter setting and increase all MDA 40 feet. Procedure NA at night.

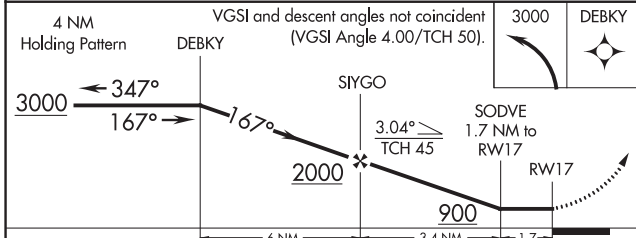
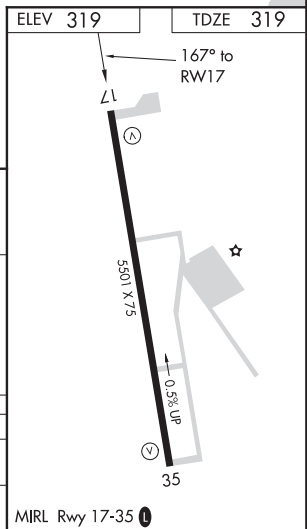
MISSED APPROACH: Climbing left turn to 3000 direct DEBKY and hold.

AWOS-3PT 128.775	NACOGDOCHES AWOS-3 135.625	FORTH WORTH CENTER 126.325 346.25	UNICOM 122.8 (CTAF) L
----------------------------	--------------------------------------	---	--



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D
LNVA MDA	800-1	481 (500-1)	800-1¼ 481 (500-1¼)	NA
CIRCLING	860-1	541 (600-1)	860-1½ 541 (600-1½)	NA

CENTER, TEXAS

AL-6632 (FAA)

15316

APP CRS	Rwy Idg	5501
347°	TDZE	308
	Apt Elev	319

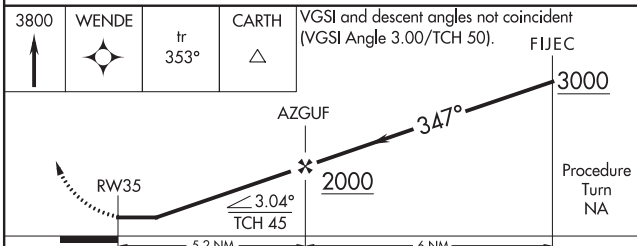
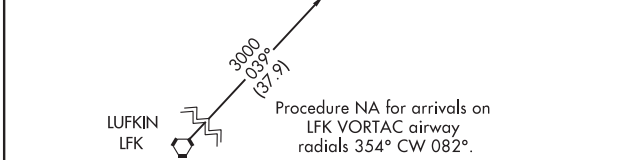
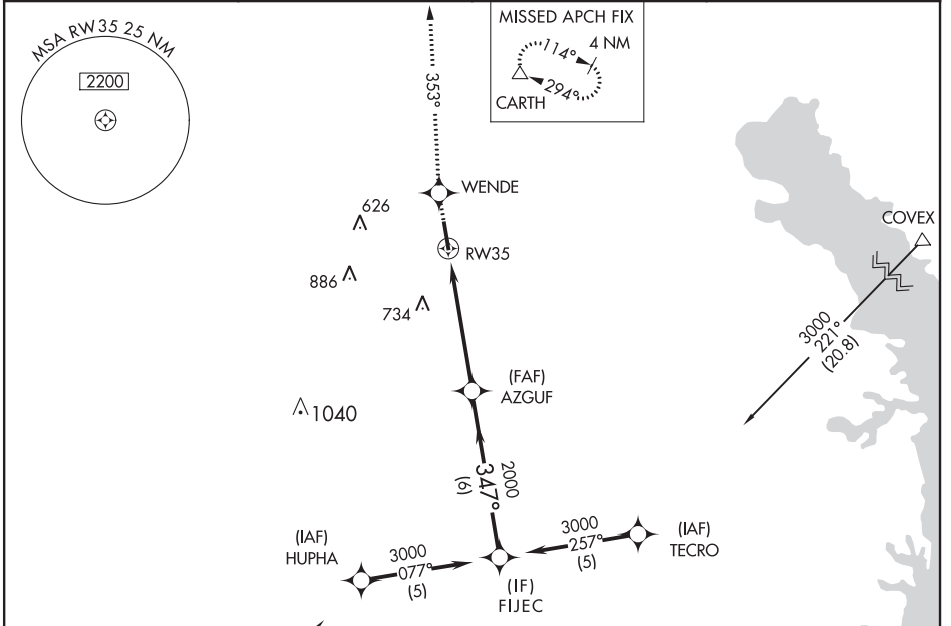
RNAV (GPS) RWY 35

CENTER MUNI (F17)

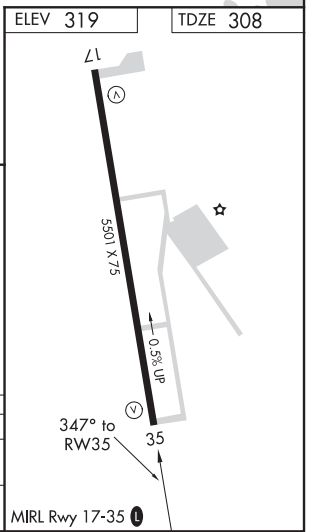
▼ DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.
▲NA Use Nacogdoches altimeter setting; when not received, use Henderson altimeter setting and increase all MDA 40 feet, and increase LNAV and Circling Cat C visibility ¼ mile. Procedure NA at night.

MISSED APPROACH: Climb to 3800 direct WENDE and on track 353° to CARTH and hold.

AWOS-3PT 128.775	NACOGDOCHES AWOS-3 135.625	FORTH WORTH CENTER 126.325 346.25	UNICOM 122.8 (CTAF) 📻
----------------------------	--------------------------------------	---	--



CATEGORY	A	B	C	D
LNAV MDA	960-1 652 (700-1)		960-1¾ 652 (700-1¾)	NA
CIRCLING	960-1 641 (700-1)		960-1¾ 641 (700-1¾)	NA



CENTER, TEXAS
Orig-A 12NOV15

31°50'N-94°09'W

CENTER MUNI (F17) RNAV (GPS) RWY 35

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

NDB CZJ 341	APP CRS 157°	Rwy ldg 5501 TDZE 319 Apt Elev 319
-----------------------	------------------------	--

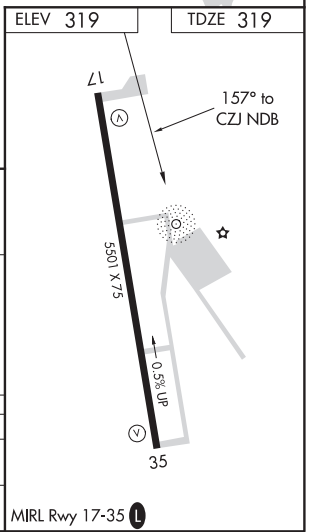
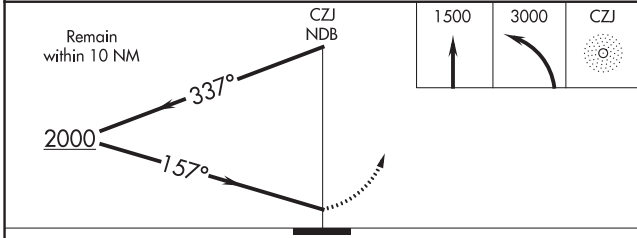
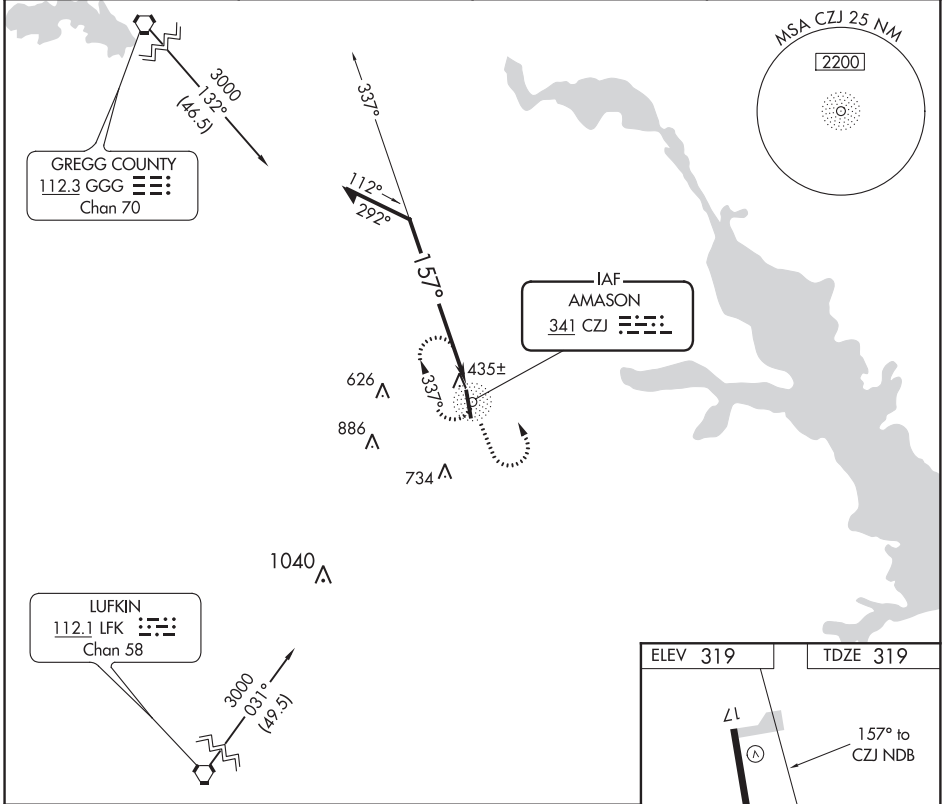
NDB RWY 17

CENTER MUNI (F17)

⚠ Use Nacogdoches altimeter setting; when not received, use Henderson altimeter setting and increase all MDA 40 feet. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 1500 then climbing left turn to 3000 direct CZJ NDB and hold.

AWOS-3PT 128.775	NACOGDOCHES AWOS-3 135.625	FORTH WORTH CENTER 126.325 346.25	UNICOM 122.8 (CTAF)
----------------------------	--------------------------------------	---	-------------------------------



CATEGORY	A	B	C	D
S-17	1200-1¼	881 (900-1¼)	1200-2¾ 881 (900-2¾)	NA
CIRCLING	1200-1¼	881 (900-1¼)	1200-2¾ 881 (900-2¾)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CLEVELAND, TEXAS

AL-6073 (FAA)

16035

WAAS CH 65724 W16A	APP CRS 157°	Rwy Idg 4998 TDZE 150 Apt Elev 150
--	------------------------	---

RNAV (GPS) RWY 16

CLEVELAND MUNI (6R3)

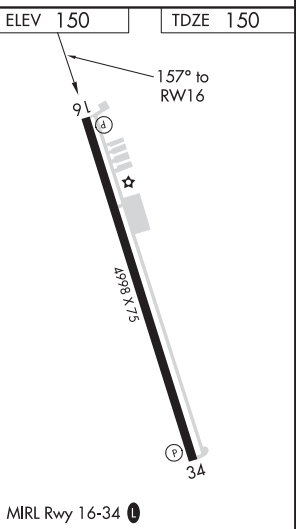
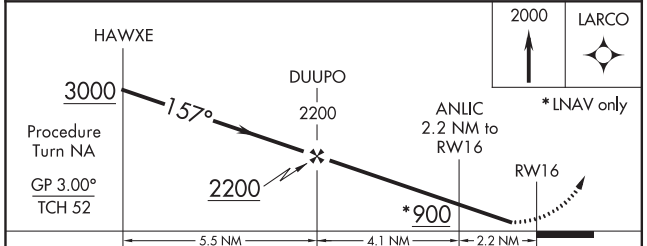
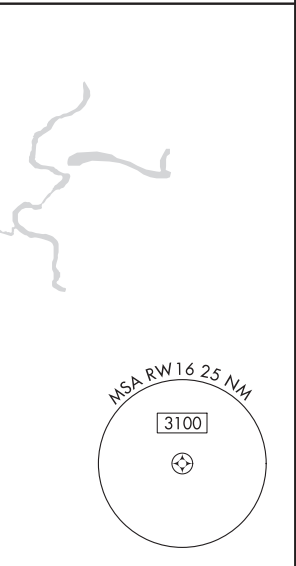
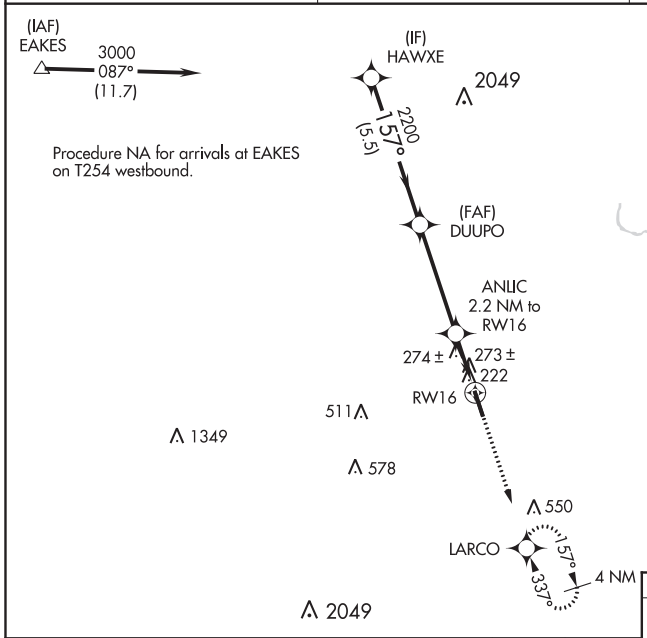
⚠ Baro-VNAV NA when using Houston/Lone Star Executive altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below 3/4 SM NA. When local altimeter setting not received, use Houston/Lone Star Executive altimeter setting and increase all DA 62 feet and all MDA 80 feet, increase LNAV/VNAV all Cats visibility 1/8 mile and LNAV Cat C 1/4 mile.

MISSED APPROACH: Climb to 2000 direct LARCO and hold.

AWOS-3
119.325

HOUSTON APP CON
119.7 281.4

UNICOM
123.0 (CTAF) 0



CATEGORY	A	B	C	D
LPV DA		400-1 250 (300-1)		NA
LNAV/VNAV DA		433-1 283 (300-1)		NA
LNAV MDA	540-1	390 (400-1)	540-1 1/8 390 (400-1 1/8)	NA
CIRCLING	580-1 430 (500-1)	600-1 450 (500-1)	600-1 1/2 450 (500-1 1/2)	NA

CLEVELAND, TEXAS
Orig-B 15OCT15

30°21'N-95°00'W

RNAV (GPS) RWY 16

CLEVELAND MUNI (6R3)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CLEVELAND, TEXAS

AL-6073 (FAA)

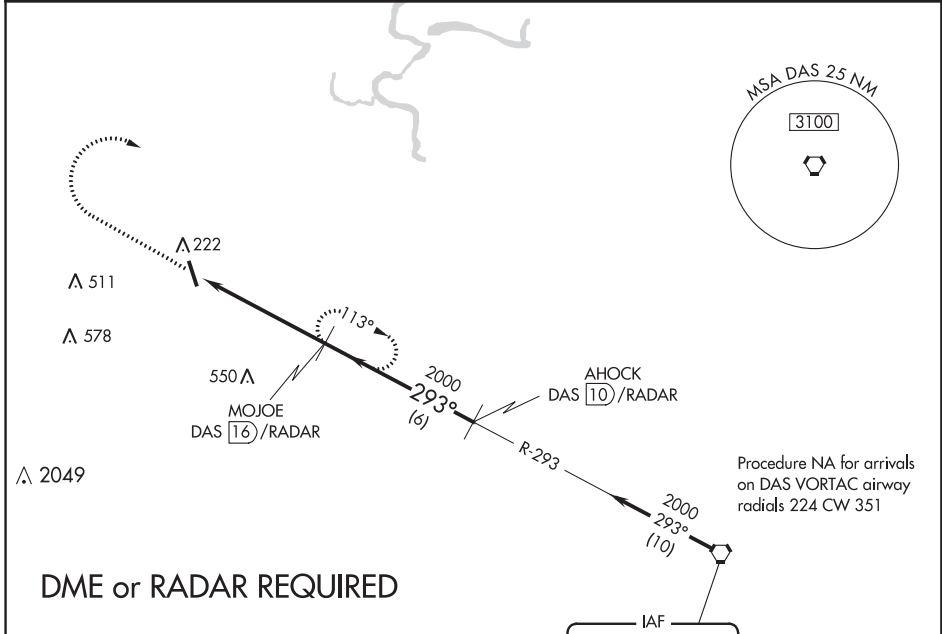
15288

VORTAC DAS 116.9 Chan 116	APP CRS 293°	Rwy Idg TDZE Apt Elev	N/A N/A 150
---	------------------------	-----------------------------	--

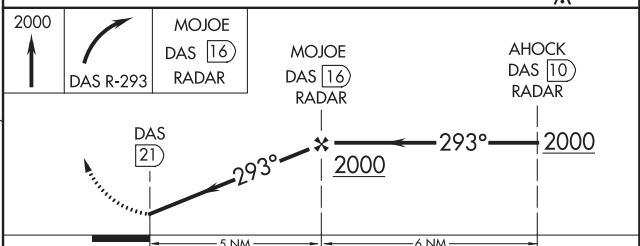
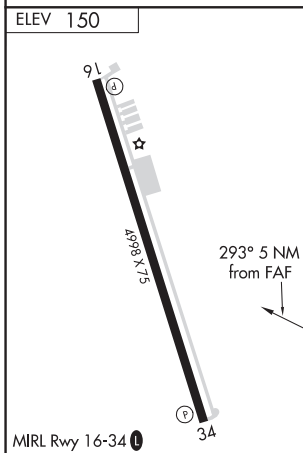
VOR-A
CLEVELAND MUNI (6R3)

NA When local altimeter setting not received, use George Bush Intercontinental/Houston altimeter setting. MISSED APPROACH: Climb to 2000 then right turn via DAS R-293 to MOJOE/DAS 16 DME/RADAR and hold.

AWOS-3 119.325	HOUSTON APP CON 119.7 281.4	UNICOM 123.0 (CTAF)
--------------------------	---------------------------------------	-------------------------------



DME or RADAR REQUIRED



FAF to MAP 5 NM						
Knots	60	90	120	150	180	
Min:Sec	5:00	3:20	2:30	2:00	1:40	
CATEGORY	A		B		C	D
CIRCLING	680-1 530 (600-1)		680-1¼ 530 (600-1¼)		NA	

CLEVELAND, TEXAS
Amdt 4D 15OCT15

30°21'N-95°00'W

CLEVELAND MUNI (6R3)
VOR-A

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

BLTWY THREE DEPARTURE (RNAV)

146
SL-6073 (FAA)

CLEVELAND MUNI (6R3)
CLEVELAND, TEXAS

AWOS-3
119.325
CTAF
123.0
HOUSTON DEP CON
119.7 281.4

**TOP ALTITUDE:
4000**

△ CRIED

12000
*2100
(46)

TAKEOFF MINIMUMS

Rwys 16, 34: Standard with minimum climb
of 500' per NM to 660.

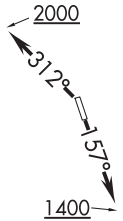
△ BLTWY

6600
*2000
346°
(6)

△ LITLD

5400
*1900
345°
(12)

◆ DREMR



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

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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

CLEVELAND, TEXAS
CLEVELAND MUNI (6R3)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 157° to 1400, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 34: Climb heading 312° to 2000, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

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 100' AGL/220' MSL.

Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

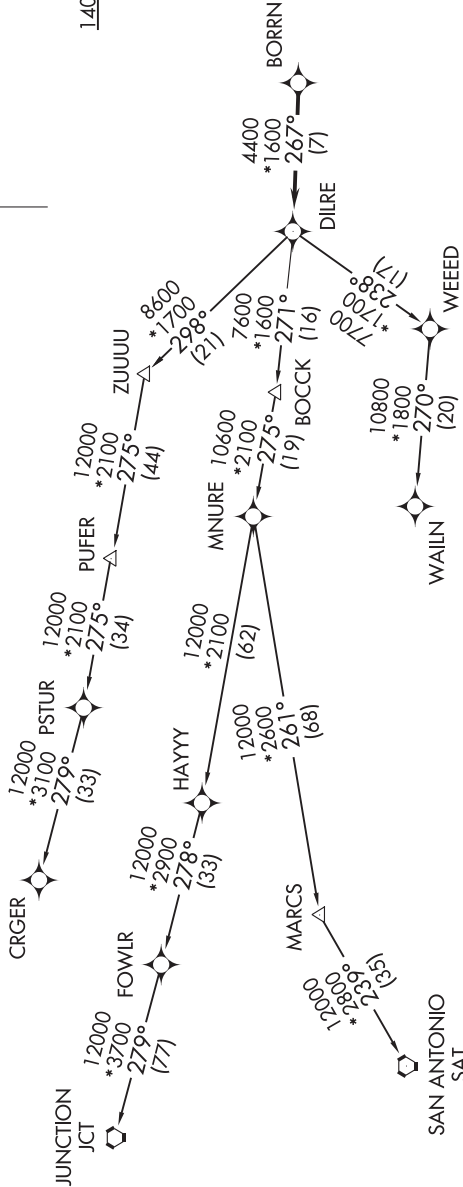
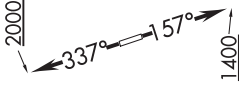
BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

AWOS-3
119.325
CTAF
123.0
HOUSTON DEP CON
119.7 281.4

TAKEOFF MINIMUMS
Rwys 16, 34: Standard with minimum
climb of 500' per NM to 660.

TOP ALTITUDE:
4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 157° to 1400, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 34: Climb on heading 337° to 2000, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

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 100' AGL/220' MSL.

Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

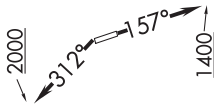
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

AWOS-3
119.325
CTAF
123.0
HOUSTON DEP CON
119.7 281.4

TOP ALTITUDE:
4000

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



SCHOLES
VUH



HOODO

SBIRD

(60)

CFOOD

(68)

BOWFN



LEEVILLE
LEV



HARVEY
HRV

TAKEOFF MINIMUMS

Rwys 16, 34: Standard with minimum climb of 500' per NM to 660.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 157° to 1400, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 34: Climb heading 312° to 2000, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000. Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

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 100' AGL/220' MSL.

Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

INDIE FOUR DEPARTURE (RNAV)

152
SL-6073 (FAA)

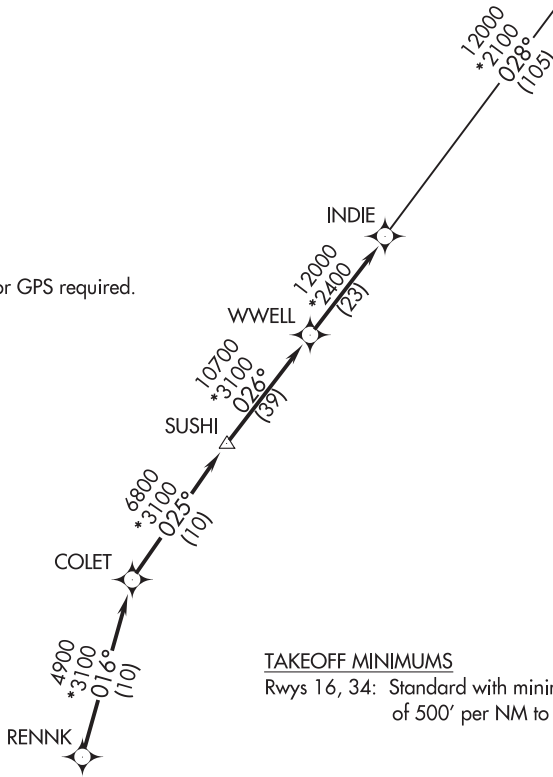
CLEVELAND MUNI (6R3)
CLEVELAND, TEXAS

AWOS-3
119.325
CTAF
123.0
HOUSTON DEP CON
119.7 281.4

**TOP ALTITUDE:
4000**

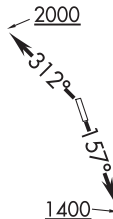
TPAKK

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 660.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

CLEVELAND, TEXAS
CLEVELAND MUNI (6R3)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 157° to 1400, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 34: Climb heading 312° to 2000, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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 100' AGL/220' MSL.

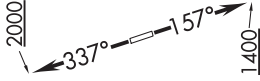
Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

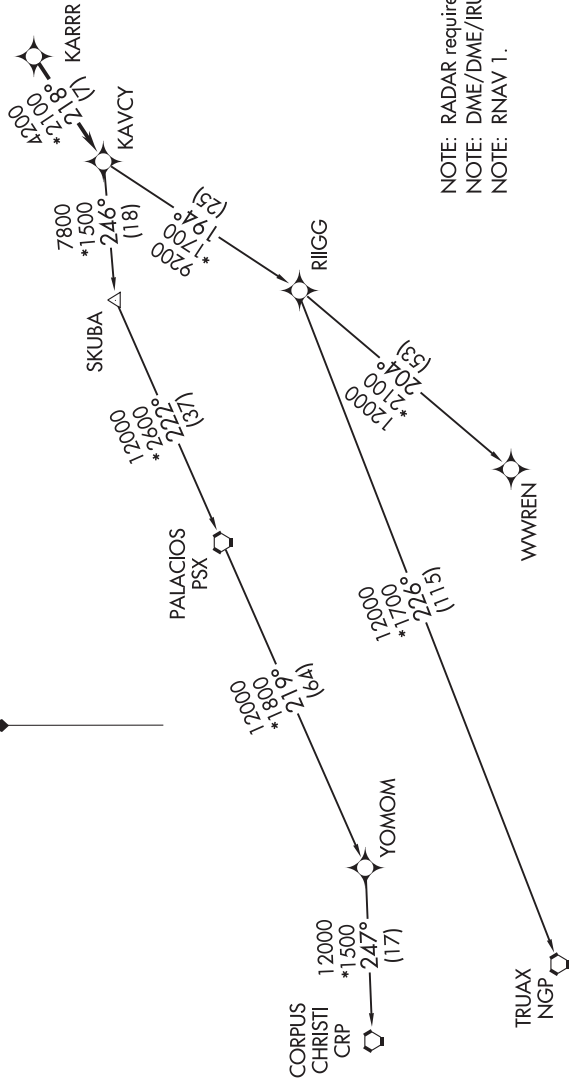
TOP ALTITUDE:
4000



TAKEOFF MINIMUMS
Rvys 16, 34: Standard with minimum climb
of 500' per NM to 660.



AWOS-3
119.325
HOUSTON DEP CON
119.7 281.4
CTAF
123.0



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

NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 157° to 1400, expect radar vectors to KARRR, thence

TAKEOFF RWY 34: Climb on heading 337° to 2000, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

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 100' AGL/220' MSL.

Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

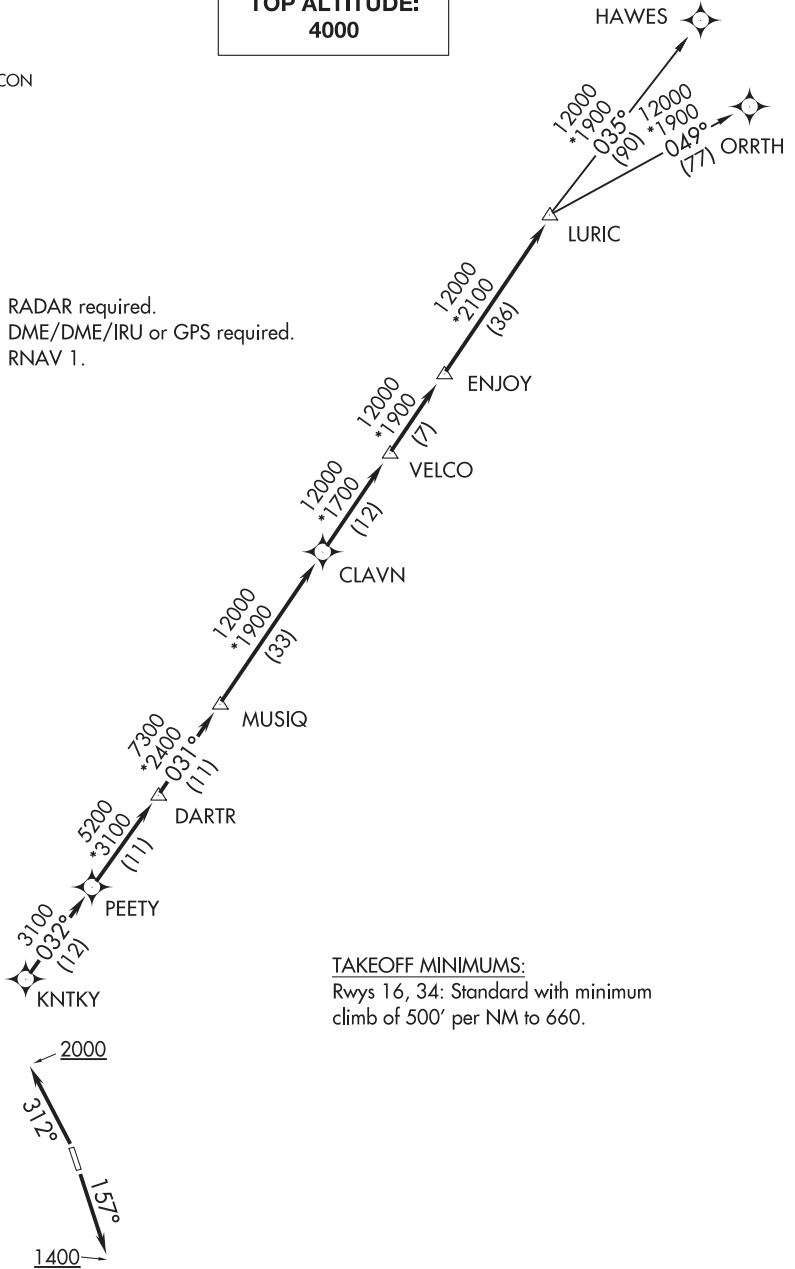
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

AWOS-3
 119.325
 CTAF
 123.0
 HOUSTON DEP CON
 119.7 281.4

**TOP ALTITUDE:
 4000**

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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)

CLEVELAND, TEXAS



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 157° to 1400, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 34: Climb heading 312° to 2000, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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 100' AGL/220' MSL.

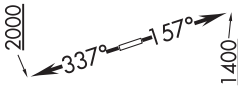
Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

210Z NOV 01 910Z NOV 10 10 15CS

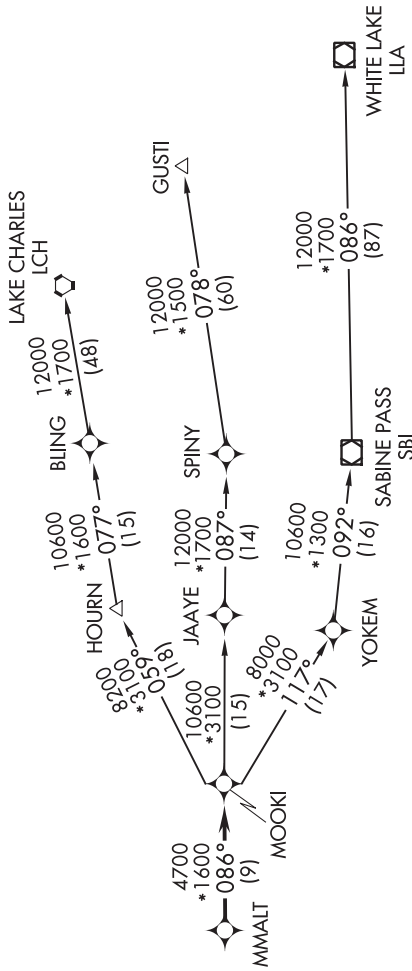
AWOS-3
119.325
CTAF
123.0
HOUSTON DEP CON
119.7 281.4



TAKEOFF MINIMUMS:

Rwys 16, 34: Standard with minimum climb of 500' per NM to 660.

TOP ALTITUDE:
4000



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, IBX, LVJ, SGR, TME, T00, T41 and 54T.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 157° to 1400, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 34: Climb on heading 337° to 2000, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

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 100' AGL/220' MSL.

Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(STRYA4.STRYA) 16315

160
SL-6073 (FAA)

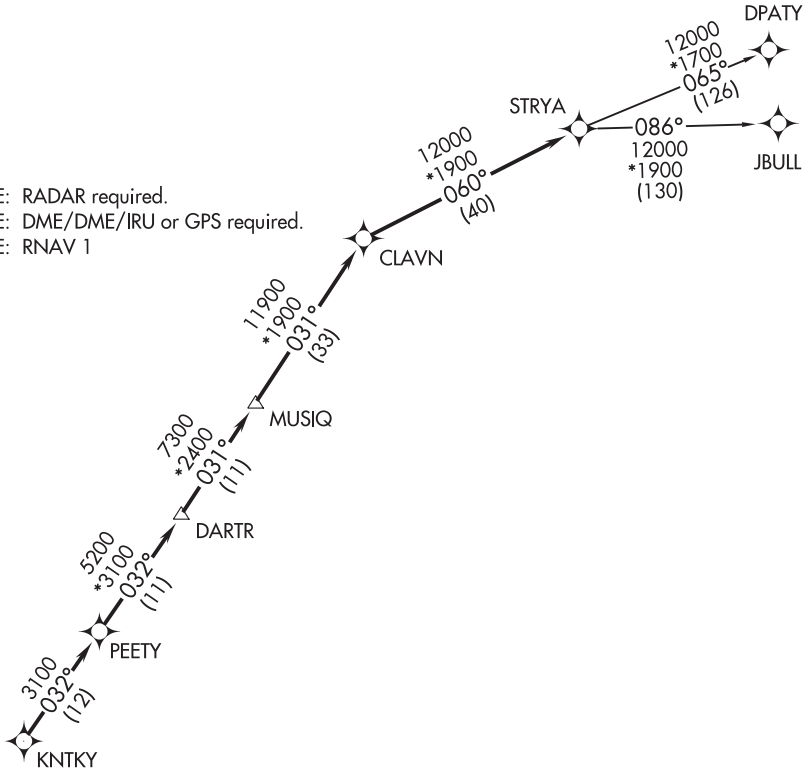
CLEVELAND MUNI (6R3)
CLEVELAND, TEXAS

STRYA FOUR DEPARTURE (RNAV)

AWOS-3
119.325
CTAF
123.0
HOUSTON DEP CON
119.7 281.4

**TOP ALTITUDE:
4000**

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 660.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

(STRYA4.STRYA) 10NOV16

CLEVELAND, TEXAS
CLEVELAND MUNI (6R3)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 157° to 1400, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 34: Climb heading 312° to 2000, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

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 100' AGL/220' MSL.

Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(STYCK4.STYCK) 16315

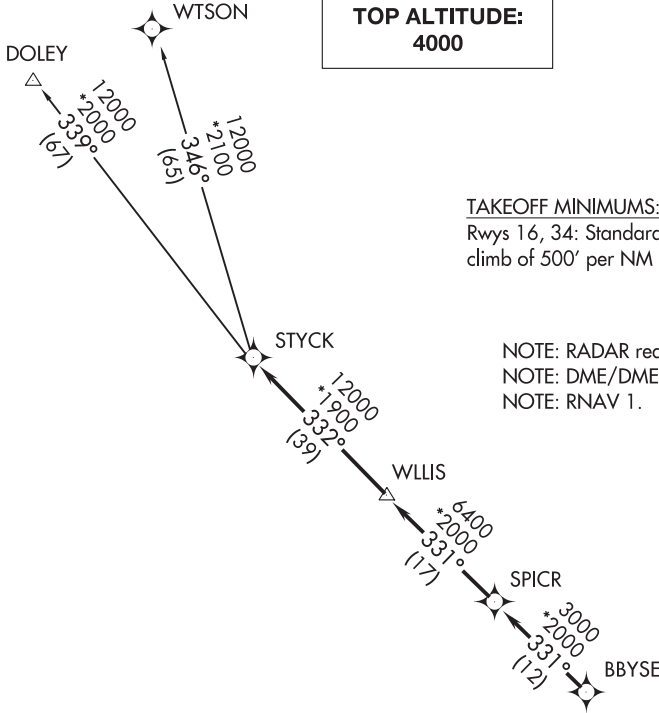
STYCK FOUR DEPARTURE (RNAV)

AWOS-3
119.325
CTAF
123.0
HOUSTON DEP CON
119.7 281.4

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS:
Rwys 16, 34: Standard with minimum
climb of 500' per NM to 660.

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



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 100' AGL/220' MSL.
Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 157° to 1400, expect RADAR vectors to BBYSE, thence. . .

TAKEOFF RWY 34: Climb heading 312° to 2000, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

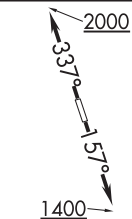
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WATFO THREE DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

AWOS-3
119.325
HOUSTON DEP CON
119.7 281.4
CTAF
123.0



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 100' AGL/220' MSL.
Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.



MUSYL



ANKRR



KELPP

NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS

Rwys 16, 34: Standard with minimum climb of 500' per NM to 660.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 157° to 1400, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 34: Climb on heading 337° to 2000, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

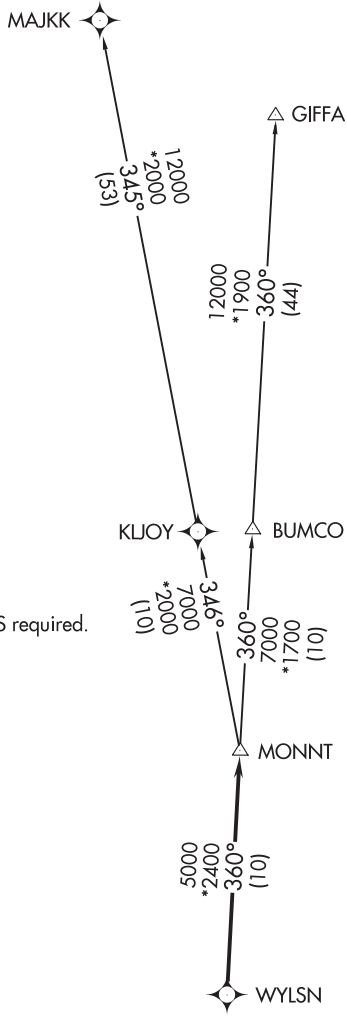
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

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.

TAKEOFF MINIMUMS:

Rwys 16, 34: Standard with minimum climb of 500' per NM to 660.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

WYLSN FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 157° to 1400, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 34: Climb on heading 312° to 2000, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJKK TRANSITION (WYLSN4.MAJKK)

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 100' AGL/220' MSL.

Vehicles on road 738' from DER, right and left of centerline, up to 19' AGL/169' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

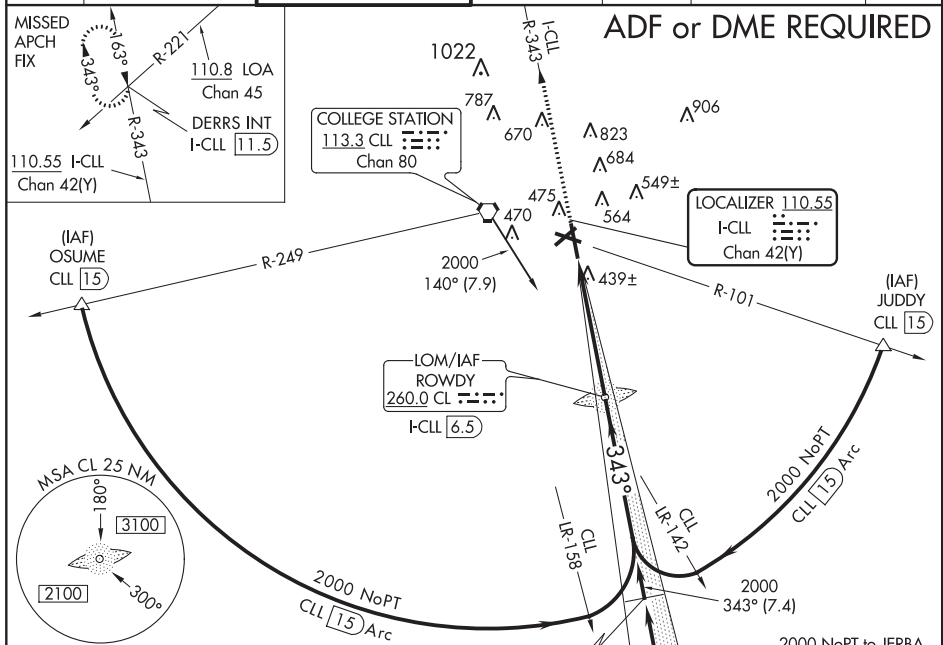
LOC/DME I-CLL 110.55 Chan 42 (Y)	APP CRS 343°	Rwy Idg TDZE Apt Elev	7000 311 321
---	------------------------	-----------------------------	---

ILS or LOC RWY 34

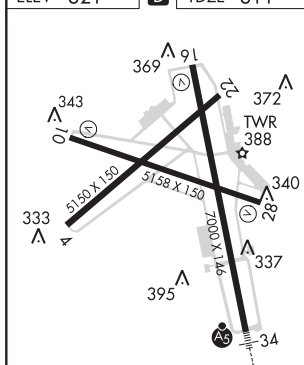
EASTERWOOD FIELD (CLL)

For inoperative MALSR increase S-ILS-34 Cat E visibility to 3/4 mile, increase S-LOC-34 Cat E visibility to 1 1/4 mile. ILS glideslope unusable for coupled approaches below 1050 feet MSL.	MALSR	MISSED APPROACH: Climb to 2500 via I-CLL north course to DERRS INT/I-CLL 11.5 DME and hold.
---	-------	---

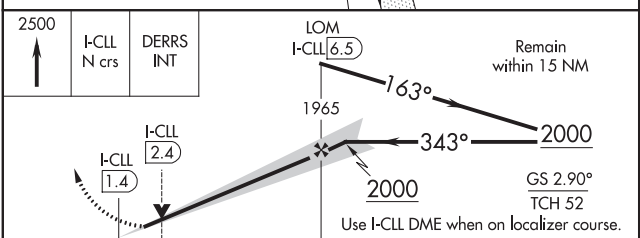
ATIS 126.85	HOUSTON APP CON 134.3 360.85	EASTERWOOD TOWER * 118.5 (CTAF) 284.7	GND CON 128.7 284.7	CLNC DEL 128.7	HOUSTON CLNC DEL (When ATCT closed.) 120.4	UNICOM 122.95
-----------------------	--	---	-------------------------------	--------------------------	---	-------------------------



ELEV 321	D	TDZE 311
----------	----------	----------



FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42



CATEGORY	A	B	C	D	E
S-ILS 34		511-1/2	200 (200-1/2)		
S-LOC 34	700-1/2	389 (400-1/2)		700-3/4	389 (400-3/4)
CIRCLING	860-1 539 (600-1)	880-1 559 (600-1)	880-1 1/2 559 (600-1 1/2)	1000-2 1/4 679 (700-2 1/4)	1180-3 859 (900-3)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 65632 W10A	APP CRS 103°	Rwy Idg TDZE Apt Elev	5158 319 321
--	------------------------	-----------------------------	---

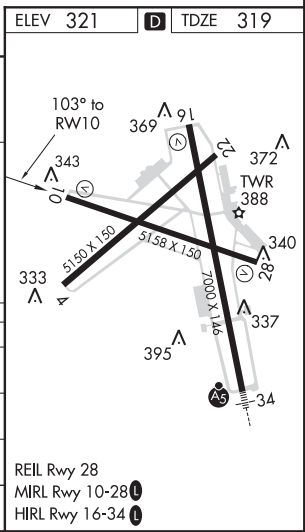
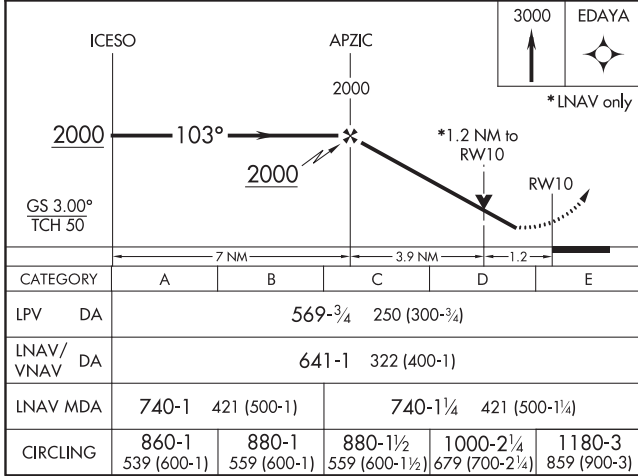
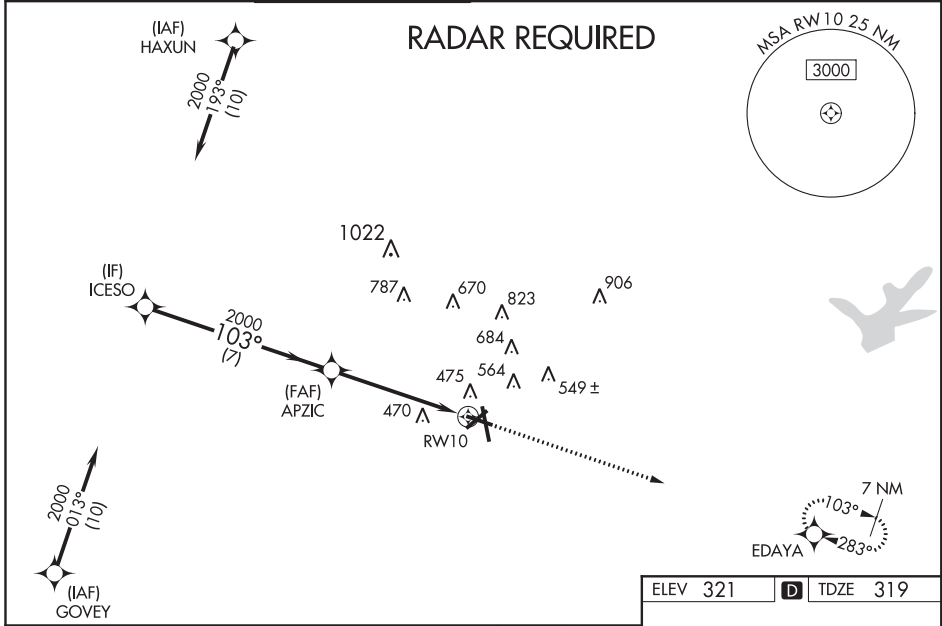
RNAV (GPS) RWY 10

EASTERWOOD FIELD (CLL)

⚠ Baro-VNAV NA when using Caldwell altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 41°C (105°F). When local altimeter setting not received, use Caldwell altimeter setting and increase all DA 52 feet and all MDA 60 feet; increase LPV and LNAV/VNAV visibility ¼ mile all Cats, LNAV Cat C/D/E visibility ⅜ mile and Circling Cat C visibility ¼ mile. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ⅜ SM NA. VDP NA with Caldwell altimeter setting. Night Landing Rwy 28 NA.

MISSED APPROACH:
Climb to 3000 direct EDAYA and hold.

ATIS 126.85	HOUSTON APP CON 134.3 360.85	EASTERWOOD TOWER* 118.5 (CTAF) 0 284.7	GND CON 128.7 284.7	CLNC DEL 128.7	HOUSTON CLNC DEL (When ATCT closed.) 120.4	UNICOM 122.95
-----------------------	--	--	-------------------------------	--------------------------	---	-------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 78322 W16A	APP CRS 163°	Rwy Idg TDZE Apt Elev	7000 321 321
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 16

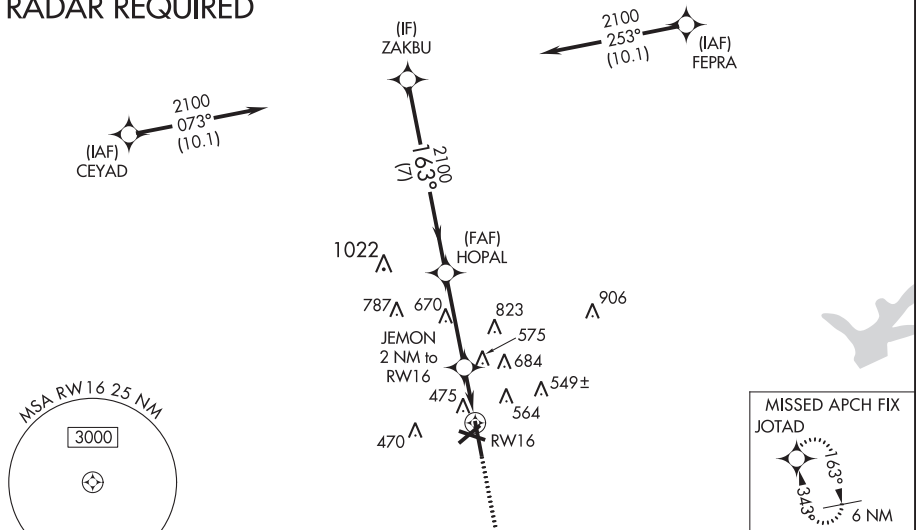
EASTERWOOD FIELD (CLL)

⚠ Baro-VNAV NA when using Caldwell altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 41°C (105°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Circling Rwy 28 NA at night. VDP NA with Caldwell altimeter setting. When local altimeter setting not received, use Caldwell altimeter setting and increase all DA 52 feet and all MDA 60 feet; increase LPV and LNAV/VNAV all Cats, LNAV Cat C/D/E and Circling Cat C visibility ¼ mile.

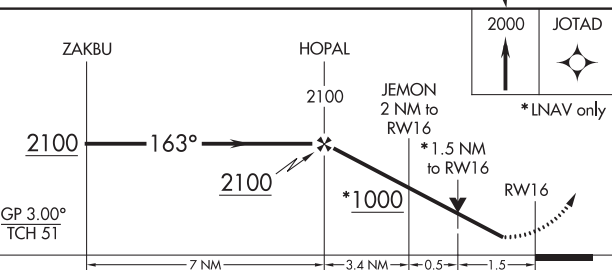
⚠ MISSED APPROACH: Climb to 2000 direct JOTAD and hold.

ATIS 126.85	HOUSTON APP CON 134.3 360.85	EASTERWOOD TOWER* 118.5 (CTAF) 0 284.7	GND CON 128.7 284.7	CLNC DEL 128.7	HOUSTON CLNC DEL (When ATCT closed.) 120.4	UNICOM 122.95
-----------------------	--	--	-------------------------------	--------------------------	---	-------------------------

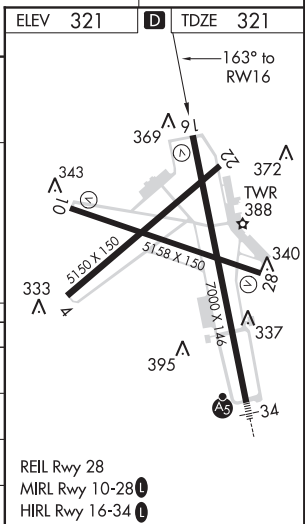
RADAR REQUIRED



ELEV	321	TDZE	321
------	-----	------	-----



CATEGORY	A	B	C	D	E
LPV DA	571-¾		250 (300-¾)		
LNAV/VNAV DA	637-1		316 (400-1)		
LNAV MDA	840-1	519 (600-1)	840-1¾	519 (600-1¾)	
CIRCLING	860-1 539 (600-1)	880-1 559 (600-1)	880-1½ 559 (600-1½)	1000-2¼ 679 (700-2¼)	1180-3 859 (900-3)



REIL Rwy 28
MIRL Rwy 10-28
HIRL Rwy 16-34

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 87022 W28A	APP CRS 283°	Rwy Idg THRE 311 Apt Elev 320
--	------------------------	---

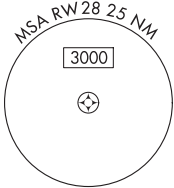
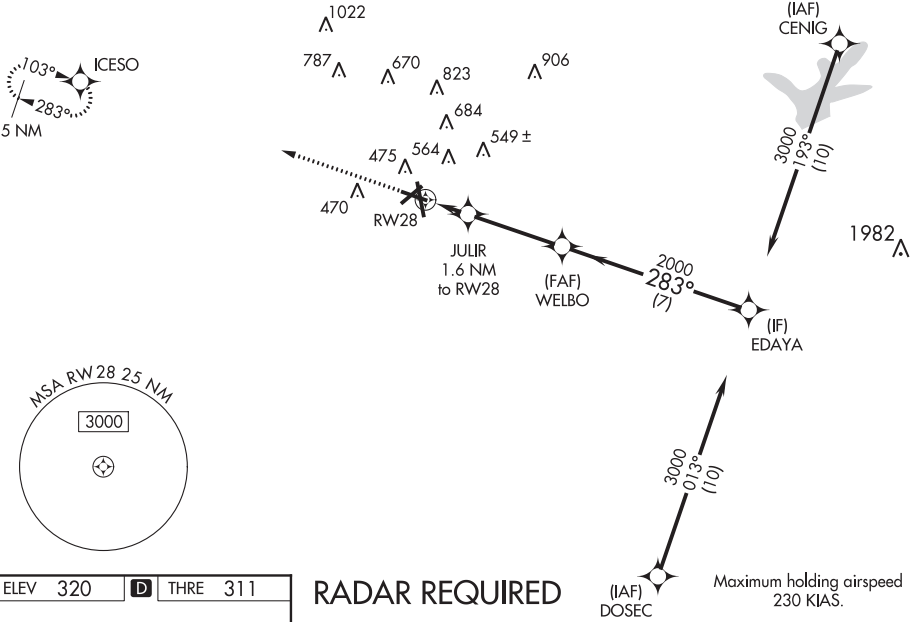
RNAV (GPS) RWY 28

EASTERWOOD FIELD (CLL)

⚠ Baro-VNAV NA when using Caldwell altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 41°C (105°F). When VGSI inop, Straight-in/Circling Rwy 28 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Caldwell altimeter setting and increase all DA 52 feet and all MDA 60 feet; increase LNAV Cat C/D/E and Circling Cat C visibility ¼ mile.

MISSED APPROACH:
Climb to 2000 direct ICESO and hold.

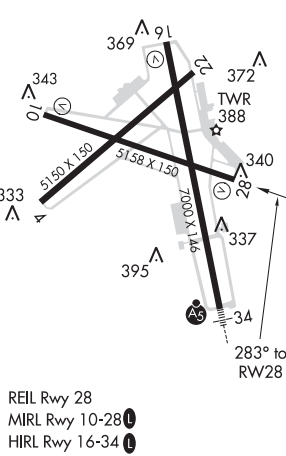
ATIS 126.85	HOUSTON APP CON 134.3 360.85	EASTERWOOD TOWER* 118.5 (CTAF) 284.7	GND CON 128.7 284.7	CLNC DEL 128.7	HOUSTON CLNC DEL (When ATCT closed.) 120.4	UNICOM 122.95
-----------------------	--	--	-------------------------------	--------------------------	---	-------------------------



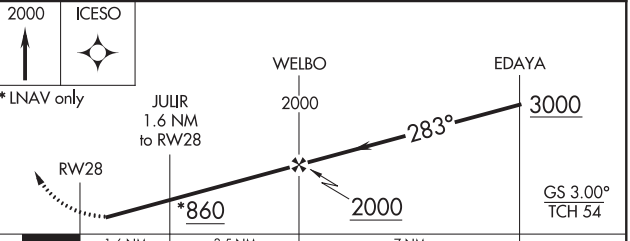
ELEV 320	D	THRE 311
----------	----------	----------

RADAR REQUIRED

(IAF) DOSEC
Maximum holding airspeed 230 KIAS.



REIL Rwy 28
MIRL Rwy 10-28
HIRL Rwy 16-34



CATEGORY	A	B	C	D	E
LPV DA		561-1	250 (300-1)		
LNAV/VNAV DA		561-1	250 (300-1)		
LNAV MDA	720-1	409 (400-1)	720-1½	409 (400-1½)	
CIRCLING	860-1 540 (600-1)	880-1 560 (600-1)	880-1½ 560 (600-1½)	1000-2¼ 680 (700-2¼)	1180-3 860 (900-3)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 63122 W34A	APP CRS 343°	Rwy Idg TDZE Apt Elev	7000 311 321
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 34

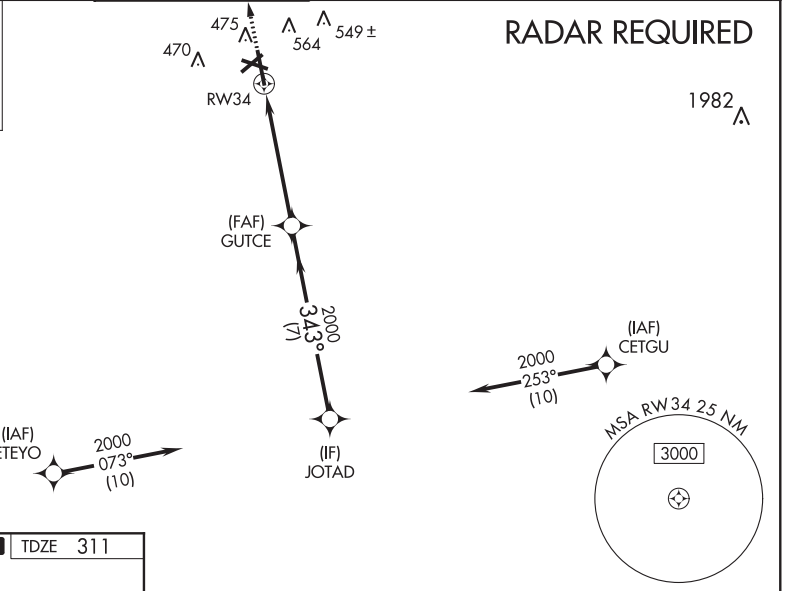
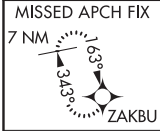
EASTERWOOD FIELD (CLL)

⚠ Baro-VNAV NA when using Caldwell altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 41°C (105°F).
⚠ DME/DME RNP-0.3 NA. VDP NA with Caldwell altimeter setting. When local altimeter setting not received, use Caldwell altimeter setting and increase all DA 52 feet and all MDA 60 feet; increase LNAV Cat C/D/E visibility 1/8 mile and Circling Cat C 1/4 mile. For inoperative MALS, increase LPV and LNAV/VNAV Cat E visibility to 3/4 mile, and LNAV Cat E visibility to 1 1/8 mile. For inoperative MALS, when using Caldwell altimeter setting, increase LPV Cat E visibility to 3/4 mile, LNAV/VNAV Cat E visibility to 1 mile, and LNAV Cat E visibility to 1 1/8 mile.

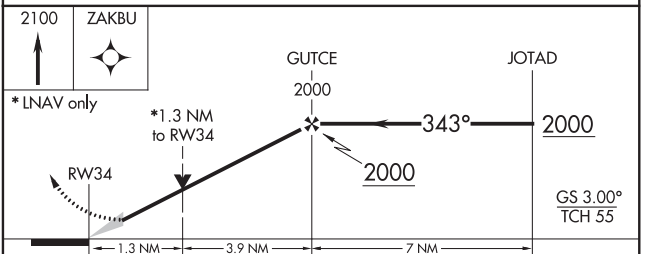
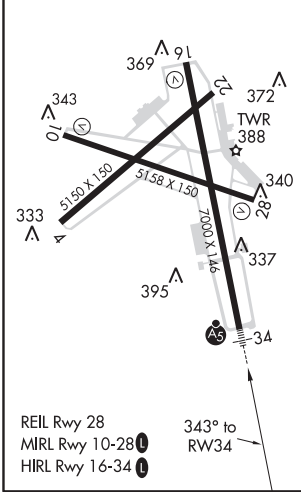


MALS
MISSED APPROACH:
 Climb to 2100 direct ZAKBU and hold.

ATIS 126.85	HOUSTON APP CON 134.3 360.85	EASTERWOOD TOWER* 118.5 (CTAF) 0 284.7	GND CON 128.7 284.7	CLNC DEL 128.7	HOUSTON CLNC DEL (When ATCT closed.) 120.4	UNICOM 122.95
-----------------------	--	---	-------------------------------	--------------------------	---	-------------------------



ELEV 321	D	TDZE 311
----------	----------	----------



CATEGORY	A	B	C	D	E
LPV DA		511-1/2	200 (200-1/2)		
LNAV/VNAV DA		563-1/2	252 (300-1/2)		
LNAV MDA	760-1/2	449 (500-1/2)	760-7/8	449 (500-7/8)	
CIRCLING	860-1 539 (600-1)	880-1 559 (600-1)	880-1 1/2 559 (600-1 1/2)	1000-2 1/4 679 (700-2 1/4)	1180-3 859 (900-3)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-CLL 110.55 Chan 42 (Y)	APP CRS 163°	Rwy Idg TDZE Apt Elev	7000 321 321
---	------------------------	-----------------------------	---

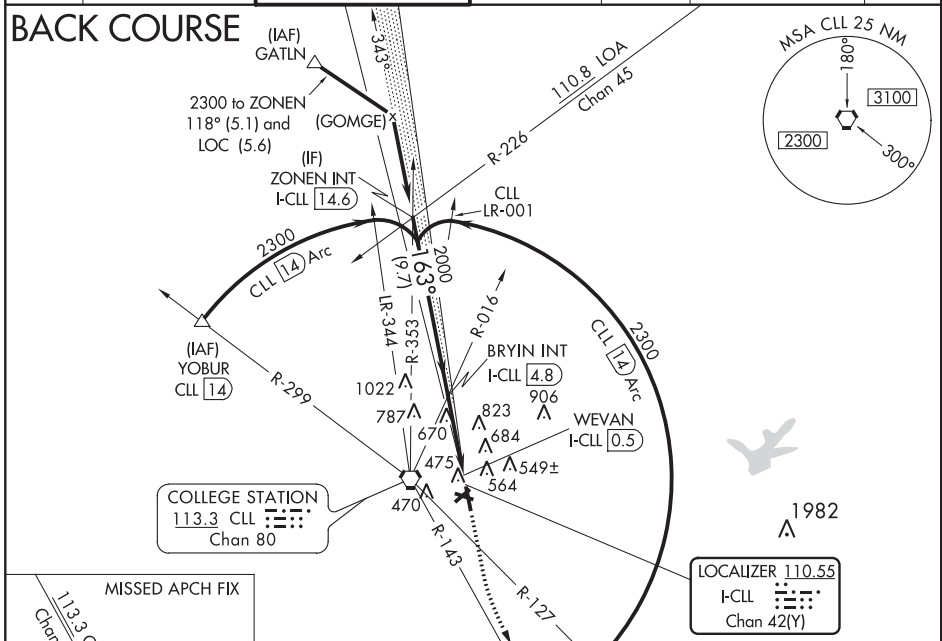
LOC BC RWY 16

EASTERWOOD FIELD (CLL)

<p>ATIS 126.85 HOUSTON APP CON 134.3 360.85 EASTERWOOD TOWER* 118.5 (CTAF) 0 284.7 GND CON 128.7 284.7 CLNC DEL 128.7 HOUSTON CLNC DEL (When ATCT closed.) 120.4 UNICOM 122.95</p>	
---	--

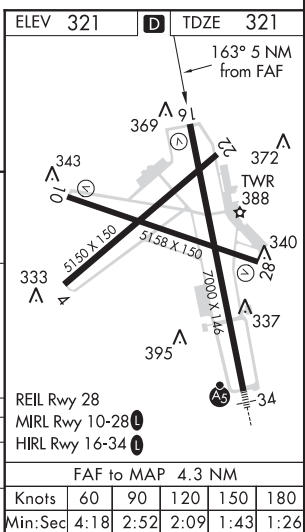
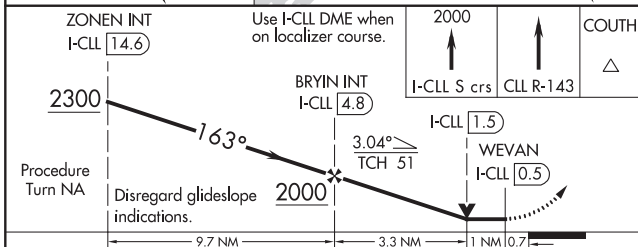
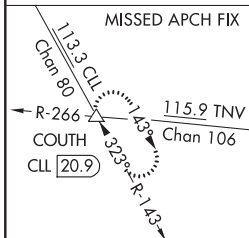
MISSED APPROACH: Climb to 2000 via I-CLL south course and CLL R-143 to COUTH INT/CLL 20.9 DME and hold.

BACK COURSE



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



ZONEN INT I-CLL 14.6	Use I-CLL DME when on localizer course.		2000	2000	COUTH
2300	BRYIN INT I-CLL 4.8		I-CLL S crs	CLL R-143	
Procedure Turn NA	Disregard glideslope indications.		2000	I-CLL 1.5	WEVAN I-CLL 0.5
	9.7 NM	3.3 NM	1 NM	0.7	
CATEGORY	A	B	C	D	E
S-16	920-1	599 (600-1)	920-1½ 599 (600-1½)	920-1¾ 599 (600-1¾)	920-2 599 (600-2)
CIRCLING	920-1	599 (600-1)	920-1½ 599 (600-1½)	1000-2¼ 679 (700-2¼)	1180-3 859 (900-3)

ELEV 321	TDZE 321
163° 5 NM from FAF	
REIL Rwy 28	
MIRL Rwy 10-28	
HIRL Rwy 16-34	
FAF to MAP 4.3 NM	
Knots	60 90 120 150 180
Min:Sec	4:18 2:52 2:09 1:43 1:26

COLLEGE STATION, TEXAS

AL-928 (FAA)

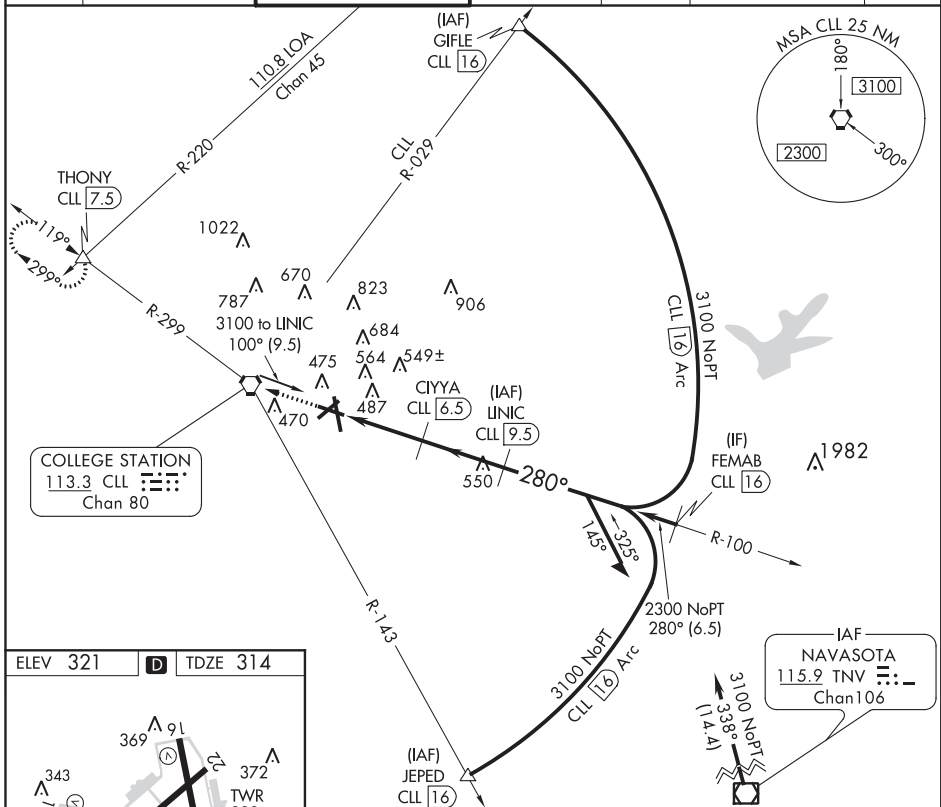
16315

VORTAC CLL	APP CRS	Rwy Idg	5159
113.3	280°	TDZE	314
Chan 80		Apt Elev	321

VOR/DME RWY 28 EASTERWOOD FIELD (CLL)

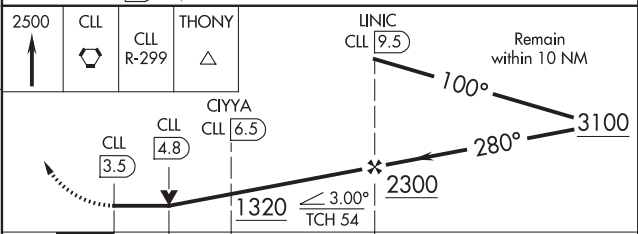
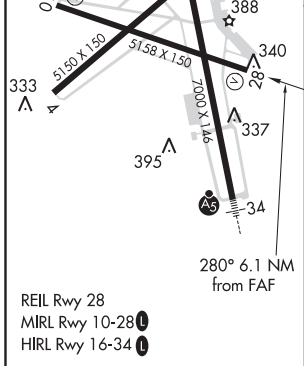
MISSED APPROACH: Climb to 2500 direct CLL VORTAC then via CLL R-299 to THONY INT/CLL 7.5 DME and hold.

ATIS	HOUSTON APP CON	EASTERWOOD TOWER*	GND CON	CLNC DEL	HOUSTON CLNC DEL (When ATCT closed.)	UNICOM
126.85	134.3 360.85	118.5 (CTAF) 0 284.7	128.7 284.7	128.7	120.4	122.95



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D
S-28	800-1	486 (500-1)	800-1¼ 486 (500-1¼)	800-1½ 486 (500-1½)
CIRCLING	860-1 539 (600-1)	880-1 559 (600-1)	880-1½ 559 (600-1½)	1000-2¼ 679 (700-2¼)

COLLEGE STATION, TEXAS
 Amdt 13A 10NOV16

30°35'N-96°22'W

EASTERWOOD FIELD (CLL) VOR/DME RWY 28

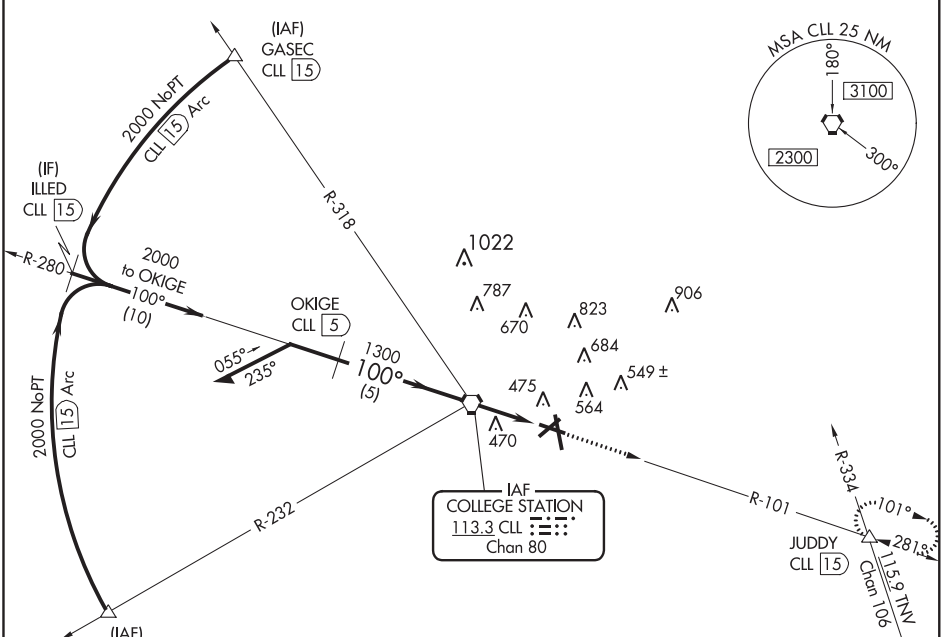
VORTAC CLL 113.3 Chan 80	APP CRS 100°	Rwy Idg TDZE Apt Elev	5158 319 321
--	------------------------	-----------------------------	---

VOR or TACAN RWY 10

EASTERWOOD FIELD (CLL)

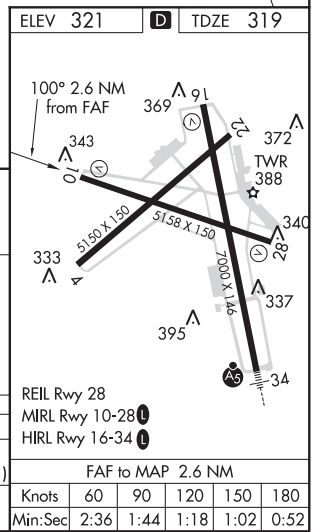
<p>▼ Helicopter visibility reduction below 3/4 SM NA. ▲ DME Required. *Procedure turn NA for Cat E.</p>		<p>MISSED APPROACH: Climb to 3100 via CLL R-101 to JUDDY INT/CLL 1.5 DME and hold.</p>			
---	--	--	--	--	--

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 128.7	HOUSTON CLNC DEL (When ATCT closed.) 120.4	UNICOM 122.95
-----------------------	--	--	-------------------------------	--------------------------	---	-------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A		B		C		D		E	
	740-1	421 (500-1)	740-1 1/4	421 (500-1 1/4)	740-1 1/2	421 (500-1 1/2)	1000-2 1/4	679 (700-2 1/4)	1180-3	859 (900-3)
CIRCLING	860-1 539 (600-1)	880-1 559 (600-1)	880-1 1/2 559 (600-1 1/2)	1000-2 1/4 679 (700-2 1/4)	1180-3 859 (900-3)					

FAF to MAP 2.6 NM		Knots	60	90	120	150	180
		Min:Sec	2:36	1:44	1:18	1:02	0:52

AIRPORT DIAGRAM

EASTERWOOD FIELD (CLL)
COLLEGE STATION, TEXAS

AL-928 (FAA)

FIELD
ELEV
321

ATIS
126.85
EASTERWOOD TOWER ★
118.5 284.7
GND CON
128.7 284.7
CLNC DEL
128.7
120.4 (When Tower Closed)

D



JANUARY 2015
ANNUAL RATE OF CHANGE
0.1° W

TERMINAL

ELEV 321 91

165.5°

ELEV 318

226.3°

HANGARS

TWR 388

HANGARS

ELEV 319

105.4°

5150 X 150

5158 X 150

7000 X 146

ELEV 311

ELEV 307

046.3°

28

285.4°

HANGAR

A 395

- RWY 04-22
S-27, D-50, 2D-87
- RWY 10-28
S-27, D-50, 2D-87
- RWY 16-34
S-70, D-90, 2S-114, 2D-150

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

96°22.5'W

96°22.0'W

96°21.5'W

30°34.5'N

30°35.0'N

30°35.5'N

AIRPORT DIAGRAM

COLLEGE STATION, TEXAS
EASTERWOOD FIELD (CLL)

SC-5, 10 NOV 2016 to 05 JAN 2017

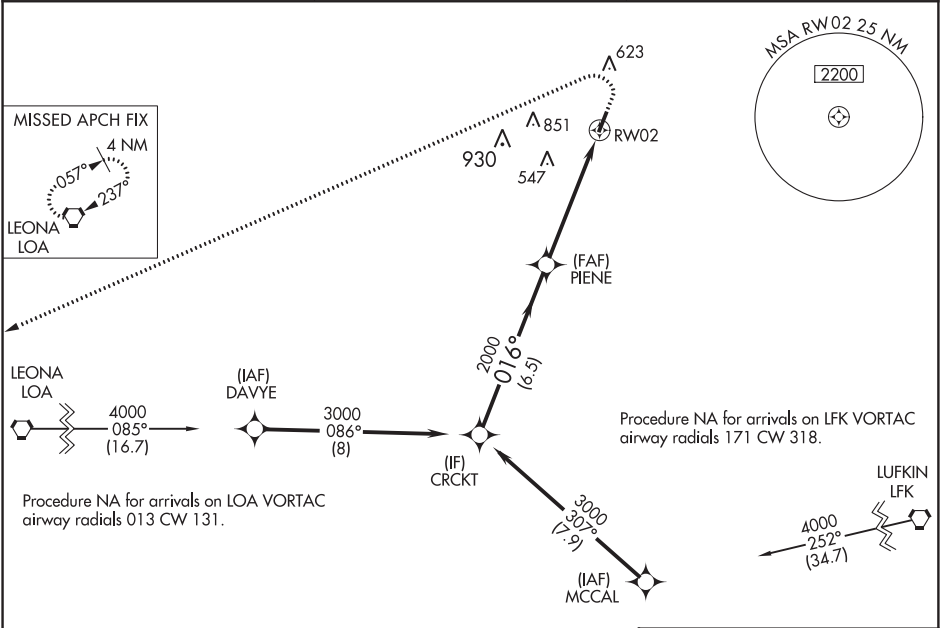
SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 53526 W02A	APP CRS 016°	Rwy Idg TDZE Apt Elev	4000 341 348
--	------------------------	-----------------------------	---

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.	MISSED APPROACH: Climb to 1000 then climbing left turn to 4000 direct LOA VORTAC and hold.	
AWOS-3 118.775	HOUSTON CENTER 134.8 269.6	CTAF 122.9 0



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 348	TDZE 341
----------	----------

0.5% UP → 4000 x 75
016° to RWY02

MIRL Rwy 2-20 0

	CRCKT		PIENE		RWY02	
	3000		2000		3.00° TCH 35	
	6.5 NM		5.2 NM			
CATEGORY	A	B	C	D		
LP MDA	820-1	479 (500-1)			NA	
LNAV MDA	840-1	499 (500-1)			NA	
CIRCLING	880-1	532 (600-1)			NA	

CROCKETT, TEXAS

AL-9412 (FAA)

16091

WAAS CH 65826 W20A	APP CRS 197°	Rwy Idg TDZE Apt Elev	4000 348 348
--	------------------------	-----------------------------	---

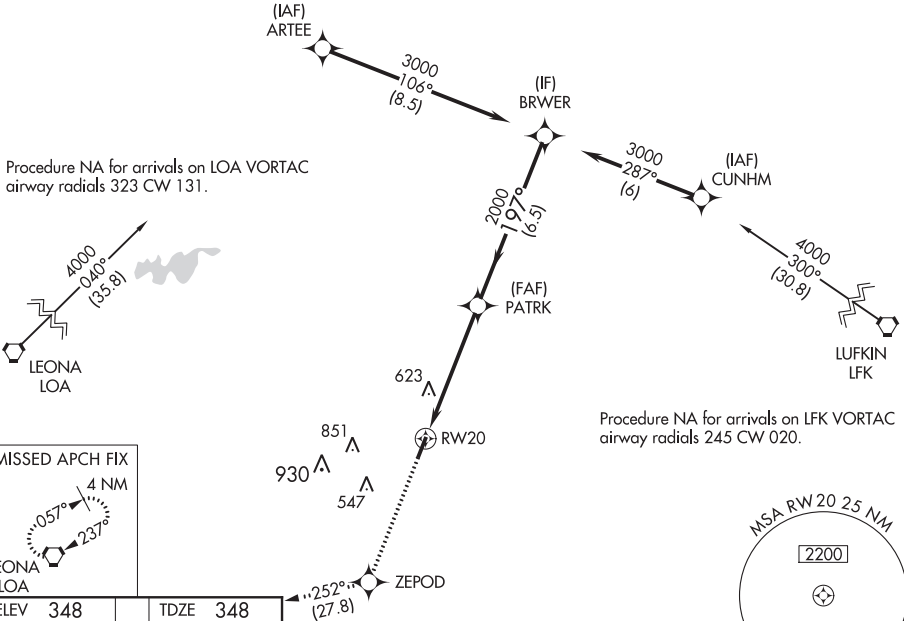
RNAV (GPS) RWY 20

HOUSTON COUNTY (DKR)

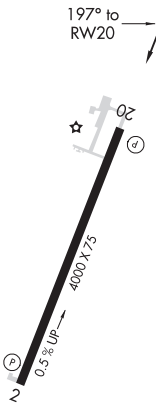
⚠ DME/DME RNP-0.3 NA. When local altimeter setting not received use Palestine altimeter setting and increase all MDA 100 feet.
⚠ Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000 direct ZEPOD then climb to 4000 on track 252° to LOA VORTAC and hold.

AWOS-3 118.775	HOUSTON CENTER 134.8 269.6	CTAF 122.9 Ⓛ
--------------------------	--------------------------------------	-------------------------------



ELEV	348	TDZE	348
------	------------	------	------------



2000	ZEPOD	4000	tr 252°	LOA	
RW20		PATRK		BRWR	
5.1 NM		6.5 NM		3000	
3.00° TCH 35		197°		2000	
CATEGORY	A	B	C	D	
LP MDA	880-1	532 (600-1)	NA		
LNAV MDA	900-1	552 (600-1)	NA		
CIRCLING	900-1	552 (600-1)	NA		

MIRL Rwy 2-20 **Ⓛ**

CROCKETT, TEXAS
Orig-B 11DEC14

31°18'N-95°24'W

HOUSTON COUNTY (DKR) RNAV (GPS) RWY 20

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 40229 W17A	APP CRS 166°	Rwy Idg TDZE Apt Elev	3801 184 184
--	------------------------	-----------------------------	---

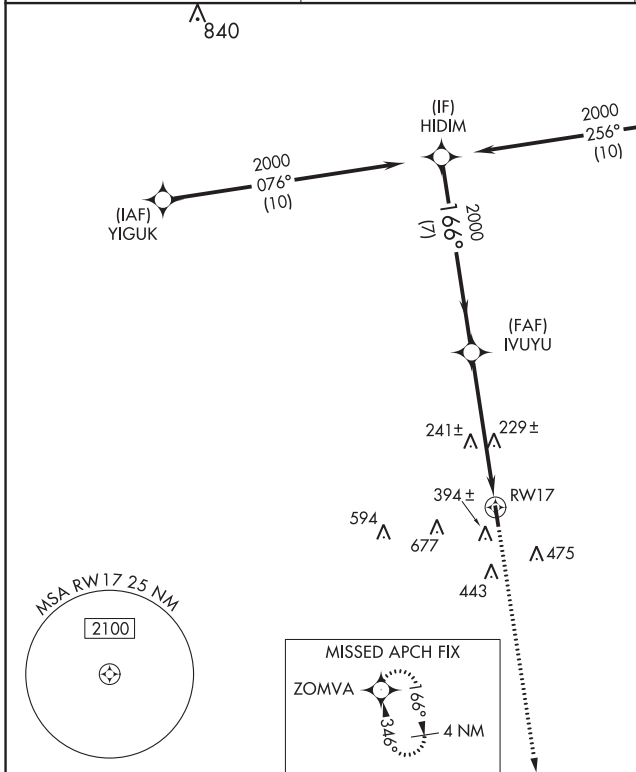
RNAV (GPS) RWY 17

EAGLE LAKE (E.L.A)

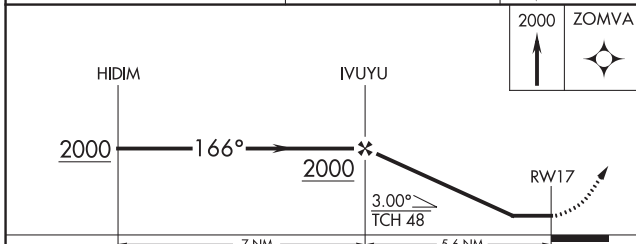
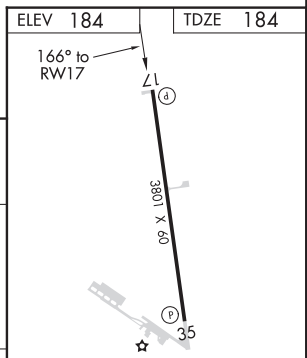
▽ When VGSI inop, procedure NA at night. DME/DME RNP-0.3 NA.
△ NA Helicopter visibility reduction below 1 SM NA.
 When local altimeter setting not received, use Sugar Land Rgnl altimeter setting.

MISSED APPROACH: Climb to 2000 direct ZOMVA and hold.

AWOS-3PT 128.475	HOUSTON APP CON 124.225 306.975	CTAF 122.9
----------------------------	---	----------------------



RADAR REQUIRED



CATEGORY	A	B	C	D
LP MDA	580-1	396 (400-1)	580-1½ 396 (400-1½)	NA
LNVA MDA	600-1	416 (500-1)	600-1½ 416 (500-1½)	NA
CIRCLING	860-1	676 (700-1)	860-2 676 (700-2)	NA

MIRL Rwy 17-35

EAGLE LAKE, TEXAS

AL-5270 (FAA)

16175

WAAS CH 45729 W35A	APP CRS 346°	Rwy Idg TDZE Apt Elev	3801 184 184
--	------------------------	-----------------------------	---

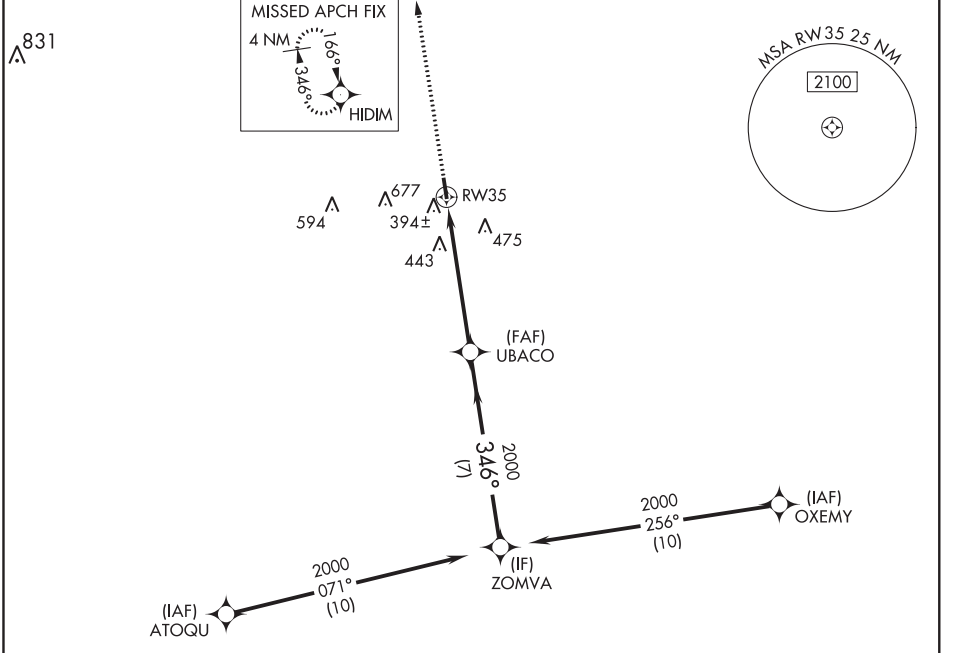
RNAV (GPS) RWY 35

EAGLE LAKE (E.L.A.)

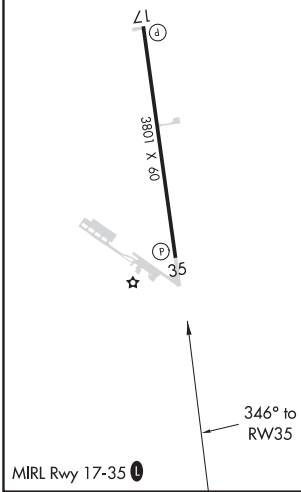
NA When VGSI inop, procedure NA at night. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Sugar Land Rgnl altimeter setting.

MISSED APPROACH: Climb to 2000 direct HIDIM and hold.

AWOS-3PT 128.475	HOUSTON APP CON 124.225 306.975	CTAF 122.9
----------------------------	---	----------------------



ELEV 184	TDZE 184
-----------------	-----------------



CATEGORY	A	B	C	D
LP MDA	720-1	536 (600-1)	720-1½ 536 (600-1½)	NA
LNAV MDA	800-1	616 (700-1)	800-1¾ 616 (700-1¾)	NA
CIRCLING	860-1	676 (700-1)	860-2 676 (700-2)	NA

EAGLE LAKE, TEXAS
Amdt 1B 23JUN16

29°36'N-96°19'W

RNAV (GPS) RWY 35

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

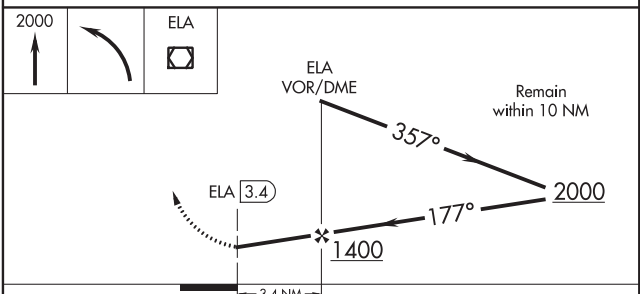
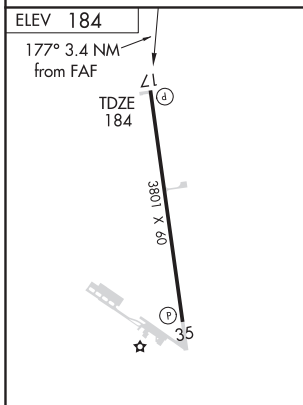
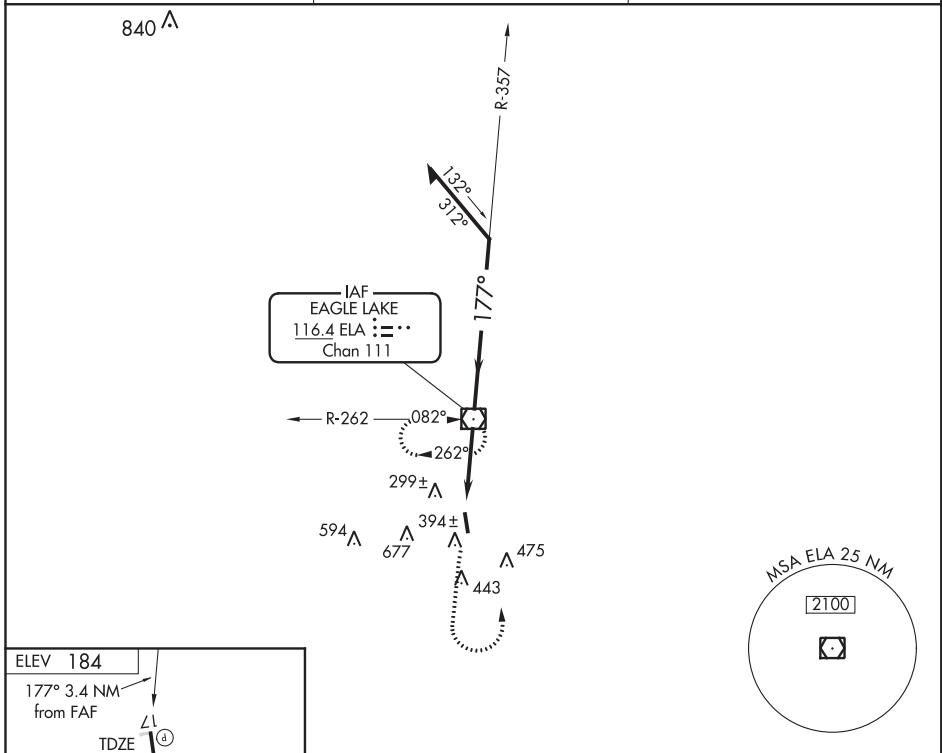
VOR ELA 116.4 Chan 111	APP CRS 177°	Rwy Idg TDZE Apt Elev	3801 184 184
--	------------------------	-----------------------------	---

VOR RWY 17

EAGLE LAKE (ELA)

NA When local altimeter setting not received, use Sugar Land Rgnl altimeter setting. MISSED APPROACH: Climb to 2000, then left turn direct ELA VOR/DME and hold.

AWOS-3PT 128.475	HOUSTON APP CON 124.225 306.975	CTAF 122.9
----------------------------	---	----------------------



MIRL Rwy 17-35					
FAF to MAP 3.4 NM					
Knots	60	90	120	150	180
Min:Sec	3:24	2:16	1:42	1:22	1:08
CATEGORY	A	B	C	D	
S-17	660-1	476 (500-1)	660-1¼ 476 (500-1¼)	NA	
CIRCLING	860-1	676 (700-1)	860-2 676 (700-2)	NA	

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EDNA, TEXAS

AL-6468 (FAA)

15344

APP CRS 147°	Rwy Idg TDZE Apt Elev	N/A N/A 61
------------------------	-----------------------------	---------------------------------------

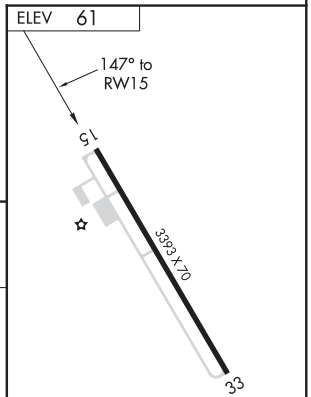
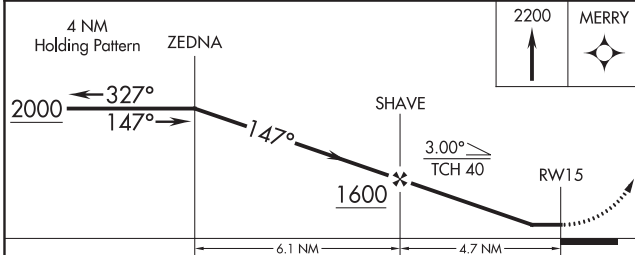
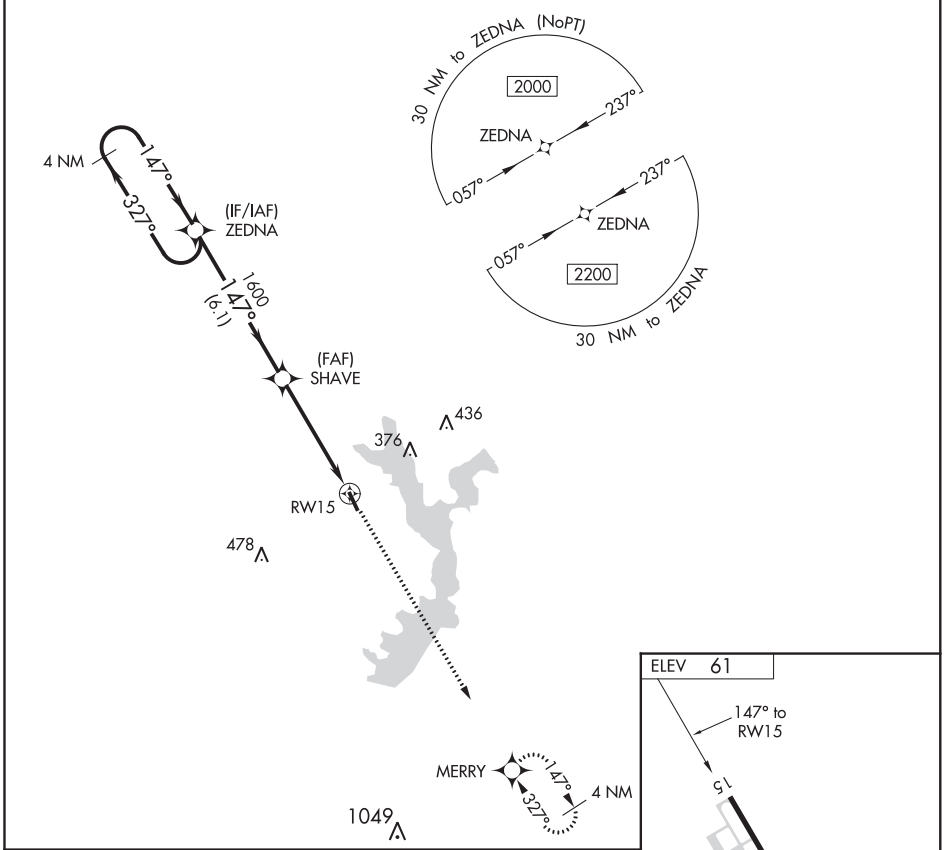
RNAV (GPS)-A

JACKSON COUNTY (26R)

▽ DME/DME RNP-0.3 NA. Use Victoria altimeter setting; when not received, use Port Lavaca altimeter setting. Procedure NA at night.
▲ NA Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2200 direct MERRY and hold.

VICTORIA RGNL ASOS 119.025	HOUSTON CENTER 128.6 360.8	UNICOM 122.8 (CTAF)
--------------------------------------	--------------------------------------	-------------------------------



CATEGORY	A	B	C	D
C CIRCLING	640-1	579 (600-1)	NA	NA

EDNA, TEXAS
Orig 10DEC15

29°00'N-96°35'W

JACKSON COUNTY (26R)

RNAV (GPS)-A

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS 327°	Rwy Idg TDZE Apt Elev	N/A N/A 61
------------------------	-----------------------------	---------------------------------------

RNAV (GPS)-B

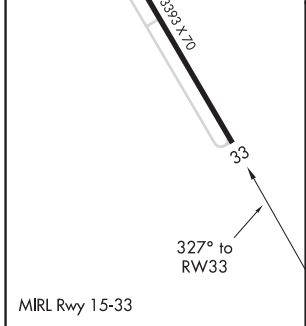
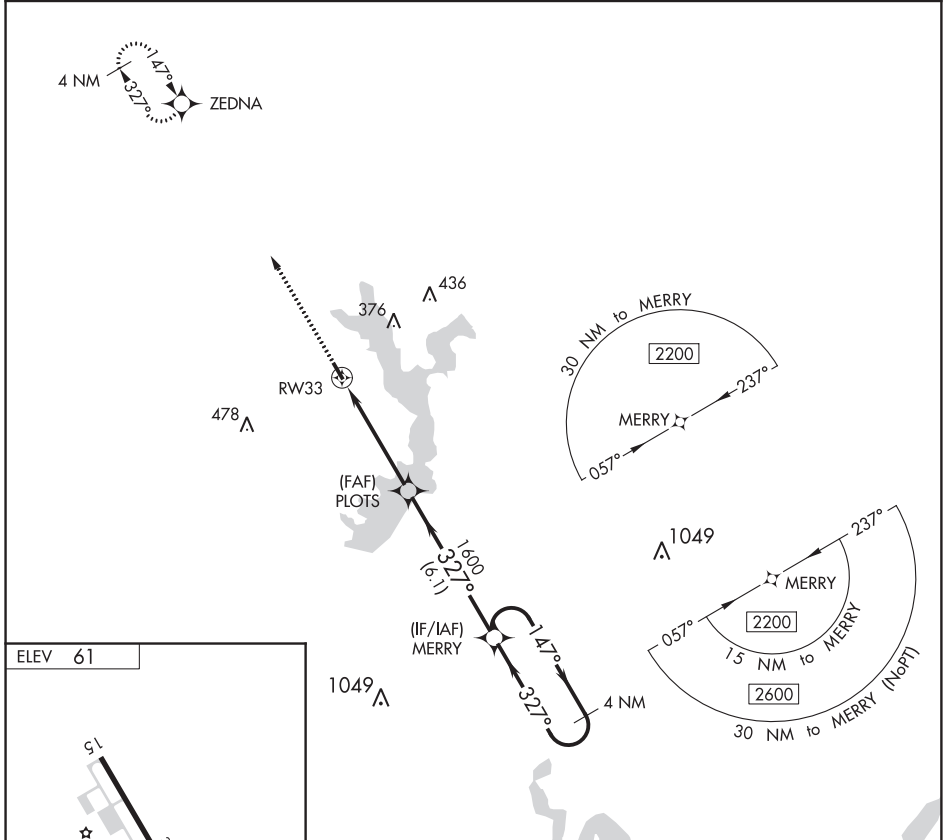
JACKSON COUNTY (26R)

▽ DME/DME RNP-0.3 NA. Use Victoria altimeter setting; when not received, use Port Lavaca altimeter setting. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

△ NA

MISSED APPROACH: Climb to 2000 direct ZEDNA and hold.

VICTORIA RGNL ASOS 119,025	HOUSTON CENTER 128.6 360.8	UNICOM 122.8 (CTAF)
--------------------------------------	--------------------------------------	-------------------------------



2000	ZEDNA				
CATEGORY	A	B	C	D	
C CIRCLING	640-1	579 (600-1)			NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC I-GLS 111.7	APP CRS 138°	Rwy Idg TDZE Apt Elev	6000 5 6
---------------------------	------------------------	-----------------------------	-------------------------------------

ILS or LOC RWY 14

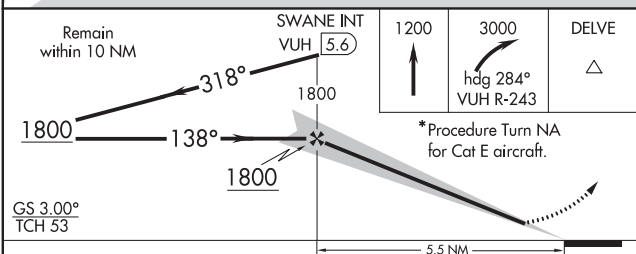
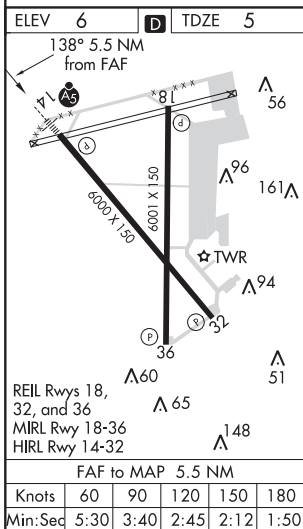
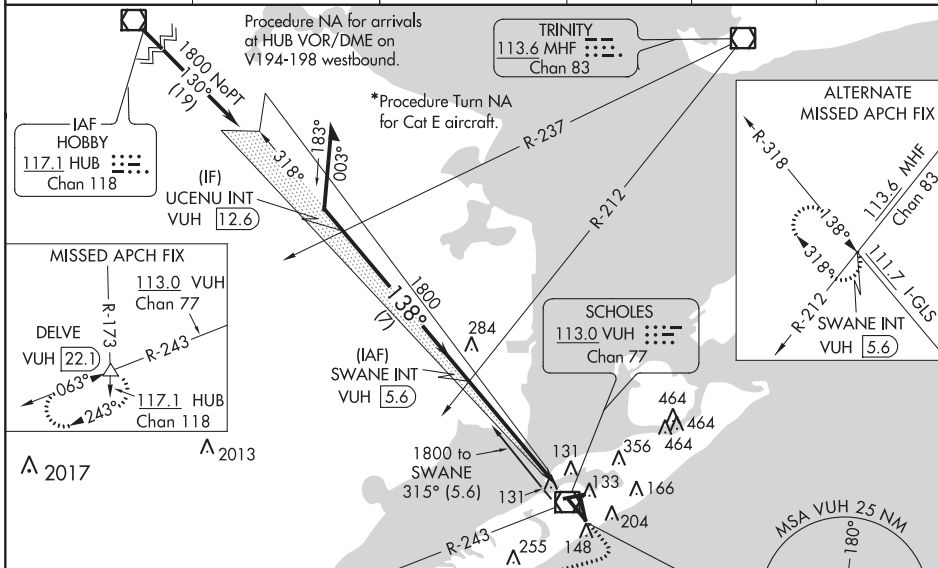
SCHOLES INTL AT GALVESTON (GLS)

⚠ Circling NA east of Rwy 18 and northeast of Rwy 32. When local altimeter setting not received, use William P Hobby altimeter setting and increase all DA and MDA 80 feet, increase S-LOC 14 Cat C/D/E visibility to 1 mile, and Circling Cat E visibility to 2½ mile. For inop MALSRS, increase S-ILS 14 Cat E visibility to ¾ and S-LOC 14 Cat E visibility to 1½ mile. For inop MALSRS when using William P Hobby altimeter setting, increase S-ILS 14 all Cats visibility to ¾ mile, and S-LOC 14 Cat E visibility to 1½ mile.



MISSED APPROACH: Climb to 1200 then climbing right turn to 3000 on heading 284° and on VUH VOR/DME R-243 to DELVE INT/VUH 22.1 DME and hold.

ASOS 119.275	HOUSTON APP CON 134.45 284.0	GALVESTON TOWER * 120.575 (CTAF) 0	GND CON 118.625	CLNC DEL 135.35 (When tower dosed)	UNICOM 123.05
------------------------	--	---	---------------------------	---	-------------------------



CATEGORY	A	B	C	D	E
S-ILS 14	205-½ 200 (200-½)				
S-LOC 14	460-½ 455 (500-½)		460-⅞ 455 (500-⅞)		
CIRCLING	500-1 494 (500-1)		500-1½ 494 (500-1½)	560-2 554 (600-2)	620-2¼ 614 (700-2¼)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 65606 W14A	APP CRS 138°	Rwy Idg 6000 TDZE 5 Apt Elev 6
--	------------------------	---

RNAV (GPS) RWY 14

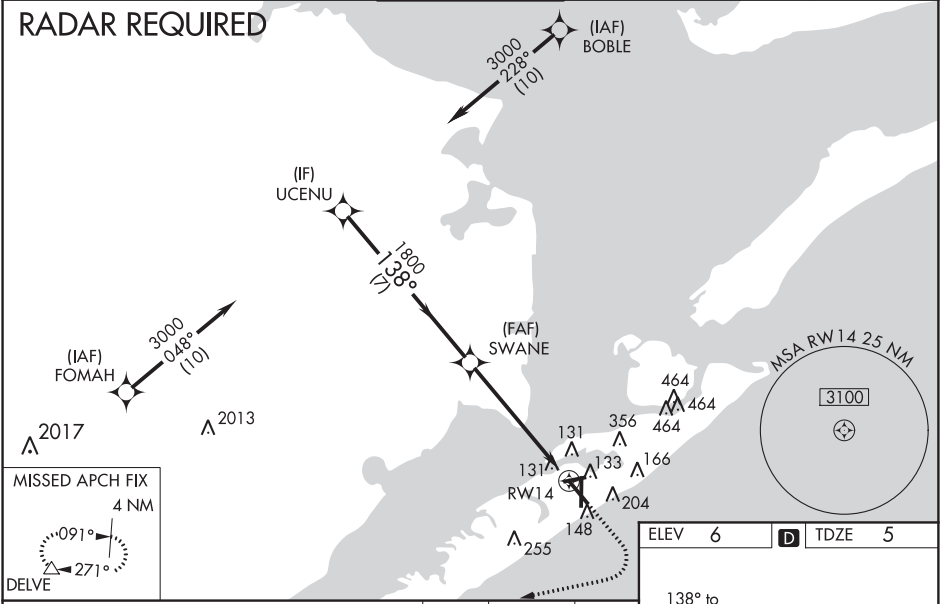
SCHOLES INTL AT GALVESTON (GLS)

⚠ Baro-VNAV and VDP NA when using William P Hobby altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C (34°F) or above 54°C (130°F). Circling NA east of Rwy 18 and northeast Rwy 32. DME/DME RNP-0.3 NA. When local altimeter setting not received, use William P Hobby altimeter setting and increase all DA 79 feet and all MDA 80 feet. Increase LNAV/VNAV all Cats visibility to 7/8 mile, LNAV Cats C/D/E visibility to 1 mile, and Circling Cat E visibility to 2 1/2 mile. For inop MALSR, increase LPV Cat E visibility to 3/4, LNAV/VNAV Cat E visibility to 1 1/8, and LNAV Cat E visibility to 1 3/8 mile. For inop MALSR when using William P Hobby altimeter setting, increase LPV all Cats visibility to 7/8 mile, LNAV Cat E visibility to 1 1/2 mile.

MALSR

MISSED APPROACH:
Climb to 1200 then climbing right turn to 3000 direct DELVE and hold.

ASOS 119.275	HOUSTON APP CON 134.45 284.0	GALVESTON TOWER * 120.575 (CTAF)	GND CON 118.625	CLNC DEL 135.35 (When tower closed)	UNICOM 123.05
------------------------	--	--	---------------------------	--	-------------------------



UCENU		SWANE		RWY 14	
3000	1800	1200	3000	DELVE	
GP 3.00° TCH 53		*1.3 NM to RWY 14		*LNAV only.	
7 NM		4.2 NM		1.3 NM	
138°	180°				
CATEGORY	A	B	C	D	E
LPV DA	205-1/2		200 (200-1/2)		
LNAV/VNAV DA	342-5/8		337 (400-5/8)		
LNAV MDA	460-1/2	455 (500-1/2)	460-7/8	455 (500-7/8)	
CIRCLING	500-1	494 (500-1)	500-1 1/2 494 (500-1 1/2)	560-2 554 (600-2)	620-2 1/4 614 (700-2 1/4)

ELEV 6	TDZE 5
--------	--------

REIL Rws 18, 32, and 36
MRL Rwy 18-36
HIRL Rwy 14-32

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

GALVESTON, TEXAS

AL-164 (FAA)

16203

WAAS CH 82301 W18A	APP CRS 179°	Rwy Idg TDZE Apt Elev	6001 6 6
--	------------------------	-----------------------------	-------------------------------------

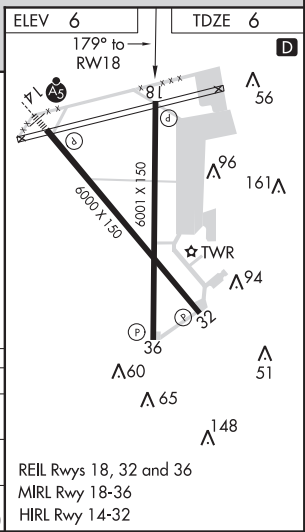
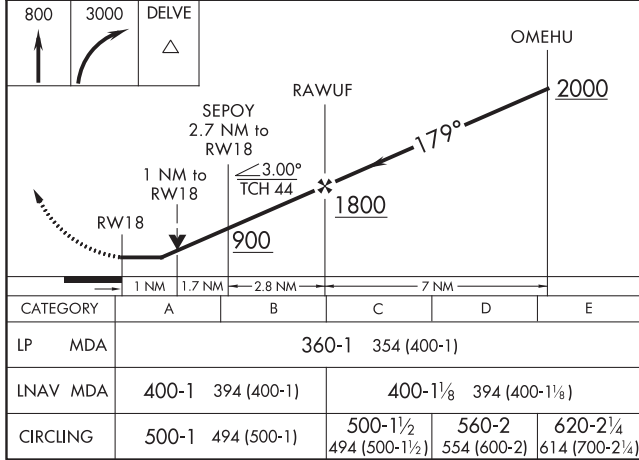
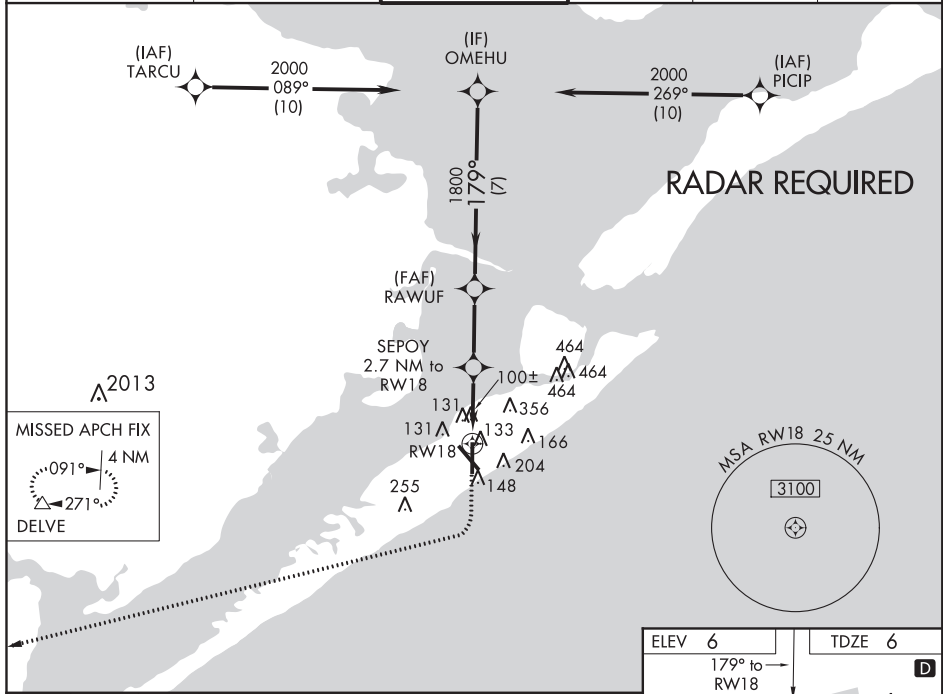
RNAV (GPS) RWY 18

SCHOLES INTL AT GALVESTON (GLS)

⚠ Circling NA east of Rwy 18 and northeast of Rwy 32. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¼ SM NA. When local altimeter not received, use William P Hobby altimeter setting and increase all MDA 80 feet, increase LP Cats C/D/E visibility to 1¼ mile, LNAV Cats C/D/E visibility to 1½ mile, and Circling Cat E visibility to 2½ mile. VDP NA with William P Hobby altimeter setting.

⚠ MISSED APPROACH: Climb to 800 then climbing right turn to 3000 direct DELVE and hold.

ASOS 119.275	HOUSTON APP CON 134.45 284.0	GALVESTON TOWER* 120.575 (CTAF)	GND CON 118.625	CLNC DEL 135.35 (When tower closed)	UNICOM 123.05
------------------------	--	--	---------------------------	--	-------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

GALVESTON, TEXAS
Amdt 2A 02APR15

29°16'N-94°52'W

SCHOLES INTL AT GALVESTON (GLS)
RNAV (GPS) RWY 18

WAAS CH 40101 W32A	APP CRS 318°	Rwy Idg TDZE Apt Elev	6000 5 6
--	------------------------	-----------------------------	-------------------------------------

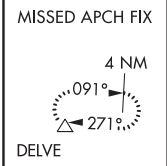
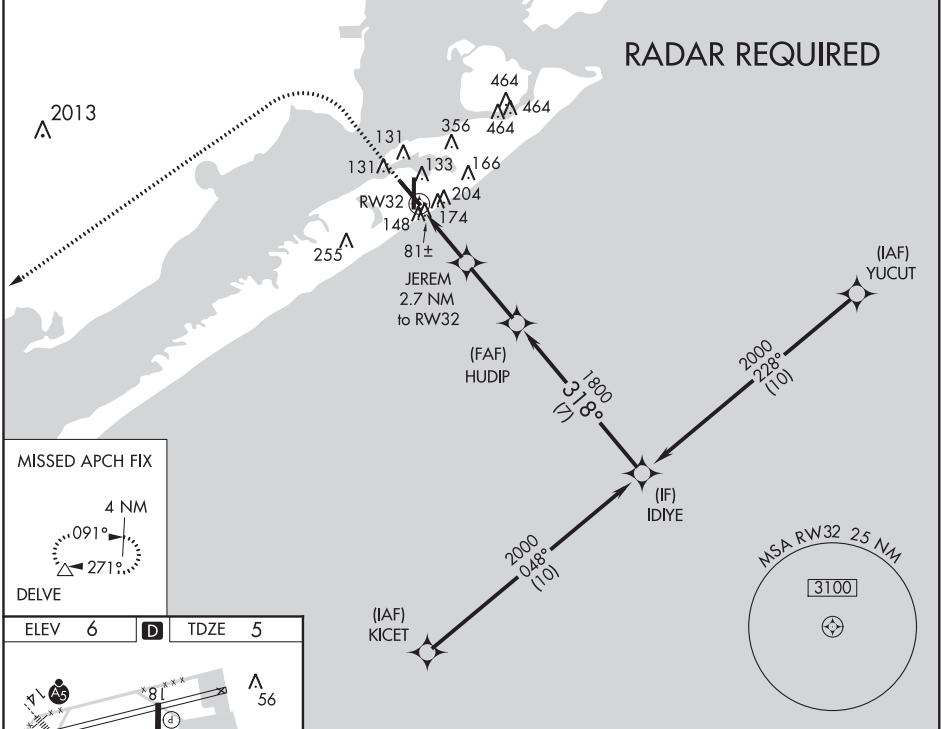
RNAV (GPS) RWY 32

SCHOLES INTL AT GALVESTON (GLS)

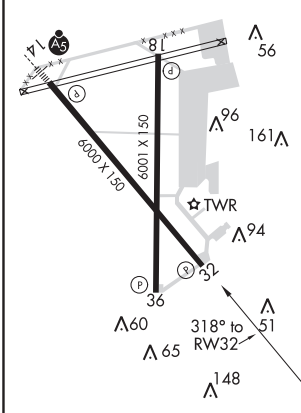
⚠ Circling NA east of Rwy 18 and northeast of Rwy 32. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 3/4 SM NA. VDP NA with William P Hobby altimeter setting. When local altimeter setting not received, use William P Hobby altimeter setting and increase all MDA 80 feet. Increase LP Cat C/D/E visibility to 1 1/2, increase LNAV Cat C/D/E visibility to 1 3/8 and increase Cat E Circling visibility to 2 1/2.

MISSED APPROACH:
Climb to 800 then climbing left turn to 3000 direct DELVE and hold.

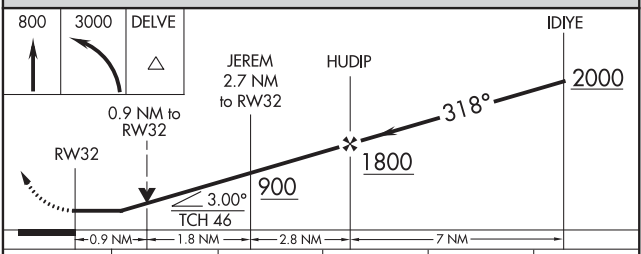
ASOS 119.275	HOUSTON APP CON 134.45 284.0	GALVESTON TOWER * 120.575 (CTAF) 0	GND CON 118.625	CLNC DEL 135.35 (When tower closed)	UNICOM 123.05
------------------------	--	--	---------------------------	--	-------------------------



ELEV 6	D	TDZE 5
--------	----------	--------



REIL Rwy 18, 32 and 36
MIRL Rwy 18-36
HIRL Rwy 14-32



CATEGORY	A	B	C	D	E
LP MDA	340-1		335 (400-1)		
LNAV MDA	440-1	435 (500-1)	440-1 1/4		435 (500-1 1/4)
CIRCLING	500-1	494 (500-1)	500-1 1/2	560-2	620-2 1/4
			494 (500-1 1/2)	554 (600-2)	614 (700-2 1/4)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

GALVESTON, TEXAS

AL-164 (FAA)

12033

WAAS CH 48831 W 36A	APP CRS 359°	Rwy Idg TDZE Apt Elev	6001 5 6
---	------------------------	-----------------------------	-------------------------------------

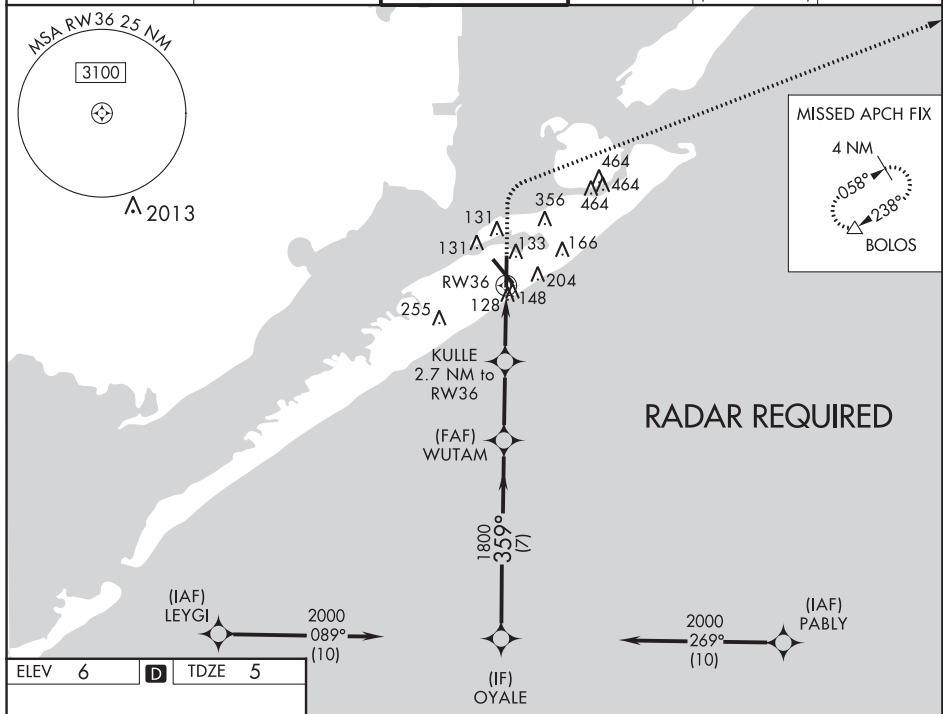
RNAV (GPS) RWY 36

SCHOLES INTL AT GALVESTON (GLS)

⚠ 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 and increase all MDA 80 feet. Increase LP Cat C/D/E visibility to 1½ mile, LNAV Cat C/D/E visibility to 1½ mile, and Circling Cat E visibility to 2½ mile.

⚠ MISSED APPROACH: Climb to 800 then climbing right turn to 2000 direct BOLOS and hold.

ASOS 119.275	HOUSTON APP CON 134.45 284.0	GALVESTON TOWER * 120.575 (CTAF) 0	GND CON 118.625	CLNC DEL 135.35 (When tower closed)	UNICOM 123.05
------------------------	--	---	---------------------------	--	-------------------------



GALVESTON, TEXAS
Amdt 1A 02APR15

29°16'N-94°52'W

SCHOLES INTL AT GALVESTON (GLS)

RNAV (GPS) RWY 36

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

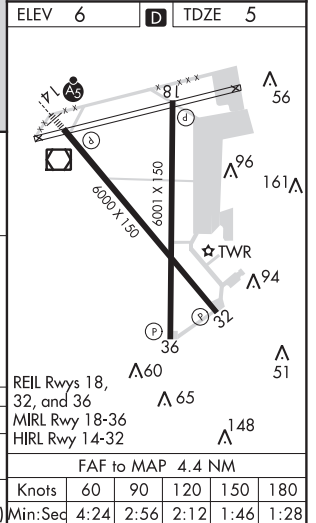
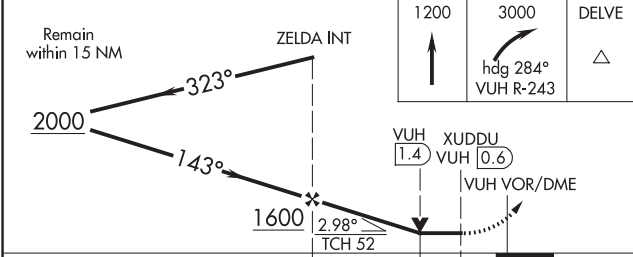
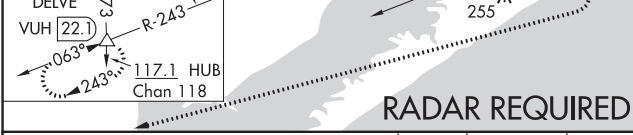
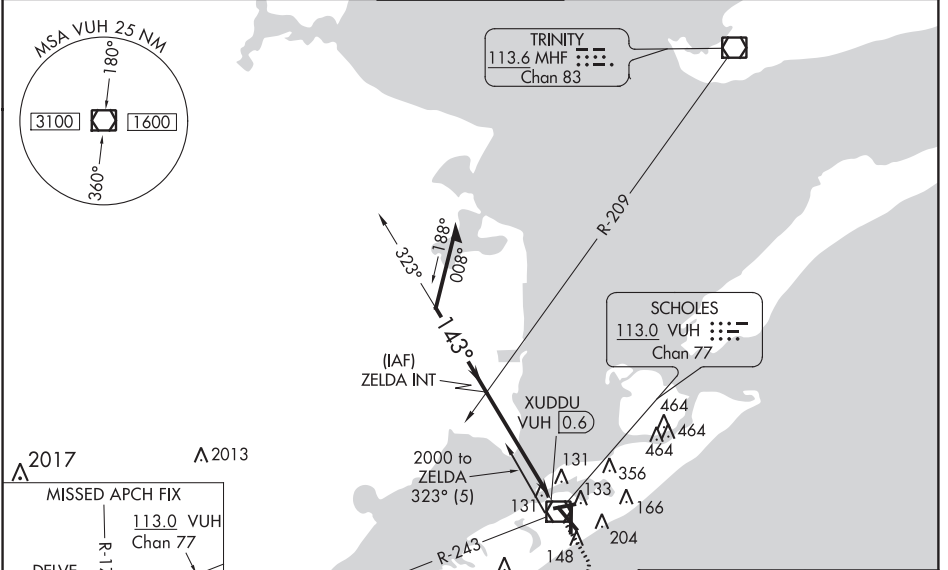
VOR/DME VUH 113.0 Chan 77	APP CRS 143°	Rwy Idg TDZE Apt Elev	6000 5 6
--	------------------------	-----------------------------	-------------------------------------

VOR RWY 14
SCHOLES INTL AT GALVESTON (GLS)

NA Circling NA east of Rwy 18 and northeast of Rwy 32. VDP NA when using William P Hobby altimeter setting. When local altimeter setting not received, use William P Hobby altimeter setting and increase all MDA 80 feet, increase S-14 Cat C/D/E visibility to 1 mile and Circling Cat E visibility to 2½ mile. For inop MALSRS, increase S-14 Cat E visibility to 1½ mile. For inop MALSRS, when using William P Hobby altimeter setting, increase S-14 Cat E visibility to ½ mile.

MALSRS MISSED APPROACH: Climb to 1200 then climbing right turn to 3000 on heading 284° and on VUH VOR/DME R-243 to DELVE INT/VUH 22.1 DME and hold.

ASOS 119.275	HOUSTON APP CON 134.45 284.0	GALVESTON TOWER * 120.575 (CTAF) 0	GND CON 118.625	CLNC DEL 135.35 (When tower closed)	UNICOM 123.05
------------------------	--	--	---------------------------	--	-------------------------



CATEGORY	A	B	C	D	E
S-14	460-½ 455 (500-½)		460-¾ 455 (500-¾)		
CIRCLING	500-1 494 (500-1)		500-1½ 494 (500-1½)	554 (600-2)	620-2¼ 614 (700-2¼)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

16203

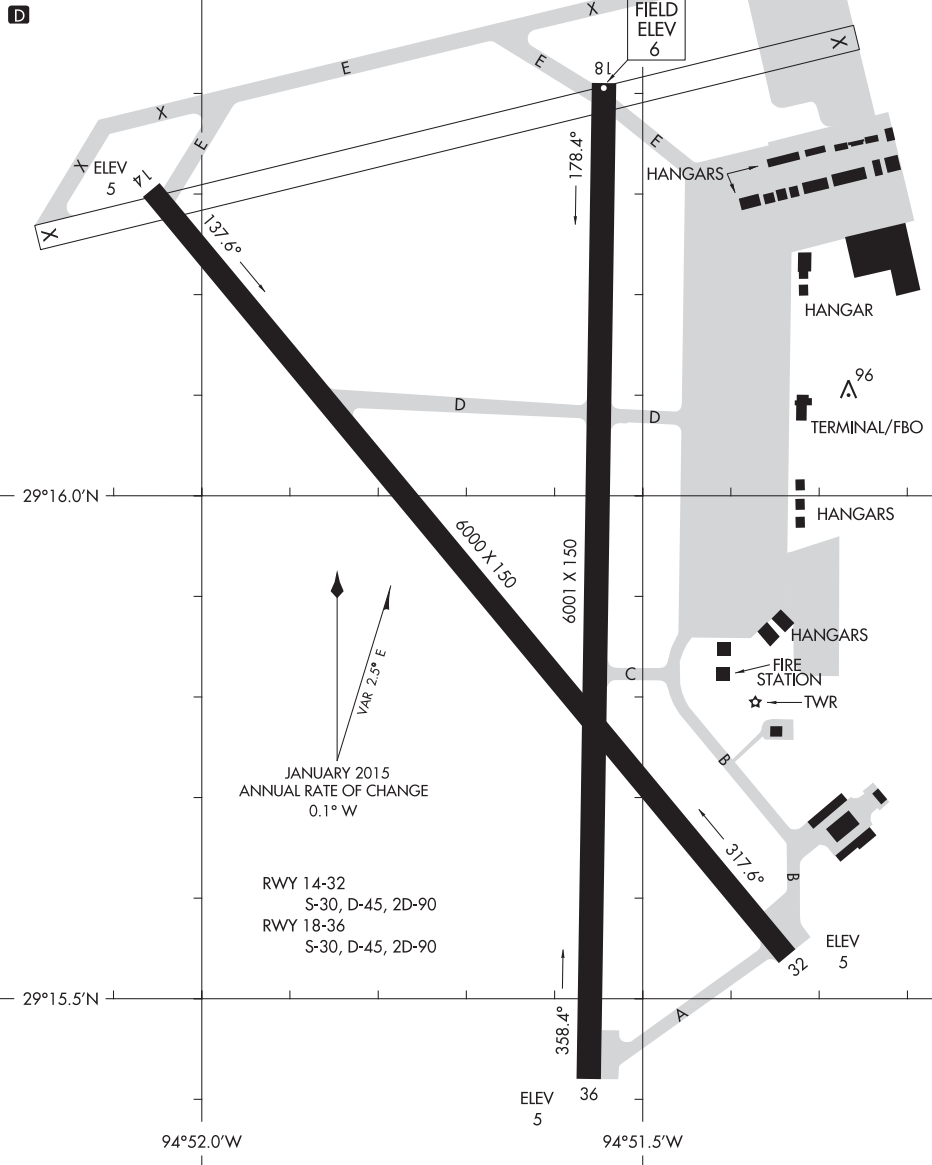
AIRPORT DIAGRAM

SCHOLES INTL AT GALVESTON (GLS) GALVESTON, TEXAS

AL-164 (FAA)

ASOS
 119.275
 GALVESTON TOWER ★
 120.575
 GND CON
 118.625
 CLNC DEL (When Tower Closed)
 135.35 29°16.5'N

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



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

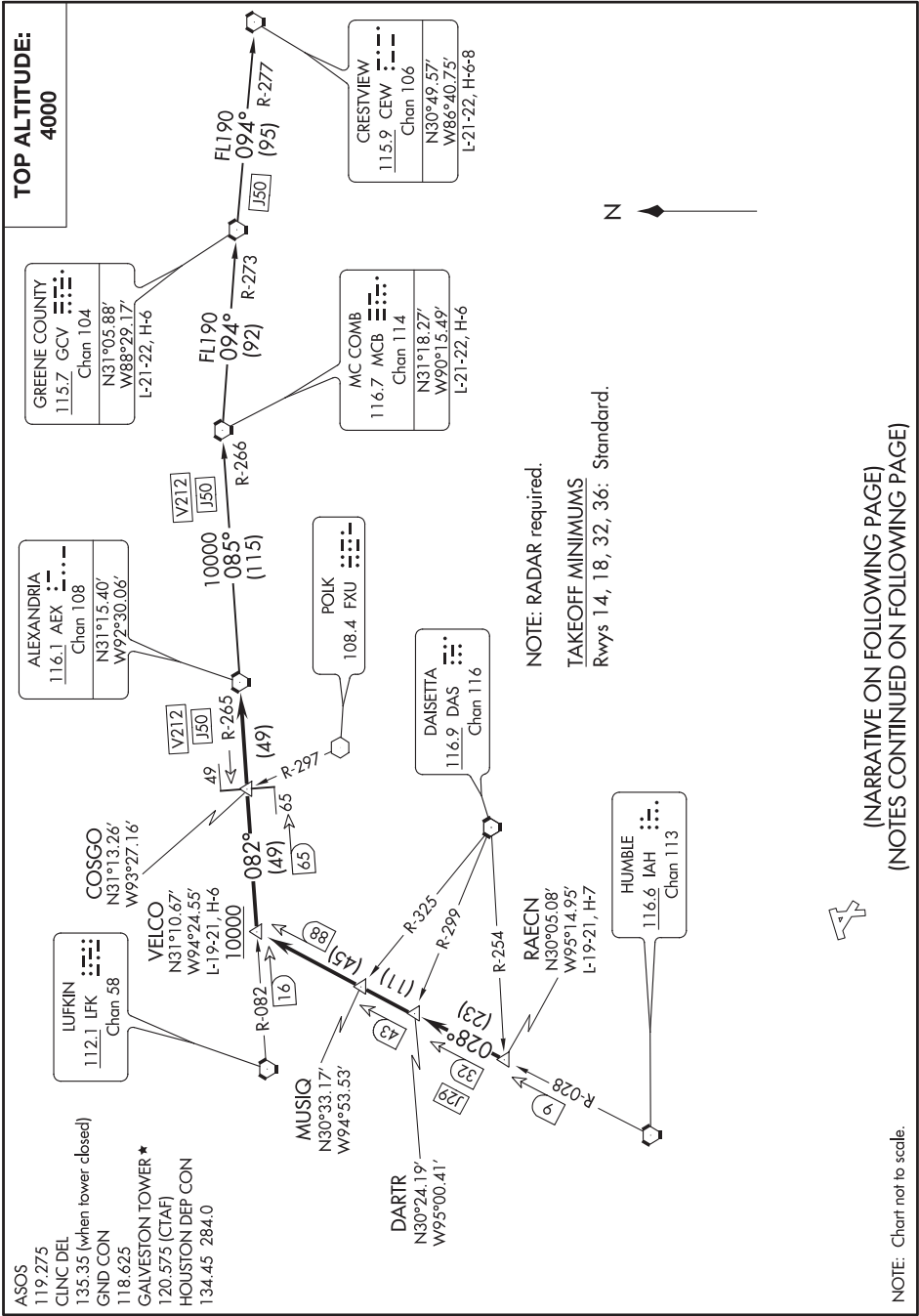
AIRPORT DIAGRAM

16203

SCHOLES INTL AT GALVESTON (GLS) GALVESTON, TEXAS

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



**TOP ALTITUDE:
4000**

ALEXANDRIA
116.1 AEX
Chan 108
N31°15.40'
W92°30.06'
L-21-22, H-6

GREENE COUNTY
115.7 GCV
Chan 104
N31°05.88'
W88°29.17'
L-21-22, H-6

MC COMB
116.7 MCB
Chan 114
N31°18.27'
W90°15.49'
L-21-22, H-6

POLK
108.4 FXU
Chan 116

DAISETTA
116.9 DAS
Chan 116

NOTE: RADAR required.
TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36: Standard.



LUFKIN
112.1 LFK
Chan 58
N31°13.26'
W93°27.16'

COSGO
N31°13.26'
W93°27.16'

VELOCO
N31°10.67'
W94°24.55'
L-19-21, H-6

MUSIQ
N30°33.17'
W94°53.53'

DARTR
N30°24.19'
W95°00.41'

RAECEN
N30°05.08'
W95°14.95'
L-19-21, H-7

HUMBIE
116.6 IAH
Chan 113

ASOS 119.275
CLNC DEL 135.35 (when tower closed)
GND CON 118.625
GALVESTON TOWER ★ 120.575 (CTAF)
HOUSTON DEP CON 134.45 284.0

ALEXANDRIA NINE DEPARTURE

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

SL-164 (FAA)

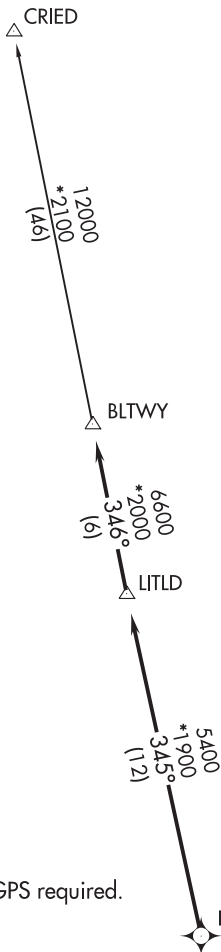
SCHOLES INTL AT GALVESTON (GLS)

GALVESTON, TEXAS

BLTWY THREE DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

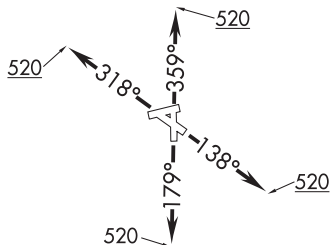
ASOS
 119.275
 CLNC DEL
 135.35 (When tower closed)
 GND CON
 118.625
 GALVESTON TOWER *
 120.575 (CTAF)
 HOUSTON DEP CON
 134.45 284.0



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.



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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)

(BLTWY3.BLTWY) 10NOV16

GALVESTON, TEXAS
 SCHOLES INTL AT GALVESTON (GLS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 138° to 520, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 18: Climb heading 179° to 520, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 32: Climb heading 318° to 520, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 36: Climb heading 359° to 520, expect RADAR vectors to DREMR, thence

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)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.

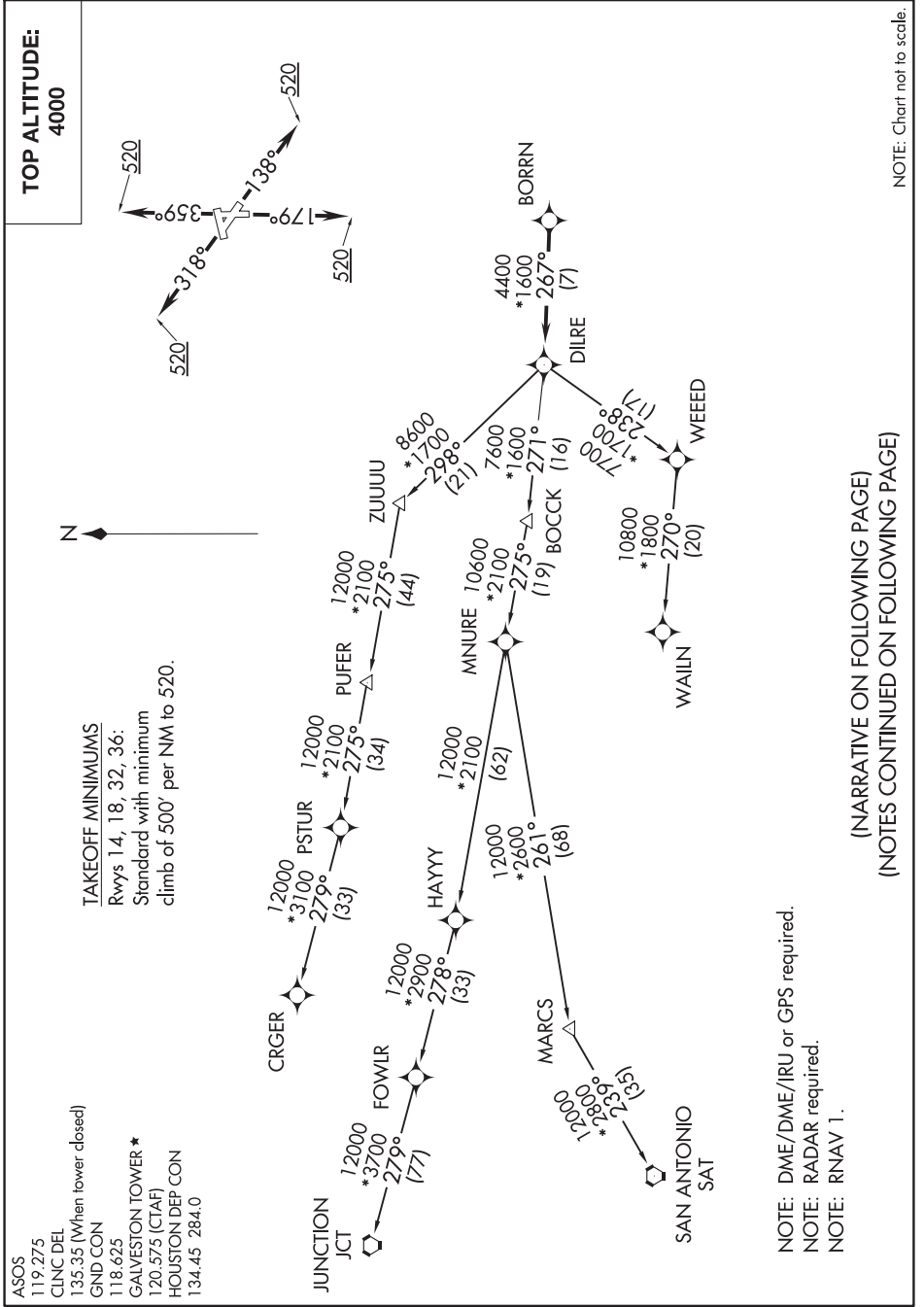
Rwy 36: Bush 419' from DER, 577' left of centerline, 12' AGL/17' MSL.

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.

BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017



NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)

GALVESTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 138° to 520, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 18: Climb on heading 179° to 520, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 32: Climb on heading 318° to 520, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 36: Climb on heading 359° to 520, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

SL-164 (FAA)

GALVESTON, TEXAS

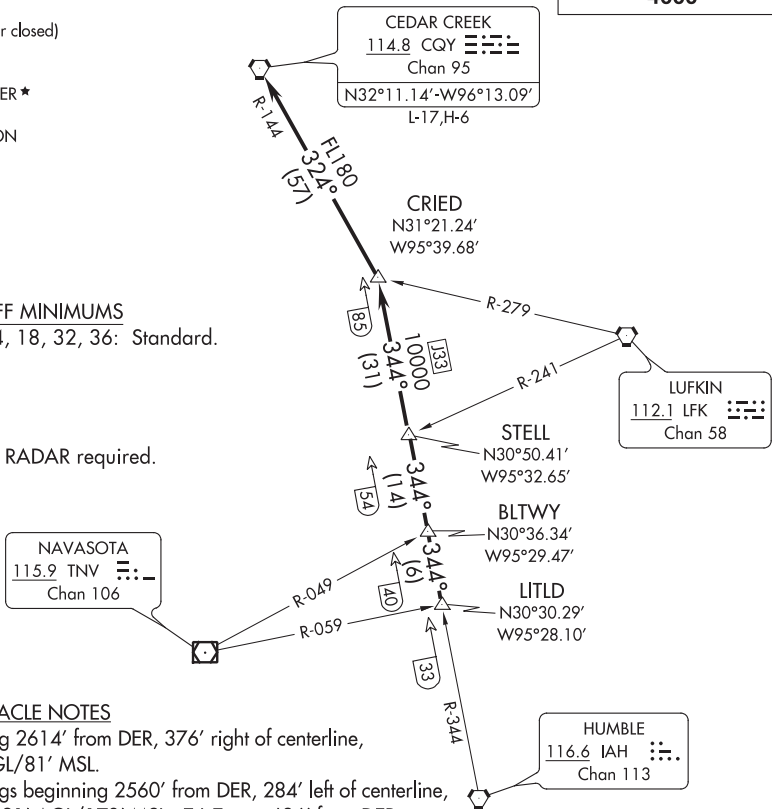
ASOS
 119.275
 CLNC DEL
 135.35 (when tower closed)
 GND CON
 118.625
 GALVESTON TOWER ★
 120.575 (CTAF)
 HOUSTON DEP CON
 134.45 284.0

**TOP ALTITUDE:
 4000**

TAKEOFF MINIMUMS

Rwys 14, 18, 32, 36: Standard.

NOTE: RADAR required.



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.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT, maintain 4000. 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.

CRIED EIGHT DEPARTURE

GALVESTON, TEXAS

SCHOLES INTL AT GALVESTON (GLS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE

ASOS
119.275
CLNC DEL
135.35 (when tower closed)
GND CON
118.625
GALVESTON TOWER ★
120.575
HOUSTON DEP CON
134.45 284.0
CTAF
120.575

**TOP ALTITUDE:
4000**

EL DORADO
115.5 ELD
Chan 102
N33°15.37'-W92°44.64'
L-17, H-6

NOTE: RADAR required.
NOTE: For aircraft destined MEM
or filed via Q32 or J42.

LUFKIN
112.1 LFK
Chan 58

ENJOY
N31°16.73'
W94°19.82'

MUSIQ
N30°33.17'
W94°53.53'

VELCO
N31°10.67'
W94°24.55'
10000

DARTR
N30°24.19'
W95°00.41'

RAECN
N30°05.08'
W95°14.95'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113

TAKEOFF MINIMUMS
Rwys 14, 18, 32, 36: Standard.

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

NOTE: Chart not to scale.

EL DORADO EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE

GALVESTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE

(ELD8.ELD) 10NOV16

GALVESTON, TEXAS

SCHOLES INTL AT GALVESTON (GLS)

GIFFA EIGHT DEPARTURE

SL-164 (FAA)


SCHOLES INTL AT GALVESTON (GLS)

GALVESTON, TEXAS

ASOS
 119.275
 CLNC DEL
 135.35 (when tower closed)
 GND CON
 118.625
 GALVESTON TOWER★
 120.575 (CTAF)
 HOUSTON DEP CON
 134.45 284.0

**TOP ALTITUDE:
 4000**

CEDAR CREEK
 114.8 CQY 
 Chan 95


LEONA
 110.8 LOA 
 Chan 45

GIFFA
 N31°22.89'
 W95°15.10'
 L-19-21, H-6
8500

BUMCO
 N30°38.91'
 W95°18.03'

MONNT
 N30°28.65'
 W95°18.70'
 L19-21, H7

DAISETTA
 116.9 DAS 
 Chan 116

HUMBLE
 116.6 IAH 
 Chan 113

TAKEOFF MINIMUMS:

Rwys 14, 18, 32, 36: Standard.

NOTE: RADAR required.

NOTE: For aircraft destined for the DFW terminal area only.

(NOTES CONTINUED ON FOLLOWING PAGE)

(NARRATIVE ON FOLLOWING PAGE)



NOTE: Chart not to scale.

GIFFA EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

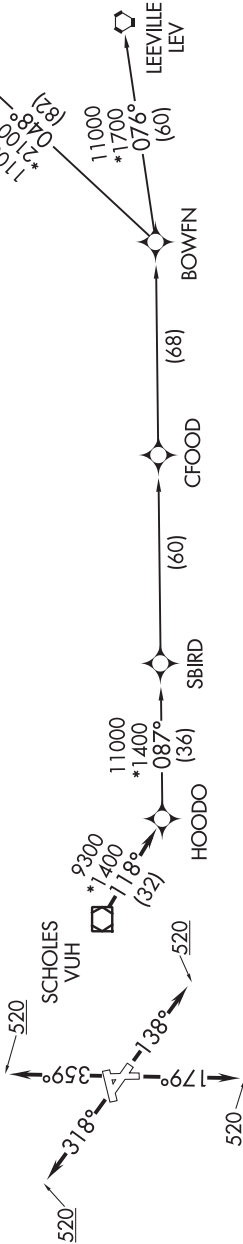
HOODO FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

- ASOS 119.275
- CINC DEL 135.35 (When tower closed)
- GND CON 118.625
- GALVESTON TOWER ★ 120.575 (CTAF)
- HOUSTON DEP CON 134.45 284.0

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

TOP ALTITUDE:
4000



TAKEOFF MINIMUMS

Rwys 14, 18, 32, 36:
Standard with minimum climb of 500' per NM to 520.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb heading 138° to 520, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAY 18: Climb heading 179° to 520, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAY 32: Climb heading 318° to 520, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAY 36: Climb heading 359° to 520, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

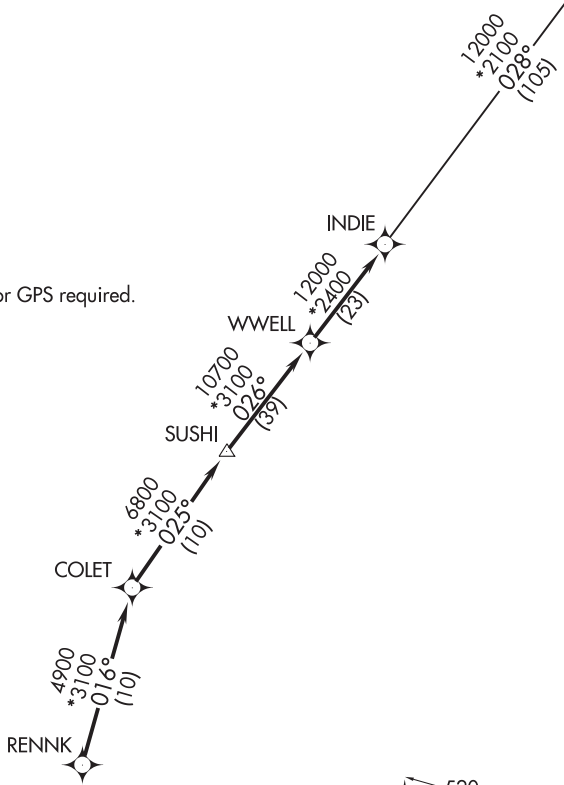
INDIE FOUR DEPARTURE (RNAV) SL-164 (FAA)

SCHOLES INTL AT GALVESTON (GLS)
GALVESTON, TEXAS

ASOS
 119.275
 CLNC DEL
 135.35 (When tower closed)
 GND CON
 118.625
 GALVESTON TOWER *
 120.575 (CTAF)
 HOUSTON DEP CON
 134.45 284.0

**TOP ALTITUDE:
4000**

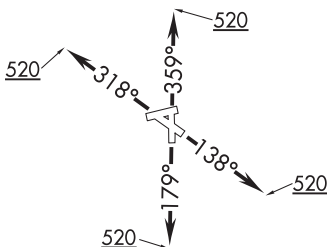
TPAKK



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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



TAKEOFF MINIMUMS

Rwys 14, 18, 32, 36:
 Standard with minimum climb of 500' per NM to 520.

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

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)
 (INDIE4.INDIE) 10NOV16

GALVESTON, TEXAS
 SCHOLES INTL AT GALVESTON (GLS)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 138° to 520, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 18: Climb heading 179° to 520, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 32: Climb heading 318° to 520, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 36: Climb heading 359° to 520, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

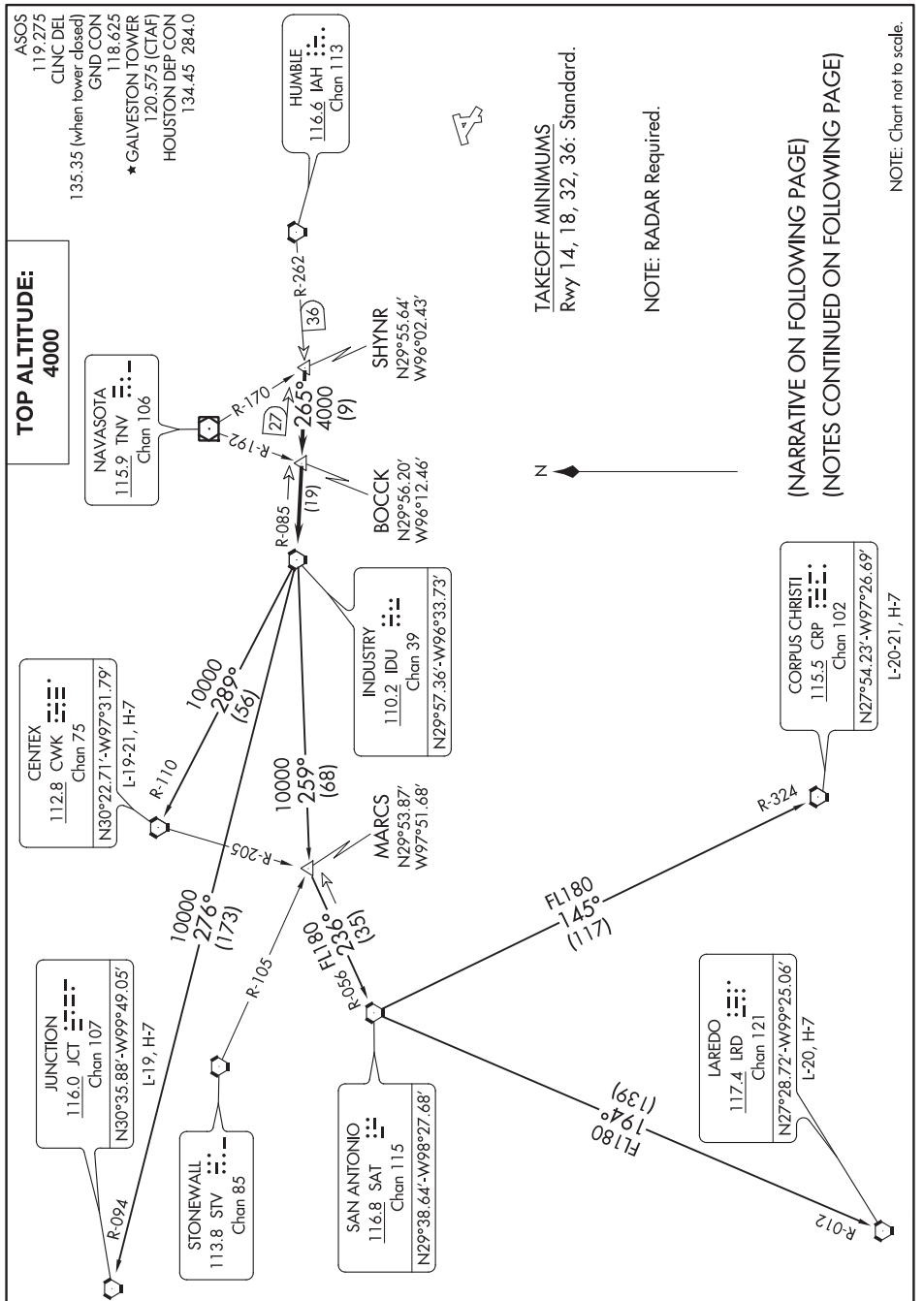
SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SL-164 (FAA)

GALVESTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



INDUSTRY EIGHT DEPARTURE

GALVESTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(KARRR3.KARRR) 15064

KARR THREE DEPARTURE (RNAV) SL-164 (FAA)

SCHOLES INTL AT GALVESTON (GLS)
GALVESTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

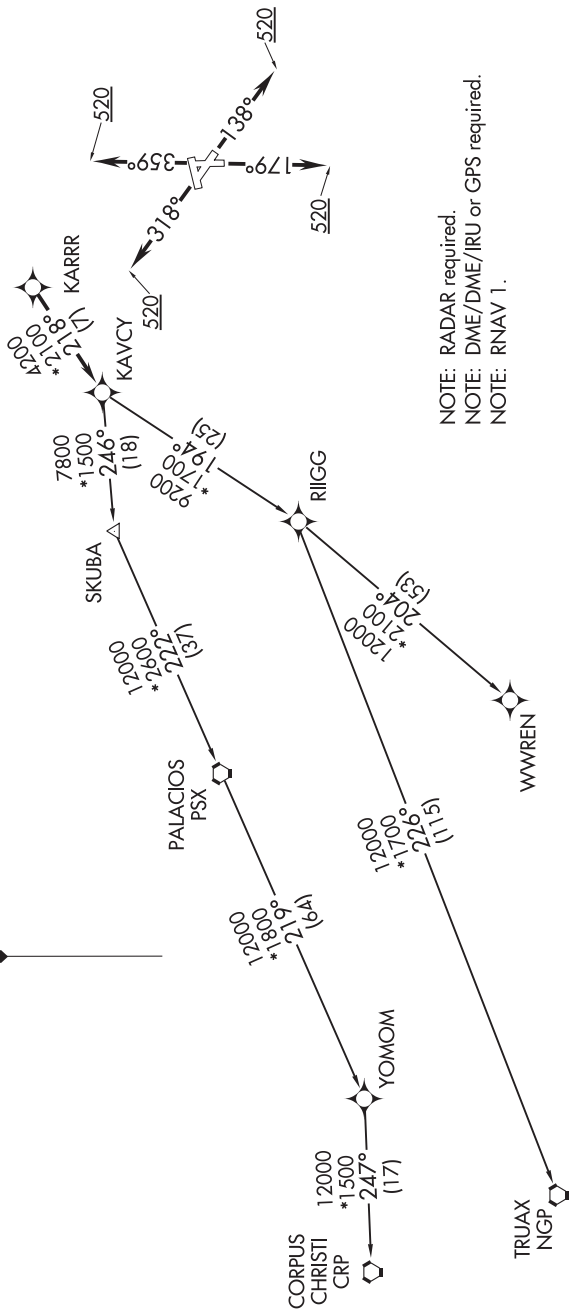
TOP ALTITUDE:
4000

ASOS 119.275
CLNC DEL 135.35 (When tower 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 NMI to 520.



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

(KARRR3.KARRR) 15064

GALVESTON, TEXAS
SCHOLES INTL AT GALVESTON (GLS)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 138° to 520, expect radar vectors to KARRR, thence

TAKEOFF RWY 18: Climb on heading 179° to 520, expect radar vectors to KARRR, thence

TAKEOFF RWY 32: Climb on heading 318° to 520, expect radar vectors to KARRR, thence

TAKEOFF RWY 36: Climb on heading 359° to 520, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEONA TWO DEPARTURE

SL-164 (FAA)

SCHOLLES INTL AT GALVESTON (GLS)

GALVESTON, TEXAS

ASOS

119.275

CLNC DEL

135.35 (When tower closed)

GND CON

118.625

GALVESTON TOWER *

120.575 (CTAF)

HOUSTON DEP CON

134.45 284.0

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'

BONHAM
114.6 BYP
Chan 93
N33°32.25' - W96°14.05'
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°23.08'

CEDAR CREEK
114.8 CQY
Chan 95
N32°11.14' - W96°13.09'

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

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

**TOP ALTITUDE:
4000**

NOTE: RADAR required.
NOTE: Except for aircraft destined
ACT or the DFW terminal area,
all aircraft filing the LOA2 SID
must file one of the published
transitions via FUZ (LOA2.FUZ)
ADM (LOA2.ADM) or
BYP (LOA2.BYP).

NAVASOTA
115.9 TNV
Chan 106

WLLIS
N30°32.08'
W95°39.10'

HUMBLE
116.6 IAH
Chan 113

TAKEOFF MINIMUMS

Rwy 14, 18, 32, 36, Standard.

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

NOTE: Chart not to scale.



LEONA TWO DEPARTURE

(LOA2.LOA) 10NOV16

GALVESTON, TEXAS

SCHOLLES INTL AT GALVESTON (GLS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEONA TWO DEPARTURE

SL-164 (FAA)



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LKF1.LFK) 16315

LUFKIN ONE DEPARTURE

SL-164 (FAA)

SCHOLES INTL AT GALVESTON (GLS)

GALVESTON, TEXAS

ASOS
 119.275
 CLNC DEL
 135.35 (when tower closed)
 GND CON
 118.625
 GALVESTON TOWER ★
 120.575 (CTAF)
 HOUSTON DEP CON
 134.45 284.0

TOP ALTITUDE:
4000

LITTLE ROCK
113.9 LIT
Chan 86
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: RADAR 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

TAKEOFF MINIMUMS
 Rwy 14, 18, 32, 36: Standard.



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

NOTE: Chart not to scale.

LUFKIN ONE DEPARTURE

(LKF1.LFK) 10NOV16

GALVESTON, TEXAS

SCHOLES INTL AT GALVESTON (GLS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

212
SL-164 (FAA)

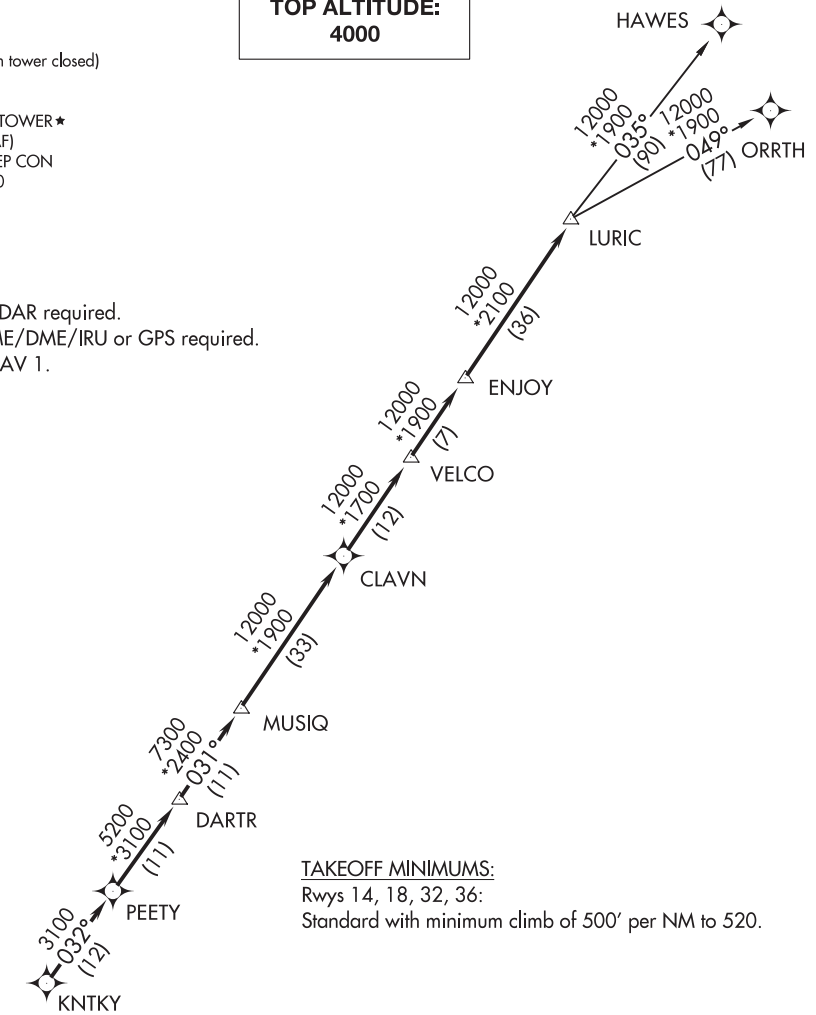
SCHOLES INTL AT GALVESTON (GLS)
GALVESTON, TEXAS

LURIC FOUR DEPARTURE (RNAV)

ASOS
119.275
CLNC DEL
135.35 (When tower closed)
GND CON
118.625
GALVESTON TOWER ★
120.575 (CTAF)
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)
(LURIC4.LURIC) 10NOV16

GALVESTON, TEXAS
SCHOLES INTL AT GALVESTON (GLS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 138° to 520, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 18: Climb heading 179° to 520, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 32: Climb heading 318° to 520, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 36: Climb heading 359° to 520, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(MMALT2.MMALT) 15008

SCHOLES INTL AT GALVESTON (GLS)

MMALT TWO DEPARTURE (RNAV)

SL-164 (FAA)

GALVESTON, TEXAS

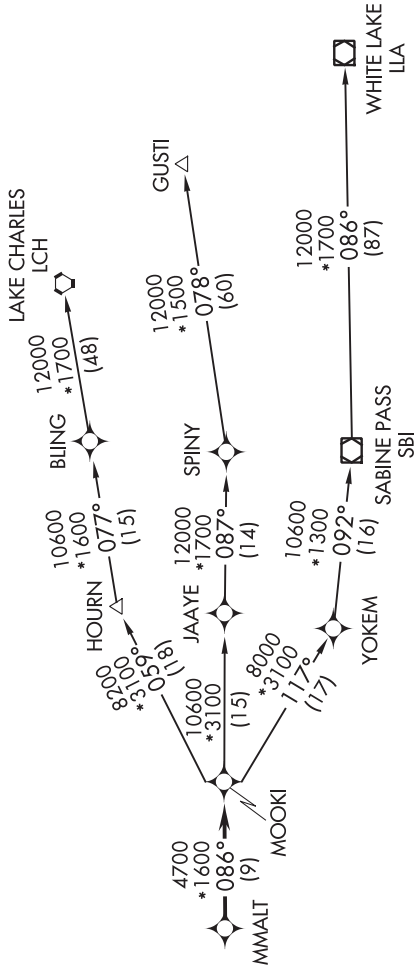
2102 NAV 01 9102 VON 10 10 'S-CS

- ASOS 119.275
- CLNC DEL 135.35 (When tower closed)
- GND CON 118.625
- GALVESTON TOWER * 120.575 (CTAF)
- HOUSTON DEP CON 134.45 284.0

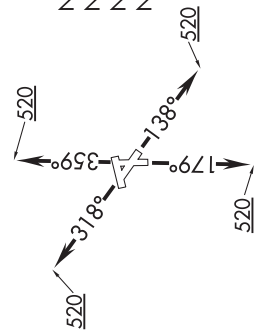


TAKEOFF MINIMUMS:
 Rwy's 14, 18, 32, 36:
 Standard with minimum
 climb of 500' per NM to 520.

**TOP ALTITUDE:
4000**



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, IBX, LVJ, SGR, TME, T00, T41 and 54T.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

(MMALT2.MMALT) 15008

GALVESTON, TEXAS

SCHOLES INTL AT GALVESTON (GLS)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 138° to 520, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 18: Climb on heading 179° to 520, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 32: Climb on heading 318° to 520, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 36: Climb on heading 359° to 520, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

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.

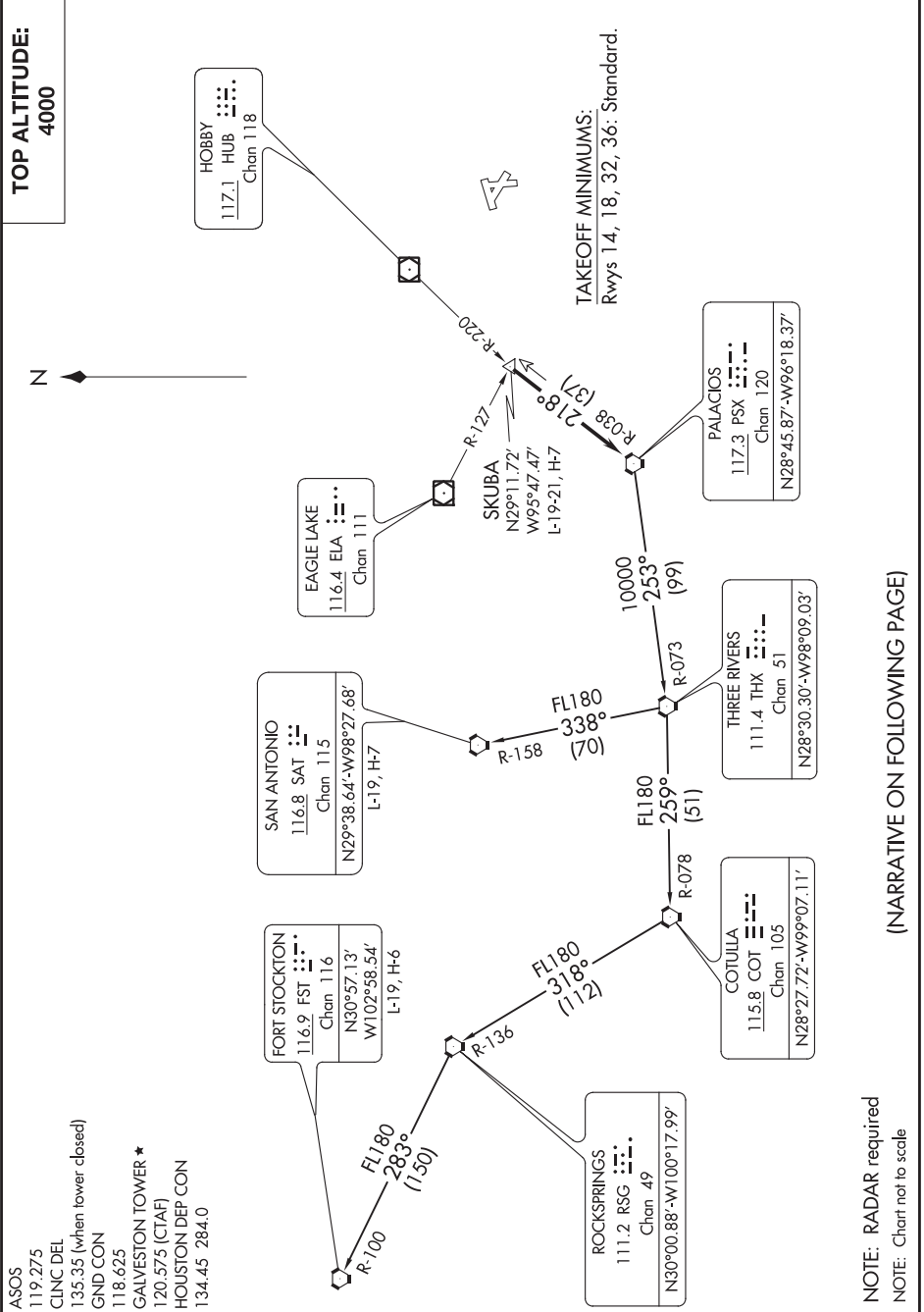
Trees beginning 713' from DER, 383' right of centerline, up to 27' AGL/32' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

PALACIOS EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required
NOTE: Chart not to scale

SC-5, 10 NOV 2016 to 05 JAN 2017

PALACIOS EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(STRYA4.STRYA) 16315

STRYA FOUR DEPARTURE (RNAV)

218

SL-164 (FAA)

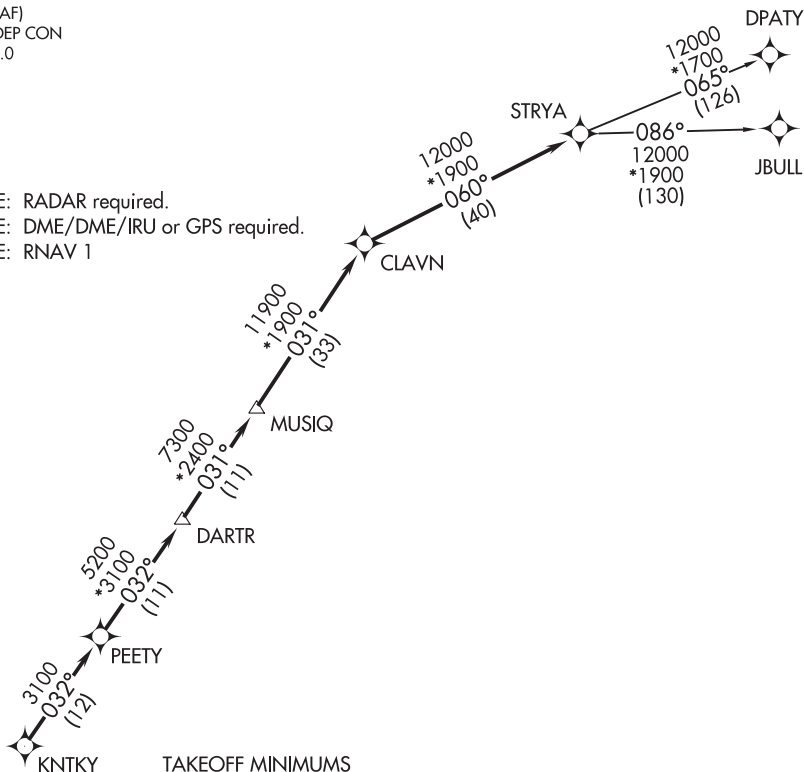
SCHOLES INTL AT GALVESTON (GLS)

GALVESTON, TEXAS

ASOS
 119.275
 CLNC DEL
 135.35 (When tower closed)
 GND CON
 118.625
 GALVESTON TOWER *
 120.575 (CTAF)
 HOUSTON DEP CON
 134.45 284.0

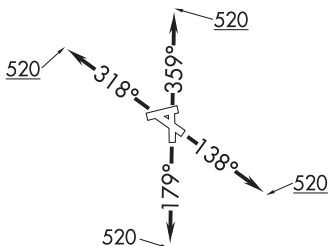
**TOP ALTITUDE:
 4000**

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.



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

NOTE: Chart not to scale.

STRYA FOUR DEPARTURE (RNAV)

(STRYA4.STRYA) 10NOV16

SCHOLES INTL AT GALVESTON (GLS)
 GALVESTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 138° to 520, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 18: Climb heading 179° to 520, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 32: Climb heading 318° to 520, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 36: Climb heading 359° to 520, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

ASOS
119.275
CLNC DEL
135.35 (When tower 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.

NOTE: RADAR required.

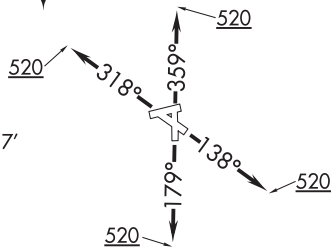
NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

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.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 138° to 520, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 18: Climb heading 179° to 520, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 32: Climb heading 318° to 520, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 36: Climb heading 359° to 520, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

(NGP6.NGP) 16315

TRUAX SIX DEPARTURE

SL-164 (FAA)

SCHOLES INTL AT GALVESTON (GLS)
GALVESTON, TEXAS

ASOS
119.275
CLNC DEL
135.35 (when tower closed)
GND CON
118.625
GALVESTON TOWER★
120.575 (CTAF)
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

HOBBY
117.1 HUB
Chan 118

EAGLE LAKE
116.4 ELA
Chan 111

SCHOLES
113.0 VUH
Chan 77

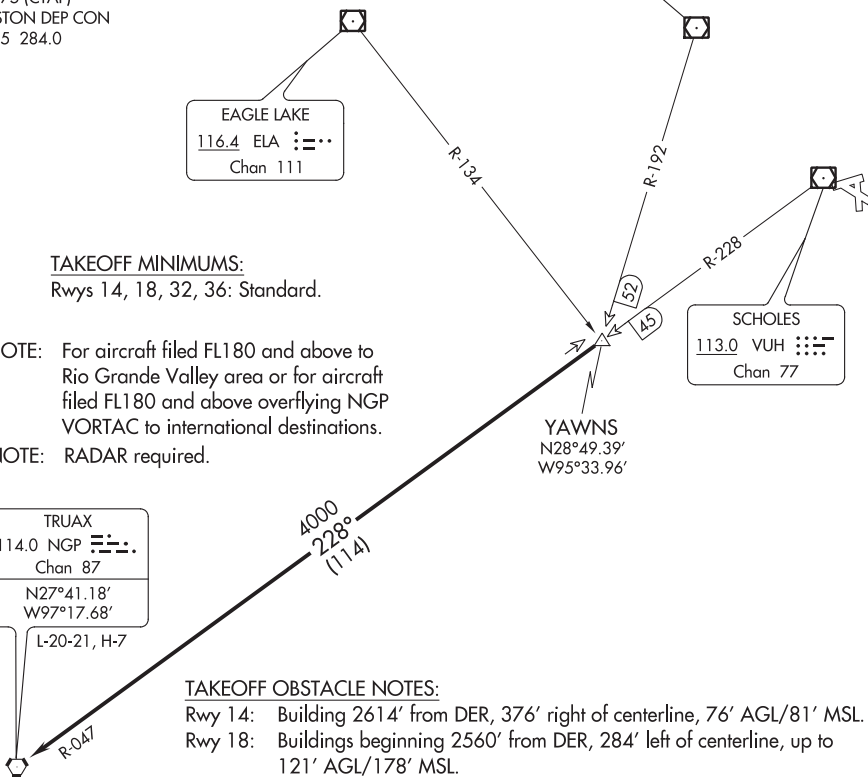
TAKEOFF MINIMUMS:
Rwys 14, 18, 32, 36: Standard.

NOTE: For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP VORTAC to international destinations.

NOTE: RADAR required.

TRUAX
114.0 NGP
Chan 87
N27°41.18'
W97°17.68'
L-20-21, H-7

YAWNS
N28°49.39'
W95°33.96'



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.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION
When entering controlled airspace, climb on assigned heading for RADAR vectors to YAWNS INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .
. . . .on VUH R-228 and NGP R-047 to NGP VORTAC.

TRUAX SIX DEPARTURE
(NGP6.NGP) 10NOV16

GALVESTON, TEXAS
SCHOLES INTL AT GALVESTON (GLS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(WATFO3.WATFO) 16259

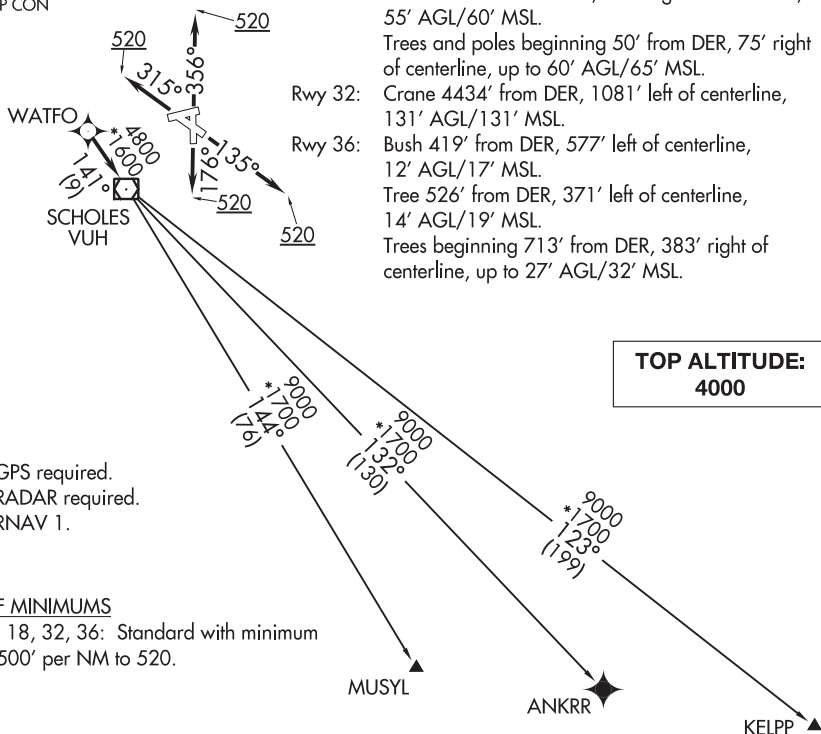
SCHOLES INTL AT GALVESTON (GLS)
GALVESTON, TEXAS

WATFO THREE DEPARTURE (RNAV) SL-164 (FAA)

ASOS
119.275
CLNC DEL
135.35 (when tower closed)
GND CON
118.625
GALVESTON TOWER ★
120.575 (CTAF)
HOUSTON DEP CON
134.45 284.0

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.
- Rwy 32: Trees and poles beginning 50' from DER, 75' right of centerline, up to 60' AGL/65' MSL.
- Rwy 36: 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.



NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS

Rwys 14, 18, 32, 36: Standard with minimum climb of 500' per NM to 520.

**TOP ALTITUDE:
4000**

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

- TAKEOFF RWY 14: Climb on heading 135° to 520, expect RADAR vectors to WATFO, thence . . .
- TAKEOFF RWY 18: Climb on heading 176° to 520, expect RADAR vectors to WATFO, thence . . .
- TAKEOFF RWY 32: Climb on heading 315° to 520, expect RADAR vectors to WATFO, thence . . .
- TAKEOFF RWY 36: Climb on heading 356° to 520, expect RADAR vectors to WATFO, thence . . .

. . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

- ANKRR TRANSITION (WATFO3.ANKRR):
- KELPP TRANSITION (WATFO3.KELPP):
- MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)
(WATFO3.WATFO) 15SEP16

GALVESTON, TEXAS
SCHOLES INTL AT GALVESTON (GLS)

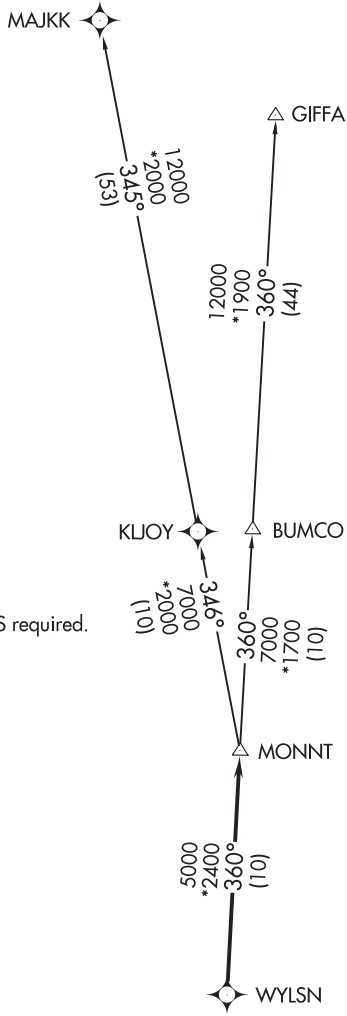
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

ASOS
 119.275
 CLNC DEL
 135.35 (When tower closed)
 GND CON
 118.625
 GALVESTON TOWER ★
 120.575 (CTAF)
 HOUSTON DEP CON
 134.45 284.0

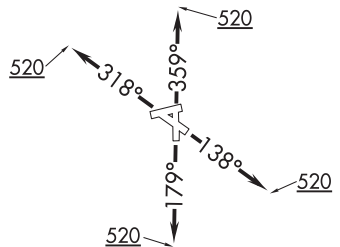
**TOP ALTITUDE:
 4000**



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.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

WYLSN FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 138° to 520, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 18: Climb on heading 179° to 520, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 32: Climb on heading 318° to 520, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 36: Climb on heading 359° to 520, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJJK)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS 168°	Rwy Idg 4000
	TDZE 484
	Apt Elev 484

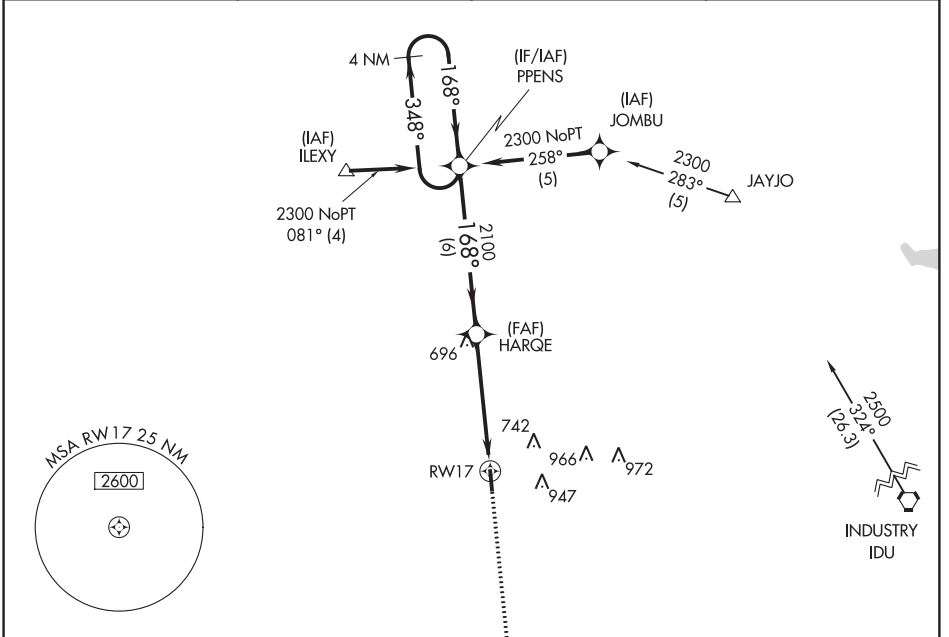
RNAV (GPS) RWY 17

GIDDINGS-LEE COUNTY (GYB)

⚠ DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.
⚠ Procedure NA at night. When local altimeter setting not received, use Austin-Bergstrom Intl altimeter setting and increase all MDA 100 feet; increase LNAV Cat C visibility ¼ mile.

MISSED APPROACH:
 Climb to 2500 direct RAMOS and hold.

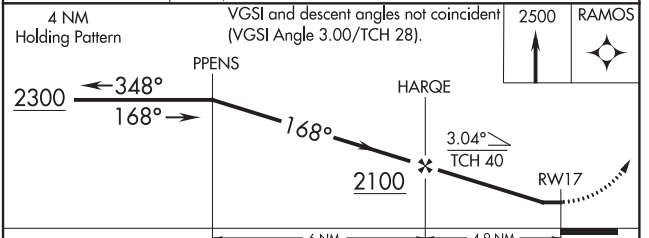
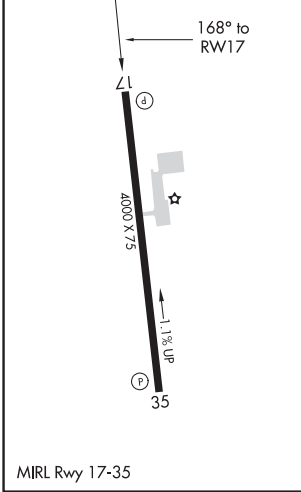
AWOS-3 119.225	AUSTIN APP CON 127.225 317.65	UNICOM 123.05 (CTAF)
---------------------------------	--	---------------------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 484	TDZE 484
-----------------	-----------------



CATEGORY	A	B	C	D
LNAV MDA	940-1	456 (500-1)	940-1¼ 456 (500-1¼)	NA
CIRCLING	940-1	456 (500-1)	940-1½ 456 (500-1½)	NA

APP CRS 348°	Rwy Idg 4000
	TDZE 473
	Apt Elev 484

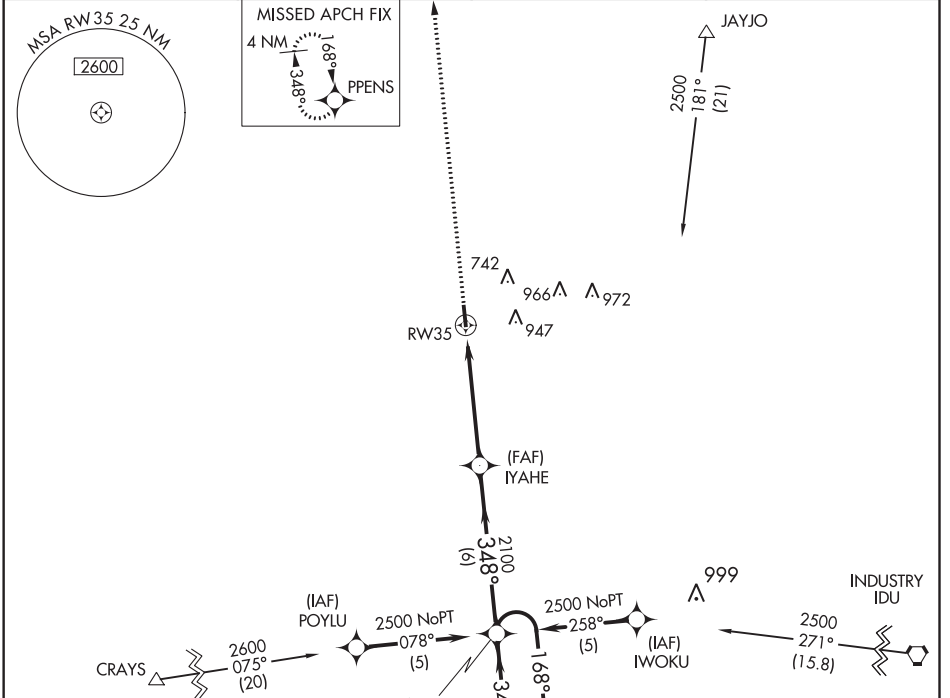
RNAV (GPS) RWY 35

GIDDINGS-LEE COUNTY (GYB)

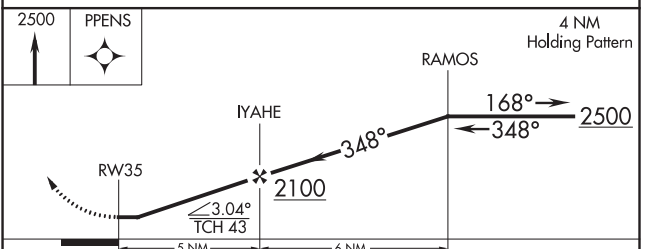
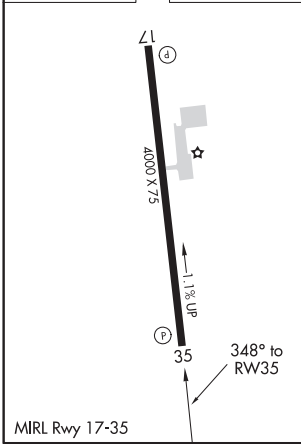
⚠ DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Austin-Bergstrom Intl altimeter setting and increase all MDA 100 feet; increase LNAV Cat C visibility ¼ mile.

⚠ MISSED APPROACH: Climb to 2500 direct PPENS and hold.

AWOS-3 119.225	AUSTIN APP CON 127.225 317.65	UNICOM 123.05 (CTAF)
--------------------------	---	--------------------------------



ELEV 484	TDZE 473
----------	----------



CATEGORY	A	B	C	D
LNAV MDA	960-1	487 (500-1)	960-1¼ 487 (500-1¼)	NA
CIRCLING	960-1	476 (500-1)	960-1½ 476 (500-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

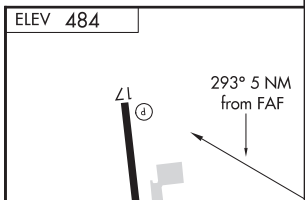
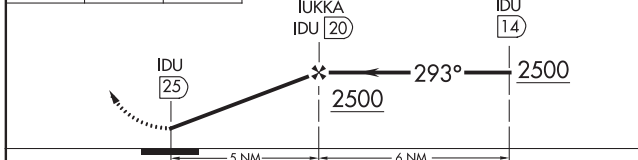
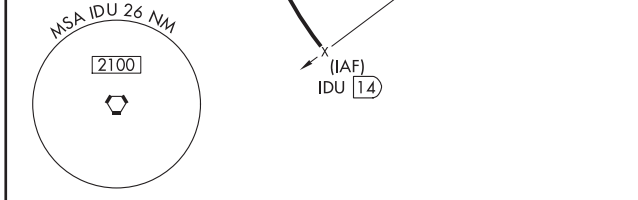
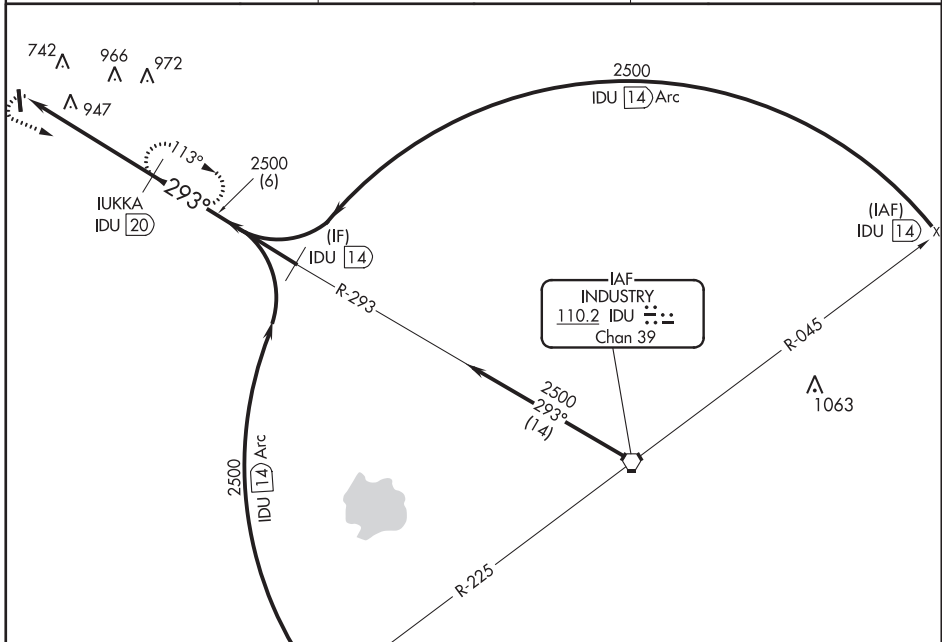
VORTAC IDU 110.2 Chan 39	APP CRS 293°	Rwy Idg TDZE Apt Elev N/A N/A 484
--	------------------------	---

VOR/DME-A
GIDDINGS-LEE COUNTY (GYB)

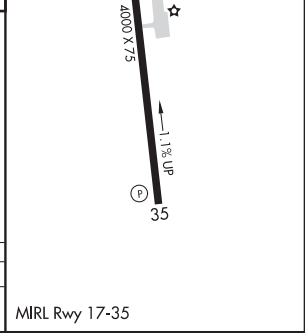
Procedure NA at night. Helicopter visibility reduction below 1 SM NA. Use Austin-Bergstrom altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 via IDU R-293 to IUKKA 20 DME and hold.

AWOS-3 119.225	AUSTIN APP CON 127.225 317.65	UNICOM 123.05 (CTAF)
--------------------------	---	--------------------------------



CATEGORY	A	B	C	D
CIRCLING	1300-1 816 (900-1)	1300-1¼ 816 (900-1¼)	1300-2½ 816 (900-2½)	NA



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 50522 W18A	APP CRS 178°	Rwy Idg TDZE Apt Elev	4001 285 285
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 18

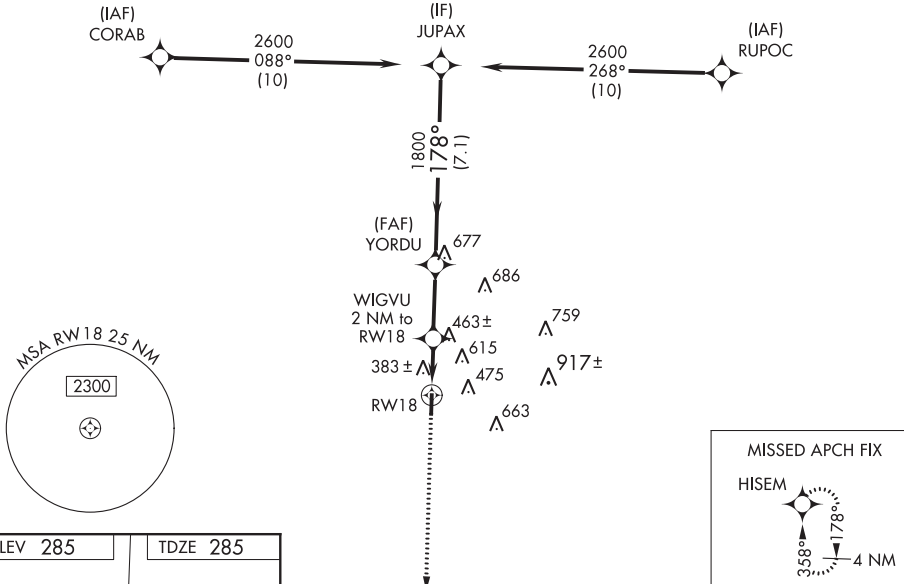
HEARNE MUNI (LHB)

⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use College Station altimeter setting and increase all DA 55 feet and all MDA 60 feet. Increase LPV and LNAV/VNAV all Cats visibility ½ mile. Increase LNAV and Circling Cat C visibility ½ mile. Baro-VNAV and VDP NA when using College Station altimeter setting.

MISSED APPROACH: Climb to 2100 direct HISEM and hold.

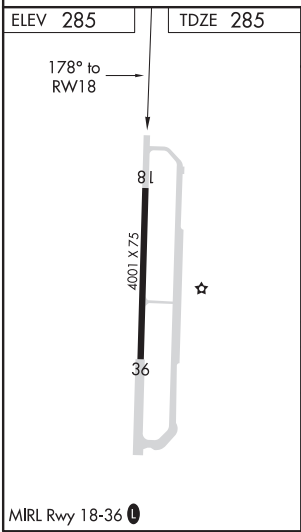
AWOS-3 118.675	HOUSTON APP CON 134.3 360.85	CTAF 122.9	123.3 0
--------------------------	--	----------------------	----------------

RADAR REQUIRED



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



ELEV 285	TDZE 285				
2100	HISEM				
* LNAV only		WIGVU 2 NM to RW18	YORDU 1800	JUPAX 2600	
* 1.4 NM to RW18		* 960		178°	
1.4 0.6 NM		2.6 NM		7.1 NM	
CATEGORY	A	B	C	D	
LPV DA	485-¾		200 (200-¾)		NA
LNAV/VNAV DA	569-1		284 (300-1)		NA
LNAV MDA	780-1	495 (500-1)		780-1¾ 495 (500-1¾)	
CIRCLING	800-1 515 (600-1)	880-1 595 (600-1)	920-1¾ 635 (700-1¾)		NA

WAAS CH 87122 W36A	APP CRS 358°	Rwy Idg TDZE Apt Elev	4001 284 285
--	------------------------	-----------------------------	---

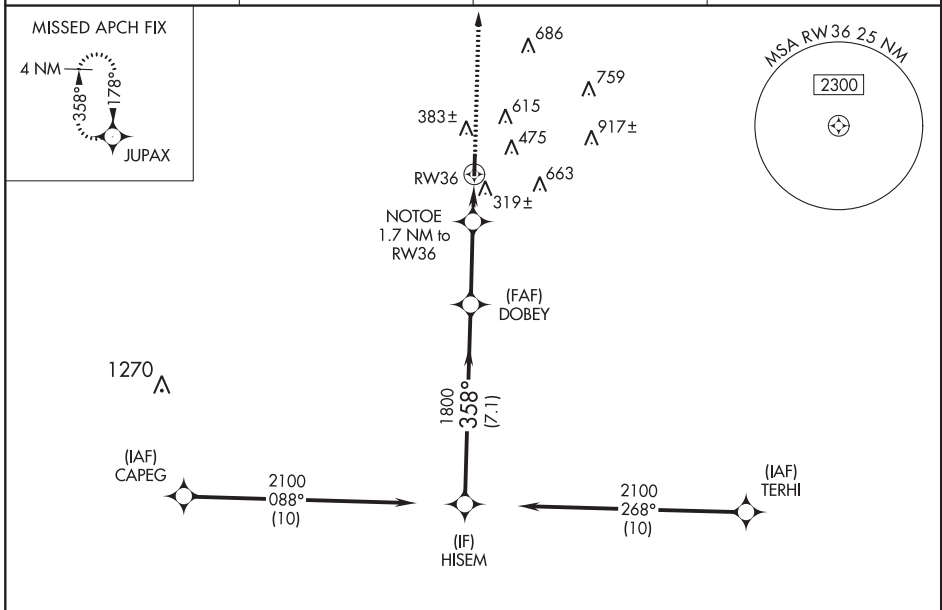
RNAV (GPS) RWY 36

HEARNE MUNI (LHB)

⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use 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 1/8 mile. Increase Circling Cat C visibility 1/4 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 Ⓛ
--------------------------	--	----------------------	-----------------------



ELEV 285	TDZE 284
-----------------	-----------------

RADAR REQUIRED

2600

JUPAX

HISEM

NOTE

1.7 NM to RW36

DOBEY

1800

358°

2100

*LNAV only.

*0.8 NM to RW36

*860

1800

GS 3.00° TCH 40

0.8 NM 0.9 NM 3 NM 7.1 NM

CATEGORY	A	B	C	D
LPV DA	484- ³ / ₄	200 (200- ³ / ₄)		NA
LNAV/VNAV DA	534- ⁷ / ₈	250 (300- ⁷ / ₈)		NA
LNAV MDA	580-1	296 (300-1)	580- ⁷ / ₈ 296 (300- ⁷ / ₈)	NA
CIRCLING	800-1 515 (600-1)	880-1 595 (600-1)	920- ¹ / ₄ 635 (700- ¹ / ₄)	NA

81

4001 X 75

36

358° to RW36

MIRL Rwy 18-36 **Ⓛ**

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5457 (FAA)

16315

APP CRS	Rwy Idg	6002
168°	TDZE	152
	Apt Elev	152

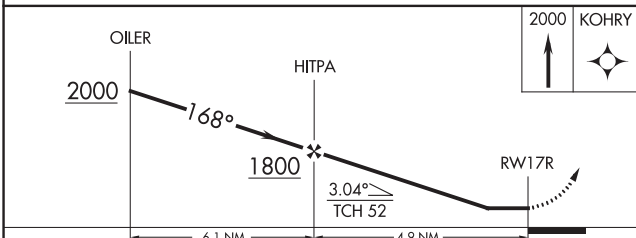
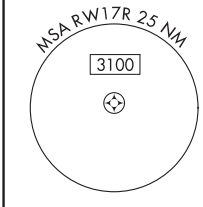
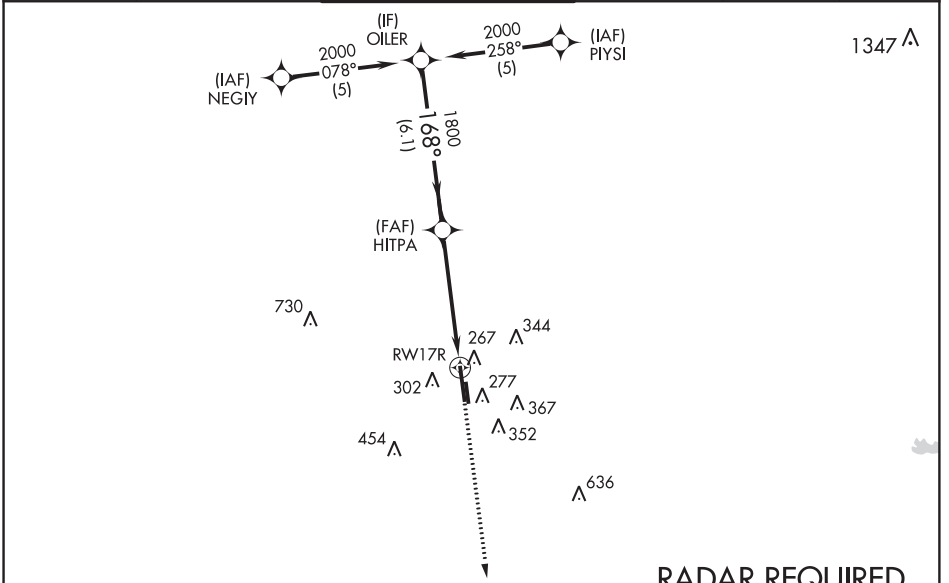
RNAV (GPS) RWY 17R

DAVID WAYNE HOOKS MEMORIAL (DWH)

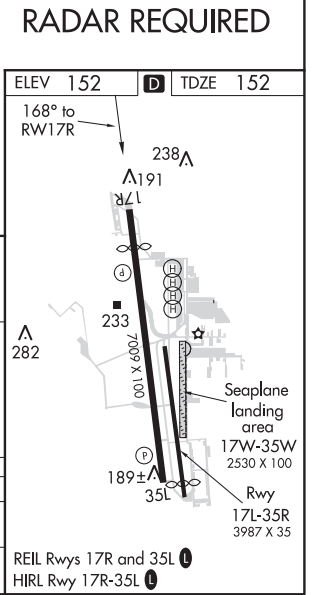
▽ DME/DME RNP-0.3 NA. Night landing: Rwy 35R NA. When local altimeter setting not received, use George Bush Intercontinental/Houston altimeter setting and increase all MDA 40 feet and LNAV Cat C/D visibility 1/8 mile. Helicopter visibility reduction below 1 SM NA.

▲ MISSED APPROACH: Climb to 2000 direct KOHRY and hold.

ATIS 128.375	HOUSTON APP CON 119.7 281.4	HOOKS TOWER* 127.4 354.1 EAST 118.4 (CTAF) 0 354.1 WEST	GND CON 121.8 239.0	CLNC DEL 119.45	UNICOM 122.95
------------------------	---------------------------------------	---	-------------------------------	---------------------------	-------------------------



CATEGORY	A	B	C	D
LNAV MDA	640-1	488 (500-1)	640-1 3/8	488 (500-1 3/8)
C CIRCLING	640-1 488 (500-1)	660-1 508 (600-1)	660-1 1/2 508 (600-1 1/2)	760-2 608 (700-2)



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS
Amdt 1D 02APR15

30°04'N-95°33'W

DAVID WAYNE HOOKS MEMORIAL (DWH)

RNAV (GPS) RWY 17R

WAAS CH 45603 W35A	APP CRS 348°	Rwy ldg 6700 TDZE 152 Apt Elev 152
---------------------------------	------------------------	---

RNAV (GPS) RWY 35L

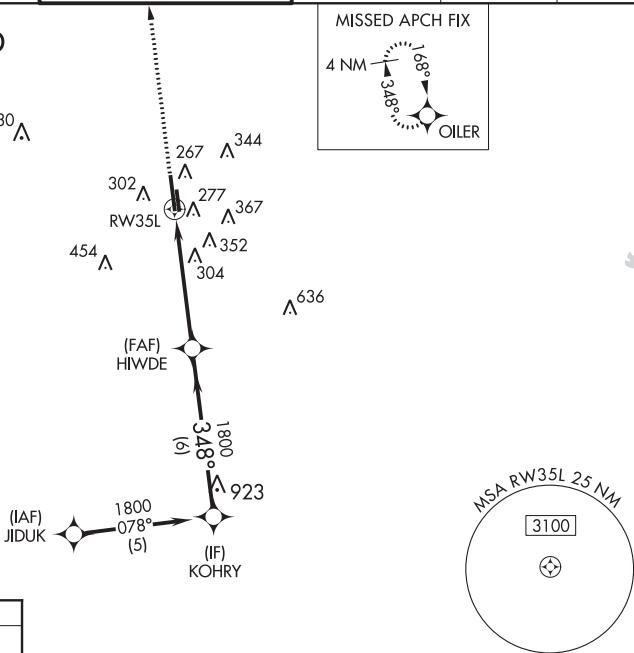
DAVID WAYNE HOOKS MEMORIAL (DWH)

⚠ Baro-VNAV NA when using George Bush Intercontinental/Houston altimeter setting. 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. When local altimeter setting not received, use George Bush Intercontinental/Houston altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LPV and LNAV/VNAV visibility all Cats 1/8 mile, LNAV visibility Cats C/D 1/4 mile. Helicopter visibility reduction below 3/4 SM NA. Night landing: Rwy 35R NA.

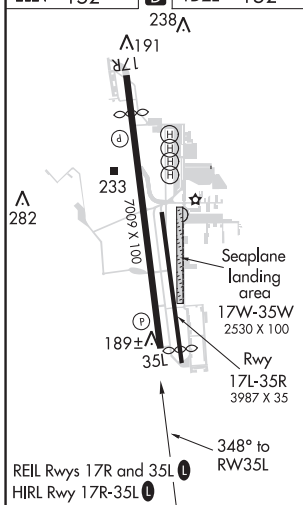
MISSED APPROACH:
Climb to 2000 direct OILER and hold.

ATIS 128.375	HOUSTON APP CON 119.7 281.4	HOOKS TOWER* 127.4 354.1 (EAST) 118.4 (CTAF) 0 354.1 (WEST)	GND CON 121.8 239.0	CLNC DEL 119.45	UNICOM 122.95
------------------------	---------------------------------------	--	-------------------------------	---------------------------	-------------------------

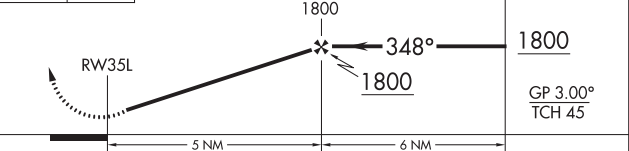
RADAR REQUIRED



ELEV 152	D	TDZE 152
----------	----------	----------



2000 OILER VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 41).



CATEGORY	A	B	C	D
LPV DA		451-1	299 (300-1)	
LNAV/ VNAV DA		552-1 3/8	400 (400-1 1/8)	
LNAV MDA	560-1	408 (500-1)	560-1 1/8	408 (500-1 1/8)
C CIRCLING	640-1 488 (500-1)	660-1 508 (600-1)	660-1 1/2 508 (600-1 1/2)	760-2 608 (700-2)

HOUSTON, TEXAS

AL-5457 (FAA)

16315

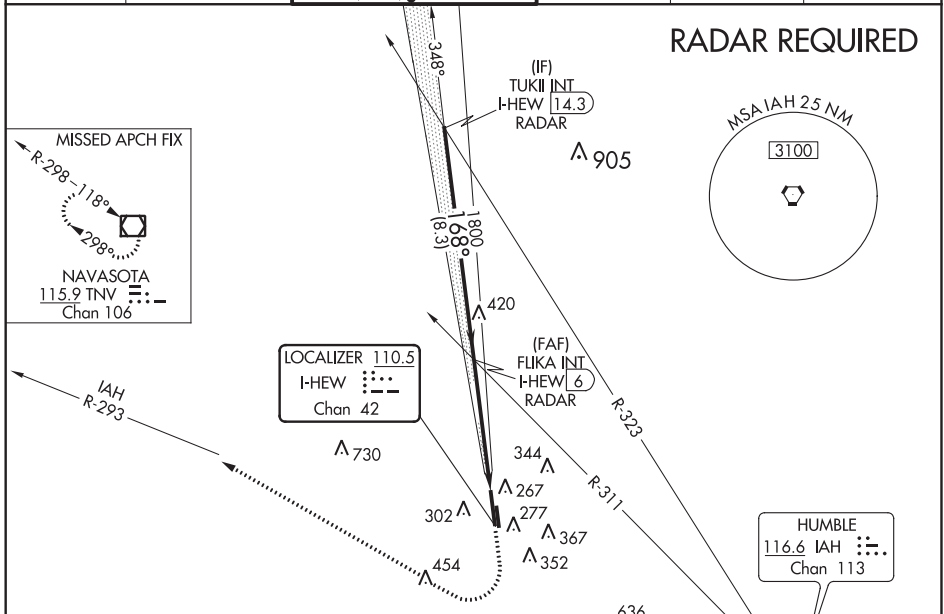
LOC/DME I-HEW 110.5 Chan 42	APP CRS 168°	Rwy Idg TDZE Apt Elev	6002 152 152
---	------------------------	-----------------------------	---

LOC RWY 17R
DAVID WAYNE HOOKS MEMORIAL (DWH)

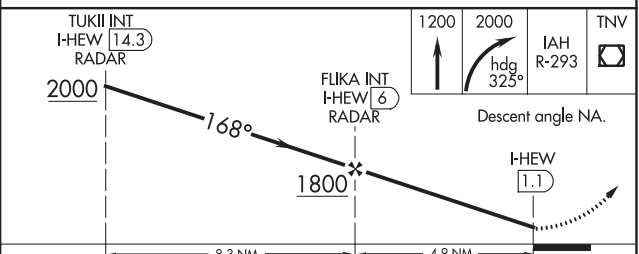
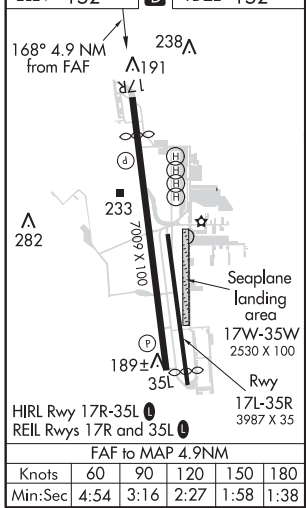
When local altimeter setting not received, use George Bush Intercontinental/Houston altimeter setting and increase all MDA 40 feet; increase S-LOC 17R Cats C/D visibility 1/8 mile. Helicopter visibility reduction below 1 SM NA. Night landing: Rwy 35R NA.

MISSED APPROACH: Climb to 1200 then climbing right turn to 2000 on heading 325° and IAH VORTAC R-293 to TNV VOR/DME and hold.

ATIS 128.375	HOUSTON APP CON 119.7 281.4	HOOKS TOWER* 127.4 354.1 EAST 118.4 (CTAF) 354.1 WEST	GND CON 121.8 239.0	CLNC DEL 119.45	UNICOM 122.95
------------------------	---------------------------------------	---	-------------------------------	---------------------------	-------------------------



ELEV 152	D	TDZE 152
----------	----------	----------



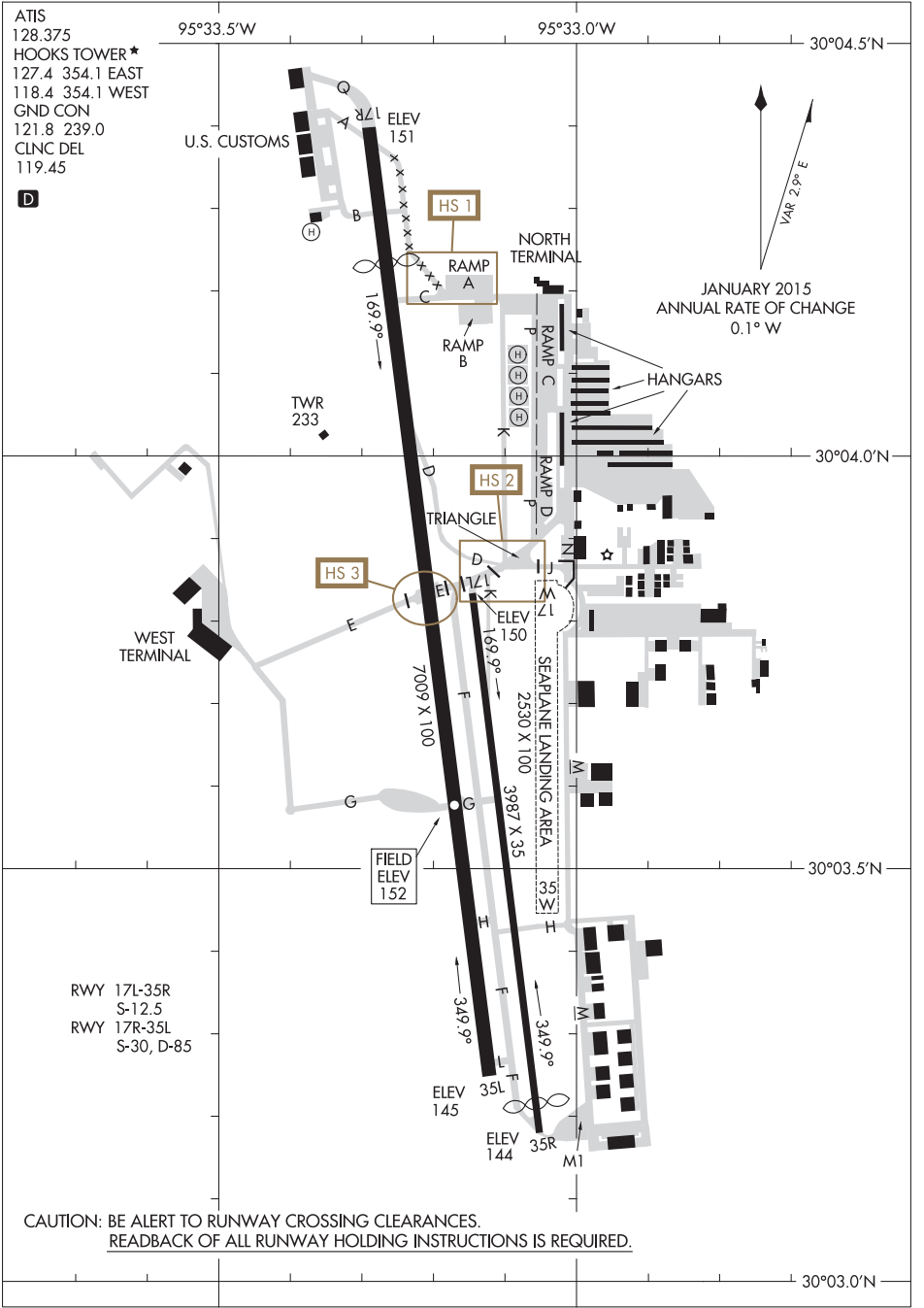
CATEGORY	A	B	C	D
S-LOC 17R	640-1	488 (500-1)	640-1 3/8	488 (500-1 3/8)
C CIRCLING	640-1 488 (500-1)	660-1 508 (600-1)	660-1 1/2 508 (600-1 1/2)	760-2 608 (700-2)

HOUSTON, TEXAS
Amdt 3C 10NOV16

DAVID WAYNE HOOKS MEMORIAL (DWH)
LOC RWY 17R
30°04'N-95°33'W

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

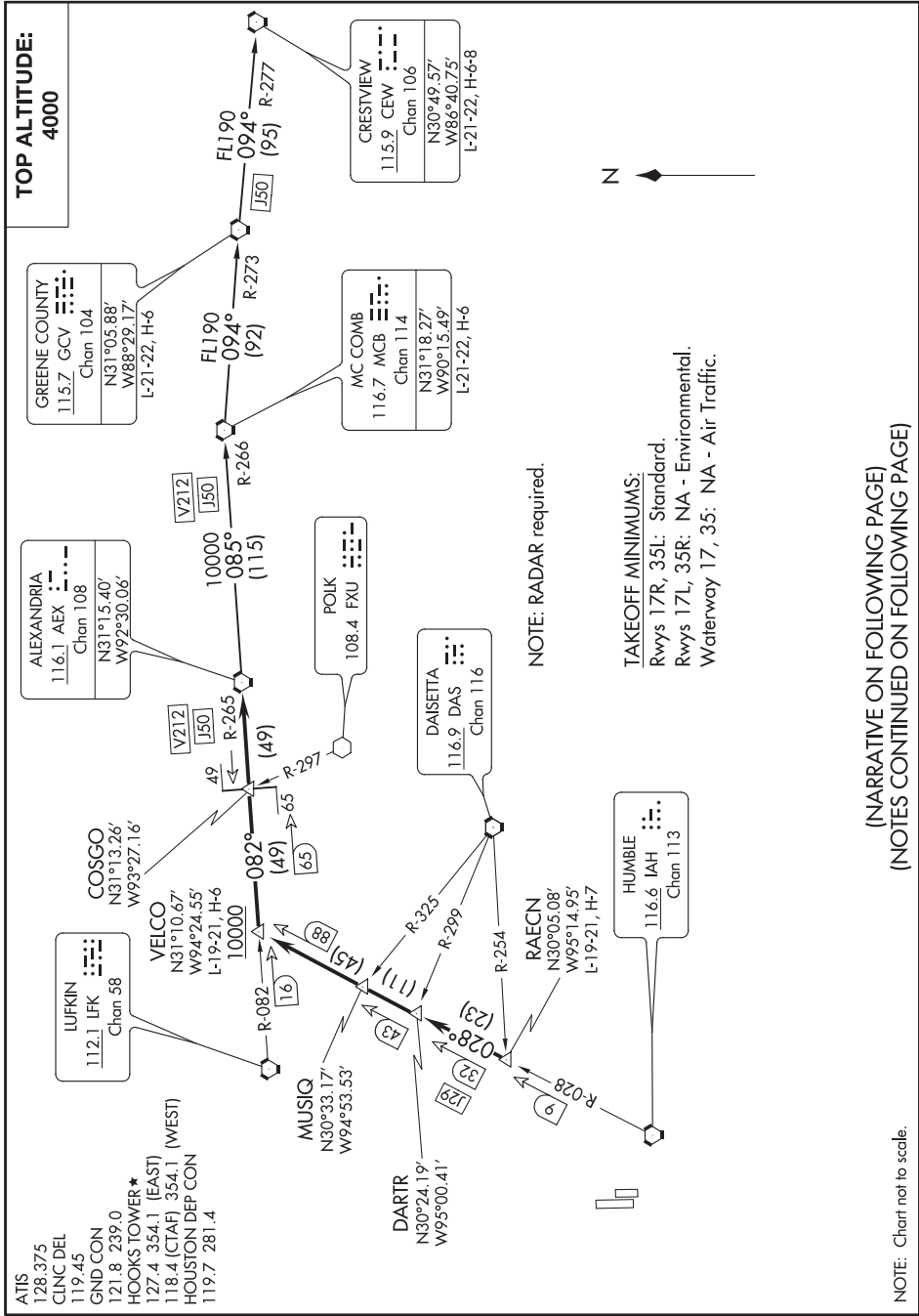


SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



ATIS 128.375
 CINC DEL 119.45
 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

ALEXANDRIA NINE DEPARTURE

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

SC-5, 10 NOV 2016 to 05 JAN 2017

NOTE: Chart not to scale.

NOTE: RADAR required.

TAKEOFF MINIMUMS:
 Rwy 17R, 35L: Standard.
 Rwy 17L, 35R: NA - Environmental.
 Waterway 17, 35: NA - Air Traffic.

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

TAKEOFF OBSTACLE NOTES

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL. Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL. DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL. Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL. Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL. Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL. Vehicle on road 315' from DER, on centerline, 15' AGL/166' MSL. Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

DAVID WAYNE HOOKS MEMORIAL (DWH)

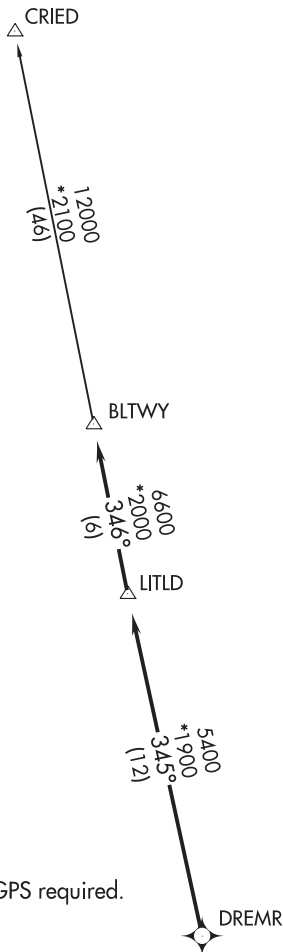
BLTWY THREE DEPARTURE (RNAV)

SL-5457 (FAA)

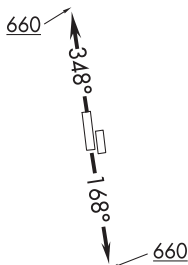
HOUSTON, TEXAS

ATIS
 128.375
 CLNC DEL
 119.45
 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

**TOP ALTITUDE:
4000**



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



TAKEOFF MINIMUMS

Rwy 17L, 35R: NA - Environmental.
 Waterway 17, 35: NA - Air Traffic.
 Rwys 17R, 35L: Standard with minimum climb of 500' per NM to 660.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)

HOUSTON, TEXAS

(BLTWY3.BLTWY) 10NOV16

DAVID WAYNE HOOKS MEMORIAL (DWH)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb heading 168° to 660, expect RADAR vectors to DREMR, thence

TAKEOFF RWYS 35L: Climb heading 348° to 660, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

TAKEOFF OBSTACLE NOTES

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL.

Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.

DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.

Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.

Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.

Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.

Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL.

Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

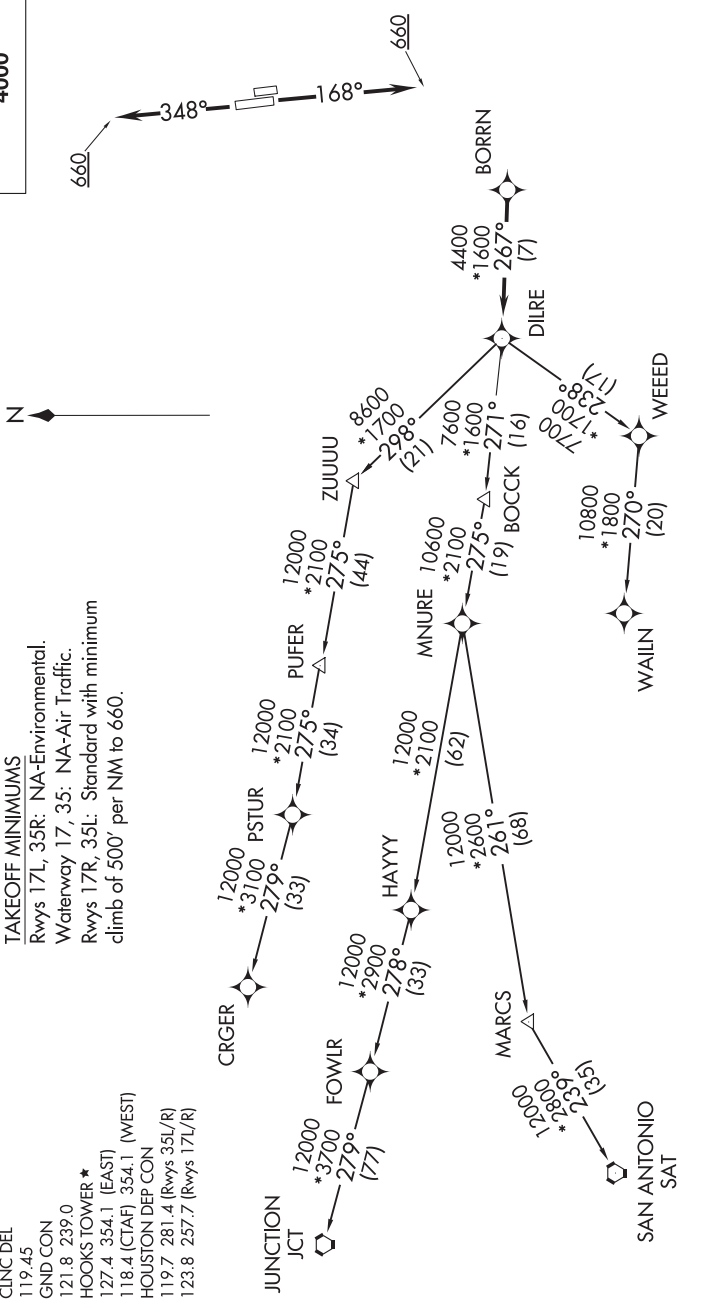
SC-5, 10 NOV 2016 to 05 JAN 2017

- ATIS 128.375
- CLNC DEL 119.45
- 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)

TAKEOFF MINIMUMS

Rwys 17L, 35R: NA-Environmental.
 Waterway 17, 35: NA-Air Traffic.
 Rwys 17R, 35L: Standard with minimum
 climb of 500' per NM to 660.

TOP ALTITUDE:
4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb on heading 168° to 660, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 35L: Climb on heading 348° to 660, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

TAKEOFF OBSTACLE NOTES

- Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL. Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL. DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL. Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.
- Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL. Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL. Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL. Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL. Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

SL-5457 (FAA)

HOUSTON, TEXAS

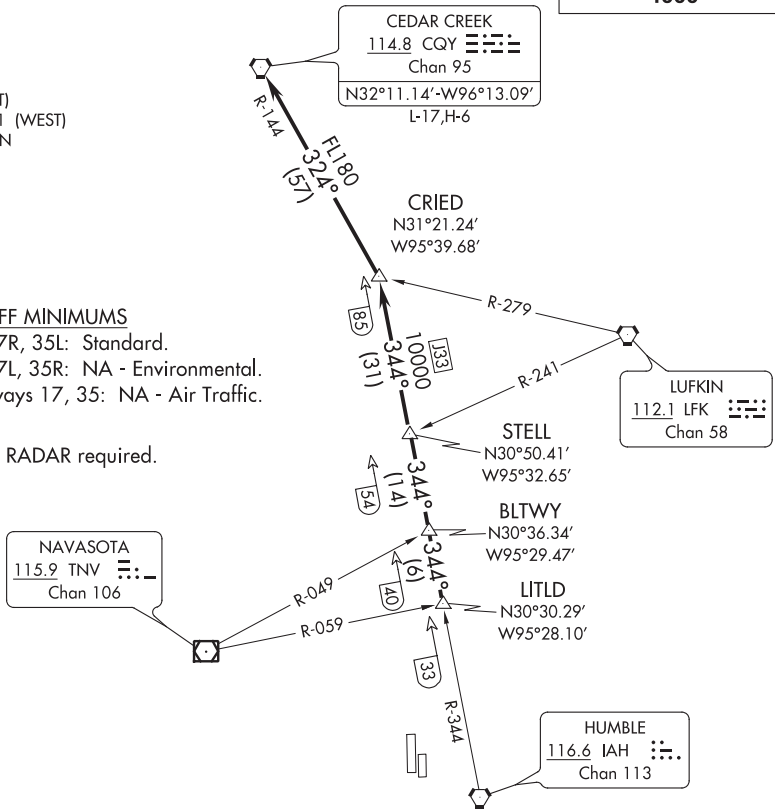
**TOP ALTITUDE:
4000**

ATIS
128.375
CLNC DEL
119.45
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

TAKEOFF MINIMUMS

Rwys 17R, 35L: Standard.
Rwys 17L, 35R: NA - Environmental.
Waterways 17, 35: NA - Air Traffic.

NOTE: RADAR required.



TAKEOFF OBSTACLE NOTES

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/ 220' MSL. Multiple hangars beginning 433' from DER, 51.5' left of centerline, up to 37' AGL/182' MSL. DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL. Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/ 238' MSL. Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL. Multiple trees, towers and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL. Vehicle and road 315' from DER, on centerline 15' AGL/166' MSL. Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT, maintain 4000. 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.

CRIED EIGHT DEPARTURE

(CRIED8.CRIED) 10NOV16

HOUSTON, TEXAS

DAVID WAYNE HOOKS MEMORIAL (DWH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE

ATIS
 128.375
 CLNC DEL
 119.45
 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

**TOP ALTITUDE:
 4000**

EL DORADO
 115.5 ELD
 Chan 102
 N33°15.37'-W92°44.64'
 L-17, H-6

NOTE: RADAR required.
 NOTE: For aircraft destined MEM
 or filed via Q32 or J42.

LUFKIN
 112.1 LFK
 Chan 58

ENJOY
 N31°16.73'
 W94°19.82'

MUSIQ
 N30°33.17'
 W94°53.53'

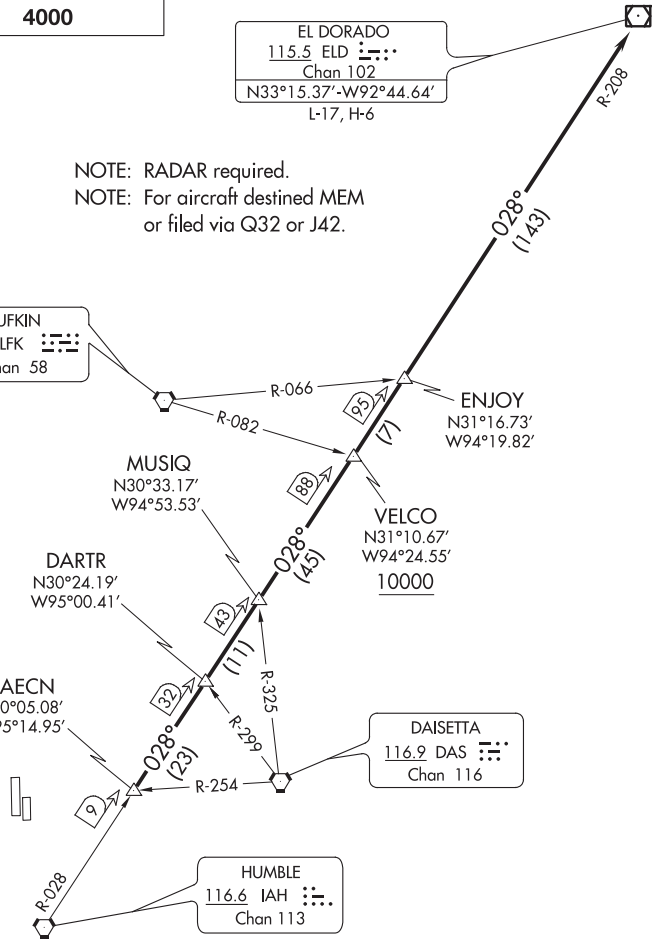
VELCO
 N31°10.67'
 W94°24.55'
 10000

DARTR
 N30°24.19'
 W95°00.41'

RAECN
 N30°05.08'
 W95°14.95'

DAISETTA
 116.9 DAS
 Chan 116

HUMBLE
 116.6 IAH
 Chan 113



TAKEOFF MINIMUMS:
 Rwy 17R, 35L: Standard.
 Rwy 17L, 35R NA - environmental.
 Waterway 17, 35 NA - air traffic.

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

NOTE: Chart not to scale.

EL DORADO EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

TAKEOFF OBSTACLE NOTES

- Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/ 220' MSL.
 Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.
 DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.
 Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.
- Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.
 Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.
 Multiple trees, tower and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.
 Vehicle on road 315' from DER, on centerline, 15' AGL/166' MSL.
 Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

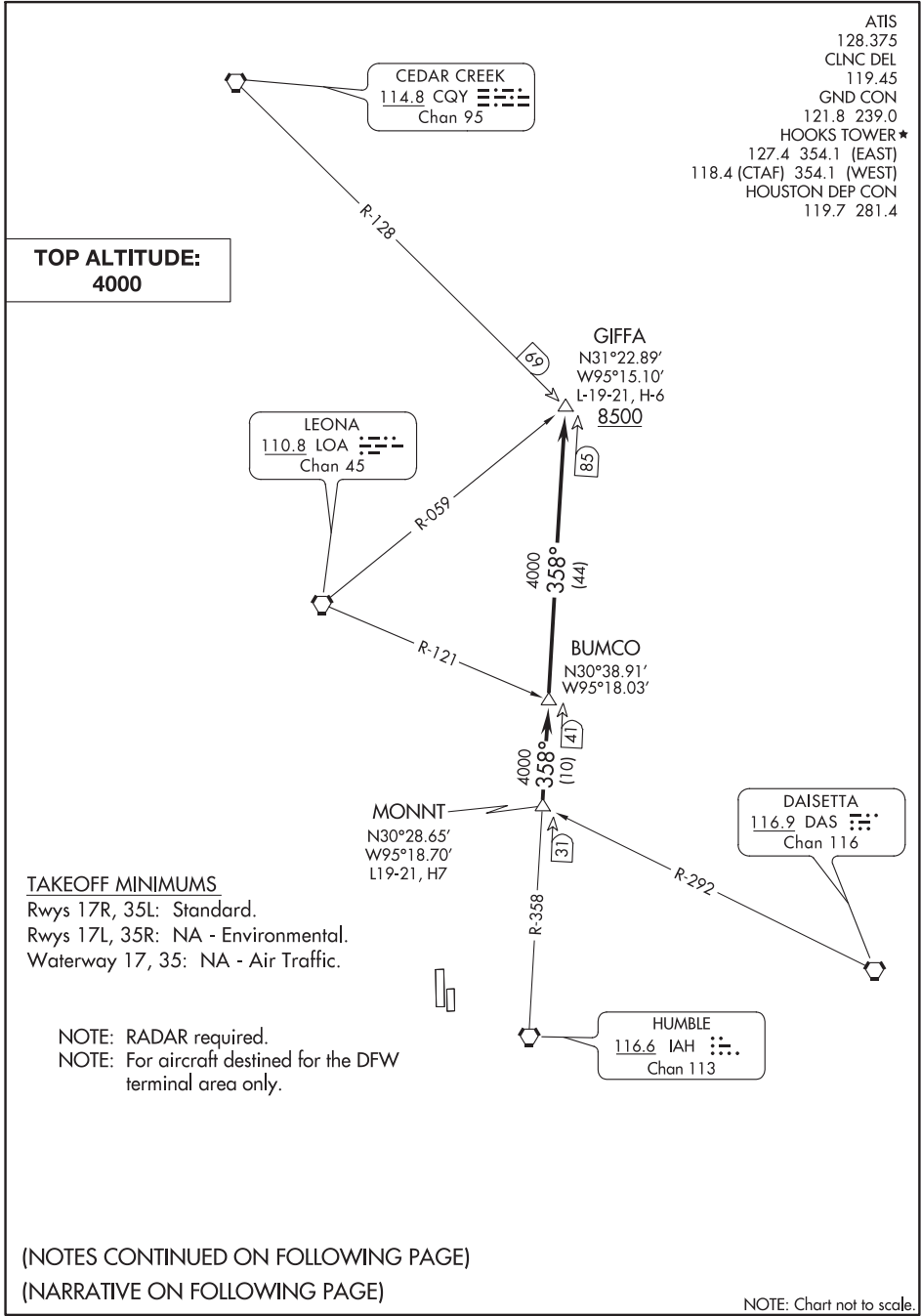
SC-5, 10 NOV 2016 to 05 JAN 2017

GIFFA EIGHT DEPARTURE

SL-5457 (FAA)

HOUSTON, TEXAS

- ATIS 128.375
- CLNC DEL 119.45
- 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



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

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

NOTE: Chart not to scale.

GIFFA EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

TAKEOFF OBSTACLE NOTES

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/ 220' MSL.

Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.

DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.

Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.

Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.

Multiple trees, tower and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.

Vehicle and road 315' from DER, on centerline 15' AGL/166' MSL.

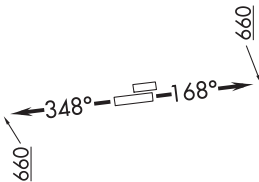
Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

- ATIS 128.375
- CLINIC DEL 119.45
- 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)

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

TOP ALTITUDE: 4000



SCHOLES VUH



HOODO

11000
*1400

087°

(36)

SBIRD

(60)

CFOOD

(68)

BOWFN

11000
*1700

076°

(60)

LEEVILLE LEV

11000
*1000

048°

(82)

HARVEY HRV

TAKEOFF MINIMUMS

Rwys 17R, 35L: Standard with minimum climb of 500' per NM to 600.

Rwys 17L, 35R: NA - Environmental

Waterway 17, 35: NA - Air Traffic

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb heading 168° to 660, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 35L: Climb heading 348° to 660, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL.

Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.

DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.

Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.

Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.

Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.

Vehicle on road 315' from DER, on centerline, 15' AGL/166' MSL.

Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

(INDIE4.INDIE) 16315

SL-5457 (FAA)

DAVID WAYNE HOOKS MEMORIAL (DWH)

INDIE FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

ATIS
 128.375
 CLNC DEL
 119.45
 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

**TOP ALTITUDE:
4000**

TPAKK

12000
 *2100
 0238°
 (105)

INDIE

12000
 *2400
 (23)

WWELL

10700
 *3100
 0235°
 (39)

SUSHI

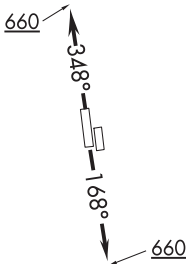
6800
 *3100
 0235°
 (110)

COLET

4900
 *3100
 0216°
 (110)

RENNK

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



TAKEOFF MINIMUMS

Rwy 17L, 35R: NA - Environmental.

Waterway 17, 35: NA - Air Traffic.

Rwys 17R, 35L: Standard with minimum climb of 500' per NM to 660.

(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

(INDIE4.INDIE) 10NOV16

DAVID WAYNE HOOKS MEMORIAL (DWH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb heading 168° to 660, expect RADAR vectors to RENNK, thence

TAKEOFF RWYS 35L: Climb heading 348° to 660, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF OBSTACLE NOTES

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL.

Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.

DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.

Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.

Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.

Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.

Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL.

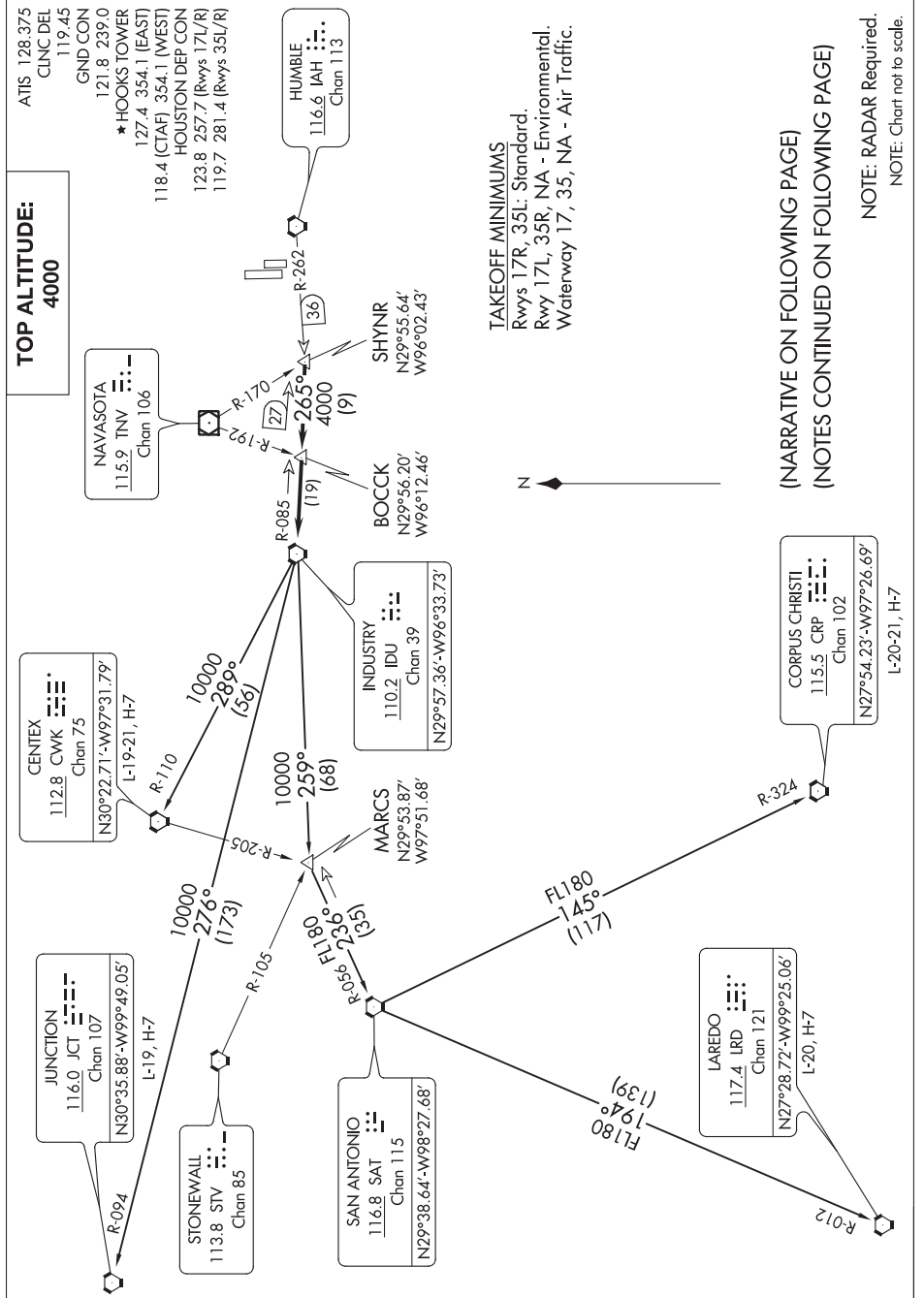
Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



INDUSTRY EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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 OBSTACLE NOTES

- Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL. Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL. DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL. Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.
- Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL. Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL. Multiple trees, towers and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL. Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL. Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

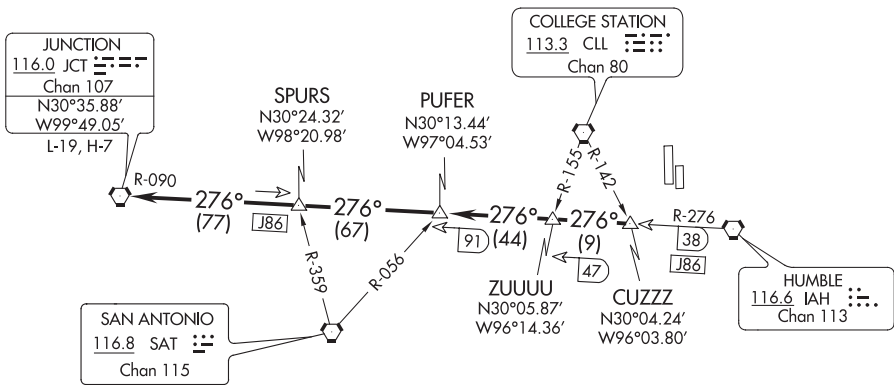
JUNCTION NINE DEPARTURE

**TOP ALTITUDE:
4000**

ATIS
128.375
CLNC DEL
119.45
GND CON
121.8 239.0
HOOKS TOWER ★
127.4 354.1 (EAST)
118.4 354.1 (WEST)
HOUSTON DEP CON
123.8 257.7 (Rwys 17L/R)
119.7 281.4 (Rwys 35L/R)

TAKEOFF MINIMUMS

Rwys 17R, 35L: Standard.
Rwys 17L, 35R: NA - Environmental.
Waterway 17, 35: NA - Air Traffic.



NOTE: RADAR required.

NOTE: For aircraft overflying JCT VORTAC via J86 filing FL240 or above.

TAKEOFF OBSTACLE NOTES

- Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL. Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL. DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL. Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.
- Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL. Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL. Multiple trees, tower and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL. Vehicle and road 315' from DER, on centerline 15' AGL/166' MSL. Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to CUZZZ INT. Maintain 4000. Expect filed altitude 10 minutes after departure, thence . . .

. . . via IAH R-276 and JCT R-090 to JCT VORTAC.

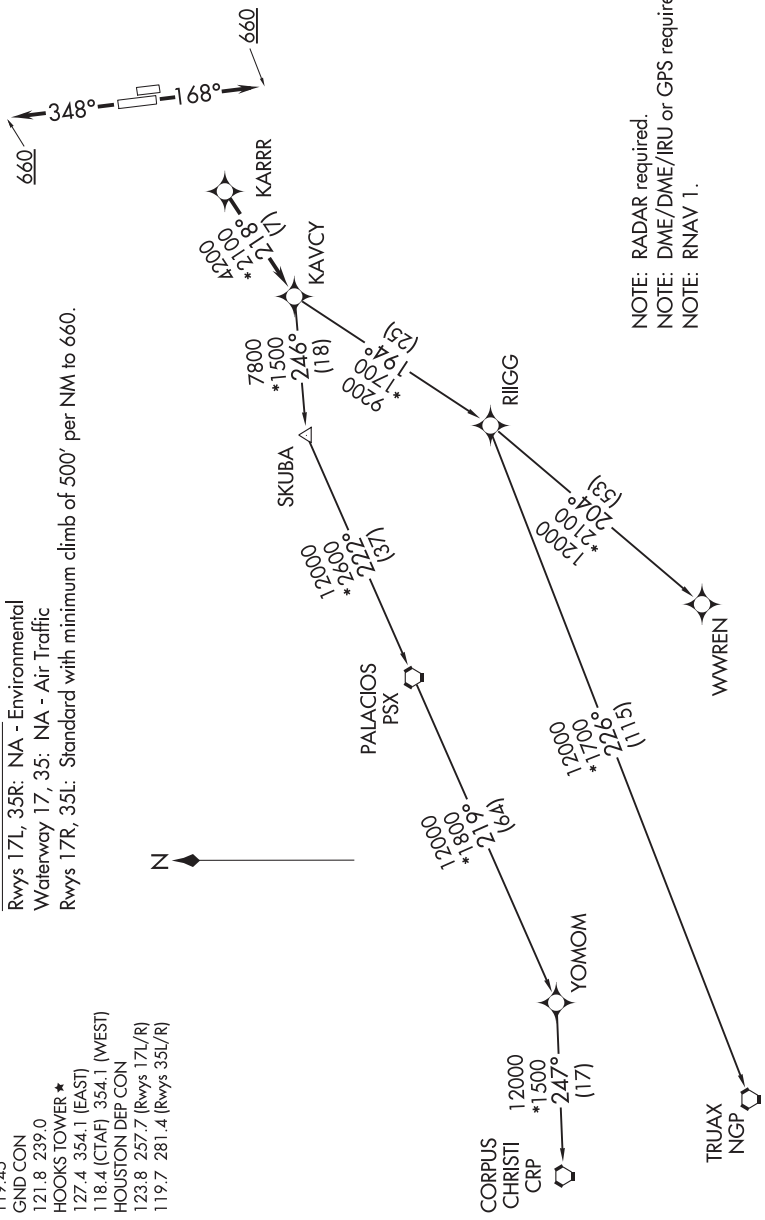
JUNCTION NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

TOP ALTITUDE:
4000



TAKEOFF MINIMUMS
 Rwys 17L, 35R: NA - Environmental
 Waterway 17, 35: NA - Air Traffic
 Rwys 17R, 35L: Standard with minimum climb of 500' per NM to 660.

- ATIS 128.375
- CINC DEL 119.45
- GND CON 121.8 239.0
- HOOKS TOWER * 127.4 354.1 (EAST)
- 118.4 (CTAF) 354.1 (WEST)
- HOUSTON DEP CON 123.8 257.7 (Rwys 17L/R)
- 119.7 281.4 (Rwys 35L/R)

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

NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb on heading 168° to 660, expect radar vectors to KARRR, thence

TAKEOFF RWY 35L: Climb on heading 348° to 660, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

TAKEOFF OBSTACLE NOTES:

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL.

Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.

DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.

Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.

Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.

Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.

Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL.

Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LCH4.LCH) 15344

LAKE CHARLES FOUR DEPARTURE SL-5457 (FAA)

DAVID WAYNE HOOKS MEMORIAL (DWH)
HOUSTON, TEXAS

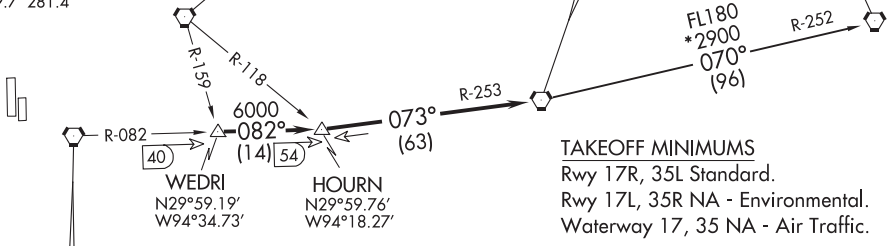
ATIS
128.375
CLNC DEL
119.45
GND CON
121.8 239.0
HOOKS TOWER*
127.4 354.1 (EAST)
118.4 (CTAF) 354.1 (WEST)
HOUSTON DEP CON
119.7 281.4

FIGHTING TIGER
116.5 LSU : : : :
Chan 112
N30°29.11'-W91°17.64'
L-21-22, H-7

LAKE CHARLES
113.4 LCH : : : :
Chan 81
N30°08.49'-W93°06.33'

DAISETTA
116.9 DAS : : : :
Chan 116

HUMBLE
116.6 IAH : : . .
Chan 113



TAKEOFF MINIMUMS
Rwy 17R, 35L Standard.
Rwy 17L, 35R NA - Environmental.
Waterway 17, 35 NA - Air Traffic.

NOTE: RADAR required.

TAKEOFF OBSTACLE NOTES

- Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL.
Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.
DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.
Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.
- Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.
Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.
Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.
Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL.
Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

TOP ALTITUDE:
4000

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WEDRI INT, maintain 4000, 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 (LCH4.LSU): From over LCH VORTAC on LCH R-070 and LSU R-252 to LSU VORTAC.

LAKE CHARLES FOUR DEPARTURE
(LCH4.LCH) 15344

HOUSTON, TEXAS
DAVID WAYNE HOOKS MEMORIAL (DWH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEONA TWO DEPARTURE

SL-5457 (FAA)

HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

- ATIS 128.375
- CLNC DEL 119.45
- 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

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'

BONHAM
114.6 BYP
Chan 93
N33°32.25' - W96°14.05'
L-17, H-6

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

CEDAR CREEK
114.8 CQY
Chan 95
N32°11.14' - W96°13.09'

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

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

DOLEY
N32°11.35'
W96°23.08'

WLLIS
N30°32.08'
W95°39.10'

NAVASOTA
115.9 TNV
Chan 106

HUMBLE
116.6 IAH
Chan 113

NOTE: RADAR required.
NOTE: Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LOA2 SID must file one of the published transitions via FUZ (LOA2.FUZ) ADM (LOA2.ADM) or BYP (LOA2.BYP).

TAKEOFF MINIMUMS

Rwys 17R, 35L: Standard.
Rwys 17L, 35R: NA - Environmental.
Waterway 17, 35: NA - Air Traffic.

(NOTES ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

LEONA TWO DEPARTURE

HOUSTON, TEXAS

(LOA2.LOA) 10NOV16

DAVID WAYNE HOOKS MEMORIAL (DWH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

TAKEOFF OBSTACLE NOTES

Rwy 17R, Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/ 220' MSL.

Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.

DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.

Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L, Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.

Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.

Multiple trees, tower and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.

Vehicle and road 315' from DER, on centerline 15' AGL/166' MSL.

Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LUFKIN ONE DEPARTURE

SL-5457 (FAA)

HOUSTON, TEXAS

ATIS
 128.375
 CLNC DEL
 119.45
 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

**TOP ALTITUDE:
 4000**

LITTLE ROCK
 113.9 LIT : : : :
 Chan 86
 N34°40.66'
 W92°10.83'
 L-18, H-6

NOTE: RADAR 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

TAKEOFF MINIMUMS:
 Rwy 17R, 35L: Standard.
 Rwy 17L, 35R: NA - Environmental.
 Waterways 17, 35: NA - Air Traffic.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

TAKEOFF OBSTACLE NOTES:

- Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL. Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL. DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL. Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.
- Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL. Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL. Multiple trees, towers and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL. Vehicle on road 315' from DER, on centerline, 15' AGL/166' MSL. Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

(LURIC4.LURIC) 16315

SL-5457 (FAA)

DAVID WAYNE HOOKS MEMORIAL (DWH)

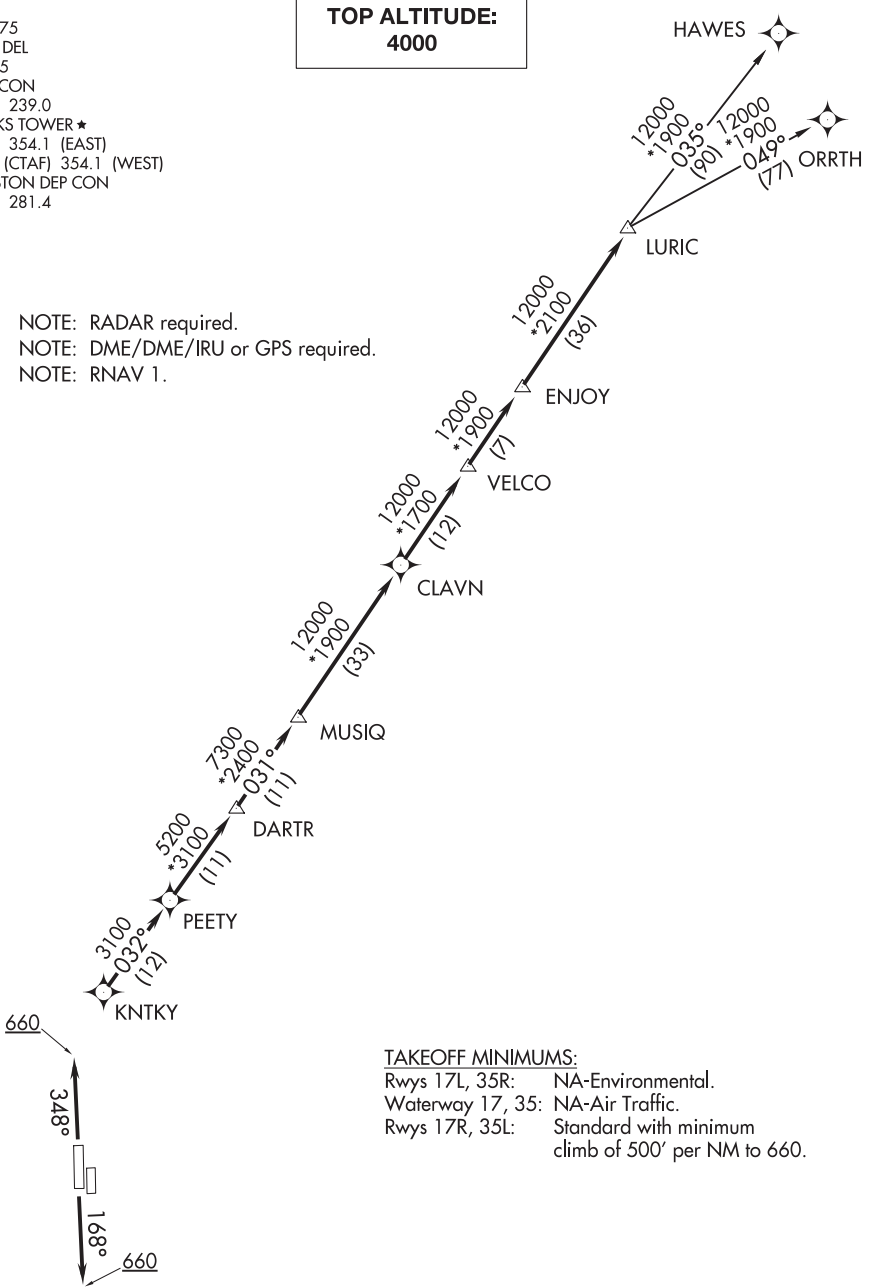
LURIC FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

ATIS
 128.375
 CLNC DEL
 119.45
 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

**TOP ALTITUDE:
4000**

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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)

(LURIC4.LURIC) 10NOV16

HOUSTON, TEXAS

DAVID WAYNE HOOKS MEMORIAL (DWH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb heading 168° to 660, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 35L: Climb heading 348° to 660, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

TAKEOFF OBSTACLE NOTES:

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL. Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL. DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL. Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

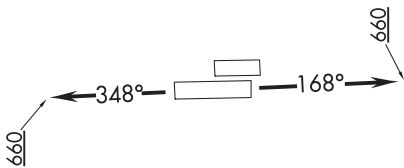
Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL. Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL. Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL. Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL. Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

2102 NAV JAN 05 01 9102 AON 01 'S-CS

- ATIS 128.375
- CLINC DEL 119.45
- 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



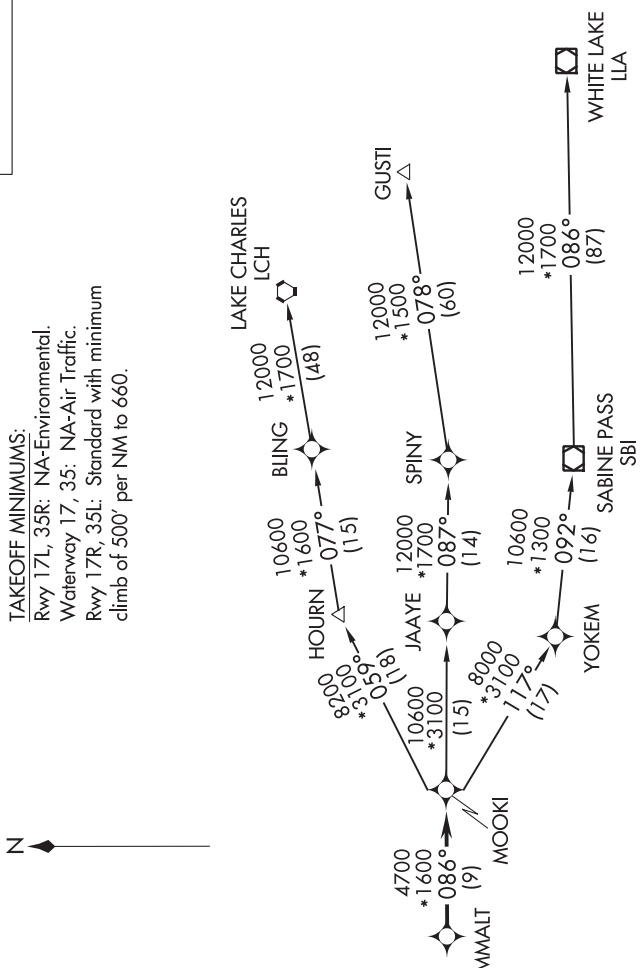
TAKEOFF MINIMUMS:

Rwy 17L, 35R: NA-Environmental.

Waterway 17, 35: NA-Air Traffic.

Rwy 17R, 35L: Standard with minimum climb of 500' per NM to 660.

TOP ALTITUDE:
4000



NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

NOTE: RNAV 1.

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

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

(MMALT2.MMALT) 15008

DAVID WAYNE HOOKS MEMORIAL (DWH)

MMALT TWO DEPARTURE (RNAV)

SL-5457 (FAA)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb on heading 168° to 660, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 35L: Climb on heading 348° to 660, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

TAKEOFF OBSTACLE NOTES:

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL. Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL. DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL. Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL. Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL. Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL. Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL. Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

HOUSTON, TEXAS

(MMALT2.MMALT) 15008

DAVID WAYNE HOOKS MEMORIAL (DWH)

PALACIOS EIGHT DEPARTURE

SL-5457 (FAA)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:

Rwys 17R, 35L: Standard.

Rwys 17L, 35R: NA - Environmental.

Waterway 17, 35: NA - Air Traffic.

ATIS 128.375
 CLNC DEL 119.45
 GND CON 121.8 239.0
 HOOKS TOWER* 127.4 354.1 (EAST)
 118.4 (CTAF) 354.1 (WEST)
 HOUSTON DEP CON 123.8 257.7 (Rwys 17L/R)
 119.7 281.4 (Rwys 35L/R)

HOBBY
 117.1 HUB
 Chan 118

EAGLE LAKE
 116.4 ELA
 Chan 111

SAN ANTONIO
 116.8 SAT
 Chan 115
 N29°38.64'-W98°27.68'
 L-19, H-7

FORT STOCKTON
 116.9 FST
 Chan 116
 N30°57.13'
 W102°58.54'
 L-19, H-6

ROCKSPRINGS
 111.2 RSG
 Chan 49
 N30°00.88'-W100°17.99'

COTUILA
 115.8 COT
 Chan 105
 N28°27.72'-W99°07.11'

THREE RIVERS
 111.4 THX
 Chan 51
 N28°30.30'-W98°09.03'

PALACIOS
 117.3 PSX
 Chan 120
 N28°45.87'-W96°18.37'

FL180
 283°
 (130)

FL180
 338°
 (70)

FL180
 259°
 (51)

FL180
 318°
 (112)

10000
 253°
 (99)

R-100

R-158

R-127

R-220

R-136

R-078

R-073

R-038 (37)

R-158

R-100

R-100



(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required
 NOTE: Chart not to scale

SC-5, 10 NOV 2016 to 05 JAN 2017

PALACIOS EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

TAKEOFF OBSTACLE NOTES:

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/ 220' MSL.

Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.

DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.

Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.

Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.

Multiple trees, tower and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.

Vehicle and road 315' from DER, on centerline 15' AGL/166' MSL.

Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

(STRYA4.STRYA) 16315

SL-5457 (FAA)

DAVID WAYNE HOOKS MEMORIAL (DWH)

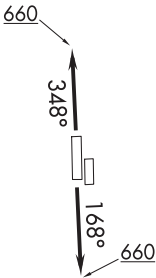
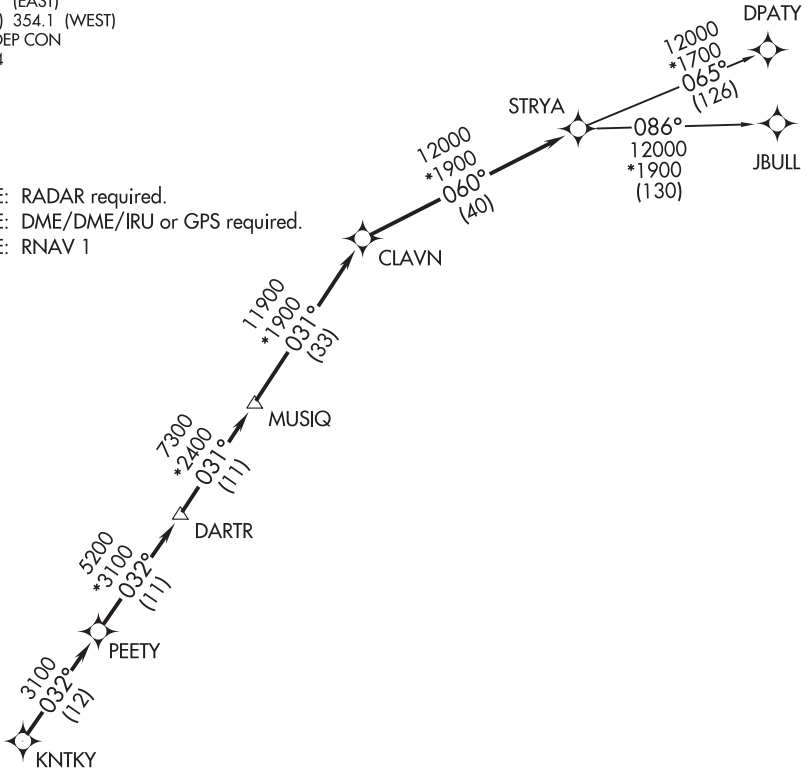
STRYA FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

ATIS
 128.375
 CLNC DEL
 119.45
 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

**TOP ALTITUDE:
4000**

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



TAKEOFF MINIMUMS

Rwy 17L, 35R: NA-Environmental.
 Waterway 17, 35: NA-Air Traffic.
 Rwy 17R, 35L: Standard with minimum
 climb of 500' per NM to 660.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

(STRYA4.STRYA) 10NOV16

DAVID WAYNE HOOKS MEMORIAL (DWH)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb heading 168° to 660, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 35L: Climb heading 348° to 660, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL.
Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.
DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.
Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

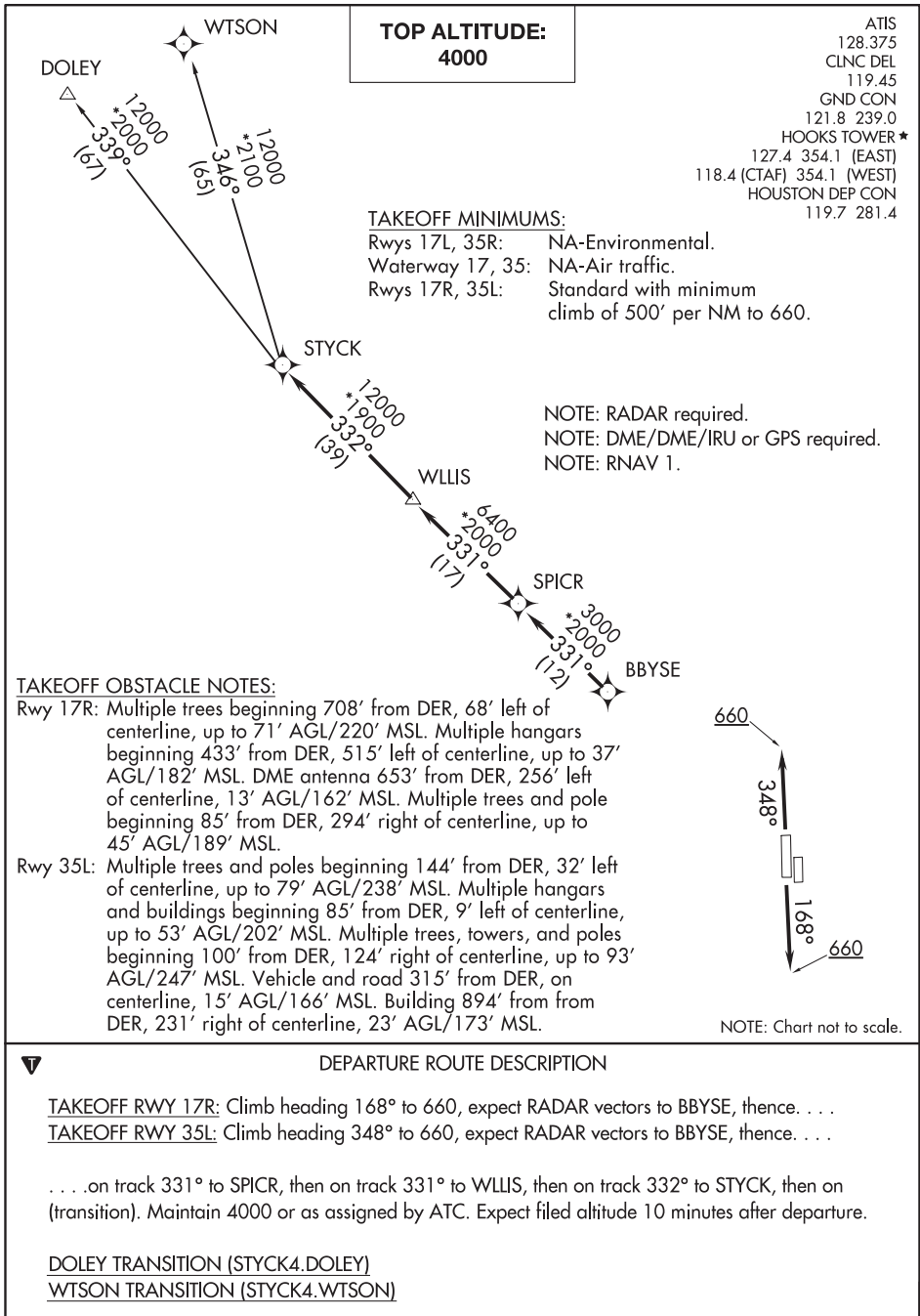
Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.
Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.
Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.
Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL.
Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

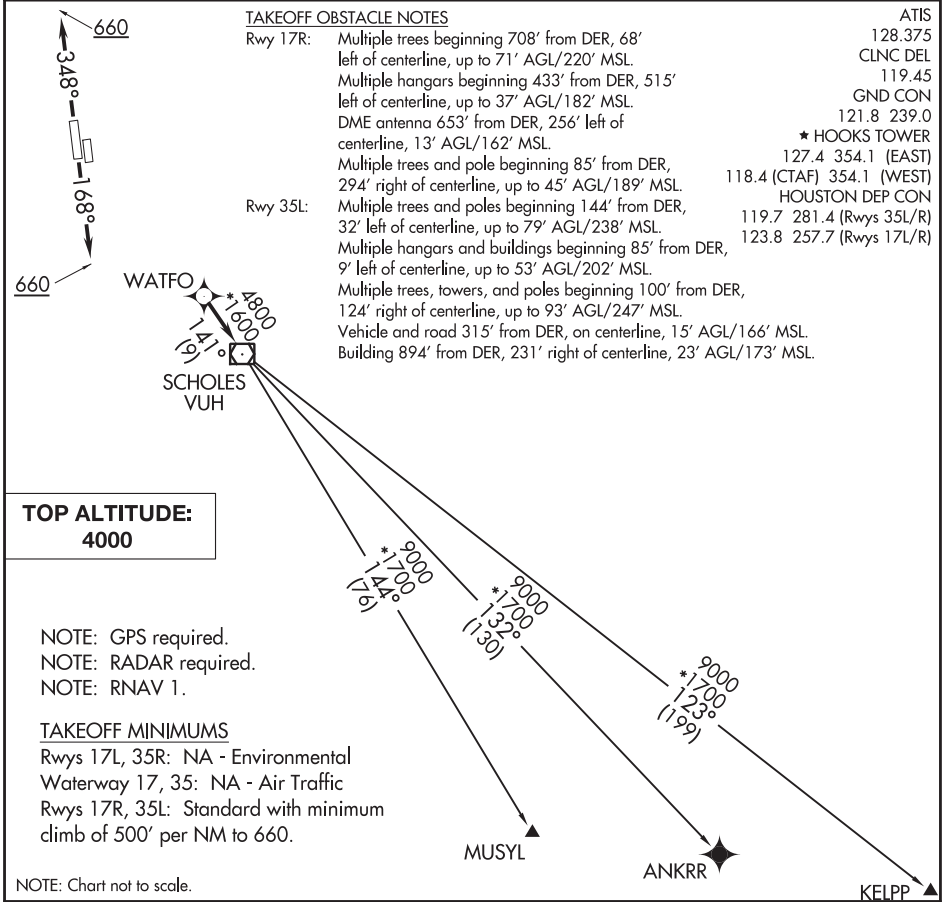
STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

HOUSTON, TEXAS

DAVID WAYNE HOOKS MEMORIAL (DWH)

WATFO THREE DEPARTURE (RNAV)



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb on heading 168° to 660, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 35L: Climb on heading 348° to 660, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

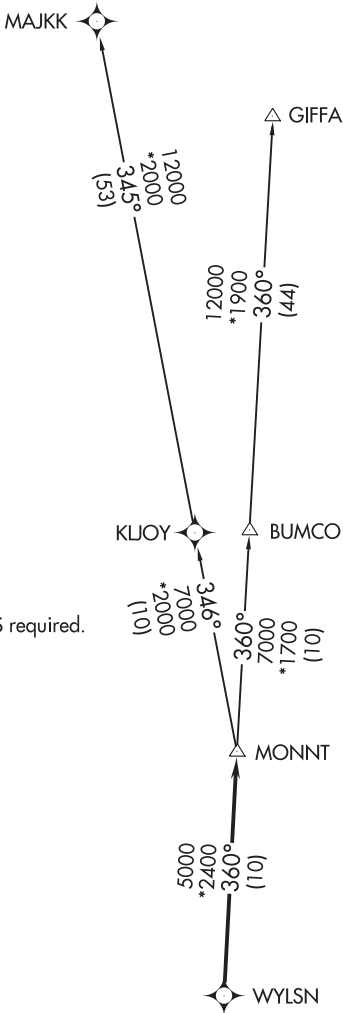
MUSYL TRANSITION (WATFO3.MUSYL):

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

ATIS
 128.375
 CLNC DEL
 119.45
 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



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

TAKEOFF MINIMUMS:

Rwys 17L, 35R: NA - Environmental.

Waterway 17, 35: NA - Air Traffic.

Rwys 17R, 35L: Standard with minimum climb of 500' per NM to 660.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17R: Climb on heading 168° to 660, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 35L: Climb on heading 348° to 660, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJKK)

TAKEOFF OBSTACLE NOTES:

Rwy 17R: Multiple trees beginning 708' from DER, 68' left of centerline, up to 71' AGL/220' MSL.

Multiple hangars beginning 433' from DER, 515' left of centerline, up to 37' AGL/182' MSL.

DME antenna 653' from DER, 256' left of centerline, 13' AGL/162' MSL.

Multiple trees and pole beginning 85' from DER, 294' right of centerline, up to 45' AGL/189' MSL.

Rwy 35L: Multiple trees and poles beginning 144' from DER, 32' left of centerline, up to 79' AGL/238' MSL.

Multiple hangars and buildings beginning 85' from DER, 9' left of centerline, up to 53' AGL/202' MSL.

Multiple trees, towers, and poles beginning 100' from DER, 124' right of centerline, up to 93' AGL/247' MSL.

Vehicle and road 315' from DER, on centerline, 15' AGL/166' MSL.

Building 894' from DER, 231' right of centerline, 23' AGL/173' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ILS or LOC RWY 17R

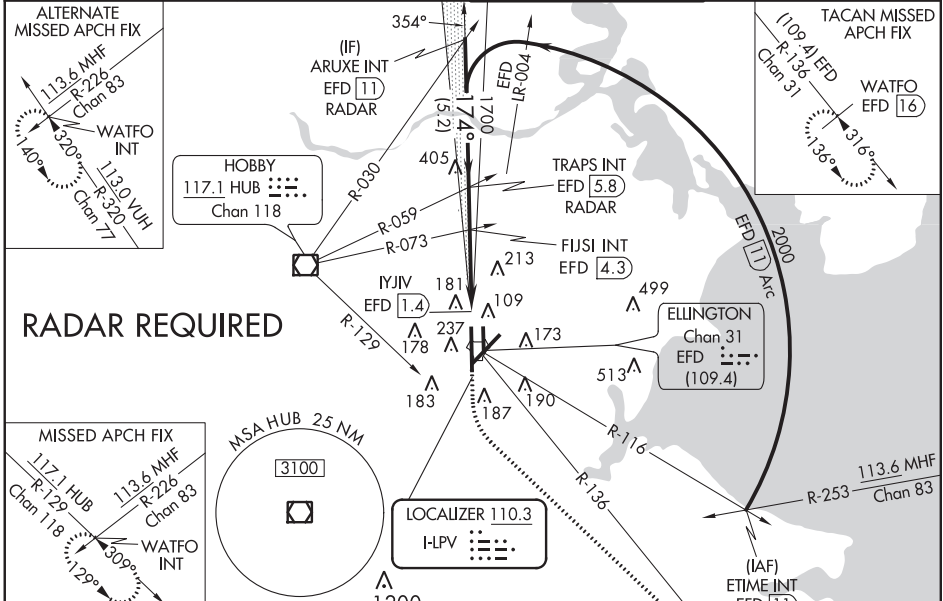
ELLINGTON (EFD)

LOC I-HPV 110.3	APP CRS 174°	Rwy Idg TDZE Apt Elev	9001 32 33
---------------------------	------------------------	-----------------------------	---------------------------------------

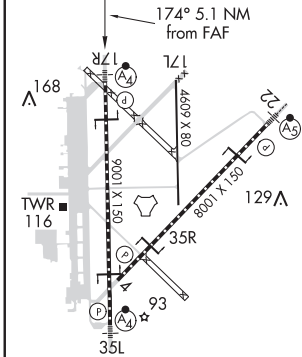
⚠ Circling NA west of Rwy 17R-35L. Inoperative table does not apply to S-ILS 17R. For inoperative MALSF, increase S-LOC 17R Cat A visibility to RVR 6000, Cat B to 1½ miles and Cat E to 3 miles. FIJSI fix minimums: For inoperative MALSF, increase S-LOC 17R Cats A and B visibility to RVR 5500 and Cats C, D and E to RVR 6000.

MALSIF MISSED APPROACH: Climb to 700 then climbing left turn to 3100 on HUB VOR/DME R-129 to WATFO INT and hold (TACAN aircraft climb to 700 then climbing left turn to 3100 on HFD TACAN R-136 to WATFO INT/ EFD 16 DME and hold southeast, left turn, 316° inbound).

ATIS 135.575 269.9	HOUSTON APP CON 134.45 284.0	ELLINGTON TOWER 126.05 253.5	GND CON 121.6 275.8
------------------------------	--	--	-------------------------------



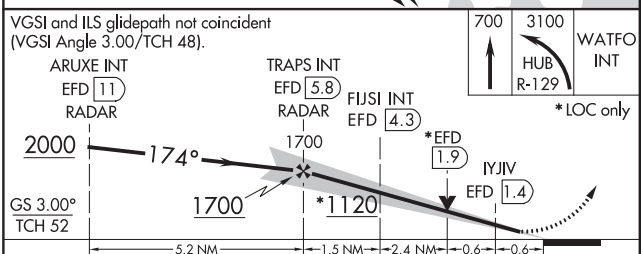
ELEV 33	D	TDZE 32
---------	----------	---------



HIRL Rwy 4-22 and 17R-35L
TDZ/CL Rwy 17R, 22 and 35L

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42



CATEGORY	A	B	C	D	E
S-ILS 17R	232/40		200 (200-¾)		
S-LOC 17R	1120/50 1088 (1100-1)	1120/60 1088 (1100-1¼)	1120-2½ 1088 (1100-2½)		
CIRCLING	1120-1¼ 1087 (1100-1¼)	1120-1½ 1087 (1100-1½)	1120-3 1087 (1100-3)		
FIJSI FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)					
S-LOC 17R	440/40	408 (500-¾)	440/50	408 (500-1)	
CIRCLING	500-1	467 (500-1)	500-1½ 467 (500-1½)	600-2 567 (600-2)	660-2½ 627 (700-2½)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-197 (FAA)

16259

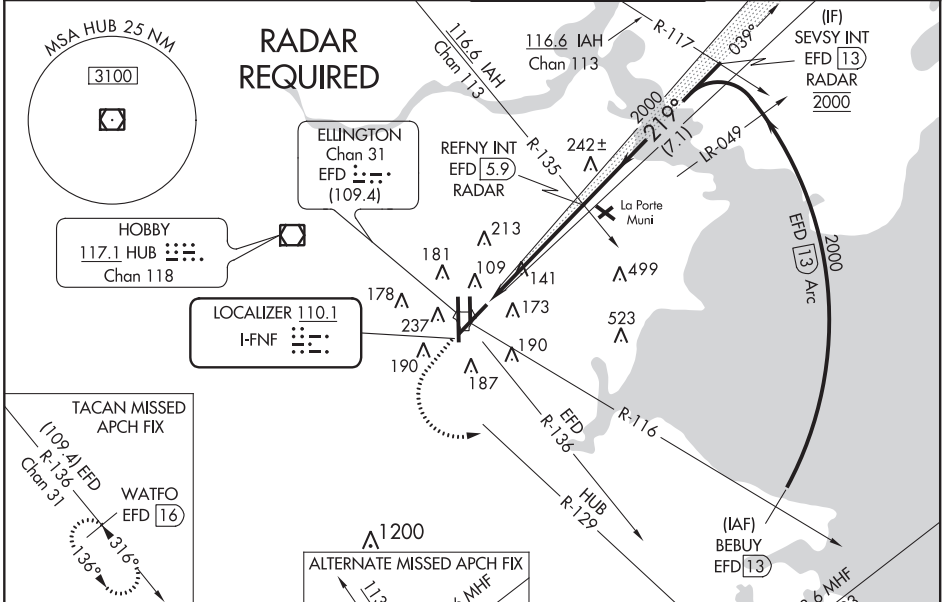
LOC I-FNF 110.1	APP CRS 219°	Rwy Idg TDZE Apt Elev	8001 31 33
---------------------------	------------------------	-----------------------------	---------------------------------------

ILS or LOC RWY 22

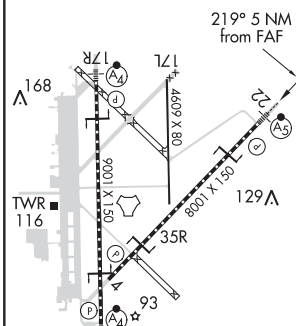
ELLINGTON (E/FD)

<p>NA Circling NA west of Rwy 17R-35L. For inoperative MALSRR, increase S-ILS 22 Cat E visibility to RVR 4000 and S-LOC 22 Cat E visibility to RVR 6000.</p>	<p>MALSRR AS</p>	<p>MISSED APPROACH: Climb to 700 then climbing left turn to 3100 on HUB VOR/DME R-129 to WATFO INT 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.)</p>
---	-----------------------------	---

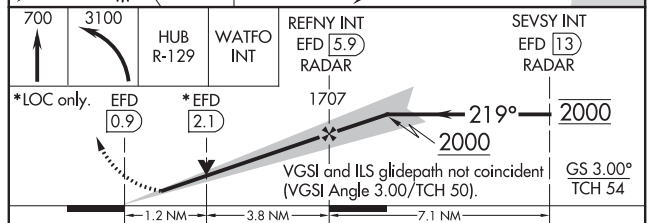
<p>ATIS 135.575 269.9</p>	<p>HOUSTON APP CON 134.45 284.0</p>	<p>ELLINGTON TOWER 126.05 253.5</p>	<p>GND CON 121.6 275.8</p>
--------------------------------------	--	--	---------------------------------------



ELEV 33	D	TDZE 31
---------	----------	---------



<p>700</p>	<p>3100</p>	<p>HUB R-129</p>	<p>WATFO INT</p>	<p>REFNY INT EFD 5.9 RADAR</p>	<p>SEVSY INT EFD 13 RADAR</p>
------------	-------------	------------------	------------------	--------------------------------	-------------------------------



FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40
CATEGORY	A	B	C	D	E
S-ILS 22	231/18		200 (200-½)		231/24 200 (200-½)
S-LOC 22	460/24	429 (500-½)	460/40	429 (500-¾)	
CIRCLING	500-1	467 (500-1)	500-1½ 467 (500-1½)	600-2 567 (600-2)	660-2¼ 627 (700-2¼)

HOUSTON, TEXAS
Amdt 3G 15SEP16

29°36'N-95°10'W

ELLINGTON (E/FD)

ILS or LOC RWY 22

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC I-EDF 111.1	APP CRS 354°	Rwy Idg TDZE Apt Elev	9001 28 33
---------------------------	------------------------	-----------------------------	---------------------------------------

ILS or LOC RWY 35L

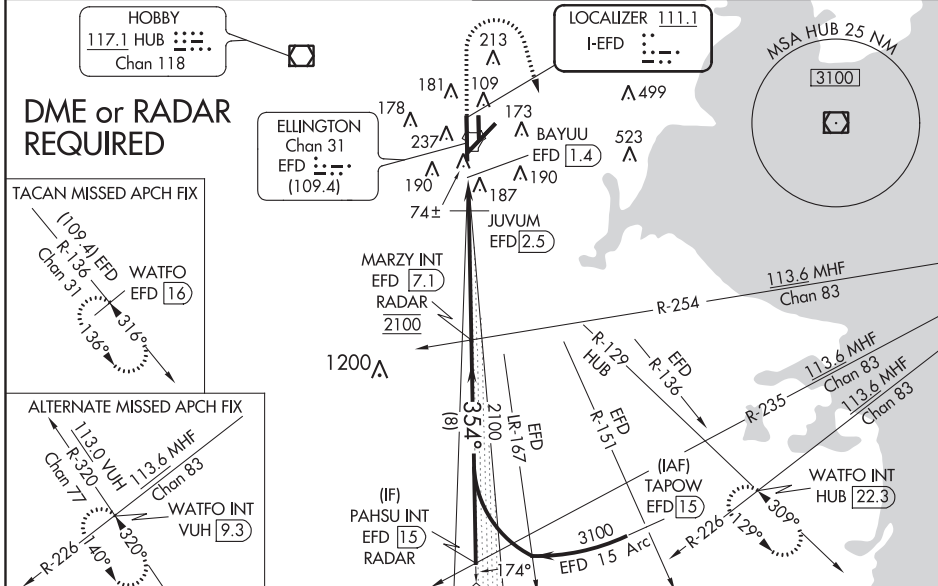
ELLINGTON (EFD)

For inop MALSF, increase S-LOC 35L Cats A/B visibility to RVR 5000, Cats C/D/E visibility to 1¼ mile. For inop MALSF when using JUVUM fix minimums, increase S-LOC 35L Cats A/B visibility to RVR 5000, Cats C/D/E visibility to 1½ mile. Inop table does not apply to S-ILS 35L. Circling NA west of Rwy 17R-35L.



MISSED APPROACH: Climb to 700 then climbing right turn to 3100 on HUB VOR/DME R-129 to WATFO INT/HUB 22.3 DME and hold (TACAN aircraft climb to 700 then climbing right turn to 3100 on EFD TACAN R-136 to WATFO INT/EFD 16 DME and hold southeast, left turn, 316° inbound).

ATIS 135.575 269.9	HOUSTON APP CON 134.45 284.0	ELLINGTON TOWER 126.05 253.5	GND CON 121.6 275.8
------------------------------	--	--	-------------------------------

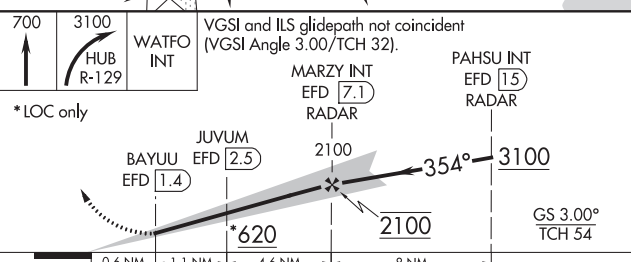
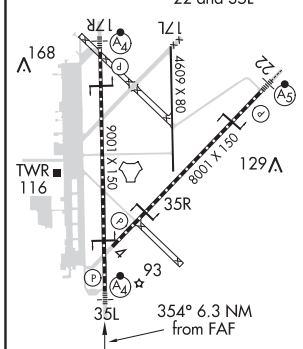


SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 33	D	TDZE 28
---------	----------	---------

HIRL Rwy 4-22 and 17R-35L
TDZ/CL Rwy 17R, 22 and 35L



CATEGORY	A	B	C	D	E
S-ILS 35L	228/40 200 (200-¾)				
S-LOC 35L	620/40	592 (600-¾)	620-1⅜		592 (600-1⅜)
CIRCLING	620-1	587 (600-1)	620-1¼ 587 (600-1¼)	620-2 587 (600-2)	660-2¼ 627 (700-2¼)
JUVUM DME MINIMUMS					
S-LOC 35L	440/40	412 (500-¾)	440/50		412 (500-1)
CIRCLING	500-1	467 (500-1)	500-1½ 467 (500-1½)	600-2 567 (600-2)	660-2¼ 627 (700-2¼)

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

HOUSTON, TEXAS

AL-197 (FAA)

15120

APP CRS	Rwy Idg	8001
039°	TDZE	30
	Apt Elev	33

RNAV (GPS) RWY 4

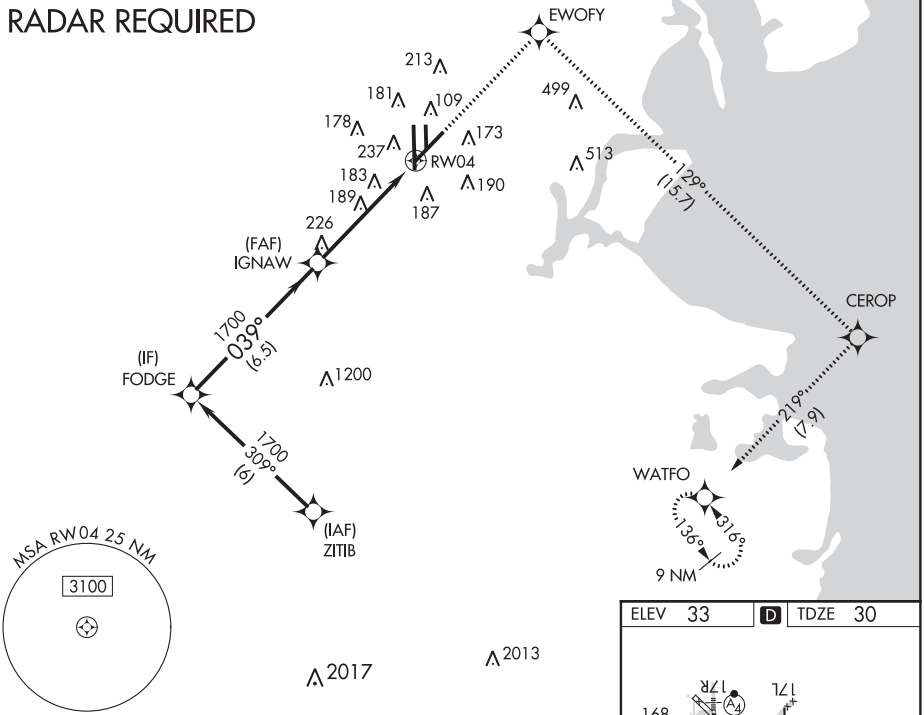
ELLINGTON (EFD)

⚠ 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.

ATIS 135.575 269.9	HOUSTON APP CON 134.45 284.0	ELLINGTON TOWER 126.05 253.5	GND CON 121.6 275.8
------------------------------	--	--	-------------------------------

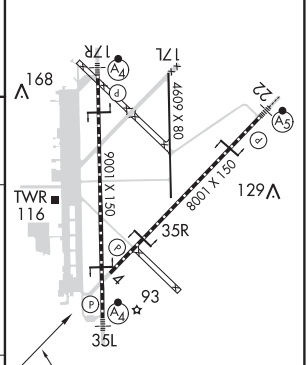
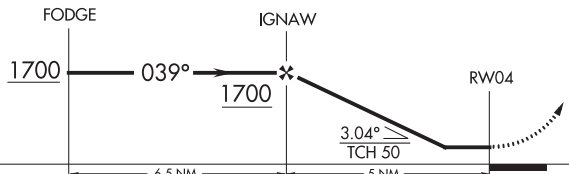
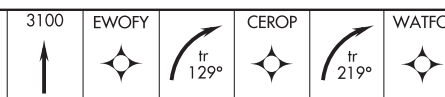
RADAR REQUIRED



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 33	D TDZE 30
---------	------------------



CATEGORY	A	B	C	D	E
LNVA MDA	500-1	470 (500-1)	500-1 ³ / ₈	470 (500-1 ³ / ₈)	
CIRCLING	500-1	467 (500-1)	500-1 ¹ / ₂ 467 (500-1 ¹ / ₂)	600-2 567 (600-2)	660-2 ¹ / ₄ 627 (700-2 ¹ / ₄)

HIRL Rwy 4-22 and 17R-35L
 TDZ/CL Rwy 17R, 22 and 35L

HOUSTON, TEXAS
 Amdt 1B 30APR15

29°36'N-95°10'W

RNAV (GPS) RWY 4

ELLINGTON (EFD)

WAAS CH 70625 W17A	APP CRS 174°	Rwy Idg TDZE Apt Elev	9001 32 33
--	------------------------	-----------------------------	---------------------------------------

RNAV (GPS) RWY 17R

ELLINGTON (E/FD)

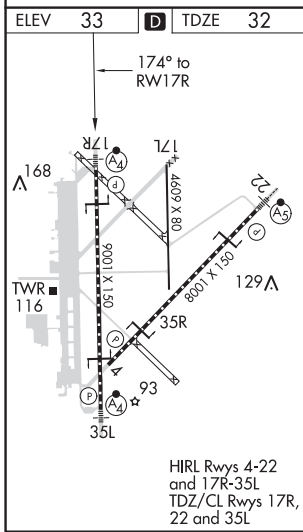
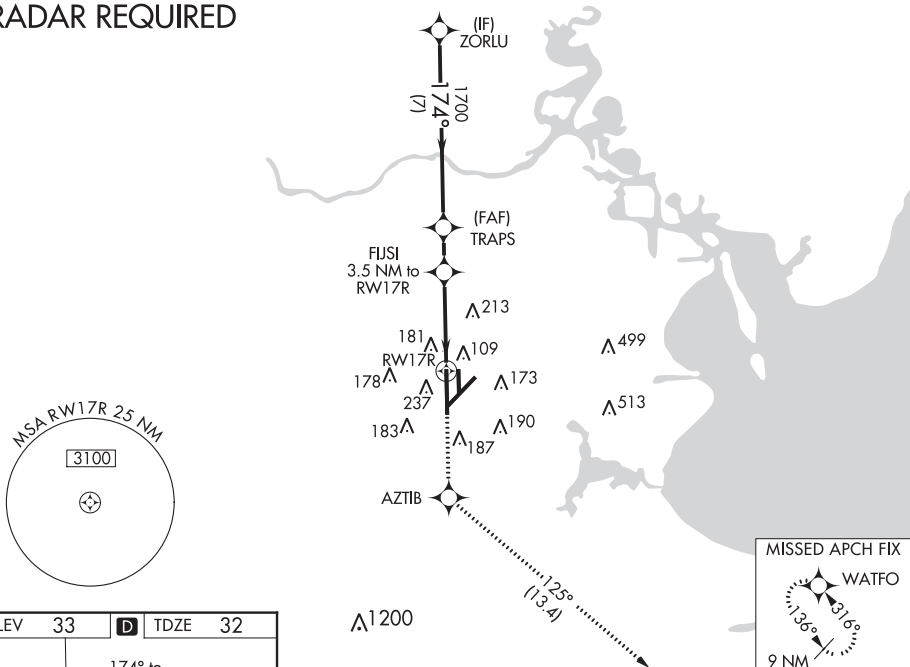
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 43°C (109°F). DME/DME RNP-0.3 NA. Inop table does not apply to LPV DA. For inop MALSF, increase LNAV/VNAV all Cats and LNAV Cats A and B visibility to RVR 5500 and Cats C/D/E visibility to 1½ miles. Circling NA west of Rwy 17R-35L.

MALSF

MISSED APPROACH: Climb to 3100 direct AZTIB and on track 125° to WATFO and hold.

ATIS 135.575 269.9	HOUSTON APP CON 134.45 284.0	ELLINGTON TOWER 126.05 253.5	GND CON 121.6 275.8
------------------------------	--	--	-------------------------------

RADAR REQUIRED



VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 48).

ELEV 33	D	TDZE 32			
3100		AZTIB	tr 125°		WATFO
ZORLU	TRAPS	FUJI	*LNAV only		
2000	1700	1180	3.5 NM to RWY 17R	1.4 NM to RWY 17R	
GP 3.00° TCH 52					
7 NM		1.6 NM	2.2 NM	1.4 NM	
CATEGORY	A	B	C	D	E
LPV DA	232/40		200 (200-¾)		
LNAV/VNAV DA	363/40		331 (400-¾)		
LNAV MDA	500/40	468 (500-¾)	500/60		468 (500-1¼)
CIRCLING	500-1	467 (500-1)	500-1½ 467 (500-1½)	600-2 567 (600-2)	660-2 ¼ 627 (700-2¼)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-197 (FAA)

15148

WAAS CH 61111 W22A	APP CRS 219°	Rwy Idg TDZE Apt Elev	8001 31 33
--	------------------------	-----------------------------	---------------------------------------

RNAV (GPS) RWY 22

ELLINGTON (EFD)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Circling NA west of Rwy 17R-35L.
▲ For inop MALS, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to RVR 5000 and LNAV Cats C, D and E visibility to RVR 5000.

MALS

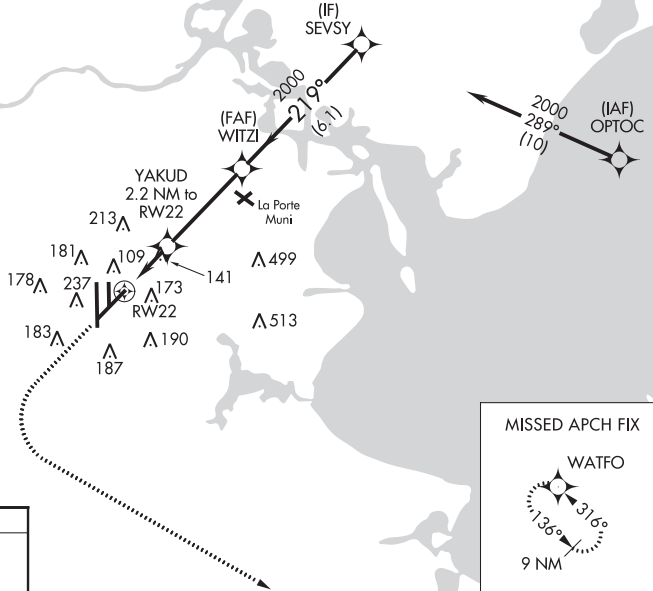
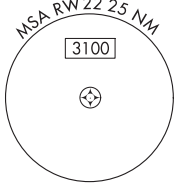


MISSED APPROACH:
 Climb to 500 then climbing left turn to 3100 direct WATFO and hold.

ATIS 135.575 269.9	HOUSTON APP CON 134.45 284.0	ELLINGTON TOWER 126.05 253.5	GND CON 121.6 275.8
------------------------------	--	--	-------------------------------

RADAR REQUIRED

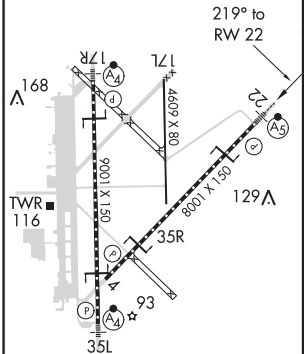
1049 1049



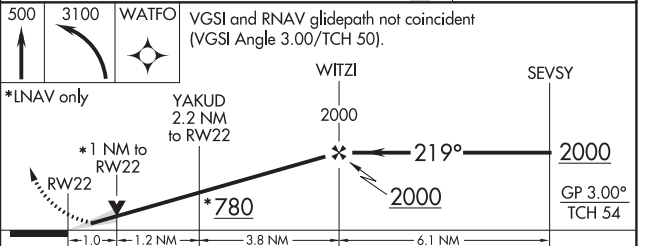
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 33	D	TDZE 31
---------	----------	---------



HIRL Rwy 4-22 and 17R-35L
 TDZ/CL Rwy 17R, 22 and 35L



CATEGORY	A	B	C	D	E
LPV	DA	231/24	200 (200-½)		
LNAV/VNAV	DA	341/24	310 (400-½)		
LNAV MDA	400/24	369 (400-½)	400/35	369 (400-¾)	
CIRCLING	500-1	467 (500-1)	500-1½ 467 (500-1½)	600-2 567 (600-2)	660-2¼ 627 (700-2¼)

HOUSTON, TEXAS
 Amdt 2B 28MAY15

29°36'N-95°10'W

ELLINGTON (EFD) RNAV (GPS) RWY 22

WAAS CH 97629 W35A	APP CRS 354°	Rwy Idg TDZE Apt Elev	9001 28 33
--	------------------------	-----------------------------	---------------------------------------

RNAV (GPS) RWY 35L

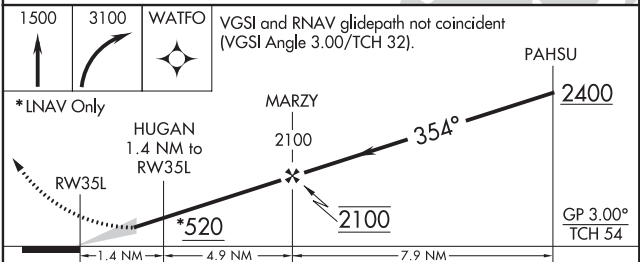
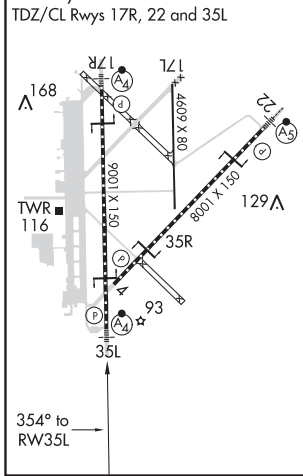
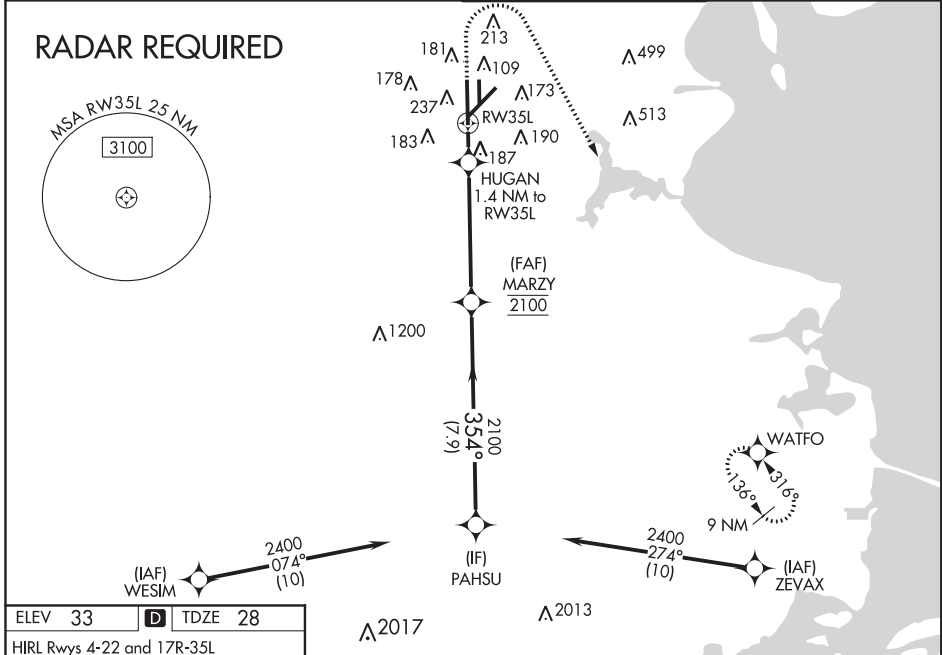
ELLINGTON (EFD)

⚠ 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 1½ mile, and LNAV Cats A and B visibility to 1 mile and Cats C, D and E visibility to 1½ mile. Inop table does not apply to LPV.

MALSF

MISSED APPROACH: Climb to 1500 then climbing right turn to 3100 direct WATFO and hold.

ATIS* 135.575 269.9	HOUSTON APP CON 134.45 284.0	ELLINGTON TOWER 126.05 253.5	GND CON 121.6 275.8
-------------------------------	--	--	-------------------------------



CATEGORY	A	B	C	D	E
LPV DA		228/40	200 (200-¾)		
LNAV/VNAV DA		499/60	471 (500-1¼)		
LNAV MDA	440/40	412 (500-¾)	440/50	412 (500-1)	
CIRCLING	500-1	468 (500-1)	500-1½ 468 (500-1½)	600-2 568 (600-2)	660-2¼ 628 (700-2¼)

HOUSTON, TEXAS

AL-197 (FAA)

15120

TACAN EFD Chan 31	APP CRS 028°	Rwy Idg TDZE Apt Elev	8001 30 33
----------------------	-----------------	-----------------------------	------------------

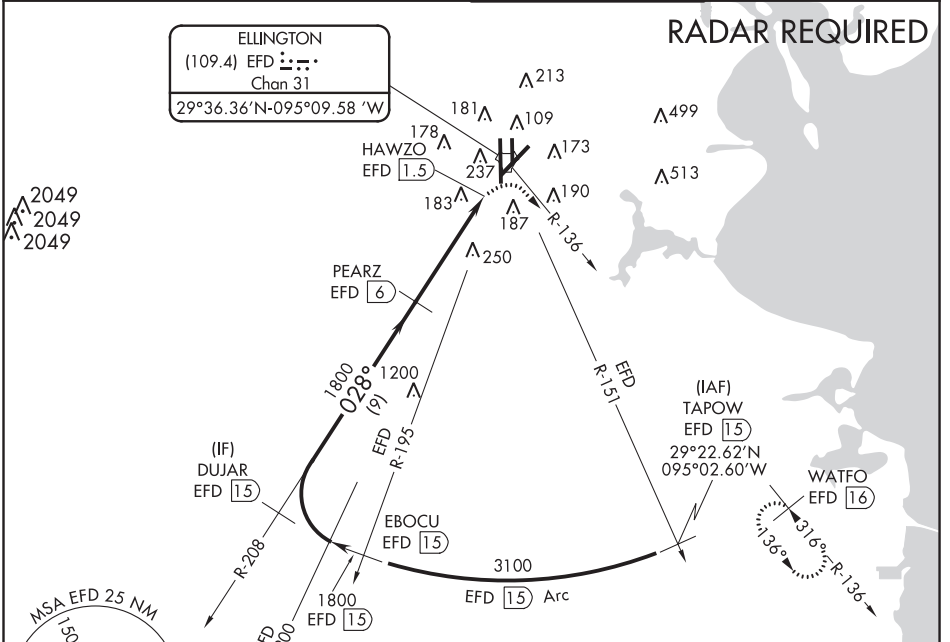
TACAN RWY 4

ELLINGTON (EFD)

NA Circling NA west of Rwy 17R-35L
Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 3100 on EFD TACAN R-136 to WATFO/EFD 1.6 DME and hold.

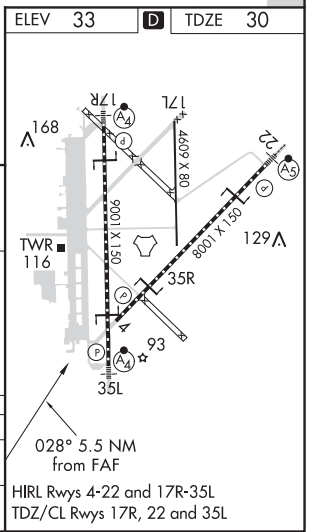
ATIS 135.575 269.9	HOUSTON APP CON 134.45 284.0	ELLINGTON TOWER 126.05 253.5	GND CON 121.6 275.8
-----------------------	---------------------------------	---------------------------------	------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 33	D	TDZE 30
---------	----------	---------



DUJAR EFD 1.5	PEARZ EFD 6	HAWZO EFD 1.5	3100 EFD R-136	WATFO EFD 1.6
1800	1800	2.95° TCH 50	9 NM	4.5 NM

CATEGORY	A	B	C	D	E
S-4	520-1¼ 490 (500-1¼)			520-1½ 490 (500-1½)	520-1¾ 490 (500-1¾)
CIRCLING	520-1¼	487 (500-1¼)	520-1½ 487 (500-1½)	600-2 567 (600-2)	660-2¼ 627 (700-2¼)

HOUSTON, TEXAS
Orig-A 30APR15

29°36'N-95°10'W

ELLINGTON (EFD) TACAN RWY 4

TACAN EFD Chan 31	APP CRS 163°	Rwy Idg TDZE Apt Elev	9001 32 33
-----------------------------	------------------------	-----------------------------	---------------------------------------

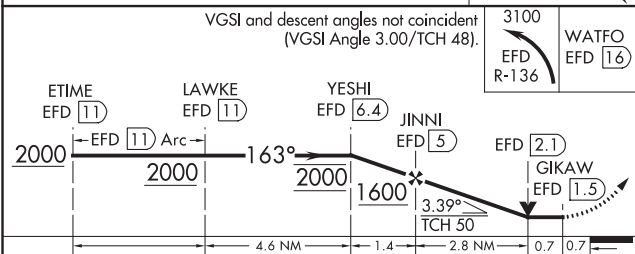
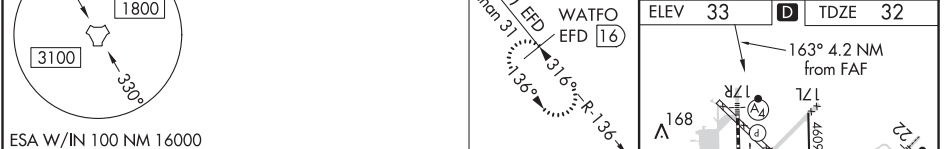
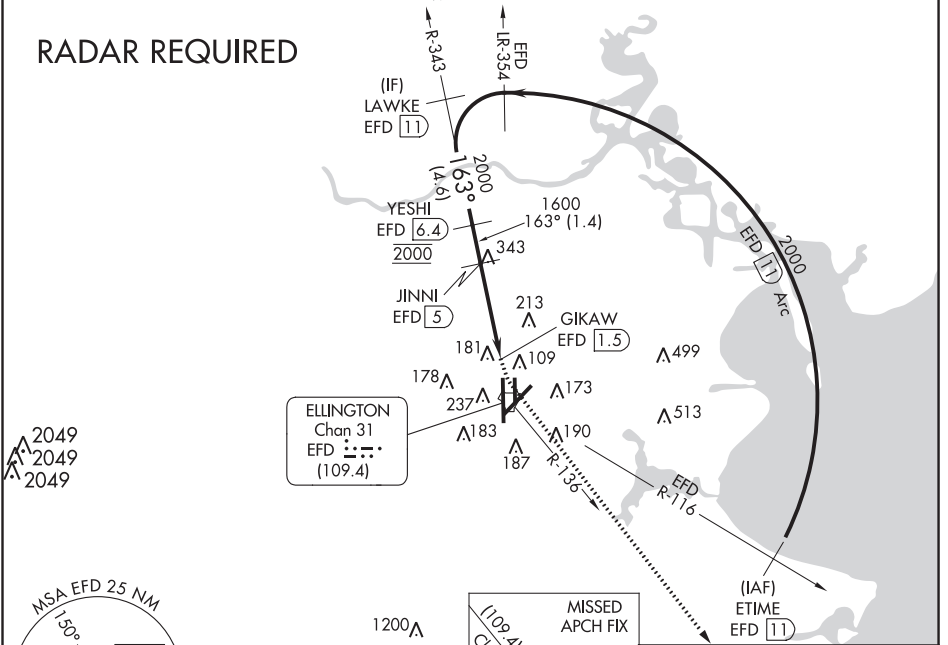
TACAN RWY 17R

ELLINGTON (EFD)

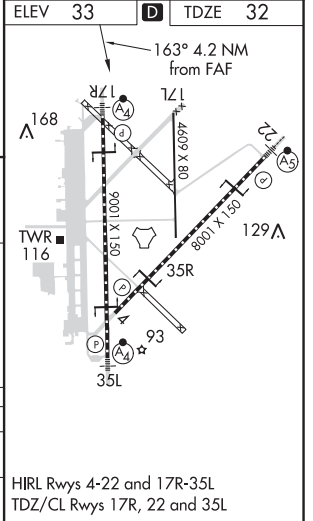
NA When ALS inop, increase visibility Cat A/B to RVR 5500 and Cat C/D/E visibility to 1½ miles. Circling NA west of Rwy 17R-35L.

MALSF MISSED APPROACH: Climbing left turn to 3100 on EFD TACAN R-136 to WATFO/EFD 16 DME and hold.

ATIS 135.575 269.9	HOUSTON APP CON 134.45 284.0	ELLINGTON TOWER 126.05 253.5	GND CON 121.6 275.8
------------------------------	--	--	-------------------------------



CATEGORY	A	B	C	D	E
S-17R	500/40	468 (500-¾)	500/60 468 (500-1¼)		
CIRCLING	500-1	467 (500-1)	500-1½ 467 (500-1½)	600-2 567 (600-2)	660-2¼ 627 (700-2¼)



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-197 (FAA)

15120


TACAN EFD Chan 31	APP CRS 226°	Rwy Idg TDZE Apt Elev	8001 31 33
-----------------------------	------------------------	-----------------------------	---------------------------------------

TACAN RWY 22

ELLINGTON (EFD)

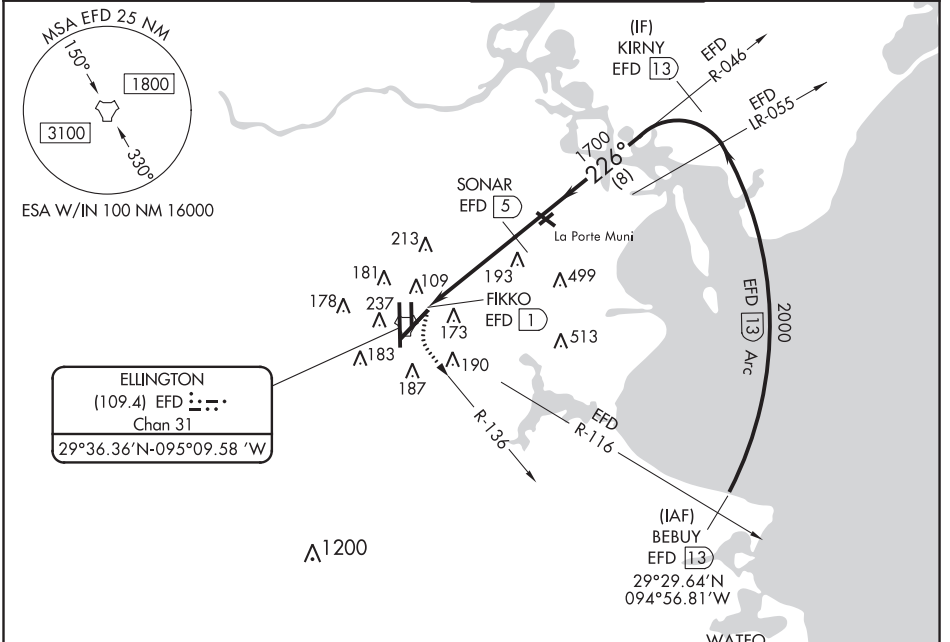
⚠ Circling NA west of Rwy 17R-35L. When ALS inop, increase S-22 Cat A/B visibility to RVR 5500 and Cat C/D/E to 1½ miles.

⚠ NA

MALSR 

MISSED APPROACH: Climbing left turn to 3100 on EFD TACAN R-136 to WATFO/EFD 16 DME and hold.

ATIS 135.575 269.9	HOUSTON APP CON 134.45 284.0	ELLINGTON TOWER 126.05 253.5	GND CON 121.6 275.8
------------------------------	--	--	-------------------------------

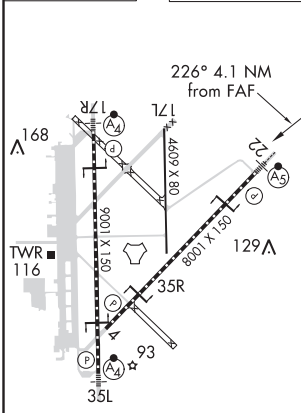


ELLINGTON
(109.4) EFD Chan 31
29°36.36'N-095°09.58'W

SC-5, 10 NOV 2016 to 05 JAN 2017

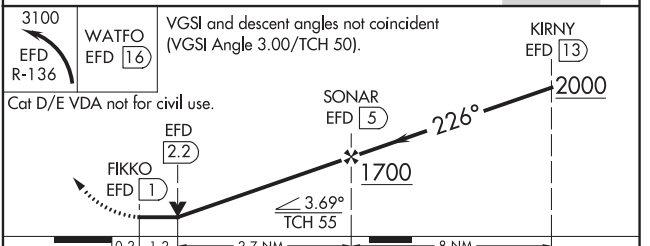
SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 33	D	TDZE 31
---------	----------	---------



HIRL Rwy 4-22 and 17R-35L
TDZ/CL Rwy 17R, 22 and 35L

RADAR REQUIRED



CATEGORY	A	B	C	D	E
S-22	500/24	469 (500-½)	500/50 469 (500-1)		
CIRCLING	500-1	467 (500-1)	500-1½ 467 (500-1½)	600-2 567 (600-2)	660-2¼ 627 (700-2¼)

HOUSTON, TEXAS
Orig-B 30APR15

29°36'N-95°10'W

ELLINGTON (EFD) TACAN RWY 22

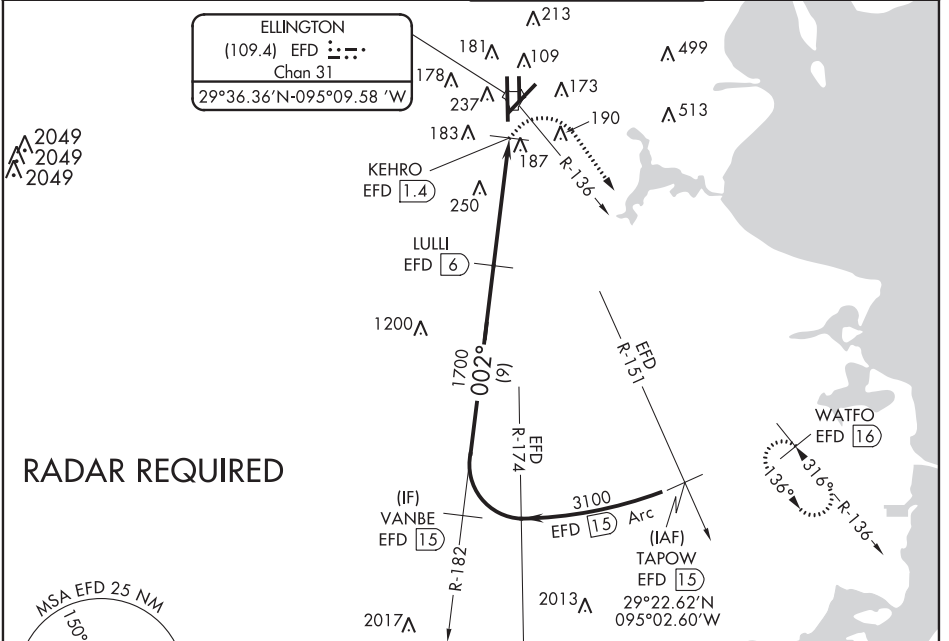
TACAN EFD Chan 31	APP CRS 002°	Rwy Idg 9001 TDZE 28 Apt Elev 33
-----------------------------	------------------------	---

TACAN RWY 35L

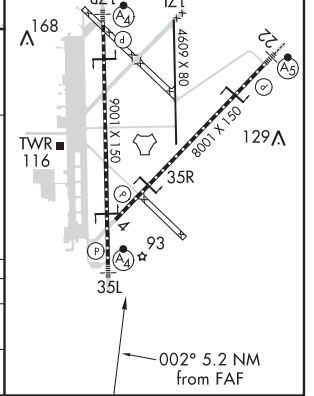
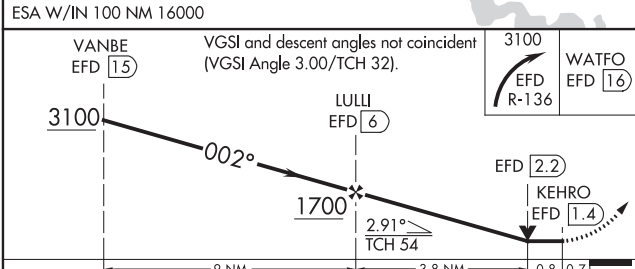
ELLINGTON (EFD)

<p>NA</p> <p>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 1 3/8 miles.</p>	<p>MAJLF</p>	<p>MISSED APPROACH: Climbing right turn to 3100 on EFD TACAN R-136 to WATFO/EFD 16 DME and hold.</p>
--	---------------------	---

<p>ATIS 135.575 269.9</p>	<p>HOUSTON APP CON 134.45 284.0</p>	<p>ELLINGTON TOWER 126.05 253.5</p>	<p>GND CON 121.6 275.8</p>
--------------------------------------	--	--	---------------------------------------



ELEV 33	D	TDZE 28
<p>HIRL Rwy 4-22 and 17R-35L TDZ/CL Rwy 17R, 22 and 35L</p>		



CATEGORY	A	B	C	D	E
S-35L	520/40	492 (500-3/4)	520/60 492 (500-1/4)		
CIRCLING	520-1	487 (500-1)	520-1 1/2 487 (500-1 1/2)	600-2 567 (600-2)	660-2 1/4 627 (700-2 1/4)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

AIRPORT DIAGRAM

AL-197 (FAA)

ELLINGTON (EFD)
HOUSTON, TEXAS

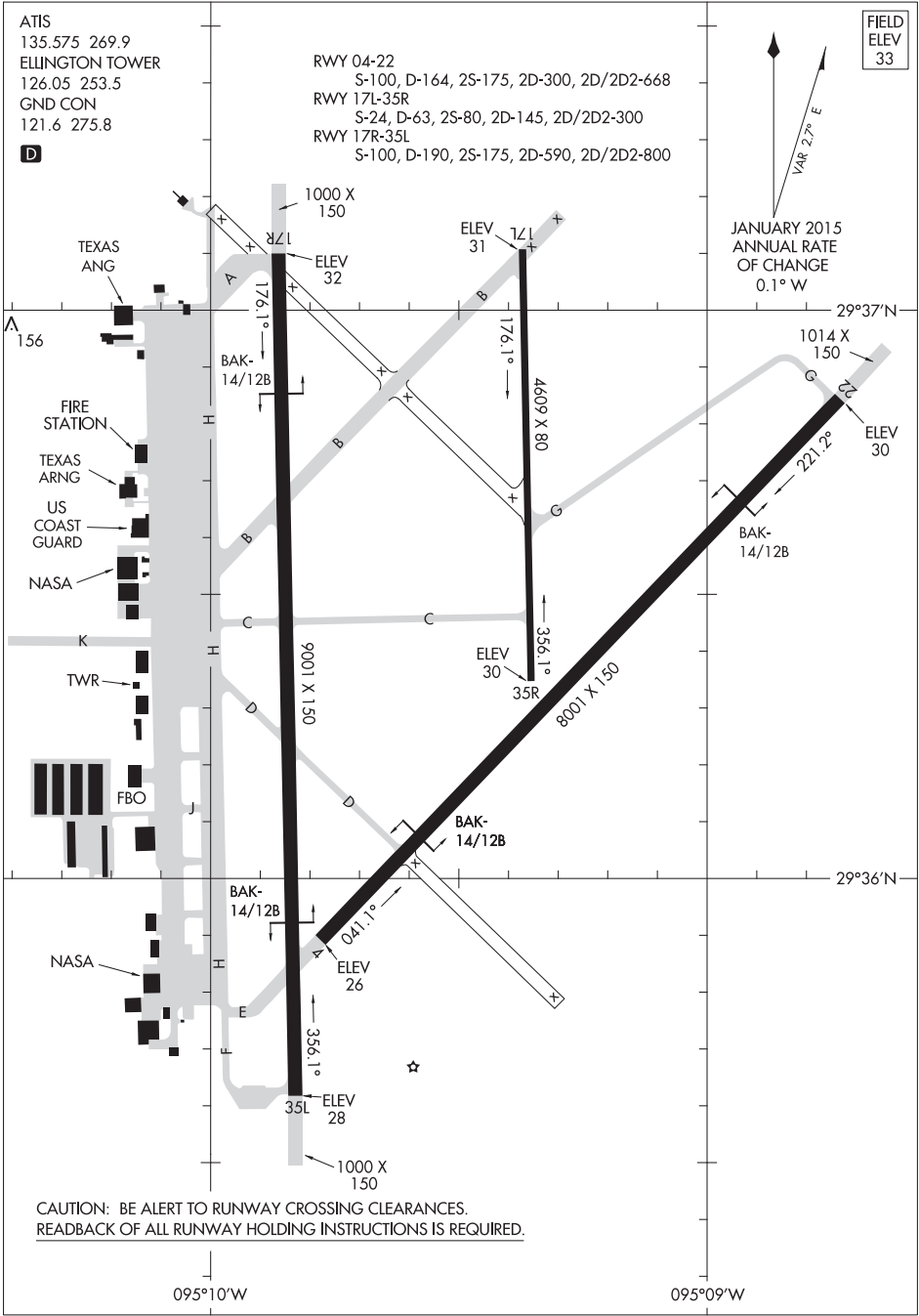
ATIS
135.575 269.9
ELLINGTON TOWER
126.05 253.5
GND CON
121.6 275.8

D

RWY 04-22
S-100, D-164, 2S-175, 2D-300, 2D/2D2-668
RWY 17L-35R
S-24, D-63, 2S-80, 2D-145, 2D/2D2-300
RWY 17R-35L
S-100, D-190, 2S-175, 2D-590, 2D/2D2-800

FIELD
ELEV
33

JANUARY 2015
ANNUAL RATE
OF CHANGE
0.1° W



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

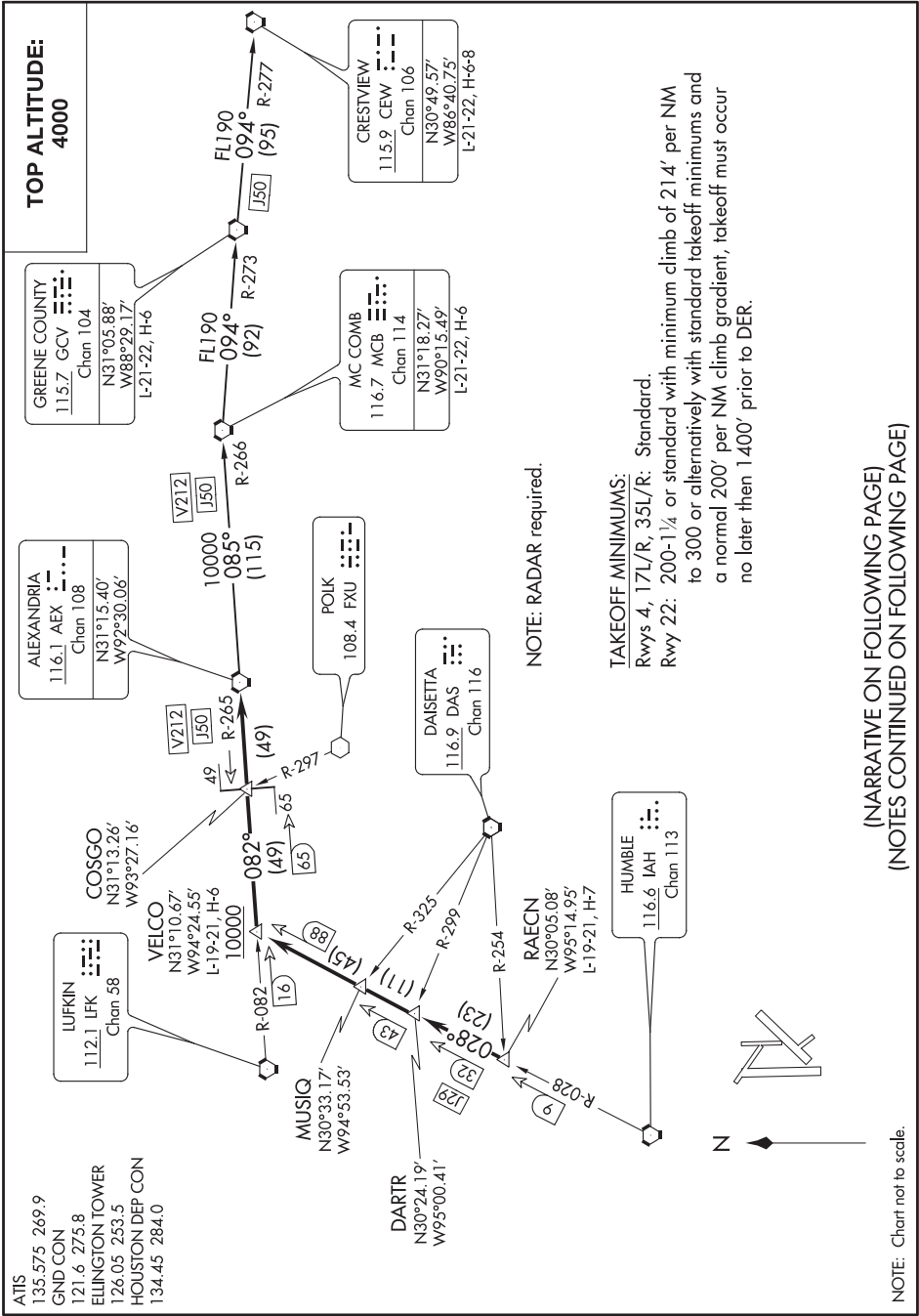
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READEBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

HOUSTON, TEXAS
ELLINGTON (EFD)

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



ALEXANDRIA NINE DEPARTURE

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

SC-5, 10 NOV 2016 to 05 JAN 2017

NOTE: Chart not to scale.

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL. OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.
- 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

SL-197 (FAA)

ELLINGTON (EFD)
HOUSTON, TEXAS

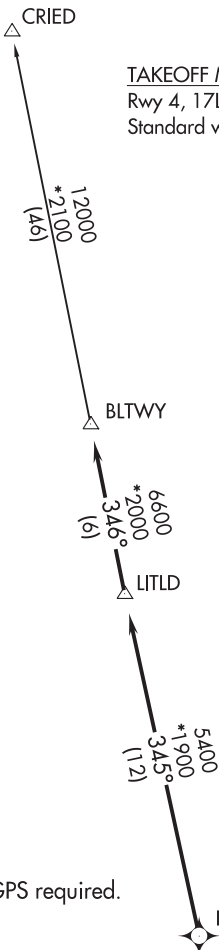
BLTWY THREE DEPARTURE (RNAV)

ATIS
135.575 269.9
GND CON
121.6 275.8
ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

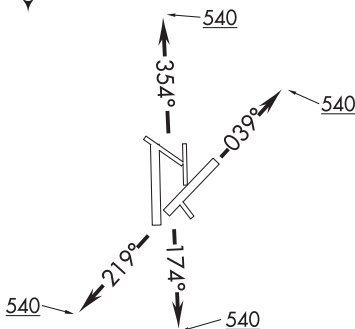
**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS

Rwy 4, 17L/R, 35L/R:
Standard with minimum climb of 500' per NM to 540.



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



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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

HOUSTON, TEXAS
ELLINGTON (EFD)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 039° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWYS 17L/R: Climb heading 174° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 22: Climb heading 219° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWYS 35L/R: Climb heading 354° to 540, expect RADAR vectors to DREMR, thence

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).

Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

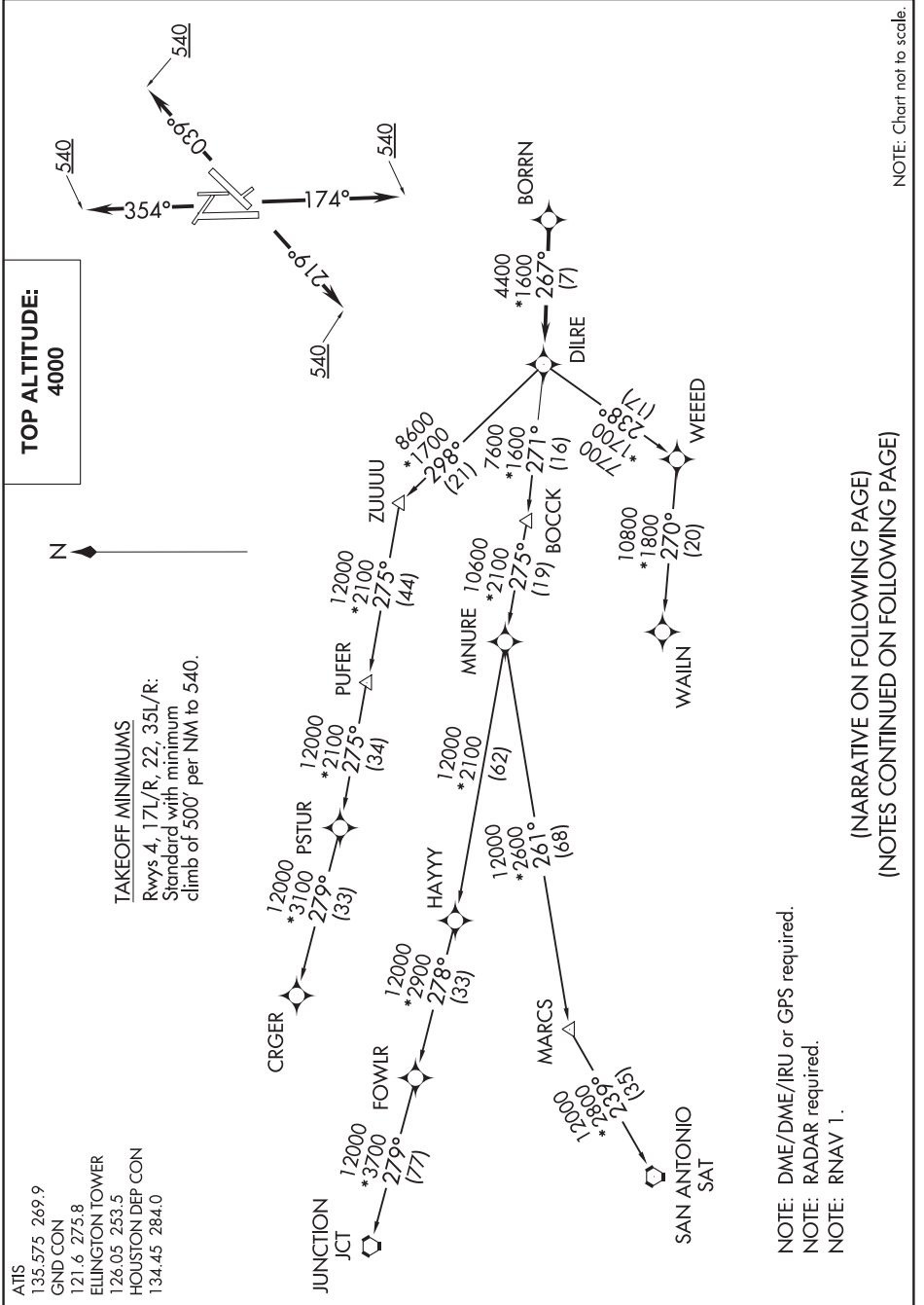
CRIED TRANSITION (BLTWY3.CRIED)

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.
 OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.
 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.

BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017



NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb on heading 039° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWYS 17L/R: Climb on heading 174° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 22: Climb on heading 219° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWYS 35L/R: Climb on heading 354° to 540, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL. OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.
- 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

SL-197 (FAA)

ELLINGTON (EFD)
HOUSTON, TEXAS

ATIS
135.575 269.9
GND CON
121.6 275.8
ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS

Rwys 4, 17R/L, 35R/L: Standard.
Rwy 22: 200-1¼ 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: RADAR required.

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.
OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.
- 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.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

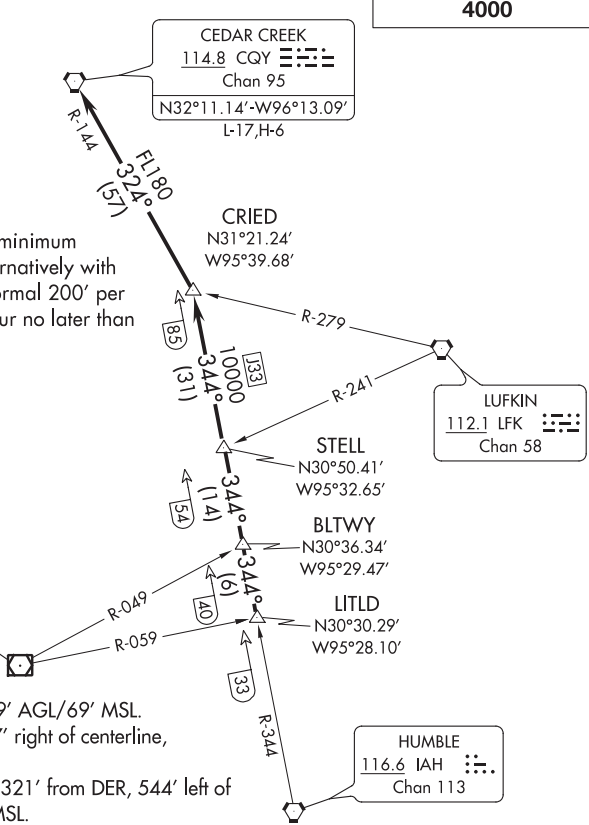
Climb on assigned heading for RADAR vectors to LITLID INT, maintain 4000.
Expect filed altitude 10 minutes after departure, thence

. . . . 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.

CRIED EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



EL DORADO EIGHT DEPARTURE

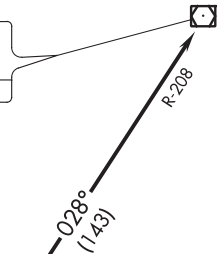
ATIS
135.575 269.9
GND CON
121.6 275.8
ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

EL DORADO
115.5 ELD : : :
Chan 102
N33°15.37'-W92°44.64'
L-17, H-6

NOTE: RADAR required.
NOTE: For aircraft destined MEM
or filed via Q32 or J42.

LUFKIN
112.1 LFK : : :
Chan 58



ENJOY
N31°16.73'
W94°19.82'



VELCO
N31°10.67'
W94°24.55'
10000

MUSIQ
N30°33.17'
W94°53.53'

DARTR
N30°24.19'
W95°00.41'

RAECN
N30°05.08'
W95°14.95'

DAISETTA
116.9 DAS : : :
Chan 116

HUMBLE
116.6 IAH : : :
Chan 113



TAKEOFF MINIMUMS

Rwys 4, 17L/R, 35L/R: Standard.
Rwy 22: 200-1¼ 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.

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

NOTE: Chart not to scale.

EL DORADO EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to RAE CN INT, maintain 4000, 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.

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.

OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

GIFFA EIGHT DEPARTURE


SL-197 (FAA)

ELLINGTON (EFD)
HOUSTON, TEXAS

ATIS
135.575 269.9
GND CON
121.6 275.8
ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

CEDAR CREEK
114.8 CQY 
Chan 95

LEONA
110.8 LOA 
Chan 45

GIFFA
N31°22.89'
W95°15.10'
L-19-21, H-6
8500

TAKEOFF MINIMUMS
Rwys 4, 17L, 17R, 35L, 35R: Standard.
Rwy 22: 200-1¼ 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.

BUMCO
N30°38.91'
W95°18.03'

MONNT
N30°28.65'
W95°18.70'
L19-21, H7

DAISETTA
116.9 DAS 
Chan 116

HUMBLE
116.6 IAH 
Chan 113

NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.



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

NOTE: Chart not to scale.

GIFFA EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000.
Expect filed altitude 10 minutes after departure, thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.

OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

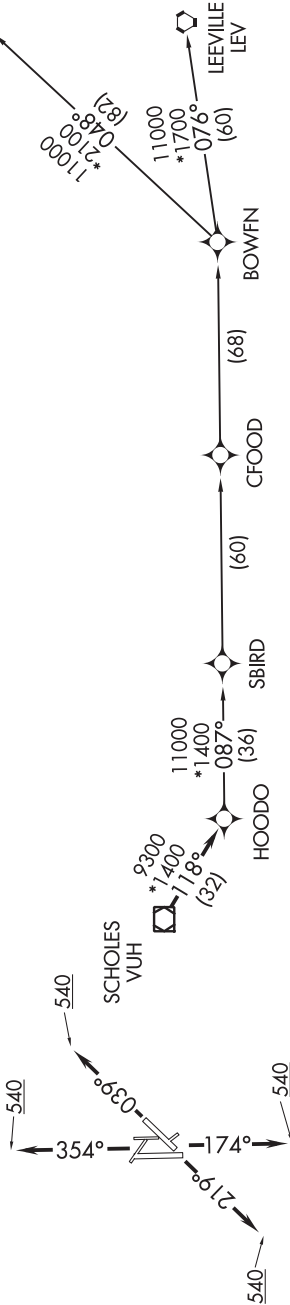
ATIS 135.575 269.9
GND CON 121.6 275.8

ELLINGTON TOWER 126.05 253.5
HOUSTON DEP CON 134.45 284.0

TOP ALTITUDE:
4000



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



TAKEOFF MINIMUMS
Rwys 4, 17R/L, 35R/L:
Standard with minimum climb of 500' per NM to 540.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 039° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWYS 17L/R: Climb heading 174° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 22: Climb heading 219° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWYS 35L/R: Climb heading 354° to 540, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.

OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

INDIE FOUR DEPARTURE (RNAV) SL-197 (FAA)

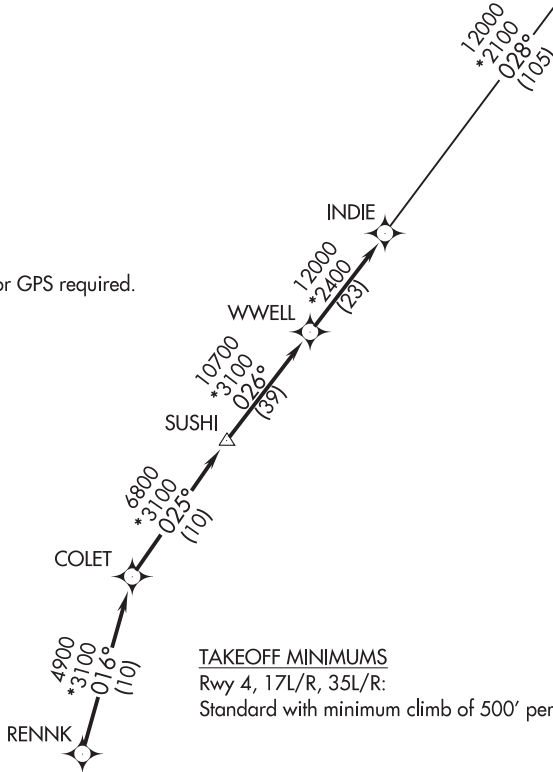
ELLINGTON (EFD)
HOUSTON, TEXAS

ATIS
135.575 269.9
GND CON
121.6 275.8
ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

TPAKK

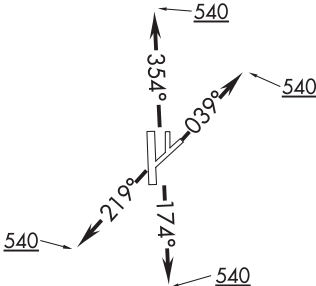
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.



TAKEOFF MINIMUMS

Rwy 4, 17L/R, 35L/R:

Standard with minimum climb of 500' per NM to 540.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

HOUSTON, TEXAS
ELLINGTON (EFD)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV) SL-197 (FAA)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 039° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWYS 17L/R: Climb heading 174° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 22: Climb heading 219° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWYS 35L/R: Climb heading 354° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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: OL 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.

OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

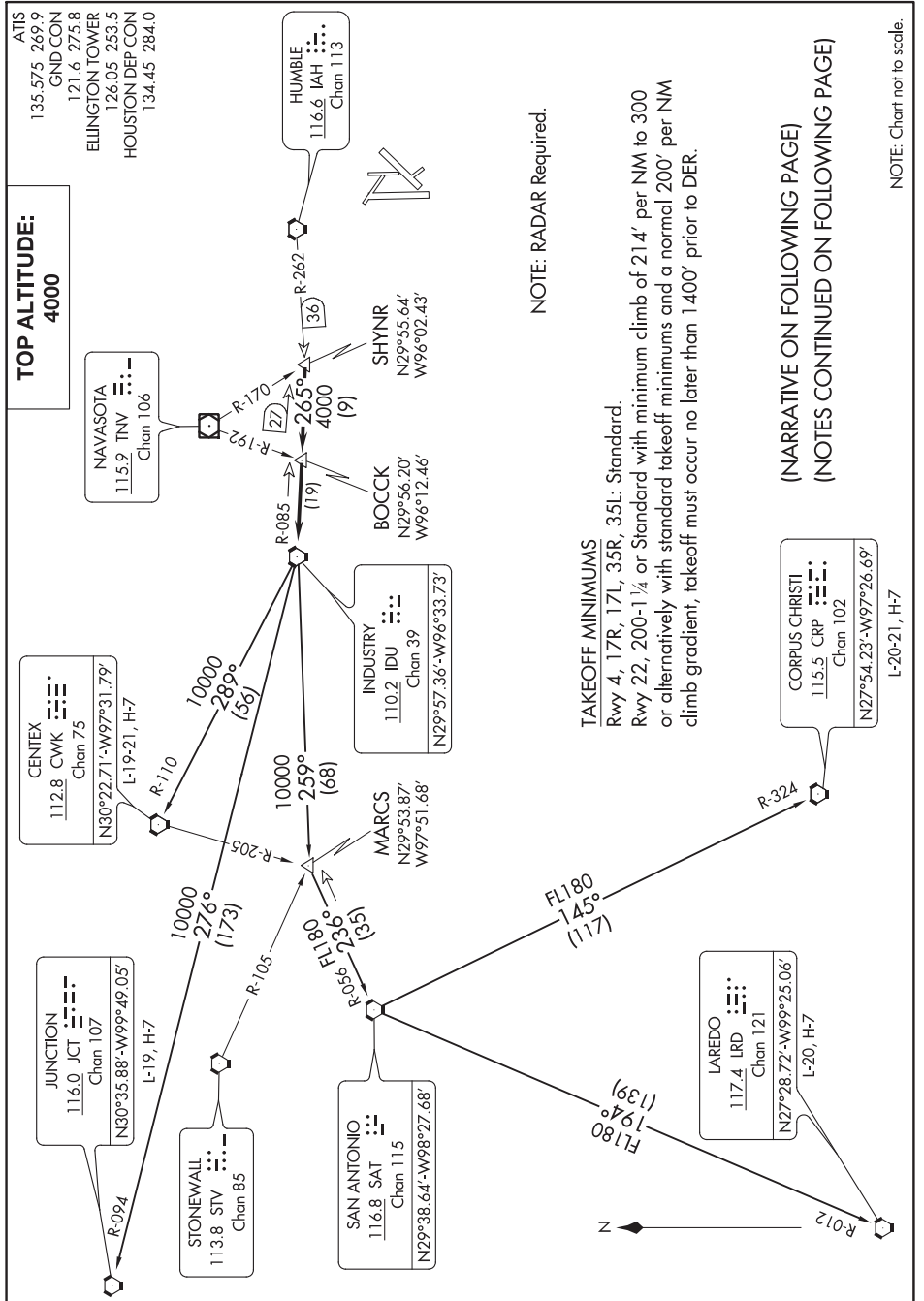
SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SL-197 (FAA)

ELLINGTON (E,F,D)
HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



INDUSTRY EIGHT DEPARTURE

HOUSTON, TEXAS
ELLINGTON (E,F,D)

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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 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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.
OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.
- 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS

Rwys 4, 17L/R, 22, 35L/R:

Standard with minimum climb of 500' per NM to 540.

- ATIS 135.575 269.9
- GND CON 121.6 275.8
- ELLINGTON TOWER 126.05 253.5
- HOUSTON DEP CON 134.45 284.0



CORPUS CHRISTI CRP
12000
*1500

YOMOM
247° (17)

PALACIOS PSX

SKUBA

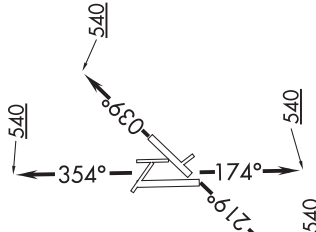
KARRR

KAVCY

RIIGG

TRUAX NGP

WMPRE



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb on heading 039° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWYS 17L/R: Climb on heading 174° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 22: Climb on heading 219° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWYS 35L/R: Climb on heading 354° to 540, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

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, 1635' right of centerline, 159' AGL/192' 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.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEONA TWO DEPARTURE

SL-197 (FAA)

ELLINGTON (EFD)
HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

ATIS	135.575	269.9
GND CON	121.6	275.8
ELLINGTON TOWER	126.05	253.5
HOUSTON DEP CON	134.45	284.0

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'		

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'		

LEONA	110.8	LOA
Chan 45		
N31°07.44' - W95°58.08'		

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

NOTE: RADAR required.
NOTE: Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LOA2 SID must file one of the published transitions via FUZ (LOA2.FUZ) ADM (LOA2.ADM) or BYP (LOA2.BYP).

TAKEOFF MINIMUMS

Rwys 4, 17L, 17R, 35L, 35R: Standard.
Rwy 22: 200-1¼ 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.

NAVASOTA	115.9	TNV
Chan 106		

HUMBLE	116.6	IAH
Chan 113		

(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)



NOTE: Chart not to scale.

LEONA TWO DEPARTURE

(LOA2.LOA) 10NOV16

HOUSTON, TEXAS
ELLINGTON (EFD)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000.
Expect filed altitude 10 minutes after departure, thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.
OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.
- 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LKF1.LFK) 16315

LUFKIN ONE DEPARTURE

SL-197 (FAA)

ELLINGTON (EFD)
HOUSTON, TEXAS

ATIS
135.575 269.9
GND CON
121.6 275.8
ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

LITTLE ROCK
113.9 LIT
Chan 86
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: RADAR 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

TAKEOFF MINIMUMS:

Rwys 4, 17R/L, 35R/L: Standard.

Rwy 22: 200-1¼ 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.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

LUFKIN ONE DEPARTURE

(LKF1.LFK) 10NOV16

HOUSTON, TEXAS
ELLINGTON (EFD)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL. OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.

Rwy 32: 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

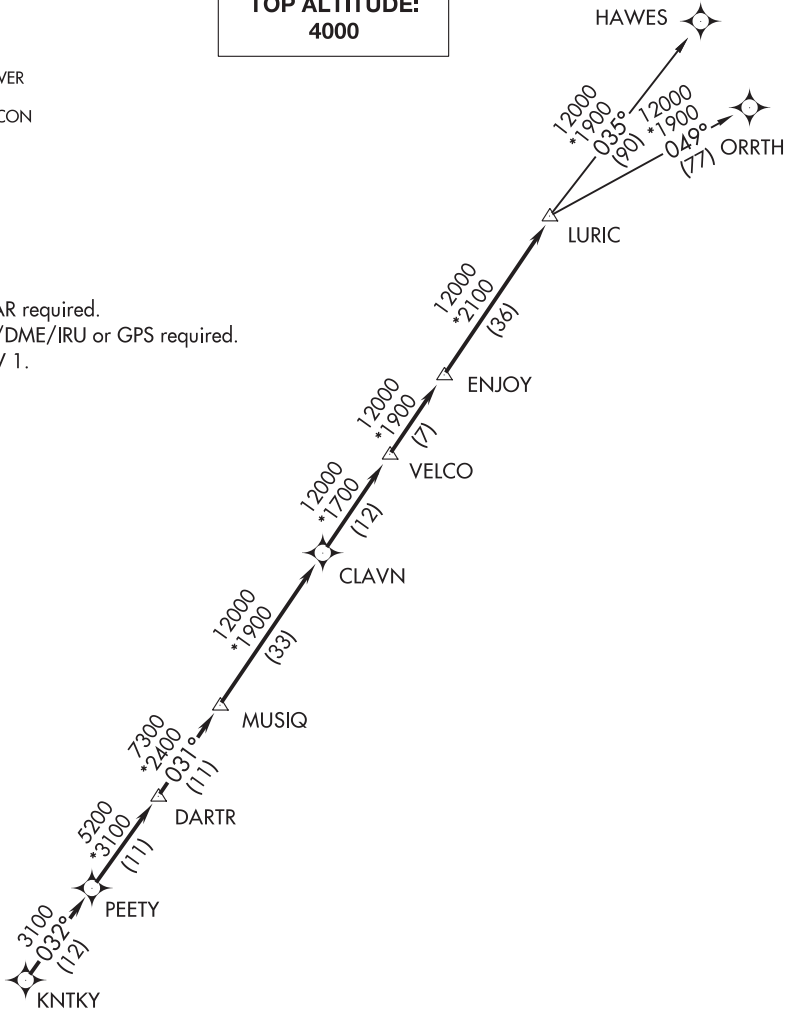
SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)

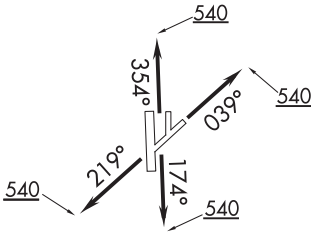
ATIS
135.575 269.9
GND CON
121.6 275.8
ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

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



TAKEOFF MINIMUMS:
Rwys 4, 17L/R, 35L/R:
Standard with minimum
climb of 500' per NM to 540.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 039° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWYS 17L/R: Climb heading 174° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 22: Climb heading 219° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWYS 35L/R: Climb heading 354° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL. OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.
- 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

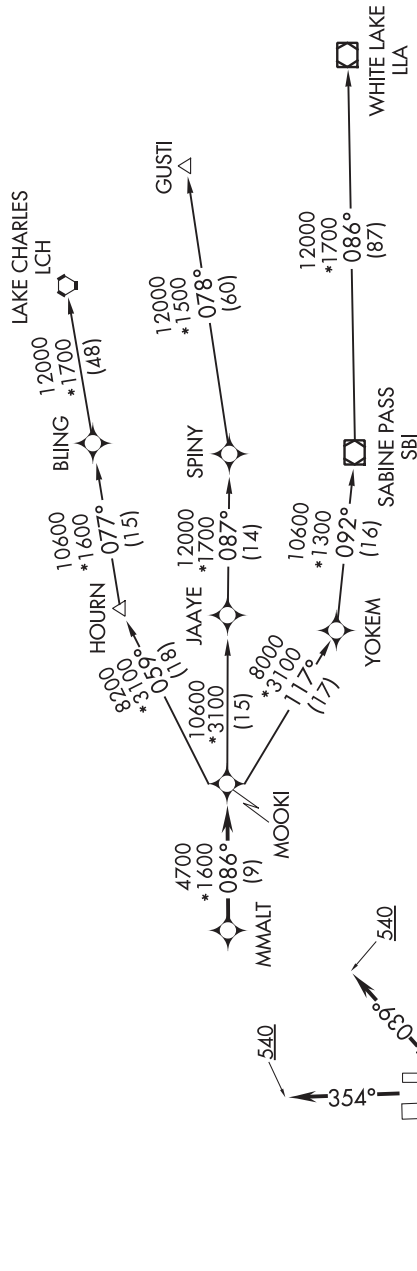
SC-5, 10 NOV 2016 to 05 JAN 2017

210Z NR 01 910Z AON 10 10 'S-CS

ATIS 135.575 269.9
GND CON 121.6 275.8
ELLINGTON TOWER 126.05 253.5
HOUSTON DEP CON 134.45 284.0

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:
Rwy 4, 17L/R, 22, 35L/R:
Standard with minimum
climb of 500' per NM to 540.



NOTE: DME/DME/IRU or GPS required.
 NOTE: RADAR required.
 NOTE: RNAV 1.
 NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, IBX, LVJ, SGR, TME, T00, T41 and 54T.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb on heading 039° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWYS 17L/R: Climb on heading 174° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 22: Climb on heading 219° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWYS 35L/R: Climb on heading 354° to 540, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL. OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS
135.575 269.9
GND CON
121.6 275.8

ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:

Rwys 4: 17L, 17R, 35L, 35R: Standard.
Rwy 22: 200-1¼ 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.

HOBBY
117.1 HUB
Chan 118

EAGLE LAKE
116.4 ELA
Chan 111

SAN ANTONIO
116.8 SAT
Chan 115
N29°38.64'-W98°27.68'
L-19, H-7

FORT STOCKTON
116.9 FST
Chan 116
N30°57.13'
W102°58.54'
L-19, H-6

ROCKSPRINGS
111.2 RSG
Chan 49
N30°00.88'-W100°17.99'

COTUILA
115.8 COT
Chan 105
N28°27.72'-W99°07.11'

THREE RIVERS
111.4 THX
Chan 51
N28°30.30'-W98°09.03'

PALACIOS
117.3 PSX
Chan 120
N28°45.87'-W96°18.37'



R-100
FL180
283°
(130)

R-136
FL180
318°
(112)

R-078
FL180
259°
(51)

R-158
FL180
338°
(70)

R-073
10000
253°
(99)

R-220
R-227
R-038 (37)
218°

SKUBA
N29°11.72'
W95°47.47'
L-19-21, H-7



(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

NOTE: RADAR required
NOTE: Chart not to scale



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000.
Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.
OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.
- 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

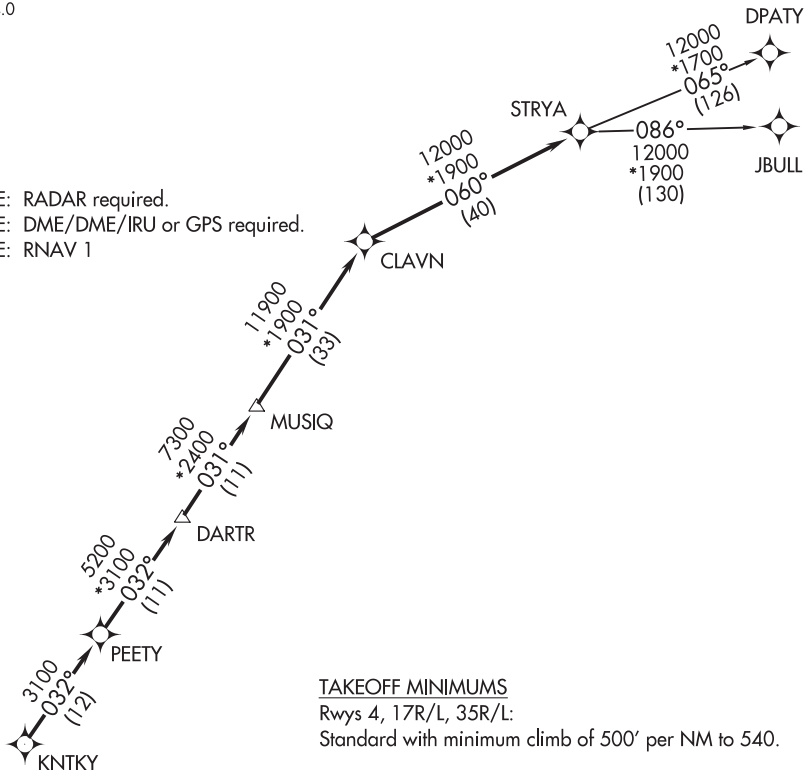
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR 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

**TOP ALTITUDE:
4000**

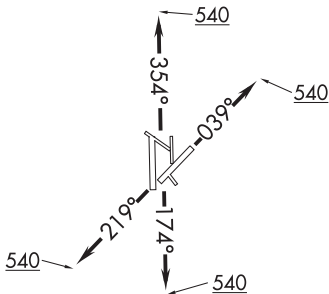
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1



TAKEOFF MINIMUMS

Rwys 4, 17R/L, 35R/L:

Standard with minimum climb of 500' per NM to 540.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 039° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWYS 17L/R: Climb heading 174° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 22: Climb heading 219° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWYS 35L/R: Climb heading 354° to 540, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, then on track 032° to DARTR, then on track 031° to MUSICQ, then on track 031° to CLAVN, then on track 060° to STRYA, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

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: OL 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 comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.
OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL 192' 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.
- 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 16315
STYCK FOUR DEPARTURE (RNAV)

SL-197 (FAA)

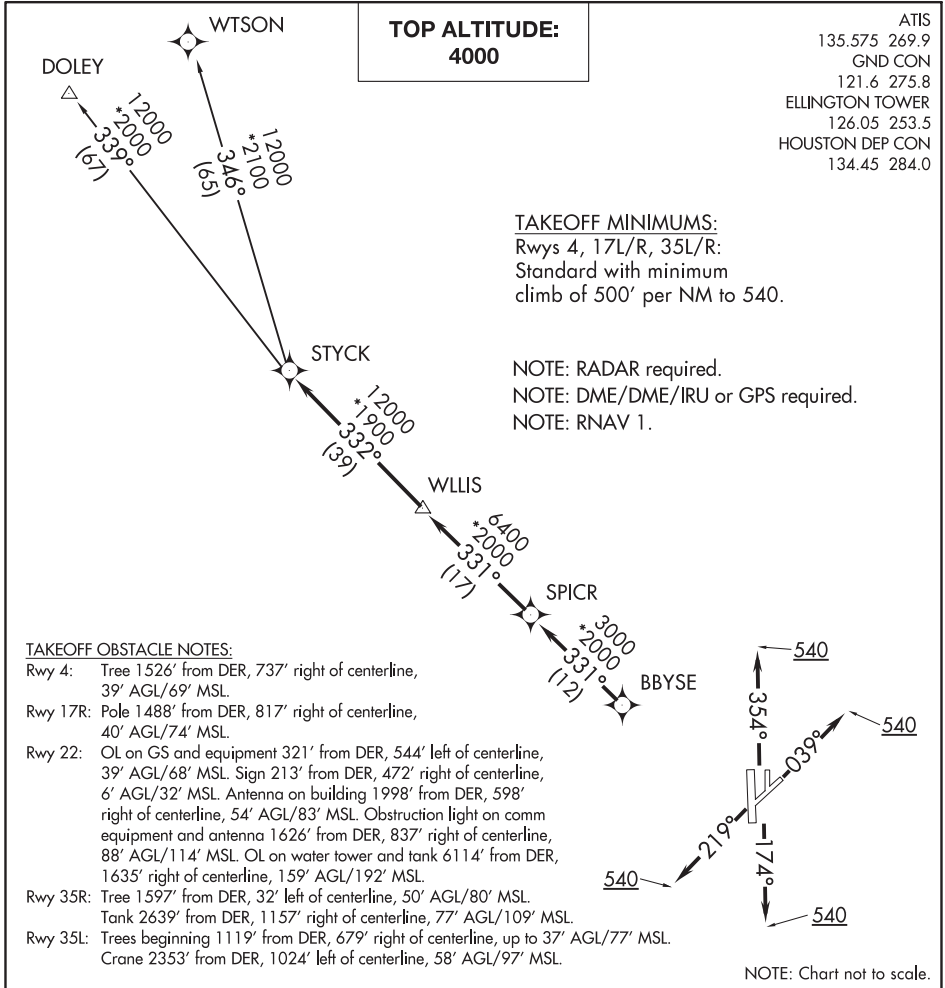
ELLINGTON (EFD)
 HOUSTON, TEXAS

ATIS
 135.575 269.9
 GND CON
 121.6 275.8
 ELLINGTON TOWER
 126.05 253.5
 HOUSTON DEP CON
 134.45 284.0

**TOP ALTITUDE:
 4000**

TAKEOFF MINIMUMS:
 Rwys 4, 17L/R, 35L/R:
 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 RWY 4: Climb heading 039° to 540, expect RADAR vectors to BBYSE, thence. . .
- TAKEOFF RWYS 17L/R: Climb heading 174° to 540, expect RADAR vectors to BBYSE, thence. . .
- TAKEOFF RWY 22: Climb heading 219° to 540, expect RADAR vectors to BBYSE, thence. . .
- TAKEOFF RWYS 35L/R: Climb heading 354° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

- DOLEY TRANSITION (STYCK4.DOLEY)
- WTSON TRANSITION (STYCK4.WTSON)

STYCK FOUR DEPARTURE (RNAV)
 (STYCK4.STYCK) 10NOV16

HOUSTON, TEXAS
 ELLINGTON (EFD)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TRUAX SIX DEPARTURE

SL-197 (FAA)

ELLINGTON (EFD)
HOUSTON, TEXAS

ATIS
135.575 269.9
GND CON
121.6 275.8
ELLINGTON TOWER
126.05 253.5
HOUSTON DEP CON
134.45 284.0

HOBBY
117.1 HUB
Chan 118

**TOP ALTITUDE:
4000**

EAGLE LAKE
116.4 ELA
Chan 111

SCHOLES
113.0 VUH
Chan 77

TAKEOFF MINIMUMS:

Rwys 4, 17L/R, 35L/R: Standard.

Rwy 22: 200-1¼ 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: RADAR required.

TRUAX
114.0 NGP
Chan 87
N27°41.18'
W97°17.68'
L-20-21, H-7

YAWNS
N28°49.39'
W95°33.96'

NOTE: For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP VORTAC to international destinations.

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: OL 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. OL on comm equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL. OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.

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.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

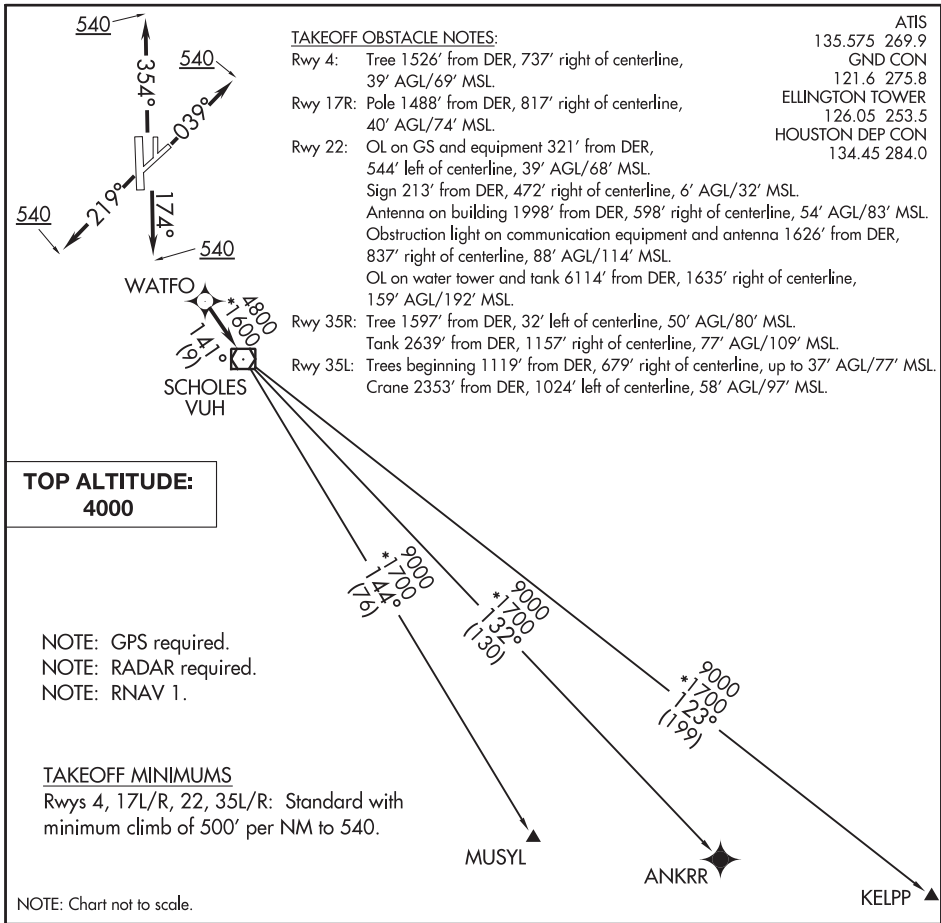
Climb on assigned heading for RADAR vectors to YAWNS INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . .

. . . on VUH R-228 and NGP R-047 to NGP VORTAC.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WATFO THREE DEPARTURE (RNAV)



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

DEPARTURE ROUTE DESCRIPTION

- TAKEOFF RWY 4: Climb on heading 039° to 540, expect RADAR vectors to WATFO, thence . . .
- TAKEOFF RWYS 17L/R: Climb on heading 174° to 540, expect RADAR vectors to WATFO, thence . . .
- TAKEOFF RWY 22: Climb on heading 219° to 540, expect RADAR vectors to WATFO, thence . . .
- TAKEOFF RWYS 35L/R: Climb on heading 354° to 540, expect RADAR vectors to WATFO, thence . . .

. . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

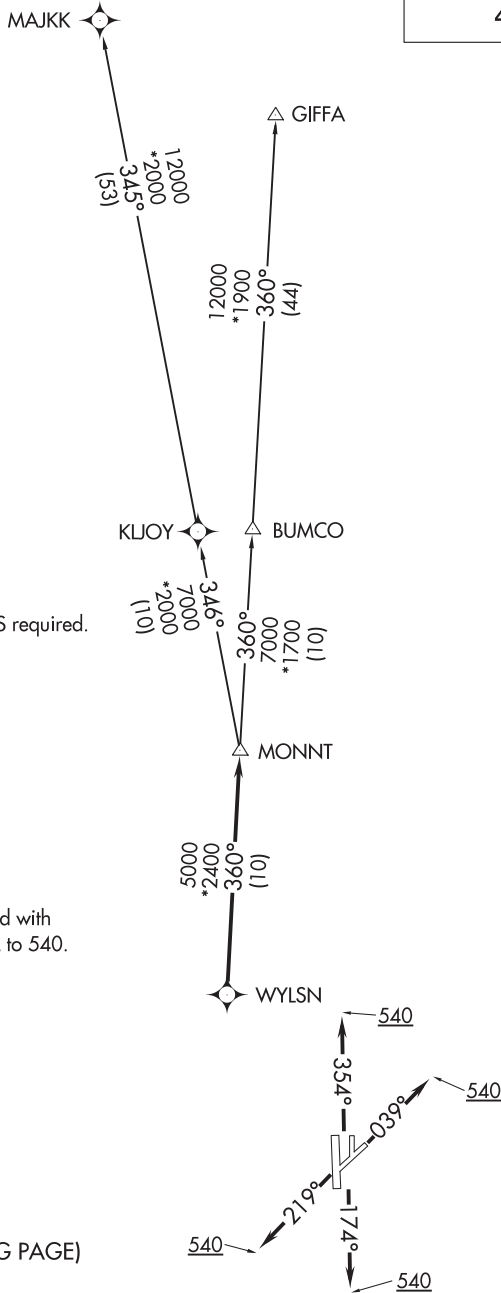
- ANKRR TRANSITION (WATFO3.ANKRR):
- KELPP TRANSITION (WATFO3.KELPP):
- MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

WYLSN FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

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, 35L/R: Standard with minimum climb of 500' per NM to 540.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb on heading 039° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWYS 17L/R: Climb on heading 174° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 22: Climb on heading 219° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWYS 35L/R: Climb on heading 354° to 540, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJJK)

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: OL 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.

OL on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' 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.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-BZU 111.55 Chan 52 (Y)	APP CRS 087°	Rwy Idg TDZE Apt Elev	9000 95 96
---	------------------------	-----------------------------	---------------------------------------

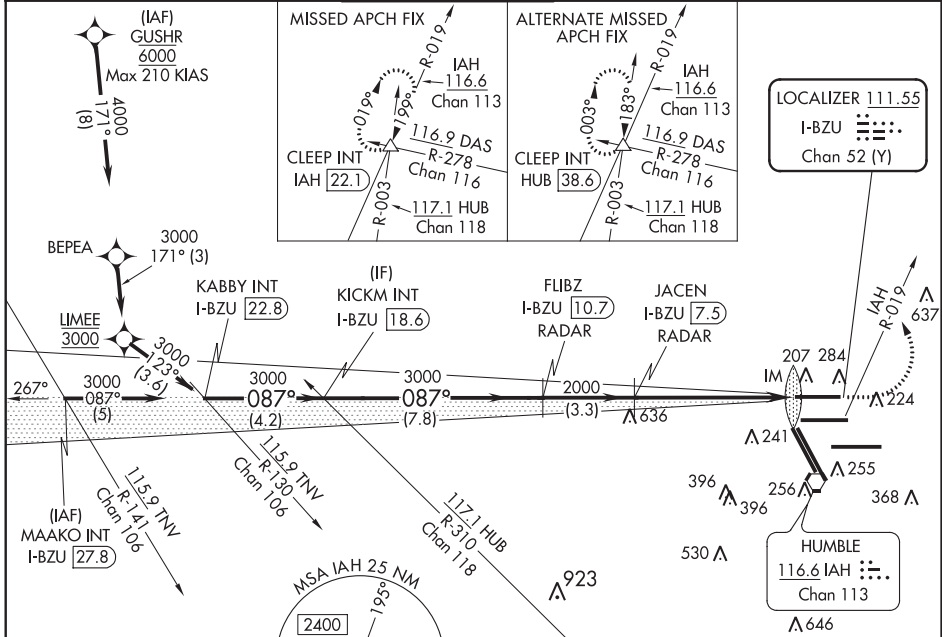
ILS or LOC RWY 8L

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

For inop ALSF, increase S-ILS 8L Cat E visibility to RVR 4000 and S-LOC 8L Cat C/D/E visibility to 1 1/2 mile. Simultaneous approach authorized with Rwy 8R and Rwy 9.

ALSF-2 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 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------



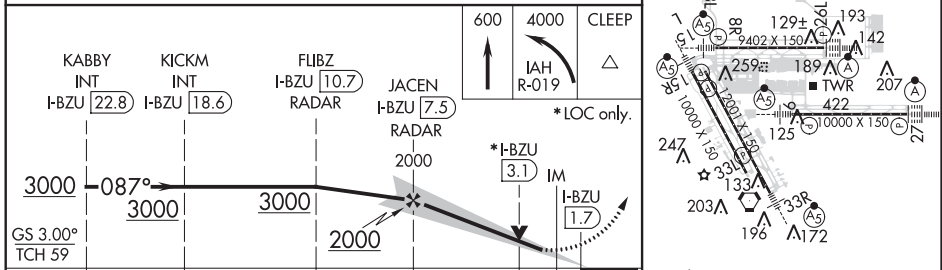
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

GPS or RADAR REQUIRED

ELEV 96 TDZE 95

087° 5.8 NM from FAF



CATEGORY	A	B	C	D	E
S-ILS 8L	295/18		200 (200-1/2)		
S-LOC 8L	600/24	505 (600-1/2)	600/55	505 (600-1/4)	


FAF to MAP 5.8 NM					
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

LOC/DME I-IAH 109.7 Chan 34	APP CRS 087°	Rwy Idg 9402 TDZE 96 Apt Elev 96
--	------------------------	---

ILS or LOC RWY 8R

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

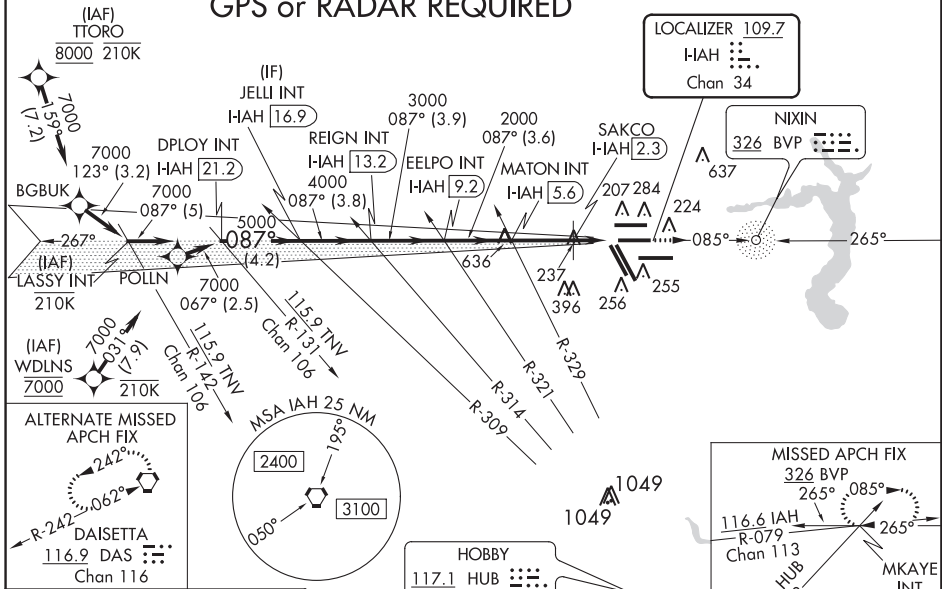
ADF Required. Simultaneous approach authorized with Rwy 8L and Rwy 9. For inop MALSRL, increase S-ILS 8R Cat E visibility to RVR 4000, and S-LOC 8R Cat C-E visibility to 2½ miles. SAKCO Fix Minimums: For inop MALSRL, increase S-LOC 8R Cat C-E visibility to RVR 6000.

MALSRL


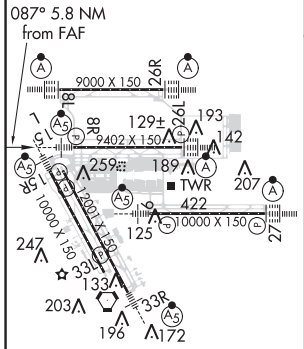
MISSED APPROACH: Climb to 3000 on BVP NDB bearing 085° to MKAYE INT and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

GPS or RADAR REQUIRED



ELEV 96	D	TDZE 96
----------------	----------	----------------



TDZ/CL Rwy's 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwy's

FAF to MAP 5.8 NM

Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 72).

DPLOY INT I-IAH 21.2	JELLI INT IAH 16.9	EELPO INT IAH 9.2	MATON INT IAH 5.6	SAKCO I-IAH 2.3	I-IAH DME ANTENNA I-IAH 0.9	I-IAH 0.2
7000		5000		4000		3000
GS 3.00°		TCH 55		*940		
-4.2 NM		3.8		3.9		3.6
3.3 NM		1.5 NM		1 NM		
CATEGORY	A		B		C	
S-ILS 8R	296/18		200 (200-½)			
S-LOC 8R	940/24	940/40	940-17%		844 (900-17%)	
SAKCO FIX MINIMUMS (DME REQUIRED)						
S-LOC 8R	500/24	404 (500-½)	500/40		404 (500-¾)	

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-UYO 110.9 Chan 46	APP CRS 087°	Rwy Idg 10000 TDZE 91 Apt Elev 96
---	------------------------	--

ILS or LOC RWY 9

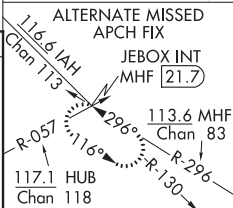
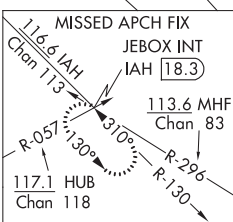
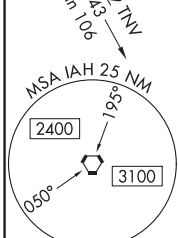
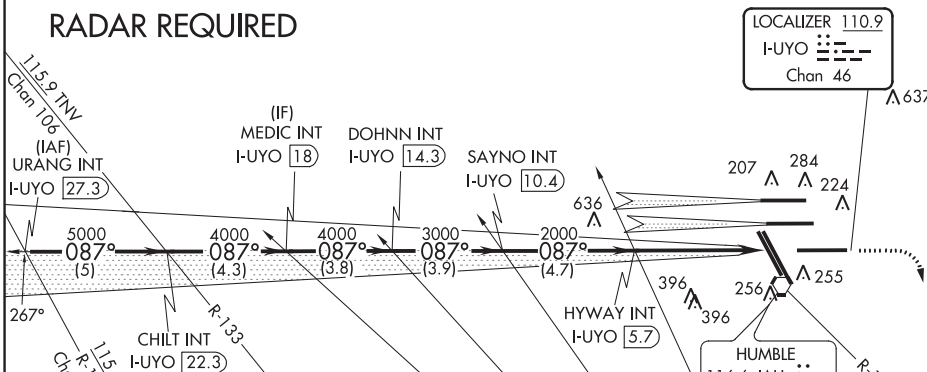
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

For inop MALSR, increase S-ILS 9 Cat E visibility to RVR 4000 and S-LOC 9 Cat C/D/E visibility to 1 1/8 mile. Simultaneous approach authorized with Rwy 8L/R. #RVR 1800 authorized with the use of FD or AP or HUD to DA.

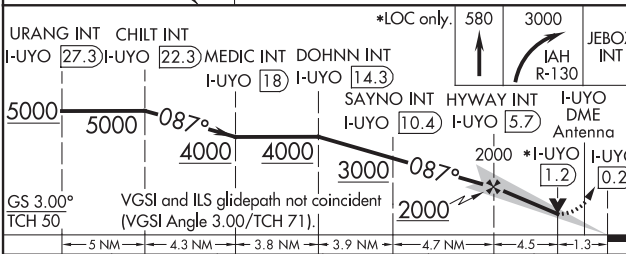
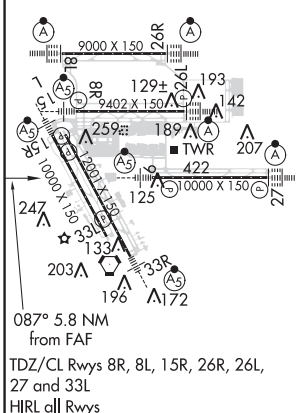
MALSR MISSED APPROACH: Climb to 580 then climbing right turn to 3000 on IAH VORTAC R-130 to JEBOX INT/IAH 18.3 DME and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

RADAR REQUIRED



ELEV 96	D	TDZE 91
----------------	----------	----------------



CATEGORY	A	B	C	D	E
S-ILS 9	# 291/24 200 (200-1/2)				
S-LOC 9	580/24	489 (500-1/2)	580/50	489 (500-1)	

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)

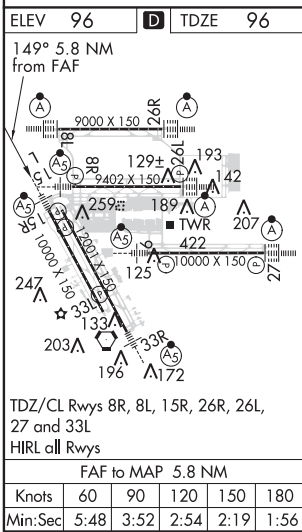
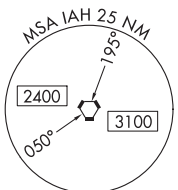
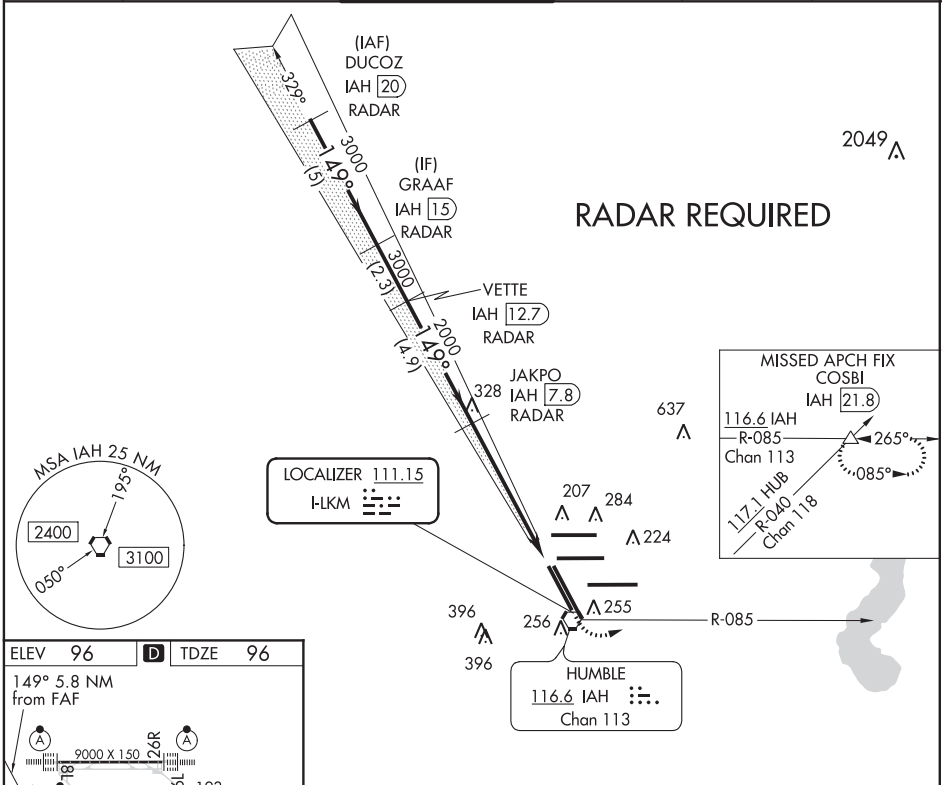
16259

LOC I-LKM 111.15	APP CRS 149°	Rwy Idg 10000 TDZE 96 Apt Elev 96
----------------------------	------------------------	--

ILS or LOC RWY 15R

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

<p>▼ DME from IAH VORTAC; simultaneous reception of I-LKM and IAH DME required. For inop MALSRS, increase S-ILS 15R Cat E visibility to RVR 4000, and S-LOC 15R Cat C/D/E visibility to 1½%. DME or RADAR required.</p>	<p>MALSRS</p>	<p>MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 on IAH VORTAC R-085 to COSBI INT/IAH 21.8 DME and hold.</p>			
<p>ATIS 124.05</p>	<p>HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST</p>	<p>HOUSTON TOWER 127.3 288.25</p>	<p>GND CON 121.7</p>	<p>CLNC DEL 128.1</p>	<p>CPDLC</p>



VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).

DUCOZ IAH [20] RADAR	GRAAF IAH [15] RADAR	VETTE IAH [12.7] RADAR	JAKPO IAH [7.8] RADAR
----------------------------	----------------------------	------------------------------	-----------------------------

1000
↑
2000
IAH R-085

*LOC only.

3000	3000	3000	2000	2000	2000
5 NM	2.3 NM	4.9 NM	4.5 NM	1.3	

CATEGORY	A	B	C	D	E
S-ILS 15R	296/18		200 (200-½)		
S-LOC 15R	580/24		484 (500-½)		580/50 484 (500-1)

HOUSTON, TEXAS
Amdt 2A 21JUL16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
ILS or LOC RWY 15R

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-JYV 109.7 Chan 34	APP CRS 267°	Rwy Idg TDZE Apt Elev	9402 95 96
--	------------------------	-----------------------------	---------------------------------------

ILS or LOC RWY 26L

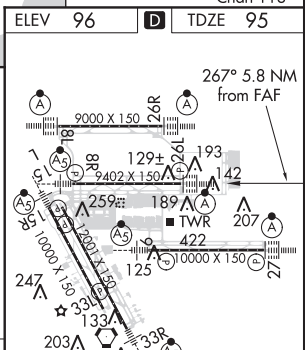
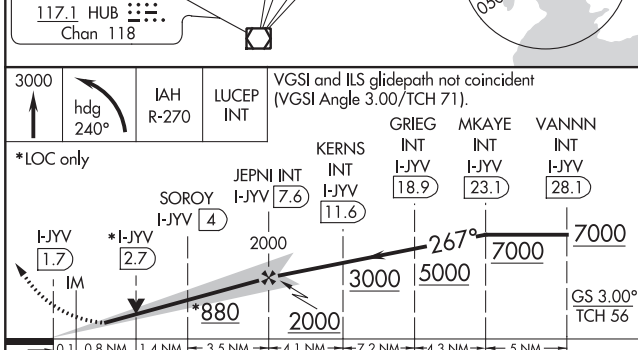
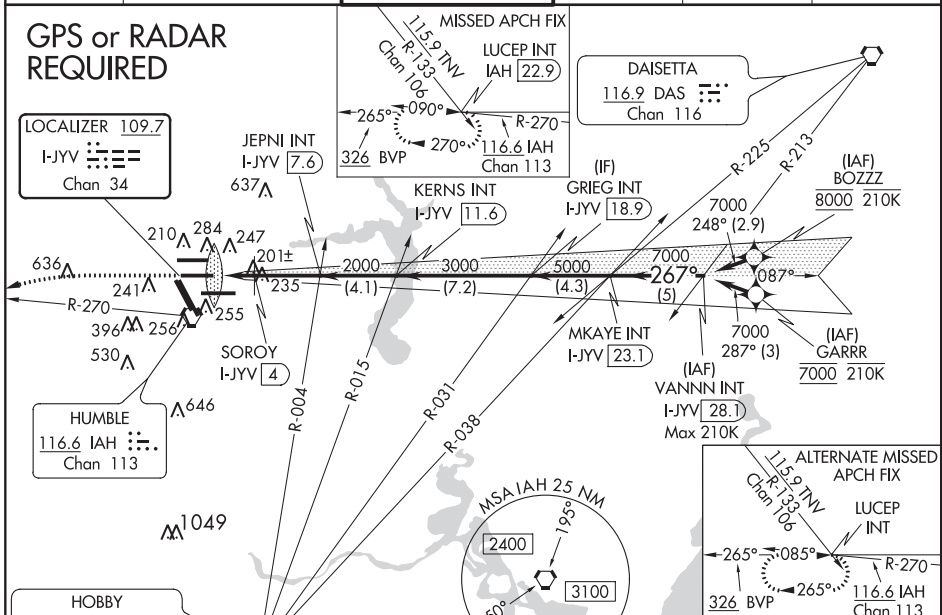
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

▽ For inop ALSF, increase S-ILS 26L Cat E visibility to RVR 4000, S-LOC 26L Cat C/D/E visibility to 2½ miles. SOROY fix minimums: For inop ALSF, increase S-LOC 26L Cat C/D/E visibility to RVR 5000. Simultaneous approach authorized with Rwy 26R and Rwy 27.

ALSF-2
(A)

MISSED APPROACH: Climb to 3000 then left turn heading 240° and IAH VORTAC R-270 to LUCEP INT/IAH 22.9 DME and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------



CATEGORY	A	B	C	D	E
S-ILS 26L	295/18 200 (200-½)				
S-LOC 26L	880/24 785 (800-½)	880/40 785 (800-¾)	880-1¾	785 (800-1¾)	
SOROY FIX MINIMUMS (DME REQUIRED)					
S-LOC 26L	460/24	365 (400-½)	460/35	365 (400-¾)	

Knots	FAF to MAP 5.8 NM				
	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-OND 111.55 Chan 52 (Y)	APP CRS 267°	Rwy Idg TDZE Apt Elev 9000 96 96
--	------------------------	--

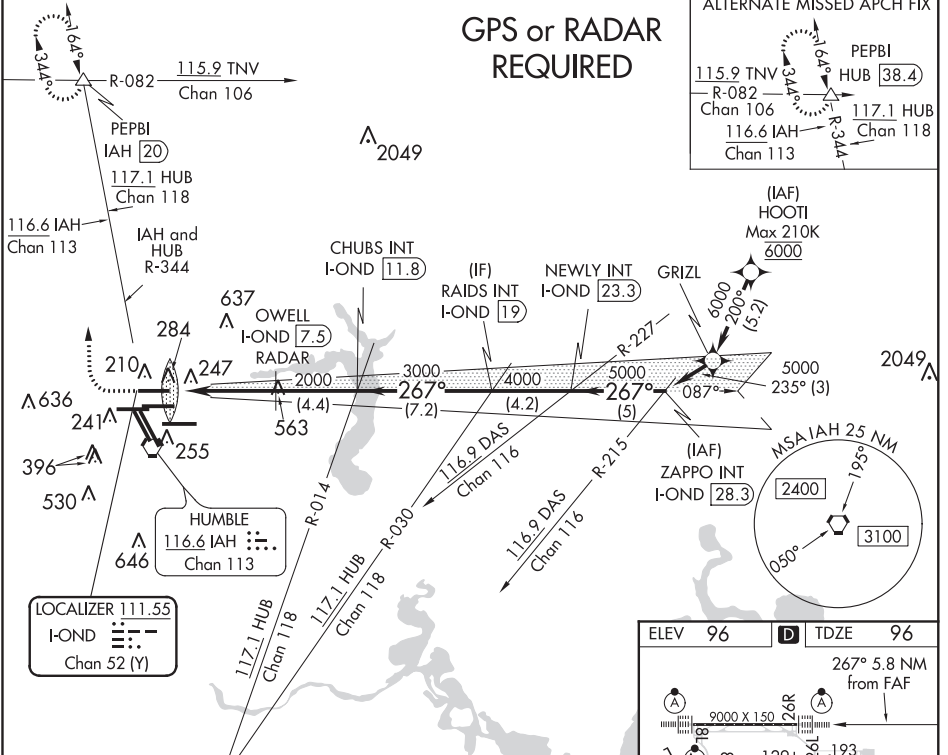
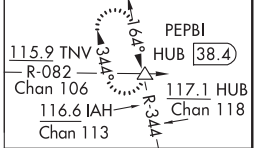
ILS or LOC RWY 26R

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

<p>Simultaneous approach authorized with Rwy 26L and Rwy 27. DME or RADAR required. For inop ALSF, increase S-ILS 26R Cat E visibility to RVR 4000 and S-LOC 26R Cat C/D/E visibility to 1$\frac{1}{2}$ mile.</p>		<p>ALSF-2</p>	<p>MISSED APPROACH: Climb to 600 then climbing right turn to 3000 on IAH VORTAC R-344 to PEPBI INT/IAH 20 DME and hold.</p>		
ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC

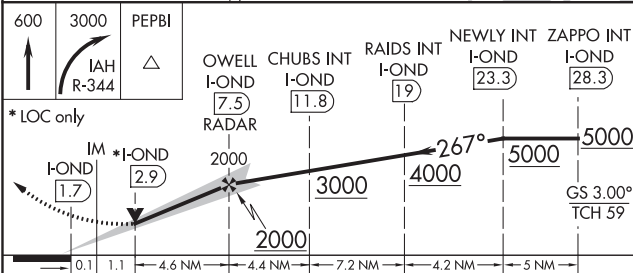
GPS or RADAR REQUIRED

ALTERNATE MISSED APCH FIX



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



ELEV 96	TDZE 96
<p>267° 5.8 NM from FAF</p>	
<p>TDZ/CL Rws 8R, 8L, 15R, 26R, 26L, 27 and 33L</p>	
<p>HIRL all Rws</p>	
<p>FAF to MAP 5.8 NM</p>	
Knots	60 90 120 150 180
Min:Sec	5:48 3:52 2:54 2:19 1:56

CATEGORY	A	B	C	D	E
S-ILS 26R	296/18		200 (200-1/2)		
S-LOC 26R	560/24	464 (500-1/2)	560/50	464 (500-1)	

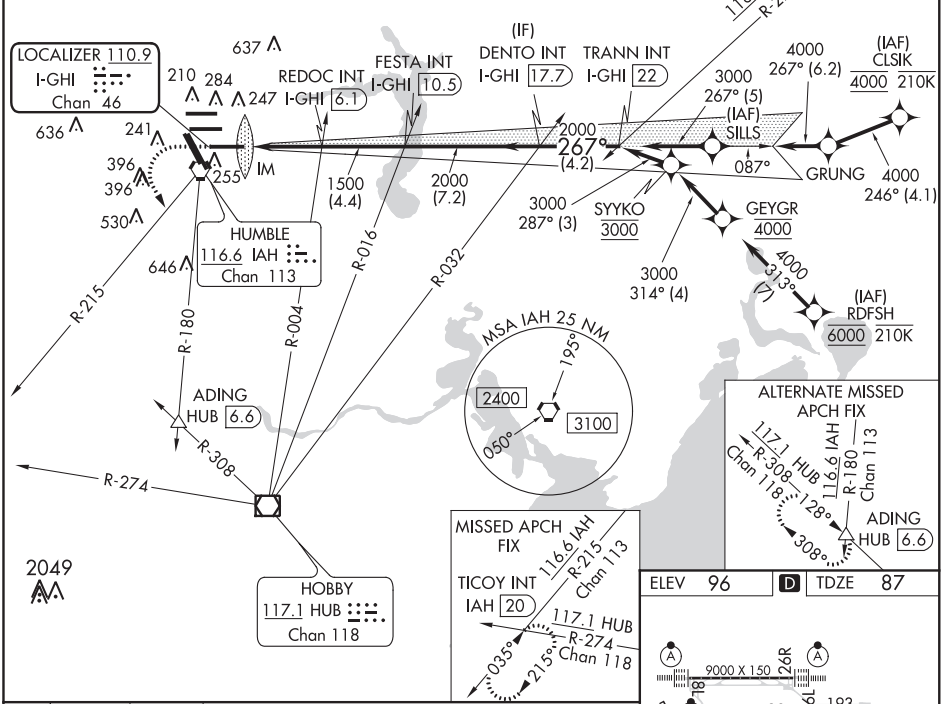
LOC/DME I-GHI 110.9 Chan 46	APP CRS 267°	Rwy Idg 10000 TDZE 87 Apt Elev 96
---	------------------------	--

ILS or LOC RWY 27

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

▽ Simultaneous approach authorized with Rwys 26L/R. For inop ALSF, increase S-ILS 27 Cat E visibility to RVR 4000 and S-LOC 27 Cat C-E visibility to 1%.		ALSF-2 	MISSED APPROACH: Climb to 560 then climbing left turn to 3000 on IAH VORTAC R-215 to TICOOY INT/IAH 20 DME and hold.		
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

GPS and RADAR REQUIRED



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

560	3000	VGSIs and ILS glidepath not coincident (VGSi Angle 3.00/TCH 70).		TRANN INT I-GHI 22		
*LOC only.		REDOC INT I-GHI 6.1	FESTA INT I-GHI 10.5	DENTO INT I-GHI 17.7		
		1500	2000	2000		
0.1 1.2 3 NM 4.4 NM 7.2 NM 4.2 NM						
CATEGORY	A	B	C	D	E	
S-ILS 27	287/18 200 (200-½)					
S-LOC 27	560/24	473 (500-½)	560/50 473 (500-1)			
TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L HIRL all Rwys FAF to MAP 4.3 NM						
Knots		60	90	120	150	180
Min:Sec		4:18	2:52	2:09	1:43	1:26

HOUSTON, TEXAS

AL-5461 (FAA)

16259

ILS or LOC RWY 33R

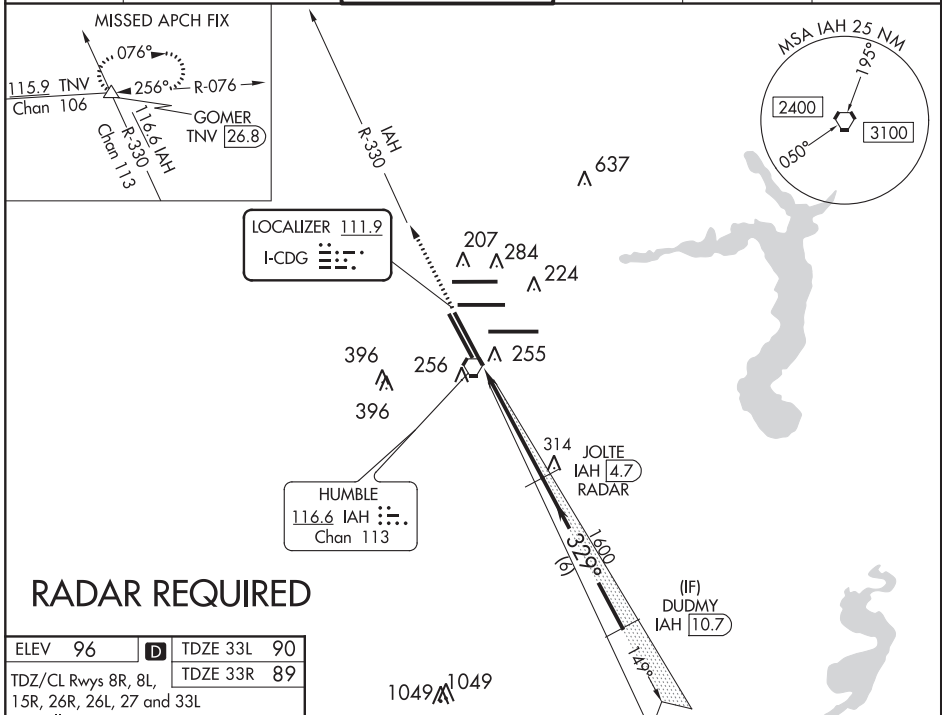
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

LOC I-CDG 111.9	APP CRS 329°	Rwy 33R Idg 12001 TDZE 89 Apt Elev 96	Rwy 33L Idg 10000 TDZE 90 Apt Elev 96
---------------------------	------------------------	--	--

▼ DME from IAH VORTAC. Simultaneous reception of I-CDG and IAH DME Required. For inop MALSRL, increase S-ILS 33R Cat E visibility to RVR 4000 and S-LOC 33R Cat E visibility to 1/2. DME or RADAR Required. #RVR 1800 authorized with the use of FD or AP or HUD to DA.

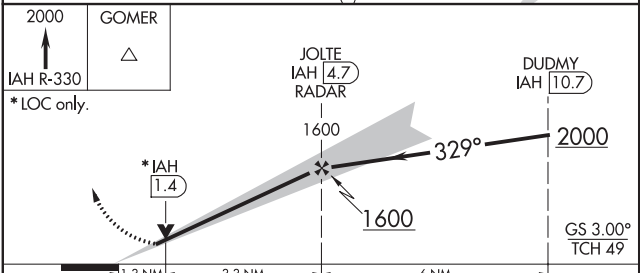
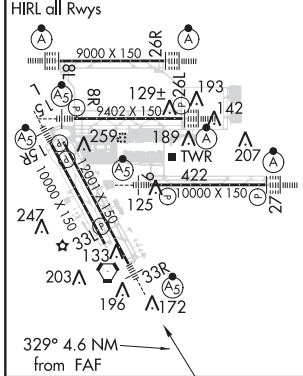
MALSRL MISSED APPROACH: Climb to 2000 on IAH VORTAC R-330 to GOMER INT/TNV 26.8 DME and hold.

ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 127.3 288.25	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------



ELEV 96	D	TDZE 33L 90
TDZ/CL Rws 8R, 8L, 15R, 26R, 26L, 27 and 33L		TDZE 33R 89

HIRL all Rws



CATEGORY	A	B	C	D	E
S-ILS 33R	# 289/24 200 (200-1/2)				
S-LOC 33R	540/24	451 (500-1/2)	540/45 451 (500-7/8)		
SIDESTEP Rwy 33L	540-1	450 (500-1)	540-1 1/2	540-2	NA
			450 (500-1 1/2)	450 (500-2)	

HOUSTON, TEXAS
Amdt 13A 23JUN16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
ILS or LOC RWY 33R

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-BZU 111.55 Chan 52 (Y)	APP CRS 087°	Rwy Idg TDZE Apt Elev	9000 95 96
---	------------------------	-----------------------------	---------------------------------------

ILS RWY 8L (SA CAT I)

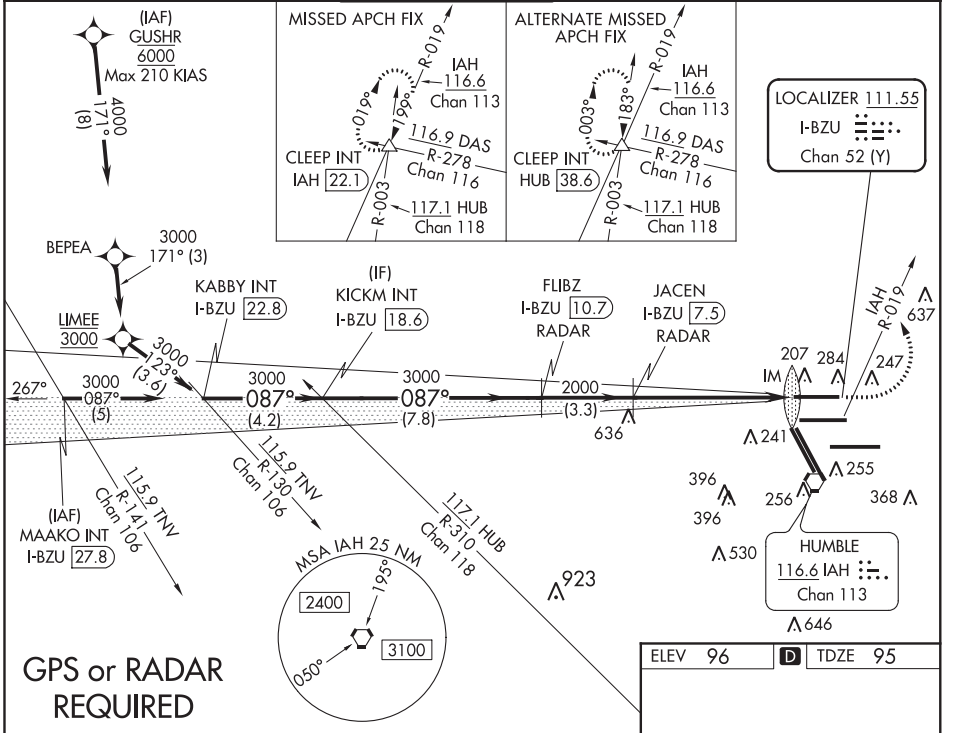
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

Simultaneous approach authorized with Rwy 8R and Rwy 9. Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DA.

ALSF-2

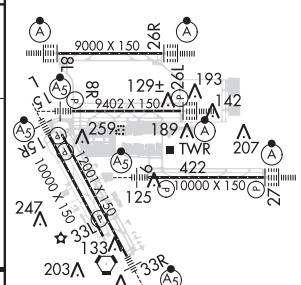
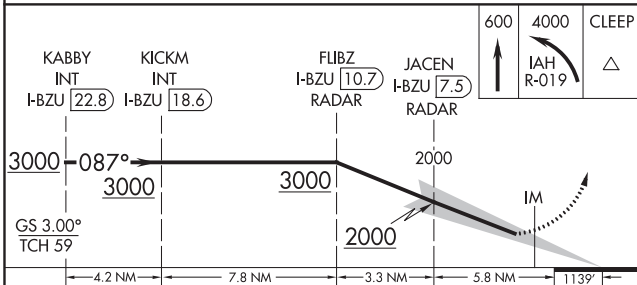
MISSED APPROACH: Climb to 600 then climbing left turn to 4000 on IAH VORTAC R-019 to CLEEP INT/IAH 22.1 DME and hold.

ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------



LOCALIZER 111.55
I-BZU
Chan 52 (Y)

ELEV 96 TDZE 95



CATEGORY	A	B	C	D
S-ILS 8L		RA 156/14	150 DA 245	

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwy's 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwy's

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-JYV 109.7 Chan 34	APP CRS 267°	Rwy Idg TDZE Apt Elev	9402 95 96
--	------------------------	-----------------------------	---------------------------------------

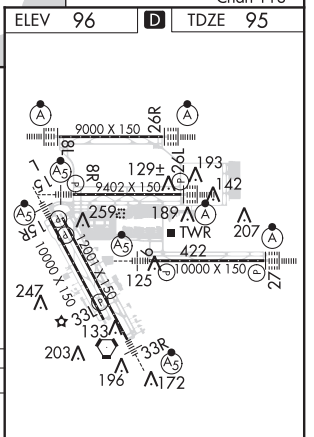
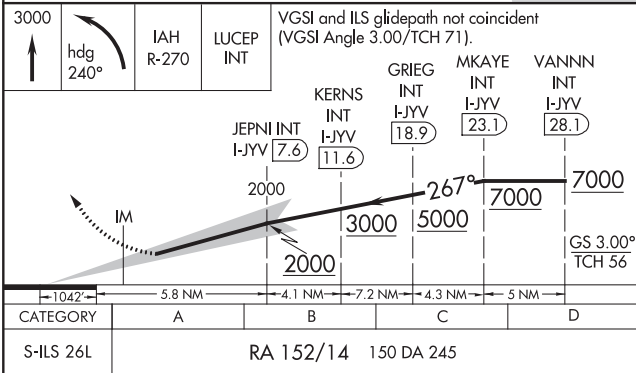
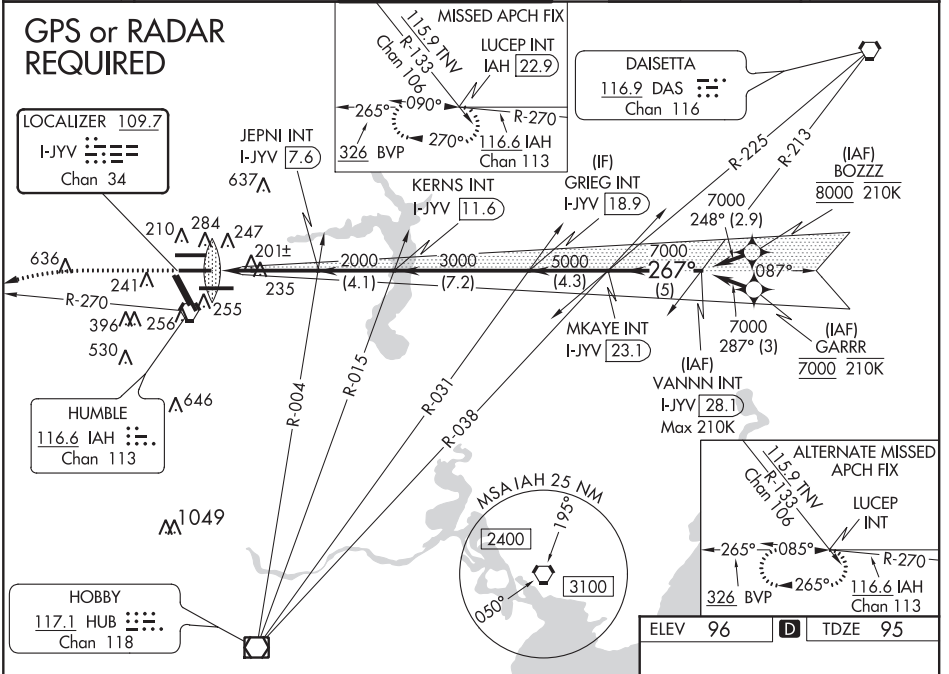
ILS RWY 26L (SA CAT I)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

Simultaneous approach authorized with Rwy 26R and Rwy 27.
Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSF-2
MISSED APPROACH: Climb to 3000 then left turn heading 240° and IAH VORTAC R-270 to LUCEP INT/IAH 22.9 DME and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------



SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/Cl Rwsys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HILR all Rwsys

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-OND 111.55 Chan 52 (Y)	APP CRS 267°	Rwy Idg TDZE Apt Elev 9000 96 96
--	------------------------	--

ILS RWY 26R (SA CAT I)
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

Requires specific OPSPEC, MSPEC or LOA approval and use of HUD to DH. Simultaneous approach authorized with Rwy 26L and Rwy 27. DME or RADAR required.

ALSF-2

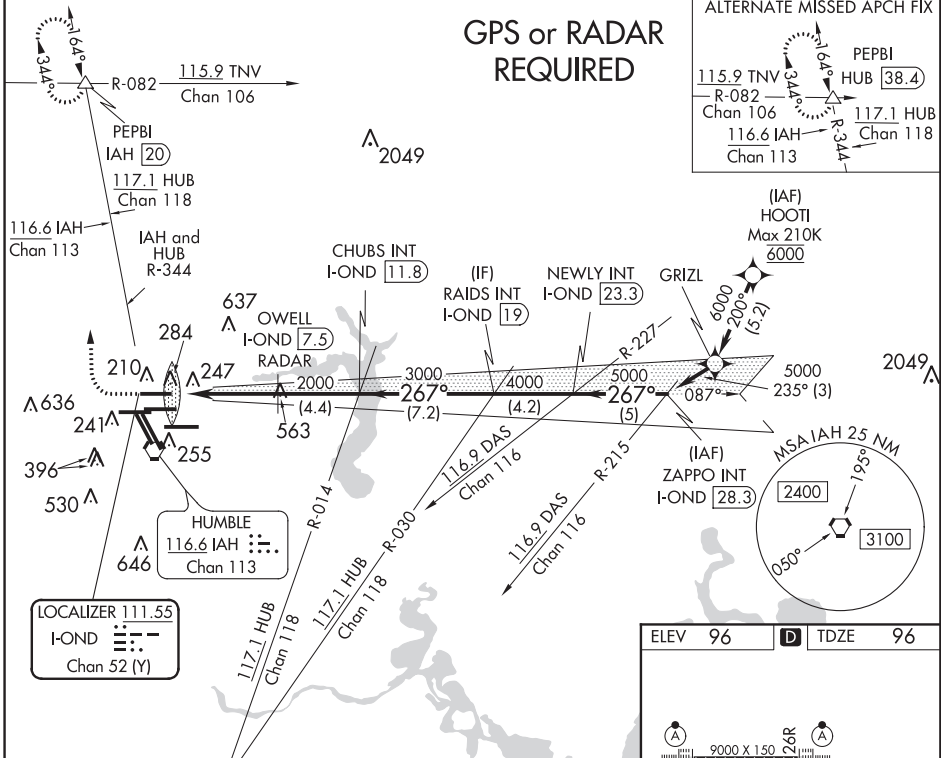
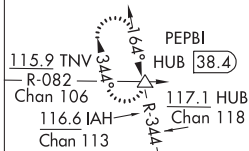


MISSED APPROACH: Climb to 600 then climbing right turn to 3000 on IAH VORTAC R-344 to PEPBI INT/ IAH 20 DME and hold.

ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------

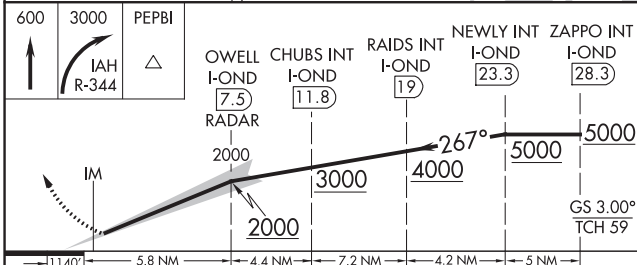
GPS or RADAR REQUIRED

ALTERNATE MISSED APCH FIX

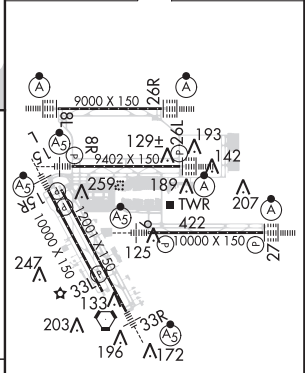


SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



ELEV 96	D TDZE 96
---------	-----------



600	3000	PEPBI			
IAH R-344	△				
OWELL I-OND 7.5 RADAR	CHUBS INT I-OND 11.8	RAIDS INT I-OND 19	NEWLY INT I-OND 23.3	ZAPPO INT I-OND 28.3	
2000	3000	4000	5000	5000	
IM				GS 3.00° TCH 59	
1140'	5.8 NM	4.4 NM	7.2 NM	4.2 NM	5 NM
CATEGORY	A	B	C	D	
S-ILS-26R	RA 157/14 150 DA 246				

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwyys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwyys

LOC/DME I-GHI 110.9 Chan 46	APP CRS 267°	Rwy Idg 10000 TDZE 87 Apt Elev 96
---	------------------------	--

ILS RWY 27 (SA CAT I)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

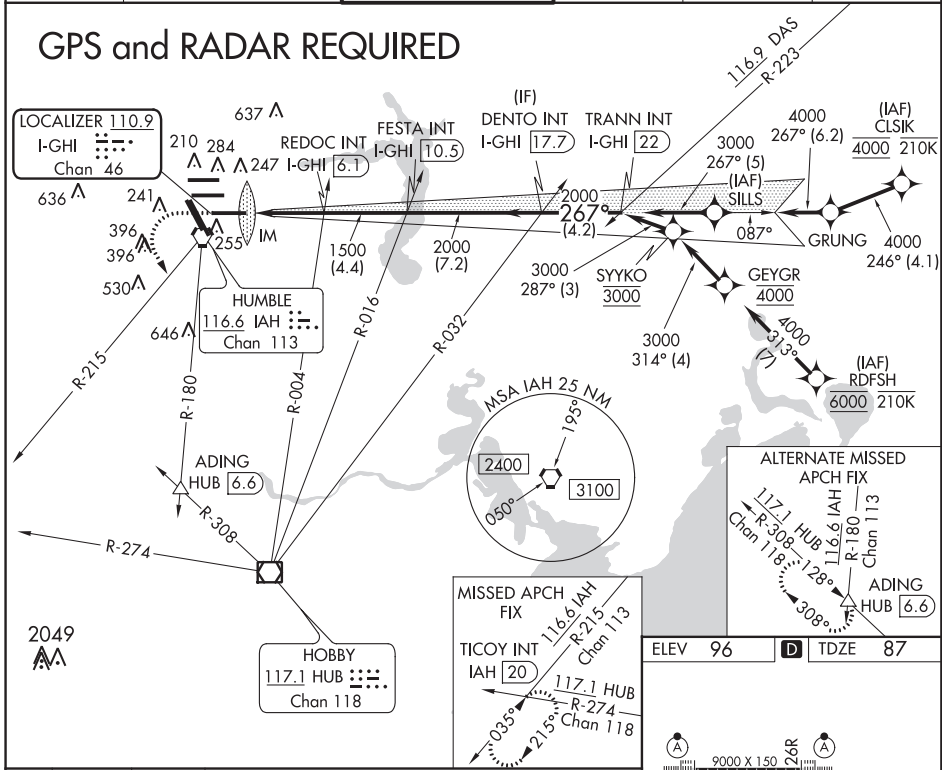
Simultaneous approach authorized with Rwy 26L/R. Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSIF-2

MISSED APPROACH: Climb to 560 then climbing left turn to 3000 on IAH VORTAC R-215 to TICOO INT/IAH 20 DME and hold.

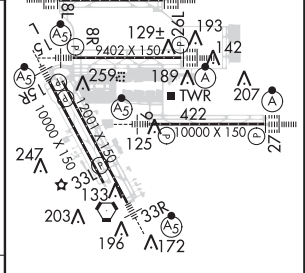
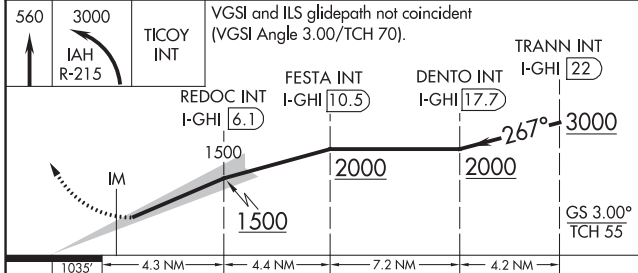
ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 135.15 290.2	GND CON 118.575	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

GPS and RADAR REQUIRED



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D
S-ILS 27	RA 104/14		150 DA 237	

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys

LOC/DME I-IAH 109.7 Chan 34	APP CRS 087°	Rwy Idg 9402 TDZE 96 Apt Elev 96
---	------------------------	---

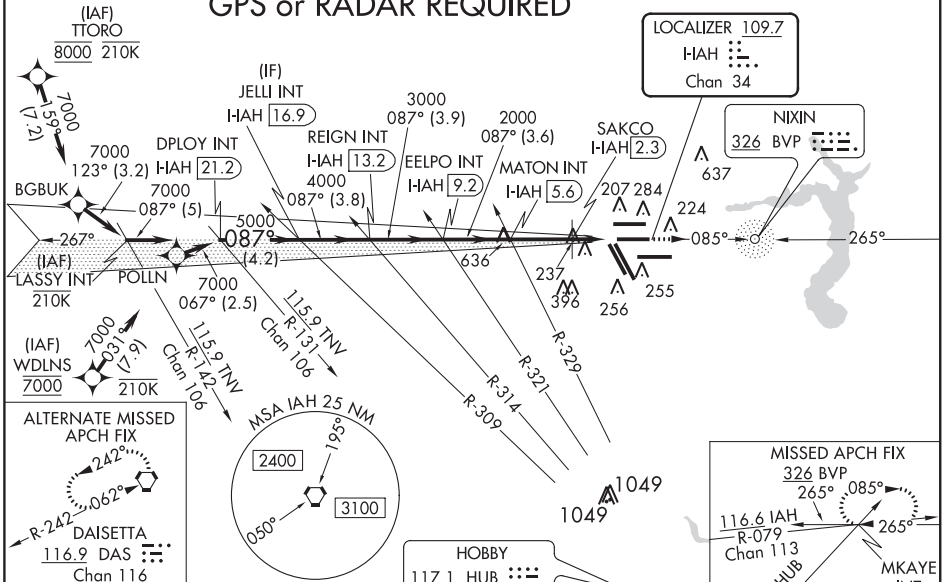
ILS RWY 8R (SA CAT I & II)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

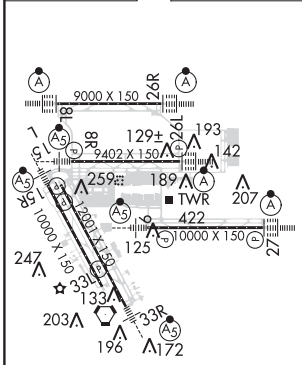
<p>▼ ADF Required. Simultaneous approach authorized with Rwy 8L and Rwy 9.</p> <p>▲ SA CAT I: Reduced lighting: requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.</p> <p>SA CAT II: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown.</p>	MALSR 	MISSED APPROACH: Climb to 3000 on BVP NDB bearing 085° to MKAYE INT and hold.
--	-----------	---

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

GPS or RADAR REQUIRED



ELEV 96	D	TDZE 96
----------------	----------	----------------



TDZ/CL Rwy 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 72).

DPLOY INT	JELLI INT	EELPO INT	REIGN INT	MATON INT
I-IAH 21.2	I-IAH 16.9	I-IAH 9.2	I-IAH 13.2	I-IAH 5.6
7000	5000	4000	3000	2000
GS 3.00° TCH 55				
-4.2 NM -3.8 -3.9 -3.6 -5.8 NM 1040'				
CATEGORY	A	B	C	D
S-ILS 8R	SA CAT I RA 152/14 150 DA 246			
S-ILS 8R	SA CAT II RA 102/12 100 DA 196			

SA CATEGORY I and II ILS SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)

16259

LOC/DME I-UYO 110.9 Chan 46	APP CRS 087°	Rwy Idg 10000 TDZE 91 Apt Elev 96
---	------------------------	--

ILS RWY 9 (SA CAT I & II)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

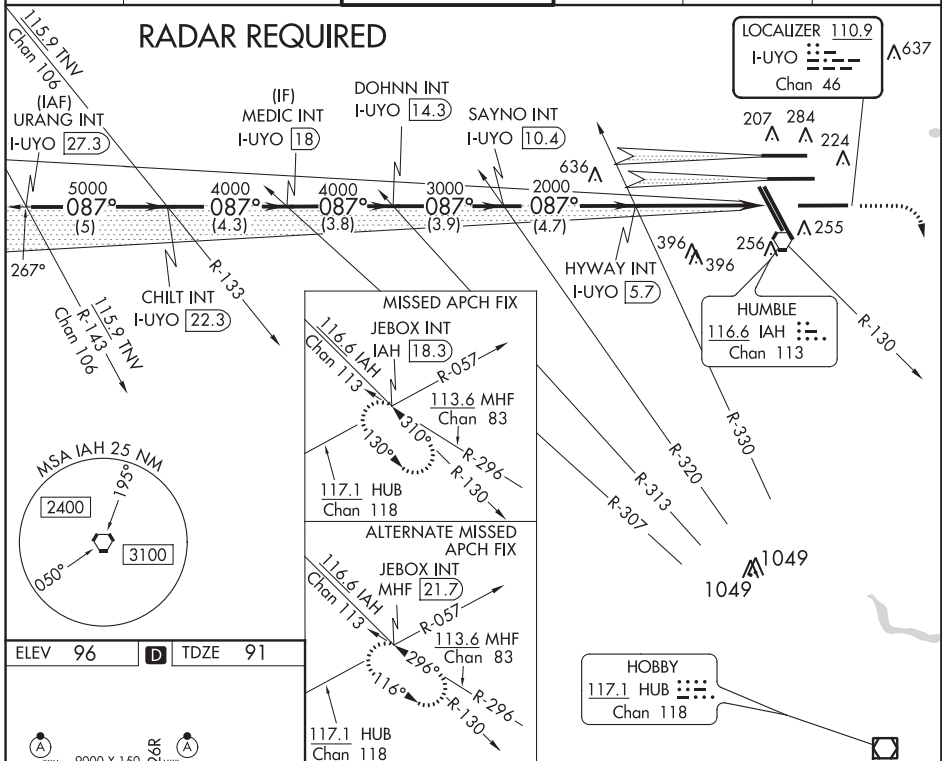
Simultaneous approach authorized with Rwy 8L/R. SA CAT I: Requires specific OPSPEC, MSPEC, or LOA approval and use of AUTOLAND or HUD to touchdown. SA CAT II: Reduced lighting: requires specific OPSPEC, MSPEC, or LOA approval and use of AUTOLAND or HUD to touchdown.

MALS R

MISSED APPROACH: Climb to 580 then climbing right turn to 3000 on IAH VORTAC R-130 to JEBOX INT/IAH 18.3 DME and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

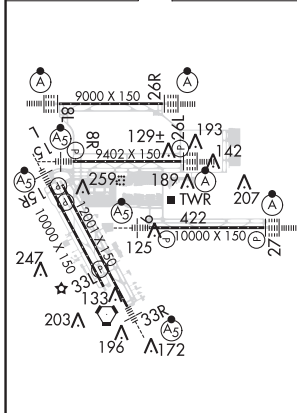
RADAR REQUIRED



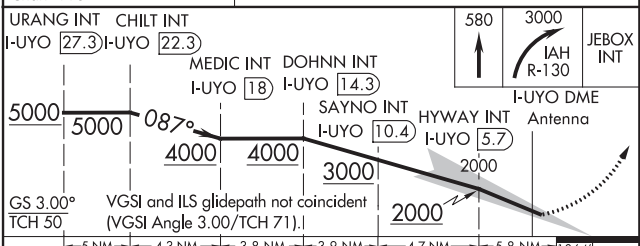
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 96	D TDZE 91
---------	------------------



TDZ/CL Rwy 8, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwy



CATEGORY	A	B	C	D
S-ILS 9	SA CAT I RA 149/14 150 DA 241			
S-ILS 9	SA CAT II RA 99/12 100 DA 191			

SA CATEGORY I and II ILS SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HOUSTON, TEXAS
Amdt 10A 21JUL16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
ILS RWY 9 (SA CAT I & II)

LOC/DME I-BZU 111.55 Chan 52 (Y)	APP CRS 087°	Rwy Idg TDZE Apt Elev	9000 95 96
---	------------------------	-----------------------------	---------------------------------------

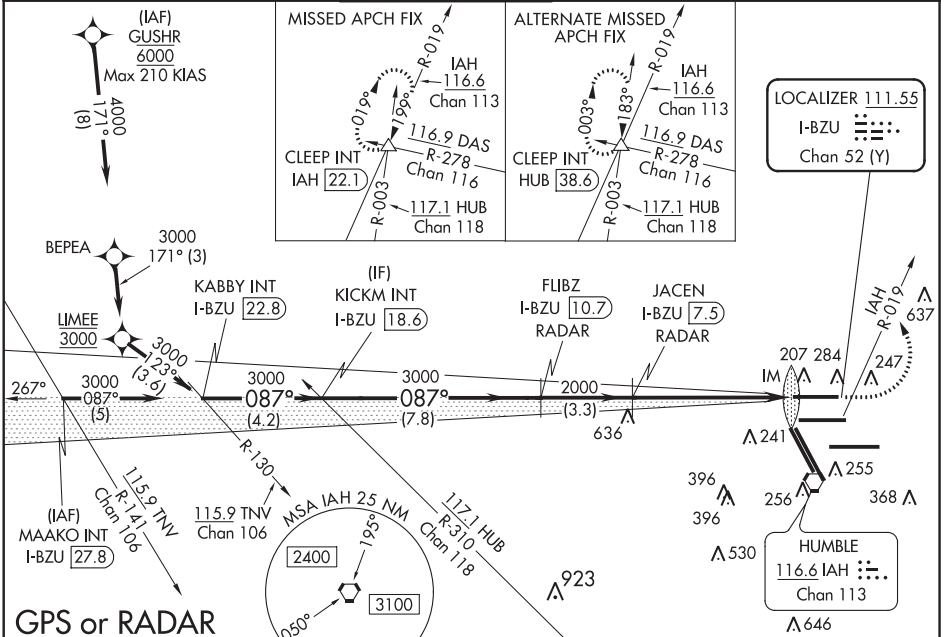
ILS RWY 8L (CAT II & III)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

Simultaneous approach authorized with Rwy 8R and Rwy 9. RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

ALSF-2 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 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------

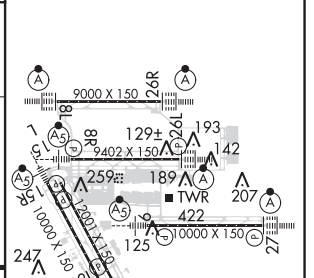
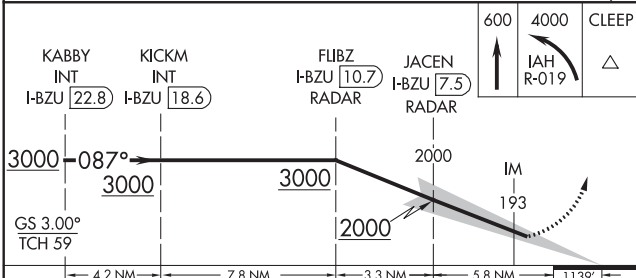


SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

GPS or RADAR REQUIRED

ELEV 96	D TDZE 95
---------	------------------



CATEGORY	A	B	C	D
S-ILS 8L	CAT II RA 104/12		100 DA 195	
S-ILS 8L	CAT IIIa RVR 07			
S-ILS 8L	CAT IIIb RVR 06			
S-ILS 8L	CAT IIIc NA			

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys

LOC/DME I-JYV 109.7 Chan 34	APP CRS 267°	Rwy Idg TDZE Apt Elev	9402 95 96
--	------------------------	-----------------------------	---------------------------------------

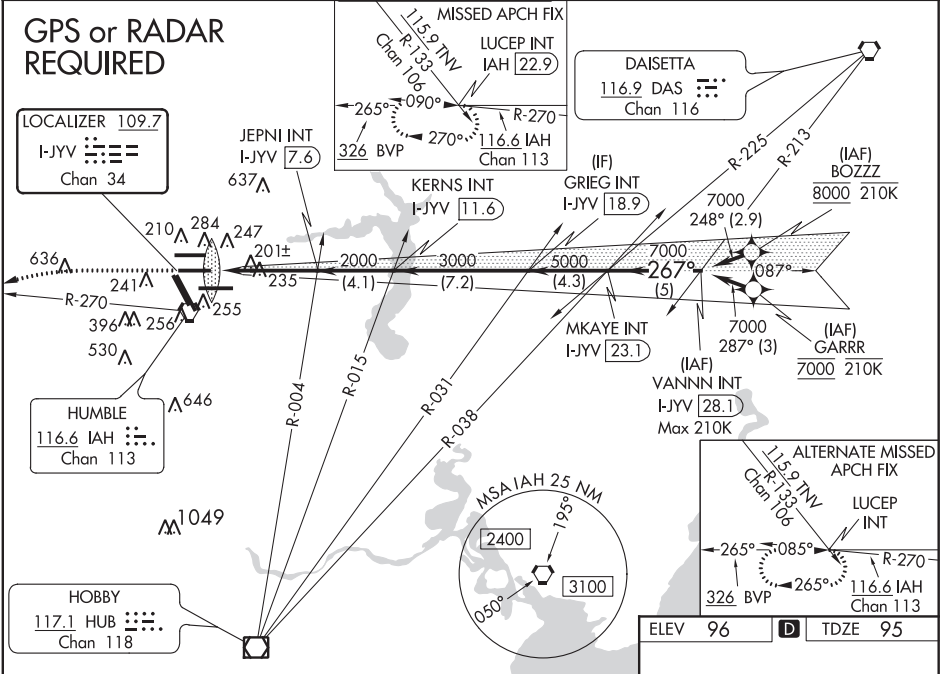
ILS RWY 26L (CAT II & III)
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

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.

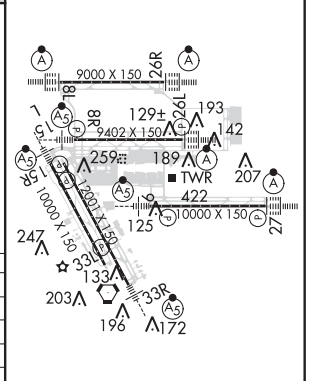
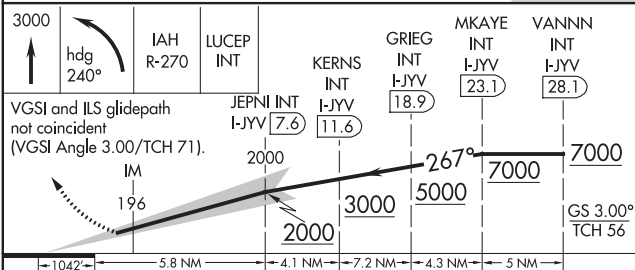
ALSF-2
A

MISSED APPROACH: Climb to 3000 then left turn heading 240° and IAH VORTAC R-270 to LUCEP INT/IAH 22.9 DME and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------



ELEV 96	D	TDZE 95
---------	----------	---------



CATEGORY	A	B	C	D
S-ILS 26L	CAT II RA 100/12 100 DA 195			
S-ILS 26L	CAT IIIa RVR 07			
S-ILS 26L	CAT IIIb RVR 06			
S-ILS 26L	CAT IIIc NA			

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwy's 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwy's

ILS RWY 26L (CAT II & III)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-OND 111.55 Chan 52 (Y)	APP CRS 267°	Rwy Idg TDZE 96 Apt Elev 96	9000
--	------------------------	---	-------------

ILS RWY 26R (CAT II & III)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

▼ RVR 1000 authorized with specific OPSPEC, MSPEC or LOA approval and use of autoland or HUD to touchdown.
Simultaneous approach authorized with Rwy 26L and Rwy 27.
DME or RADAR required.

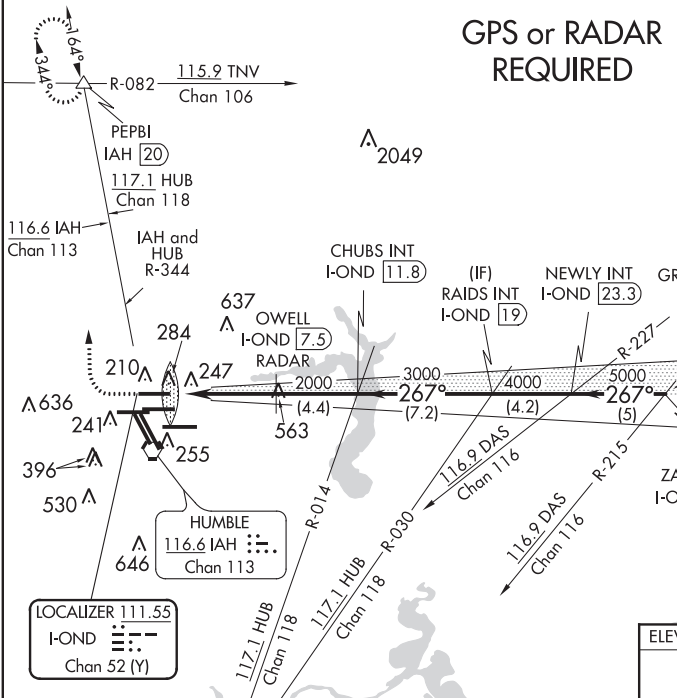
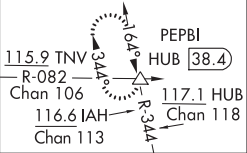
ALSF-2
(A)

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 on IAH VORTAC R-344 to PEPBI INT/IAH 20 DME and hold.

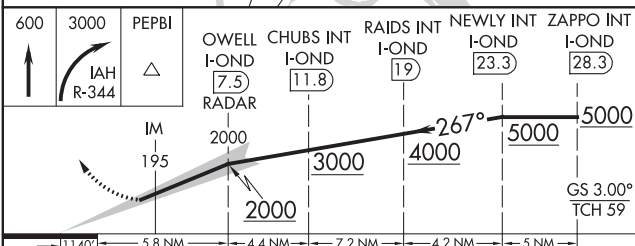
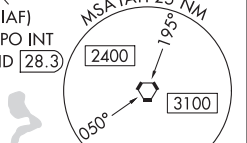
ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------

**GPS or RADAR
REQUIRED**

ALTERNATE MISSED APCH FIX

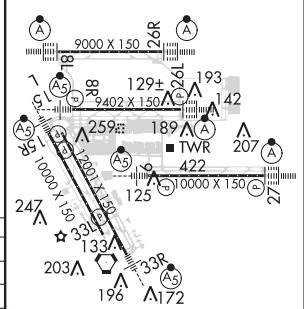


(IAF) HOOTI
Max 210K
6000



600	3000	PEPBI	OWELL I-OND [7.5] RADAR	CHUBS INT I-OND [11.8]	RAIDS INT I-OND [19]	NEWLY INT I-OND [23.3]	ZAPPO INT I-OND [28.3]
IM 195	2000			3000	4000	5000	5000
1140'	5.8 NM	A	B	C	D		
CATEGORY		CAT II RA 99/12 100 DA 196					
S-ILS-26R		CAT IIIa RVR 07					
S-ILS-26R		CAT IIIb RVR 06					
S-ILS-26R		CAT IIIc NA					

ELEV 96	D TDZE 96
---------	------------------



CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwyys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwyys

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)

16259

LOC/DME I-GHI 110.9 Chan 46	APP CRS 267°	Rwy Idg 10000 TDZE 87 Apt Elev 96
---	------------------------	--

ILS RWY 27 (CAT II & III)
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

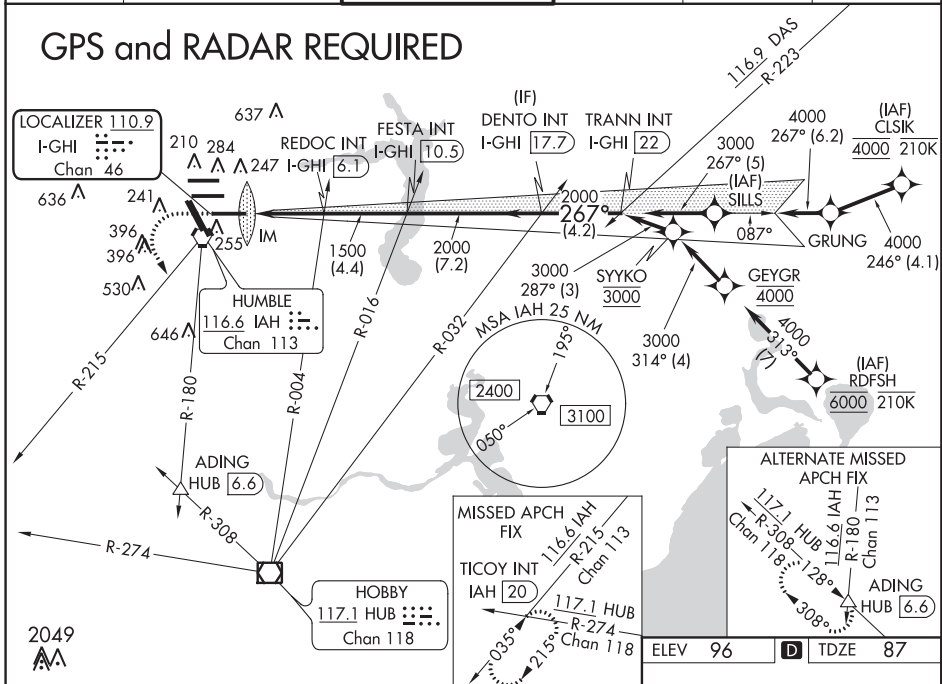
Simultaneous approach authorized with Rwsy 26L/R. RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

ALSF-2

MISSED APPROACH: Climb to 560 then climbing left turn to 3000 on IAH VORTAC R-215 to TICOY INT/IAH 20 DME and hold.

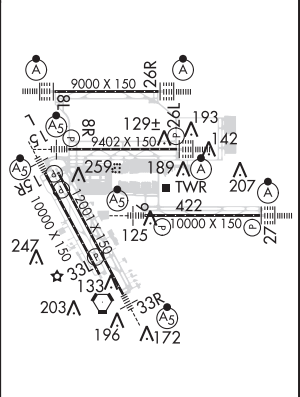
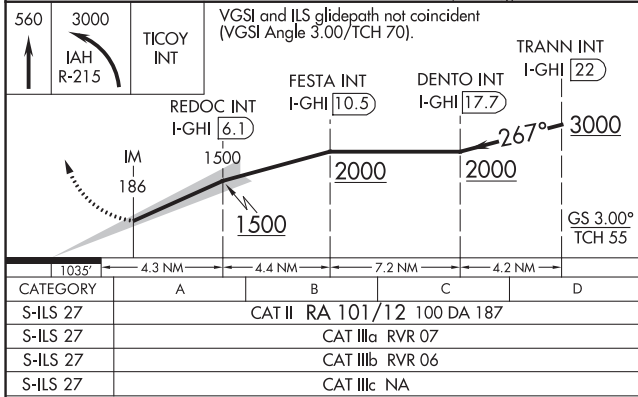
ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 135.15 290.2	GND CON 118.575	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

GPS and RADAR REQUIRED



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwsy 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwsy

HOUSTON, TEXAS
Amdt 11 15SEP16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
ILS RWY 27 (CAT II & III)

LAAS CH 21073 RPI GBZU	APP CRS 087°	Rwy Idg 9000 TDZE 95 Apt Elev 96
--	------------------------	---

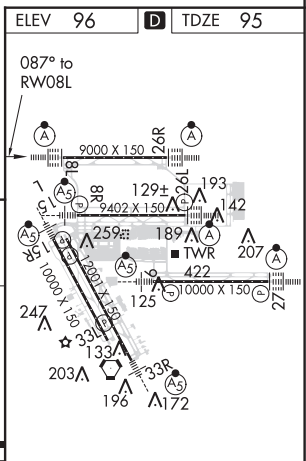
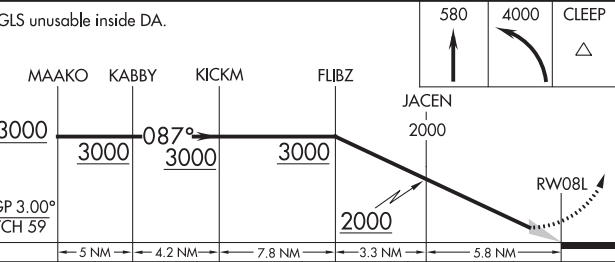
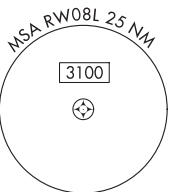
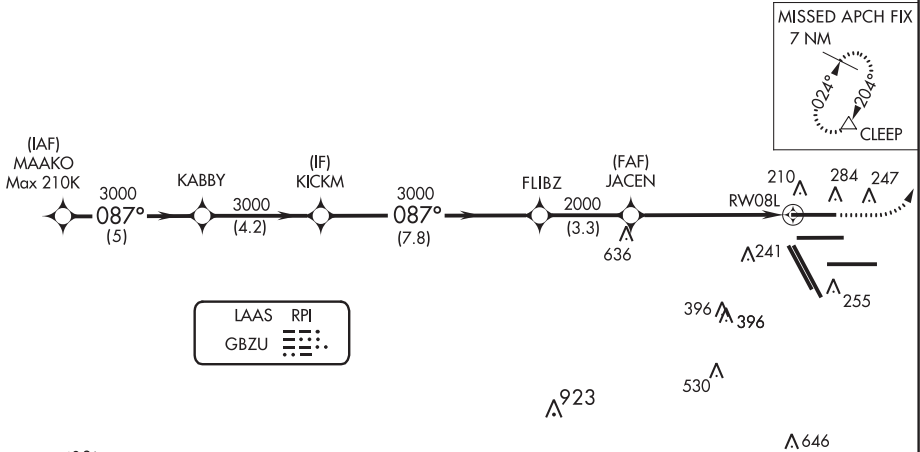
GLS RWY 8L

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

▼ ▲ NA	For inop ALSF, increase GLS all Cats visibility to RVR 4000. Simultaneous approach authorized with Rwy 8R and Rwy 9. DME/DME RNP-0.3NA. GPS Required. Autoland approach NA. Use of FD or AP providing RNAV track guidance required during simultaneous operations.	ALSF-2 	MISSED APPROACH: Climb to 580 then climbing left turn to 4000 direct CLEEP and hold.
-------------------------	--	------------	--

ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------

RADAR REQUIRED



CATEGORY	A	B	C	D	E	TDZ/CL Rwy 8R, 8L, 15R, 26R, 26L, 27 and 33L HIRL all Rwy 8
GLS DA	295/24			200 (200-1/2)		

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)

16259

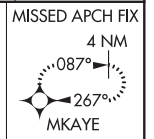
LAAS CH 20251 RPI GIAH	APP CRS 087°	Rwy Idg TDZE 96 Apt Elev 96	9402
--	------------------------	---	-------------

GLS RWY 8R

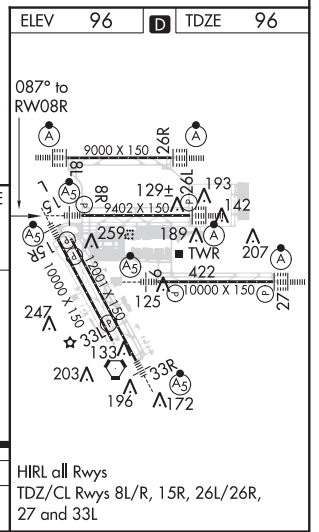
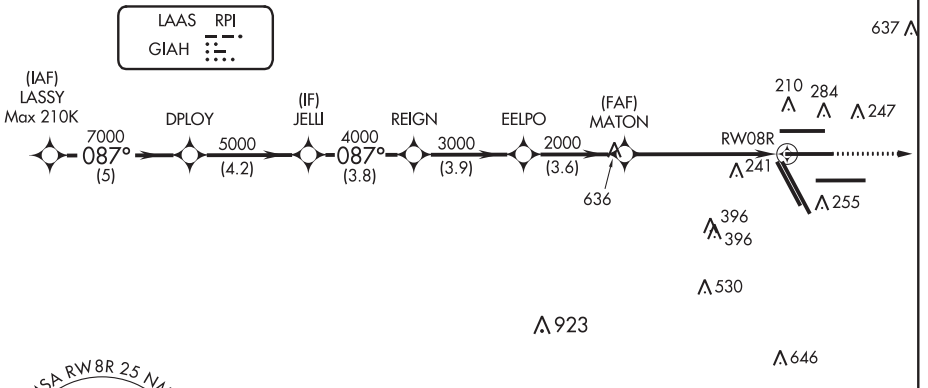
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

NA	For inop MALSR, increase GLS all Cats visibility to RVR 4000. Simultaneous approach authorized with Rwy 8L and Rwy 9. DME/DME RNP-0,3 NA. GPS required. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Autoland approach NA.	MALSR 	MISSED APPROACH: Climb to 3000 direct MKAYE and hold.
-----------	--	-----------	--

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------



RADAR REQUIRED



VGSI and GLS glidepath not coincident (VGSI Angle 3.00/TCH 72).

LASSY	DPLOY	JELLI	REIGN	EELPO	MATON	RWY 08R
7000	7000	5000	4000	3000	2000	
GP 3.00°						
TCH 55						
	5 NM	4.2 NM	3.8 NM	3.9 NM	3.6 NM	5.8 NM
CATEGORY	A	B	C	D	E	
S-8R	296/24		200 (200-1/2)			

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS
Amdt 1A 21JUL16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W


GLS RWY 8R

LAAS CH 21895	APP CRS 087°	Rwy Idg TDZE 91	10000
RPI GUYO		Apt Elev	96

GLS RWY 9

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

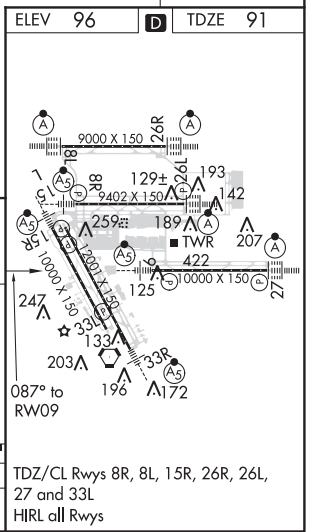
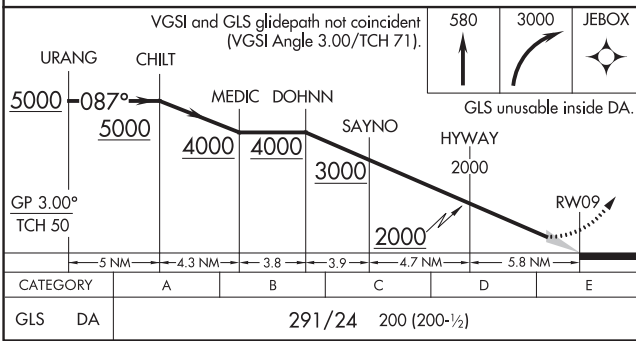
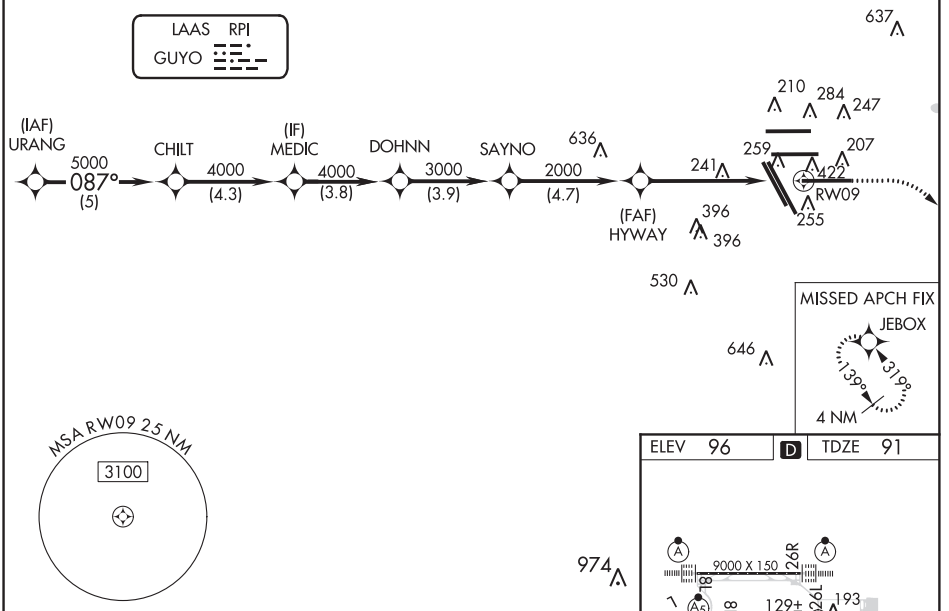
NA For inop MALSR, increase GLS all Cats visibility to RVR 4000. Simultaneous approach authorized with Rwy 8L/R. DME/DME RNP-0.3 NA. Use of FD or AP providing RNAV track guidance required during simultaneous operations. GPS required. Autoland approach NA.

MALSR 

MISSED APPROACH: Climb to 580 then climbing right turn to 3000 direct JEBOX and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

RADAR REQUIRED



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)

16259

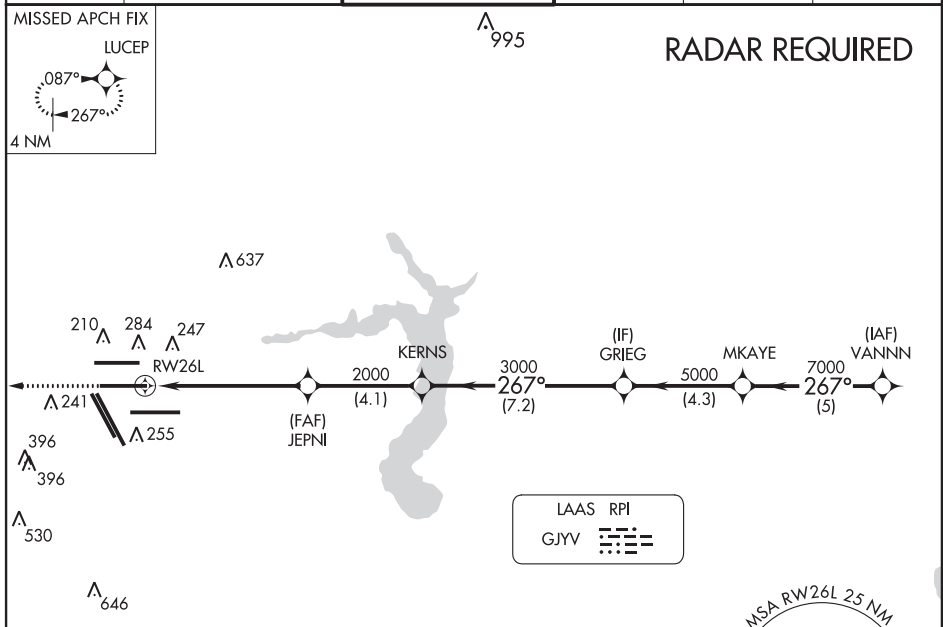
LAAS CH 20662 RPI GJVV	APP CRS 267°	Rwy Idg 9402 TDZE 95 Apt Elev 96
--	------------------------	---

GLS RWY 26L

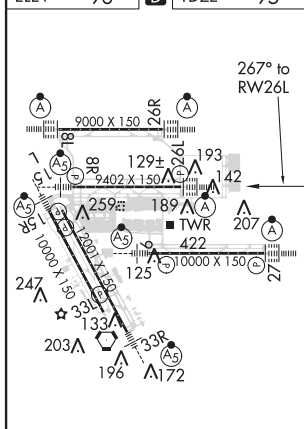
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

<p>ALSF-2</p> <p>NA For inop ALSF, increase GLS all Cats visibility to RVR 4000. Simultaneous approach authorized with Rwy 26R and Rwy 27. DME/DME RNP-0.3 NA. GPS required. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Autoland approach NA.</p>	<p>ALSF-2</p>	<p>MISSED APPROACH: Climb to 3000 direct LUCEP and hold.</p>
---	----------------------	---

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------



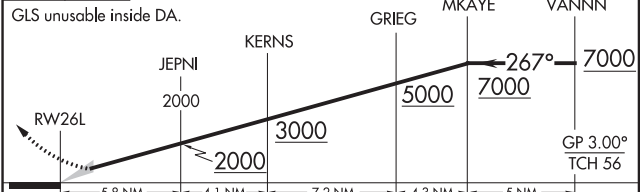
ELEV 96	D	TDZE 95
---------	----------	---------



TDZ/CL Rwy 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwy



3000	LUCEP	VGSI and GLS glidepath not coincident (VGSI Angle 3.00/TCH 71).
------	-------	---



CATEGORY	A	B	C	D	E
GLS DA	295/24 200 (200-1/2)				

HOUSTON, TEXAS
Amdt 1A 05MAR15

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
GLS RWY 26L

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

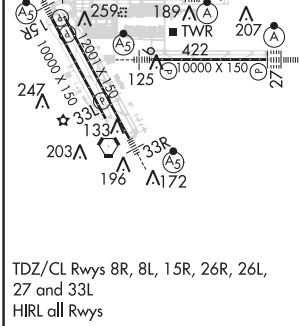
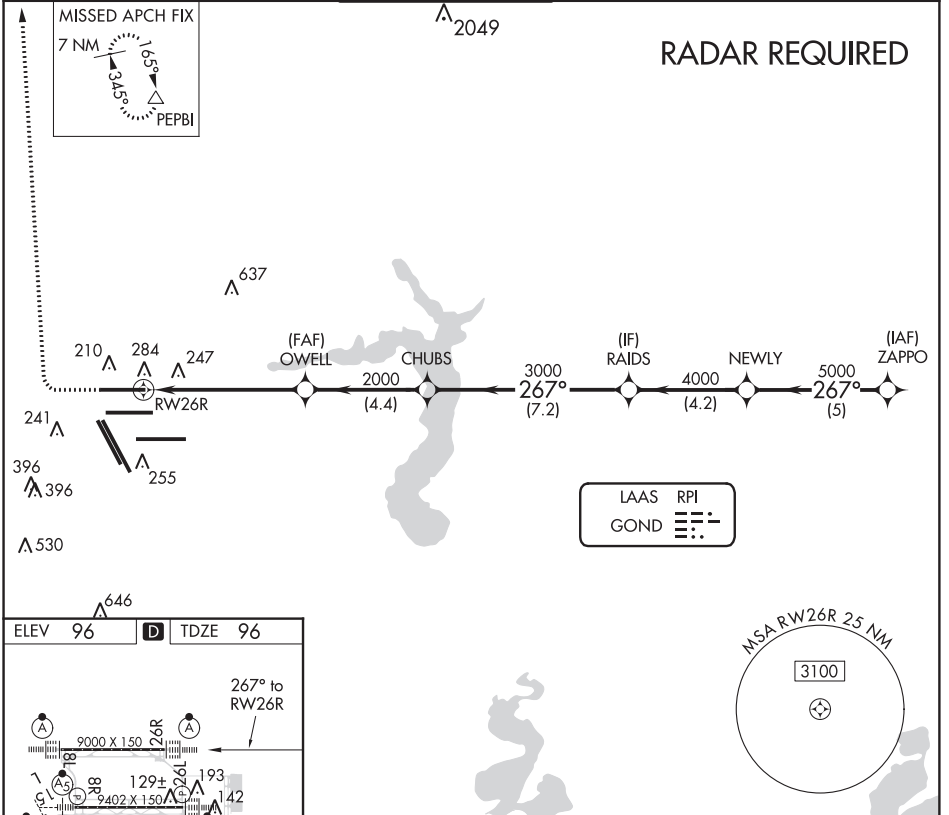
LAAS CH 21484	APP CRS 267°	Rwy Idg TDZE 96	9000
RPI GOND		Apt Elev 96	

GLS RWY 26R

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

NA For inop ALSF, increase GLS all Cats visibility to RVR 4000. DME/DME RNP-0.3 NA. GPS required. Simultaneous approach authorized with Rwy 26L and Rwy 27. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Autoland approach NA.	ALSF-2 	MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct PEPBI and hold.

ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)

16259

LAAS	APP CRS	Rwy Idg	10000
CH 22306	267°	TDZE	87
RPI GGHI		Apt Elev	96

GLS RWY 27

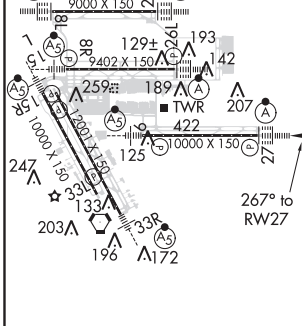
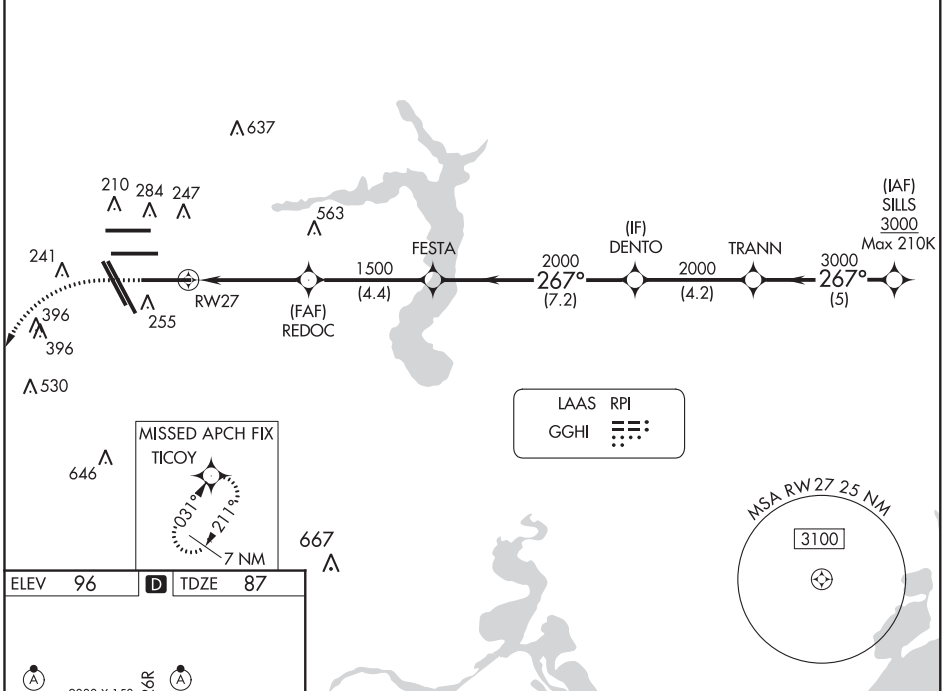
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

⚠ NA For inop ALSF, increase GLS all Cats visibility to RVR 4000. Simultaneous approach authorized with Rwy 26L and Rwy 26R. DME/DME RNP-0.3 NA. GPS required. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Autoland approach NA.

ALSF-2 MISSED APPROACH: Climb to 560 then climbing left turn to 3100 direct TICOY and hold.

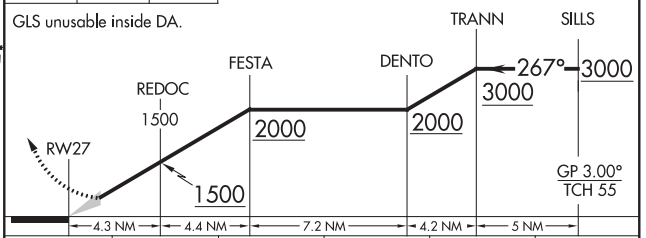
ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 135.15 290.2	GND CON 118.575	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

RADAR REQUIRED



560 3100 TICOY

VGSI and GLS glidepath not coincident (VGSI Angle 3.00/TCH 70).



CATEGORY	A	B	C	D	E
GLS DA	287/24 200 (200-1/2)				

TDZ/CL Rws 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rws

HOUSTON, TEXAS
Amdt 1A 30APR15

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
GLS RWY 27

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS 087°	Rwy Idg 9000
	TDZE 95
	Apt Elev 96

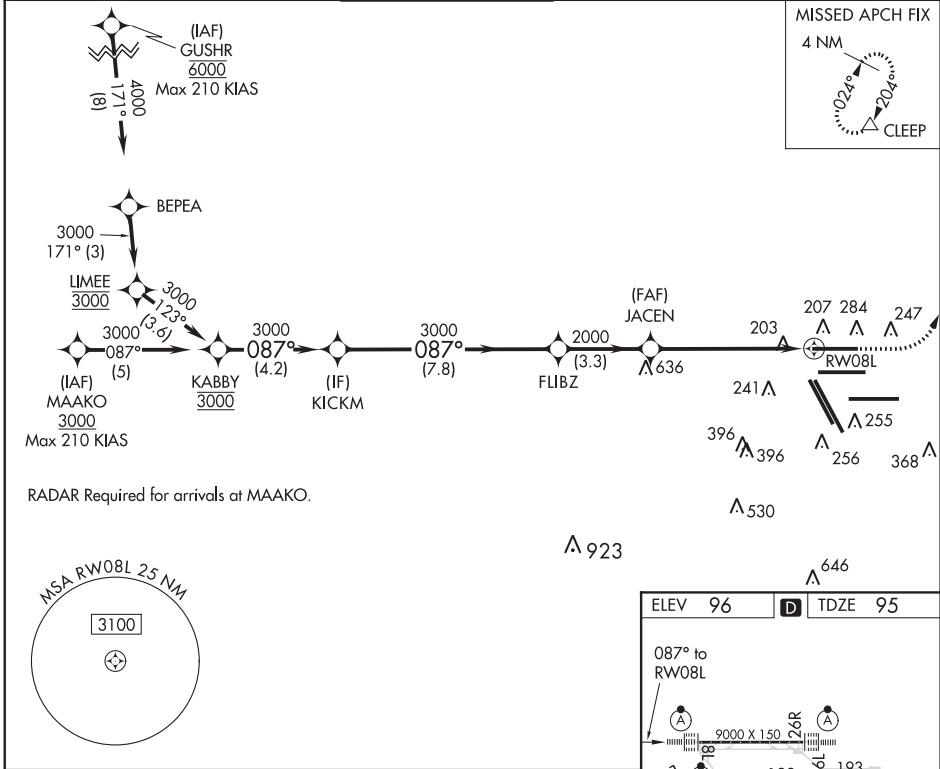
RNAV (RNP) Y RWY 8L
 GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

GPS Required. For uncompensated Baro-VNAV systems, procedure NA below -3°C (27°F) or above 54°C (130°F). For inop ALSF-2, increase RNP 0.30 all Cats visibility to 1 3/8 mile. Simultaneous approach authorized with Rwy 8R and Rwy 9. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

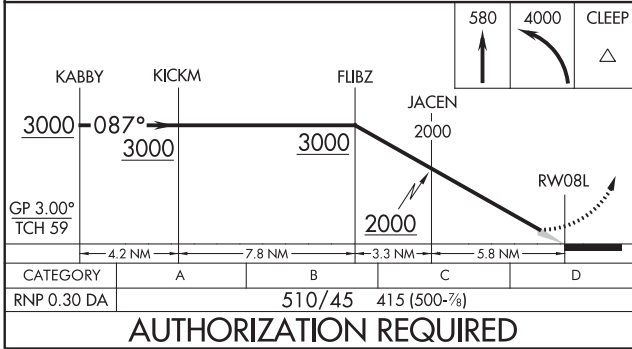
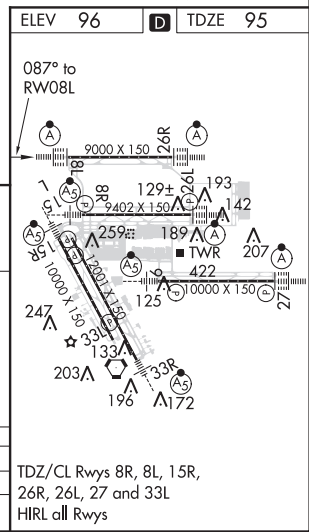


MISSED APPROACH: Climb to 580 then climbing left turn to 4000 direct CLEEP and hold.

ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------



RADAR Required for arrivals at MAAKO.



AUTHORIZATION REQUIRED

HOUSTON, TEXAS
 Orig-A 05MAR15

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
 29°59'N-95°20'W
RNAV (RNP) Y RWY 8L
 343

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)

16259

APP CRS	Rwy Idg	9402
087°	TDZE	96
	Apt Elev	96

RNAV (RNP) Y RWY 8R

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

▼ For uncompensated Baro-VNAV systems, procedure NA below -3°C (27°F) or above 54°C (130°F). GPS Required. For inop MALSR increase RNP 0.13 all Cats visibility to RVR 4500, increase RNP 0.14 all Cats visibility to RVR 5600, increase RNP 0.30 all Cats visibility to 1 ¼ mile. Simultaneous approach authorized with Rwy 8L and Rwy 9. Use of FD or AP or HUD providing RNAV track guidance required during simultaneous operations.

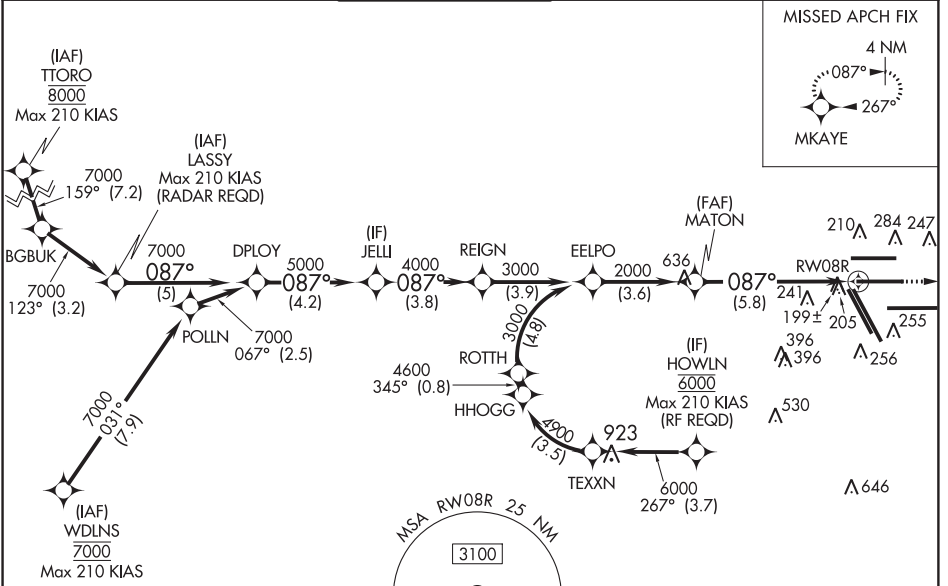
MALSR



MISSED APPROACH:
Climb to 3000 on track
087° to MKAYE and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

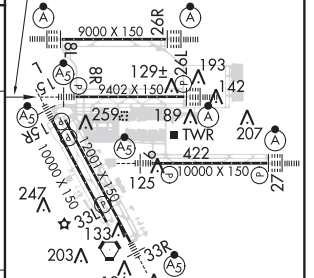
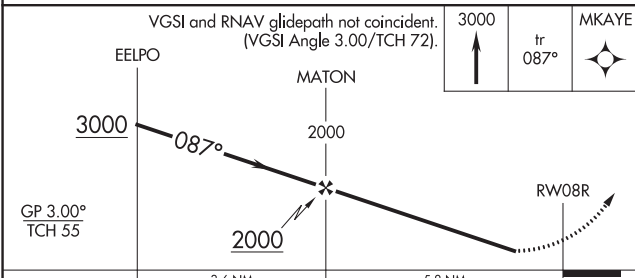
MISSED APCH FIX



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 96	D TDZE 96
---------	------------------



CATEGORY	A	B	C	D
RNP 0.13 DA		384/40	288 (300-¾)	
RNP 0.14 DA		442/40	346 (400-¾)	
RNP 0.30 DA		493/42	397 (400-¾)	

AUTHORIZATION REQUIRED

TDZ/CL Rwy 8R, 8L, 15R, 26R, 26L, 27 and 31L
HIRL all Rwy's

HOUSTON, TEXAS
Amdt 1A 21JUL16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
RNAV (RNP) Y RWY 8R

APP CRS	Rwy Idg 10000
087°	TDZE 91
	Apt Elev 96

RNAV (RNP) Y RWY 9

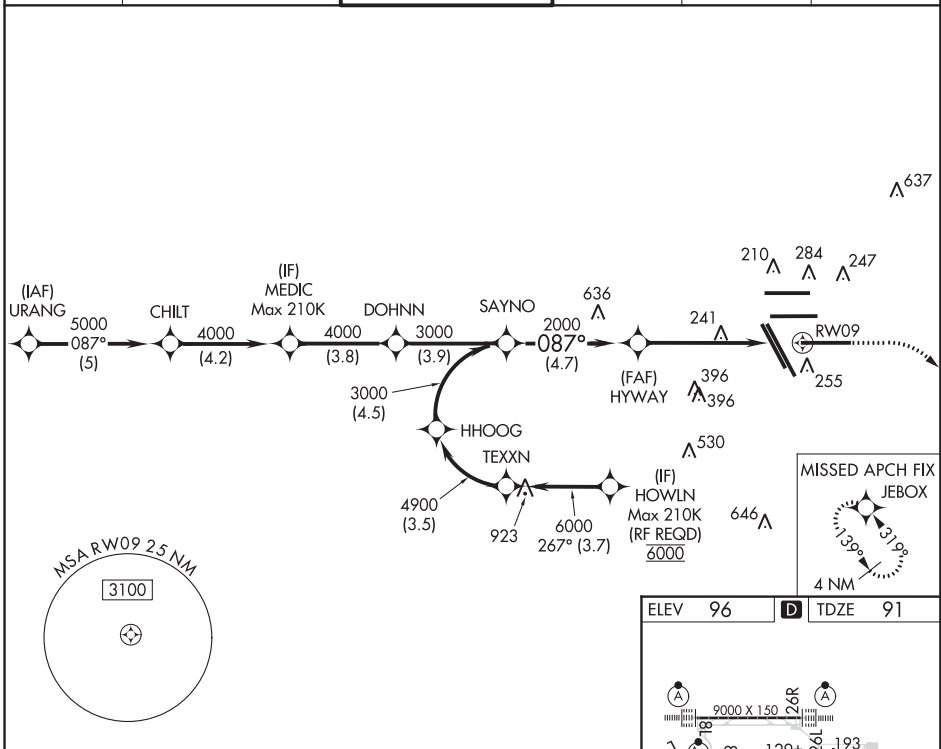
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

▽ For uncompensated Baro-VNAV systems, procedure NA below -3°C (27°F) or above 54°C (130°F). GPS required. For inop MALSRS, increase all Cats visibility to 1 3/8 mile. Simultaneous approach authorized with Rwy 8L and Rwy 9. Use of FD or AP or HUD providing RNAV track guidance required during simultaneous operations.

MALSRS

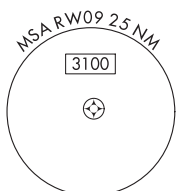
MISSED APPROACH: Climb to 580 then climbing right turn to 3000 direct JEBOX and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



ELEV 96	TDZE 91
---------	---------

Obstacle chart showing various obstacles with MSL and AGL altitudes. Key obstacles include 9000 X 150, 129±, 193, 142, 207, 203, 133, 33R, 172, 247, 203A, 196, 172, 125, 125, 10000 X 150, 422, 189, 259, 9402 X 150, 26R, 26R, 193, 142, 207, 21.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 71).

Diagram showing the VGSI and RNAV glidepaths. The VGSI glidepath is at 3.00° TCH, and the RNAV glidepath is at 087°. Key altitudes include 580, 3000, and 2000. Distances are marked as 4.7 NM and 5.8 NM.

CATEGORY	A	B	C	D
RNP 0.30 DA	516/49 425 (500-1)			

AUTHORIZATION REQUIRED

TDZ/CL Rwws 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwws

HOUSTON, TEXAS

AL-5461 (FAA)

16259

APP CRS	Rwy Idg	9402
	TDZE	95
267°	Apt Elev	96

RNAV (RNP) Y RWY 26L

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

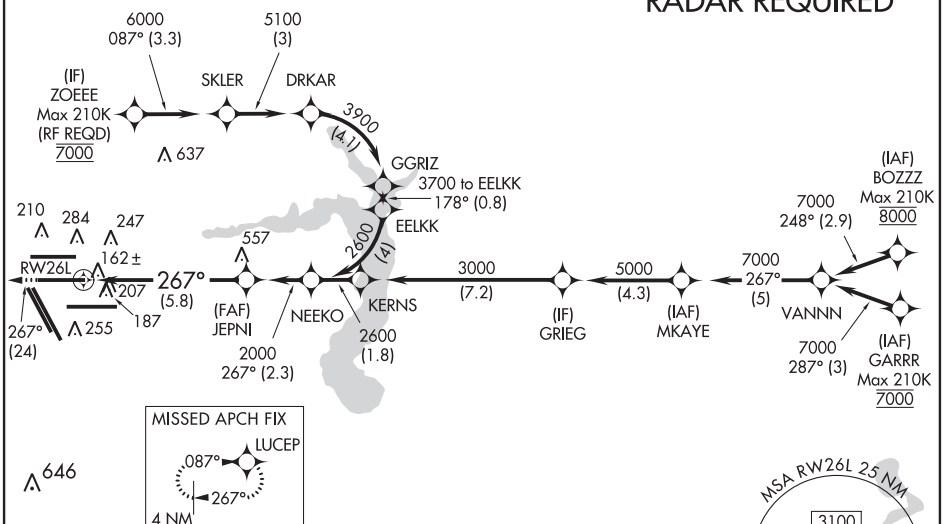
▽ For uncompensated Baro-VNAV systems, procedure NA below -3°C (27°F) or above 54°C (130°F). For inop ALSF, increase RNP 0.13 all Cats visibility to RVR 5100, and RNP 0.30 all Cats visibility to 1½ miles. GPS required. Simultaneous approach authorized with Rwy 26R and Rwy 27, except for arrivals at ZOEER. Use of FD or AP providing RNAV track guidance required during simultaneous operations.



MISSED APPROACH:
Climb to 3000 on track 267° to LUCEP and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

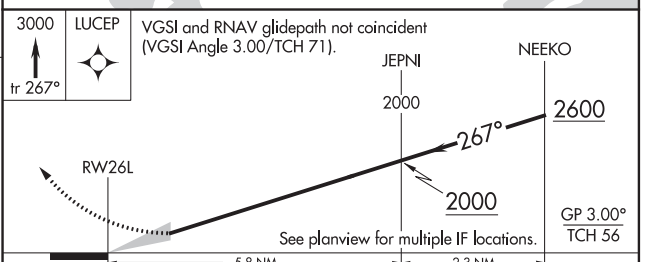
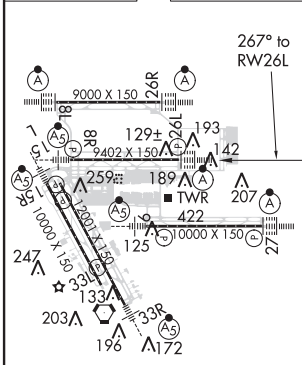
RADAR REQUIRED



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 96	D	TDZE 95
---------	----------	---------



CATEGORY	A	B	C	D
RNP 0.13 DA	414/40	319 (400-¾)		
RNP 0.30 DA	549/53	454 (500-1½)		

TDZ/CL Rws 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rws

AUTHORIZATION REQUIRED

HOUSTON, TEXAS
Orig-B 05MAR15

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20' W
RNAV (RNP) Y RWY 26L


APP CRS	Rwy Idg	9000
267°	TDZE	96
	Apt Elev	96

RNAV (RNP) Y RWY 26R

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

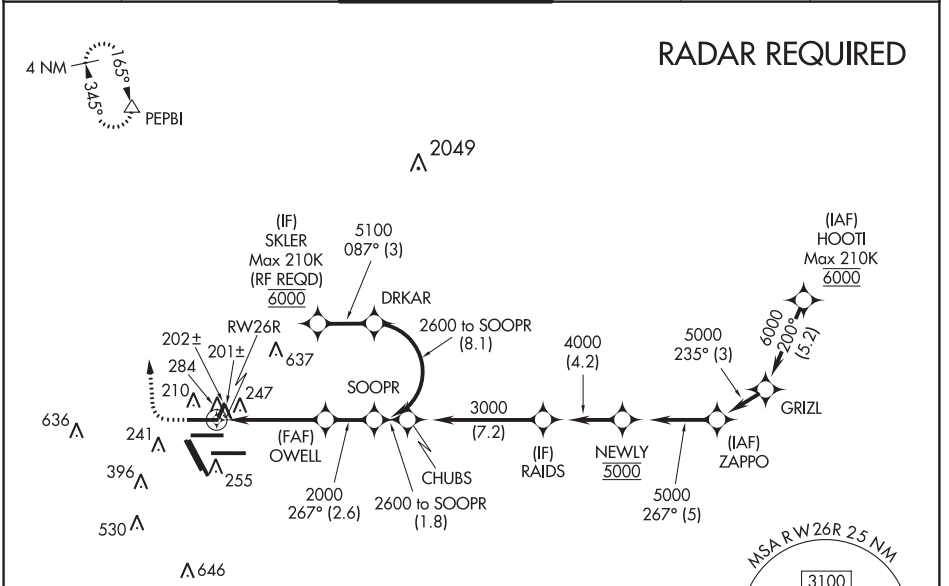
▼ For uncompensated Baro-VNAV systems, procedure NA below -3°C (27°F) or above 54°C (130°F). For inop ALSF, increase RNP 0.11 all Cats visibility to RVR 5300, RNP 0.15 all Cats visibility to 1¼ miles, and RNP 0.30 all Cats visibility to 1½ miles. GPS required. Simultaneous approach authorized with Rwy 26L and Rwy 27, except for arrivals at SKLER. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

ALSF-2

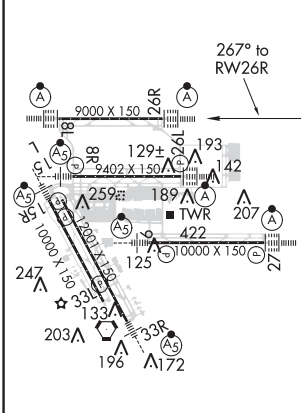





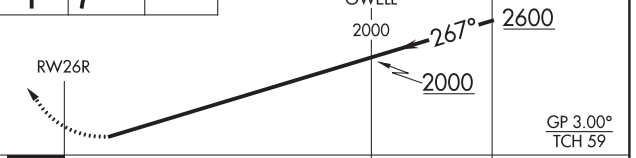
MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct PEPBI and hold.

ATIS	HOUSTON APP CON	HOUSTON TOWER	GND CON	CLNC DEL	CPDLC
124.05	120.05 379.1 EAST 124.35 316.15 WEST	120.72 290.2	121.7	128.1	



ELEV	96	D	TDZE	96
------	-----------	---	------	-----------



600	3000	PEPBI	See planview for multiple IF locations.
			
			
		GP 3.00° TCH 59	

CATEGORY	A	B	C	D
RNP 0.11 DA		429/40	333 (400-¾)	
RNP 0.15 DA		496/42	400 (400-¾)	
RNP 0.30 DA		554/53	458 (500-1¼)	

TDZ/CL Rws 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rws

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)


16259

APP CRS	Rwy Idg	10000
267°	TDZE	87
	Apt Elev	96

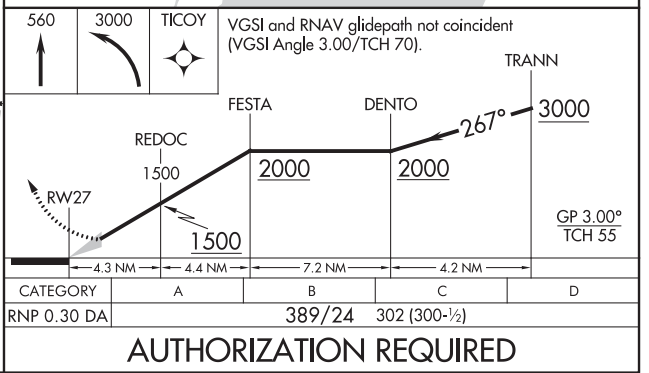
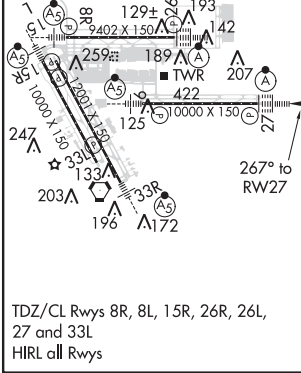
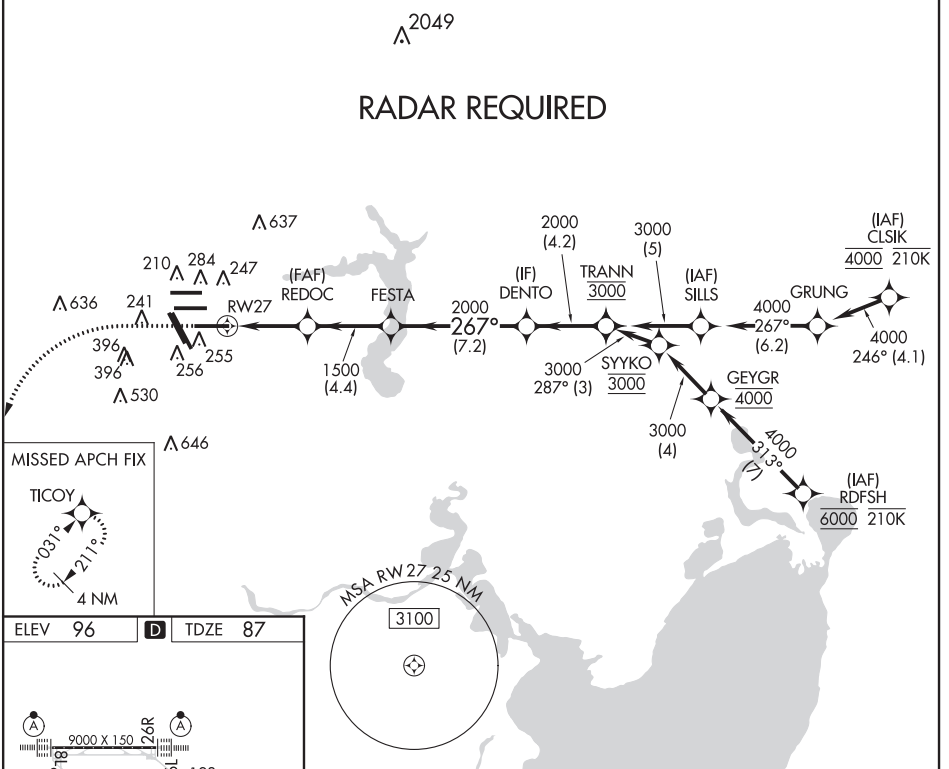
RNAV (RNP) Y RWY 27

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

▼ For uncompensated Baro-VNAV systems, procedure NA below -2°C (29°F) or above 54°C (130°F). GPS required. Simultaneous approach authorized with Rwy 26R/L. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

ALSf-2
 MISSED APPROACH: Climb to 560 then climbing left turn to 3000 direct TICoy and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------



HOUSTON, TEXAS
Amdt 2 15SEP16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
RNAV (RNP) Y RWY 27

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

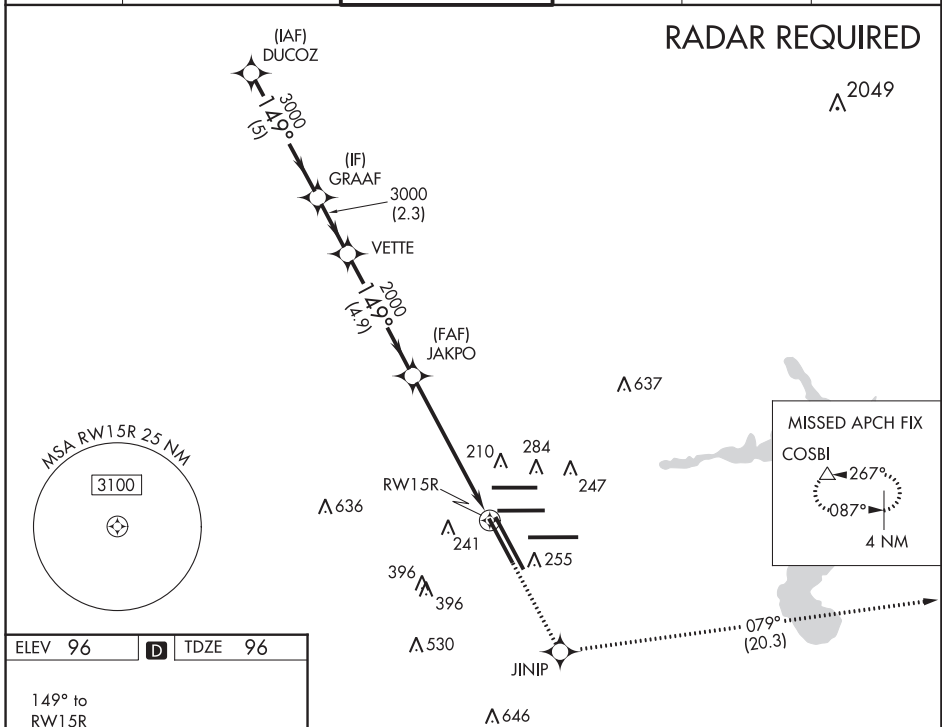
WAAS CH 97599 W15A	APP CRS 149°	Rwy Idg 10000 TDZE 96 Apt Elev 96
--	------------------------	--

RNAV (GPS) RWY 15R

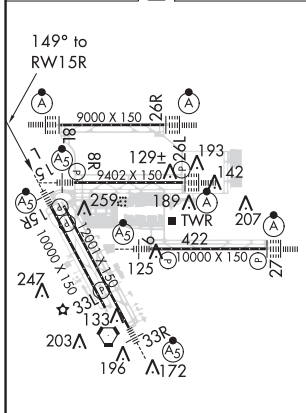
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

<p>▼ 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 RVR 5000, and LNAV Cat C/D/E to 1 3/8 mile. DME/DME RNP-0.3 NA.</p>	MALSR	MISSED APPROACH: Climb to 2000 direct JINIP and left turn on track 079° to COSBI and hold.

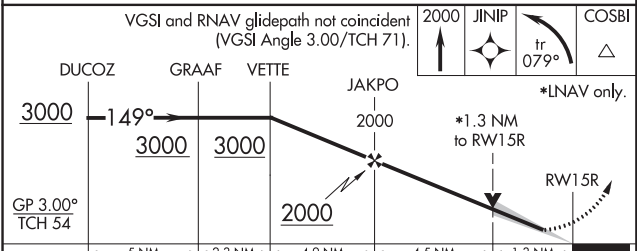
ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 127.3 288.25	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------



ELEV 96	D	TDZE 96
---------	----------	---------



TDZ/CL Rwy 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwy



CATEGORY	A	B	C	D	E
LPV DA		296/24	200 (200-1/2)		
LNAV/VNAV DA		420/28	324 (400-3/4)		
LNAV MDA	580/24	484 (500-1/2)	580/50	484 (500-1)	

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)

16259

WAAS CH 57902 W 33A	APP CRS 329°	Rwy 33R Rwy ldg 12001 TDZE 89 Apt Elev 96	Rwy 33L Rwy ldg 10000 TDZE 90 Apt Elev 96
---	------------------------	---	---

RNAV (GPS) RWY 33R

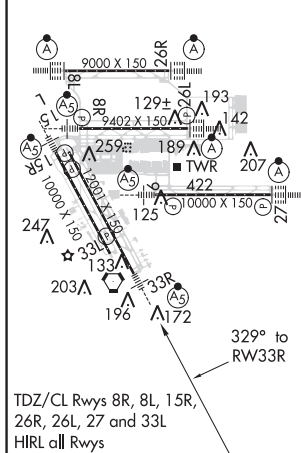
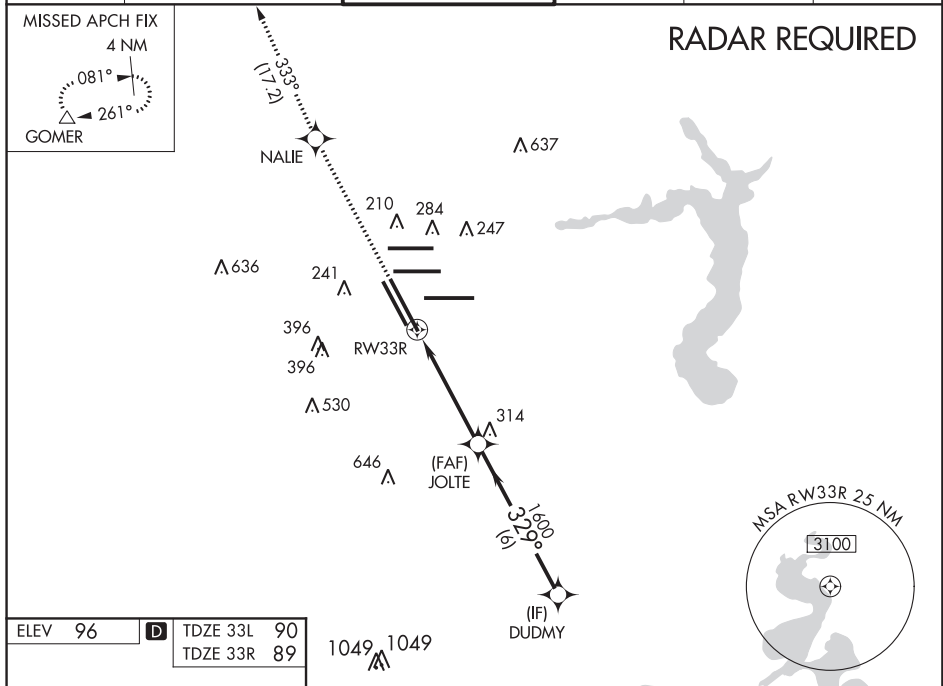
GEORGE BUSH
INTERCONTINENTAL/HOUSTON (IAH)

▼ 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 1/2, and LNAV Cat E visibility to 1/2. DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 2000 direct NALIE and on track 333° GOMER and hold.

ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 127.3 288.25	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------



ELEV 96	D	TDZE 33L 90 TDZE 33R 89			
2000	NALIE	tr 333°	GOMER	DUDMY	
*LNAV only.					
*1.3 NM to RWY 33R		DUDMY			
RWY 33R		JOLTE 1600	2000		
1.3 NM		3.3 NM		6 NM	
329°		1600			
GP 3.00°		TCH 49			
CATEGORY	A	B	C	D	E
LPV DA	289/24		200 (200-1/2)		
LNAV/VNAV DA	490/45		401 (400-7/8)		
LNAV MDA	540/24	451 (500-1/2)	540/45		451 (500-7/8)
SIDESTEP 33L	540-1	450 (500-1)	540-1 1/2 450 (500-1 1/2)	540-2 450 (500-2)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS
Amdt 2A 23JUN16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
RNAV (GPS) RWY 33R

WAAS CH 77826 W08A	APP CRS 087°	Rwy Idg TDZE Apt Elev	9000 95 96
--	------------------------	-----------------------------	---------------------------------------

RNAV (GPS) Z RWY 8L

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

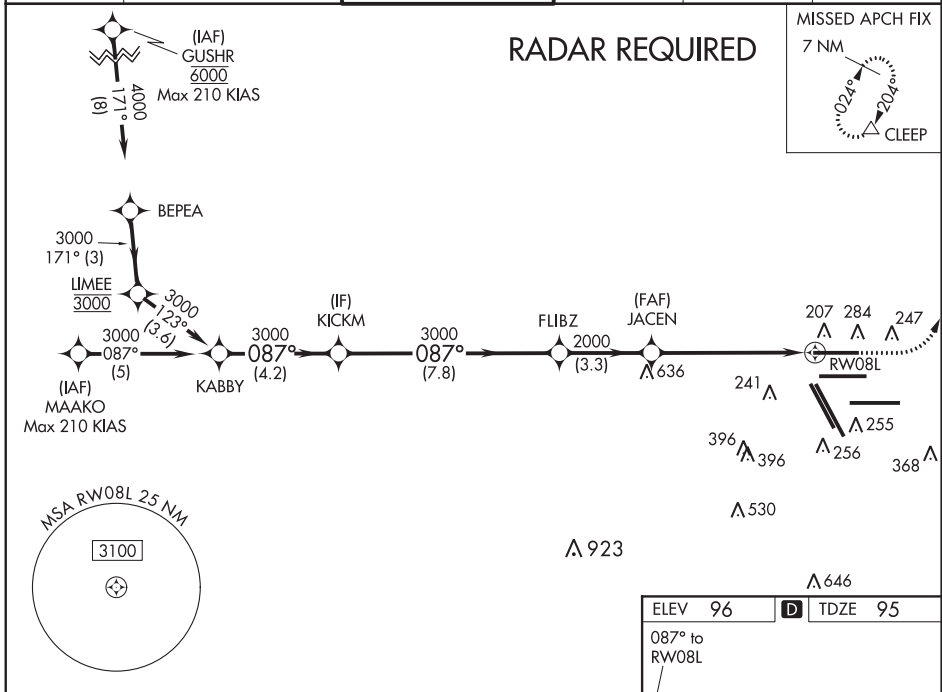
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C (27°F) or above 54°C (130°F). For inop ALSF, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1¼, and LNAV Cat C/D/E visibility to 1½. Simultaneous approach authorized with Rwy 8R and Rwy 9. DME/DME RNP-0.3 NA. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations.

ALSF-2



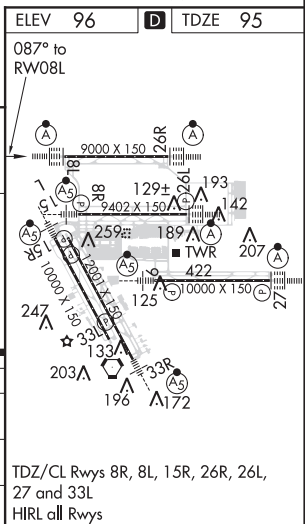
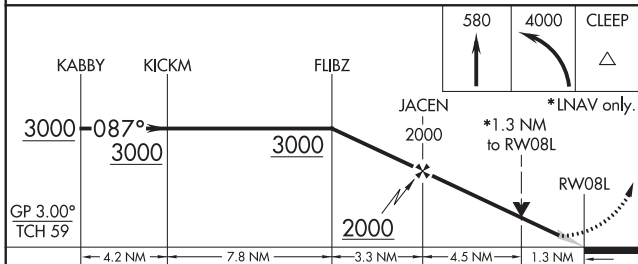
MISSED APPROACH: Climb to 580 then climbing left turn to 4000 direct CLEEP and hold.

ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D	E
LPV DA		295/24	200 (200-½)		
LNAV/VNAV DA		486/40	391 (400-¾)		
LNAV MDA	580/24	485 (500-½)	580/50	485 (500-1)	

WAAS CH 53626 W08B	APP CRS 087°	Rwy Idg 9402 TDZE 96 Apt Elev 96
--	------------------------	---

RNAV (GPS) Z RWY 8R

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

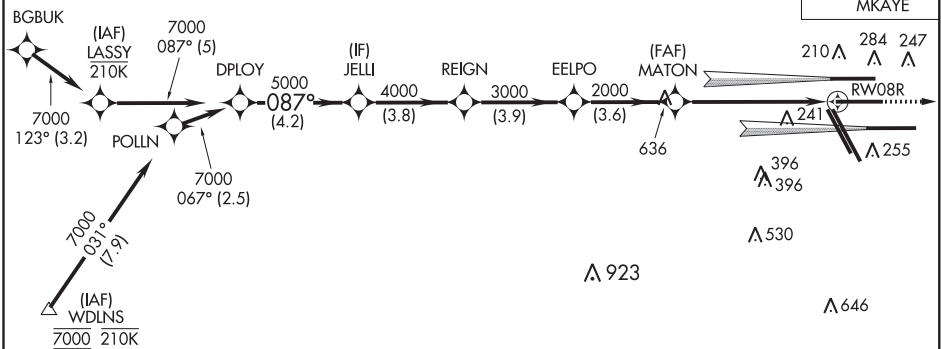
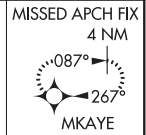
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C (27°F) or above 54°C (130°F). For inop MALS/R, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV all Cats visibility to RVR 6000, and LNAV Cat C/D/E visibility to 1 $\frac{1}{2}$. Simultaneous approach authorized with Rwy 8L and Rwy 9. 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.

MALS/R
MISSED APPROACH:
Climb to 3000 direct MKAYE and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

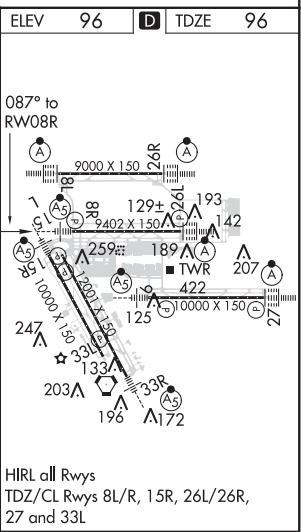
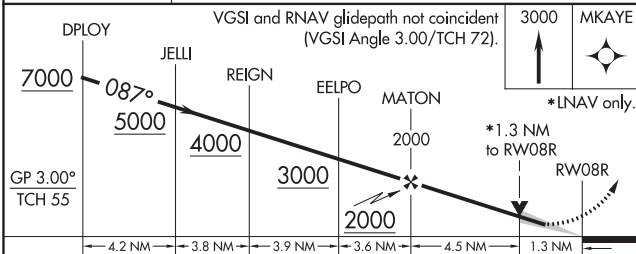
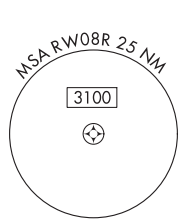
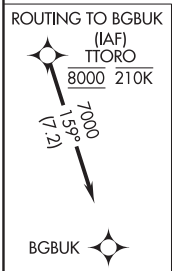
SEE INSET FOR ROUTING TO BGBK

RADAR REQUIRED



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D	E
LPV DA	296/24		200 (200- $\frac{1}{2}$)		
LNAV/VNAV DA	421/32		325 (400- $\frac{5}{8}$)		
LNAV MDA	580/24	484 (500- $\frac{1}{2}$)	580/50	484 (500-1)	


HIRL all Rwys
TDZ/CL Rwys 8L/R, 15R, 26L/26R, 27 and 33L

WAAS CH 72926 W09A	APP CRS 087°	Rwy Idg 10000 TDZE 91 Apt Elev 96
--	------------------------	--

RNAV (GPS) Z RWY 9

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

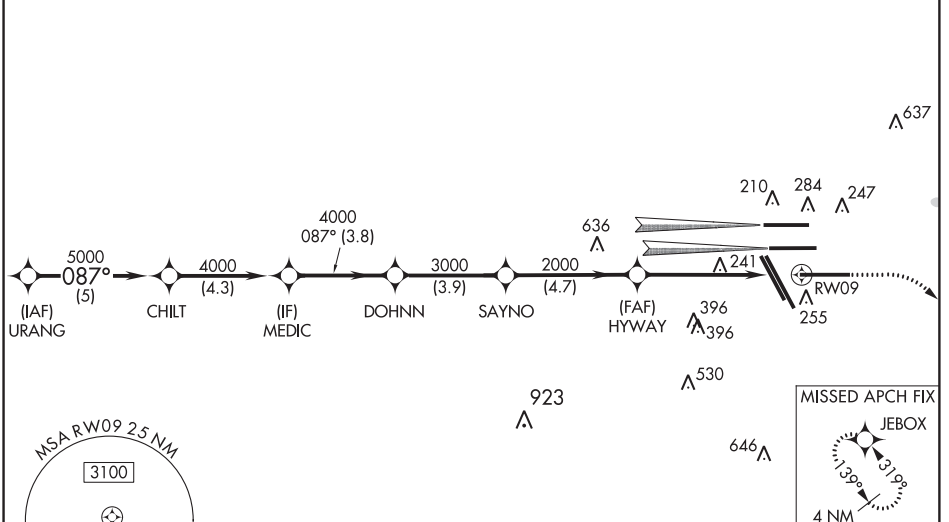
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C (27°F) or above 54°C (130°F). For inop MALSR, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1½ mile, and LNAV Cat C/D/E visibility to 1¾ mile. Simultaneous approach authorized with Rwy 8L/R. DME/DME RNP-0.3 NA. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

MALSR 

MISSED APPROACH: Climb to 580 then climbing right turn to 3000 direct JEBOX and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

RADAR REQUIRED



ELEV 96	TDZE 91
<p>URANG CHILT MEDIC DOHNN SAYNO HYWAY RWY 9</p> <p>5000 -087° 5000 4000 4000 3000 2000 2000</p> <p>GP 3.00° TCH 50</p> <p>5 NM 4.3 NM 3.8 NM 3.9 NM 4.7 NM 4.5 NM 1.3 NM</p> <p>580 3000 JEBOX</p> <p>*LNAV only. *1.3 NM to RWY 9</p>	
CATEGORY	A B C D E
LPV DA	291/24 200 (200-½)
LNAV/VNAV DA	525/50 434 (500-1)
LNAV MDA	580/24 489 (500-½) 580/50 489 (500-1)
<p>087° to RWY 9</p> <p>TDZ/CL Rwy's 8R, 8L, 15R, 26R, 26L, 27 and 33L</p> <p>HIRL all Rwy's</p>	

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5461 (FAA)

16259

WAAS CH 49226 W26D	APP CRS 267°	Rwy Idg 9402 TDZE 95 Apt Elev 96
--	------------------------	---

RNAV (GPS) Z RWY 26L

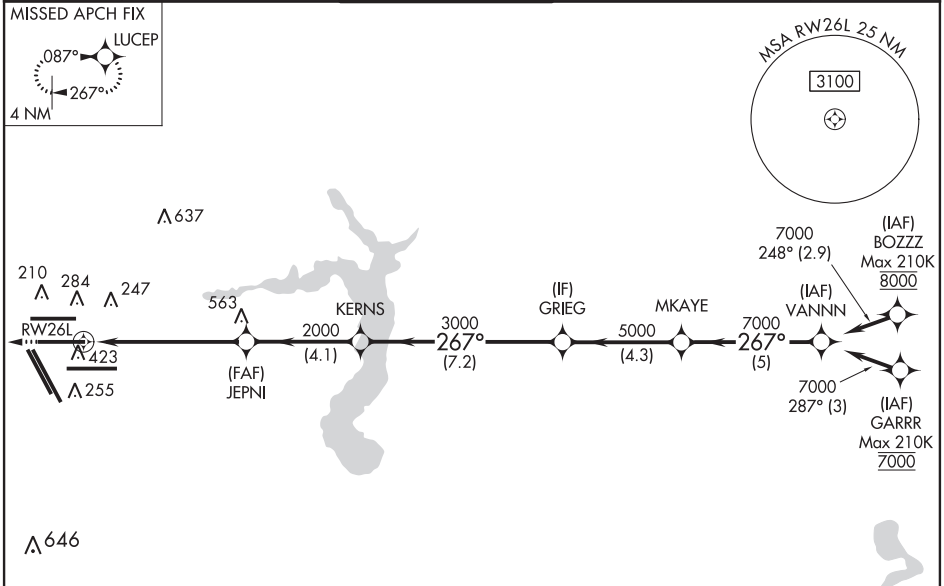
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

▼ 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 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.



MISSED APPROACH:
Climb to 3000 direct
LUCEP and hold.

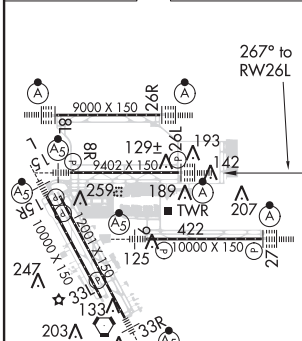
ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 125.35 290.2	GND CON 118.575	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------



SC-5, 10 NOV 2016 to 05 JAN 2017

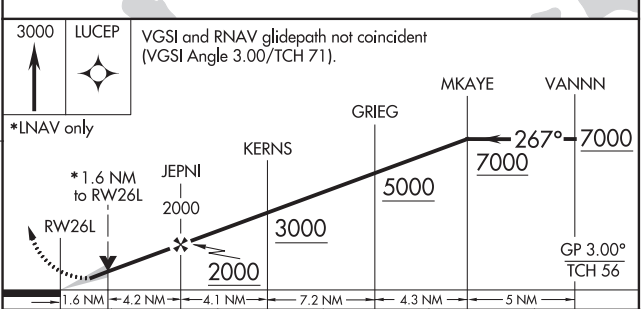
SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 96	D	TDZE 95
---------	----------	---------



TDZ/CL Rws 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rws

RADAR REQUIRED



CATEGORY	A	B	C	D	E
LPV DA		295/24	200 (200-½)		
LNAV/VNAV DA		586/60	491 (500-1¼)		
LNAV MDA	680/24	585 (600-½)	680-1¼	585 (600-1¼)	

HOUSTON, TEXAS
Admt 4A 05MAR15

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20' W
RNAV (GPS) Z RWY 26L

WAAS CH 97726 W26A	APP CRS 267°	Rwy Idg TDZE Apt Elev	9000 96 96
--	------------------------	-----------------------------	---------------------------------------

RNAV (GPS) Z RWY 26R

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

▼ 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 all Cats visibility to 1¼, and LNAV Cat C/D/E visibility to 1½. DME/DME RNP-0.3 NA. Simultaneous approach authorized with Rwy 26L and Rwy 27. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

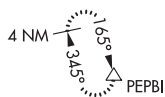
ALSF-2



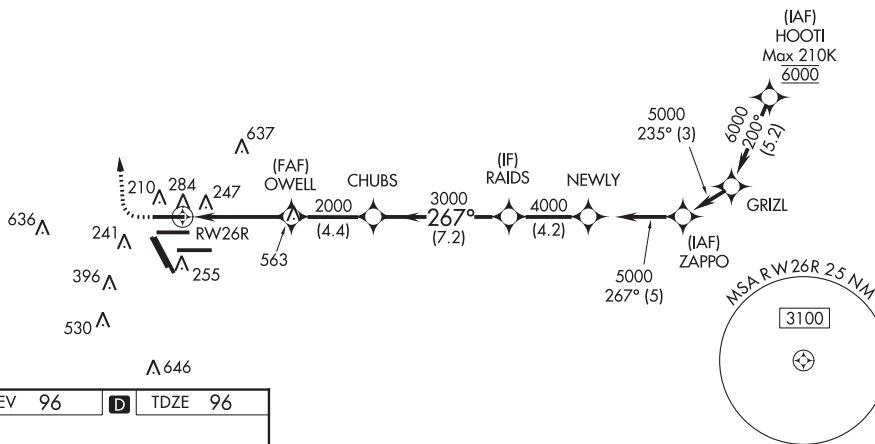
MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct PEPBI and hold.

ATIS 124.05	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOUSTON TOWER 120.72 290.2	GND CON 121.7	CLNC DEL 128.1	CPDLC
-----------------------	--	--------------------------------------	-------------------------	--------------------------	-------

RADAR REQUIRED



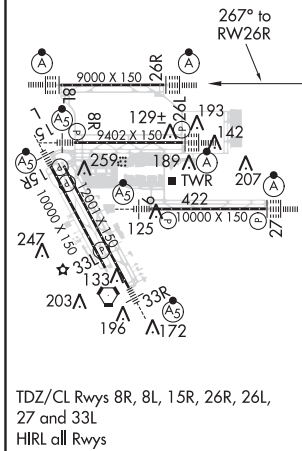
2049



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 96	D	TDZE 96
---------	----------	---------



	600	3000	PEPBI						
	↑	↪	△						
*LNAV only									
	RW26R	OWELL	CHUBS	RAIDS	NEWLY	ZAPPO			
	2000	2000	3000	4000	5000	5000			
	*1.4 NM to RW26R				267°				
									GP 3.00° TCH 59
	1.4	4.4 NM	4.4 NM	7.2 NM	4.2 NM	5 NM			
CATEGORY	A	B	C	D	E				
LPV DA		296/24	200 (200-½)						
LNAV/VNAV DA		496/42	400 (400-¾)						
LNAV MDA	600/24	504 (600-½)		600/55	504 (600-1¼)				

HOUSTON, TEXAS
Amdt 4A 28MAY15

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
RNAV (GPS) Z RWY 26R
355

HOUSTON, TEXAS

AL-5461 (FAA)

16259

WAAS CH 69626 W27A	APP CRS 267°	Rwy Idg 10000 TDZE 87 Apt Elev 96
--	------------------------	--

RNAV (GPS) Z RWY 27

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

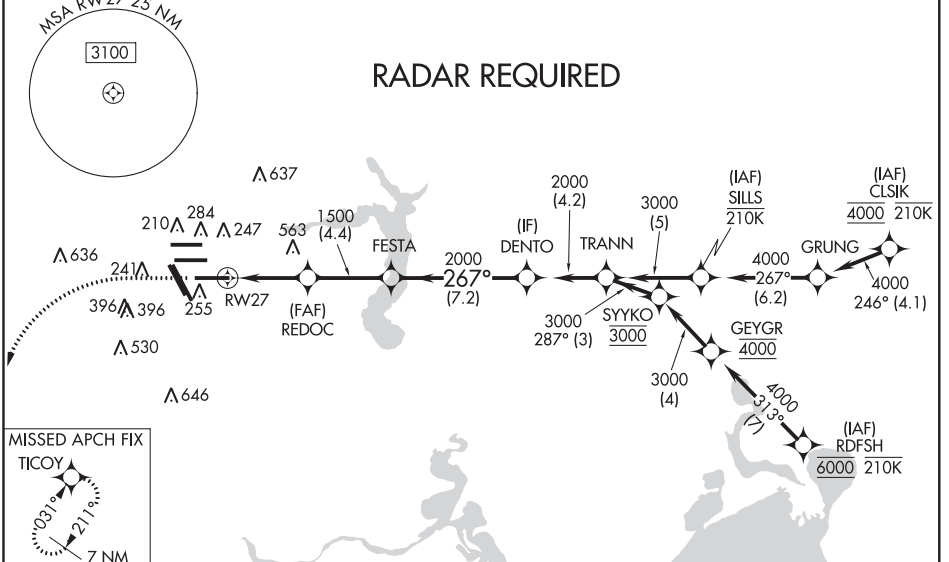
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C (29°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 26L and Rwy 26R. DME/DME RNP-0.3 NA. For inop ALSF, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV all Cats visibility to 1¼, and LNAV Cat C/D/E visibility to 1½. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.



MISSED APPROACH: Climb to 560 then climbing left turn to 3100 direct TICOY and hold.

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
-----------------------	--	--------------------------------------	---------------------------	--------------------------	-------

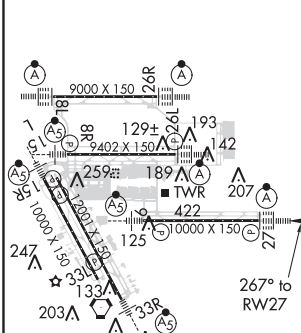
Λ 2049



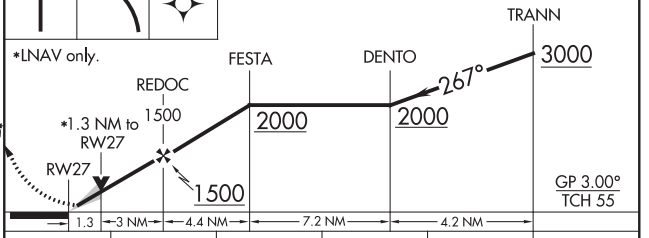
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 96	D	TDZE 87
---------	----------	---------



560 3100 TICOY VGSJ and RNAV glidepath not coincident (VGSJ Angle 3.00/TCH 70).



CATEGORY	A	B	C	D	E
LPV DA	287/24		200 (200-½)		
LNAV/VNAV DA	477/45		390 (400-¾)		
LNAV MDA	560/24	473 (500-½)	560/50		473 (500-1)

TDZ/CL Rws 8R, 1L, 15R, 26R, 26L, 27 and 33L
HIRL all Rws

HOUSTON, TEXAS
Amdt 5 15SEP16

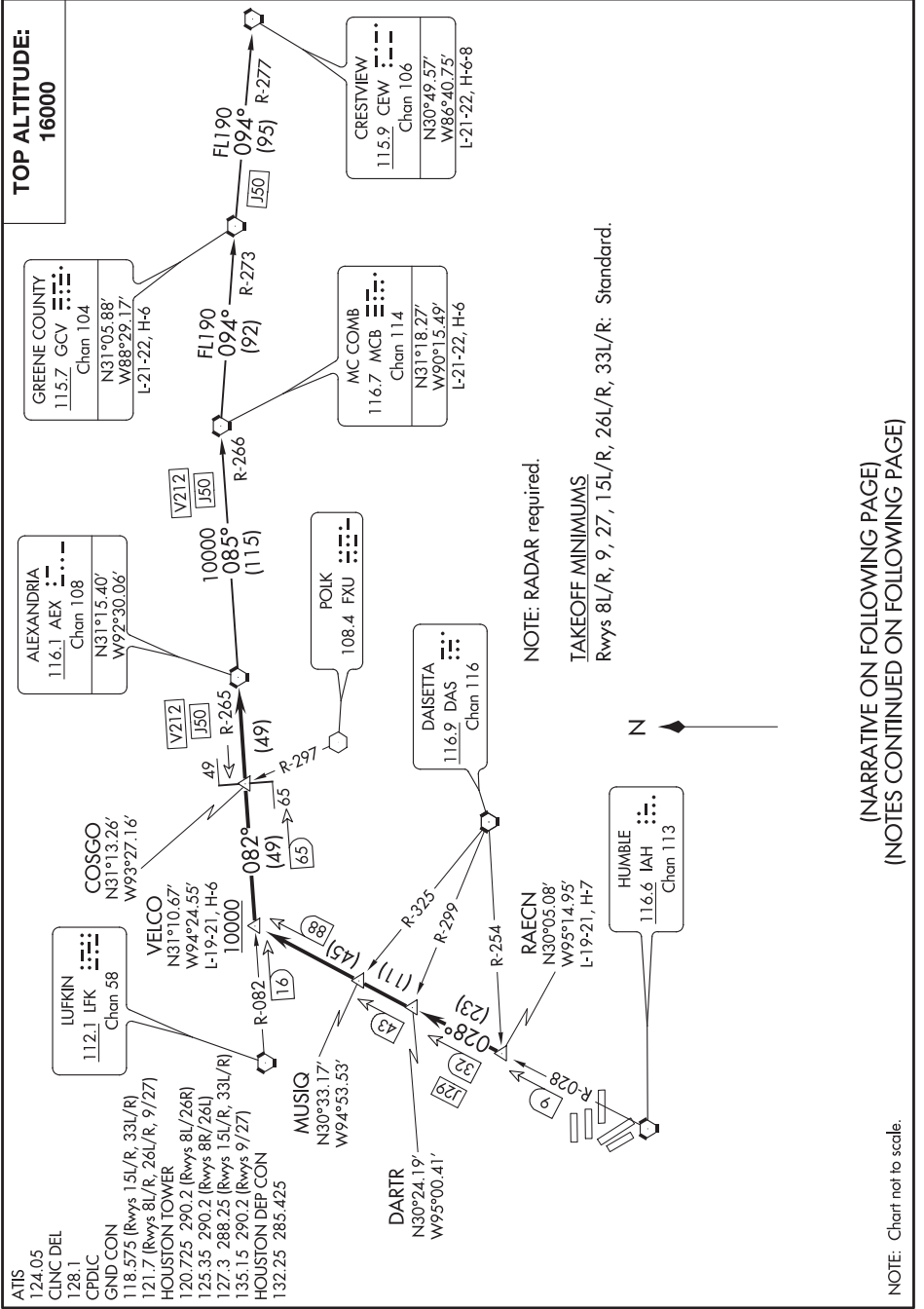
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
29°59'N-95°20'W
RNAV (GPS) Z RWY 27

ALEXANDRIA NINE DEPARTURE

SL-5461 (FAA)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



ALEXANDRIA NINE DEPARTURE

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

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL. Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

BLTWY THREE DEPARTURE (RNAV) SL-5461 (FAA)

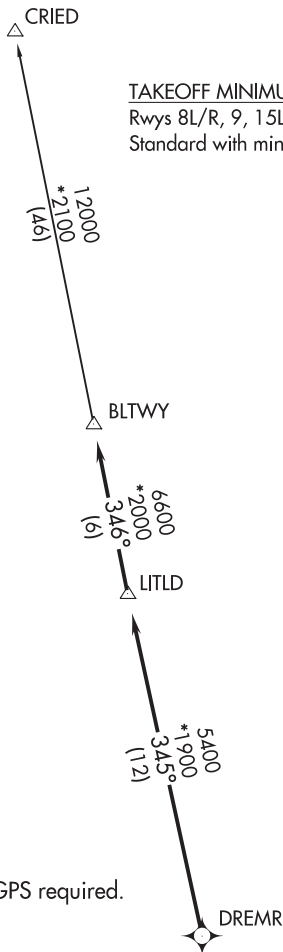
HOUSTON, TEXAS

ATIS
 124.05
 CLNC DEL
 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9/27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L/26R)
 125.35 290.2 (Rwys 8R/26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9/27)
 HOUSTON DEP CON
 132.25 285.425

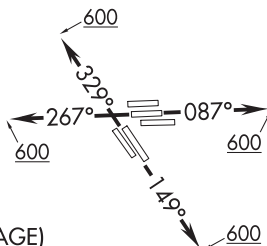
**TOP ALTITUDE:
16000**

TAKEOFF MINIMUMS

Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R:
 Standard with minimum climb of 500' per NM to 600.



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



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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)

HOUSTON, TEXAS

(BLTWY3.BLTWY) 10NOV16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to DREMR, thence

TAKEOFF RWYS 15L/R: Climb heading 149° to 600, expect RADAR vectors to DREMR, thence

TAKEOFF RWYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to DREMR, thence

TAKEOFF RWYS 33L/R: Climb heading 329° to 600, expect 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 (BLTWY3.CRIED)

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.

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.
Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.

Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TOP ALTITUDE:
16000



TAKEOFF MINIMUMS
Rwys 15L/R, 26L/R, 27, 33L/R: Standard with
minimum climb of 500' per NM to 1200.

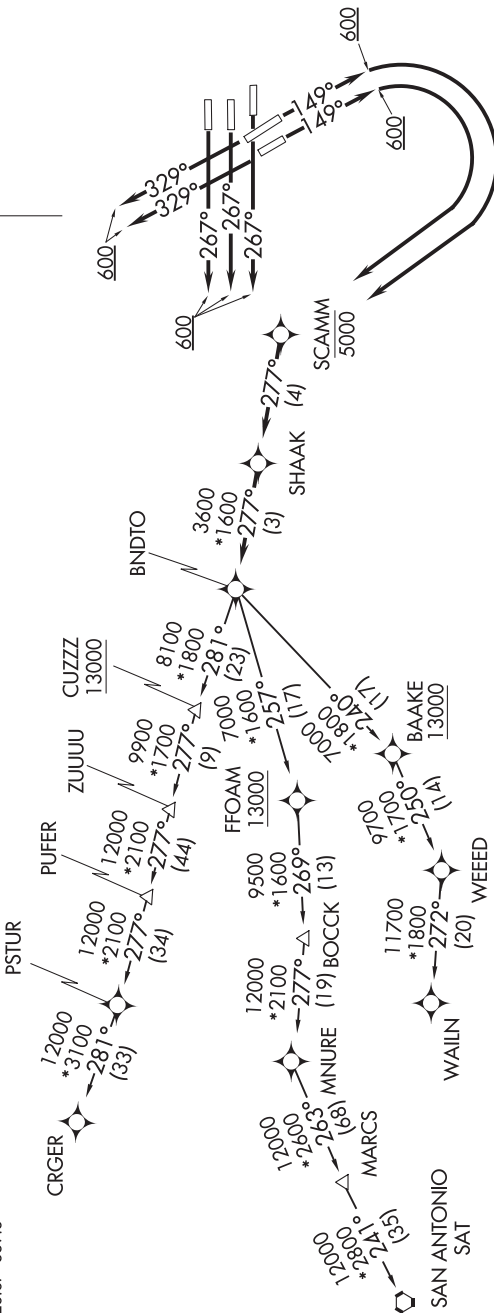
NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: For use during west flow at IAH, for east flow
file the PITZZ DEPARTURE.

- ATIS 124.05
- CINCDEL 128.1
- CPDIC
- GND CON
- 118.575 (Rwys 8L/R, 26L/R, 9, 27)
- 121.7 (Rwys 15L/R, 33L/R)
- HOUSTON TOWER
- 120.725 290.2 (Rwys 8L, 26R)
- 125.35 290.2 (Rwys 8R, 26L)
- 127.3 288.25 (Rwys 15L/R, 33L/R)
- 135.15 290.2 (Rwys 9, 27)
- HOUSTON DEP CON
- 126.67 339.8



NOTE: Chart not to scale.

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



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)

TAKEOFF OBSTACLE NOTES

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.

Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.

Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

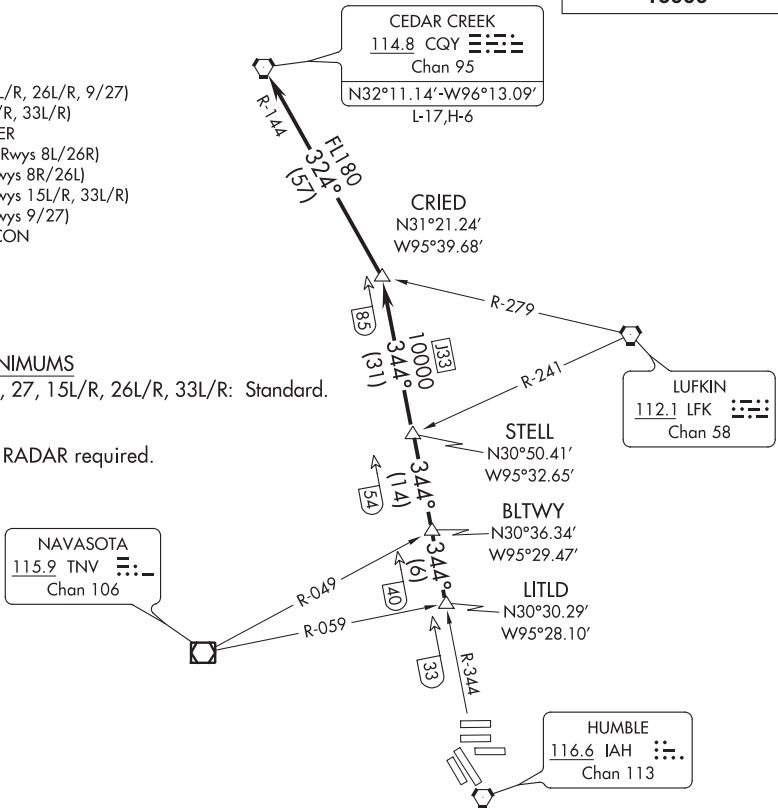
**TOP ALTITUDE:
16000**

ATIS
124.05
CLNC DEL
128.1
CPDLC
GND CON
118.575 (Rwys 8L/R, 26L/R, 9/27)
121.7 (Rwys 15L/R, 33L/R)
HOUSTON TOWER
120.725 290.2 (Rwys 8L/26R)
125.35 290.2 (Rwys 8R/26L)
127.3 288.25 (Rwys 15L/R, 33L/R)
135.15 290.2 (Rwys 9/27)
HOUSTON DEP CON
132.25 285.425

TAKEOFF MINIMUMS

Rwys 8R/L, 9, 27, 15L/R, 26L/R, 33L/R: Standard.

NOTE: RADAR required.



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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL. Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

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.

CRIED EIGHT DEPARTURE

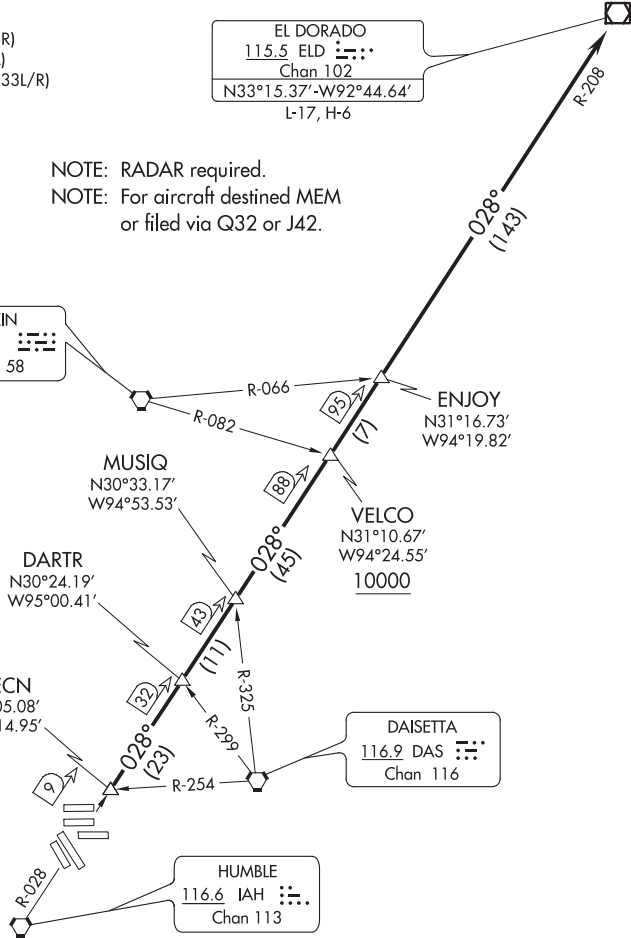
ATIS
 124.05
 CLNC DEL
 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9/27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L/26R)
 125.35 290.2 (Rwys 8R/26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9/27)
 HOUSTON DEP CON
 132.25 285.425

**TOP ALTITUDE:
 16000**

EL DORADO
 115.5 ELD :...
 Chan 102
 N33°15.37'-W92°44.64'
 L-17, H-6

NOTE: RADAR required.
 NOTE: For aircraft destined MEM
 or filed via Q32 or J42.

LUFKIN
 112.1 LFK :...
 Chan 58



TAKEOFF MINIMUMS

Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

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.

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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.
Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

(FLYZA5.FLYZA) 16259

FLYZA FIVE DEPARTURE (RNAV)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SL-5461 (FAA)

HOUSTON, TEXAS

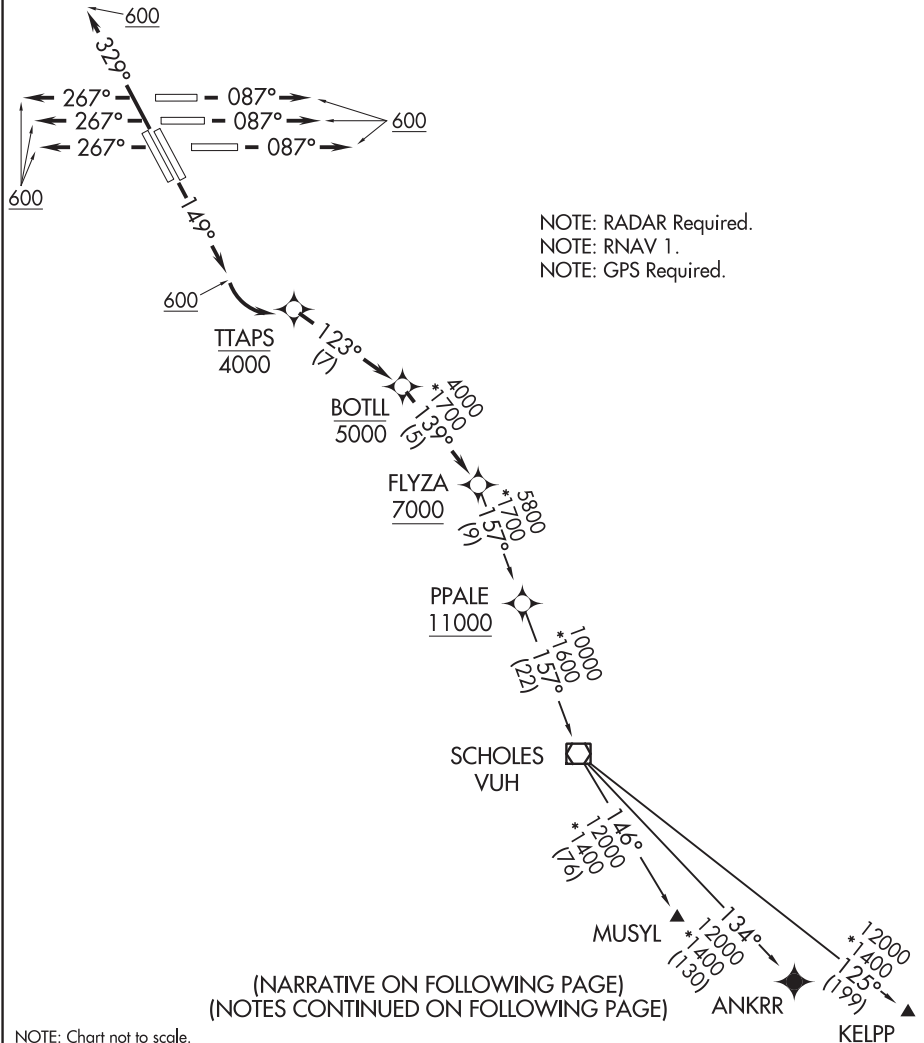
ATIS
 124.05
 CLNC DEL
 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9, 27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L, 26R)
 125.35 290.2 (Rwys 8R, 26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9, 27)
 HOUSTON DEP CON
 127.12 269.07

**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.



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

FLYZA FIVE DEPARTURE (RNAV)

(FLYZA5.FLYZA) 15SEP16

HOUSTON, TEXAS

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to cross BOTLL at or below 5000, thence

TAKEOFF RWYS 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 RWYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to cross BOTLL at or below 5000, thence

TAKEOFF RWYS 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)

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.

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.

Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.

Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

GIFFA EIGHT DEPARTURE

**TOP ALTITUDE:
16000**

CEDAR CREEK
114.8 CQY 
Chan 95

LEONA
110.8 LOA 
Chan 45

- ATIS 124.05
- CLNC 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/26R)
- 125.35 290.2 (Rwys 8R/26L)
- 127.3 288.25 (Rwys 15L/R, 33L/R)
- 135.15 290.2 (Rwys 9/27)
- HOUSTON DEP CON
- 132.25 285.425

GIFFA
N31°22.89'
W95°15.10'
L-19-21, H-6
8500

85

358°
(44)

BUMCO
N30°38.91'
W95°18.03'

41

358°
(10)

MONNT
N30°28.65'
W95°18.70'
L19-21, H7

31

DAISETTA
116.9 DAS 
Chan 116

HUMBLE
116.6 IAH 
Chan 113

TAKEOFF MINIMUMS
Rwys 8L/R, 9, 15L/R, 26L/R, 27,
33L/R: Standard.

NOTE: RADAR required.
NOTE: For aircraft destined for the DFW
terminal area only.

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

NOTE: Chart not to scale.

GIFFA EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

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 GIFFA INT at or above 8500.

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.

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL. Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.

Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

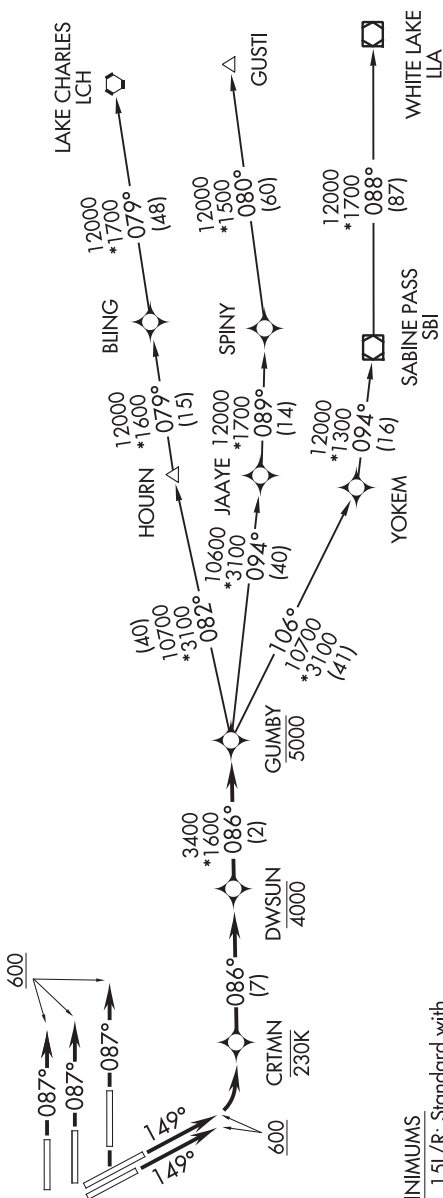
GUMBY THREE DEPARTURE (RNAV)

ST-5461(FAA)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

TOP ALTITUDE:
16000



TAKEOFF MINIMUMS

Rwy 8L/R, 9, 15L/R: Standard with minimum climb of 500' per NM to 1700.

NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS Required.

NOTE: RNAV 1.

(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

GUMBY THREE DEPARTURE (RNAV)

(GUMBY3.GUMBY) 10DEC15

HOUSTON, TEXAS

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

(GUMBY3.GUMBY) 15344

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

GUMBY THREE DEPARTURE (RNAV) ST-5461(FAA)

HOUSTON, TEXAS



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)

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.

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.

Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

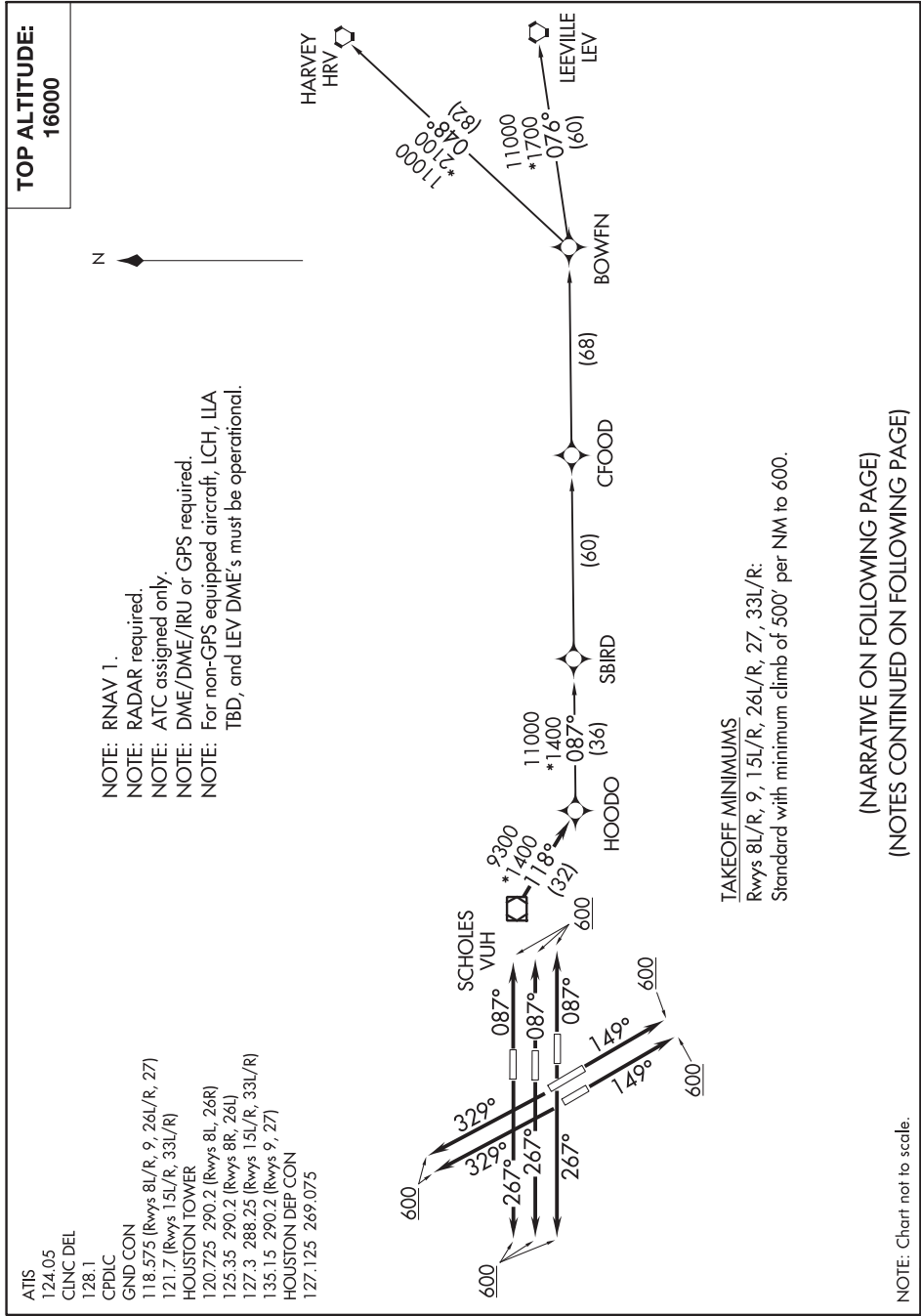
GUMBY THREE DEPARTURE (RNAV)

HOUSTON, TEXAS

(GUMBY3.GUMBY) 15344

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SC-5, 10 NOV 2016 to 05 JAN 2017



HOODO FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

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

SC-5, 10 NOV 2016 to 05 JAN 2017

(HOODO4.HOODO) 16315

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

HOODO FOUR DEPARTURE (RNAV) SL-5461 (FAA)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAYS 15L/R: Climb heading 149° to 600, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAYS 33L/R: Climb heading 329° to 600, expect 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 (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

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.

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.

Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.

Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

(HOODO4.HOODO) 10NOV16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

(INDIE4.INDIE) 16315

INDIE FOUR DEPARTURE (RNAV)

SL-5461 (FAA)

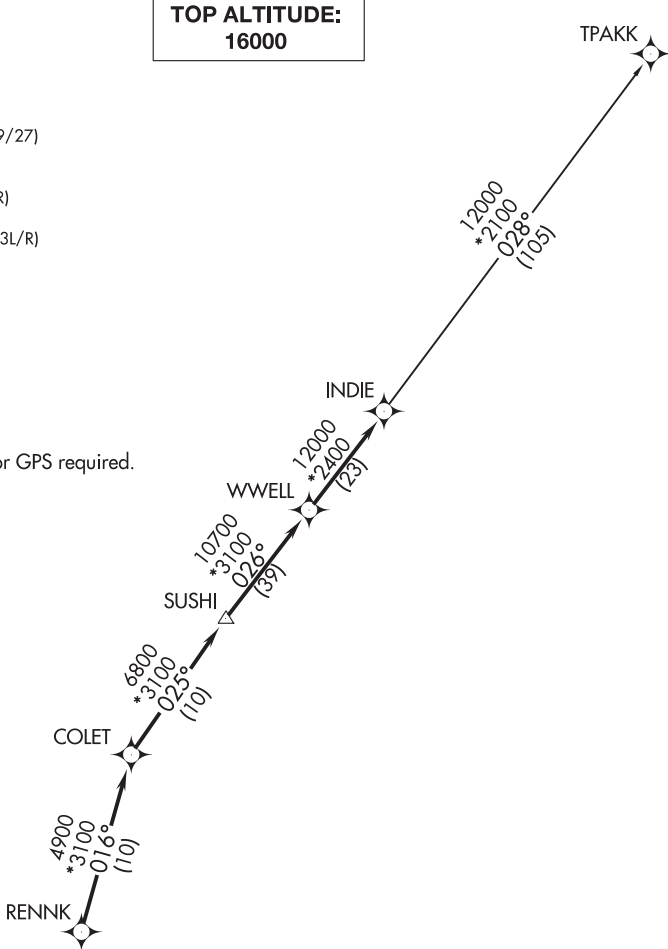
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

HOUSTON, TEXAS

ATIS
 124.05
 CLNC DEL
 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9/27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L/26R)
 125.35 290.2 (Rwys 8R/26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9/27)
 HOUSTON DEP CON
 132.25 285.425

**TOP ALTITUDE:
16000**

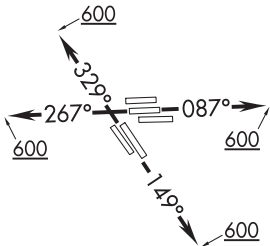
NOTE: RADAR required.
 NOTE: DME/DME/IRU or GPS required.
 NOTE: RNAV 1.



TAKEOFF MINIMUMS

Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R:

Standard with minimum climb of 500' per NM to 600.



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

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

HOUSTON, TEXAS

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to RENNK, thence

TAKEOFF RWYS 15L/R: Climb heading 149° to 600, expect RADAR vectors to RENNK, thence

TAKEOFF RWYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to RENNK, thence

TAKEOFF RWYS 33L/R: Climb heading 329° to 600, expect 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 (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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.

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.
Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.

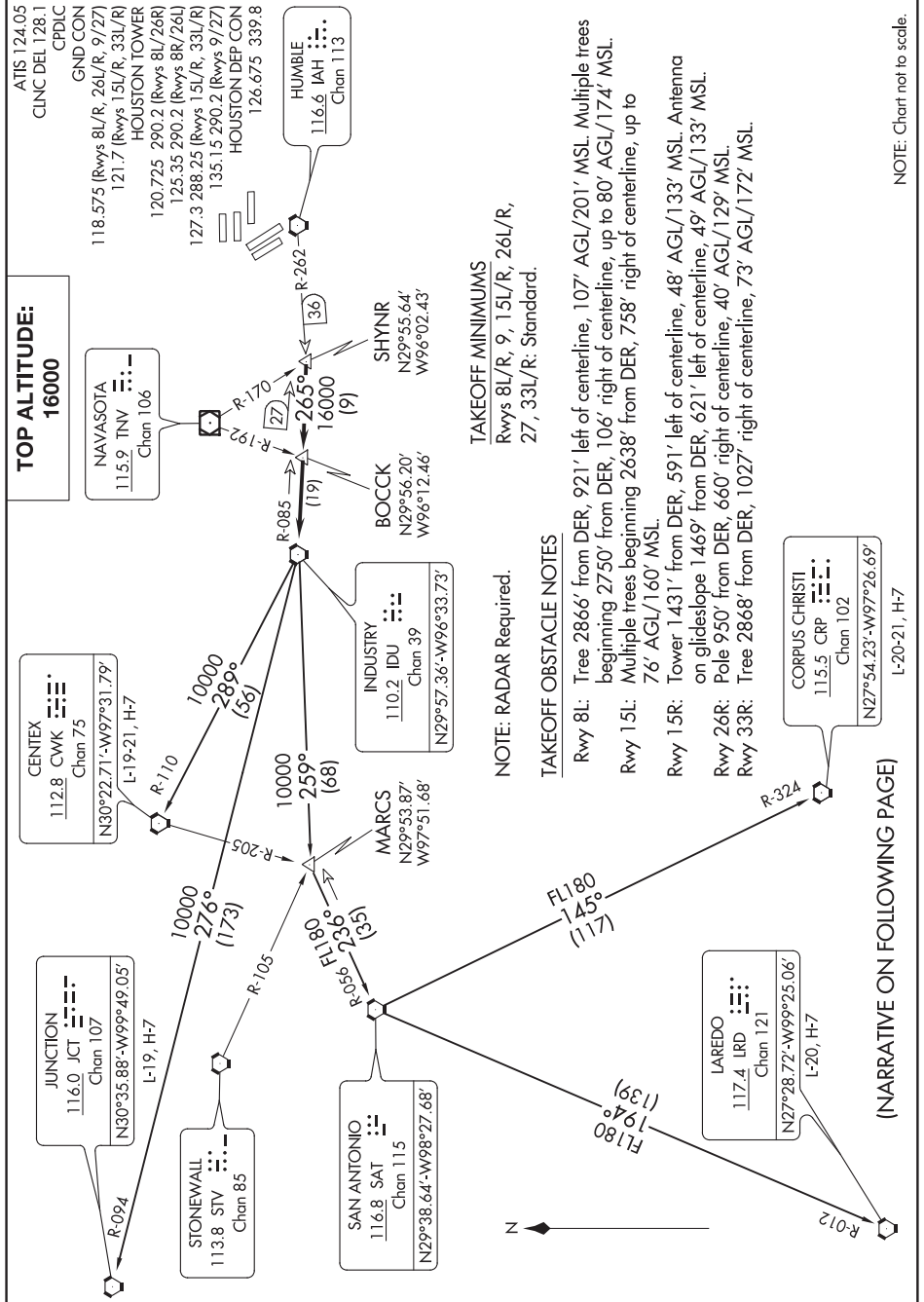
Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



INDUSTRY EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

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 (IDU8.CWK): (ATC assigned only for aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

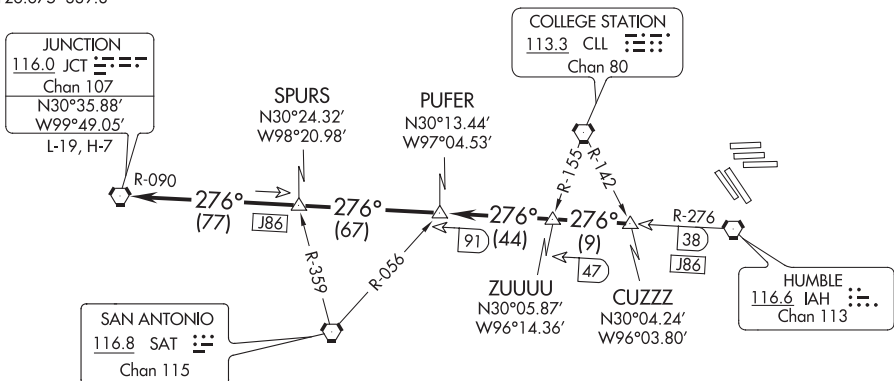
JUNCTION NINE DEPARTURE

ATIS 124.05
 CLNC DEL 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9/27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L/26R)
 125.35 290.2 (Rwys 8R/26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9/27)
 HOUSTON DEP CON
 126.675 339.8

**TOP ALTITUDE:
16000**

TAKEOFF MINIMUMS

Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard.



NOTE: RADAR required.

NOTE: For aircraft overflying JCT VORTAC via J86 filing FL240 or above.

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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL. Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

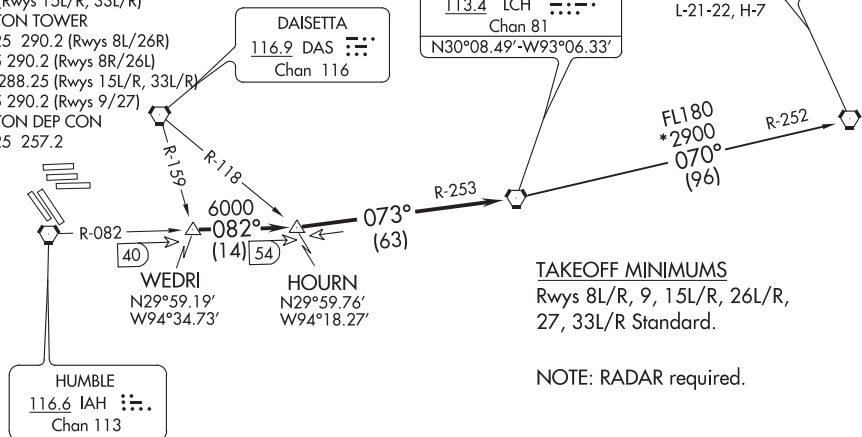
Climb on assigned heading for RADAR vectors to CUZZZ INT. Maintain 16000. Expect filed altitude 10 minutes after departure. Thence . . .

. . . via IAH R-276 and JCT R-090 to JCT VORTAC.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS 124.05
 CLNC DEL 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9/27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L/26R)
 125.35 290.2 (Rwys 8R/26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9/27)
 HOUSTON DEP CON
 127.125 257.2



TAKEOFF MINIMUMS
 Rwys 8L/R, 9, 15L/R, 26L/R,
 27, 33L/R Standard.

NOTE: RADAR required.

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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.
 Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

TOP ALTITUDE:
16000

NOTE: Chart not to scale.

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 (LCH4.LSU): From over LCH VORTAC on LCH R-070 and LSU R-252 to LSU VORTAC.

LEONA TWO DEPARTURE

**TOP ALTITUDE:
16000**

- ATIS 124.05
- CLNC DEL 128.1
- CPDLC 118.575 (Rwys 8L/R, 26L/R, 9/27)
- GND CON 121.7 (Rwys 15L/R, 33L/R)
- HOUSTON TOWER 120.725 290.2 (Rwys 8L/26R)
- 125.35 290.2 (Rwys 8R/26L)
- 127.3 288.25 (Rwys 15L/R, 33L/R)
- 135.15 290.2 (Rwys 9/27)
- HOUSTON DEP CON 132.25 285.425

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'

BONHAM
114.6 BYP
Chan 93
N33°32.25' - W96°14.05'
L-17, H-6

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

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'

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

DOLEY
N32°11.35'
W96°23.08'

WLLIS
N30°32.08'
W95°39.10'

NAVASOTA
115.9 TNV
Chan 106

HUMBLE
116.6 IAH
Chan 113

NOTE: RADAR required.
NOTE: Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LOA2 SID must file one of the published transitions via FUZ (LOA2.FUZ) ADM (LOA2.ADM) or BYP (LOA2.BYP).

TAKEOFF MINIMUMS
Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard.

(NOTES ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEONA TWO DEPARTURE



DEPARTURE ROUTE DESCRIPTION

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 (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL. Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LFK1.LFK) 16315

LUFKIN ONE DEPARTURE

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
SC-5461 (FAA) HOUSTON, TEXAS

ATIS
124.05
CLNC DEL
128.1
CPDLC
GND CON
118.575 (Rwys 8L/R, 26L/R, 9/27)
121.7 (Rwys 15L/R, 33L/R)
HOUSTON TOWER
120.725 290.2 (Rwys 8L/26R)
125.35 290.2 (Rwys 8R/26L)
127.3 288.25 (Rwys 15L/R, 33L/R)
135.15 290.2 (Rwys 9/27)
HOUSTON DEP CON
132.25 285.425

**TOP ALTITUDE:
16000**

LITTLE ROCK
113.9 LIT
Chan 86
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: RADAR 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

TAKEOFF MINIMUMS:
Rwys 8R/L, 9, 27, 15L/R, 26L/R, 33L/R: Standard.

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

NOTE: Chart not to scale.

LUFKIN ONE DEPARTURE
(LFK1.LFK) 10NOV16

HOUSTON, TEXAS
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LFK1.LFK) 16315

LUFKIN ONE DEPARTURE

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)
SL-5461 (FAA) HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors for 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

TAKEOFF OBSTACLES 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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.
Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LUFKIN ONE DEPARTURE

(LFK1.LFK) 10NOV16

HOUSTON, TEXAS
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

(LURIC4.LURIC) 16315

LURIC FOUR DEPARTURE (RNAV)

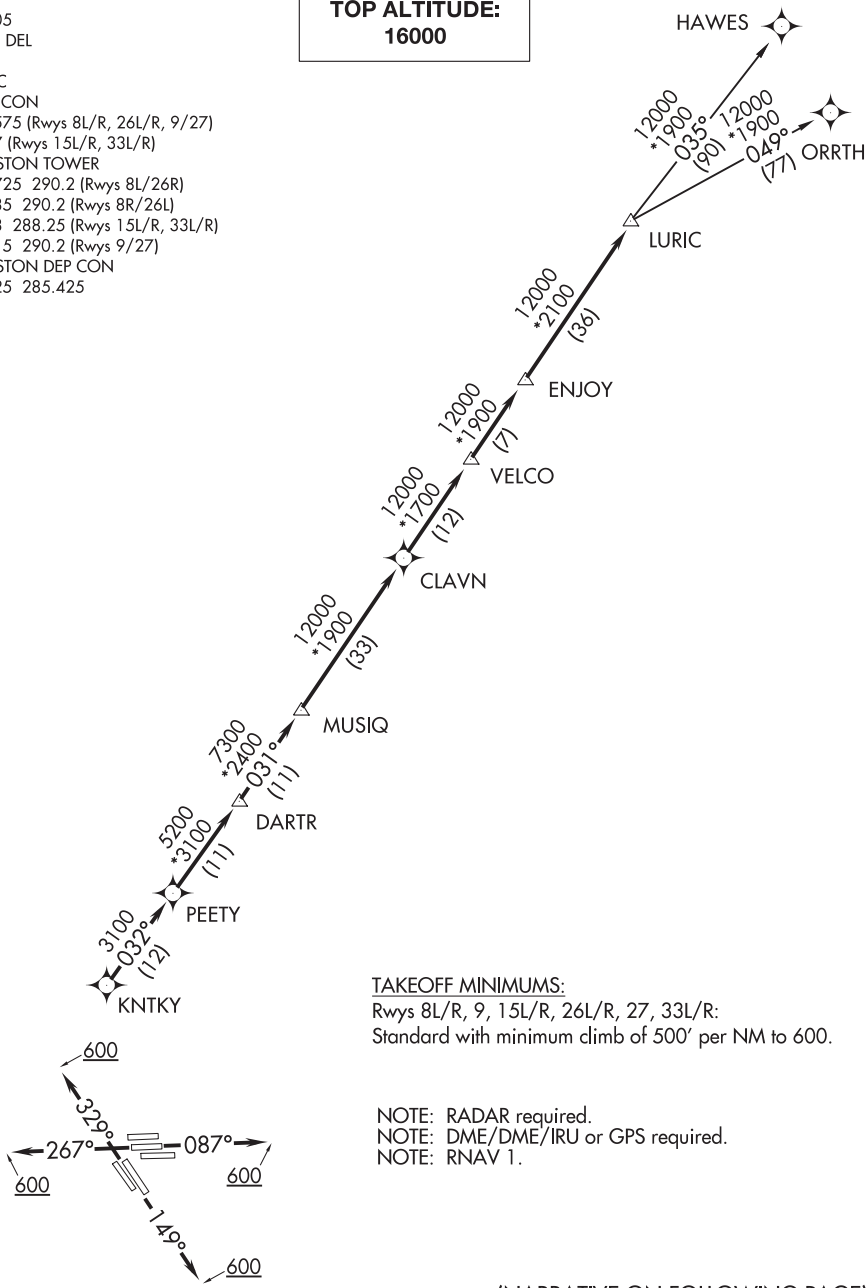
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SL-5461 (FAA)

HOUSTON, TEXAS

ATIS
 124.05
 CLNC DEL
 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9/27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L/26R)
 125.35 290.2 (Rwys 8R/26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9/27)
 HOUSTON DEP CON
 132.25 285.425

**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 600.

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

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)

(LURIC4.LURIC) 10NOV16

HOUSTON, TEXAS

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 15L/R: Climb heading 149° to 600, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWYS 33L/R: Climb heading 329° to 600, expect 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 (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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.

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.

Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.

Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

(MMUGS4.MMUGS) 15344

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

MMUGS FOUR DEPARTURE (RNAV)

SL-5461 (FAA)

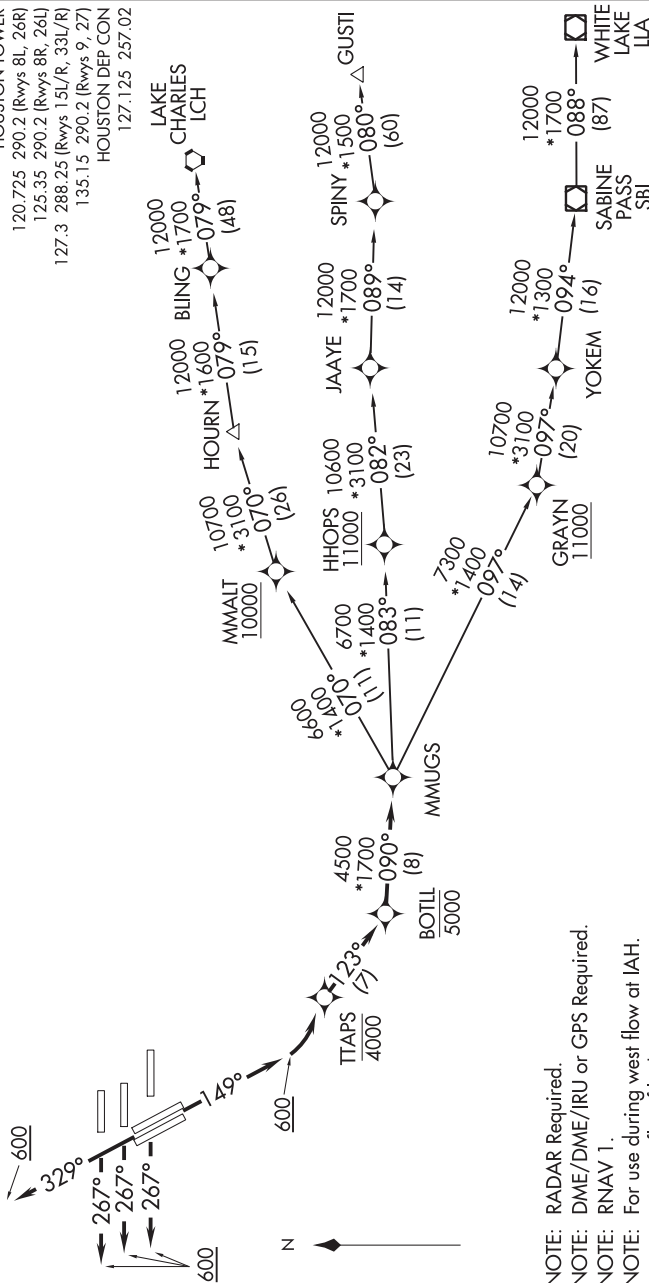
HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

TOP ALTITUDE:
16000

TAKEOFF MINIMUMS
Rwys 15L/R, 26L/R, 27, 33L/R: Standard
with minimum climb of 500' per NM to 800.

- ATIS 124.05
- CLINC DEL 128.1
- CPDLC
- GND CON 118.575 (Rwys 8L/R, 26L/R, 9, 27)
- 121.7 (Rwys 15L/R, 33L/R)
- HOUSTON TOWER 120.725 290.2 (Rwys 8L, 26R)
- 125.35 290.2 (Rwys 8R, 26L)
- 127.3 288.25 (Rwys 15L/R, 33L/R)
- 135.15 290.2 (Rwys 9, 27)
- HOUSTON DEP CON 127.125 257.02



- NOTE: RADAR Required.
- NOTE: DME/DME/IRU or GPS Required.
- NOTE: RNAV 1.
- NOTE: For use during west flow at IAH.
- NOTE: For east flow file the GUMBY RNAV DEPARTURE.

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

NOTE: Chart not to scale.

MMUGS FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

(MMUGS4.MMUGS) 15344

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)



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)

TAKEOFF OBSTACLE NOTES

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

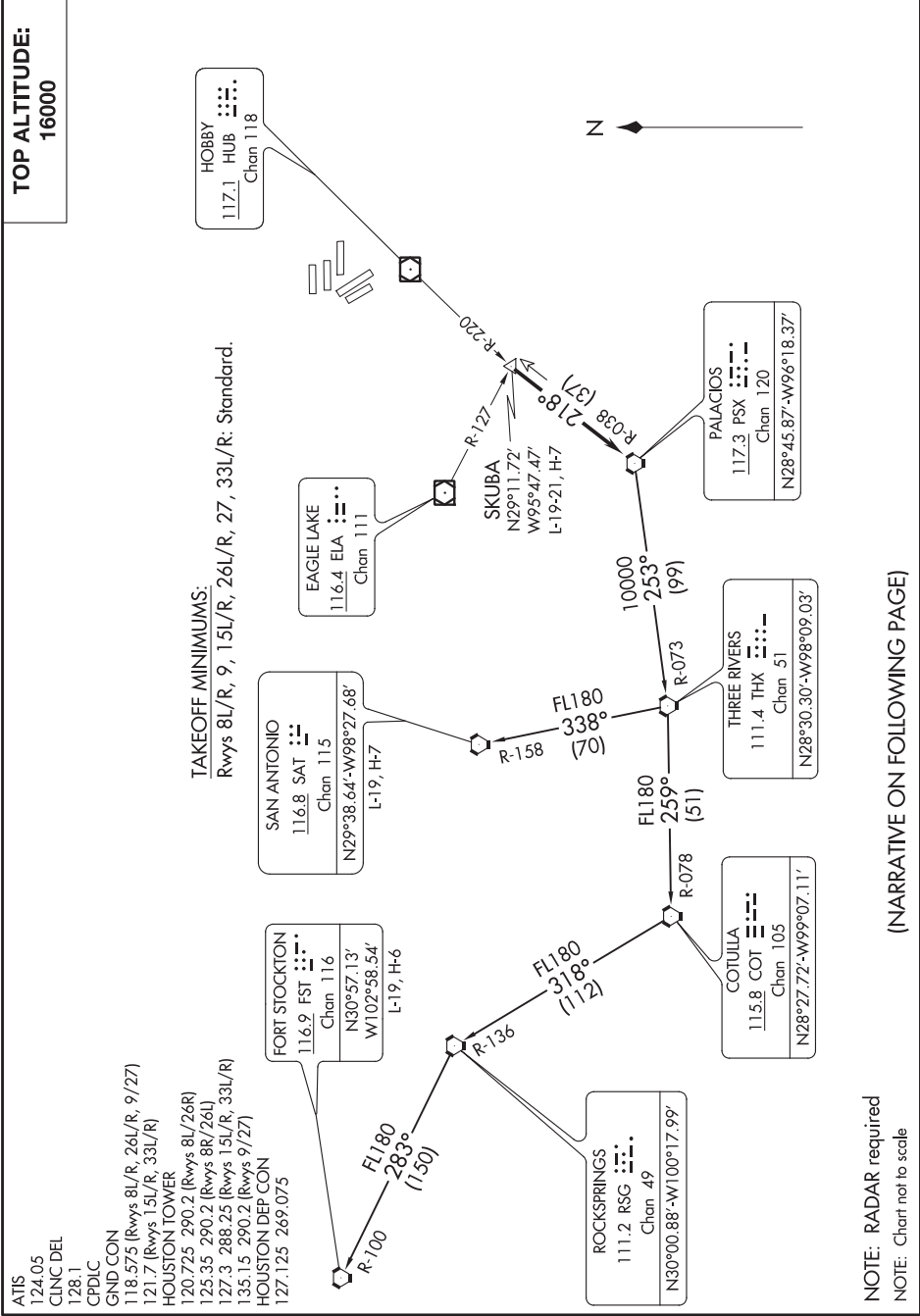
Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.

Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.

Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017



SC-5, 10 NOV 2016 to 05 JAN 2017

(PSX8.PSX) 16315

PALACIOS EIGHT DEPARTURE

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SL-5461 (FAA)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to SKUBA INT, maintain 16000.
Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-338 and SAT R-158 to SAT VORTAC.

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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.
Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

PALACIOS EIGHT DEPARTURE

(PSX8.PSX) 10NOV16

HOUSTON, TEXAS

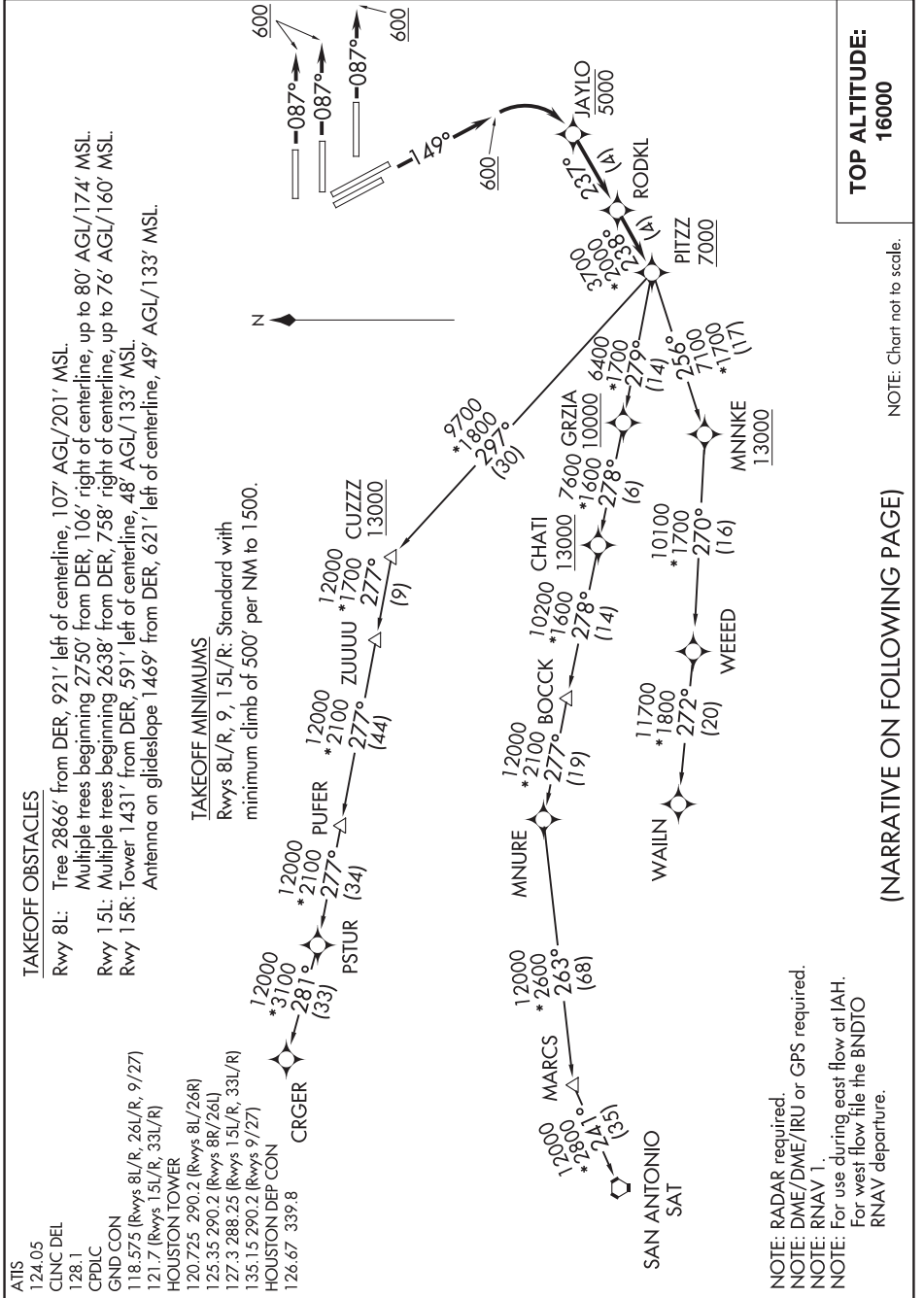
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

PITZZ FOUR DEPARTURE (RNAV)

SL-5461 (FAA)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

PITZZ FOUR DEPARTURE (RNAV)

(PITZZ4.PITZZ) 15344

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

PITZZ FOUR DEPARTURE (RNAV)

SL-5461 (FAA)

HOUSTON, TEXAS



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)

WALIN TRANSITION (PITZZ4.WALIN)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

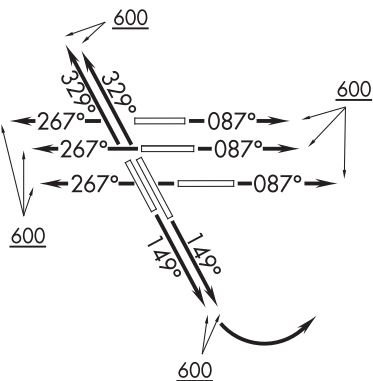
PITZZ FOUR DEPARTURE (RNAV)

(PITZZ4.PITZZ) 15344

HOUSTON, TEXAS

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

ATIS
 124.05
 CLNC DEL
 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9, 27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L, 26R)
 125.35 290.2 (Rwys 8R, 26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9, 27)
 HOUSTON DEP CON
 127.12 269.07

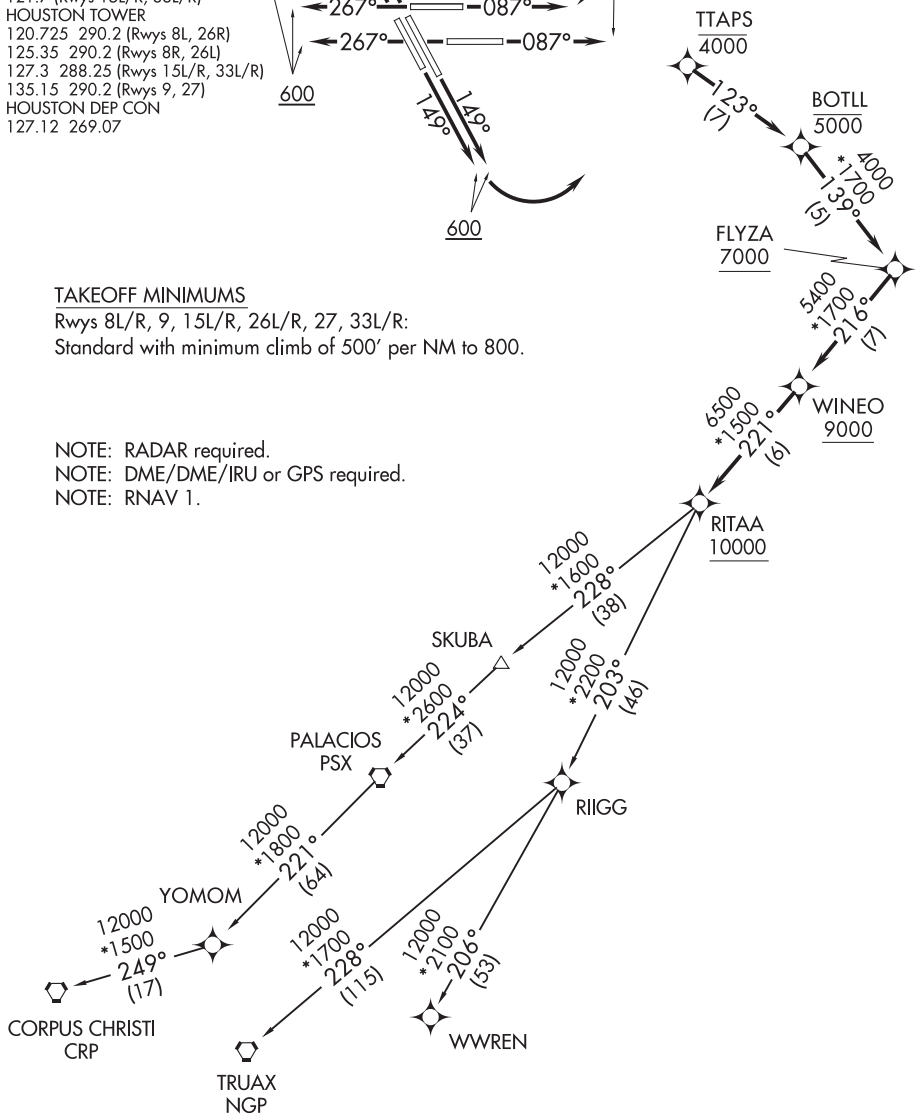


**TOP ALTITUDE:
16000**

TAKEOFF MINIMUMS

Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R:
 Standard with minimum climb of 500' per NM to 800.

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



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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



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 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.

CORPUS CHRISTI TRANSITION (RITAA5.CRP)

PALACIOS TRANSITION (RITAA5.PSX)

TRUAX TRANSITION (RITAA5.NGP)

WWREN TRANSITION (RITAA5.WWREN)

YOMOM TRANSITION (RITAA5.YOMOM)

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.

Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.

Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.

Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.

Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.

Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

(STRYA4.STRYA) 16315

STRYA FOUR DEPARTURE (RNAV)

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

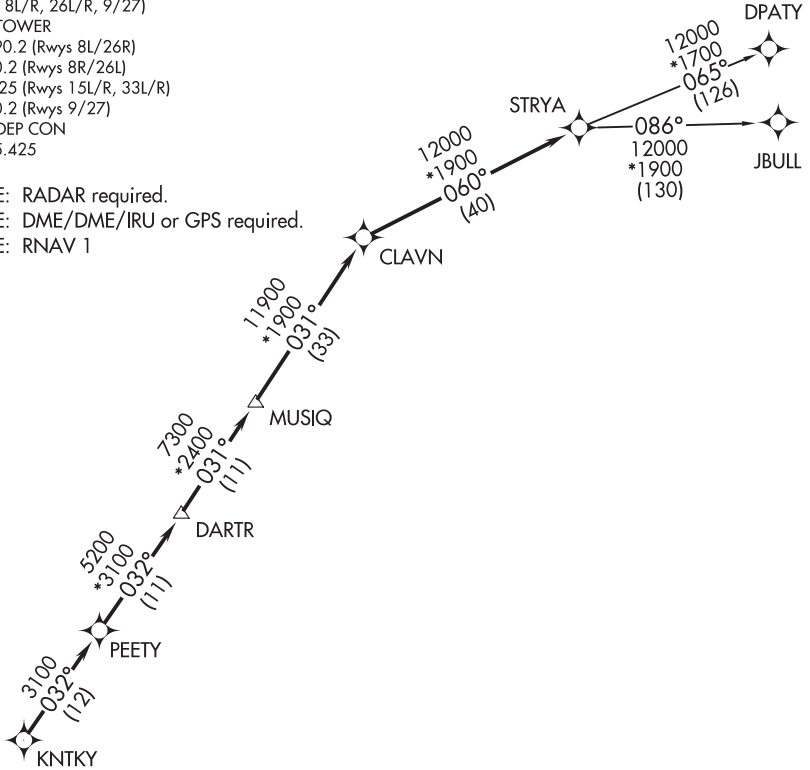
SL-5461 (FAA)

HOUSTON, TEXAS

ATIS
 124.05
 CLNC DEL
 128.1
 CPDLC
 GND CON
 118.575 (Rwys 15L/R, 33L/R)
 121.7 (Rwys 8L/R, 26L/R, 9/27)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L/26R)
 125.35 290.2 (Rwys 8R/26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9/27)
 HOUSTON DEP CON
 132.25 285.425

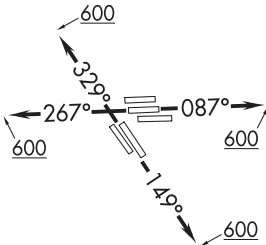
TOP ALTITUDE:
16000

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.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

(STRYA4.STRYA) 10NOV16

HOUSTON, TEXAS

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(STRYA4.STRYA) 16315

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

STRYA FOUR DEPARTURE (RNAV)

SL-5461 (FAA)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to KNTKY, thence . . .

TAKEOFF RWYS 15L/R: Climb heading 149° to 600, expect RADAR vectors to KNTKY, thence . . .

TAKEOFF RWYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to KNTKY, thence . . .

TAKEOFF RWYS 33L/R: Climb heading 329° to 600, expect 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 (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

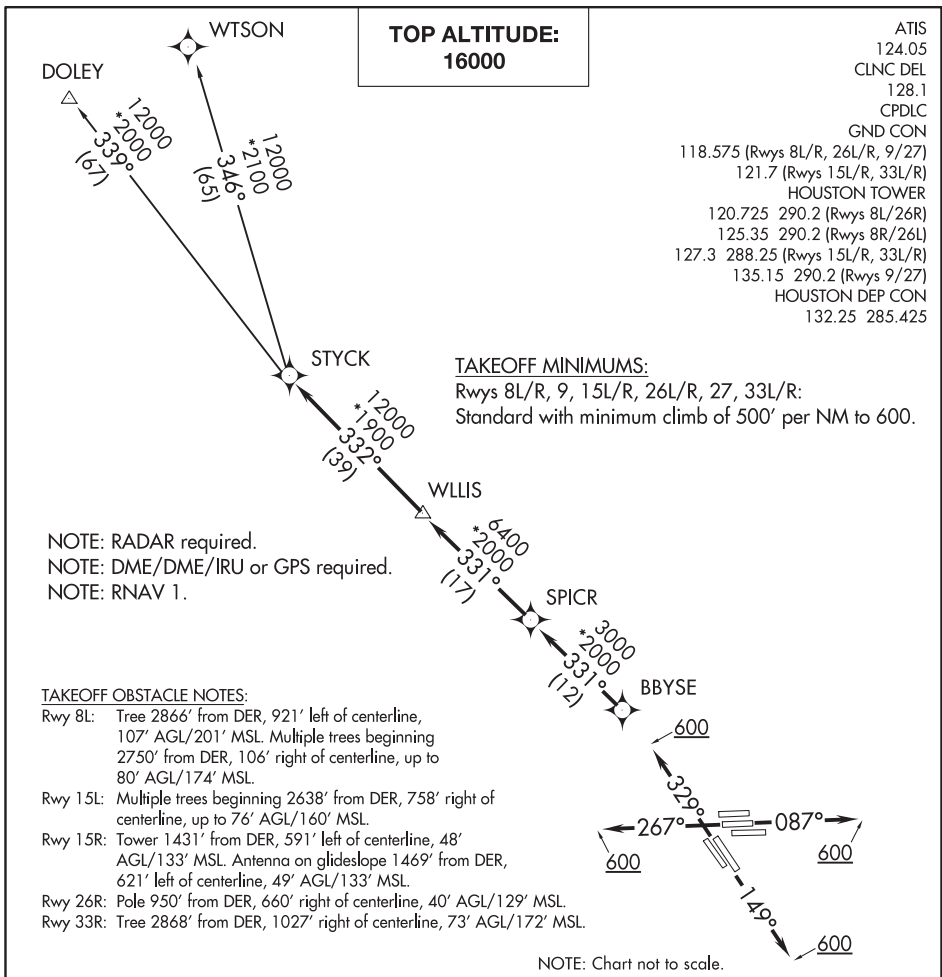
- Rwy 8L: Tree 2866' from DER, 921' left of centerline, 107' AGL/201' MSL.
Multiple trees beginning 2750' from DER, 106' right of centerline, up to 80' AGL/174' MSL.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.
Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

STRYA FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

(STRYA4.STRYA) 10NOV16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWYS 15L/R: Climb heading 149° to 600, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWYS 33L/R: Climb heading 329° to 600, expect 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 (STYCK4.DOLEY)
WTSON TRANSITION (STYCK4.WTSON)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TRUAX SIX DEPARTURE

ATIS 124.05
 CLNC DEL 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9/27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L/26R)
 125.35 290.2 (Rwys 8R/26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9/27)
 HOUSTON DEP CON
 127.125 269.075

HOBBY
 117.1 HUB
 Chan 118

EAGLE LAKE
 116.4 ELA
 Chan 111

SCHOLES
 113.0 VUH
 Chan 77

TAKEOFF MINIMUMS:

Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard.

NOTE: For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP VORTAC to international destinations.

NOTE: RADAR required.

TRUAX
 114.0 NGP
 Chan 87
 N27°41.18'
 W97°17.68'

L-20-21, H-7

16000
 228°
 (1114)

TOP ALTITUDE:
16000

TAKEOFF OBSTACLES 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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL. Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to YAWNS INT, maintain 16000.
 Expect filed altitude 10 minutes after departure, thence . . .

. . . on VUH R-228 and NGP R-047 to NGP VORTAC.

TRUAX SIX DEPARTURE

(WYLSN4.WYLSN) 16315

SL-5461 (FAA)

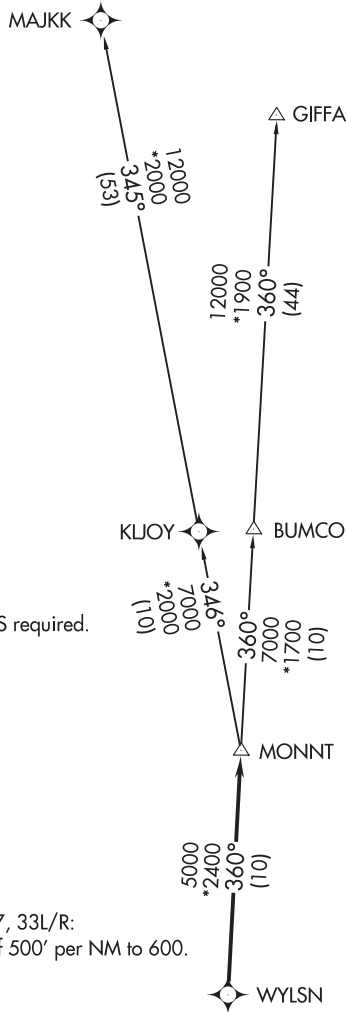
GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

ATIS
 124.05
 CLNC DEL
 128.1
 CPDLC
 GND CON
 118.575 (Rwys 8L/R, 26L/R, 9/27)
 121.7 (Rwys 15L/R, 33L/R)
 HOUSTON TOWER
 120.725 290.2 (Rwys 8L/26R)
 125.35 290.2 (Rwys 8R/26L)
 127.3 288.25 (Rwys 15L/R, 33L/R)
 135.15 290.2 (Rwys 9/27)
 HOUSTON DEP CON
 132.25 285.425

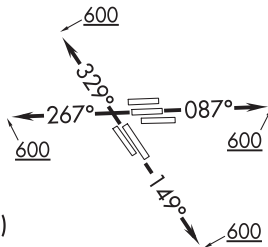
**TOP ALTITUDE:
16000**



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.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

(WYLSN4.WYLSN) 10NOV16

GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 8L/R, 9: Climb heading 087° to 600, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWYS 15L/R: Climb heading 149° to 600, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWYS 33L/R: Climb heading 329° to 600, expect 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 (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJKK)

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.
- Rwy 15L: Multiple trees beginning 2638' from DER, 758' right of centerline, up to 76' AGL/160' MSL.
- Rwy 15R: Tower 1431' from DER, 591' left of centerline, 48' AGL/133' MSL.
Antenna on glideslope 1469' from DER, 621' left of centerline, 49' AGL/133' MSL.
- Rwy 26R: Pole 950' from DER, 660' right of centerline, 40' AGL/129' MSL.
- Rwy 33R: Tree 2868' from DER, 1027' right of centerline, 73' AGL/172' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 49004 W18A	APP CRS 175°	Rwy Idg 6610 TDZE 166 Apt Elev 166
--	------------------------	---

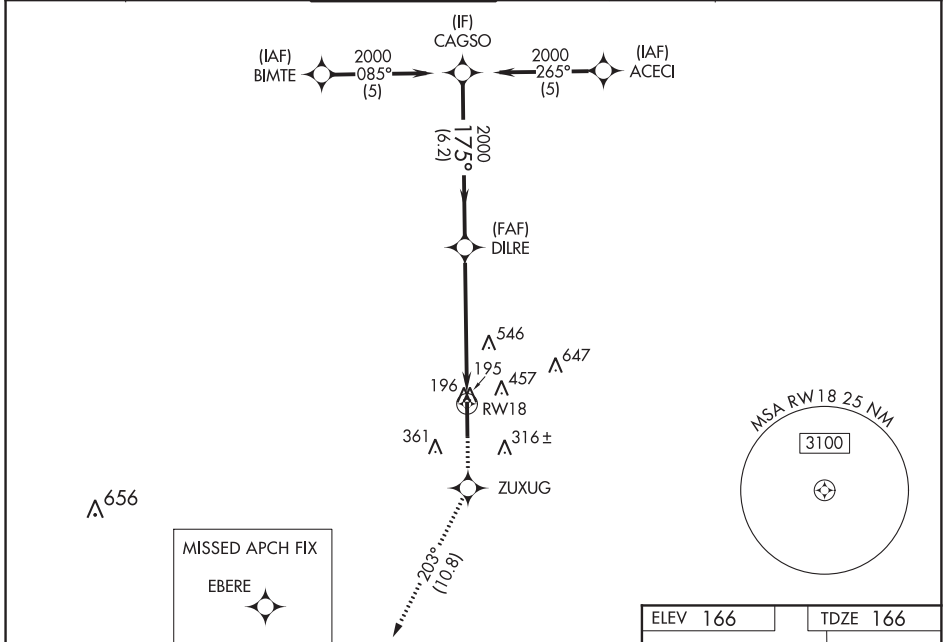
RNAV (GPS) RWY 18

HOUSTON EXECUTIVE (TME)

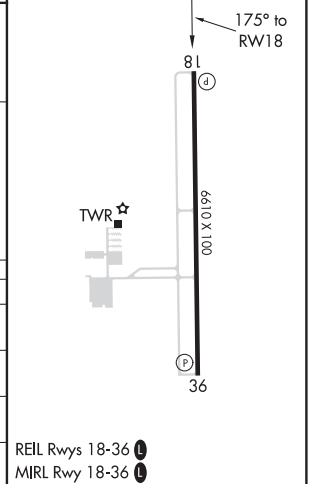
▽ Baro-VNAV NA when using David Wayne Hooks Memorial altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. VDP NA when using David Wayne Hooks Memorial altimeter setting. Helicopter visibility reduction below ¼ SM NA. When local altimeter setting not received, use David Wayne Hooks Memorial altimeter setting and increase all DA 57 feet and all MDA 60 feet; increase LNAV/VNAV all Cats and LNAV Cat C/D visibility ½ mile, and Circling Cat C/D visibility ¼ mile.

MISSED APPROACH: Climb to 2000 direct ZUXUG and on track 203° to EBERE and hold.

ATIS 119.525	HOUSTON APP CON 123.8 257.7	EXECUTIVE TOWER ★ 126.975 (CTAF) 0	GND CON 132.075	CLNC DEL 132.075	GCO 121.725	UNICOM 122.975
------------------------	---------------------------------------	---	---------------------------	----------------------------	-----------------------	--------------------------



ELEV 166	TDZE 166
----------	----------



	2000	ZUXUG	tr 203°	EBERE
	CAGSO	DILRE 2000		
	2000	175°	175°	
	GS 3.00° TCH 40		*1.8 NM to RWY 18	
	6.2 NM	3.7 NM	1.8	
CATEGORY	A	B	C	D
LPV DA		416-1	250 (300-1)	
LNAV/VNAV DA		708-2	542 (600-2)	
LNAV MDA	780-1	614 (700-1)	780-1¾	614 (700-1¾)
CIRCLING	820-1	654 (700-1)	820-1¾	860-2¼
			654 (700-1¾)	694 (700-2¼)

REIL Rwy 18-36 **0**
MIRL Rwy 18-36 **0**

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-10328 (FAA)

15120

WAAS CH 97504 W36A	APP CRS 355°	Rwy Idg 6610 TDZE 164 Apt Elev 166
--	------------------------	---

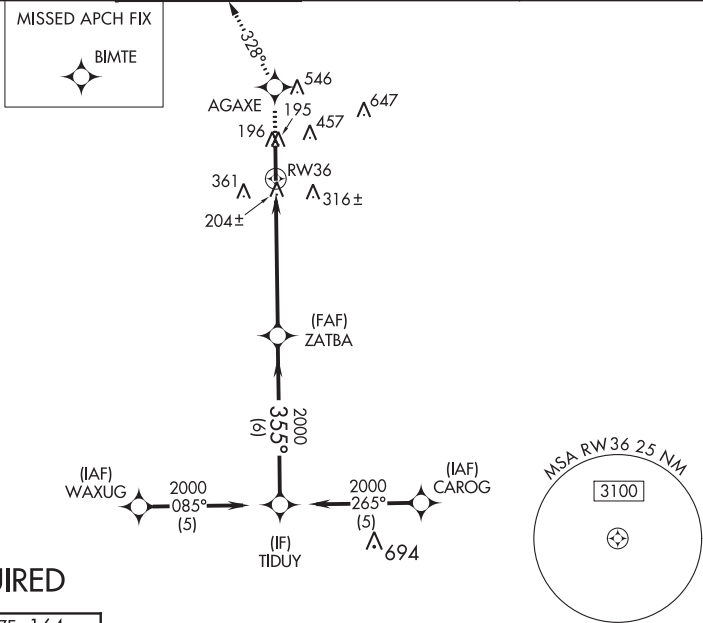
RNAV (GPS) RWY 36

HOUSTON EXECUTIVE (TME)

⚠ Baro-VNAV NA when using David Wayne Hooks Memorial 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 Memorial altimeter setting. When local altimeter setting not received, use David Wayne Hooks Memorial altimeter setting and increase LPV DA to 471 feet, LNAV/VNAV DA to 719 feet; increase all MDA 60 feet. Increase LNAV/VNAV visibility ¼ mile all Cats and LNAV and circling Cat C/D ¼ mile.

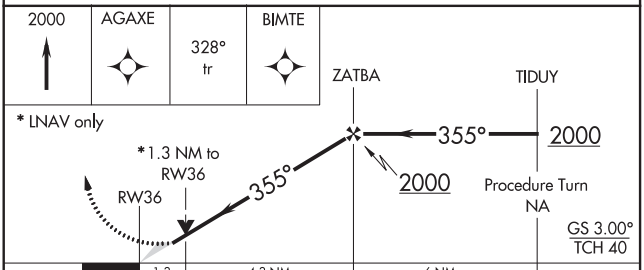
MISSED APPROACH:
 Climb to 2000 direct AGAXE and via 328° track to BIMTE and hold.

ATIS 119.525	HOUSTON APP CON 123.8 257.7	EXECUTIVE TOWER ★ 126.975 (CTAF)	GND CON 132.075	CLNC DEL 132.075	GCO 121.725	UNICOM 122.975
------------------------	---------------------------------------	--	---------------------------	----------------------------	-----------------------	--------------------------

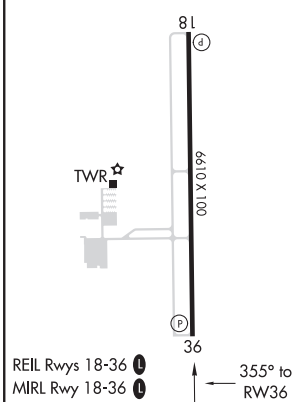


RADAR REQUIRED

ELEV 166	TDZE 164
----------	----------



CATEGORY	A	B	C	D
LPV DA	414-1 250 (300-1)			
LNAV/VNAV DA	662-1¾ 498 (500-1¾)			
LNAV MDA	620-1	456 (500-1)	620-1¼ 456 (500-1¼)	620-1½ 456 (500-1½)
CIRCLING	820-1	654 (700-1)	820-1¾ 654 (700-1¾)	860-2¼ 694 (700-2¼)



HOUSTON, TEXAS
 Amdt 1 07MAY09

29°48'N-095°54'W

HOUSTON EXECUTIVE (TME) RNAV (GPS) RWY 36

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

15064

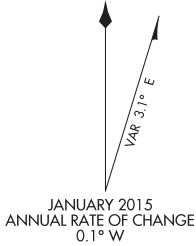
AIRPORT DIAGRAM

AL-10328 (FAA)

HOUSTON EXECUTIVE (TME)
HOUSTON, TEXAS

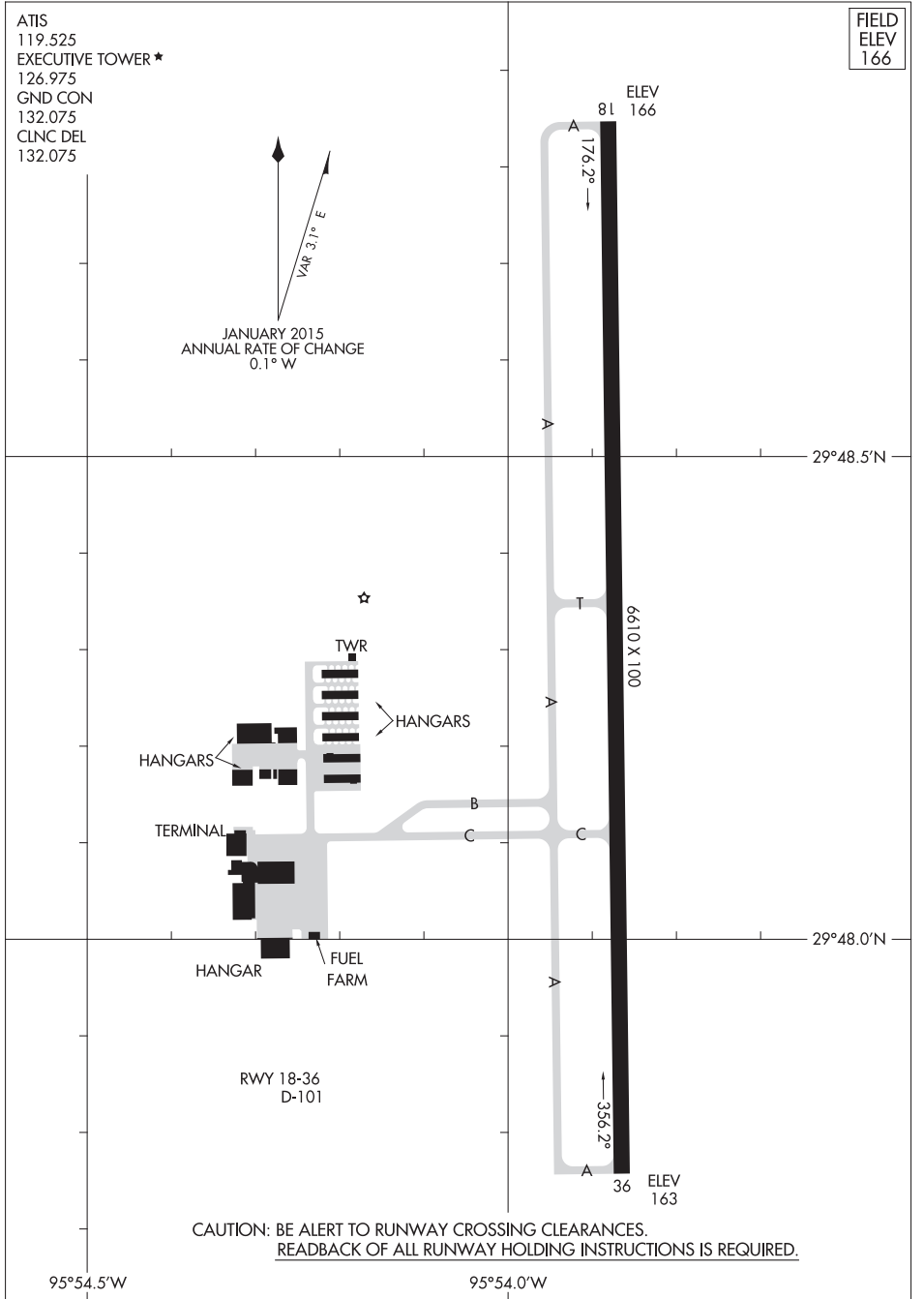
ATIS
 119.525
 EXECUTIVE TOWER ★
 126.975
 GND CON
 132.075
 CLNC DEL
 132.075

FIELD ELEV 166



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



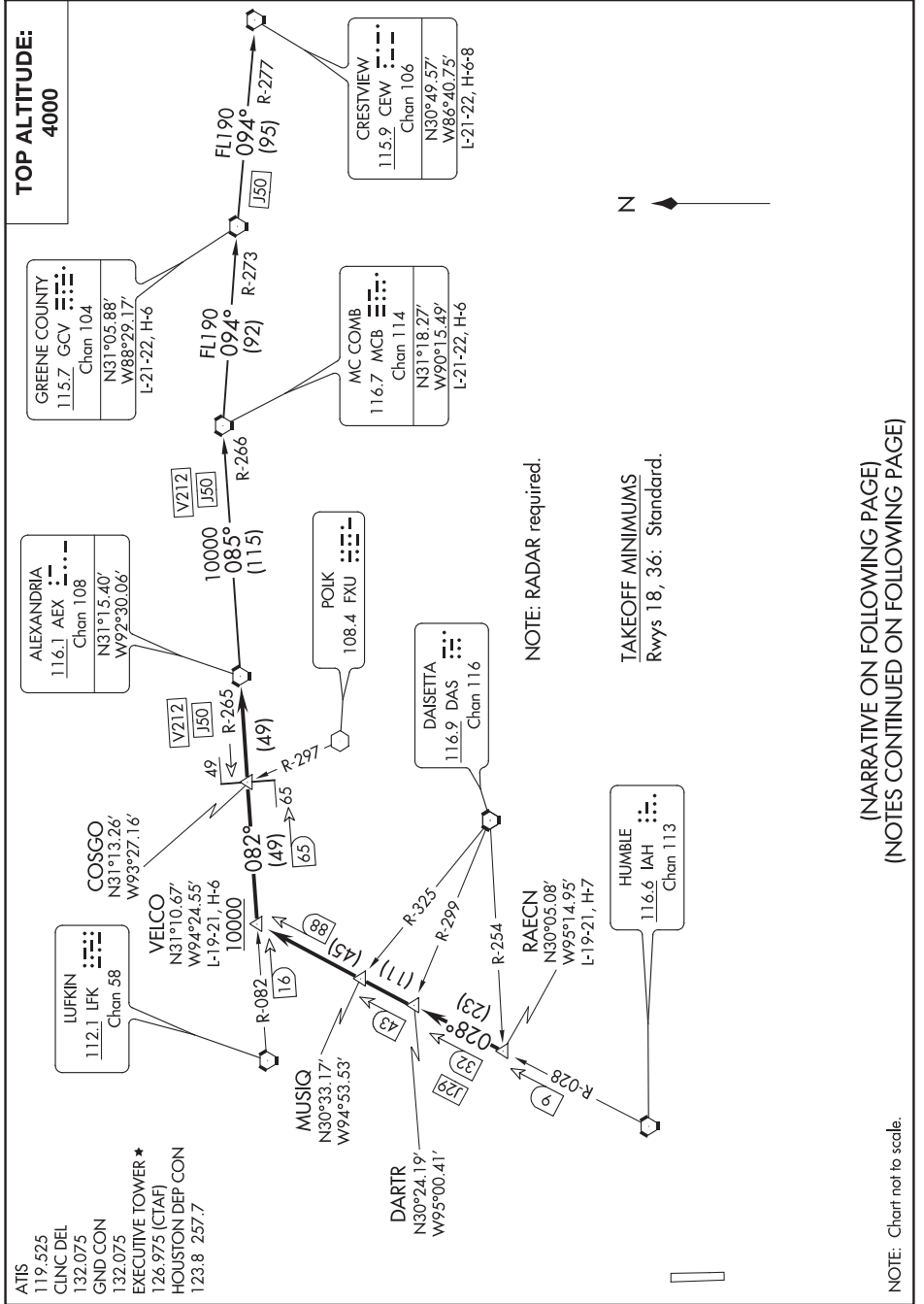
AIRPORT DIAGRAM

15064

HOUSTON, TEXAS
HOUSTON EXECUTIVE (TME)

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



**TOP ALTITUDE:
4000**

ALEXANDRIA
116.1 AEX
Chan 108

N31°15.40'
W92°30.06'

GREENE COUNTY
115.7 GCV
Chan 104

N31°05.88'
W88°29.17'

LUFKIN
112.1 LFK
Chan 58

N31°13.26'
W93°27.16'

VELCO
N31°10.67'
W94°24.55'

L-19-21, H-6

MUSIQ
N30°33.17'
W94°53.53'

DARTR
N30°24.19'
W95°00.41'

DAISETTA
116.9 DAS
Chan 116

POIK
108.4 FXU

MC COMB
116.7 MCB
Chan 114

N31°18.27'
W90°15.49'

CRESTVIEW
115.9 CEW
Chan 106

N30°49.57'
W86°40.75'

HUMBIE
116.6 IAH
Chan 113

NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwy's 18, 36: Standard.



ATIS 119.525
CLNCDEL 132.075
GND CON 132.075
EXECUTIVE TOWER * 126.975 (CTAF)
HOUSTON DEP CON 123.8 257.7

ALEXANDRIA NINE DEPARTURE

(AEX9.AEX) 10NOV16

HOUSTON, TEXAS

HOUSTON EXECUTIVE (TME)

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

SC-5, 10 NOV 2016 to 05 JAN 2017

NOTE: Chart not to scale.

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

BLTWY THREE DEPARTURE (RNAV)

SL-10328 (FAA)

HOUSTON EXECUTIVE (TME)

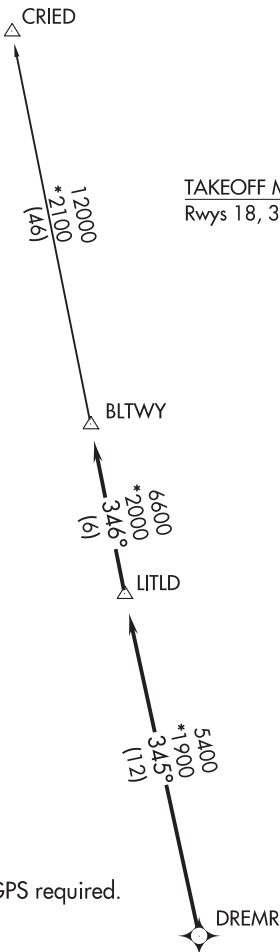
HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

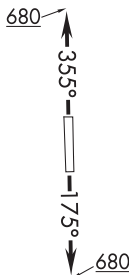
ATIS
119.525
CLNC DEL
132.075
EXECUTIVE TOWER *
126.975 (CTAF)
HOUSTON DEP CON
123.8 257.7

TAKEOFF MINIMUMS

Rwys 18, 36: Standard with minimum climb of 500' per NM to 680.



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



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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

HOUSTON, TEXAS
HOUSTON EXECUTIVE (TME)

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb heading 175° to 680, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 36: Climb heading 355° to 680, expect RADAR vectors to DREMR, thence

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

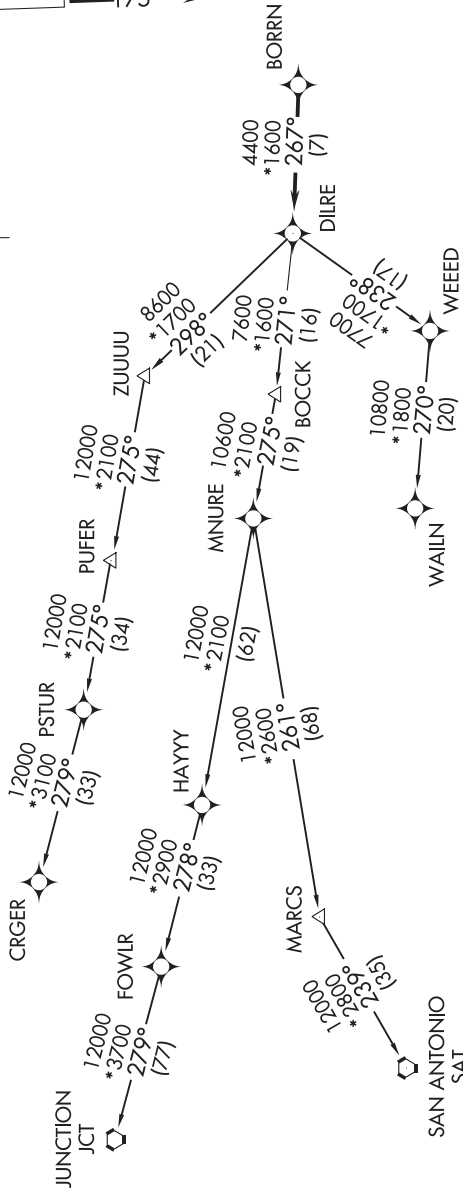
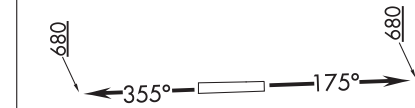
SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS
119.525
CLNC DEL
132.075
GND CON
132.075
EXECUTIVE TOWER*
126.975 (CTAF)
HOUSTON DEP CON
123.8 257.7

TAKEOFF MINIMUMS

Rwys 18, 36: Standard with minimum
climb of 500' per NM to 680.

TOP ALTITUDE:
4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb on heading 175° to 680, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 36: Climb on heading 355° to 680, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(CRIED8.CRIED) 16315

CRIED EIGHT DEPARTURE

SL-10328 (FAA)

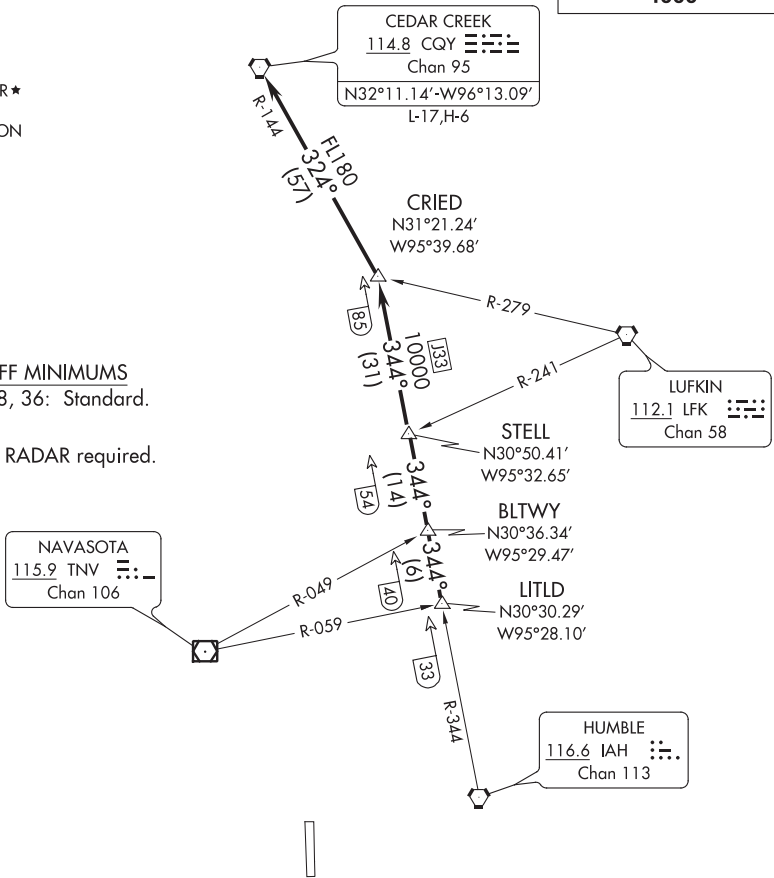
HOUSTON EXECUTIVE (TME)
HOUSTON, TEXAS

ATIS
 119.525
 CLNC DEL
 132.075
 GND CON
 132.075
 EXECUTIVE TOWER ★
 126.975 (CTAF)
 HOUSTON DEP CON
 123.8 257.7

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS
 Rwys 18, 36: Standard.

NOTE: RADAR required.



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

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.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT, maintain 4000. 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.

CRIED EIGHT DEPARTURE

(CRIED8.CRIED) 10NOV16

HOUSTON, TEXAS
HOUSTON EXECUTIVE (TME)

EL DORADO EIGHT DEPARTURE

ATIS
119.525
CLNC DEL
132.075
GND CON
132.075
EXECUTIVE TOWER★
126.975 (CTAF)
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

EL DORADO
115.5 ELD
Chan 102
N33°15.37'-W92°44.64'
L-17, H-6

NOTE: RADAR required.
NOTE: For aircraft destined MEM
or filed via Q32 or J42.

LUFKIN
112.1 LFK
Chan 58

ENJOY
N31°16.73'
W94°19.82'

MUSIQ
N30°33.17'
W94°53.53'

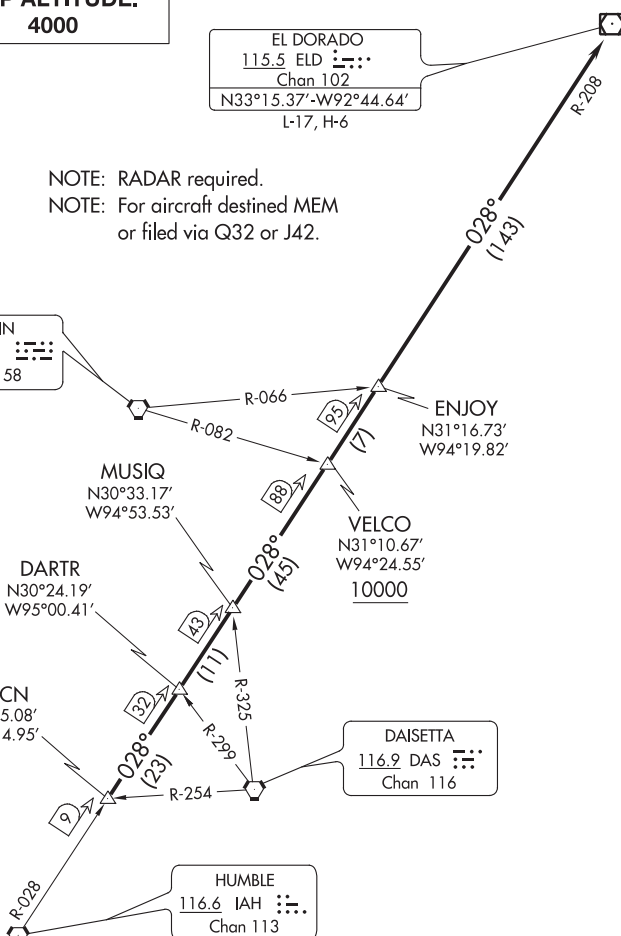
VELCO
N31°10.67'
W94°24.55'
10000

DARTR
N30°24.19'
W95°00.41'

RAECN
N30°05.08'
W95°14.95'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113



TAKEOFF MINIMUMS
Rwys 18, 36: Standard.

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

NOTE: Chart not to scale.

EL DORADO EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

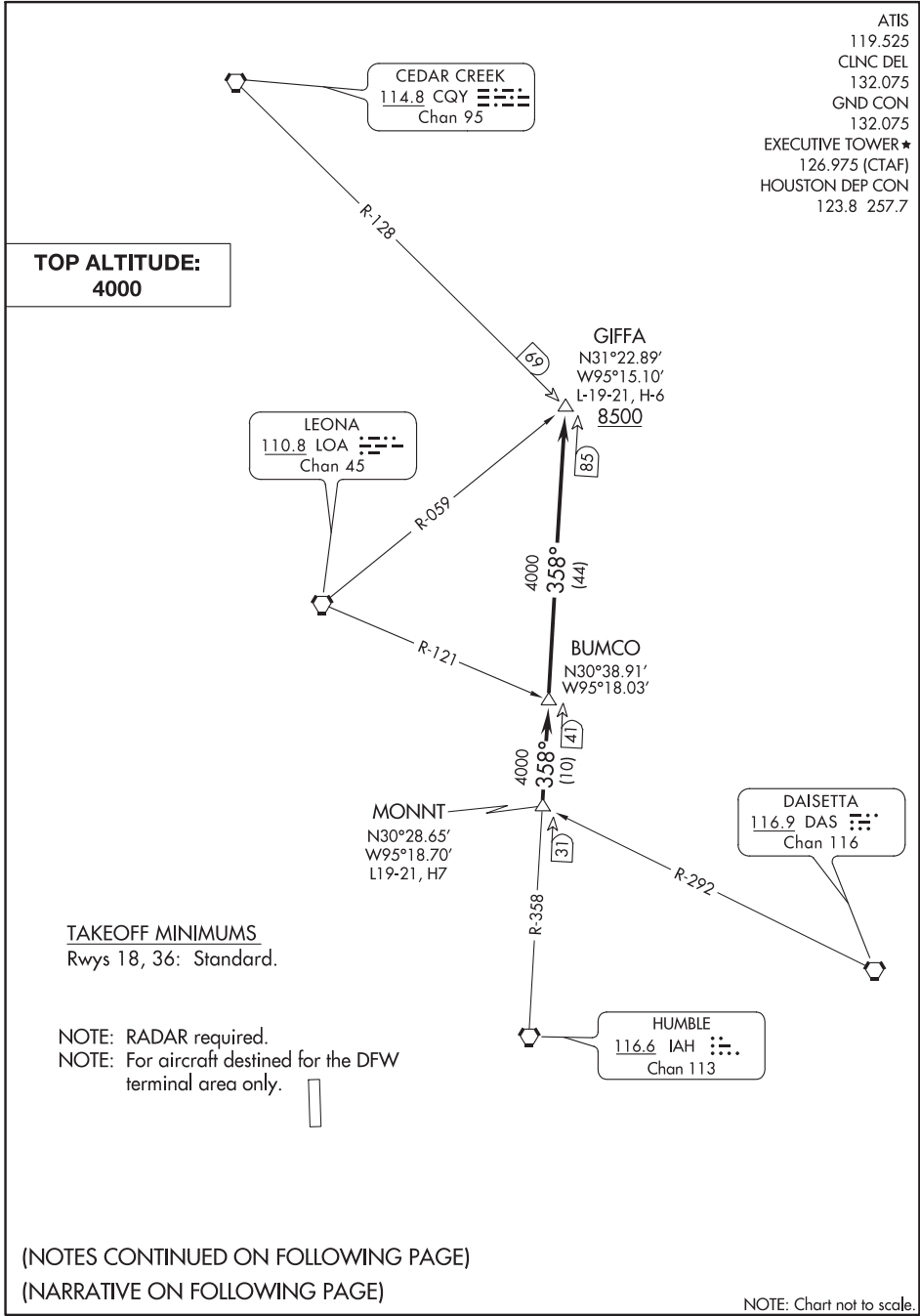
TAKEOFF OBSTACLE NOTES

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS
 119.525
 CLNC DEL
 132.075
 GND CON
 132.075
 EXECUTIVE TOWER ★
 126.975 (CTAF)
 HOUSTON DEP CON
 123.8 257.7



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TAKEOFF MINIMUMS
 Rwy 18, 36: Standard.

NOTE: RADAR required.
 NOTE: For aircraft destined for the DFW terminal area only.

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

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

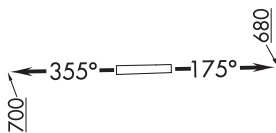
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS
 119.525
 CLNC DEL
 121.725
 EXECUTIVE TOWER ★
 122.975 (CTAF)
 HOUSTON DEP CON
 123.8 257.7

TOP ALTITUDE:
 4000

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



SCHOLES
 VUH

9300
 *1400
 118°
 (32)

HOODO
 11000
 *1400
 087°
 (36)

SBIRD

(60)

CFOOD

(68)

BOWFN

11000
 *1700
 076°
 (60)

LEEVILLE
 LEV

1821
 048°
 *1000

HARVEY
 HRV

TAKEOFF MINIMUMS

Rwys 18, 36: Standard with minimum climb of 500' per NM to 680.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb heading 175° to 680, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 36: Climb heading 355° to 700, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000. Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

INDIE FOUR DEPARTURE (RNAV) SL-10328 (FAA)

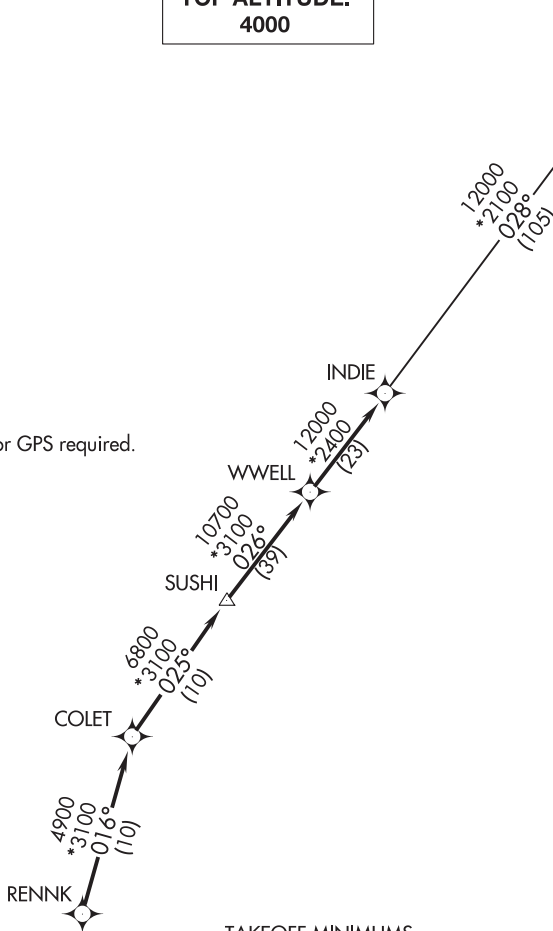
HOUSTON EXECUTIVE (TME)
HOUSTON, TEXAS

ATIS
119.525
CLNC DEL
132.075
EXECUTIVE TOWER★
126.975 (CTAF)
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

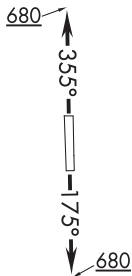
TPAKK

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.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

HOUSTON, TEXAS
HOUSTON EXECUTIVE (TME)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb heading 175° to 680, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 36: Climb heading 355° to 680, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

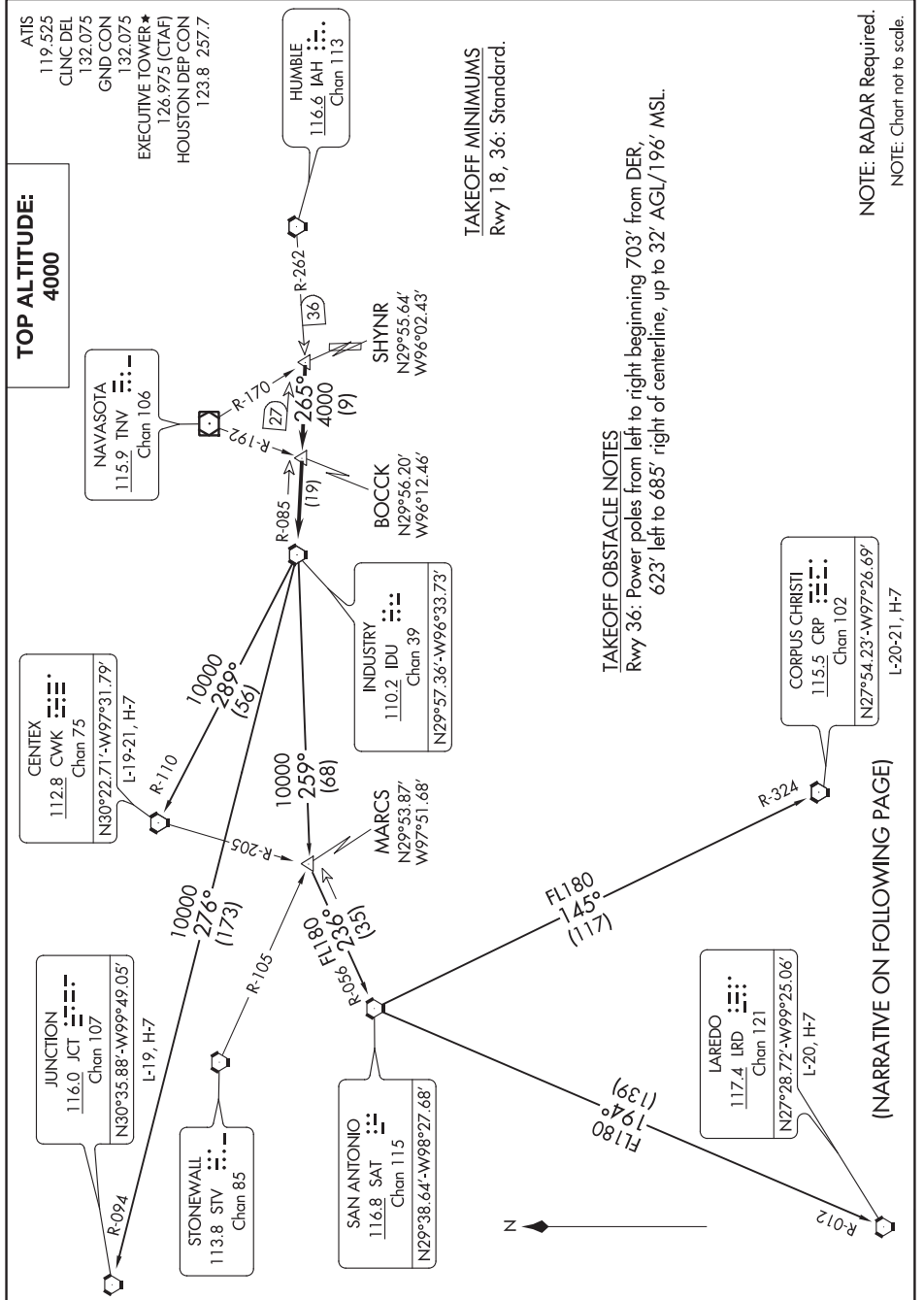
SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SL-10328 (FAA)

HOUSTON EXECUTIVE (TME)
HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



INDUSTRY EIGHT DEPARTURE

HOUSTON, TEXAS
HOUSTON EXECUTIVE (TME)

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TOP ALTITUDE:
4000

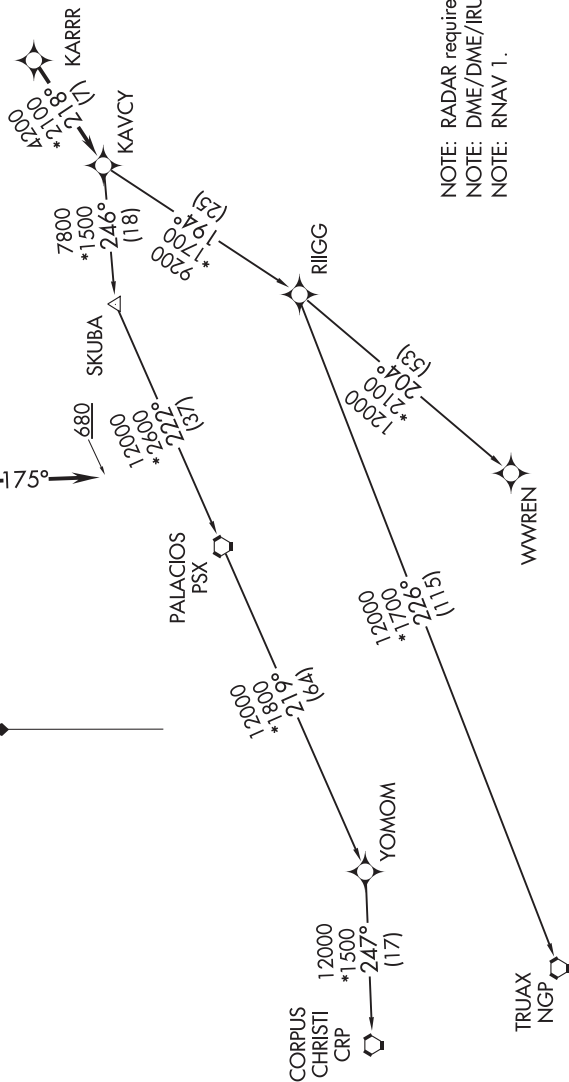
TAKEOFF MINIMUMS

Rwys 18, 36: Standard with minimum climb of 500' per NM to 680.

- ATIS 119.525
- CLINDEL 132.075
- GND CON 132.075
- EXECUTIVE TOWER* 126.975 (CTAF)
- HOUSTON DEP CON 123.8 257.7



680



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb on heading 175° to 680, expect radar vectors to KARRR, thence

TAKEOFF RWY 36: Climb on heading 355° to 680, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

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.

LEONA TWO DEPARTURE

SL-10328 (FAA)

HOUSTON EXECUTIVE (TME)
HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

ATIS
119.525
CLNC DEL
132.075
GND CON
132.075
EXECUTIVE TOWER ★
126.975 (CTAF)
HOUSTON DEP CON
123.8 257.7

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'

BONHAM
114.6 BYP
Chan 93
N33°32.25' - W96°14.05'
L-17, H-6

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

CEDAR CREEK
114.8 CQY
Chan 95
N32°11.14' - W96°13.09'

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

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

DOLEY
N32°11.35'
W96°23.08'

WLLIS
N30°32.08'
W95°39.10'

NAVASOTA
115.9 TNV
Chan 106

HUMBLE
116.6 IAH
Chan 113

NOTE: RADAR required.
NOTE: Except for aircraft destined
ACT or the DFW terminal area,
all aircraft filing the LOA2 SID
must file one of the published
transitions via FUZ (LOA2.FUZ)
ADM (LOA2.ADM) or
BYP (LOA2.BYP).

TAKEOFF MINIMUMS
Rwys 18, 36: Standard.

(NOTES ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

**TOP ALTITUDE:
4000**

LITTLE ROCK	
113.9 LIT	⋮⋮⋮
Chan 86	
N34°40.66'	
W92°10.83'	
L-18, H-6	

ATIS 119.525
 CLNC DEL 132.075
 GND CON 132.075
 EXECUTIVE TOWER★ 126.975 (CTAF)
 HOUSTON DEP CON 123.8 257.7

NOTE: RADAR 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	

TAKEOFF MINIMUMS:
 Rwy 18, 36: Standard.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LFK1.LFK) 16315

LUFKIN ONE DEPARTURE

SL-10328 (FAA)

HOUSTON EXECUTIVE (TME)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LUFKIN ONE DEPARTURE

(LFK1.LFK) 10NOV16

HOUSTON, TEXAS

HOUSTON EXECUTIVE (TME)

(LURIC4.LURIC) 16315

SL-10328 (FAA)

HOUSTON EXECUTIVE (TME)

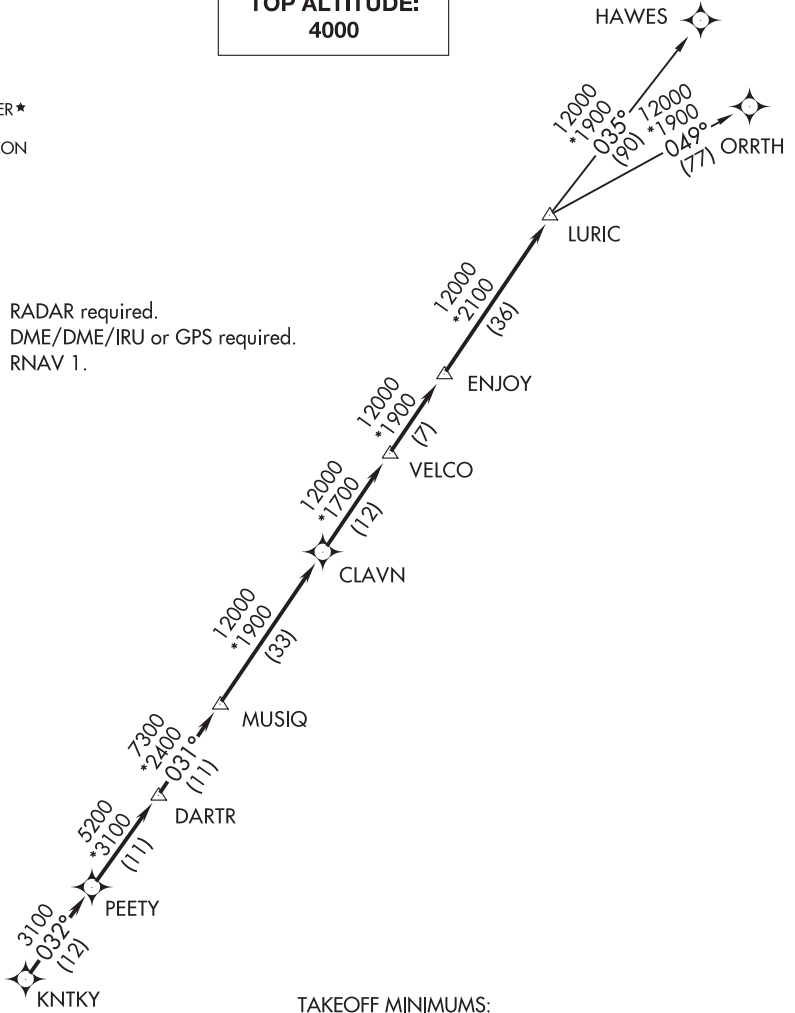
LURIC FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

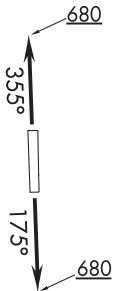
ATIS
 119.525
 CLNC DEL
 132.075
 GND CON
 132.075
 EXECUTIVE TOWER ★
 126.975 (CTAF)
 HOUSTON DEP CON
 123.8 257.7

**TOP ALTITUDE:
4000**

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.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)

(LURIC4.LURIC) 10NOV16

HOUSTON, TEXAS

HOUSTON EXECUTIVE (TME)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb heading 175° to 680, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 36: Climb heading 355° to 680, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

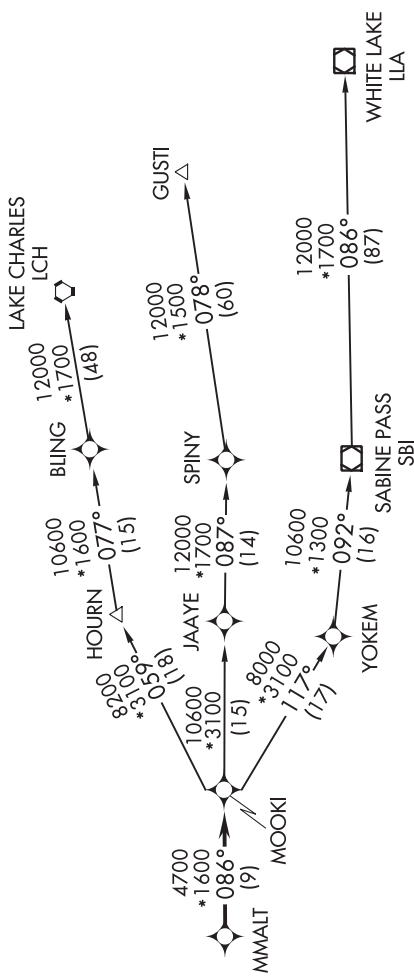
210Z NAV 01 910Z AON 10 10 15CS

ATIS 119.525
CLNC DEL 132.075
CTAF 126.975
HOUSTON DEP CON 123.8 257.7

TAKEOFF MINIMUMS:

Rwy 18, 36:
Standard with minimum
climb of 500' per NM to 680.

TOP ALTITUDE:
4000



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, IBX, LVJ, SGR, TME, T00, T41 and 54T.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb on heading 175° to 680, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 36: Climb on heading 355° to 680, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS 119.525
CLNC DEL 132.075
GND CON 132.075
EXECUTIVE TOWER ★ 126.975 (CTAF)
HOUSTON DEP CON 123.8 257.7

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:
Rwys 18, 36: Standard.

HOBBY
117.1 HUB
Chan 118

EAGLE LAKE
116.4 ELA
Chan 111

SAN ANTONIO
116.8 SAT
Chan 115
N29°38.64'-W98°27.68'
L-19, H-7

FORT STOCKTON
116.9 FST
Chan 116
N30°57.13'
W102°58.54'
L-19, H-6

ROCKSPRINGS
111.2 RSG
Chan 49
N30°00.88'-W100°17.99'

COTUILA
115.8 COT
Chan 105
N28°27.72'-W99°07.11'

THREE RIVERS
111.4 THX
Chan 51
N28°30.30'-W98°09.03'

PALACIOS
117.3 PSX
Chan 120
N28°45.87'-W96°18.37'

R-100
FL180
283°
(130)

R-136
FL180
318°
(112)

R-158
FL180
338°
(70)

R-073
10000
253°
(99)

R-078
FL180
259°
(51)

R-127
SKUBA
N29°11.72'
W95°47.47'
L-19-21, H-7

R-038 (37)
218°

R-220



(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required
NOTE: Chart not to scale

SC-5, 10 NOV 2016 to 05 JAN 2017

(PSX8.PSX) 16315

PALACIOS EIGHT DEPARTURE

SL-10328 (FAA)

HOUSTON EXECUTIVE (TME)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

PALACIOS EIGHT DEPARTURE

(PSX8.PSX) 10NOV16

HOUSTON, TEXAS

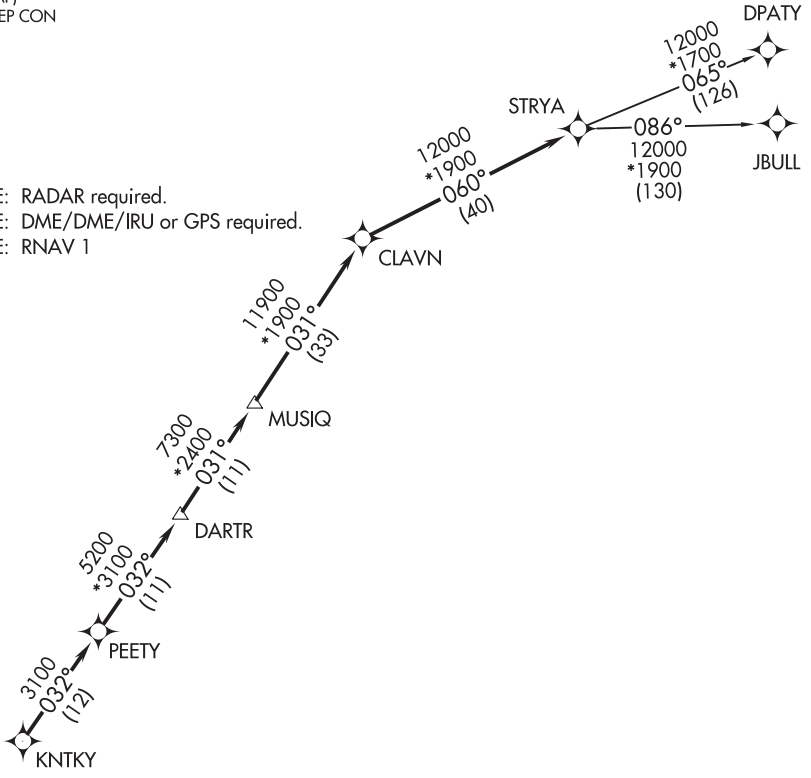
HOUSTON EXECUTIVE (TME)

STRYA FOUR DEPARTURE (RNAV)

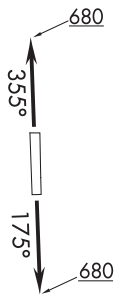
ATIS
119.525
CLNC DEL
132.075
GND CON
132.075
EXECUTIVE TOWER ★
126.975 (CTAF)
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

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.



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

NOTE: Chart not to scale.

STRYA FOUR DEPARTURE (RNAV)

(STRYA4.STRYA) 10NOV16

HOUSTON, TEXAS
HOUSTON EXECUTIVE (TME)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb heading 175° to 680, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 36: Climb heading 355° to 680, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

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.

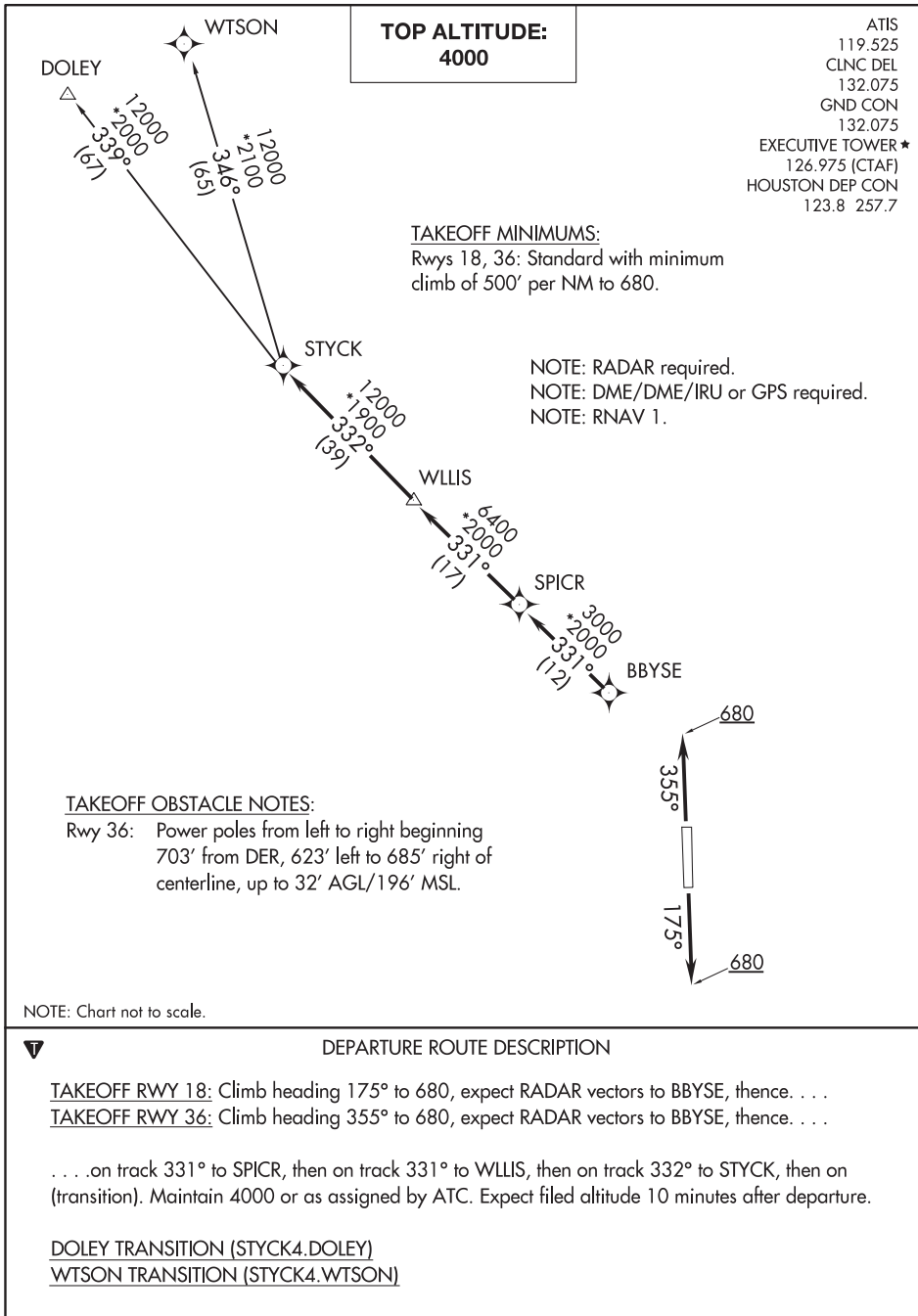
(STYCK4.STYCK) 16315

SL-10328 (FAA)

HOUSTON EXECUTIVE (TME)

STYCK FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

HOUSTON, TEXAS
HOUSTON EXECUTIVE (TME)

(WATFO3.WATFO) 16259

WATFO THREE DEPARTURE (RNAV) SL-10328 (FAA)

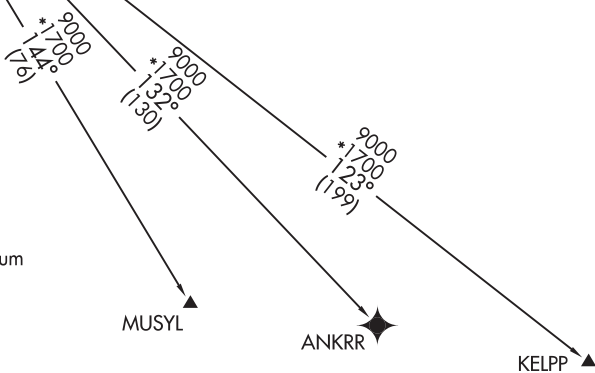
HOUSTON EXECUTIVE (TME)
HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

ATIS
119.525
CLNC DEL
132.075
HOUSTON DEP CON
123.8 257.7
CTAF
126.975

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.



NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS

Rwys 18, 36: Standard with minimum climb of 500' per NM to 680.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb on heading 174° to 680, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 36: Climb on heading 354° to 680, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

(WATFO3.WATFO) 15SEP16

HOUSTON, TEXAS
HOUSTON EXECUTIVE (TME)

SC-5, 10 NOV 2016 to 05 JAN 2017

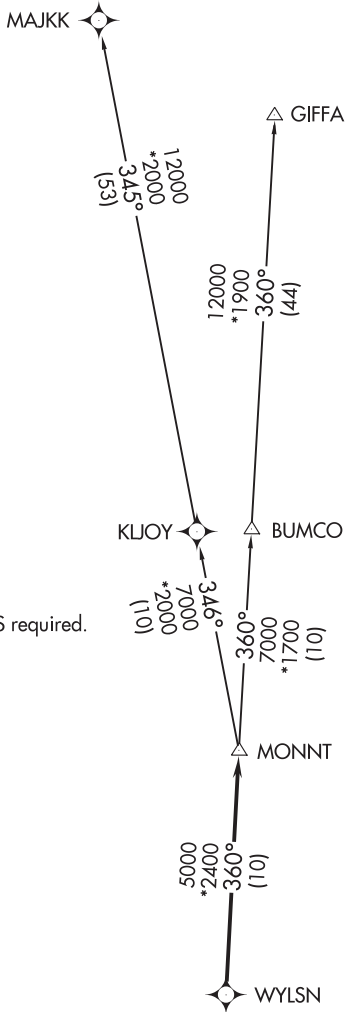
SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

ATIS
 119.525
 CLNC DEL
 132.075
 GND CON
 132.075
 EXECUTIVE TOWER*
 126.975 (CTAF)
 HOUSTON DEP CON
 123.8 257.7

**TOP ALTITUDE:
4000**



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.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 18: Climb on heading 175° to 680, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 36: Climb on heading 355° to 680, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJJK)

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 90303 W09A	APP CRS 089°	Rwy Idg 5002 TDZE 68 Apt Elev 68
--	------------------------	---

RNAV (GPS) RWY 9

HOUSTON-SOUTHWEST (A.XH)

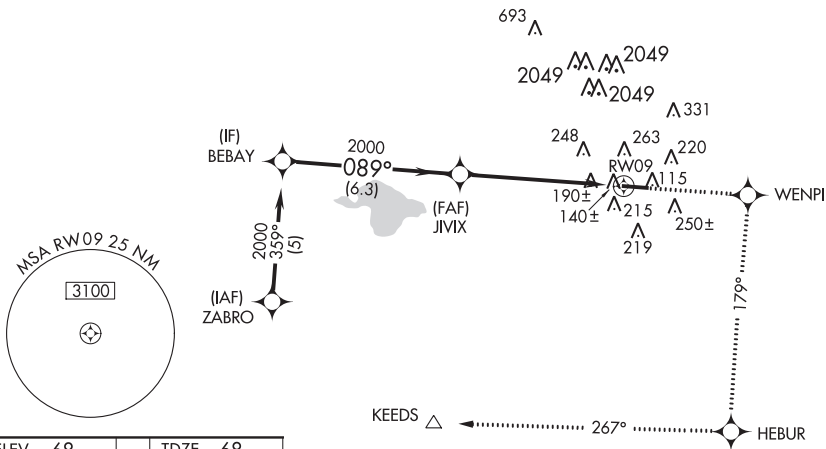
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received use William P. Hobby altimeter setting and increase all DAs/MDAs 40 feet, and LPV, LNAV/VNAV visibility ¼ mile. Baro-VNAV and VDP NA when using William P. Hobby altimeter setting.

⚠ NA

MISSED APPROACH: Climb to 2700 direct WENPI and via 179° track to HEBUR and via 267° track to KEEDS.

AWOS-3 123.625	HOUSTON APP CON 123.8 257.7	CLNC DEL 120.8	UNICOM 123.0 (CTAF) 0
--------------------------	---------------------------------------	--------------------------	--

RADAR REQUIRED

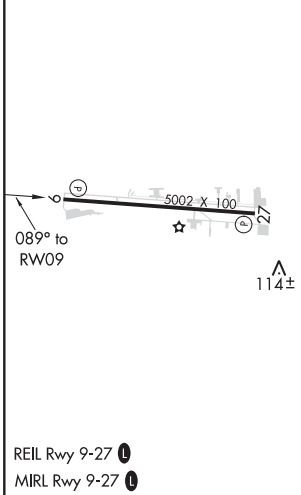


ELEV 68	TDZE 68
----------------	----------------

VGSI and RNAV glidepath not coincident (VGSI Angle 3.50/TCH 50).

2700	WENPI	tr 179°	HEBUR	tr 267°	KEEDS
↑	⬠		⬠		△

* LNAV only.



	BEBAY		JIVIX		RWY09	
	2000		2000		* 1.2 NM to RWY09	
	GP 3.00°		TCH 47			
	6.3 NM		4.6 NM		1.2 NM	
CATEGORY	A	B	C	D		
LPV DA	370-1		302 (400-1)		NA	
LNAV/VNAV DA	499-1½		431 (500-1½)		NA	
LNAV MDA	580-1	512 (600-1)	580-1½	512 (600-1½)	NA	
CIRCLING	620-1	552 (600-1)	620-1½	552 (600-1½)	NA	

HOUSTON, TEXAS
Amdt 2 10MAY07

29°30'N-95°29'W
439

HOUSTON-SOUTHWEST (A.XH) RNAV (GPS) RWY 9

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-6575 (FAA)

15288

WAAS CH 81903 W27A	APP CRS 269°	Rwy Idg 5002 TDZE 67 Apt Elev 68
--	------------------------	---

RNAV (GPS) RWY 27

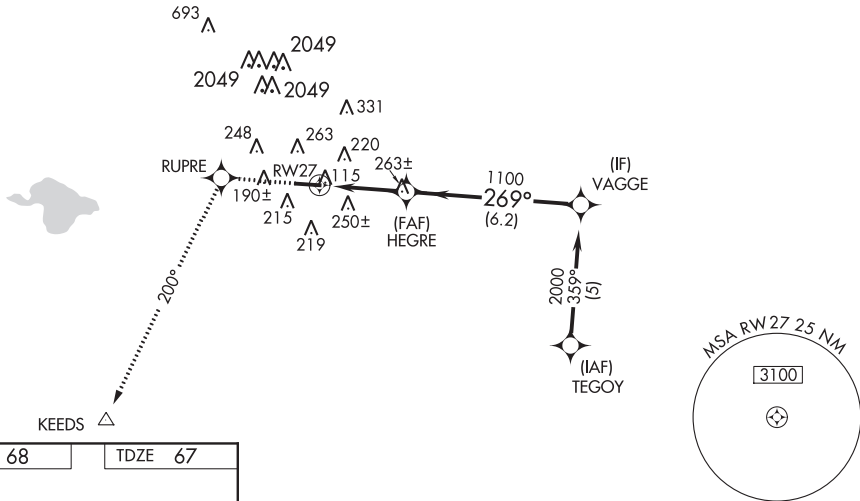
HOUSTON-SOUTHWEST (A.XH)

NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters 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 ¼ 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-3 123.625	HOUSTON APP CON 123.8 257.7	CLNC DEL 120.8	UNICOM 123.0 (CTAF) U
--------------------------	---------------------------------------	--------------------------	--

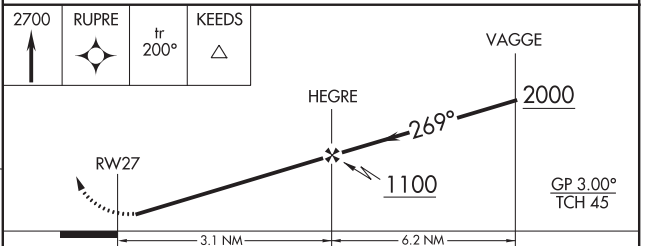
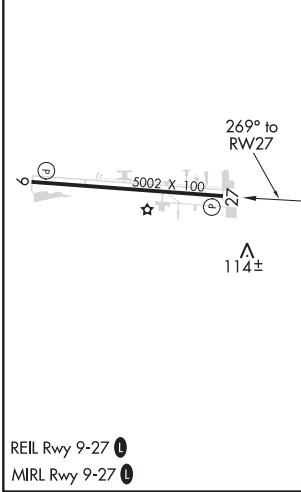
RADAR REQUIRED



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 68	TDZE 67
----------------	----------------



CATEGORY	A	B	C	D
LPV DA	367-1 300 (300-1)			NA
LNAV/VNAV DA	604-2 537 (600-2)			NA
LNAV MDA	560-1	493 (500-1)	560-1¼ 493 (500-1¼)	NA
CIRCLING	620-1	552 (600-1)	620-1½ 552 (600-1½)	NA

HOUSTON, TEXAS
Amdt 1 10MAY07

29°30'N-95°29'W

HOUSTON-SOUTHWEST (A.XH)

RNAV (GPS) RWY 27

LOC/DME I-AXH 108.9 Chan 26	APP CRS 089°	Rwy Idg 5002 TDZE 69 Apt Elev 69
---	------------------------	---

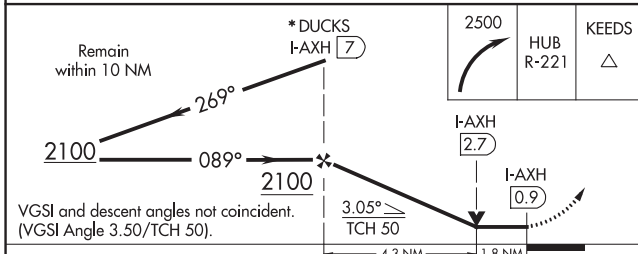
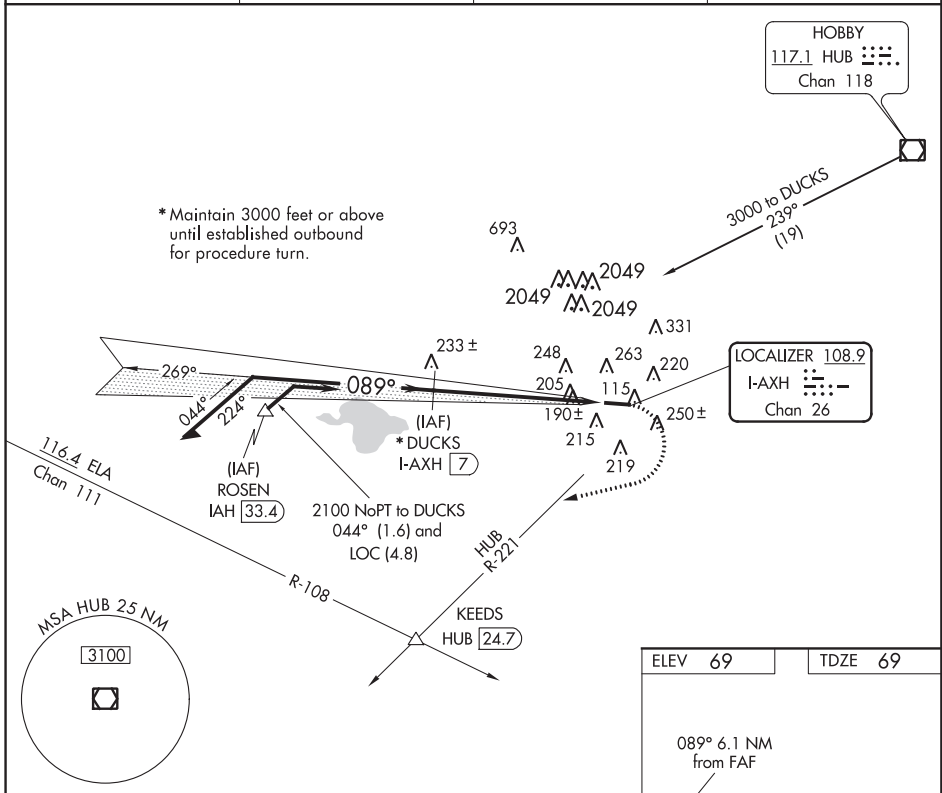
LOC/DME RWY 9

HOUSTON-SOUTHWEST (AXH)

▽ Obtain local altimeter setting on CTAF; when not received use William P. Hobby altimeter setting and increase all MDAs 40 feet. Circling to Rwy 27 NA at night. Helicopter visibility reduction below 3/4 SM NA.

△ NA MISSED APPROACH: Climbing right turn to 2500 on HUB R-221 to KEEDS INT.

AWOS-3 123.625	HOUSTON APP CON 123.8 257.7	CLNC DEL 120.8	UNICOM 123.0 (CTAF) 0
--------------------------	---------------------------------------	--------------------------	---------------------------------



ELEV 69	TDZE 69
---------	---------

089° 6.1 NM from FAF

5002 X 100

△ 114±

REIL Rwy 9-27 0
MIRL Rwy 9-27 0

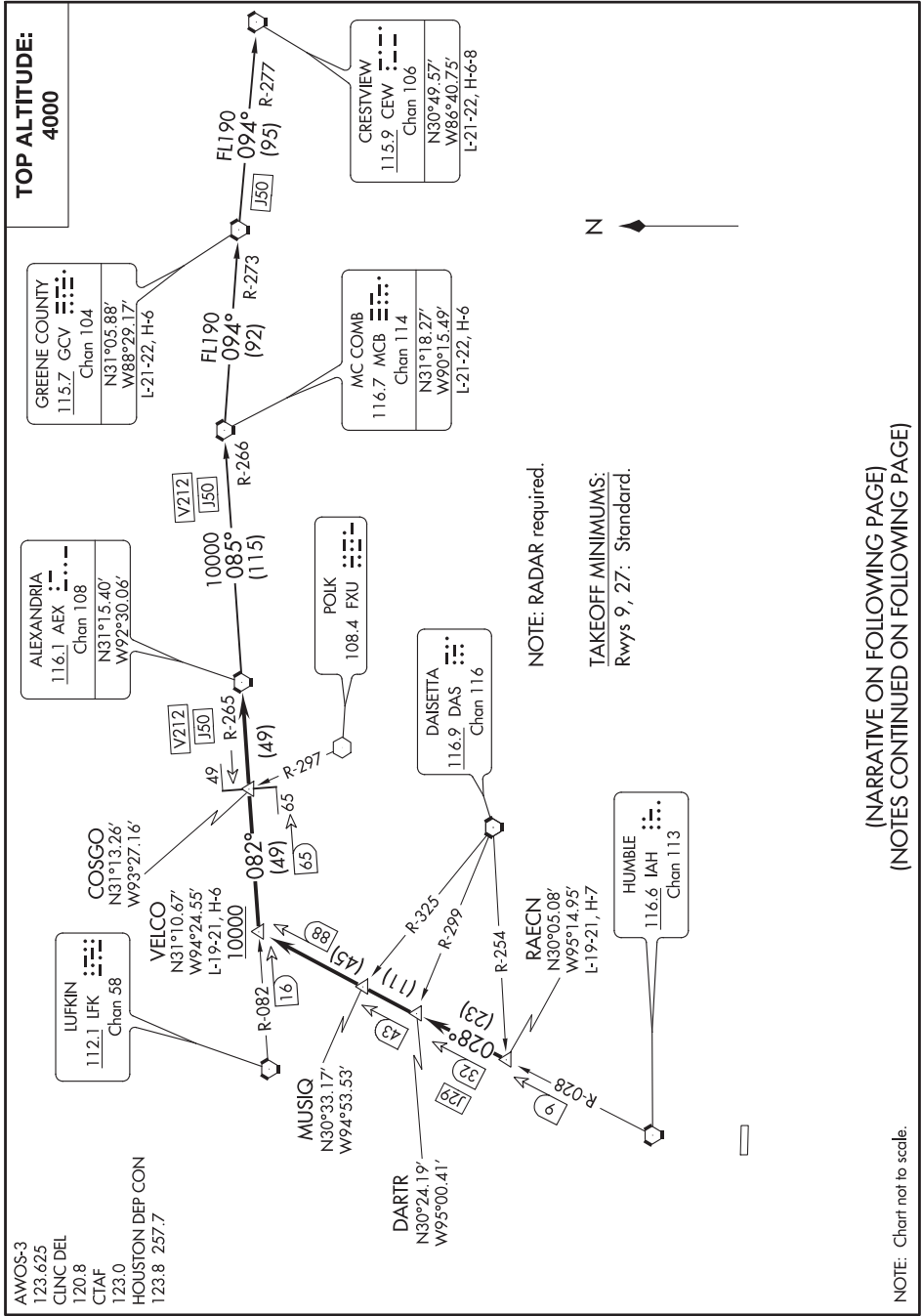
CATEGORY	A	B	C	D
S-9		780-2	711 (800-2)	NA
CIRCLING		780-2	711 (800-2)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



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

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

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 hangars 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 on 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 TRSMN poles beginning 1304' from DER, 131' right of centerline, up to 41' AGL/110' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

BLTWY THREE DEPARTURE (RNAV)

444
SL-6575 (FAA)

HOUSTON-SOUTHWEST (AXH)
HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7

△ CRIED

12000
*2100
(46)

TAKEOFF MINIMUMS

Rwys 9, 27: Standard with minimum climb of 500' per NM to 580.

△ BLTWY

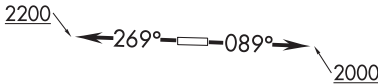
6600
*2000
346°
(6)

△ LITLD

5400
*1900
345°
(12)

◆ DREMR

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



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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

HOUSTON, TEXAS
HOUSTON-SOUTHWEST (AXH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb heading 089° to 2000, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 27: Climb heading 269° to 2200, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

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 hangars 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 on 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.

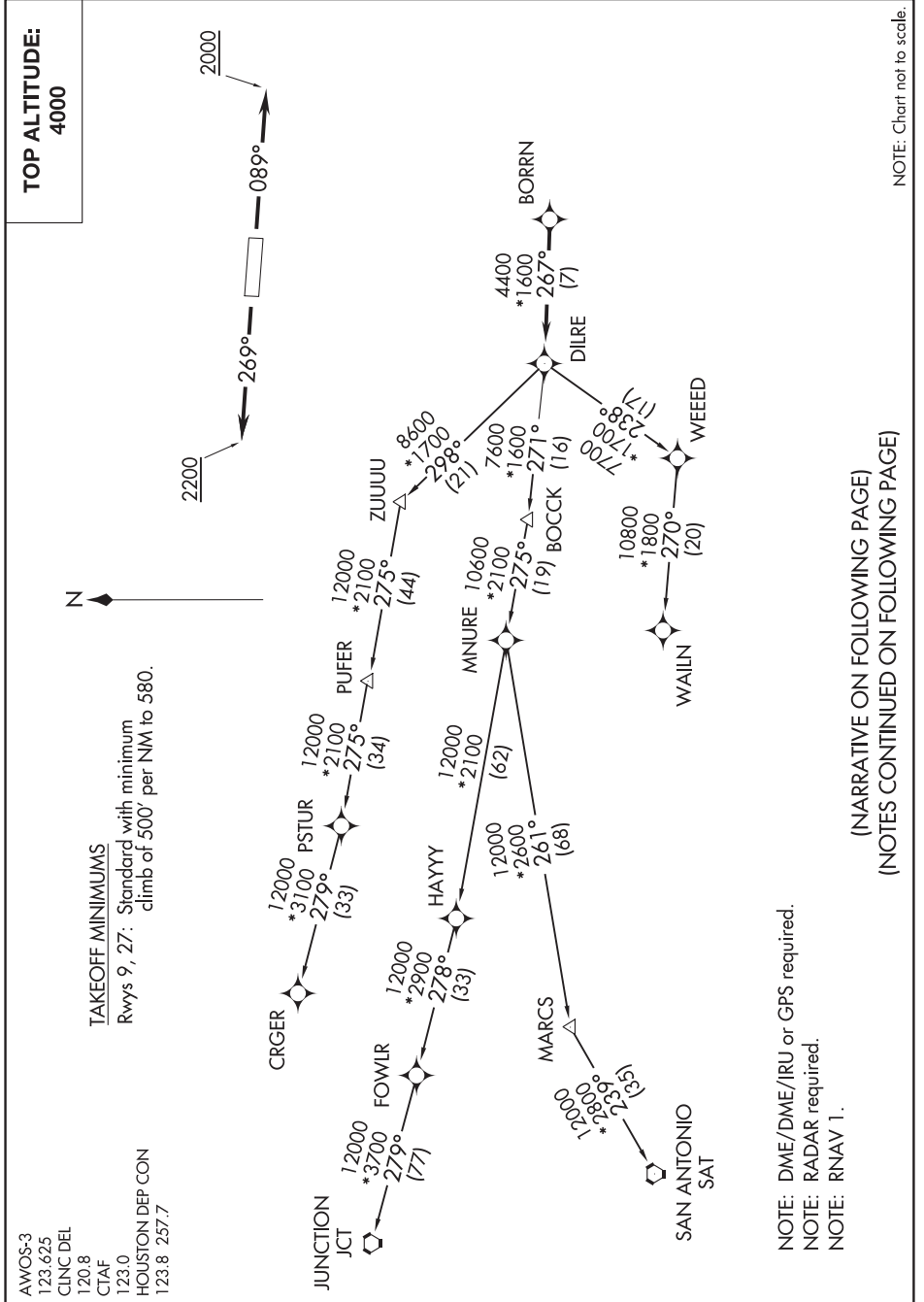
Multiple transmission poles beginning 1304' from DER, 131' right of centerline, up to 41' AGL/110' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017



BORRN TWO DEPARTURE (RNAV)

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

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb on heading 089° to 2000, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 27: Climb on heading 269° to 2200, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

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 hangars 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 on 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

SL-6575 (FAA)

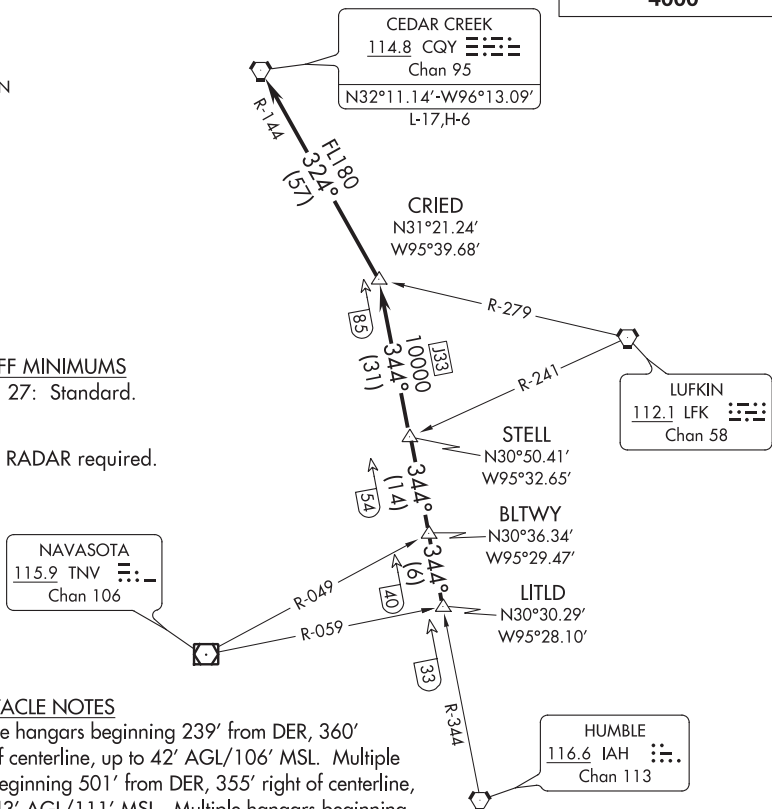
HOUSTON-SOUTHWEST (AXH)
HOUSTON, TEXAS

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS
Rwys 9, 27: Standard.

NOTE: RADAR required.



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 hangars 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 on 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 TRMSN poles beginning 1304' from DER, 131' right of centerline, up to 41' AGL/110' MSL.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT, maintain 4000. 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.

CRIED EIGHT DEPARTURE

EL DORADO EIGHT DEPARTURE

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7

TOP ALTITUDE:
4000

EL DORADO
115.5 ELD
Chan 102
N33°15.37'-W92°44.64'
L-17, H-6

NOTE: RADAR required.
NOTE: For aircraft destined MEM
or filed via Q32 or J42.

LUFKIN
112.1 LFK
Chan 58

R-208
028°
(143)

ENJOY
N31°16.73'
W94°19.82'

MUSIQ
N30°33.17'
W94°53.53'

VELCO
N31°10.67'
W94°24.55'
10000

DARTR
N30°24.19'
W95°00.41'

RAECN
N30°05.08'
W95°14.95'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113

TAKEOFF MINIMUMS
Rwys 9, 27: Standard.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

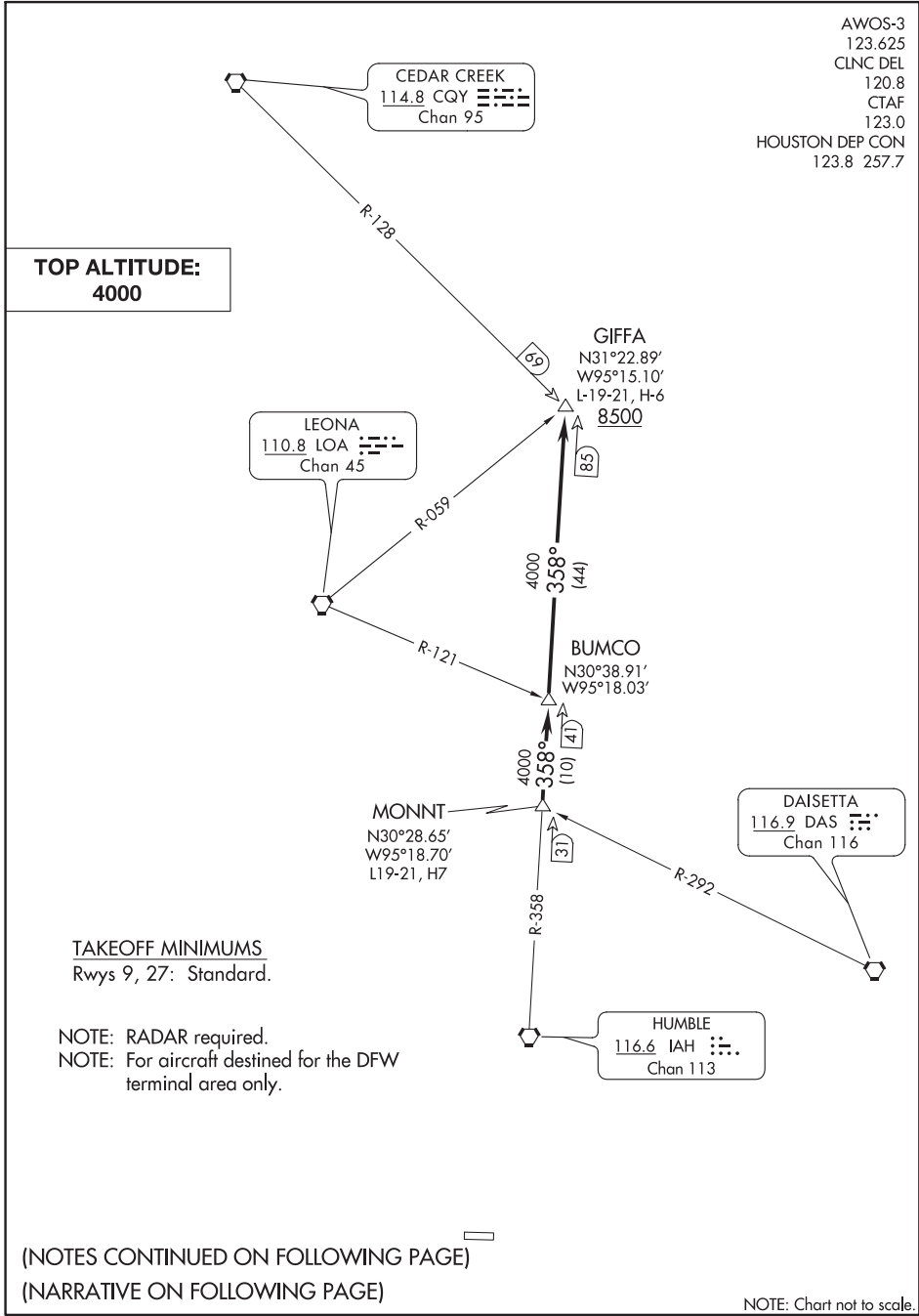
TAKEOFF OBSTACLE NOTES

- 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 hangars 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TAKEOFF MINIMUMS
Rwys 9, 27: Standard.

NOTE: RADAR required.
NOTE: For aircraft destined for the DFW terminal area only.

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

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

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 hangars 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.

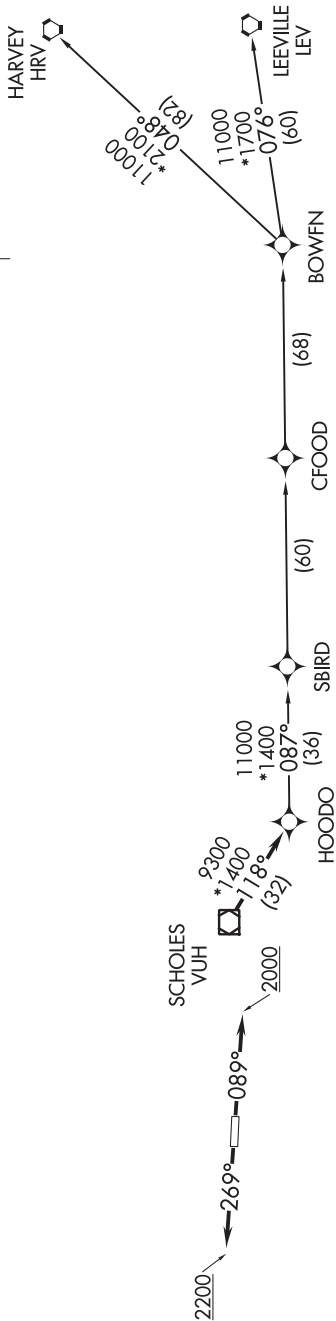
SC-5, 10 NOV 2016 to 05 JAN 2017

AWOS-3
 126.325
 CLNC DEL
 120.8
 CTAF
 123.0
 HOUSTON DEP CON
 123.8 257.7

TOP ALTITUDE:
 4000



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



TAKEOFF MINIMUMS:
 Rwy 9, 27: Standard with minimum climb of 500' per NM to 580.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb heading 089° to 2000, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 27: Climb heading 269° to 2200, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

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 hangars 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 on 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 TRSMN poles beginning 1304' from DER, 131' right of centerline, up to 41' AGL/110' MSL.

(INDIE4.INDIE) 16315

SL-6575 (FAA)

HOUSTON-SOUTHWEST (AXH)
HOUSTON, TEXAS

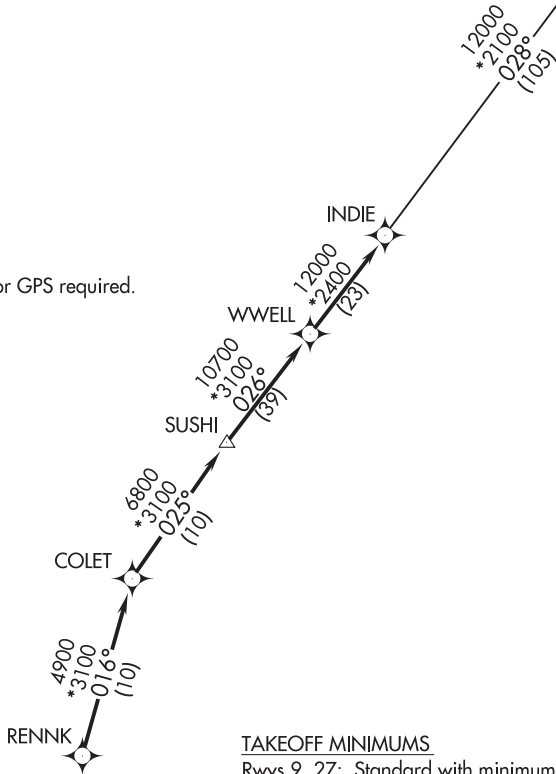
INDIE FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7

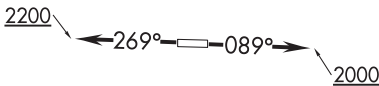
TPAKK

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



TAKEOFF MINIMUMS

Rwys 9, 27: Standard with minimum climb of 500' per NM to 580.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)
(INDIE4.INDIE) 10NOV16

HOUSTON, TEXAS
HOUSTON-SOUTHWEST (AXH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb heading 089° to 2000, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 27: Climb heading 269° to 2200, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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 hangars 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 on road 99' from DER, 291' right of centerline, 15' AGL/83' MSL.

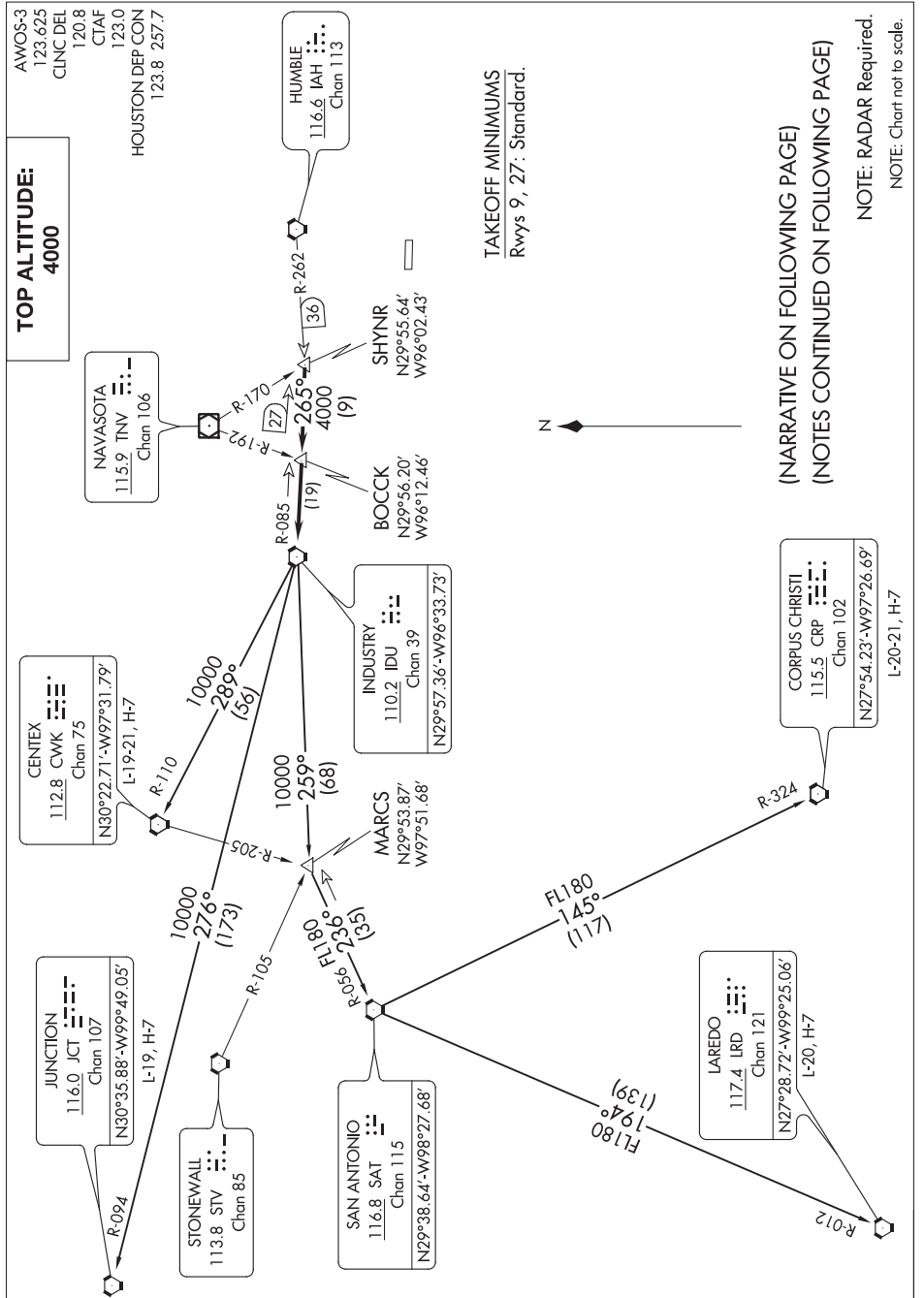
Multiple trees beginning 873' from DER, 514' right of centerline, up to 59' AGL/130' MSL.

Multiple transmission poles beginning 1304' from DER, 131' right of centerline, up to 41' AGL/110' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



SC-5, 10 NOV 2016 to 05 JAN 2017

(IDU8.IDU) 16315

INDUSTRY EIGHT DEPARTURE SL-6575 (FAA)

HOUSTON-SOUTHWEST (AXH)
HOUSTON, TEXAS

DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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 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 hangars 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

(IDU8.IDU) 10NOV16

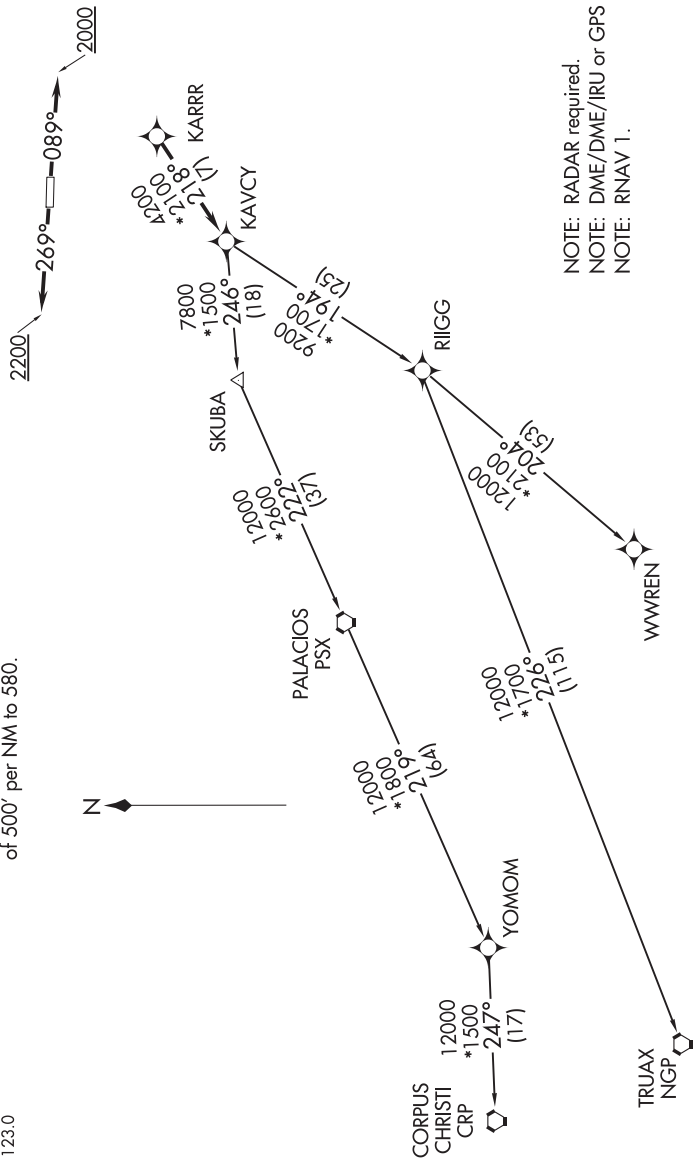
HOUSTON, TEXAS
HOUSTON-SOUTHWEST (AXH)

KARR THREE DEPARTURE (RNAV)

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS
Rwys 9, 27: Standard with minimum climb
of 500' per NM to 580.

AWOS-3
123.625
CLNC DEL
120.8
HOUSTON DEP CON
123.8 257.7
CTAF
123.0



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb on heading 089° to 2000, expect radar vectors to KARRR, thence

TAKEOFF RWY 27: Climb on heading 269° to 2200, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

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 hangars 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 on 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.

**TOP ALTITUDE:
4000**

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7

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'

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'

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

DOLEY
N32°11.35'
W96°23.08'

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

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

WLLIS
N30°32.08'
W95°39.10'

NAVASOTA
115.9 TNV
Chan 106

HUMBLE
116.6 IAH
Chan 113

TAKEOFF MINIMUMS
Rwys 9, 27: Standard.

NOTE: RADAR required.
NOTE: Except for aircraft destined
ACT or the DFW terminal area,
all aircraft filing the LOA2 SID
must file one of the published
transitions via FUZ (LOA2.FUZ)
ADM (LOA2.ADM) or
BYP (LOA2.BYP).

(NOTES ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

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 hangars 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.

AWOS-3
 123.625
 CLNC DEL
 120.8
 CTAF
 123.0
 HOUSTON DEP CON
 123.8 257.7

**TOP ALTITUDE:
 4000**

LITTLE ROCK
 113.9 LIT : : : :
 Chan 86
 N34°40.66'
 W92°10.83'
 L-18, H-6

NOTE: RADAR 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'

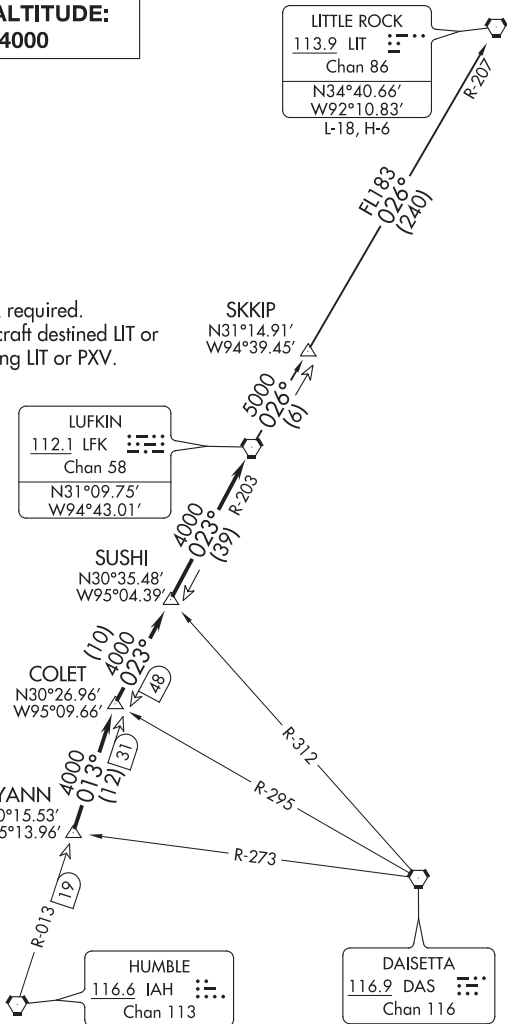
COLET
 N30°26.96'
 W95°09.66'

KYANN
 N30°15.53'
 W95°13.96'

SKKIP
 N31°14.91'
 W94°39.45'

HUMBLE
 116.6 IAH : : : :
 Chan 113

DAISETTA
 116.9 DAS : : : :
 Chan 116



TAKEOFF MINIMUMS:
 Rwys 9, 27: Standard.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LFK1.LFK) 16315

HOUSTON-SOUTHWEST (AXH)

LUFKIN ONE DEPARTURE

SL-6575 (FAA)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

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 hangars 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 on 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 TRMSN poles beginning 1304' from DER, 131' right of centerline, up to 41' AGL/110' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LUFKIN ONE DEPARTURE

HOUSTON, TEXAS

(LFK1.LFK) 10NOV16

HOUSTON-SOUTHWEST (AXH)

(LURIC4.LURIC) 16315

SL-6575 (FAA)

HOUSTON-SOUTHWEST (A.XH)

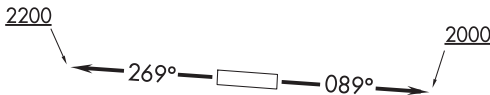
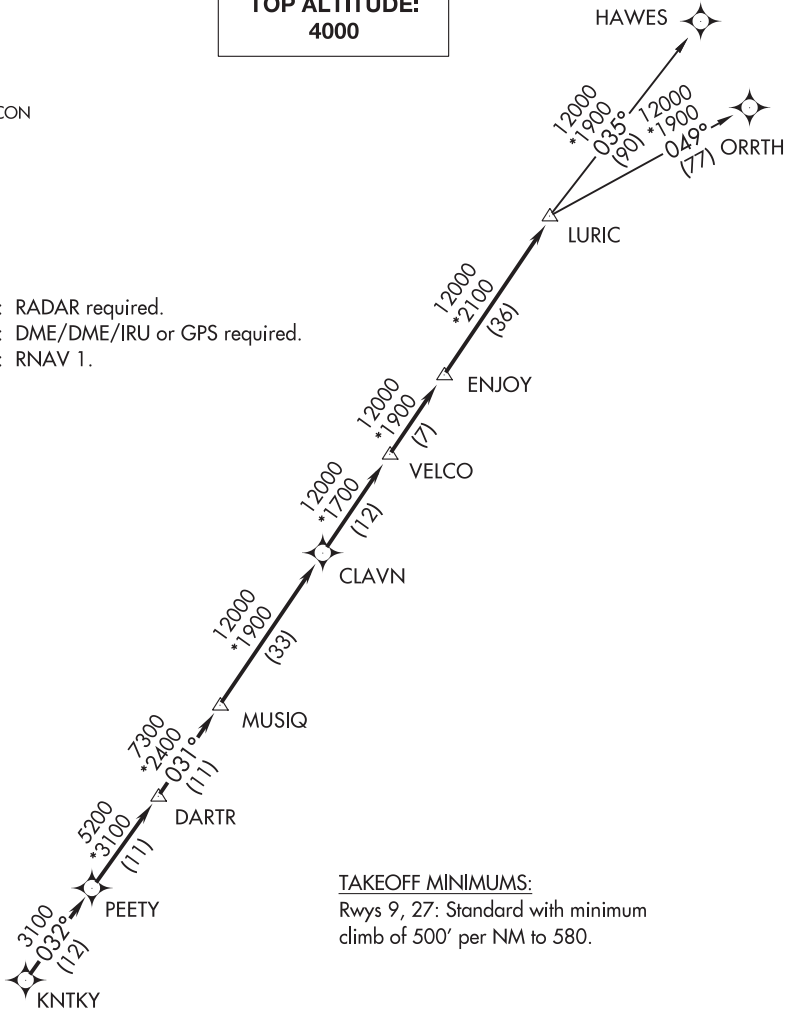
LURIC FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)

(LURIC4.LURIC) 10NOV16

HOUSTON, TEXAS

HOUSTON-SOUTHWEST (A.XH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb heading 089° to 2000, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 27: Climb heading 269° to 2200, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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 hangars 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 on 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

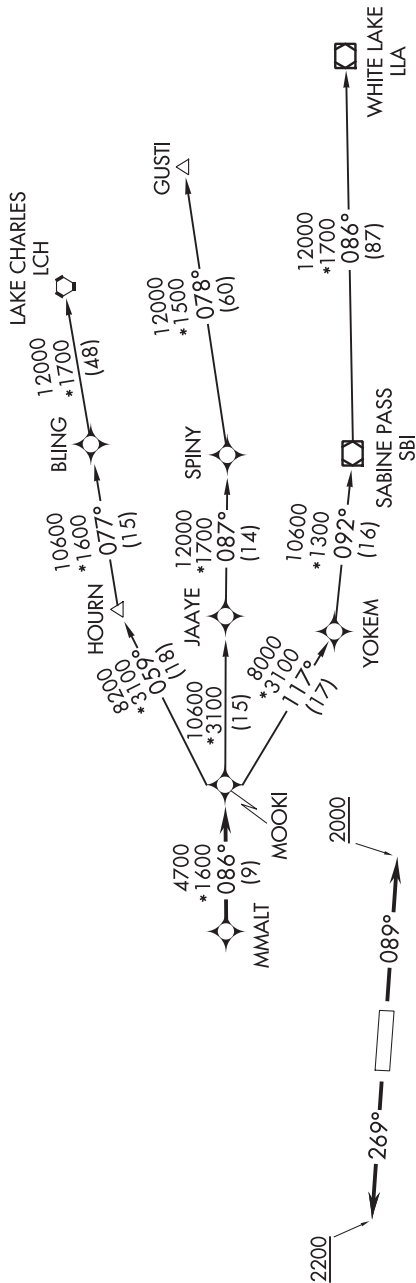
2102 NAV 01 9102 VON 10 10 'S-CS

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:

Rwy 9, 27:
Standard with minimum
climb of 500' per NM to 580.

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, IBX, LVJ, SGR, TME, T00, T41 and 54T.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb on heading 089° to 2000, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 27: Climb on heading 269° to 2200, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

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 hangars 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 on 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7

TOP ALTITUDE:
4000

HOBBY
117.1 HUB
Chan 118

TAKEOFF MINIMUMS:
Rwys 9, 27: Standard.

EAGLE LAKE
116.4 ELA
Chan 111

SAN ANTONIO
116.8 SAT
Chan 115
N29°38.64'-W98°27.68'
L-19, H-7

FORT STOCKTON
116.9 FST
Chan 116
N30°57.13'
W102°58.54'
L-19, H-6

ROCKSPRINGS
111.2 RSG
Chan 49
N30°00.88'-W100°17.99'

COTUILA
115.8 COT
Chan 105
N28°27.72'-W99°07.11'

THREE RIVERS
111.4 THX
Chan 51
N28°30.30'-W98°09.03'

PALACIOS
117.3 PSX
Chan 120
N28°45.87'-W96°18.37'

R-100
FL180
283°
(130)

R-158
FL180
338°
(70)

FL180
259°
(51)

FL180
253°
(99)

R-073
10000

R-078
FL180
318°
(112)

R-127
SKUBA
N29°11.72'
W95°47.47'
L-19-21, H-7

R-136
FL180
318°
(112)

R-220
R-038 (37)
219°



(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required
NOTE: Chart not to scale

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

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 hangars 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.

(STRYA4.STRYA) 16315

SL-6575 (FAA)

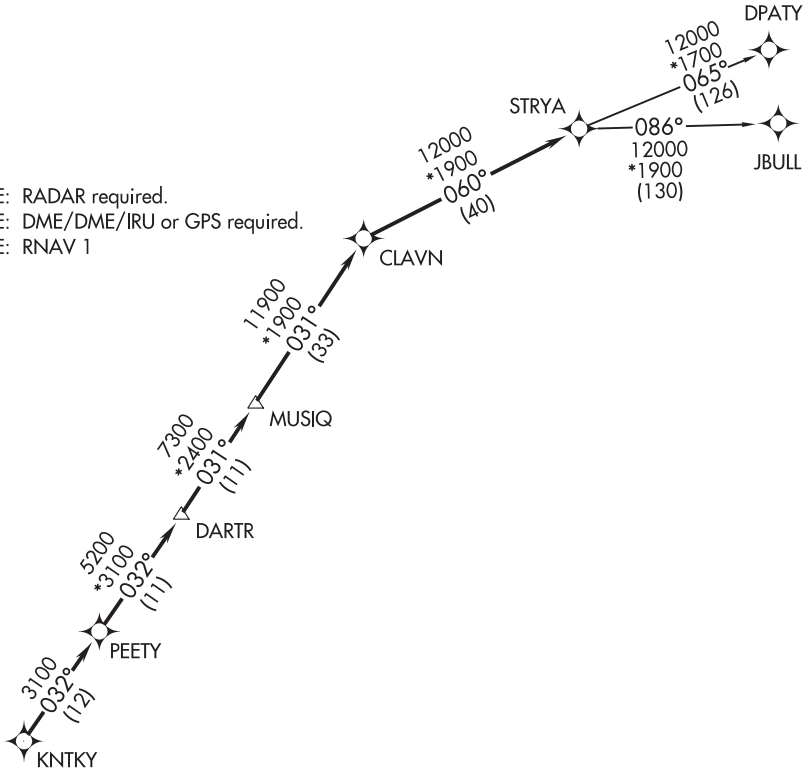
HOUSTON-SOUTHWEST (AXH)
HOUSTON, TEXAS

STRYA FOUR DEPARTURE (RNAV)

AWOS-3
123.625
CLNC DEL
120.8
CTAF
123.0
HOUSTON DEP CON
123.8 257.7

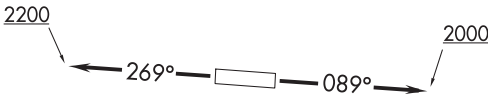
**TOP ALTITUDE:
4000**

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



TAKEOFF MINIMUMS:

Rwys 9, 27: Standard with minimum climb of 500' per NM to 580.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

(STRYA4.STRYA) 10NOV16

HOUSTON, TEXAS
HOUSTON-SOUTHWEST (AXH)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb heading 089° to 2000, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 27: Climb heading 269° to 2200, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

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 hangars 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 on 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

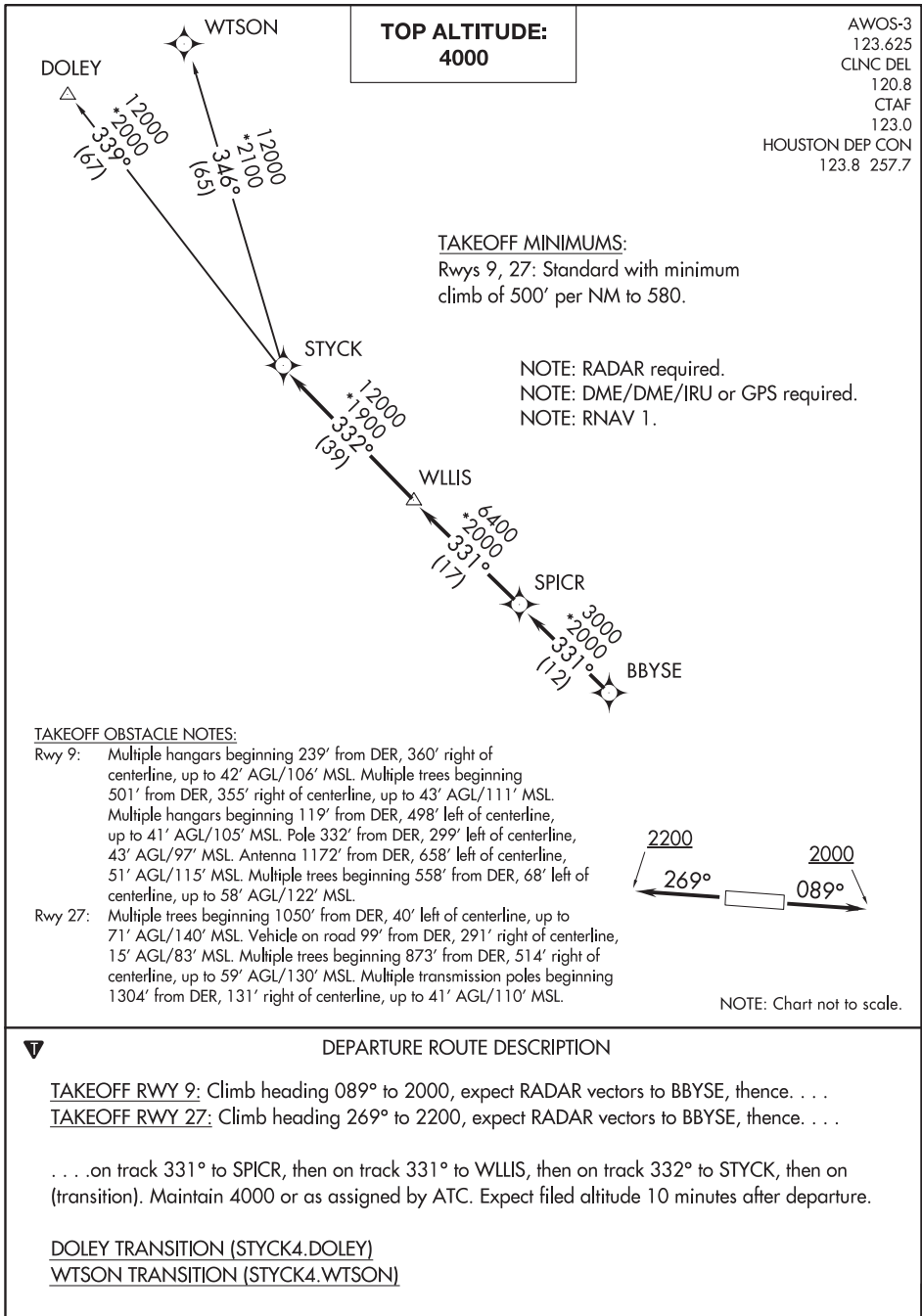
(STYCK4.STYCK) 16315

SL-6575 (FAA)

HOUSTON-SOUTHWEST (AXH)

STYCK FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

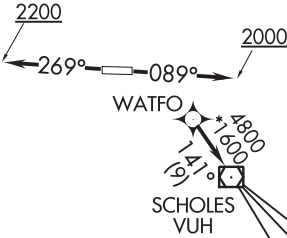
HOUSTON, TEXAS
HOUSTON-SOUTHWEST (AXH)

WATFO THREE DEPARTURE (RNAV)

AWOS-3
123.625
CLNC DEL
120.8
HOUSTON DEP CON
123.8 257.7
CTAF
123.0

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 hangars 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 on 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.



**TOP ALTITUDE:
4000**

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

TAKEOFF MINIMUMS

Rwys 9, 27: Standard with minimum climb of 500' per NM to 580.

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb on heading 089° to 2000, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 27: Climb on heading 269° to 2200, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

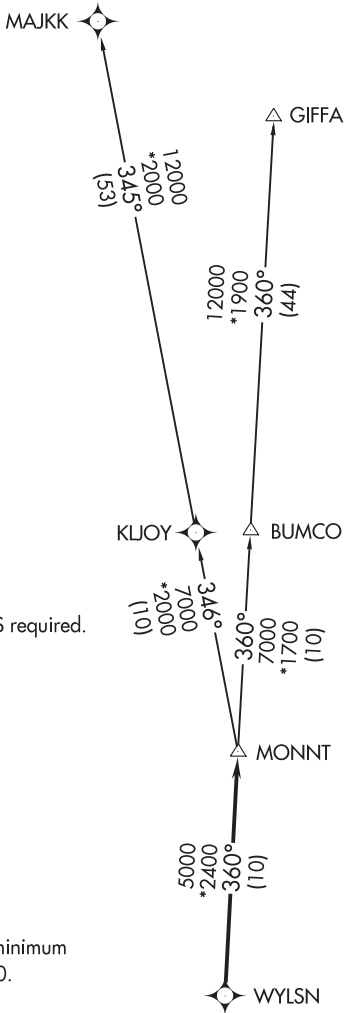
MUSYL TRANSITION (WATFO3.MUSYL):

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

AWOS-3
 123.625
 CLNC DEL
 120.8
 CTAF
 123.0
 HOUSTON DEP CON
 123.8 257.7

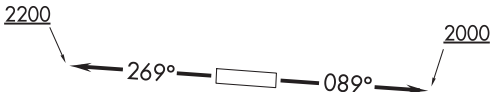
**TOP ALTITUDE:
 4000**



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

TAKEOFF MINIMUMS:

Rwys 9, 27: Standard with minimum climb of 500' per NM to 580.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 9: Climb on heading 089° to 2000, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 27: Climb on heading 269° to 2200, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)
MAJJK TRANSITION (WYLSN4.MAJKK)

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 hangars 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 on 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-CXO 108.7 Chan 24	APP CRS 140°	Rwy Idg 7501 TDZE 236 Apt Elev 245
---	------------------------	---

ILS or LOC RWY 14

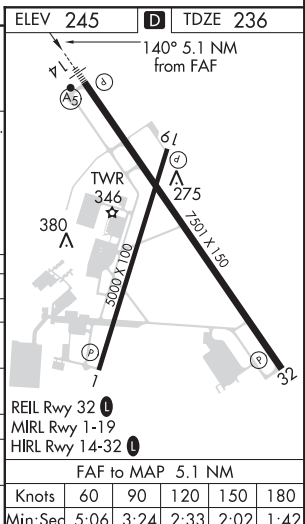
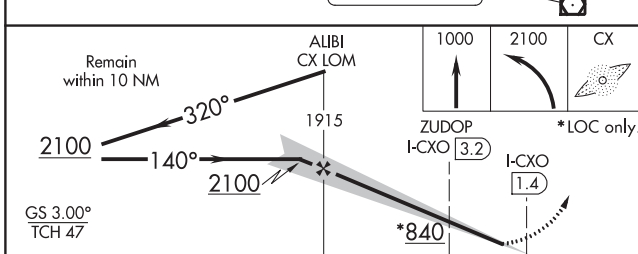
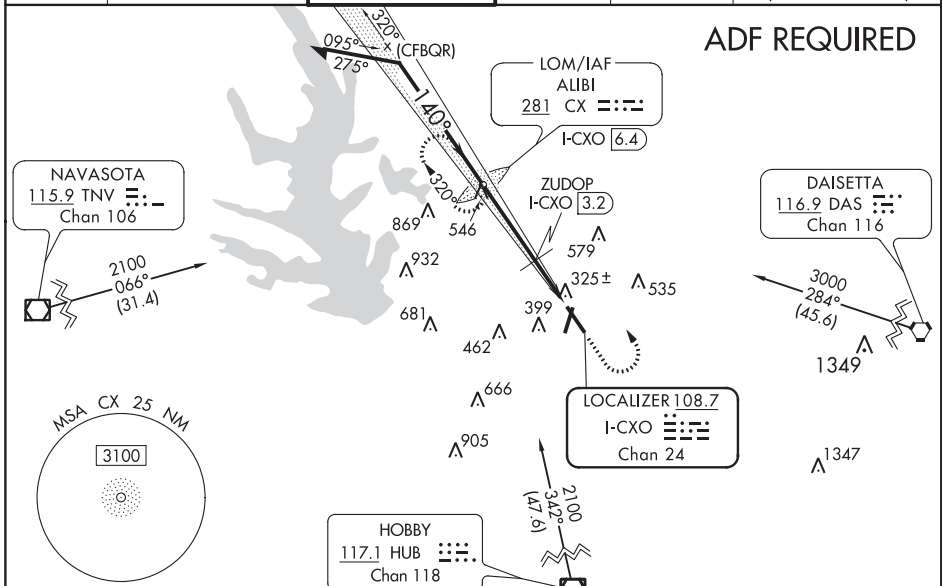
LONE STAR EXECUTIVE (CXO)

ADF Required. When local altimeter setting not received, use David Wayne Hooks Memorial altimeter setting and increase all DA 57 feet, and all MDA 60 feet; increase S-LOC 14 Cats C/D 1/8 and Circling Cats C/D visibility 1/4 mile. ZUDOP Fix Minimums: increase S-LOC 14 Cats C/D and Circling Cats C/D visibility 1/4 mile. For inop MALSAR when using David Wayne Hooks Memorial altimeter setting, increase S-ILS 14 all Cats visibility to 7/8 mile.



MISSED APPROACH: Climb to 1000 then climbing left turn to 2100 direct ALBI LOM/I-CXO 6.4 DME and hold.

ATIS 118.325	HOUSTON APP CON* 119.7 281.4	LONE STAR TOWER* 124.125 (CTAF)	GND CON 120.45	CLNC DEL 120.45	HOUSTON CLNC DEL 119.55 (When tower closed)
------------------------	--	---	--------------------------	---------------------------	--



CATEGORY	A	B	C	D
S-ILS 14		436-1/2	200 (200-1/2)	
S-LOC 14	840-1/2	604 (600-1/2)	840-1 3/8	604 (600-1 3/8)
C CIRCLING	840-1	595 (600-1)	880-1 3/4 635 (700-1 3/4)	960-2 1/4 715 (800-2 1/4)
ZUDOP FIX MINIMUMS				
S-LOC 14	640-1/2	404 (400-1/2)	640-3/4	404 (400-3/4)
C CIRCLING	700-1	455 (500-1)	880-1 3/4 635 (700-1 3/4)	960-2 1/4 715 (800-2 1/4)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 86719	APP CRS 012°	Rwy Idg TDZE Apt Elev	5000 237 245
W01A			

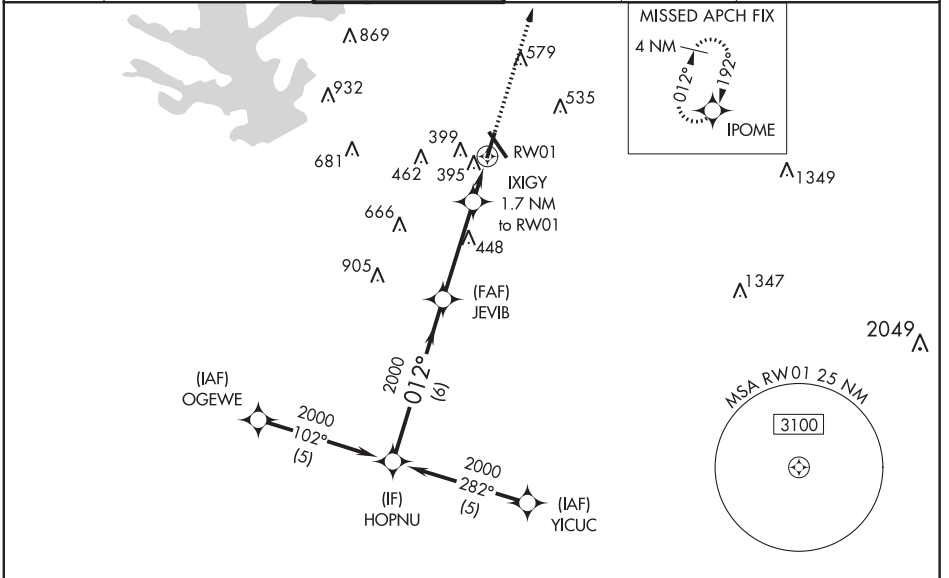
RNAV (GPS) RWY 1

LONE STAR EXECUTIVE (C_XO)

▼ Baro-VNAV NA when using David Wayne Hooks Memorial altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use David Wayne Hooks Memorial altimeter setting and increase all DA 57 feet and all MDA 60 feet. Increase LPV and LNAV/VNAV all Cts visibility ¼ mile and LNAV Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 2000 direct IPOME and hold.

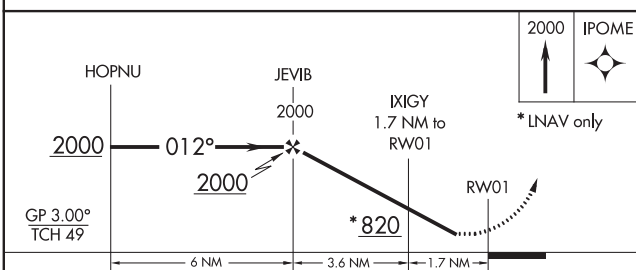
ATIS 118.325	HOUSTON APP CON * 119.7 281.4	LONE STAR TOWER * 124.125 (CTAF)	GND CON 120.45	CLNC DEL 120.45	HOUSTON CLNC DEL 119.55 (When tower closed)
------------------------	---	--	--------------------------	---------------------------	--



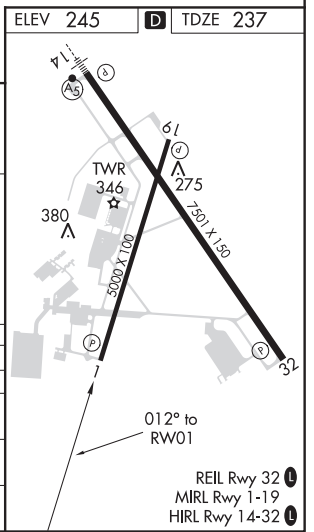
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

RADAR REQUIRED



	2000		IPOME	
	↑		✦	
	*LNAV only			
GP 3.00° TCH 49	2000		* 820	
	6 NM		3.6 NM	
			1.7 NM	
CATEGORY	A	B	C	D
LPV DA	501-1		264 (300-1)	
LNAV/VNAV DA	651-1½		414 (500-1½)	
LNAV MDA	660-1 423 (500-1)		660-1¼ 423 (500-1¼)	
CIRCLING	700-1 455 (500-1)		700-1½ 800-2 455 (500-1½) 555 (600-2)	




WAAS CH 99512 W14A	APP CRS 140°	Rwy Idg TDZE 236 Apt Elev 245	7501
--	------------------------	---	-------------

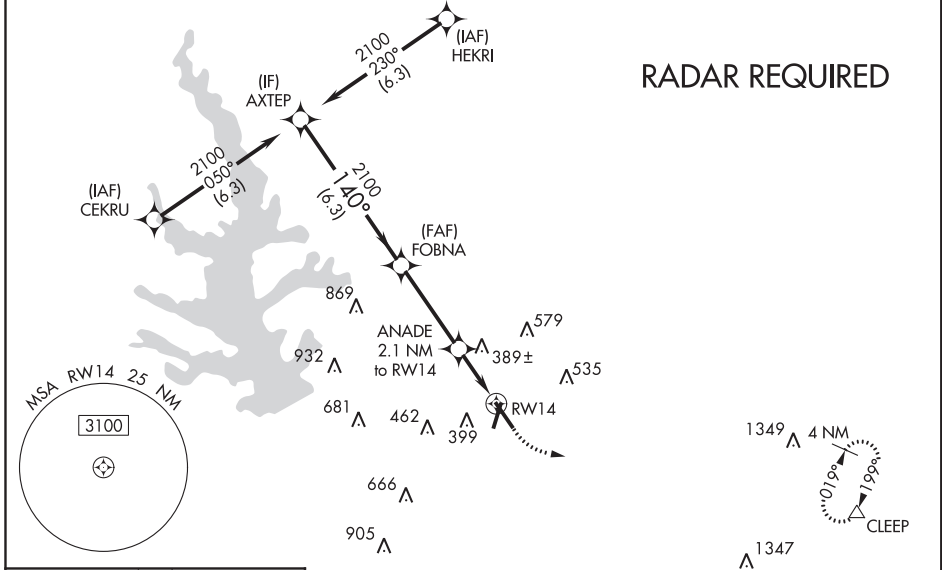
RNAV (GPS) RWY 14

LONE STAR EXECUTIVE (C XO)

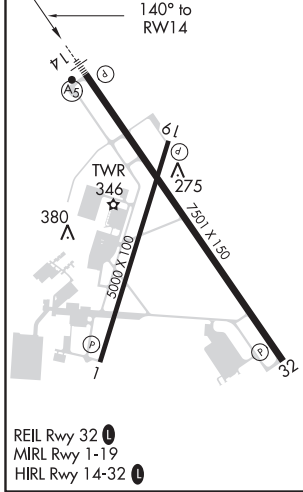
▽ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (-22°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use David Wayne Hooks Memorial altimeter setting and increase all DA 57 feet, and all MDA 60 feet; increase all Cats LNAV/VNAV visibility to ½, increase LNAV Cat C/D and Circling C/D visibility ¼ mile. Baro-VNAV NA when using David Wayne Hooks Memorial altimeter setting. For inop MALSRS when using David Wayne Hooks Memorial altimeter setting; increase LPV all Cats visibility to ¾ mile.

MALSRS
 MISSED APPROACH: Climbing left turn to 3100 direct CLEEP and hold, continue climb-in-hold to 3100.

ATIS 118.325	HOUSTON APP CON * 119.7 281.4	LONE STAR TOWER * 124.125 (CTAF) 0	GND CON 120.45	CLNC DEL 120.45	HOUSTON CLNC DEL 119.55 (When tower closed)
------------------------	---	---	--------------------------	---------------------------	--



ELEV 245	D TDZE 236
-----------------	--------------------------



	AXTEP	FOBNA	ANADE	RWY 14
	2100	2100	2.1 NM to RWY 14	*940
	6.3 NM		3.6 NM	2.1 NM
GP 3.00° TCH 47				
CATEGORY	A	B	C	D
LPV DA		436-½	200 (200-½)	
LNAV/VNAV DA		491-½	255 (300-½)	
LNAV MDA	640-½	404 (400-½)	640-⅝	404 (400-⅝)
C CIRCLING	700-1	455 (500-1)	880-1¾ 635 (700-1¾)	960-2¼ 715 (800-2¼)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 90219 W19A	APP CRS 192°	Rwy Idg TDZE Apt Elev	5000 237 245
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 19

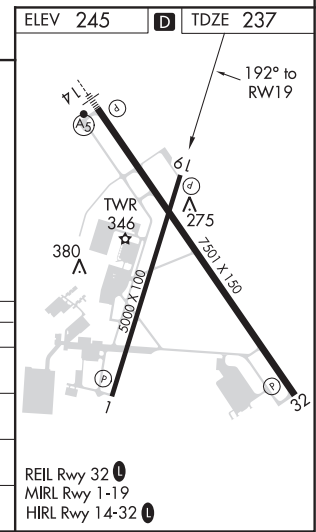
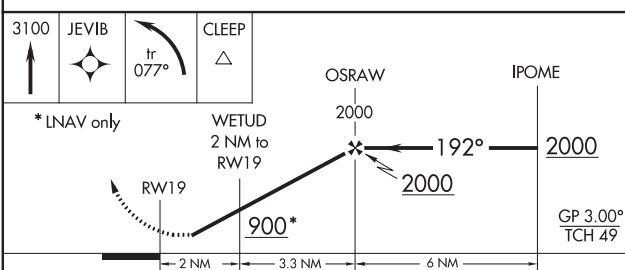
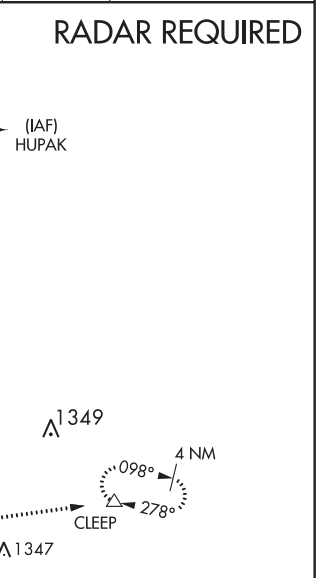
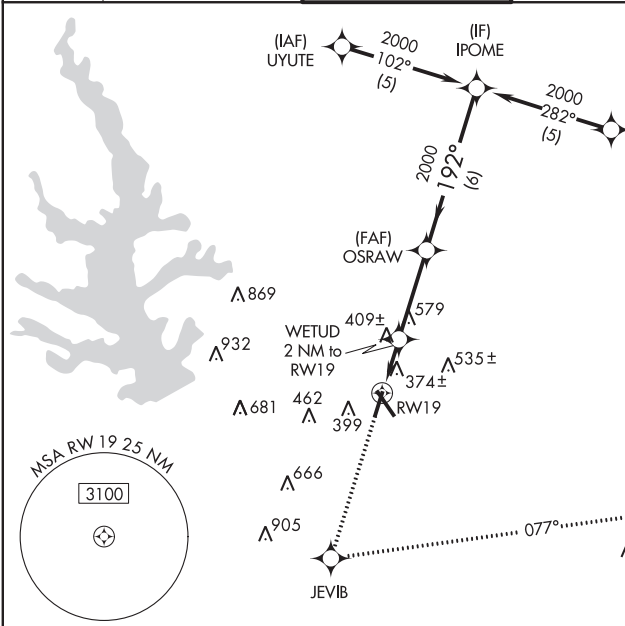
LONE STAR EXECUTIVE (C^XO)

⚠ Baro-VNAV NA when using David Wayne Hooks Memorial 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. Visibility reduction by helicopters NA. When local altimeter setting not received, use David Wayne Hooks Memorial altimeter setting and increase all DA 57 feet and all MDA 60 feet. Increase LPV and LNAV/VNAV all Cats visibility ¼ mile and LNAV Cat D visibility ½ mile.

MISSED APPROACH:
Climb to 3100 direct JEVIB and left turn on track 077° to CLEEP and hold.

ATIS 118.325	HOUSTON APP CON * 119.7 281.4	LONE STAR TOWER * 124.125 (CTAF) 0	GND CON 120.45	CLNC DEL 120.45	HOUSTON CLNC DEL 119.55 (When tower closed)
------------------------	---	---	--------------------------	---------------------------	--

RADAR REQUIRED



CATEGORY	A	B	C	D
LPV DA	526-1		289 (300-1)	
LNAV/VNAV DA	682-1½		445 (500-1½)	
LNAV MDA	660-1 423 (500-1)		660-1¼ 423 (500-1¼)	
CIRCLING	700-1 455 (500-1)		700-1½ 455 (500-1½) 800-2 555 (600-2)	

REIL Rwy 32 **0**
MIRL Rwy 1-19
HIRL Rwy 14-32 **0**

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 62819 W32A	APP CRS 321°	Rwy Idg TDZE Apt Elev	7501 245 245
--	------------------------	-----------------------------	---

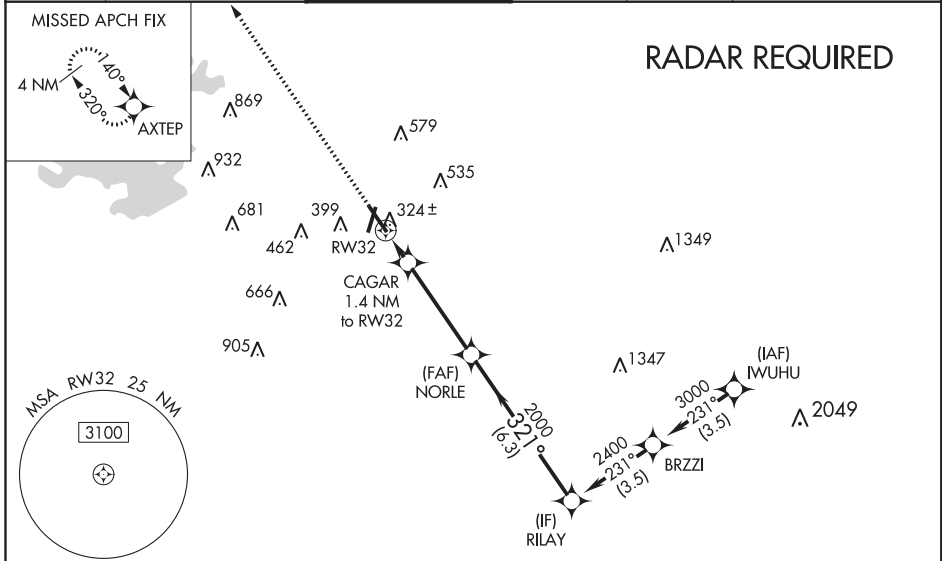
RNAV (GPS) RWY 32

LONE STAR EXECUTIVE (C XO)

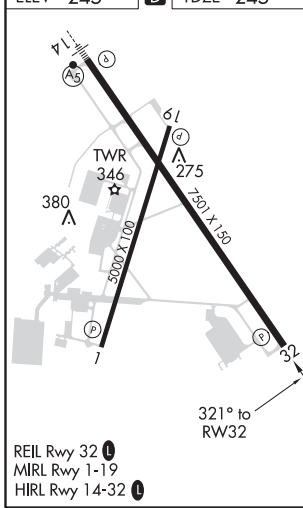
⚠ Baro-VNAV NA when using David Wayne Hooks Memorial altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (-22°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use David Wayne Hooks Memorial altimeter setting and increase all DA 57 feet and all MDA 60 feet. Increase LPV and LNAV/VNAV all Cats visibility to 1 mile and increase LNAV Cats C and D visibility to 1½ mile, and increase Circling Cat C and D ¼ mile. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH:
Climb to 2100 direct
AXTEP and hold.

ATIS 118.325	HOUSTON APP CON * 119.7 281.4	LONE STAR TOWER * 124.125 (CTAF) 0	GND CON 120.45	CLNC DEL 120.45	HOUSTON CLNC DEL 119.55 (When tower closed)
------------------------	---	--	--------------------------	---------------------------	--



ELEV 245	D	TDZE 245
-----------------	----------	-----------------



2100	AXTEP				
* LNAV only.	CAGAR 1.4 NM to RW32	NORLE 2000	RILAY 2400	GP 3.00° TCH 50	
	* 720	2000	2400		
	1.4 NM	4 NM	6.3 NM		
CATEGORY	A	B	C	D	
LPV DA		495-¾	250 (300-¾)		
LNAV/VNAV DA		505-⅞	260 (300-⅞)		
LNAV MDA		580-1	335 (400-1)		
C CIRCLING	700-1	455 (500-1)	880-1¾ 635 (700-1¾)	960-2¼	715 (800-2¼)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

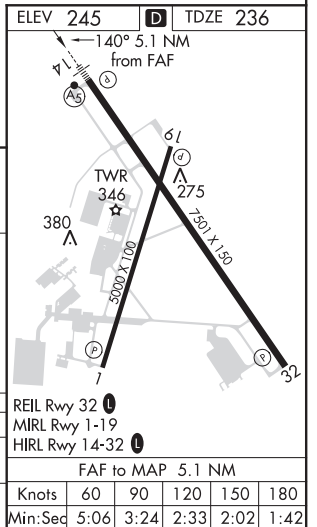
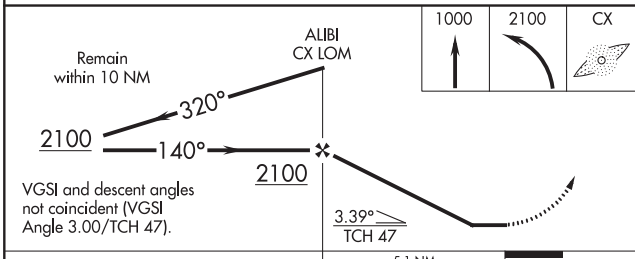
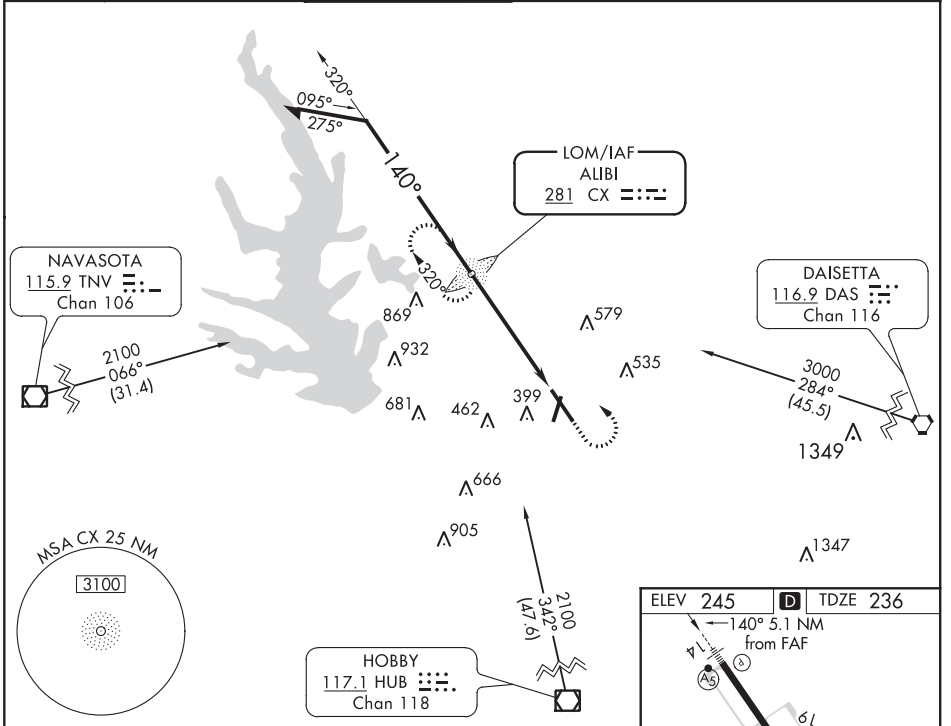
LOM CX 281	APP CRS 140°	Rwy Idg TDZE Apt Elev	7501 236 245
----------------------	------------------------	-----------------------------	---

NDB RWY 14
LONE STAR EXECUTIVE (CXO)

⚠ When local altimeter setting not received, use David Wayne Hooks Memorial altimeter setting and increase all MDAs 60 feet increase S-14 Cat C/D visibility to 1 3/8 miles, Circling Cat C visibility to 2 miles, and Cat D visibility to 2 1/2 miles. For inop MALSAR when using David Wayne Hooks Memorial altimeter setting, increase Cat D visibility to 2 miles.

MALSAR MISSED APPROACH: Climb to 1000 then climbing left turn to 2100 direct ALIBI LOM and hold.

ATIS 118.325	HOUSTON APP CON * 119.7 281.4	LONE STAR TOWER * 124.125 (CTAF) 0	GND CON 120.45	CLNC DEL 120.45	HOUSTON CLNC DEL 119.55 (When tower closed)
------------------------	---	--	--------------------------	---------------------------	--



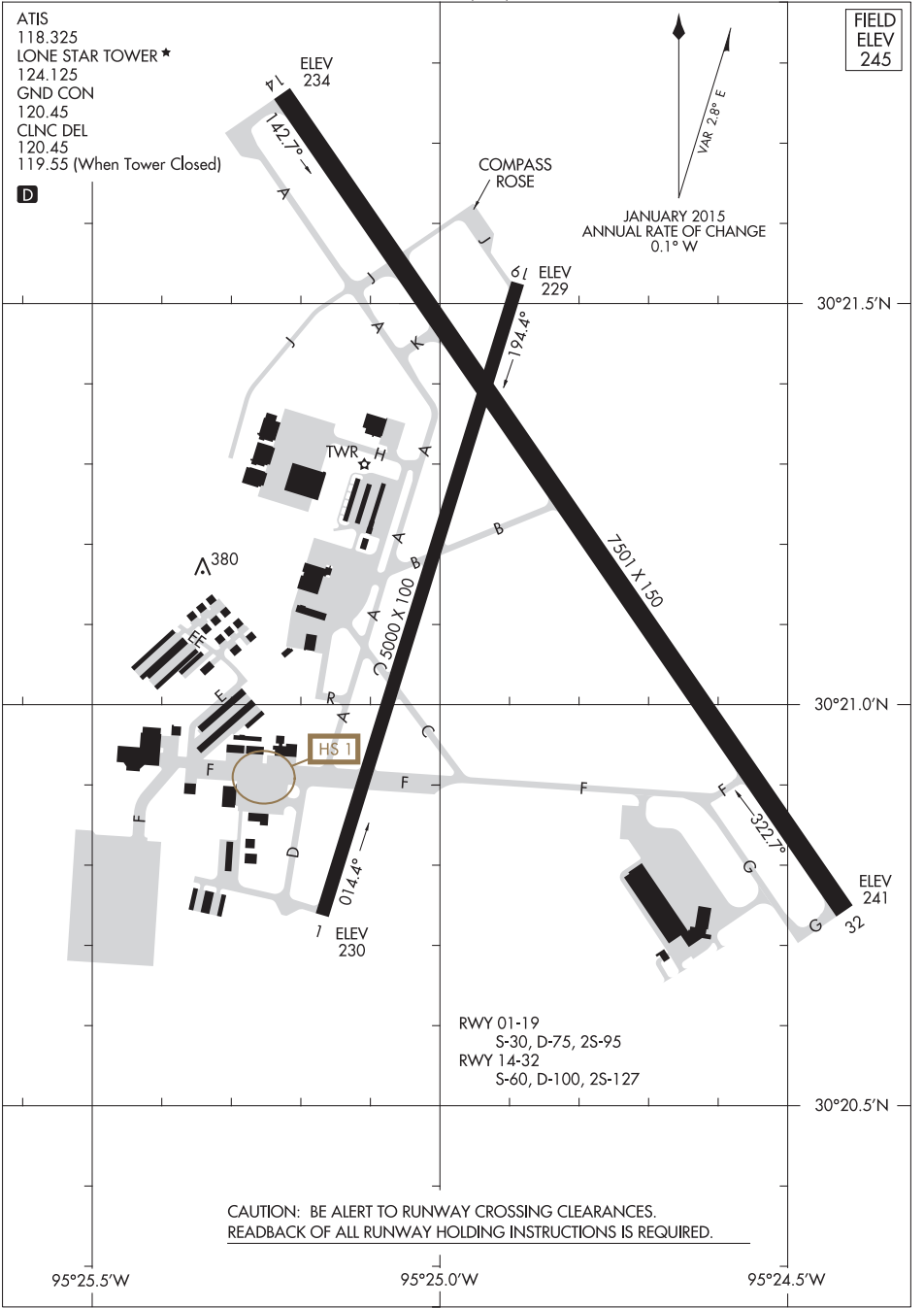
CATEGORY	A	B	C	D
S-14	880-3/4 644 (700-3/4)		880-1 3/8 644 (700-1 3/8)	
C CIRCLING	880-1 635 (700-1)		880-1 3/4 635 (700-1 3/4)	960-2 1/4 715 (800-2 1/4)

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

15176 **AIRPORT DIAGRAM** AL-5573 (FAA) **LONE STAR EXECUTIVE (CXO)** HOUSTON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

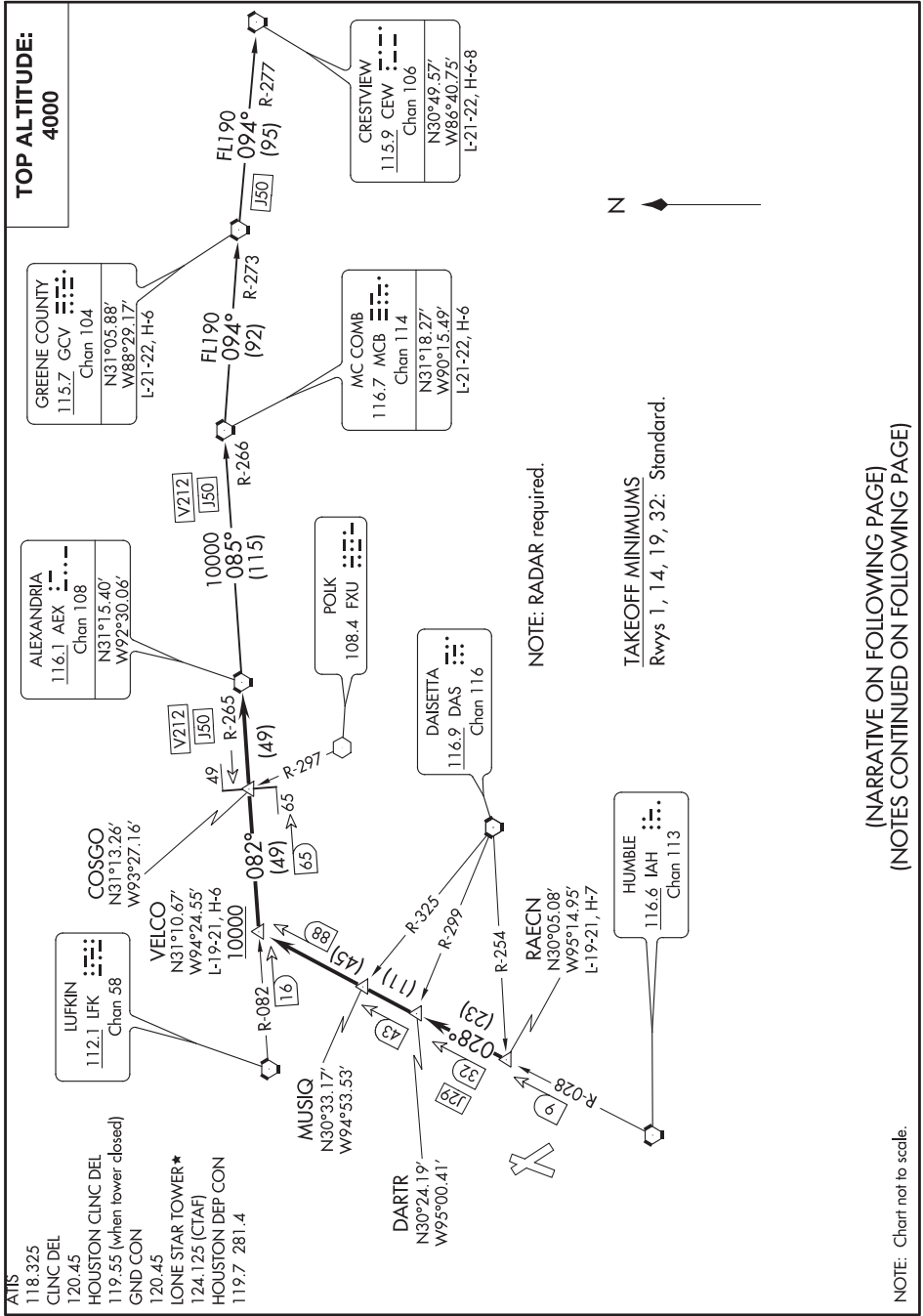
SC-5, 10 NOV 2016 to 05 JAN 2017

AIRPORT DIAGRAM HOUSTON, TEXAS **LONE STAR EXECUTIVE (CXO)**

15176

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



ALEXANDRIA NINE DEPARTURE

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

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

TAKEOFF OBSTACLE NOTES

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL. Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL. Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL. Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL. Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE

(BLTWY3.BLTWY) 16315

BLTWY THREE DEPARTURE (RNAV) SL-5573 (FAA)

LONE STAR EXECUTIVE (CXO)
HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

- ATIS
- 118.325
- CLINC DEL
- 120.45
- 119.55 (when tower closed)
- GND CON
- 120.45
- LONE STAR TOWER *
- 124.125 (CTAF)
- HOUSTON DEP CON
- 119.7 281.4

▲ CRIED

12000
*2100
(46)

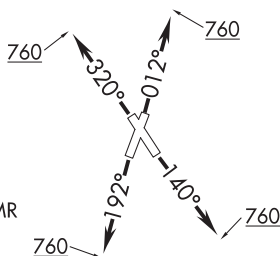
▲ BLTWY

6600
*2000
346°
(6)

▲ LITLD

5400
*1900
345°
(12)

◆ DREMR



- 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.

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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

HOUSTON, TEXAS
LONE STAR EXECUTIVE (CXO)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1: Climb heading 012° to 760, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 14: Climb heading 140° to 760, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 19: Climb heading 192° to 760, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 32: Climb heading 320° to 760, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

TAKEOFF OBSTACLE NOTES

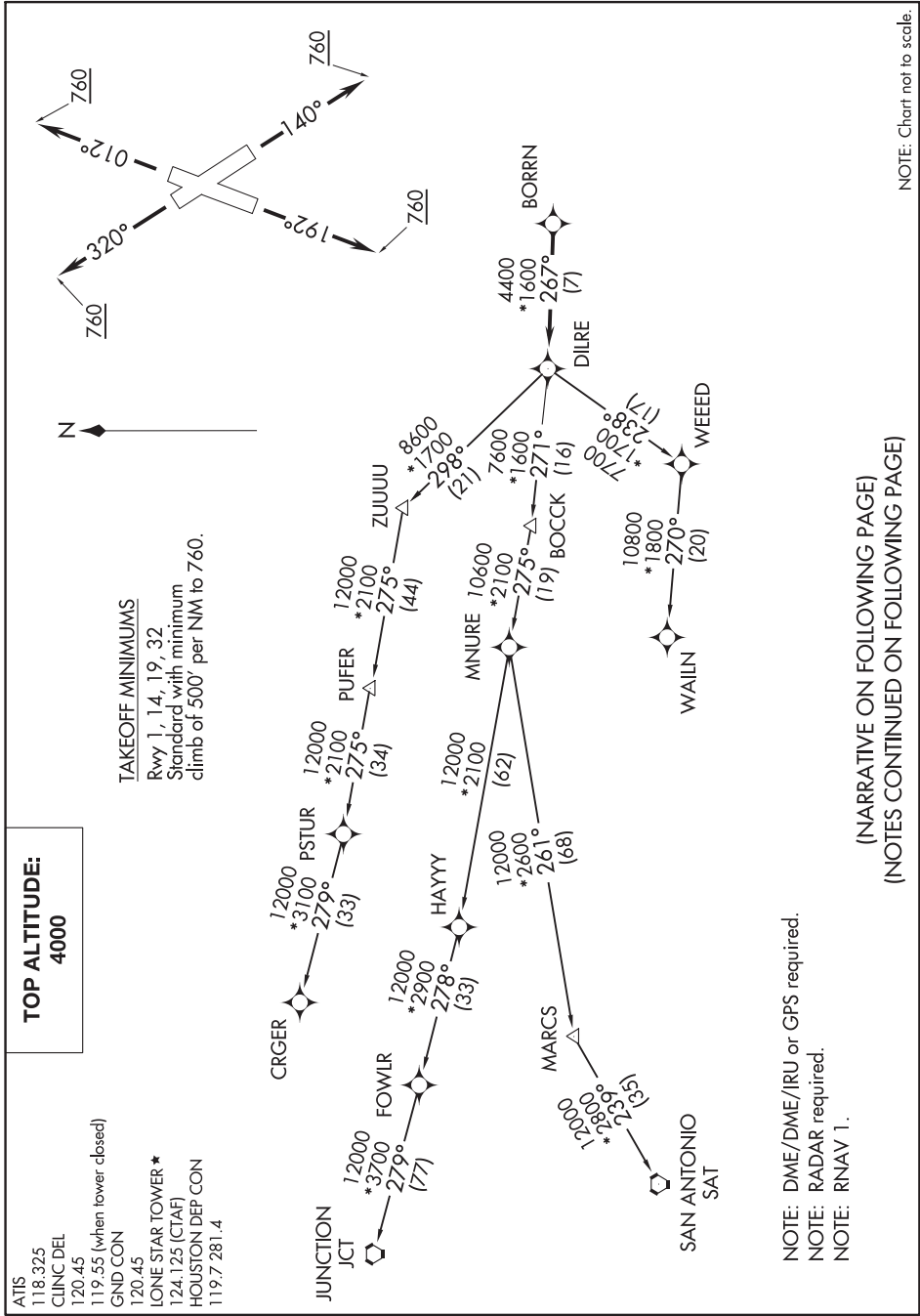
- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017



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

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1: Climb on heading 012° to 760, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 14: Climb on heading 140° to 760, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 19: Climb on heading 192° to 760, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 32: Climb on heading 320° to 760, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

TAKEOFF OBSTACLE NOTES

Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.

Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL. Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.

Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.

Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

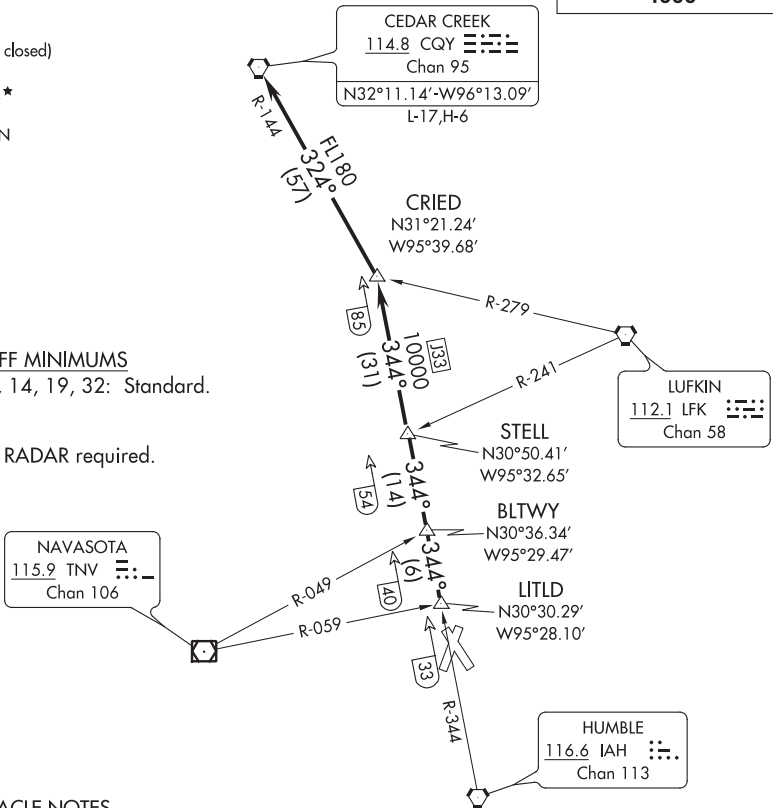
SL-5573 (FAA)

**TOP ALTITUDE:
4000**

ATIS
118.325
CLNC DEL
120.45
120.45
119.55 (when tower closed)
GND CON 120.45
LONE STAR TOWER ★
124.125 (CTAF)
HOUSTON DEP CON
119.7 281.4

TAKEOFF MINIMUMS
Rwys 1, 14, 19, 32: Standard.

NOTE: RADAR required.



TAKEOFF OBSTACLE NOTES

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL. Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL. Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL. Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL. Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT, maintain 4000. 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.

CRIED EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE

ATIS
118.325
CLNC DEL
120.45
119.55 (when tower closed)
GND CON 120.45
LONE STAR TOWER ★
124.125 (CTAF)
HOUSTON DEP CON
119.7 281.4

**TOP ALTITUDE:
4000**

EL DORADO
115.5 ELD
Chan 102
N33°15.37'-W92°44.64'
L-17, H-6

NOTE: RADAR required.
NOTE: For aircraft destined MEM
or filed via Q32 or J42.

LUFKIN
112.1 LFK
Chan 58

ENJOY
N31°16.73'
W94°19.82'

MUSIQ
N30°33.17'
W94°53.53'

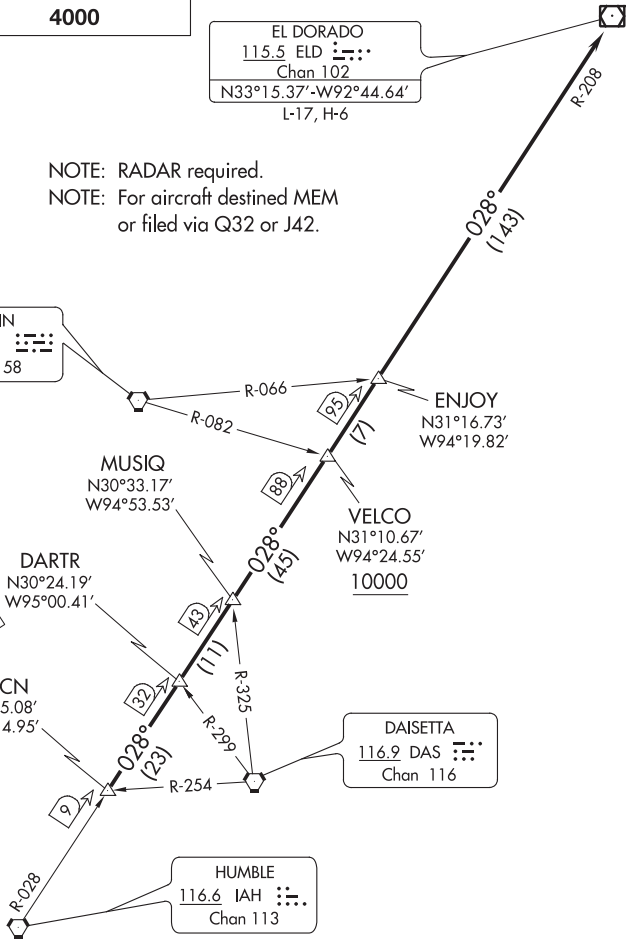
VELCO
N31°10.67'
W94°24.55'
10000

DARTR
N30°24.19'
W95°00.41'

RAECN
N30°05.08'
W95°14.95'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113



TAKEOFF MINIMUMS

Rwys 1, 14, 19, 32: Standard.

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

NOTE: Chart not to scale.

EL DORADO EIGHT DEPARTURE

(ELD8.ELD) 10NOV16

HOUSTON, TEXAS
LONE STAR EXECUTIVE (CXXO)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

TAKEOFF OBSTACLE NOTES

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.


SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS 118.325
 CLNC DEL 120.45
 119.55 (when tower closed)
 GND CON 120.45
 LONE STAR TOWER★ 124.125 (CTAF)
 HOUSTON DEP CON 119.7 281.4

**TOP ALTITUDE:
4000**

CEDAR CREEK
 114.8 CQY 
 Chan 95


LEONA
 110.8 LOA 
 Chan 45

GIFFA
 N31°22.89'
 W95°15.10'
 L-19-21, H-6
 8500

BUMCO
 N30°38.91'
 W95°18.03'

MONNT
 N30°28.65'
 W95°18.70'
 L19-21, H7

DAISSETTA
 116.9 DAS 
 Chan 116

HUMBLE
 116.6 IAH 
 Chan 113

TAKEOFF MINIMUMS

Rwys 1, 14, 19, 32: Standard.

NOTE: RADAR required.
 NOTE: For aircraft destined for the DFW terminal area only.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

TAKEOFF OBSTACLE NOTES

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)

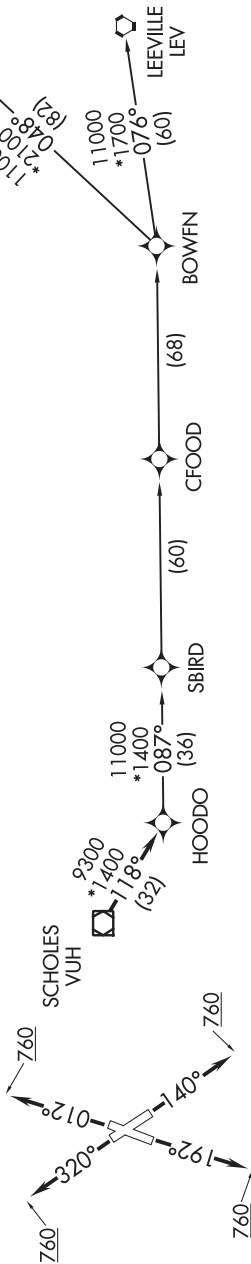
HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS
 118.325
 CLNC DEL
 120.45
 119.55 (when tower closed)
 GND CON
 120.45
 LONE STAR TOWER *
 124.125 (CTAF)
 HOUSTON DEP CON
 119.7 281.4

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

TOP ALTITUDE:
4000



TAKEOFF MINIMUMS
 Rwy 1, 14, 19, 32:
 Standard with minimum climb of 500' per NM to 760.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1: Climb heading 012° to 760, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 14: Climb heading 140° to 760, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 19: Climb heading 192° to 760, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 32: Climb heading 320° to 760, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.

Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

(INDIE4.INDIE) 16315

SL-5573 (FAA)

LONE STAR EXECUTIVE (CXO)
HOUSTON, TEXAS

INDIE FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

ATIS
118.325
CLINC DEL
120.45
119.55 (when tower closed)
GND CON
120.45
LONE STAR TOWER ★
124.125 (CTAF)
HOUSTON DEP CON
119.7 281.4

TPAKK

12000
*2100
0288°
(1105)

INDIE

12000
*2400
(23)

WWELL

10700
*3100
0288°
(139)

SUSHI

5800
*3100
0255°
(110)

COLET

4900
*3100
016°
(110)

RENNK

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

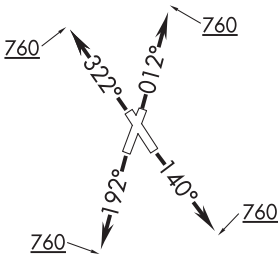
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TAKEOFF MINIMUMS

Rwys 1, 14, 19, 32:

Standard with minimum climb of 500' per NM to 760.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

HOUSTON, TEXAS
LONE STAR EXECUTIVE (CXO)

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1: Climb heading 012° to 760, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 14: Climb heading 140° to 760, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 19: Climb heading 192° to 760, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 32: Climb heading 322° to 760, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF OBSTACLE NOTES

Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.

Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.

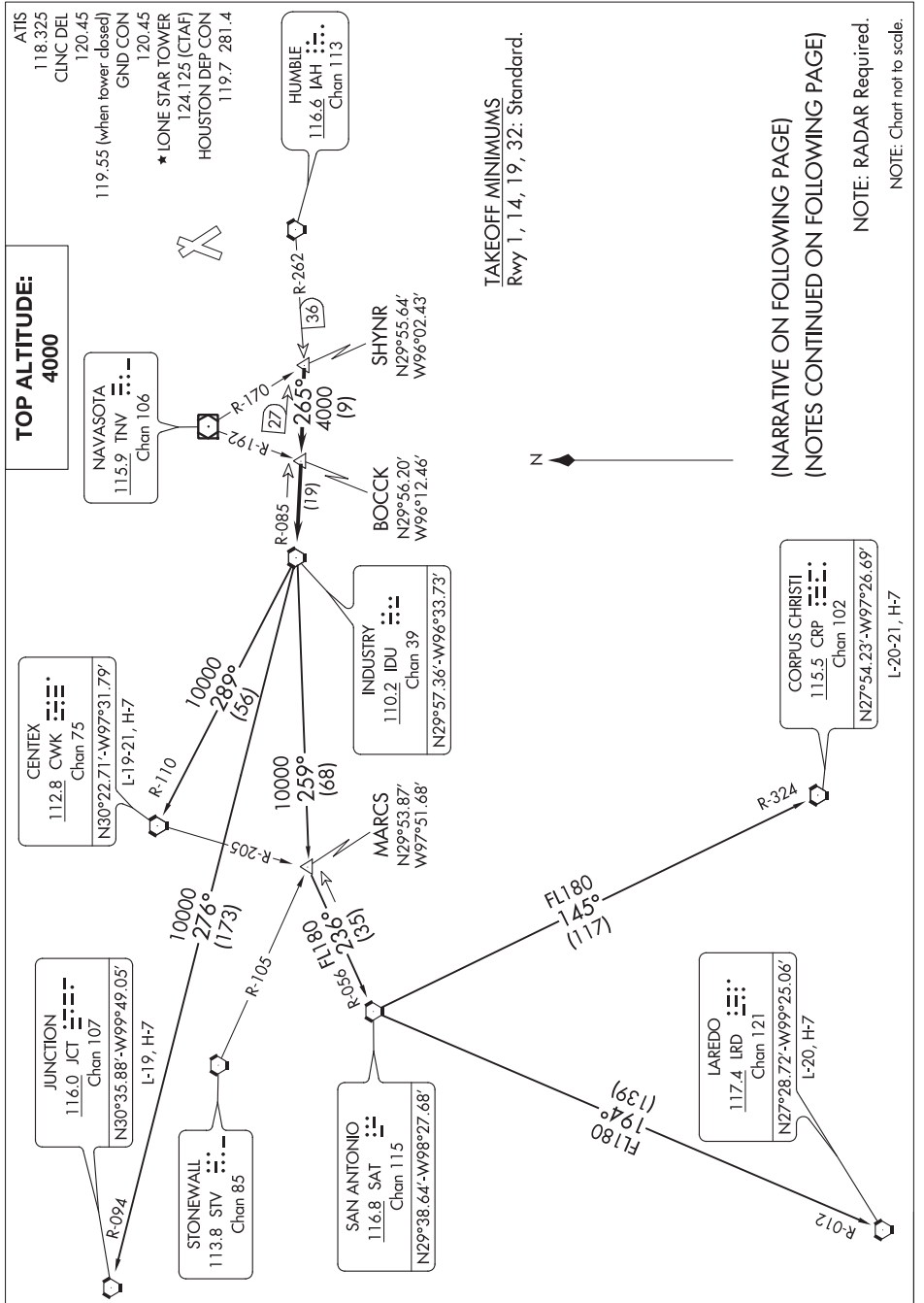
Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.

Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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 OBSTACLE NOTES

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

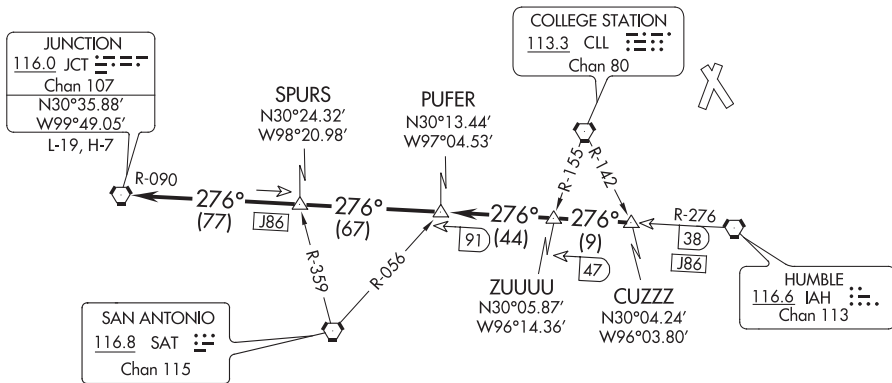
JUNCTION NINE DEPARTURE

**TOP ALTITUDE:
4000**

ATIS
118.325
CLNC DEL
120.45 119.55 (when tower closed)
GND CON
120.45
LONE STAR TOWER ★
124.125
HOUSTON DEP CON
119.7 281.4

TAKEOFF MINIMUMS

Rwys 1, 14, 19, 32: Standard.



NOTE: RADAR required.

NOTE: For aircraft overflying JCT VORTAC
via J86 filing FL240 or above.

TAKEOFF OBSTACLE NOTES

- Rwy 1: Multiple trees beginning 1899' from DER, 11' left of centerline, up to 80' AGL/314' MSL.
OL on glideslope 387' from DER, 404' right of centerline, 23' AGL/258' MSL.
Tower 457' from DER, 387' right of centerline, 45' AGL/275' MSL.
Multiple trees beginning 788' from DER, 134' right of centerline, up to 79' AGL/313' MSL.
- Rwy 14: Multiple trees beginning 1655' from DER, 408' left of centerline, up to 81' AGL/300' MSL.
OL on DME 401' from DER, 266' right of centerline, 21' AGL/255' MSL.
Multiple trees beginning 1480' from DER, 80' right of centerline, up to 77' AGL/306' MSL.
- Rwy 19: Multiple trees beginning 17' from DER, 157' left of centerline, up to 95' AGL/315' MSL.
Multiple trees beginning 68' from DER, 156' right of centerline, up to 80' AGL/305' MSL.
- Rwy 32: Vehicle and road 602' from DER, 551' left of centerline, 15' AGL/257' MSL.
Pole 1411' from DER, 458' left of centerline, 29' AGL/268' MSL.
Tree 2448' from DER, 990' right of centerline, 106' AGL/325' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to CUZZZ INT. Maintain 4000. Expect filed altitude 10 minutes after departure, thence

. . . . via IAH R-276 and JCT R-090 to JCT VORTAC.

JUNCTION NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

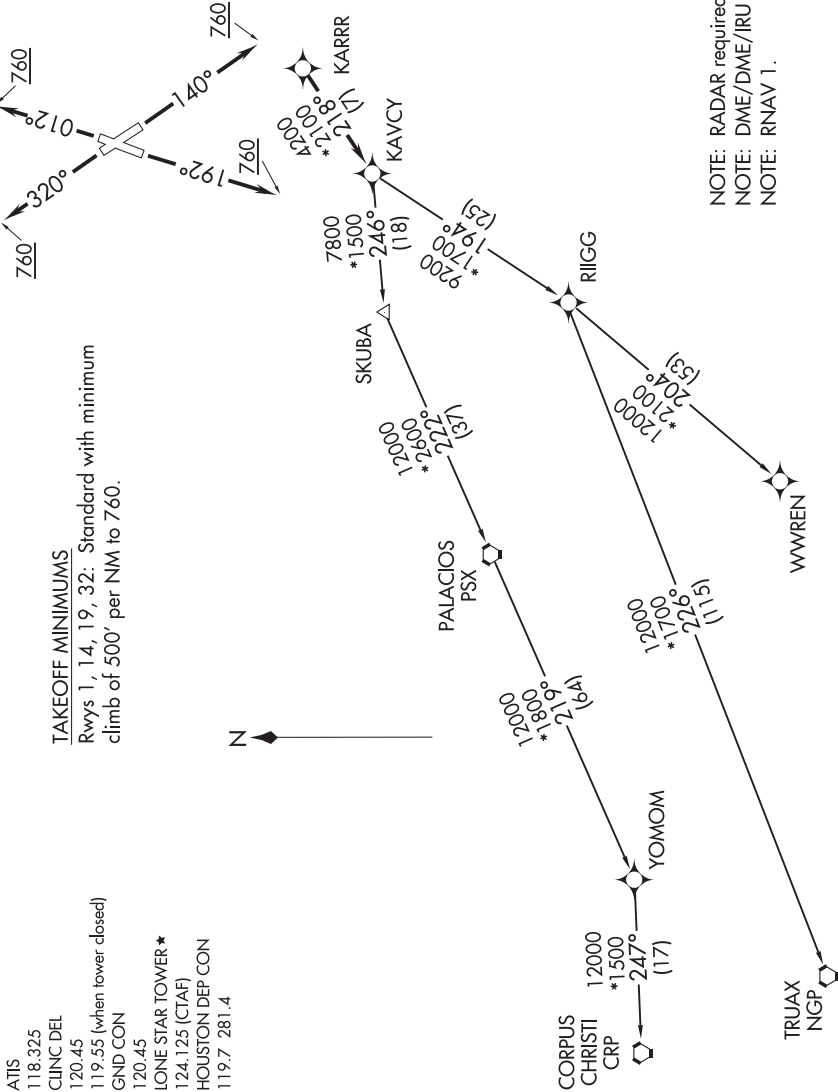
SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS
Rvys 1, 14, 19, 32: Standard with minimum
climb of 500' per NM to 760.

- ATIS 118.325
- CLINC DEL 120.45
- 119.55 (when tower closed)
- GND CON 120.45
- LONE STAR TOWER *
- 124.125 (CTAF)
- HOUSTON DEP CON 119.7 281.4



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

NOTE: Chart not to scale.

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1: Climb on heading 012° to 760, expect radar vectors to KARRR, thence

TAKEOFF RWY 14: Climb on heading 140° to 760, expect radar vectors to KARRR, thence

TAKEOFF RWY 19: Climb on heading 192° to 760, expect radar vectors to KARRR, thence

TAKEOFF RWY 32: Climb on heading 320° to 760, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

TAKEOFF OBSTACLE NOTES:

Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.

Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL. Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.

Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.

Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

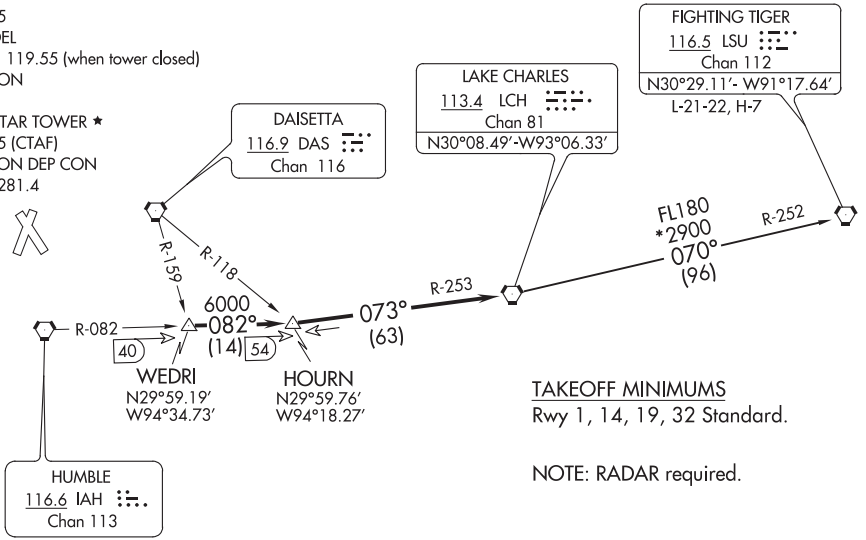
SC-5, 10 NOV 2016 to 05 JAN 2017

(LCH4.LCH) 15344

LAKE CHARLES FOUR DEPARTURE SL-5573 (FAA)

LONE STAR EXECUTIVE (CXXO)
HOUSTON, TEXAS

ATIS
118.325
CLNC DEL
120.45 119.55 (when tower closed)
GND CON
120.45
LONE STAR TOWER *
124.125 (CTAF)
HOUSTON DEP CON
119.7 281.4



FIGHTING TIGER
116.5 LSU
Chan 112
N30°29.11'-W91°17.64'
L-21-22, H-7

LAKE CHARLES
113.4 LCH
Chan 81
N30°08.49'-W93°06.33'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113

TAKEOFF MINIMUMS
Rwy 1, 14, 19, 32 Standard.

NOTE: RADAR required.

TAKEOFF OBSTACLE NOTES

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

TOP ALTITUDE:
4000

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WEDRI INT, maintain 4000, 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 (LCH4.LSU): From over LCH VORTAC on LCH R-070 and LSU R-252 to LSU VORTAC.

LAKE CHARLES FOUR DEPARTURE
(LCH4.LCH) 15344

HOUSTON, TEXAS
LONE STAR EXECUTIVE (CXXO)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEONA TWO DEPARTURE

SL-5573 (FAA)

LONE STAR EXECUTIVE (C'XO)

HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

ATIS
118.325
CLNC DEL
120.45
119.55 (when tower closed)
GND CON
120.45
LONE STAR TOWER*
124.125 (CTAF)
HOUSTON DEP CON
119.7 281.4

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'

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'

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

DOLEY
N32°11.35'
W96°23.08'

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

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

WLLIS
N30°32.08'
W95°39.10'

NAVASOTA
115.9 TNV
Chan 106

HUMBLE
116.6 IAH
Chan 113

NOTE: RADAR required.
NOTE: Except for aircraft destined
ACT or the DFW terminal area,
all aircraft filing the LOA2 SID
must file one of the published
transitions via FUZ (LOA2.FUZ)
ADM (LOA2.ADM) or
BYP (LOA2.BYP).

TAKEOFF MINIMUMS
Rwys 1, 14, 19, 32: Standard.

(NOTES ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

LEONA TWO DEPARTURE

(LOA2.LOA) 10NOV16

HOUSTON, TEXAS
LONE STAR EXECUTIVE (C'XO)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

TAKEOFF OBSTACLE NOTES

Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.

Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.

Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.

Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.

Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.

Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.

Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.

Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

(LFK1.LFK) 16315

LUFKIN ONE DEPARTURE

SL-5573 (FAA)

LONE STAR EXECUTIVE (C'XO)
HOUSTON, TEXAS

ATIS
118.325
CLNC DEL
120.45
119.55 (when tower closed)
GND CON
120.45
LONE STAR TOWER ★
124.125 (CTAF)
HOUSTON DEP CON
119.7 281.4

**TOP ALTITUDE:
4000**

LITTLE ROCK
113.9 LIT
Chan 86
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: RADAR required.
NOTE: For aircraft destined LIT or
overflying LIT or PXV.

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

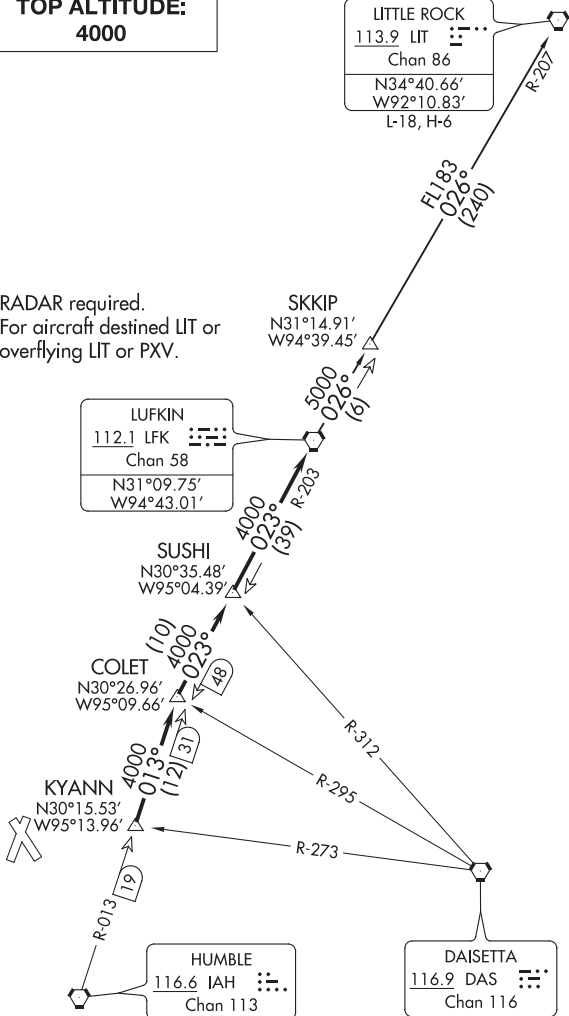
SUSHI
N30°35.48'
W95°04.39'

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



TAKEOFF MINIMUMS:
Rwys 1, 14, 19, 32: Standard.

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

NOTE: Chart not to scale.

LUFKIN ONE DEPARTURE

(LFK1.LFK) 10NOV16

HOUSTON, TEXAS
LONE STAR EXECUTIVE (C'XO)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LFK1.LFK) 16315

LUFKIN ONE DEPARTURE

SL-5573 (FAA)

LONE STAR EXECUTIVE (C'XO)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

TAKEOFF OBSTACLE NOTES:

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL. Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LUFKIN ONE DEPARTURE

(LFK1.LFK) 10NOV16

HOUSTON, TEXAS

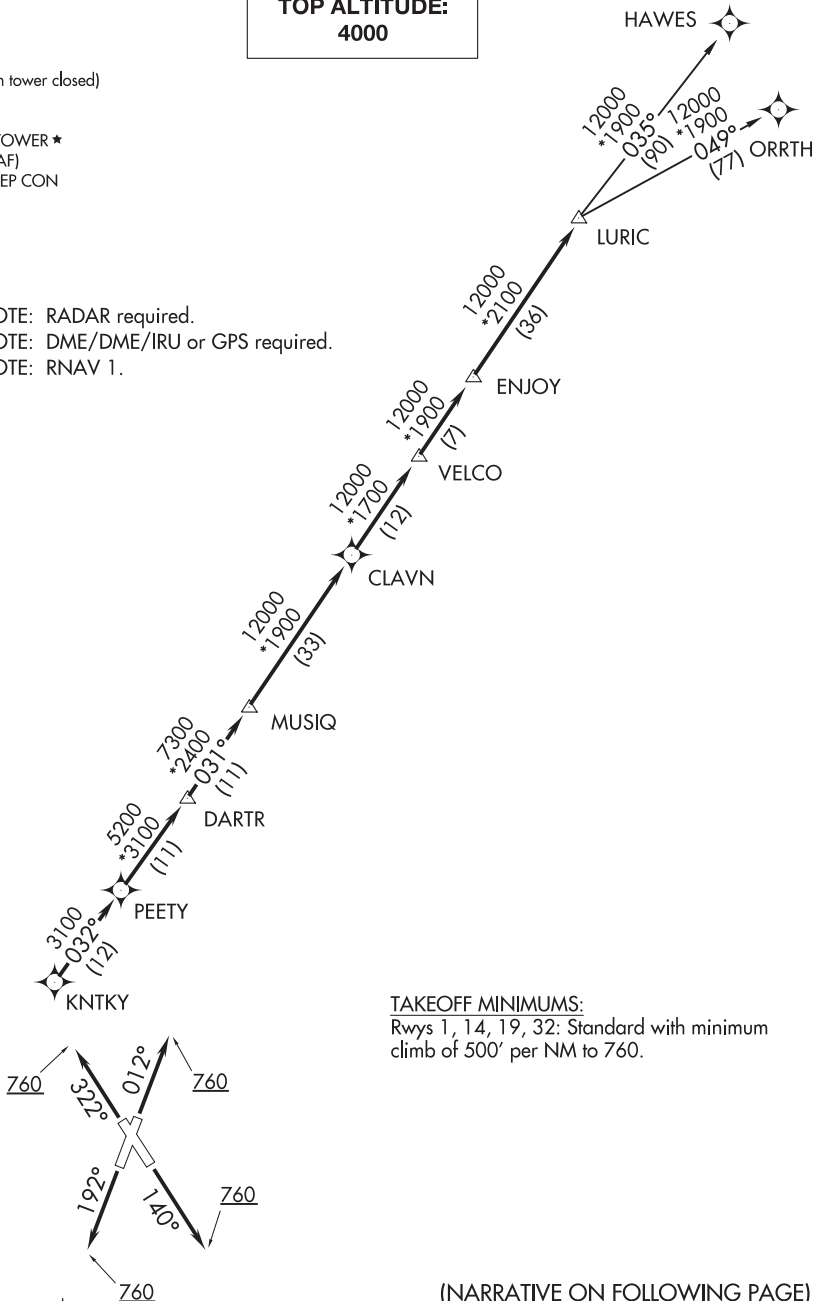
LONE STAR EXECUTIVE (C'XO)

LURIC FOUR DEPARTURE (RNAV)

ATIS
 118.325
 CLINC DEL
 120.45
 119.55 (when tower closed)
 GND CON
 120.45
 LONE STAR TOWER ★
 124.125 (CTAF)
 HOUSTON DEP CON
 119.7 281.4

**TOP ALTITUDE:
 4000**

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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1: Climb heading 012° to 760, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 14: Climb heading 140° to 760, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 19: Climb heading 192° to 760, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 32: Climb heading 322° to 760, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

TAKEOFF OBSTACLE NOTES:

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL. Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

SL-5573 (FAA)

HOUSTON, TEXAS

210Z NAV 01 910Z VON 10 10 'S-CS

ATIS
118.325
CLINC DEL
120.45
120.45
119.55 (when tower closed)
GND CON
120.45

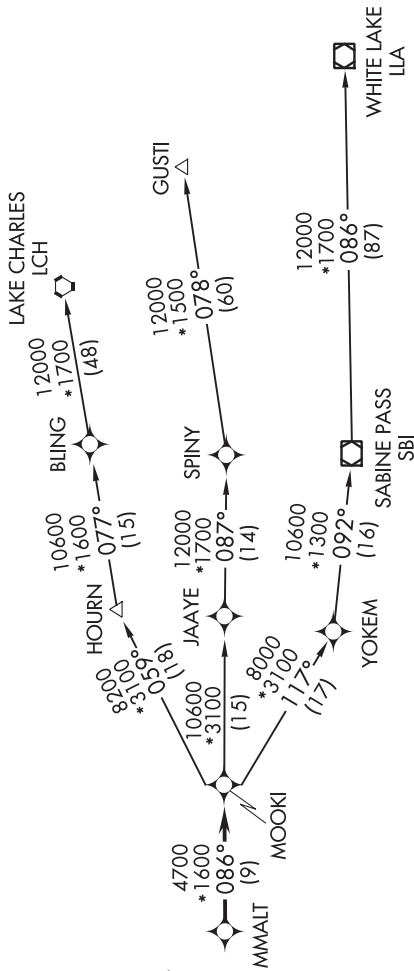
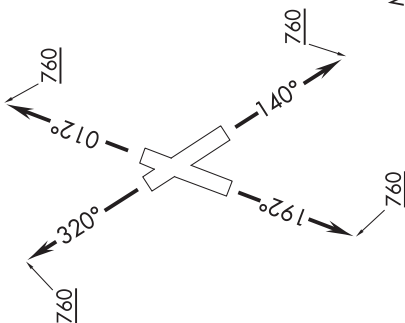
★ LONE STAR TOWER
124.125 (CTAF)
HOUSTON DEP CON
119.7 281.4



TAKEOFF MINIMUMS:

Rwy 1, 14, 19, 32:
Standard with minimum
climb of 500' per NM to 760.

TOP ALTITUDE:
4000



NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

NOTE: RNAV 1.

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

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1: Climb on heading 012° to 760, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 14: Climb on heading 140° to 760, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 19: Climb on heading 192° to 760, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 32: Climb on heading 320° to 760, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

TAKEOFF OBSTACLE NOTES:

Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.

Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL. Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.

Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.

Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS 118.325
CLNC DEL 120.45
119.55 (when tower closed)
GND CON 120.45

LONE STAR TOWER *
124.125 (CTAF)
HOUSTON DEP CON
119.7 281.4

TAKEOFF MINIMUMS:
Rwys 1, 14, 19, 32: Standard.

TOP ALTITUDE:
4000

HOBBY
117.1 HUB
Chan 118

EAGLE LAKE
116.4 ELA
Chan 111

SAN ANTONIO
116.8 SAT
Chan 115
N29°38.64'-W98°27.68'
L-19, H-7

FORT STOCKTON
116.9 FST
Chan 116
N30°57.13'
W102°58.54'
L-19, H-6

ROCKSPRINGS
111.2 RSG
Chan 49
N30°00.88'-W100°17.99'

FL180
283°
(130)

FL180
338°
(70)

FL180
259°
(51)

FL180
253°
(99)

FL180
219°
(37)

SKUBA
N29°11.72'
W95°47.47'
L-19-21, H-7

COTUILA
115.8 COT
Chan 105
N28°27.72'-W99°07.11'

THREE RIVERS
111.4 THX
Chan 51
N28°30.30'-W98°09.03'

PALACIOS
117.3 PSX
Chan 120
N28°45.87'-W96°18.37'



(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required
NOTE: Chart not to scale

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

TAKEOFF OBSTACLE NOTES:

- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

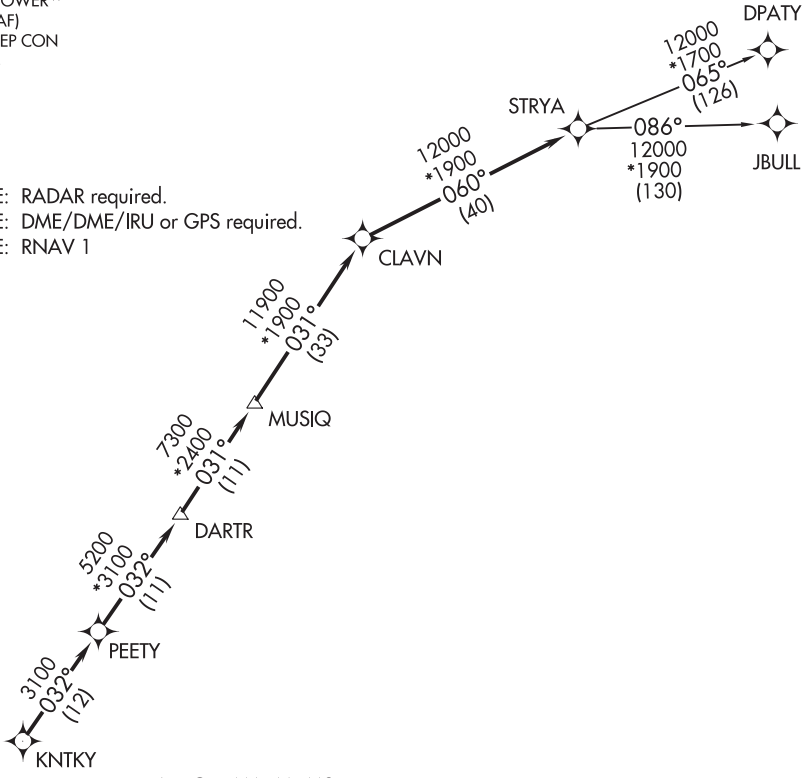
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

ATIS
118.325
CLINC DEL
120.45
119.55 (when tower closed)
GND CON
120.45
LONE STAR TOWER *
124.125 (CTAF)
HOUSTON DEP CON
119.7 281.4

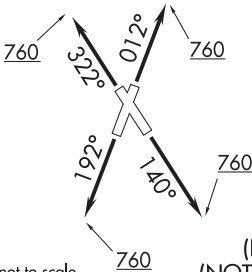
**TOP ALTITUDE:
4000**

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.



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

NOTE: Chart not to scale.

STRYA FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1: Climb heading 012° to 760, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 14: Climb heading 140° to 760, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 19: Climb heading 192° to 760, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 32: Climb heading 322° to 760, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

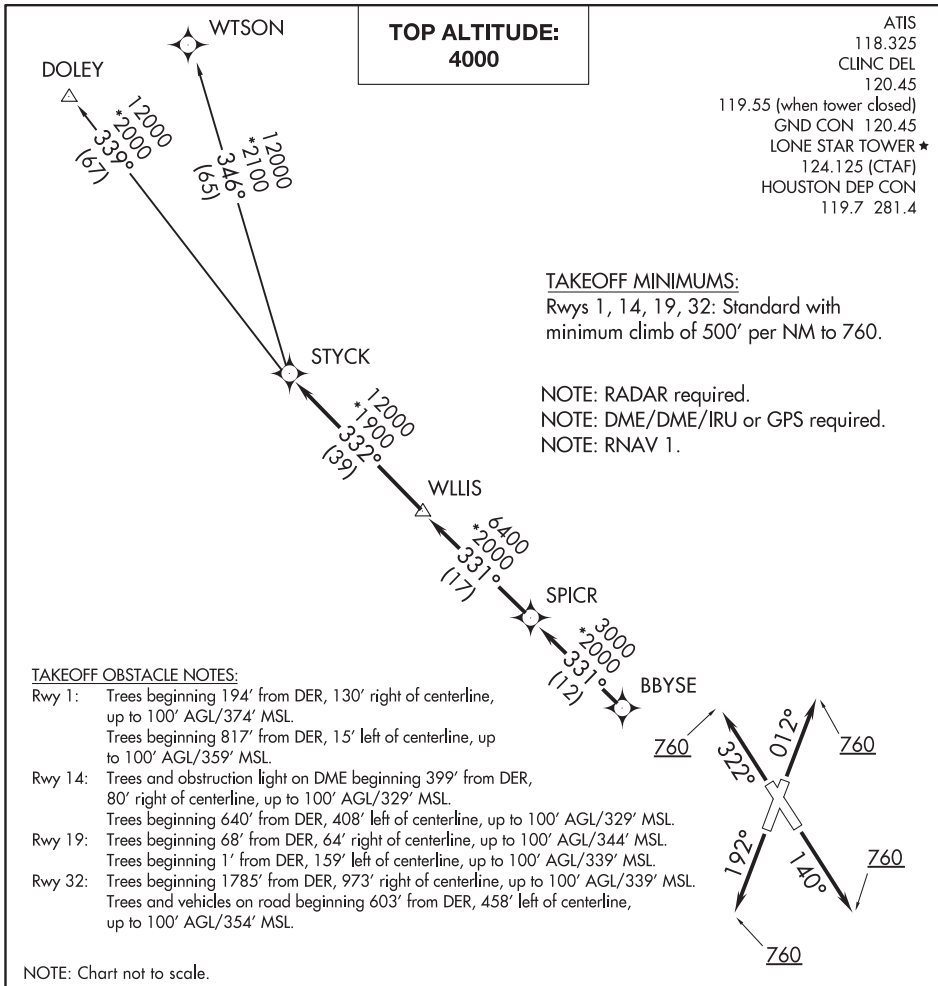
- Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.
Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.
- Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.
Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.
- Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.
Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.
- Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.
Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

DEPARTURE ROUTE DESCRIPTION

- TAKEOFF RWY 1: Climb heading 012° to 760, expect RADAR vectors to BBYSE, thence. . .
- TAKEOFF RWY 14: Climb heading 140° to 760, expect RADAR vectors to BBYSE, thence. . .
- TAKEOFF RWY 19: Climb heading 192° to 760, expect RADAR vectors to BBYSE, thence. . .
- TAKEOFF RWY 32: Climb heading 322° to 760, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

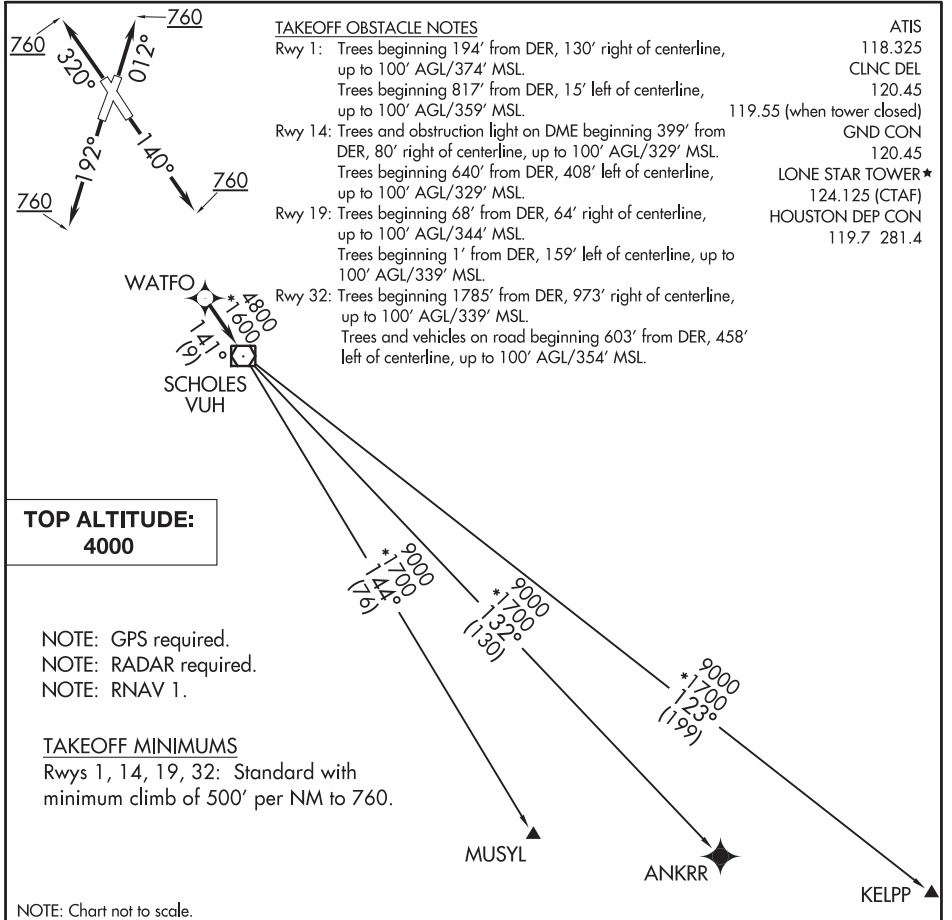
- DOLEY TRANSITION (STYCK4.DOLEY)
- WTSON TRANSITION (STYCK4.WTSON)

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

HOUSTON, TEXAS
LONE STAR EXECUTIVE (C XO)

WATFO THREE DEPARTURE (RNAV)



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

DEPARTURE ROUTE DESCRIPTION

- TAKEOFF RWY 1: Climb on heading 012° to 760, expect RADAR vectors to WATFO, thence . . .
- TAKEOFF RWY 14: Climb on heading 140° to 760, expect RADAR vectors to WATFO, thence . . .
- TAKEOFF RWY 19: Climb on heading 192° to 760, expect RADAR vectors to WATFO, thence . . .
- TAKEOFF RWY 32: Climb on heading 320° to 760, expect RADAR vectors to WATFO, thence . . .

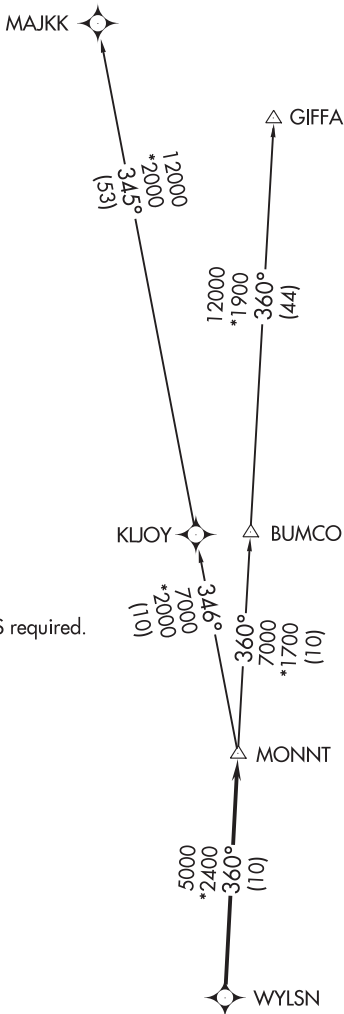
. . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

- ANKRR TRANSITION (WATFO3.ANKRR):
- KELPP TRANSITION (WATFO3.KELPP):
- MUSYL TRANSITION (WATFO3.MUSYL):

WYLSN FOUR DEPARTURE (RNAV)

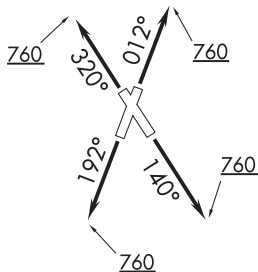
**TOP ALTITUDE:
4000**

ATIS
 118.325
 CLINC DEL
 120.45
 119.55 (when tower closed)
 GND CON
 120.45
 LONE STAR TOWER ★
 124.125 (CTAF)
 HOUSTON DEP CON
 119.7 281.4



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

TAKEOFF MINIMUMS:
 Rwy's 1, 14, 19, 32: Standard with
 minimum climb of 500' per NM to 760.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

WYLSN FOUR DEPARTURE (RNAV)

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 1: Climb on heading 012° to 760, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 14: Climb on heading 140° to 760, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 19: Climb on heading 192° to 760, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 32: Climb on heading 320° to 760, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJJK)

TAKEOFF OBSTACLE NOTES:

Rwy 1: Trees beginning 194' from DER, 130' right of centerline, up to 100' AGL/374' MSL.

Trees beginning 817' from DER, 15' left of centerline, up to 100' AGL/359' MSL.

Rwy 14: Trees and obstruction light on DME beginning 399' from DER, 80' right of centerline, up to 100' AGL/329' MSL.

Trees beginning 640' from DER, 408' left of centerline, up to 100' AGL/329' MSL.

Rwy 19: Trees beginning 68' from DER, 64' right of centerline, up to 100' AGL/344' MSL.

Trees beginning 1' from DER, 159' left of centerline, up to 100' AGL/339' MSL.

Rwy 32: Trees beginning 1785' from DER, 973' right of centerline, up to 100' AGL/339' MSL.

Trees and vehicles on road beginning 603' from DER, 458' left of centerline, up to 100' AGL/354' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 93621 W32A	APP CRS 322°	Rwy Idg 4313 TDZE 43 Apt Elev 44
--	------------------------	---

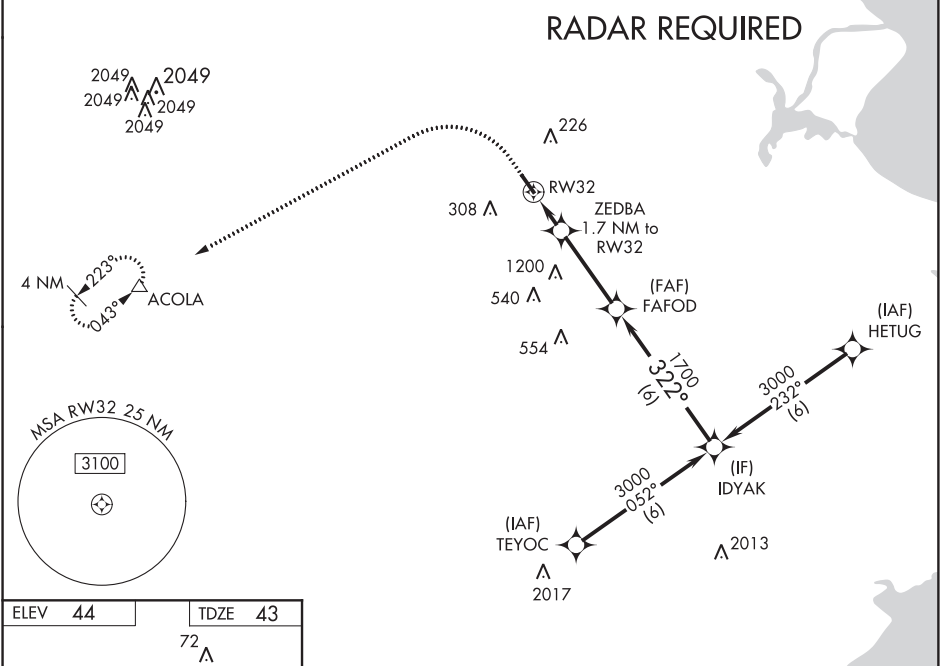
RNAV (GPS) RWY 32

PEARLAND RGNL (L V J)

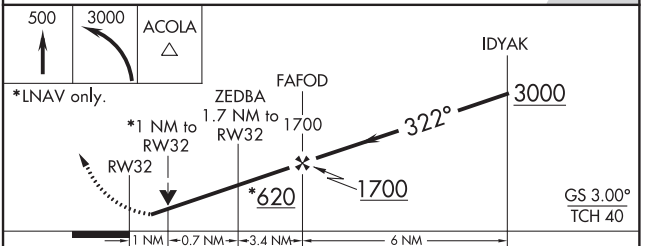
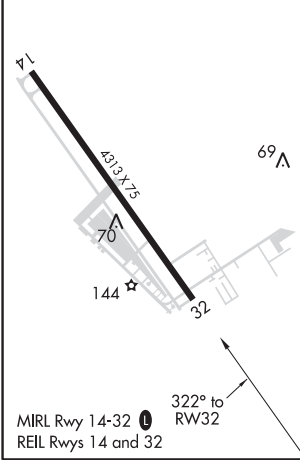
⚠ Circling to Rwy 14 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C (31°F) or above 54°C (130°F). When local altimeter setting not received, use William P Hobby altimeter setting and increase all DA 18 feet and all MDA 20 feet, increase LNAV/VNAV visibilities all Cats 1/8 mile. VDP and Baro-VNAV NA when using William P Hobby altimeter setting. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 3/4 SM NA.

MISSED APPROACH: Climb to 500 then climbing left turn to 3000 direct ACOLA and hold.

ASOS 118.525	HOUSTON APP CON 134.45 284.0	CLNC DEL 124.0	UNICOM 122.8 (CTAF) 1
------------------------	--	--------------------------	---------------------------------



ELEV 44	TDZE 43
----------------	----------------



CATEGORY	A	B	C	D
LPV DA	293-7/8	250 (300-7/8)		NA
LNAV/VNAV DA	310-7/8	267 (300-7/8)		NA
LNAV MDA	400-1	357 (400-1)		NA
C CIRCLING	500-1 456 (500-1)	660-1 616 (700-1)		NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-6460 (FAA)

14149

VOR/DME MHF 113.6 Chan 83	APP CRS 260°	Rwy Idg TDZE Apt Elev	N/A N/A 44
---	------------------------	-----------------------------	---------------------------------------

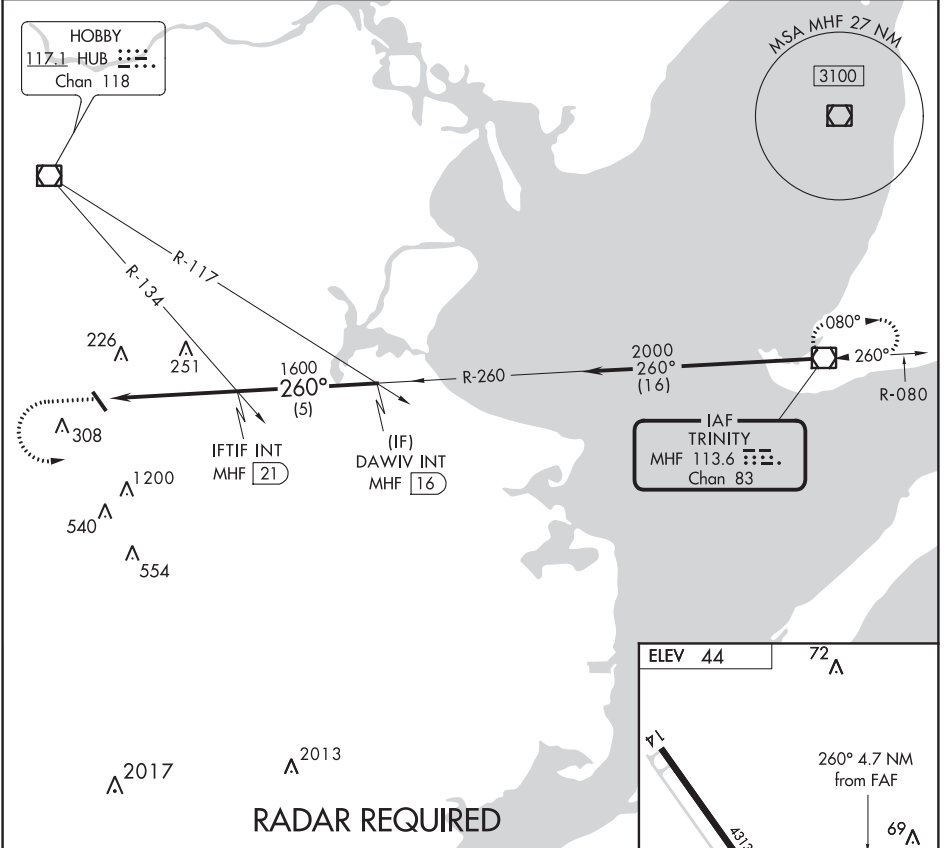
VOR-B

HOUSTON/ PEARLAND RGNL (L,V,J)

⚠ Circling to Rwy 14 NA at night. When local altimeter setting not received, use Houston/William P. Hobby altimeter setting and increase all MDA 20 feet.

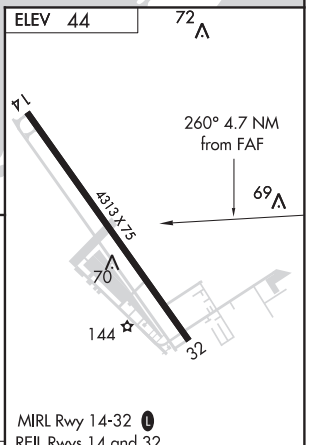
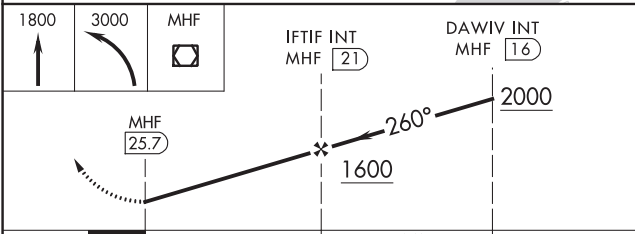
MISSED APPROACH: Climb to 1800 then climbing left turn to 3000 direct MHF VOR/DME and hold.

ASOS 118.525	HOUSTON APP CON 134.45 284.0	CLNC DEL 124.0	UNICOM 122.8 (CTAF) 0
------------------------	--	--------------------------	--



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D	FAF to MAP 4.7 NM					
CIRCLING	520-1 476 (500-1)	520-1¼ 476 (500-1¼)		NA	Knots	60	90	120	150	180
					Min:Sec	4:42	3:08	2:21	1:53	1:34

HOUSTON, TEXAS
Amdt 1A 16DEC10

29°31'N-95°15'W

HOUSTON/ PEARLAND RGNL (L,V,J)

VOR-B

(BLTWY3.BLTWY) 16315

SL-6460 (FAA)

PEARLAND RGNL (L V J)
HOUSTON, TEXAS

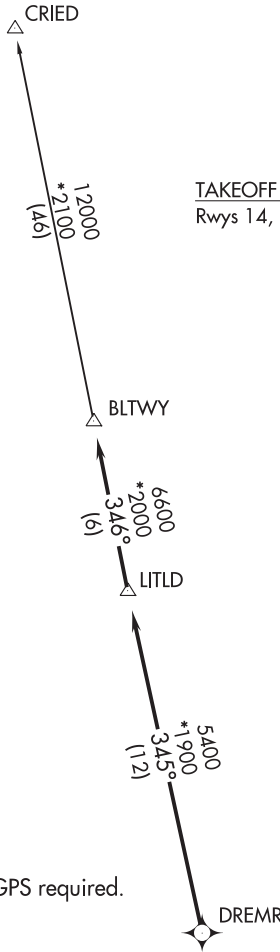
BLTWY THREE DEPARTURE (RNAV)

ASOS
118.525
CLNC DEL
124.0
CTAF
122.8
HOUSTON DEP CON
134.45 284.0

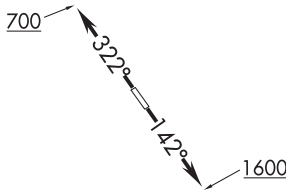
**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS

Rwys 14, 32: Standard with minimum climb of 500' per NM to 560.



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



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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

HOUSTON, TEXAS
PEARLAND RGNL (L V J)

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 142° to 1600, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 32: Climb heading 322° to 700, expect RADAR vectors to DREMR, thence

...on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

TAKEOFF OBSTACLE NOTES

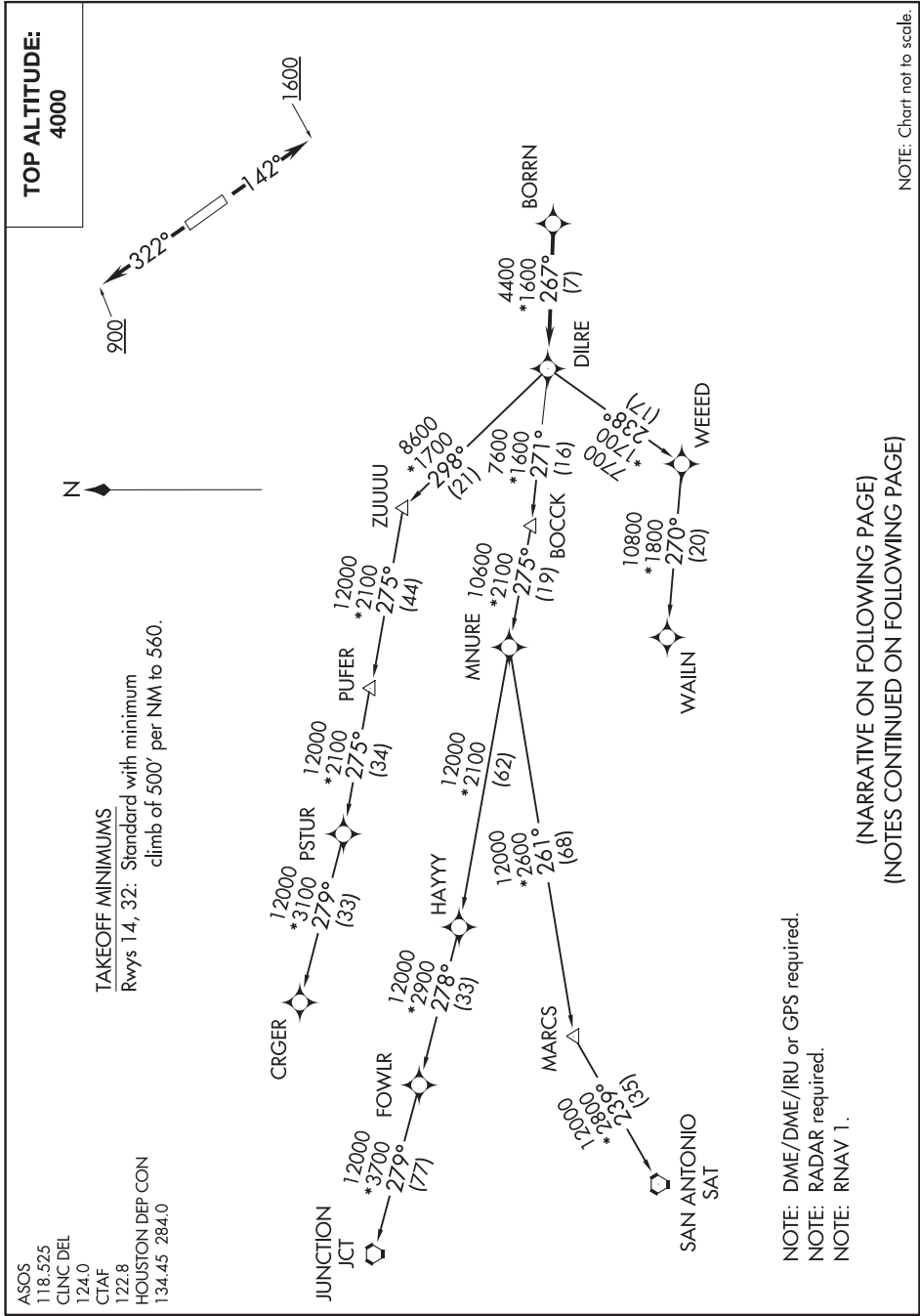
- Rwy 14: Vehicles on road beginning 11' from DER, 450' right of centerline, up to 15' AGL/54' MSL.
Hangers 99' from DER, 521' left of centerline, up to 13' AGL/53' MSL.
Trees beginning 102' from DER, 328' left of centerline, up to 27' AGL/71' MSL.
Trees beginning 199' from DER, 307' right of centerline, 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, 107' 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017



NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 142° to 1600, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 32: Climb on heading 322° to 900, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

TAKEOFF OBSTACLE NOTES

- Rwy 14: Multiple trees beginning 199' from DER, 226' right of centerline, up to 66' AGL/100' MSL.
Vehicle on road 398' from DER, 405' left of centerline, 9' AGL/55' MSL.
Trees 1287' from DER, 453' left of centerline, up to 56' AGL/90' MSL.
- Rwy 32: Multiple trees beginning 690' from DER, 81' left of centerline, up to 79' AGL/128' MSL.
Multiple poles beginning 745' from DER, 24' left of centerline, up to 40' AGL/80' MSL.
Multiple trees and poles beginning 29' from DER, 11' right of centerline, up to 64' AGL/104' MSL.
Building 237' from DER, 520' right of centerline, 32' AGL/72' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)

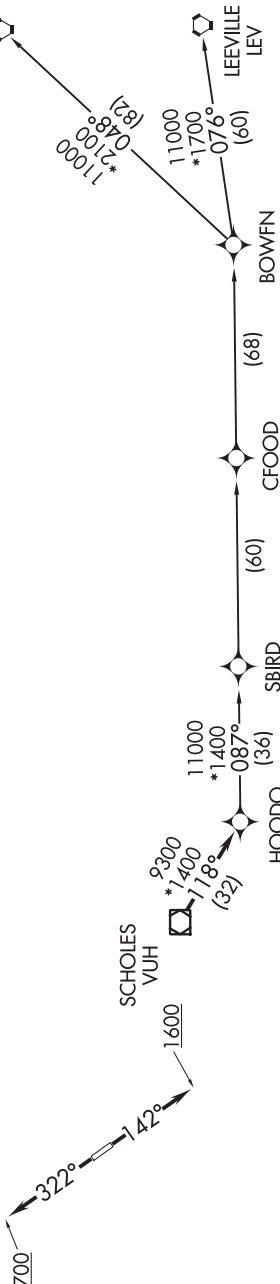
SC-5, 10 NOV 2016 to 05 JAN 2017

ASOS
118.525
CLNC DEL
124.0
CTAF
122.8
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**



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



TAKEOFF MINIMUMS

Rwys 14, 32: Standard with minimum climb of 500' per NM to 560.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 142° to 1600, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 32: Climb heading 322° to 700, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

Rwy 14: Vehicles on road beginning 11' from DER, 450' right of centerline, up to 15' AGL/54' MSL.

Hangers 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, 107' 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.

(INDIE4.INDIE) 16315

SL-6460 (FAA)

PEARLAND RGNL (LVJ)
HOUSTON, TEXAS

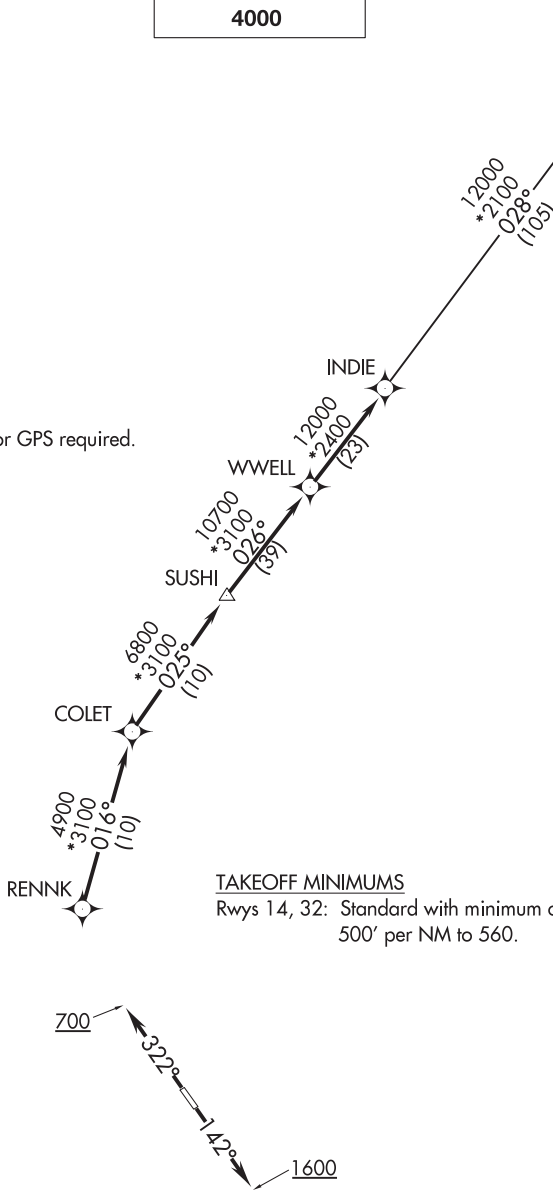
INDIE FOUR DEPARTURE (RNAV)

ASOS
118.525
CLNC DEL
124.0
CTAF
122.8
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

TPAKK

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



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

NOTE: Chart not to scale.

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

INDIE FOUR DEPARTURE (RNAV)
(INDIE4.INDIE) 10NOV16

HOUSTON, TEXAS
PEARLAND RGNL (LVJ)

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 142° to 1600, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 32: Climb heading 322° to 700, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF OBSTACLE NOTES

- Rwy 14: Vehicles on road beginning 11' from DER, 450' right of centerline, up to 15' AGL/54' MSL.
Hangers 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, 107' 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

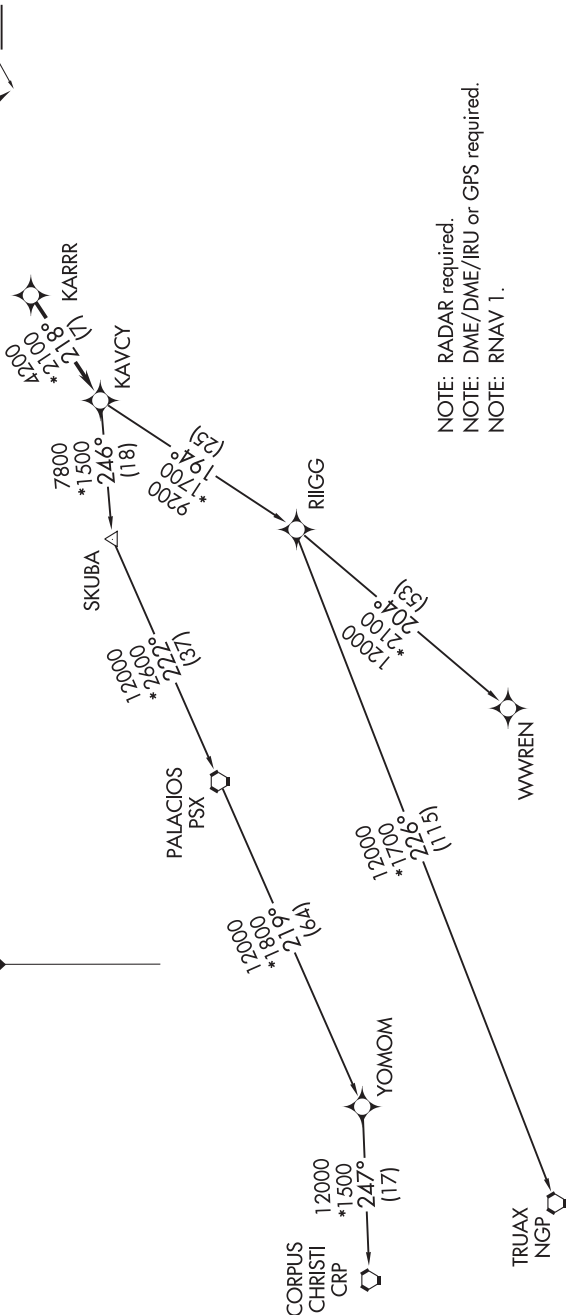
SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS
Rwys 14, 32: Standard with minimum climb of 500' per NM to 560.

ASOS 118.525
CLNC DEL 124.0
HOUSTON DEP CON 134.45 284.0
CTAF 122.8



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

NOTE: Chart not to scale.

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

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 142° to 1600, expect radar vectors to KARRR, thence

TAKEOFF RWY 32: Climb on heading 322° to 900, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

TAKEOFF OBSTACLE NOTES:

Rwy 14: Multiple trees beginning 199' from DER, 226' right of centerline, up to 66' AGL/100' MSL.
Vehicle on road 398' from DER, 405' left of centerline, 9' AGL/55' MSL.
Trees 1287' from DER, 453' left of centerline, up to 56' AGL/90' MSL.

Rwy 32: Multiple trees beginning 690' from DER, 81' left of centerline, up to 79' AGL/128' MSL.
Multiple poles beginning 745' from DER, 24' left of centerline, up to 40' AGL/80' MSL.
Multiple trees and poles beginning 29' from DER, 11' right of centerline, up to 64' AGL/104' MSL.
Building 237' from DER, 520' right of centerline, 32' AGL/72' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

SL-6460 (FAA)

PEARLAND RGNL (L.VJ)

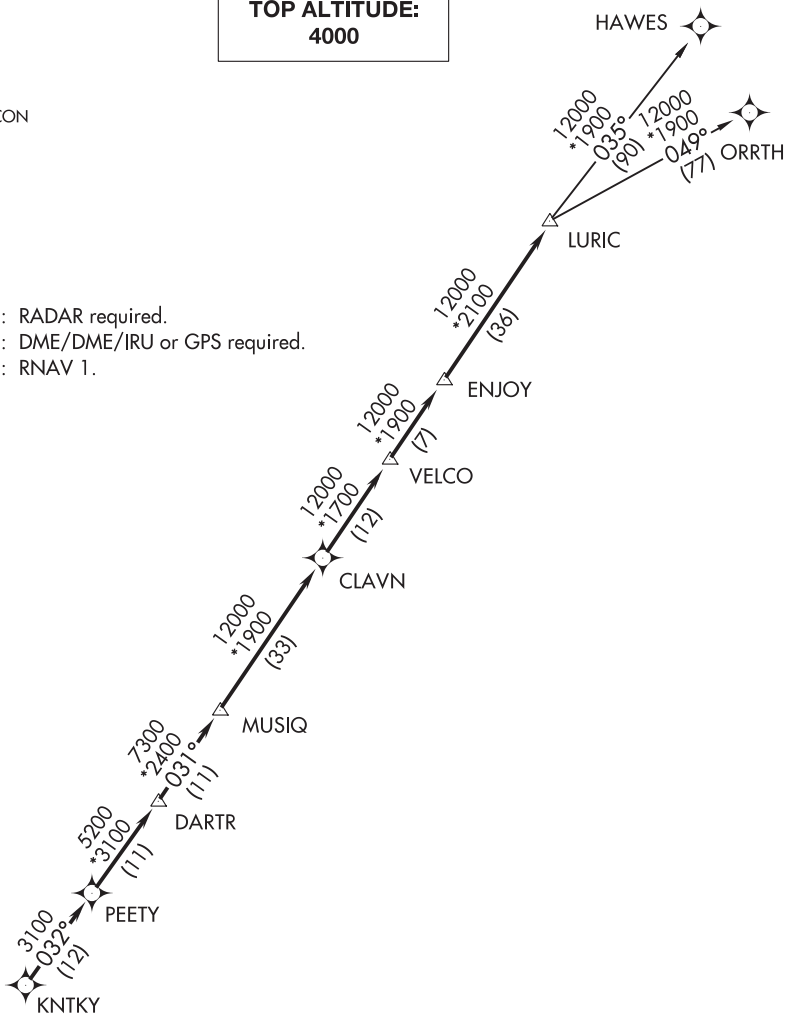
LURIC FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

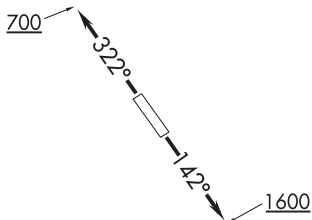
ASOS
118.525
CLNC DEL
124.0
CTAF
122.8
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

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.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)

(LURIC4.LURIC) 10NOV16

HOUSTON, TEXAS

PEARLAND RGNL (L.VJ)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 142° to 1600, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 32: Climb heading 322° to 700, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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, 107' 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

SL-6460 (FAA)

HOUSTON, TEXAS

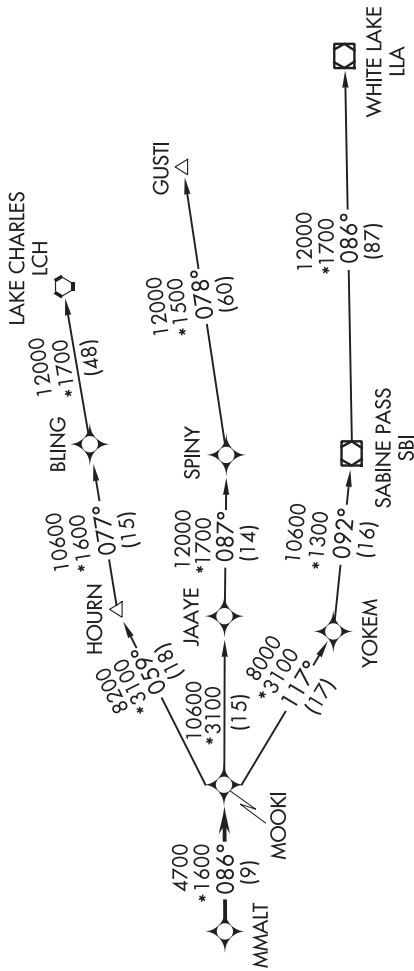
2102 NAV 01 9102 VON 10 10 'S-CS

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:

Rwys 14, 32: Standard with minimum climb of 500' per NM to 560.

ASOS
118.525
CLNC DEL
124.0
CTAF
122.8
HOUSTON DEP CON
134.45 284.0

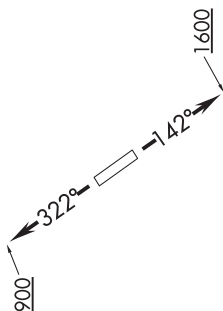


NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

NOTE: RNAV 1.

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



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 142° to 1600, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 32: Climb on heading 322° to 900, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

TAKEOFF OBSTACLE NOTES:

- Rwy 14: Multiple trees beginning 199' from DER, 226' right of centerline, up to 66' AGL/100' MSL.
Vehicle on road 398' from DER, 405' left of centerline, 9' AGL/55' MSL.
Trees 1287' from DER, 453' left of centerline, up to 56' AGL/90' MSL.
- Rwy 32: Multiple trees beginning 690' from DER, 81' left of centerline, up to 79' AGL/128' MSL.
Multiple poles beginning 745' from DER, 24' left of centerline, up to 40' AGL/80' MSL.
Multiple trees and poles beginning 29' from DER, 11' right of centerline, up to 64' AGL/104' MSL.
Building 237' from DER, 520' right of centerline, 32' AGL/72' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(STRYA4.STRYA) 16315

SL-6460 (FAA)

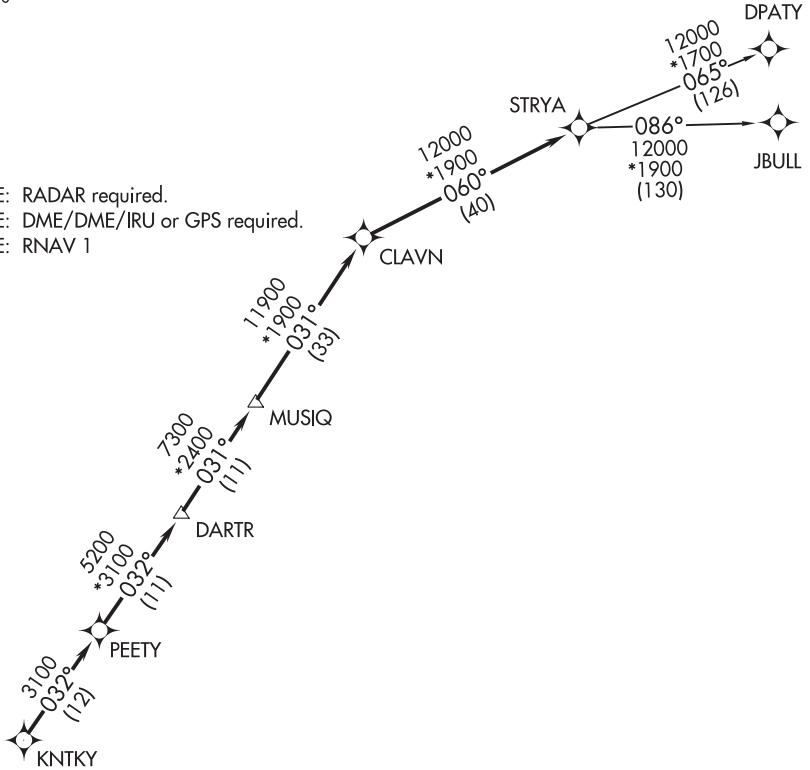
PEARLAND RGNL (L.VJ)
HOUSTON, TEXAS

STRYA FOUR DEPARTURE (RNAV)

ASOS
118.525
CLNC DEL
124.0
CTAF
122.8
HOUSTON DEP CON
134.45 284.0

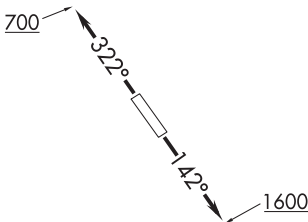
**TOP ALTITUDE:
4000**

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.



NOTE: Chart not to scale.

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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

(STRYA4.STRYA) 10NOV16

HOUSTON, TEXAS
PEARLAND RGNL (L.VJ)

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 142° to 1600, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 32: Climb heading 322° to 700, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

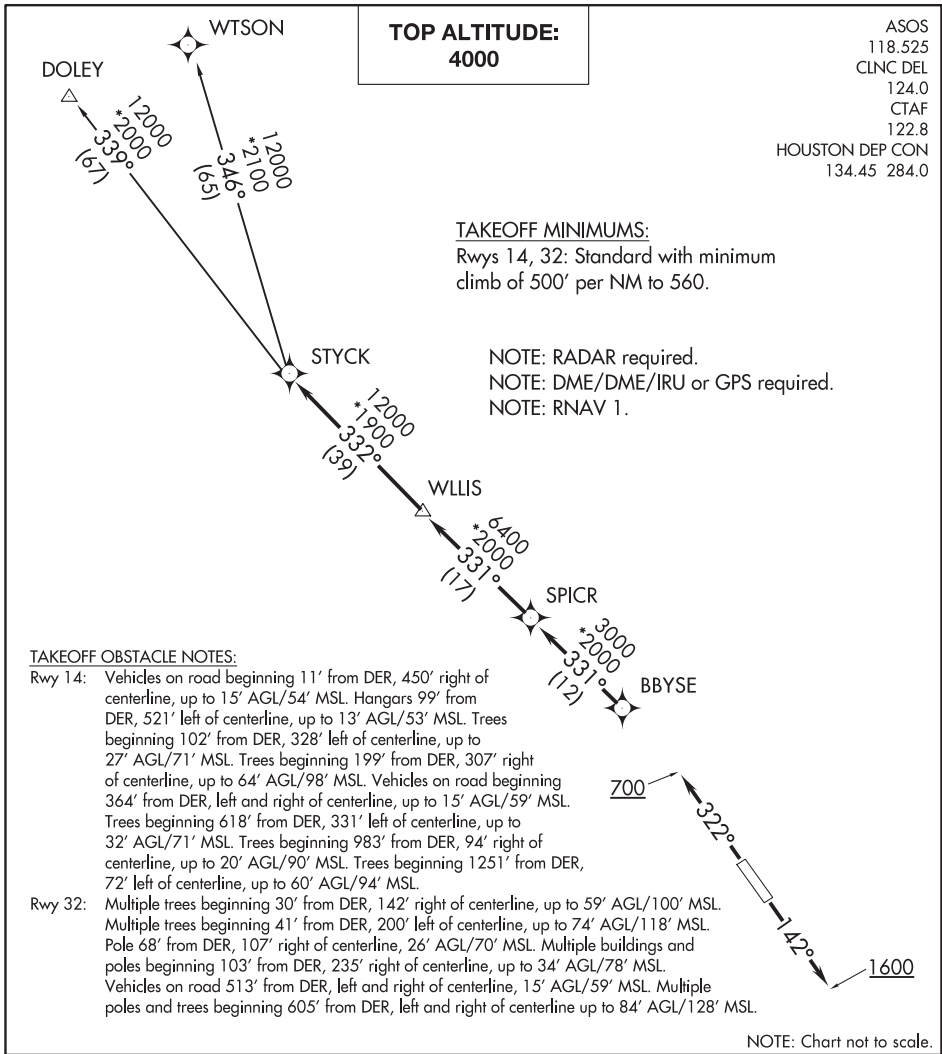
- Rwy 14: Vehicles on road beginning 11' from DER, 450' right of centerline, up to 15' AGL/54' MSL.
Hangers 99' from DER, 521' left of centerline, up to 13' AGL/53' MSL.
Trees beginning 102' from DER, 328' left of centerline, up to 27' AGL/71' MSL.
Trees beginning 199' from DER, 307' right of centerline, 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, 107' 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 142° to 1600, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 32: Climb heading 322° to 700, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

HOUSTON, TEXAS

PEARLAND RGNL (L.V.J)

WATFO THREE DEPARTURE (RNAV)

TAKEOFF OBSTACLE NOTES

Rwy 14: Multiple trees beginning 199' from DER, 226' right of centerline, up to 66' AGL/100' MSL.

Vehicle on road 398' from DER, 405' left of centerline, 9' AGL/55' MSL.

Trees 1287' from DER, 453' left of centerline, up to 56' AGL/90' MSL.

Rwy 32: Multiple trees beginning 690' from DER, 81' left of centerline, up to 79' AGL/128' MSL.

Multiple poles beginning 745' from DER, 24' left of centerline, up to 40' AGL/80' MSL.

Multiple trees and poles beginning 29' from DER, 11' right of centerline, up to 64' AGL/104' MSL.

Building 237' from DER, 520' right of centerline, 32' AGL/72' MSL.

ASOS
118.525
CLNC DEL
124.0
HOUSTON DEP CON
134.45 284.0
CTAF
122.8

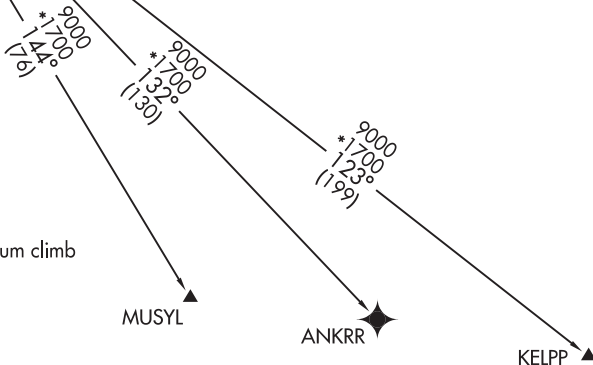


TOP ALTITUDE:
4000

NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS

Rwys 14, 32: Standard with minimum climb of 500' per NM to 560.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 140° to 1600, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 32: Climb on heading 320° to 900, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

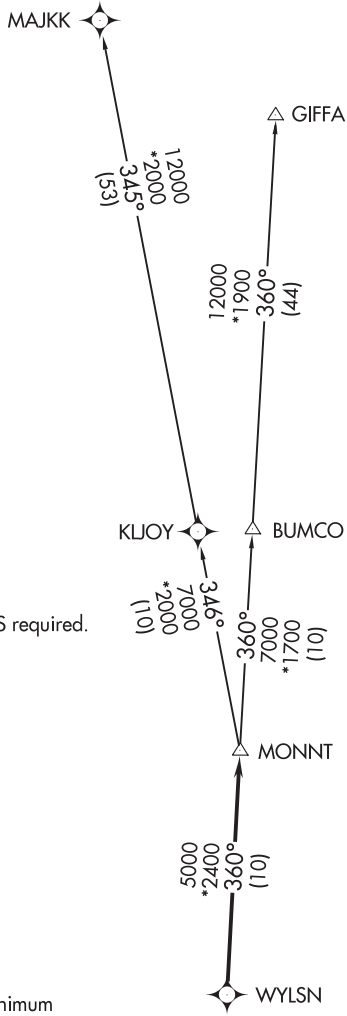
MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

WYLSN FOUR DEPARTURE (RNAV)

ASOS
 118.525
 CLNC DEL
 124.0
 CTAF
 122.8
 HOUSTON DEP CON
 134.45 284.0

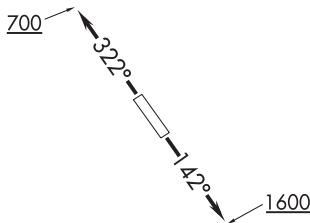
**TOP ALTITUDE:
 4000**



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.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

WYLSN FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 142° to 1600, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 32: Climb on heading 322° to 700, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJJK)

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, 107' 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-TXH 110.7 Chan 44	APP CRS 350°	Rwy Idg TDZE Apt Elev	6016 78 82
---	------------------------	-----------------------------	---------------------------------------

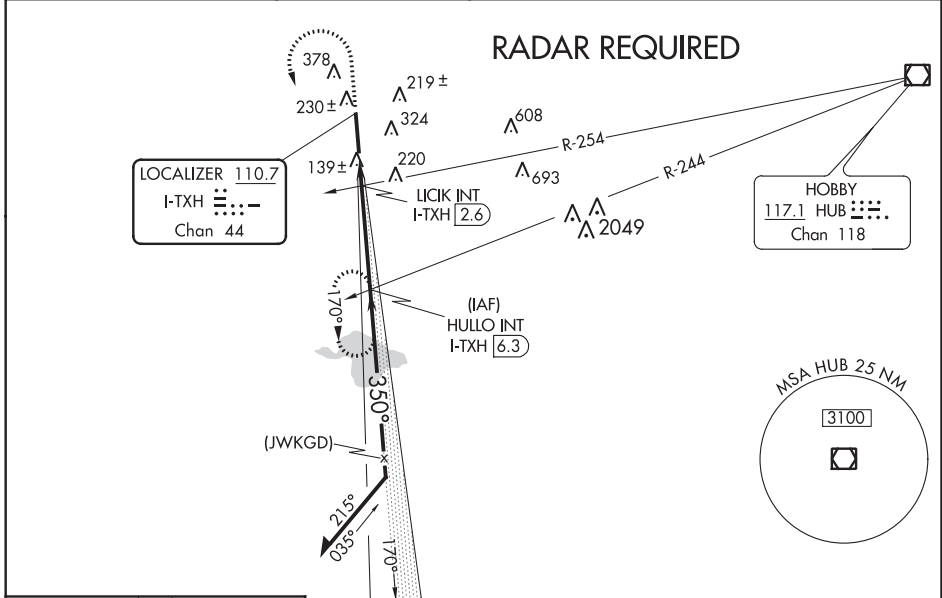
ILS or LOC RWY 35

SUGAR LAND RGNL (SGR)

⚠ When VGSI inop, Circling Rwy 17 NA at night. When local altimeter setting not received, use William P Hobby altimeter setting: increase DA 51 feet; increase all MDA 60 feet and increase S-LOC 35 visibility Cats C/D to 1½, Circling Cat C to 2, Cat D to 2¼, and LICK Fix Minimums S-LOC 35 visibility Cats C/D to 1¼, Circling Cat C to 2, Cat D to 2¼. VDP NA when using William P Hobby altimeter setting.

MISSED APPROACH: Climb to 900 then climbing left turn to 2000 on I-TXH south course to HULLO INT/I-TXH 6.3 DME and hold.

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	HOUSTON CLNC DEL 119.25 (When tower closed)	UNICOM 122.95
------------------------	---------------------------------------	---	-------------------------	--------------------------	--	-------------------------



ELEV 82	TDZE 78	900	2000	† 600 when using William P Hobby altimeter setting.
		I-TXH S crs	HULLO INT	HULLO INT I-TXH 6.3
<p>REIL Rwy 17 and 35</p> <p>HIRL Rwy 17-35</p> <p>FAF to MAP 5.2 NM</p>		* LOC only.	LICK INT I-TXH 2.6	Remain within 10 NM
<p>Knots: 60 90 120 150 180</p> <p>Min:Sec: 5:12 3:28 2:36 2:05 1:44</p>		I-TXH 1.1	* I-TXH 1.9	1800
		0.9	0.7	3.7 NM
		A	B	C
CATEGORY		S-ILS 35 278-¾ 200 (200-¾)		
S-LOC 35		540-1	462 (500-1)	540-1¾ 462 (500-1¾)
CIRCLING		720-1	638 (700-1)	720-1¾ 638 (700-1¾) 720-2 638 (700-2)
LICK FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)				
S-LOC 35		400-1 322 (400-1)		
CIRCLING		720-1	638 (700-1)	720-1¾ 638 (700-1¾) 720-2 638 (700-2)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5537 (FAA)

16259

WAAS CH 82513 W17A	APP CRS 170°	Rwy Idg TDZE Apt Elev	7620 82 82
--	------------------------	-----------------------------	---------------------------------------

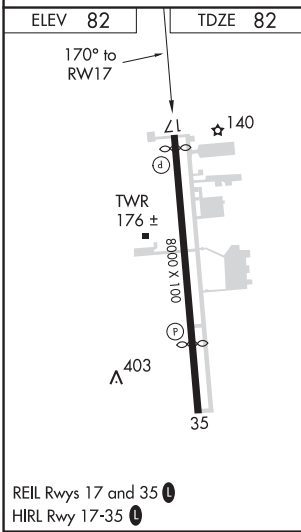
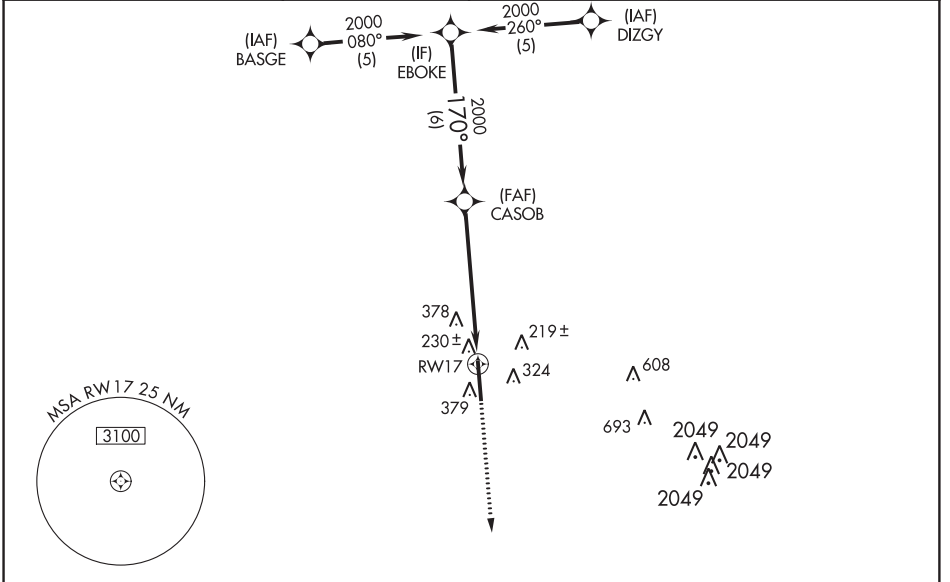
RNAV (GPS) RWY 17

SUGAR LAND RGNL (SGR)

⚠ Baro-VNAV NA when using Houston (William P. Hobby) altimeter setting.
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
 When local altimeter setting not received, use Houston (William P. Hobby) altimeter setting and increase all DA/MDA 60 feet, increase LPV all Cats, LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cats C/D visibility 1/4 mile.

MISSED APPROACH: Climb to 2000 direct POPAM and hold.

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	HOUSTON CLNC DEL 119.25 (When tower closed)	UNICOM 122.95
------------------------	---------------------------------------	--	-------------------------	--------------------------	--	-------------------------



RADAR REQUIRED

POPAM 4 NM, 170°, 350°

EBOKE	CASOB	2000	POPAM
2000	170°	2000	
GP 3.00° TCH 52			RWY 17
VGSI and RNAV glidepath not coincident (VGSI Angle 3.5/TCH 52).			
6 NM		5.8 NM	
CATEGORY	A	B	C
LPV DA	398-1 316 (400-1)		
LNAV/VNAV DA	696-2 614 (700-2)		
LNAV MDA	640-1	558 (600-1)	640-1½ 558 (600-1½)
CIRCLING	720-1	638 (700-1)	720-1¾ 638 (700-1¾)
			640-1¾ 558 (600-1¾)
			720-2 638 (700-2)

HOUSTON, TEXAS
Amdt 2 27AUG09

29°37'N-95°39'W

RNAV (GPS) RWY 17

SUGAR LAND RGNL (SGR)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 56219 W35A	APP CRS 350°	Rwy Idg TDZE 78 Apt Elev 82	6016
--	------------------------	---	-------------

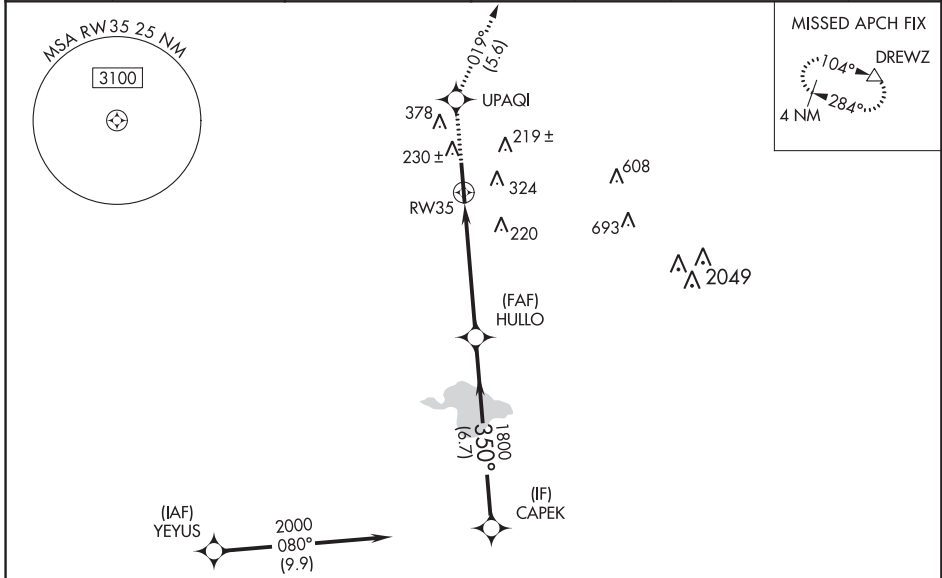
RNAV (GPS) RWY 35

SUGAR LAND RGNL (SGR)

⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F).
⚠ DME/DME RNP-0.3 NA. 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 1¾, LNAV Cat C/D visibility to 1½, and Circling Cat C visibility to 2, Cat D to 2¼. When VGSI inop, Circling Rwy 17 NA at night.

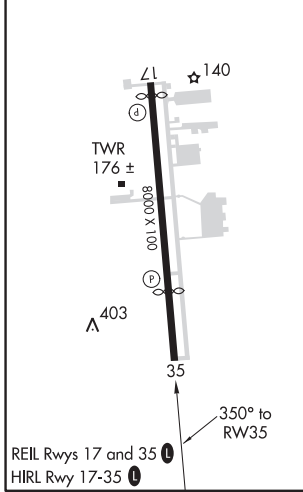
MISSED APPROACH:
 Climb to 2000 direct UPAQI and on track 019° to DREWZ and hold.

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	HOUSTON CLNC DEL 119.25 (When tower closed)	UNICOM 122.95
------------------------	---------------------------------------	--	-------------------------	--------------------------	--	-------------------------



ELEV 82	TDZE 78
----------------	----------------

RADAR REQUIRED



2000	UPAQI	DREWZ	CAPEK	
↑	⬠	tr 019°	△	
* LNAV only.				
* 1.7 NM to RW35		HULLO 1800	2000	
RW35		1800	GP 3.00° TCH 56	
1.7		3.5 NM	6.7 NM	
CATEGORY	A	B	C	D
LPV DA	278-¾		200 (200-¾)	
LNAV/VNAV DA	567-1½		489 (500-1½)	
LNAV MDA	660-1 582 (600-1)		660-1¾ 582 (600-1¾)	
CIRCLING	720-1 638 (700-1)		720-1¾ 638 (700-1¾) 720-2 638 (700-2)	

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HOUSTON, TEXAS

AL-5537 (FAA)

16259

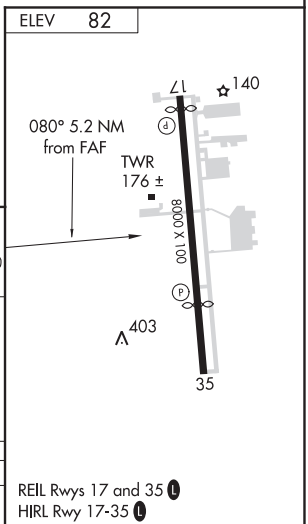
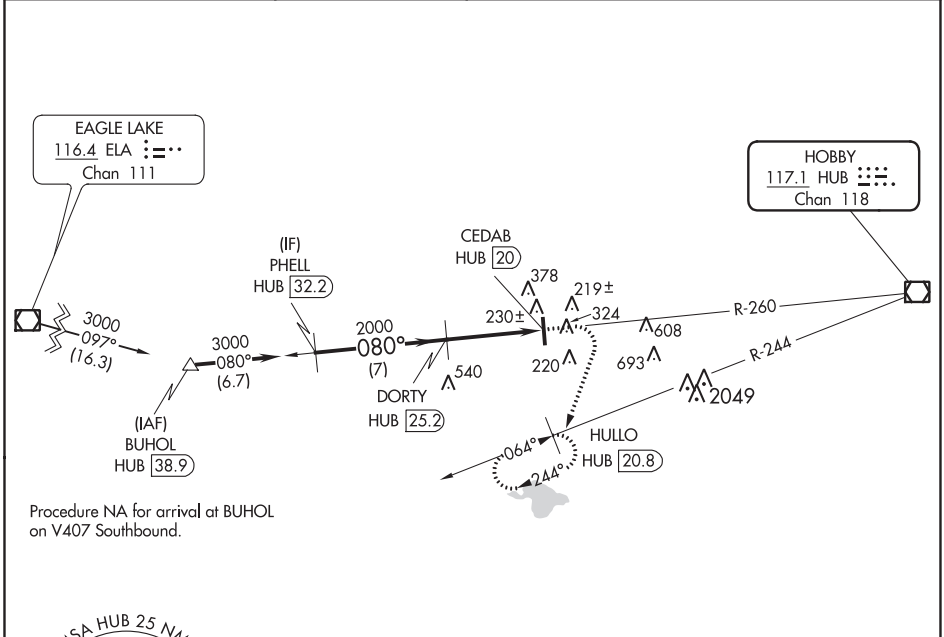
VOR/DME HUB 117.1 Chan 118	APP CRS 080°	Rwy Idg N/A TDZE N/A Apt Elev 82
--	------------------------	---

VOR/DME-A
SUGAR LAND RGNL (SGR)

⚠ When local altimeter setting not received, use William P. Hobby altimeter setting: increase MDA 60 feet and visibility Cat C to 2, Cat D to 2½. When VGSI inop, Circling Rwy 17 NA at night.

⚠ MISSED APPROACH: Climb to 1400 then climbing right turn to 2000 on heading 195° and on HUB VOR/DME R-244 to HULLO/HUB 20.8 DME and hold.

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	HOUSTON CLNC DEL 119.25 (When tower closed)	UNICOM 122.95
------------------------	---------------------------------------	---	-------------------------	--------------------------	--	-------------------------



	PHELL HUB 32.2	DORTY HUB 25.2	CEDAB HUB 20	HULLO HUB 20.8
	3000	2000		
	080°		hdg 195°	
	7 NM		5.2 NM	
CATEGORY	A	B	C	D
CIRCLING	720-1 638 (700-1)		720-1 ¾ 638 (700-1 ¾)	720-2 638 (700-2)

HOUSTON, TEXAS
Amdt 2 09FEB12

29°37'N-95°39'W

SUGAR LAND RGNL (SGR)
VOR/DME-A

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

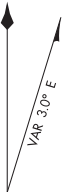
AIRPORT DIAGRAM

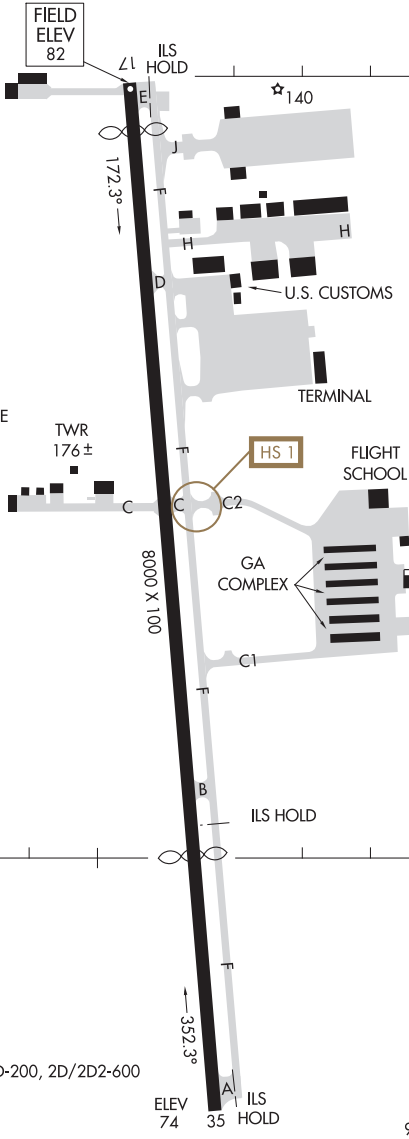
AL-5537 (FAA)

SUGAR LAND RGNL (SGR)
HOUSTON, TEXAS

ATIS ★
 118.125
 SUGAR LAND TOWER ★
 118.65
 GND CON
 121.4
 CLNC DEL
 121.4
 119.25 (When Tower Closed)

29°38'N


 VAR 3.0° E
 JANUARY 2015
 ANNUAL RATE OF CHANGE
 0.1° W



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

403
Λ

RWY 17-35
 S-80, D-120, 2S-152, 2D-200, 2D/2D2-600

95°40'W

29°37'N

95°39'W

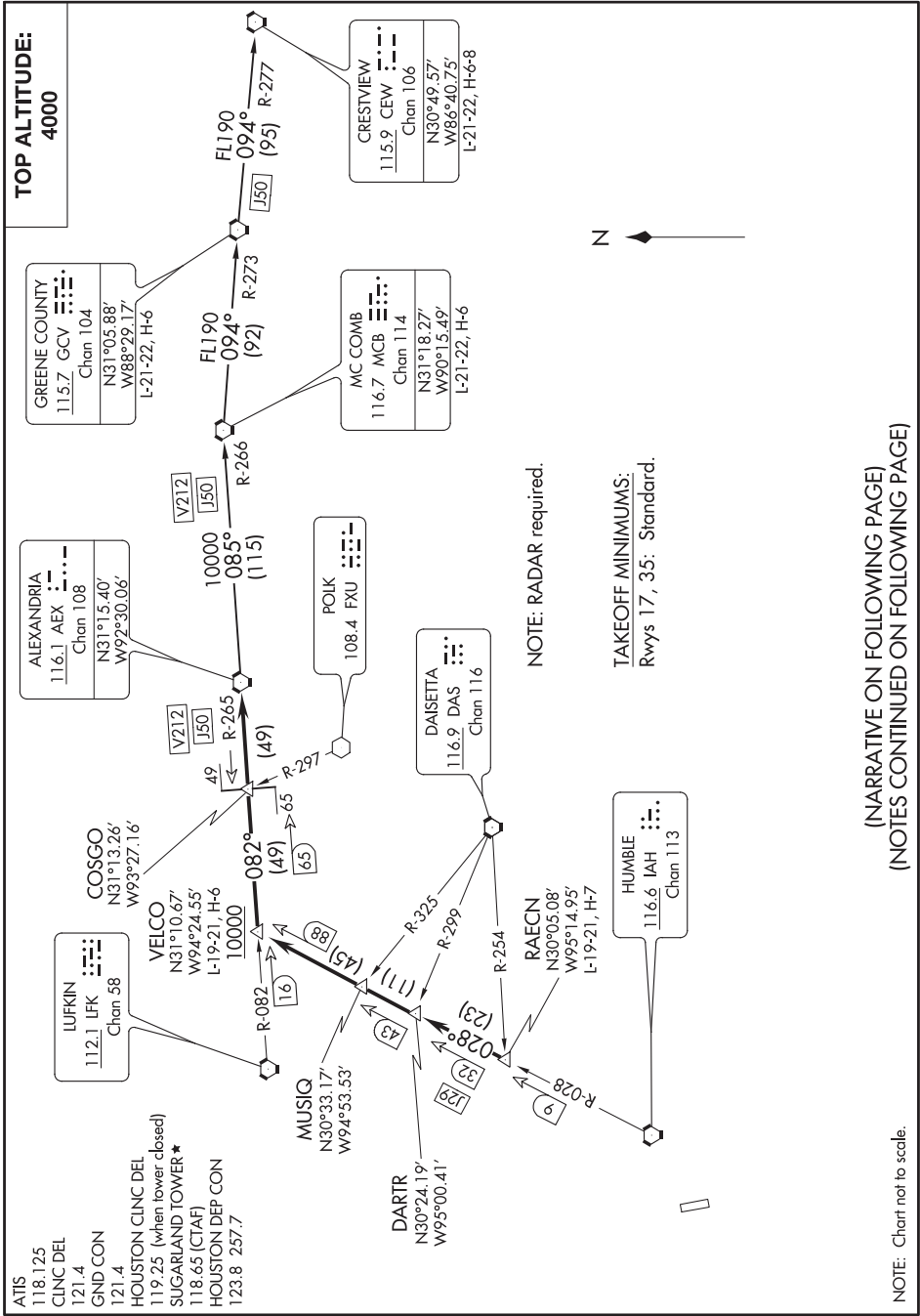
CAUTION: BE ALERT TO ALL RUNWAY CROSSING CLEARANCES.
 READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

HOUSTON, TEXAS
SUGAR LAND RGNL (SGR)

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



ALEXANDRIA NINE DEPARTURE

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

SC-5, 10 NOV 2016 to 05 JAN 2017

NOTE: Chart not to scale.

NOTE: RADAR required.

TAKEOFF MINIMUMS:
Rwys 17, 35: Standard.

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

TAKEOFF OBSTACLE NOTES

Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL. Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

BLTWY THREE DEPARTURE (RNAV)

550
SL-5537 (FAA)

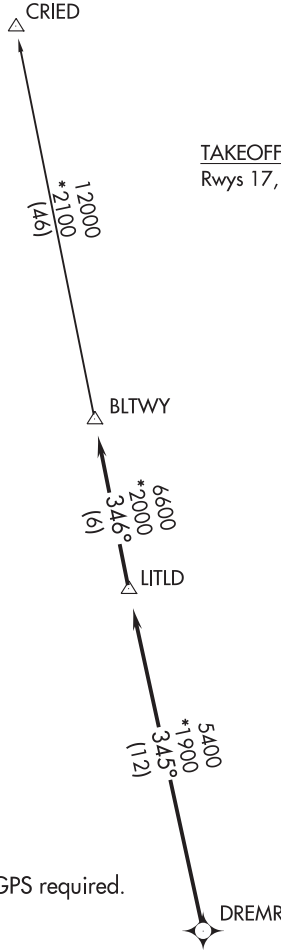
SUGAR LAND RGNL (SGR)
HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

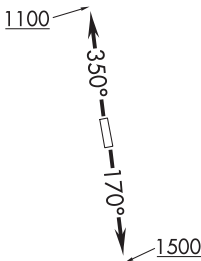
ATIS
118.125
CLNC DEL
121.4
HOUSTON CLNC DEL
119.25 (when tower closed)
GND CON
121.4
SUGARLAND TOWER *
118.65 (CTAF)
HOUSTON DEP CON
123.8 257.7

TAKEOFF MINIMUMS

Rwys 17, 35: Standard with minimum climb
of 500' per NM to 600.



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



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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

HOUSTON, TEXAS
SUGAR LAND RGNL (SGR)

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 170° to 1500, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 35: Climb heading 350° to 1100, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure

CRIED TRANSITION (BLTWY3.CRIED)

TAKEOFF OBSTACLE NOTES

Rwy 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.

Rwy 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.

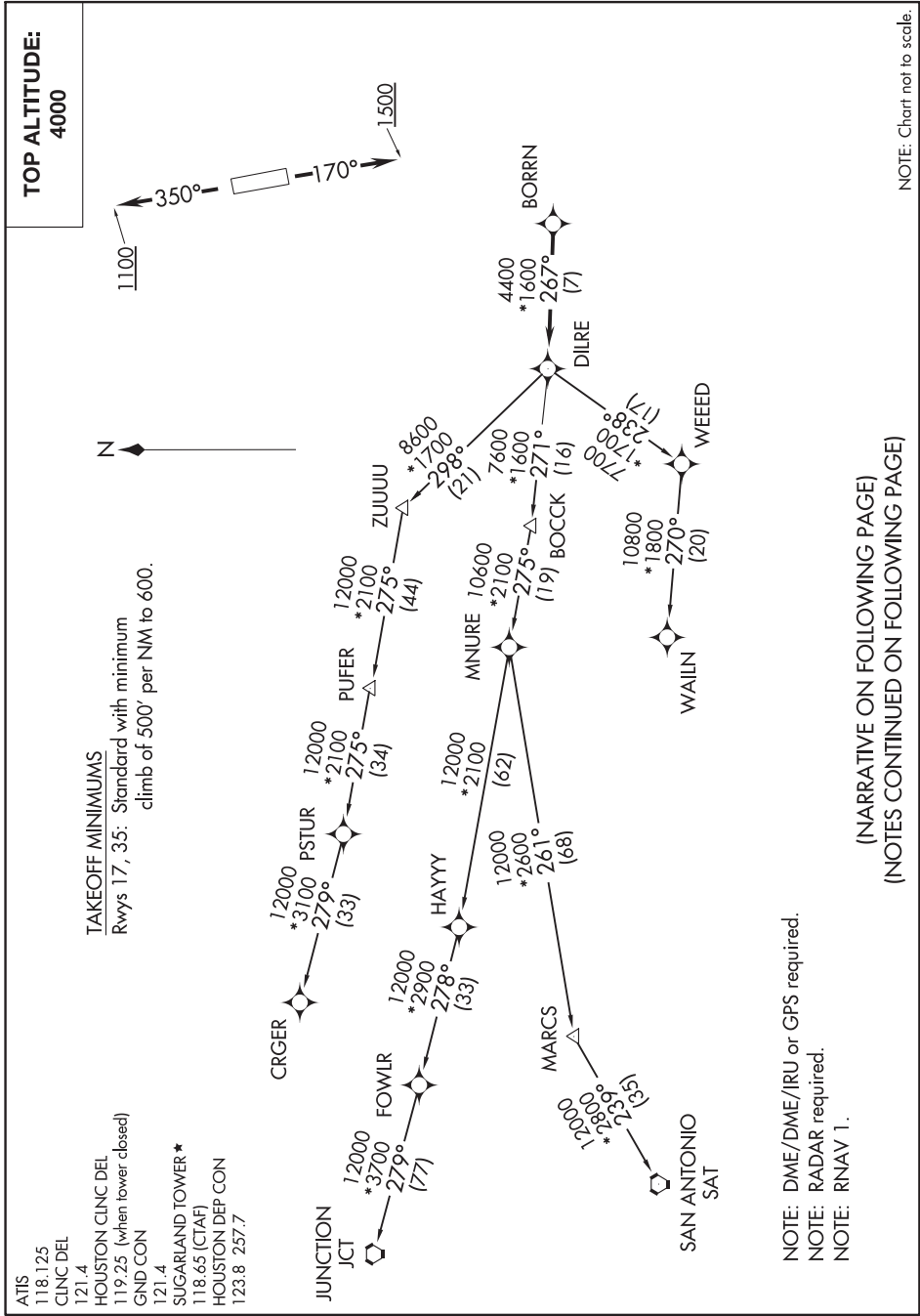
Multiple trees beginning 83' from DER, 65' left of centerline, up to 81' AGL/155' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017



NOTE: Chart not to scale.

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

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

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 170° to 1500, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 35: Climb on heading 350° to 1100, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

TAKEOFF OBSTACLE NOTES

- Rwy 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.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

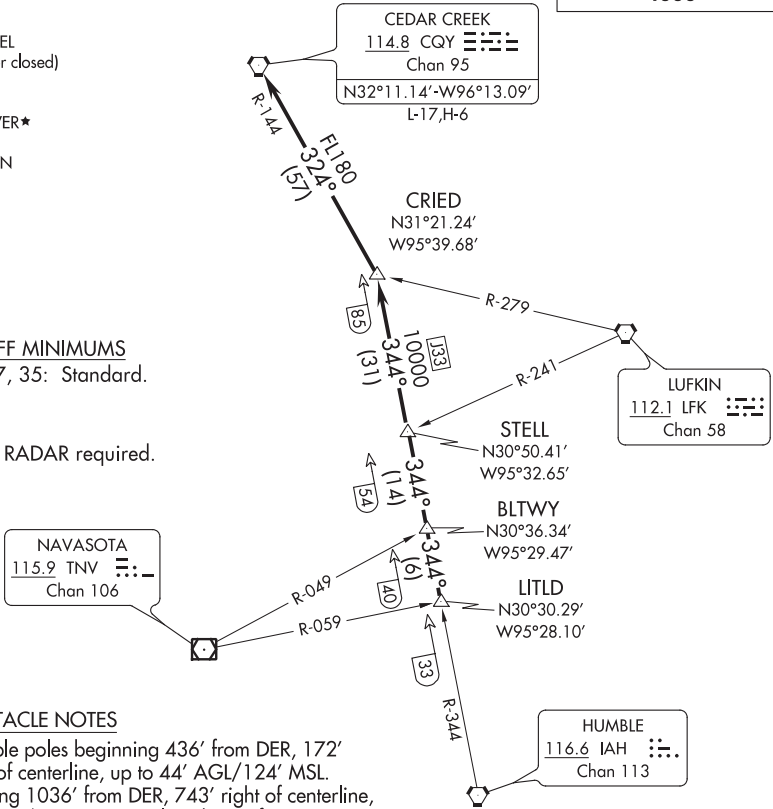
SL-5537 (FAA)

**TOP ALTITUDE:
4000**

ATIS
118.125
CLNC DEL
121.4
HOUSTON CLNC DEL
119.25 (when tower closed)
GND CON
121.4
SUGAR LAND TOWER*
118.65 (CTAF)
HOUSTON DEP CON
123.8 257.7

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

NOTE: RADAR required.



TAKEOFF OBSTACLE NOTES

- Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL. Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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.
- Rwy 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.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT, maintain 4000. 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.

CRIED EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

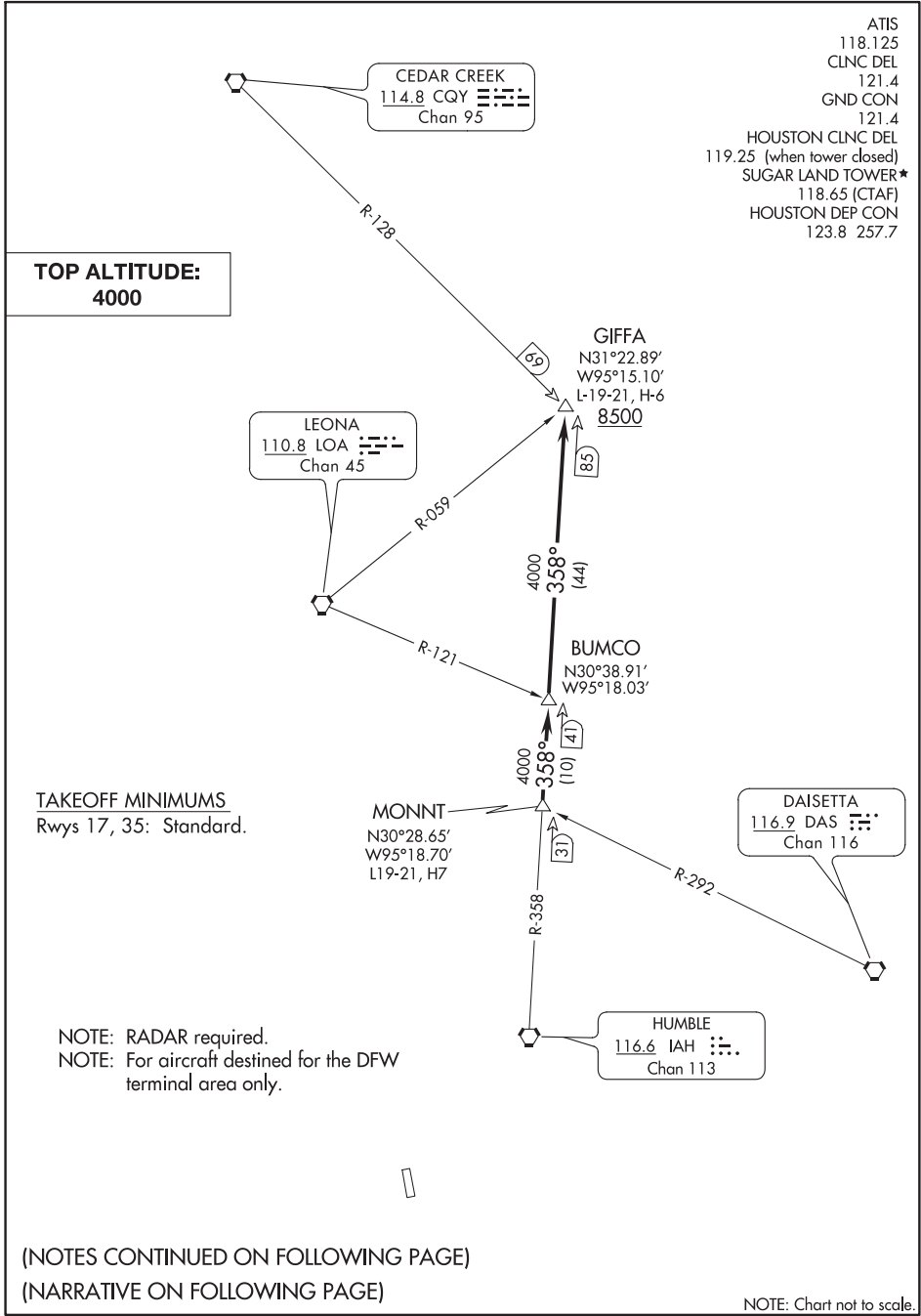
TAKEOFF OBSTACLE NOTES

- Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL.
 Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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..
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS
 118.125
 CLNC DEL
 121.4
 GND CON
 121.4
 HOUSTON CLNC DEL
 119.25 (when tower closed)
 SUGAR LAND TOWER*
 118.65 (CTAF)
 HOUSTON DEP CON
 123.8 257.7



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

TAKEOFF OBSTACLE NOTES

Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL.

Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

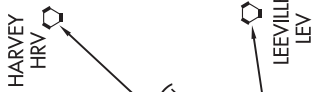
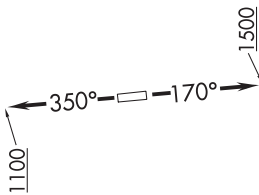
HOODO FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS 118.125
 CLNC DEL 121.4
 HOUSTON CLNC DEL 119.25 (when tower closed)
 GND CON 121.4
 SUGARLAND TOWER* 118.65 (CTAF)
 HOUSTON DEP CON 123.8 257.7

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

TOP ALTITUDE: 4000



TAKEOFF MINIMUMS
 Rwy 17, 35: Standard with minimum climb of 500' per NM to 600.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)
(HOODO4.HOODO) 10NOV16



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 170° to 1500, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 35: Climb heading 350° to 1100, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL.

Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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.

Rwy 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.

(INDIE4.INDIE) 16315

SL-5537 (FAA)

SUGAR LAND RGNL (SGR)
HOUSTON, TEXAS

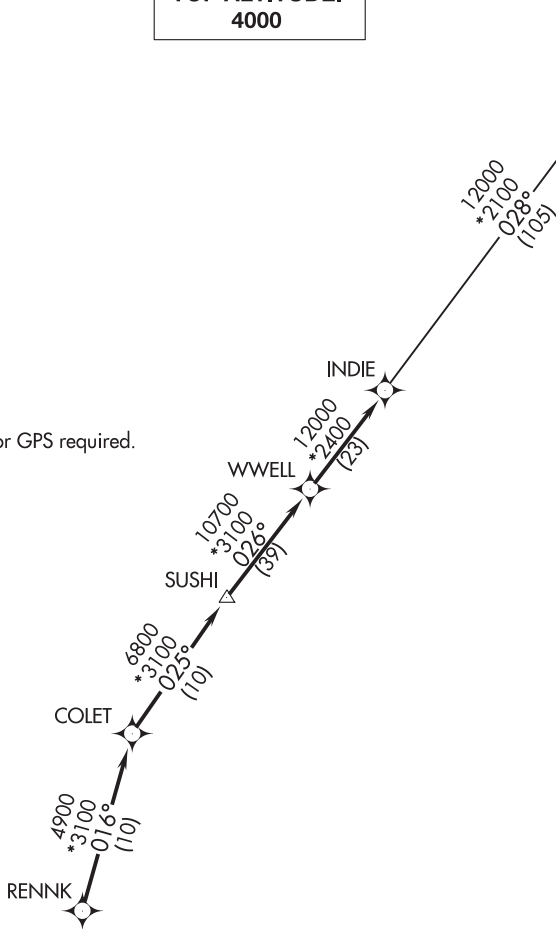
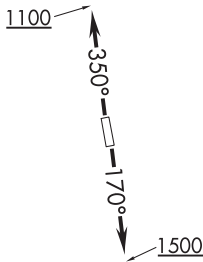
INDIE FOUR DEPARTURE (RNAV)

ATIS
 118.125
 CLNC DEL
 121.4
 HOUSTON CLNC DEL
 119.25 (when tower closed)
 GND CON
 121.4
 SUGARLAND TOWER *
 118.65 (CTAF)
 HOUSTON DEP CON
 123.8 257.7

**TOP ALTITUDE:
4000**

TPAKK

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 600.

(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

HOUSTON, TEXAS
SUGAR LAND RGNL (SGR)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 170° to 1500, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 35: Climb heading 350° to 1100, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF OBSTACLE NOTES

Rwy 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.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

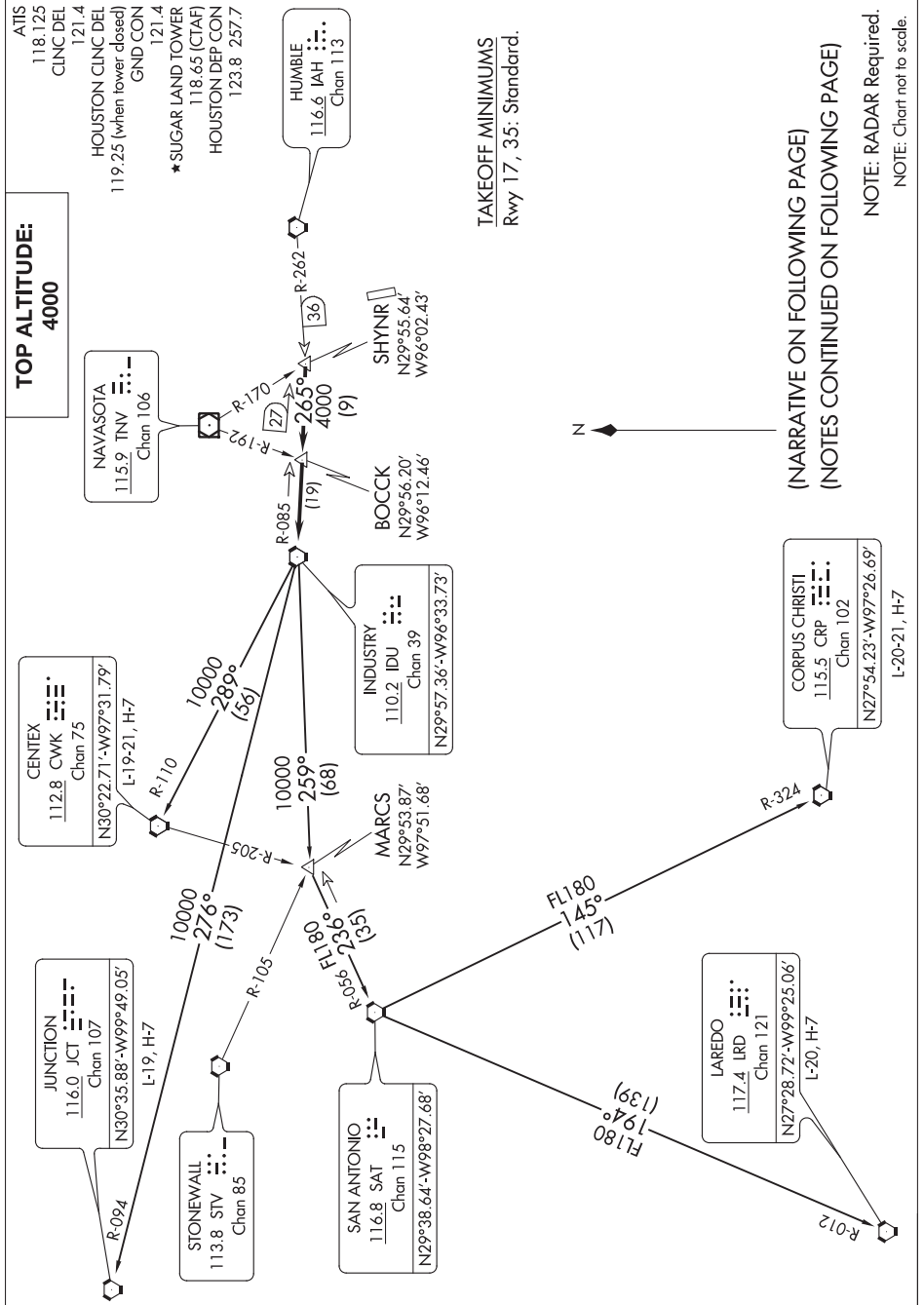
SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SL-5537 (FAA)

SUGAR LAND RGNL (SGR)
HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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 OBSTACLE NOTES

Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL.

Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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.

Rwy 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.

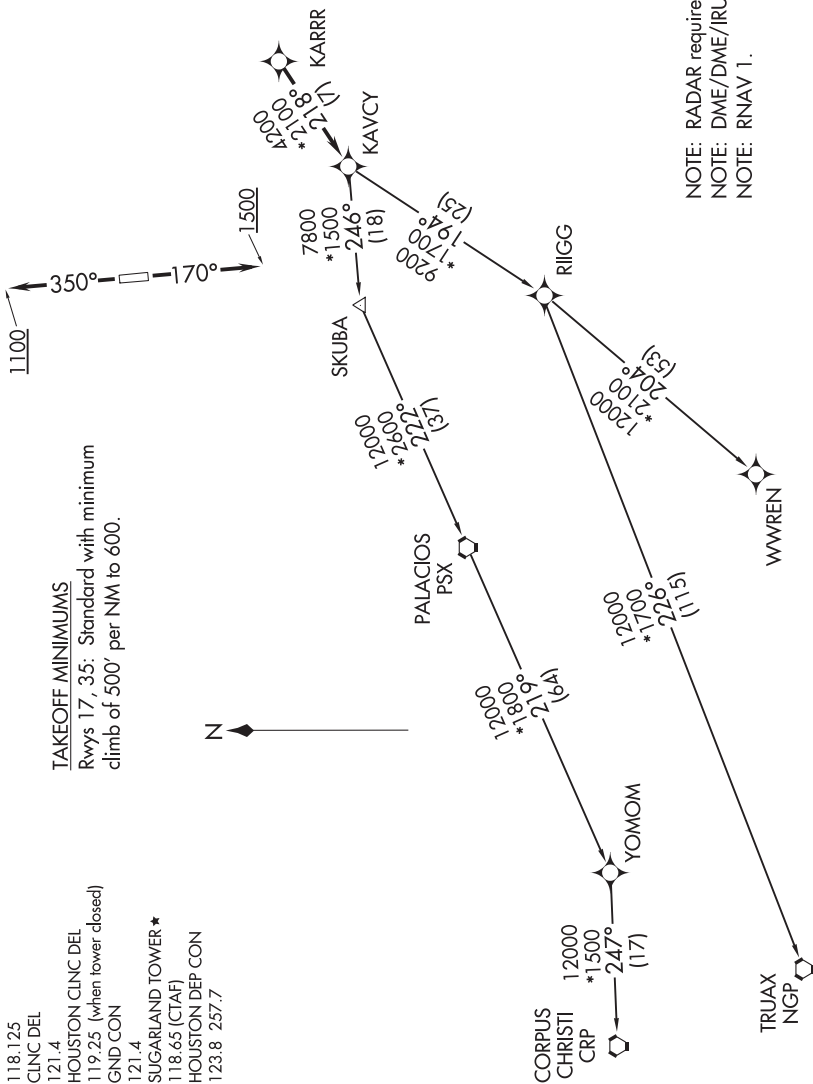
KARR THREE DEPARTURE (RNAV)

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS

Rwys 17, 35: Standard with minimum climb of 500' per NM to 600.

- ATIS 118.125
- CINC DEL 121.4
- HOUSTON CINC DEL 119.25 (when tower closed)
- GND CON 121.4
- SUGARLAND TOWER * 118.65 (CTAF)
- HOUSTON DEP CON 123.8 257.7



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

NOTE: Chart not to scale.

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

KARR THREE DEPARTURE (RNAV)

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 170° to 1500, expect radar vectors to KARRR, thence

TAKEOFF RWY 35: Climb heading 350° to 1100, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

TAKEOFF OBSTACLE NOTES:

Rwy 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.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

**TOP ALTITUDE:
4000**

- ATIS 118.125
- CLNC DEL 121.4
- GND CON 121.4
- HOUSTON CLNC DEL 119.25 (when tower closed)
- SUGAR LAND TOWER* 118.65 (CTAF)
- HOUSTON DEP CON 123.8 257.7

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'

BONHAM
114.6 BYP
Chan 93
N33°32.25' - W96°14.05'
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°23.08'

CEDAR CREEK
114.8 CQY
Chan 95
N32°11.14' - W96°13.09'

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

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

WLLIS
N30°32.08'
W95°39.10'

NAVASOTA
115.9 TNV
Chan 106

HUMBLE
116.6 IAH
Chan 113

NOTE: RADAR required.
NOTE: Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LOA2 SID must file one of the published transitions via FUZ (LOA2.FUZ) ADM (LOA2.ADM) or BYP (LOA2.BYP).

TAKEOFF MINIMUMS
Rwys 17, 35: Standard.

(NOTES ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

TAKEOFF OBSTACLE NOTES

Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL.

Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LFK1.LFK) 16315

LUFKIN ONE DEPARTURE

SL-5537 (FAA)

SUGAR LAND RGNL (SGR)

HOUSTON, TEXAS

ATIS
118.125
CLNC DEL
121.4
GND CON
121.4
HOUSTON CLNC DEL
119.25 (when tower closed)
SUGAR LAND TOWER ★
118.65 (CTAF)
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

LITTLE ROCK
113.9 LIT
Chan 86
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: RADAR 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'

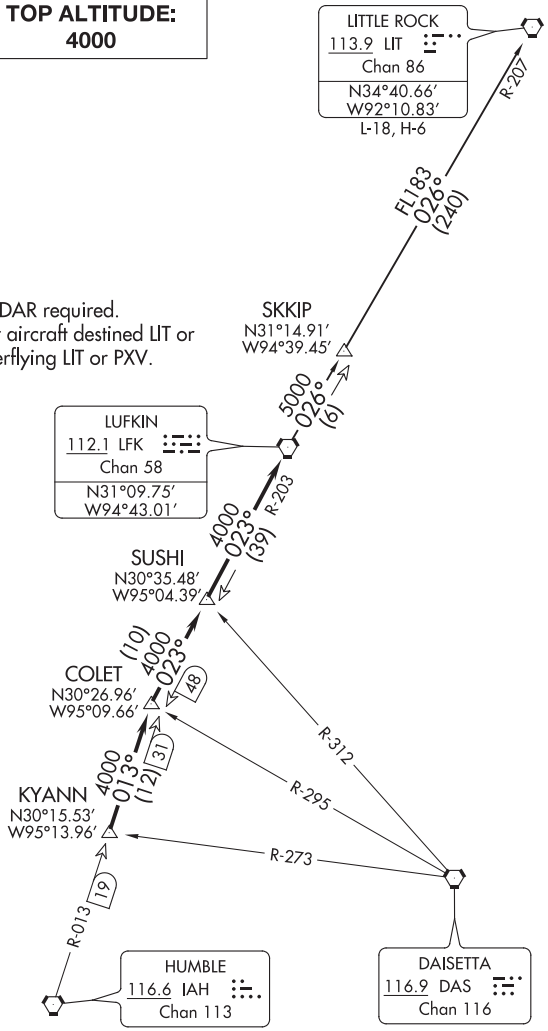
SUSHI
N30°35.48'
W95°04.39'

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



TAKEOFF MINIMUMS:
Rwys 17, 35: Standard.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LUFKIN ONE DEPARTURE

(LFK1.LFK) 10NOV16

HOUSTON, TEXAS

SUGAR LAND RGNL (SGR)



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

TAKEOFF OBSTACLE NOTES:

Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL. Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

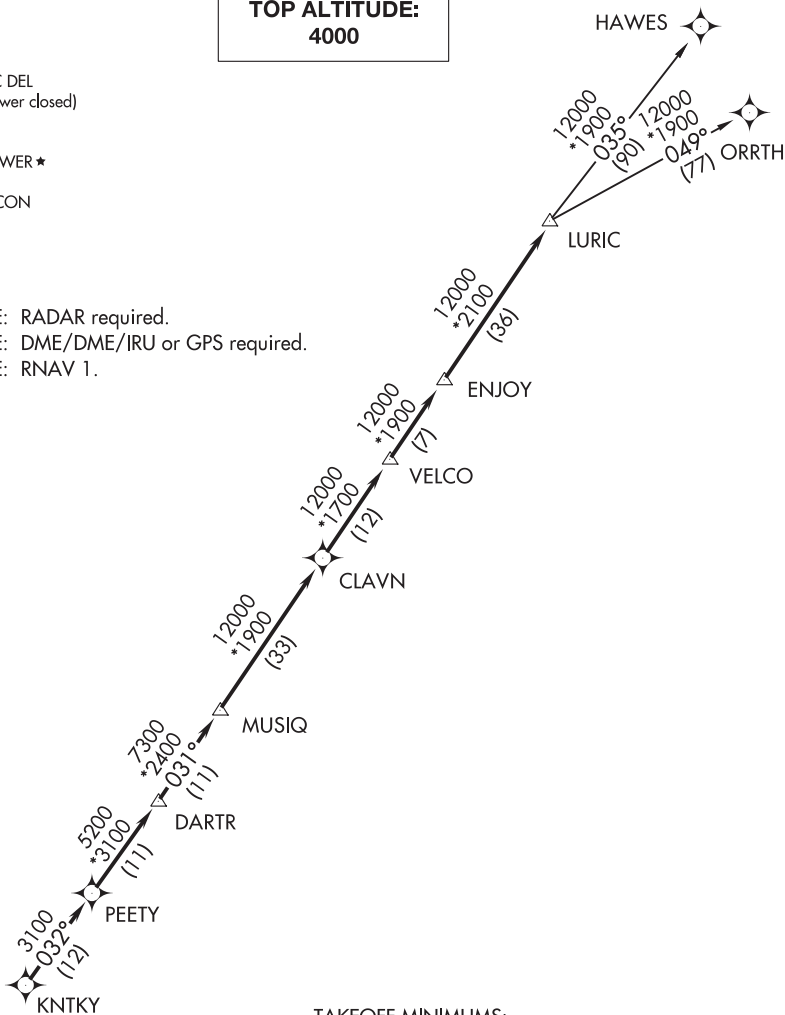
SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)

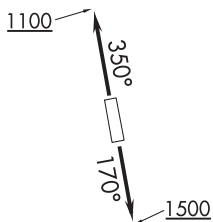
ATIS
 118.125
 CLNC DEL
 121.4
 HOUSTON CLNC DEL
 119.25 (when tower closed)
 GND CON
 121.4
 SUGARLAND TOWER ★
 118.65 (CTAF)
 HOUSTON DEP CON
 123.8 257.7

**TOP ALTITUDE:
4000**

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



TAKEOFF MINIMUMS:
 Rwy 17, 35: Standard with minimum climb of 500' per NM to 600.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)

(LURIC4.LURIC) 10NOV16

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 170° to 1500, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 35: Climb on heading 350° to 1100, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

TAKEOFF OBSTACLE NOTES:

- Rwy 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.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

2102 NAV 01 9102 VON 10 10 'S-CS

ATIS
118.125
CLNC DEL
121.4

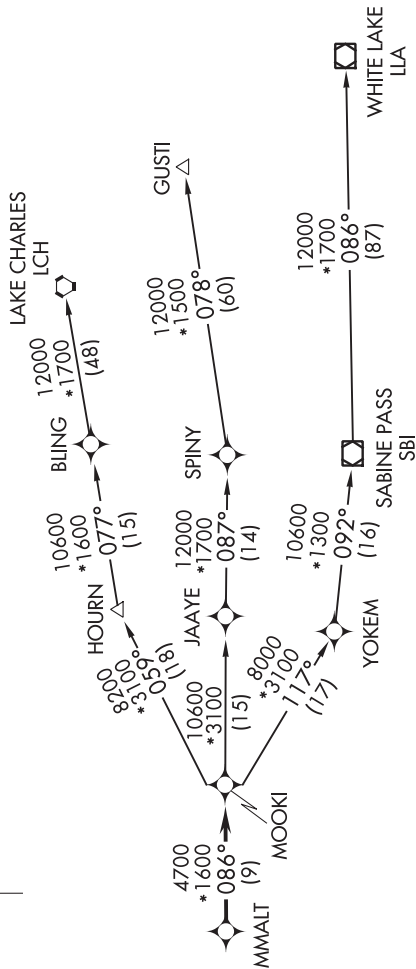
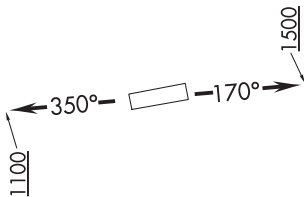
HOUSTON CLNC DEL
119.25 (when tower closed)
GND CON
121.4

SUGARLAND TOWER ★
118.65 (CTAF)
HOUSTON DEP CON
123.8 257.7

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:

Rwy 17, 35: Standard with minimum climb of 500' per NM to 600.



NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

NOTE: RNAV 1.

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

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

(MMALT2.MMALT) 16259

SUGAR LAND RGNL (SGR)

MMALT TWO DEPARTURE (RNAV)

SL-5537 (FAA)

HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 170° to 1500, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 35: Climb on heading 350° to 1100, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

TAKEOFF OBSTACLE NOTES:

Rwy 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.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

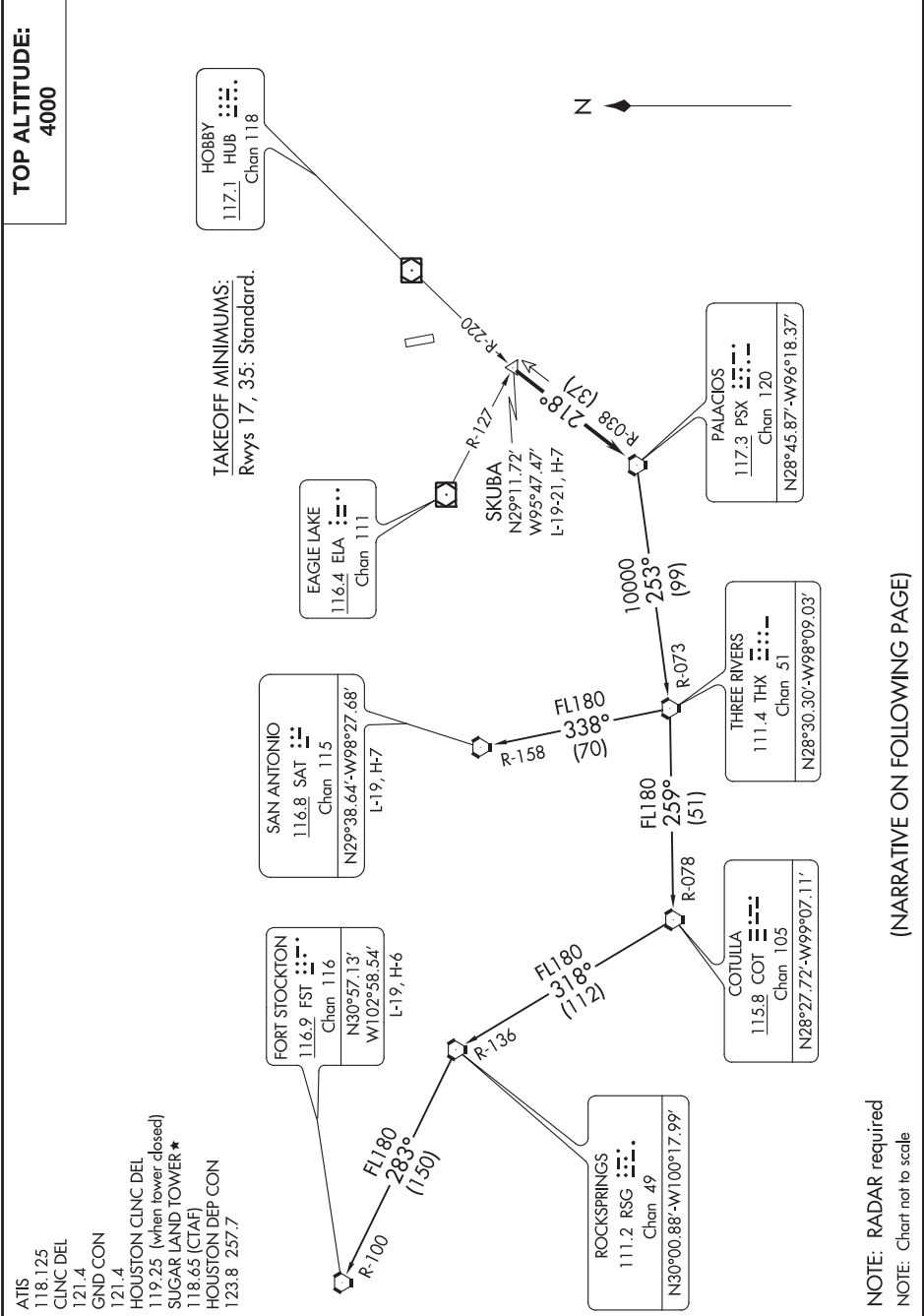
MMALT TWO DEPARTURE (RNAV)

HOUSTON, TEXAS

(MMALT2.MMALT) 08JAN15

SUGAR LAND RGNL (SGR)

SC-5, 10 NOV 2016 to 05 JAN 2017



SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

TAKEOFF OBSTACLE NOTES:

Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL.

Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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.

Rwy 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.

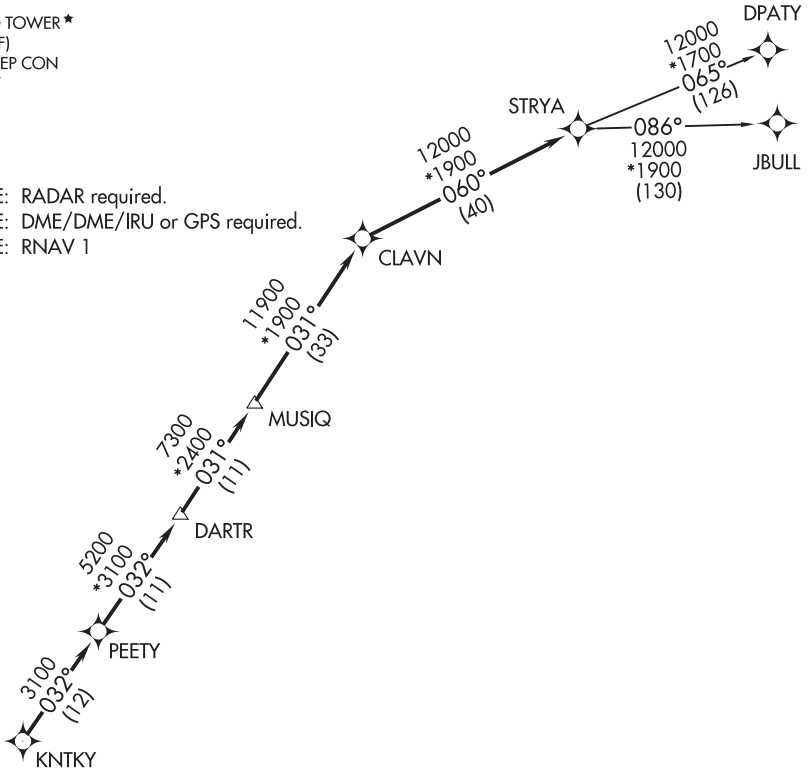
Multiple trees beginning 83' from DER, 65' left of centerline, up to 81' AGL/155' MSL.

STRYA FOUR DEPARTURE (RNAV)

ATIS
118.125
CLNC DEL
121.4
HOUSTON CLNC DEL
119.25 (when tower closed)
GND CON
121.4
SUGARLAND TOWER *
118.65 (CTAF)
HOUSTON DEP CON
123.8 257.7

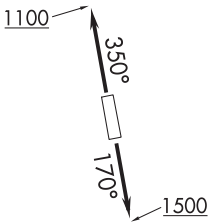
**TOP ALTITUDE:
4000**

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 600.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb heading 170° to 1500, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 35: Climb heading 350° to 1100, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

Rwy 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.

Rwy 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.

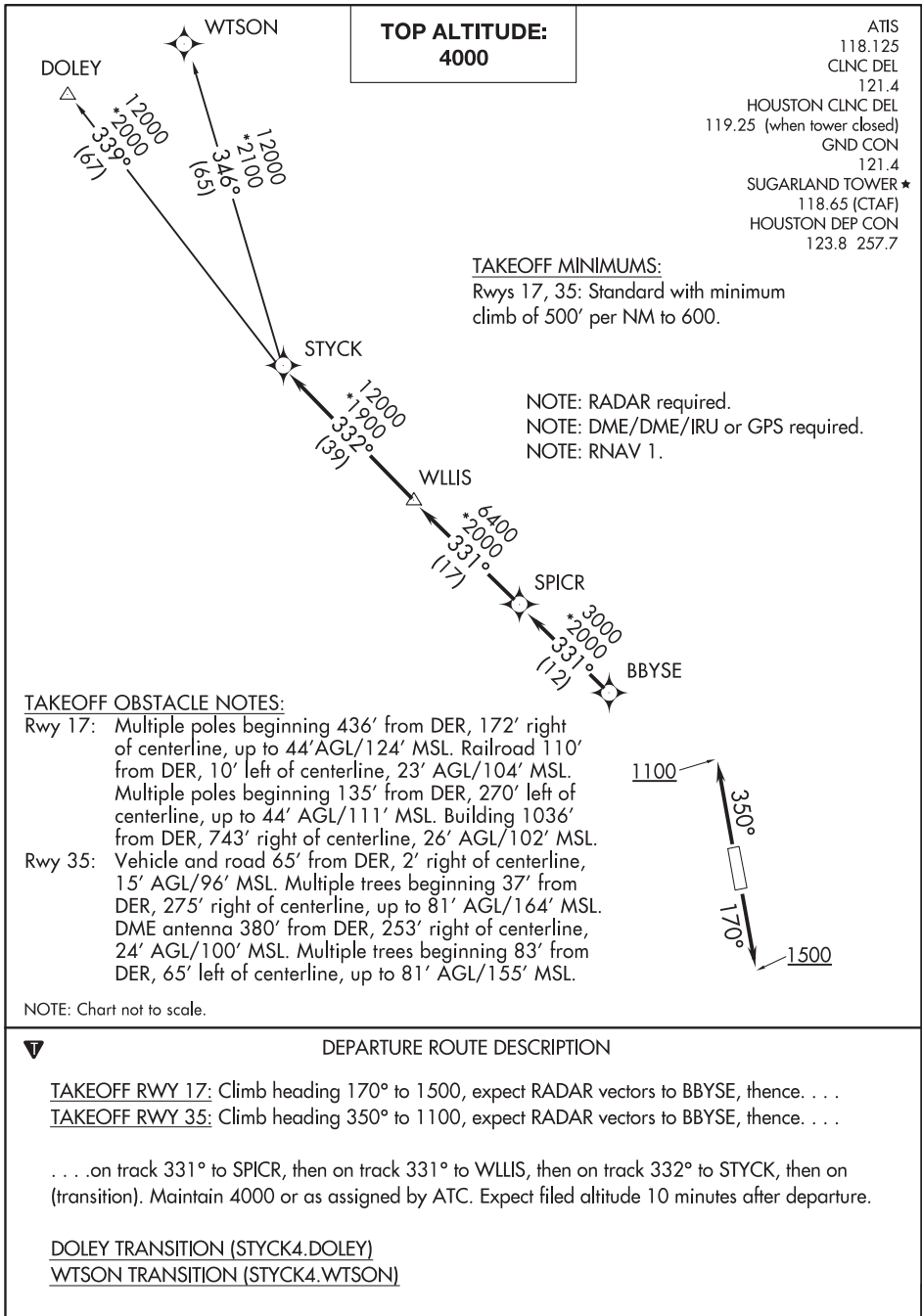
Multiple trees beginning 83' from DER, 65' left of centerline, up to 81' AGL/155' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

HOUSTON, TEXAS
SUGAR LAND RGNL (SGR)

TRUAX SIX DEPARTURE


SL-5537 (FAA)


SUGAR LAND RGNL (SGR)


HOUSTON, TEXAS

ATIS
 118.125
 CLNC DEL
 121.4
 GND CON
 121.4
 HOUSTON CLNC DEL
 119.25 (when tower closed)
 SUGAR LAND TOWER
 118.65 (CTAF)
 HOUSTON DEP CON
 123.8 257.7

**TOP ALTITUDE:
4000**

HOBBY
 117.1 HUB 
 Chan 118


EAGLE LAKE
 116.4 ELA 
 Chan 111

SCHOLLES
 113.0 VUH 
 Chan 77

TAKEOFF MINIMUMS:
 Rwy 17, 35: Standard.

NOTE: For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP VORTAC to international destinations.

NOTE: RADAR required.

TRUAX
 114.0 NGP 
 Chan 87
 N27°41.18'
 W97°17.68'
 L-20-21, H-7

4000
 228°
 (114)

YAWNS
 N28°49.39'
 W95°33.96'

TAKEOFF OBSTACLE NOTES:

- Rwy 17: Multiple poles beginning 436' from DER, 172' right of centerline, up to 44' AGL/124' MSL. Building 1036' from DER, 743' right of centerline, 26' AGL/102' 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.
- Rwy 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.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to YAWNS INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .
 . . . on VUH R-228 and NGP R-047 to NGP VORTAC.

TRUAX SIX DEPARTURE

(NGP6.NGP) 10NOV16

HOUSTON, TEXAS

SUGAR LAND RGNL (SGR)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WATFO THREE DEPARTURE (RNAV)

TAKEOFF OBSTACLE NOTES

Rwy 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.

Rwy 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.

ATIS
 118.125
 CLNC DEL
 121.4
 HOUSTON CLNC DEL
 119.25 (when tower closed)
 GND CON
 121.4
 *SUGARLAND TOWER
 118.65 (CTAF)
 HOUSTON DEP CON
 123.8 257.7

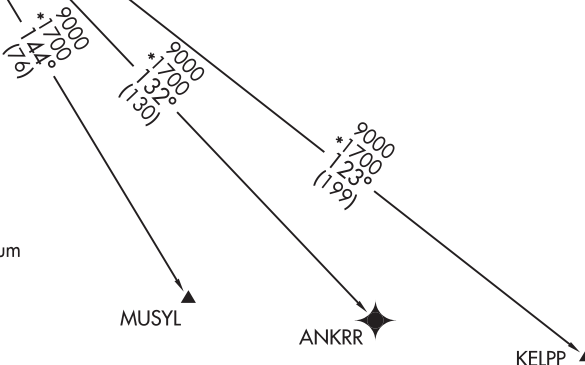


TOP ALTITUDE:
4000

NOTE: GPS required.
 NOTE: RADAR required.
 NOTE: RNAV 1.

TAKEOFF MINIMUMS

Rwys 17, 35: Standard with minimum climb of 500' per NM to 600.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 170° to 1500, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 35: Climb on heading 350° to 1100, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR)

KELPP TRANSITION (WATFO3.KELPP)

MUSYL TRANSITION (WATFO3.MUSYL)

WATFO THREE DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

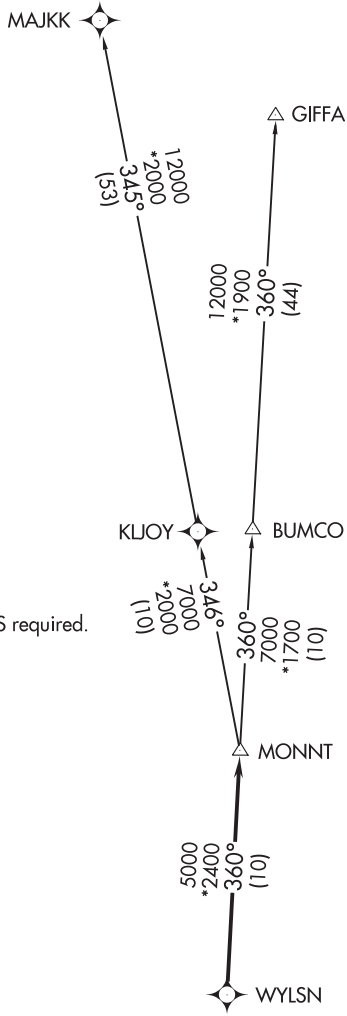
SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

HOUSTON, TEXAS

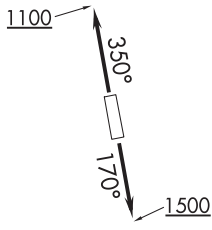
ATIS
 118.125
 CLNC DEL
 121.4
 HOUSTON CLNC DEL
 119.25 (when tower closed)
 GND CON
 121.4
 SUGARLAND TOWER *
 118.65 (CTAF)
 HOUSTON DEP CON
 123.8 257.7

**TOP ALTITUDE:
4000**



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

TAKEOFF MINIMUMS:
 Rwy 17, 35: Standard with minimum climb of 500' per NM to 600.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

WYLSN FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17: Climb on heading 170° to 1500, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 35: Climb on heading 350° to 1100, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJJK)

TAKEOFF OBSTACLE NOTES:

Rwy 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.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 40429 W15A	APP CRS 150°	Rwy Idg 3953 TDZE 111 Apt Elev 111
--	------------------------	---

RNAV (GPS) RWY 15

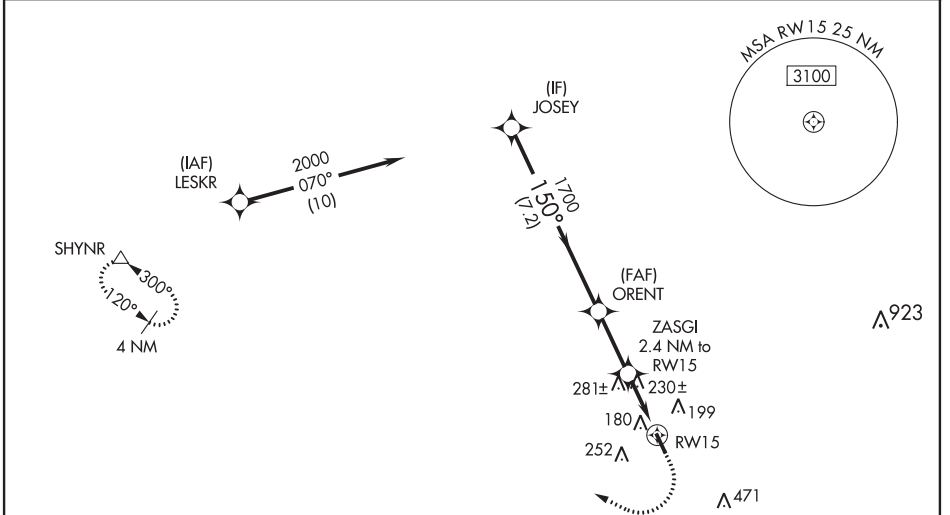
WEST HOUSTON (IWS)

▽ When VGSI inop, Circling Rwy 33 NA at night. When VGSI inop, Straight-in/Circling Rwy 15 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received, use George Bush Intercontinental/Houston altimeter setting and increase all MDA 60 feet, increase LP Cat C visibility ¼ mile and LNAV Cat C visibility ⅛ mile.

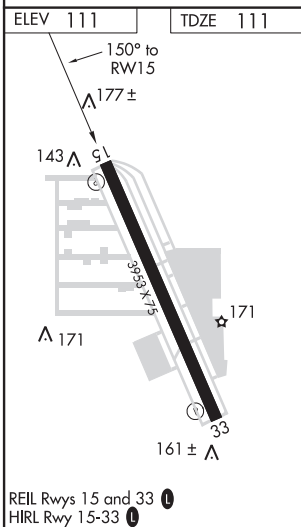
△ NA

MISSED APPROACH: Climb to 600 then climbing right turn to 2000 direct SHYNR and hold.

HOUSTON APP CON 123.8 257.7	CLNC DEL 121.15	UNICOM 123.05 (CTAF) 0
---------------------------------------	---------------------------	----------------------------------



RADAR REQUIRED



VGSI and descent angles not coincident (VGSI Angle 4.00/TCH 44).				600	2000	SHYNR
JOSEY				↑	↷	△
ORENT						
ZASGI 2.4 NM to RW15						
RW15						
7.2 NM				2.5 NM		2.4 NM
CATEGORY	A	B	C	D		
LP MDA	480-1 369 (400-1)			NA		
LNAV MDA	540-1	429 (500-1)	540-1¼ 429 (500-1½)	NA		
CIRCLING	540-1 429 (500-1)	580-1 469 (500-1)	580-1½ 469 (500-1½)	NA		

APP CRS 330°	Rwy Idg TDZE Apt Elev	3953 111 111
------------------------	-----------------------------	---

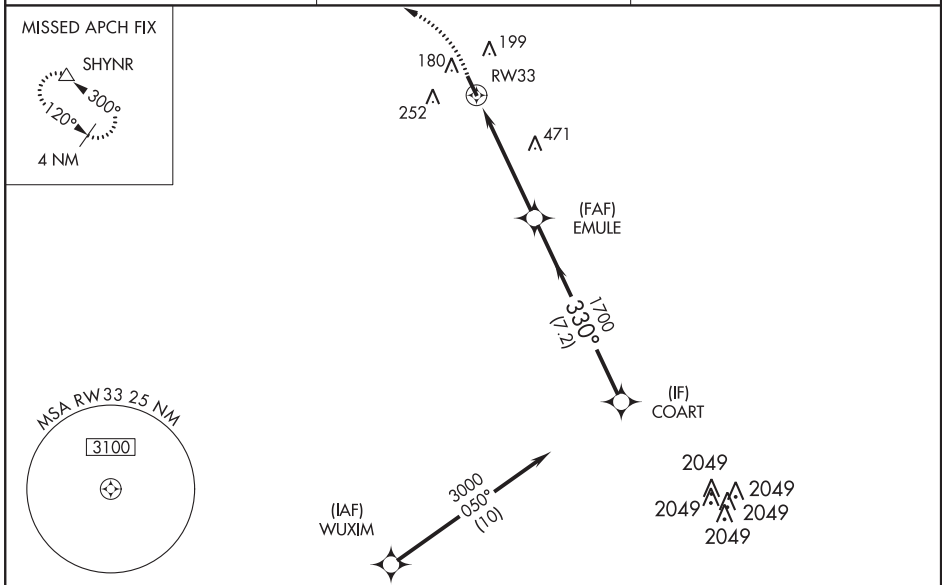
RNAV (GPS) RWY 33

HOUSTON/WEST HOUSTON (IWS)

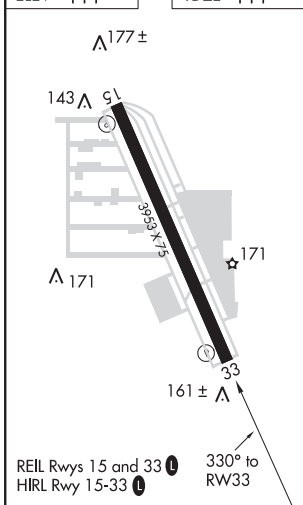
NA When VGSI inop, Circling Rwy 15 NA at night. When VGSI inop, Straight-in/Circling Rwy 33 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received, use George Bush Intercontinental/Houston altimeter setting and increase all MDA 60 feet and increase LNAV Cat C visibility 1/8 mile.

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

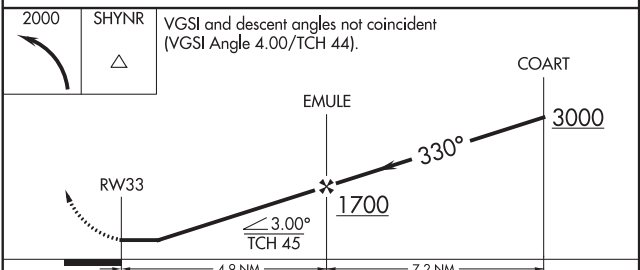
HOUSTON APP CON 123.8 257.7	CLNC DEL 121.15	UNICOM 123.05 (CTAF)
---------------------------------------	---------------------------	--------------------------------



ELEV 111	TDZE 111
----------	----------



RADAR REQUIRED



CATEGORY	A	B	C	D
LNAV MDA	580-1	469 (500-1)	580-1 ³ / ₈ 469 (500-1 ³ / ₈)	NA
CIRCLING	580-1	469 (500-1)	580-1 ¹ / ₂ 469 (500-1 ¹ / ₂)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

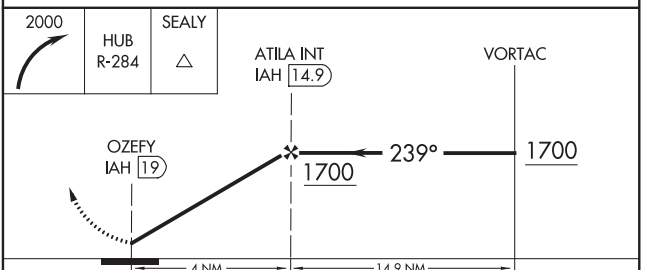
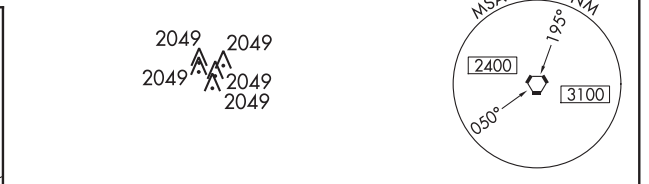
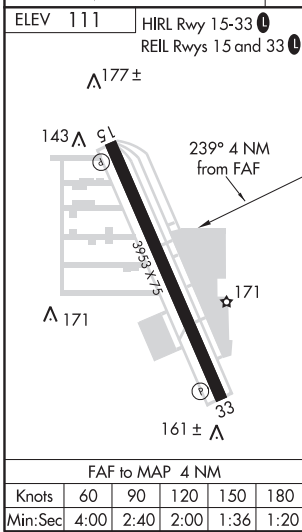
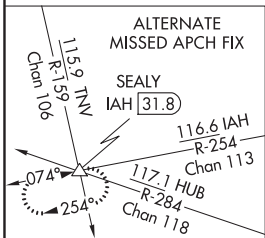
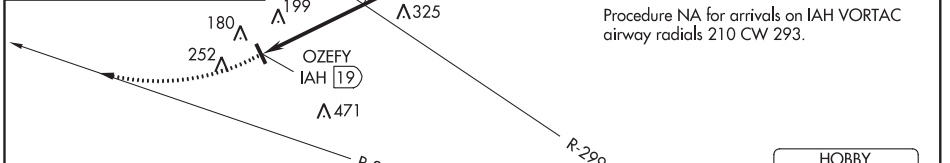
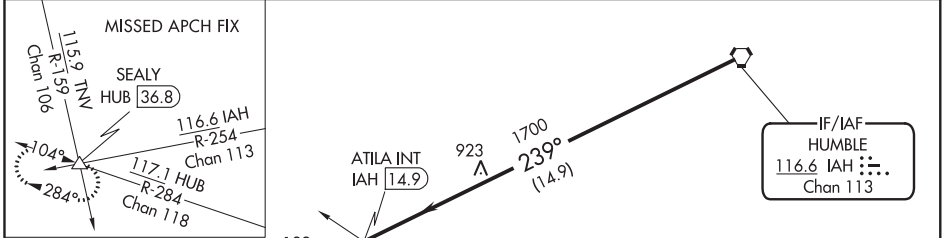
VORTAC IAH 116.6 Chan 113	APP CRS 239°	Rwy Idg TDZE Apt Elev 111	N/A N/A 111
---	------------------------	---	--------------------------

VOR-D
HOUSTON/WEST HOUSTON (IWS)

NA When VGSI inop, procedure NA at night. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received, use George Bush Intercontinental/Houston altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climbing right turn to 2000 and HUB VOR/DME R-284 to SEALY INT/HUB 36.8 DME and hold.

HOUSTON APP CON 123.8 257.7	CLNC DEL 121.15	UNICOM 123.05 (CTAF) 0
---------------------------------------	---------------------------	---



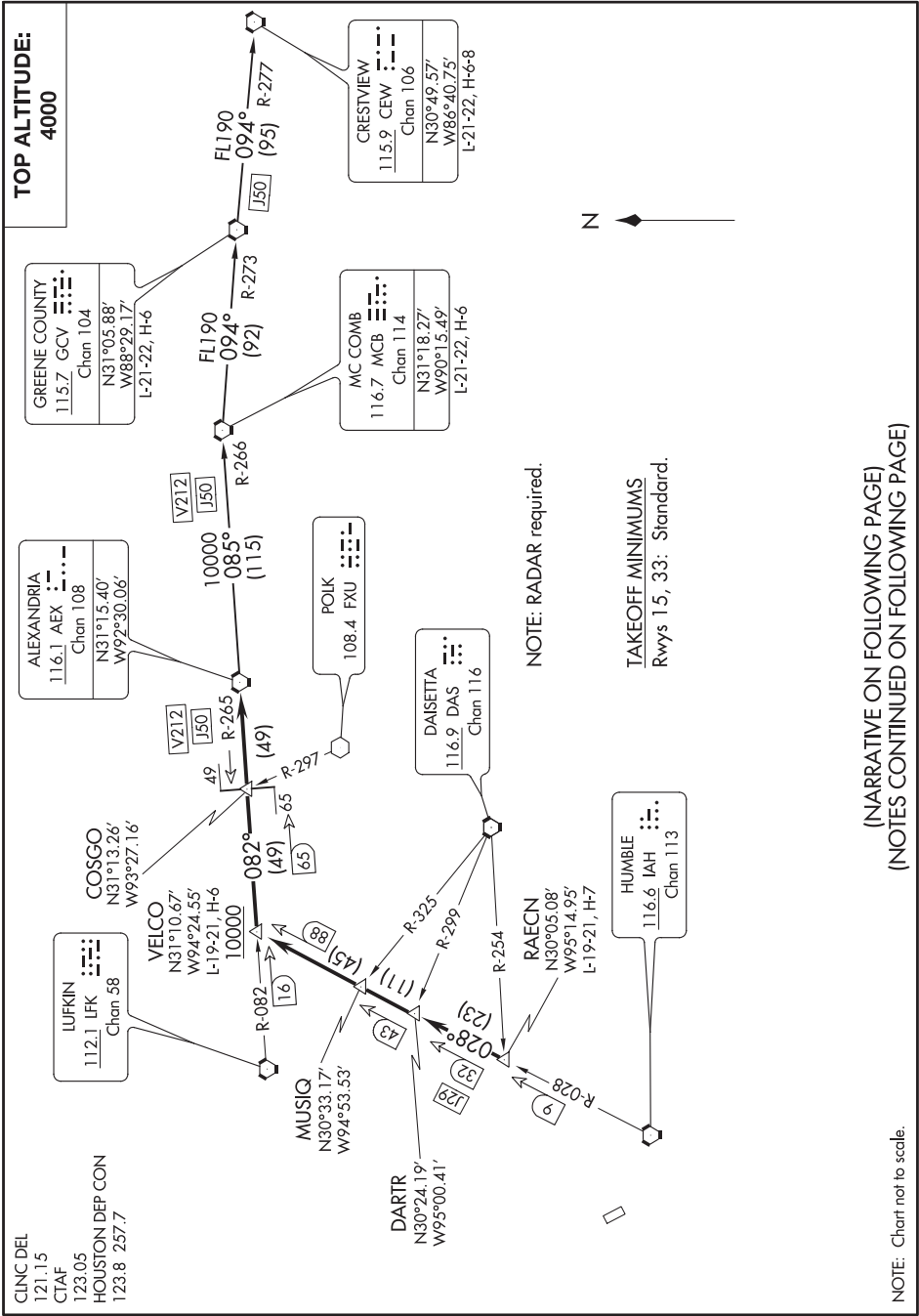
FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20
CATEGORY	A		B		C
CIRCLING	640-1		529 (600-1)		640-1½ 529 (600-1½)
					NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



ALEXANDRIA NINE DEPARTURE

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

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

TAKEOFF OBSTACLE NOTES

Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL. Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

SL-6079 (FAA)

WEST HOUSTON (IWS)
HOUSTON, TEXAS

BLTWY THREE DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

CLNC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

△ CRIED

12000
*2100
(46)

△ BLTWY

6600
*2000
346°
(6)

△ LITLD

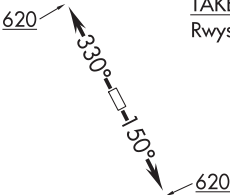
5400
*1900
345°
(12)

◉ DREMR

- 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.



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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

HOUSTON, TEXAS
WEST HOUSTON (IWS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb heading 150° to 620, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 33: Climb heading 330° to 620, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

TAKEOFF OBSTACLE NOTES

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

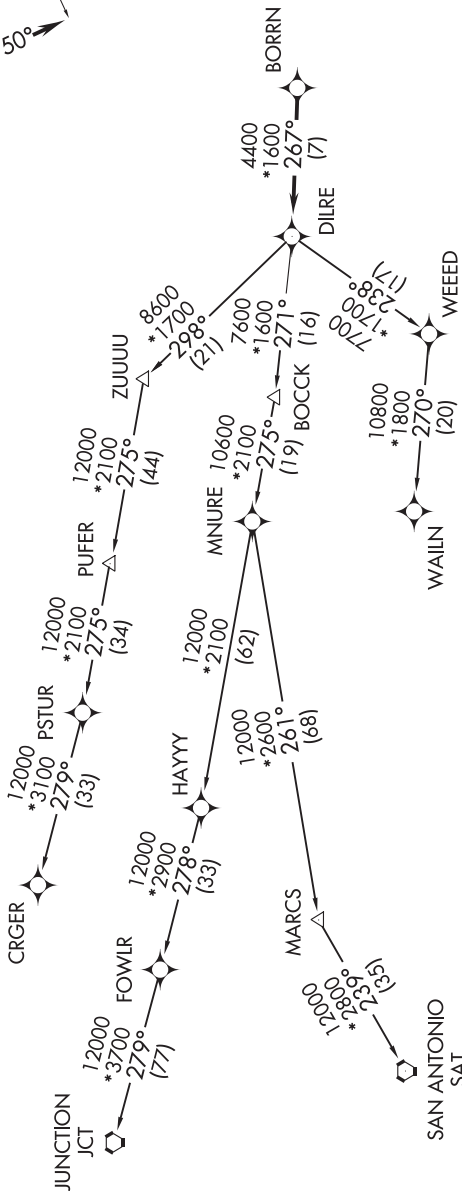
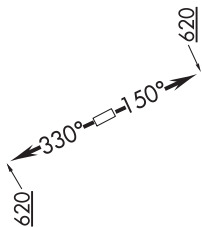
TOP ALTITUDE:
4000

SC-5, 10 NOV 2016 to 05 JAN 2017

CINC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

TAKEOFF MINIMUMS

Rwys 15, 33: Standard with minimum
climb of 500' per NM to 620.



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb heading 150° to 620, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 33: Climb heading 330° to 620, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

TAKEOFF OBSTACLE NOTES

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
- Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

SL-6079 (FAA)


WEST HOUSTON (IWS)
HOUSTON, TEXAS


CLINC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**


TAKEOFF MINIMUMS
Rwys 15, 33: Standard.

NOTE: RADAR required.

NAVASOTA
115.9 TNV 
Chan 106

CEDAR CREEK
114.8 CQY 
Chan 95
N32°11.14'-W96°13.09'
L-17,H-6


CRIED
N31°21.24'
W95°39.68'

LUFKIN
112.1 LFK 
Chan 58

STELL
N30°50.41'
W95°32.65'

BLTWY
N30°36.34'
W95°29.47'

LITLD
N30°30.29'
W95°28.10'

HUMBLE
116.6 IAH 
Chan 113

TAKEOFF OBSTACLE NOTES

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL. Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT, maintain 4000. 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.

CRIED EIGHT DEPARTURE

(CRIED8.CRIED) 10NOV16

HOUSTON, TEXAS
WEST HOUSTON (IWS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(ELD8.ELD) 16315

594
SL-6079 (FAA)

WEST HOUSTON (IWS)
HOUSTON, TEXAS

EL DORADO EIGHT DEPARTURE

CLNC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

EL DORADO
115.5 ELD
Chan 102
N33°15.37'-W92°44.64'
L-17, H-6

NOTE: RADAR required.
NOTE: For aircraft destined MEM
or filed via Q32 or J42.

LUFKIN
112.1 LFK
Chan 58

ENJOY
N31°16.73'
W94°19.82'

MUSIQ
N30°33.17'
W94°53.53'

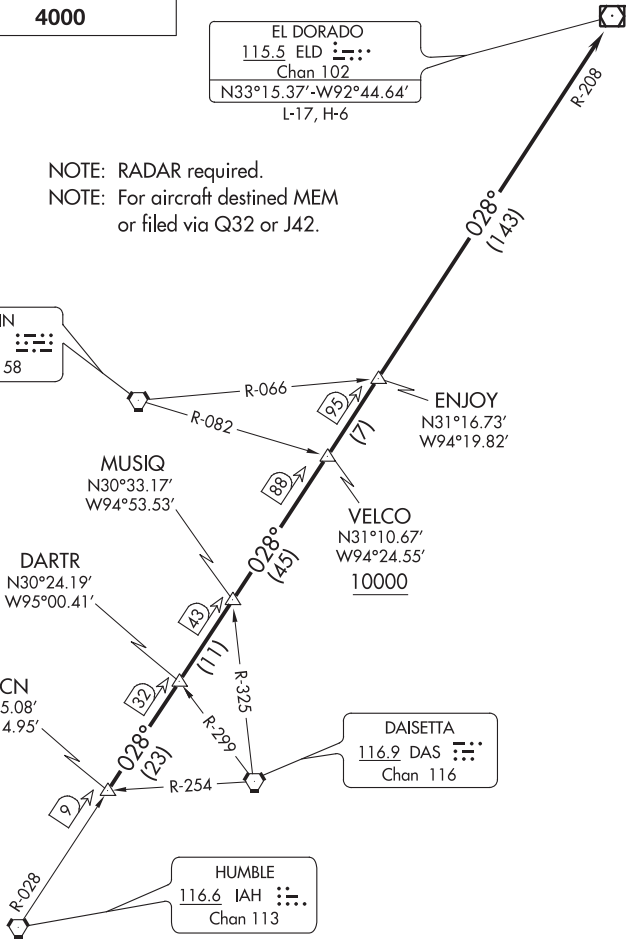
VELCO
N31°10.67'
W94°24.55'
10000

DARTR
N30°24.19'
W95°00.41'

RAECN
N30°05.08'
W95°14.95'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113



TAKEOFF MINIMUMS
Rwys 15, 33: Standard.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE
(ELD8.ELD) 10NOV16

HOUSTON, TEXAS
WEST HOUSTON (IWS)

EL DORADO EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

TAKEOFF OBSTACLE NOTES

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
 Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

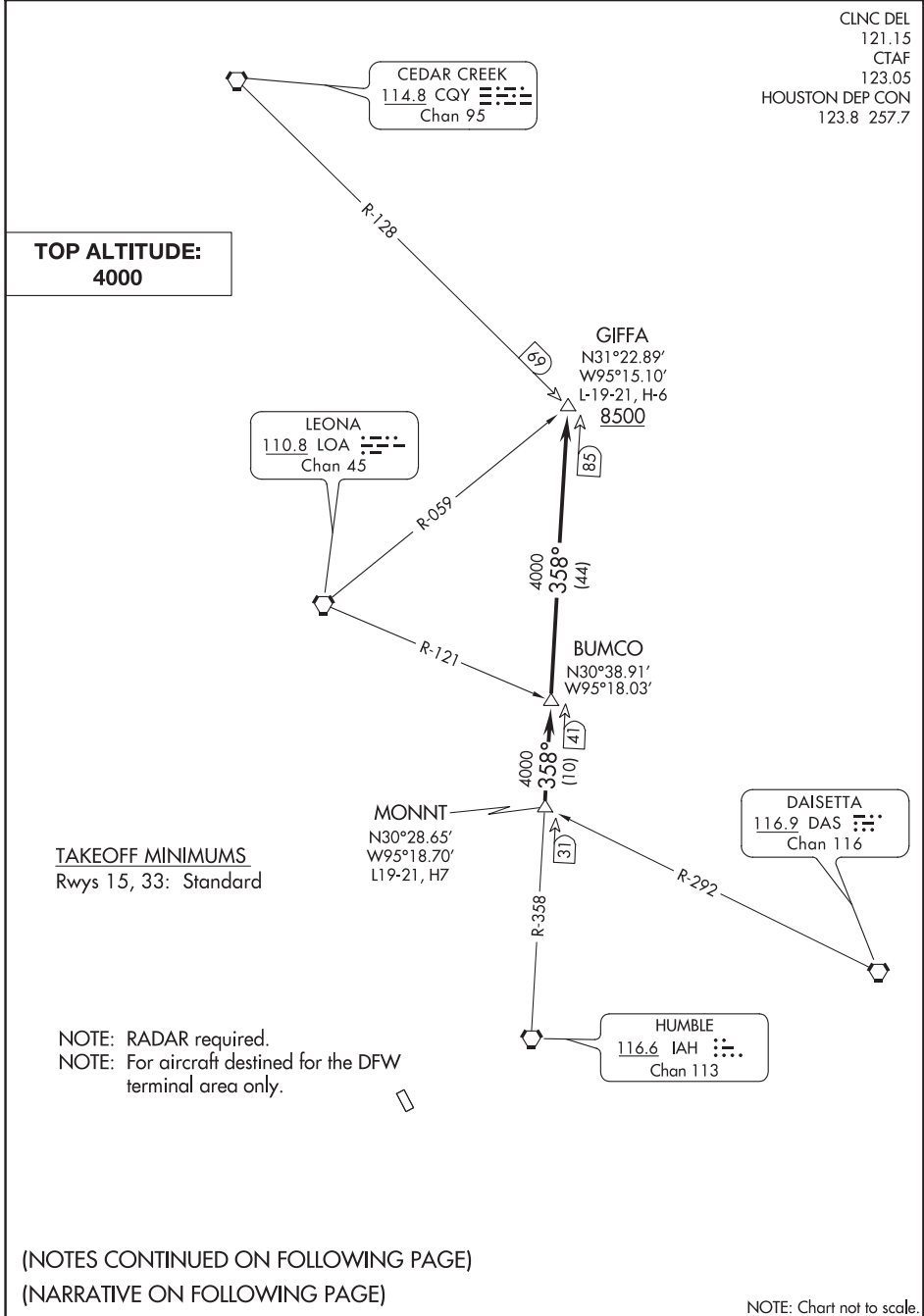
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

GIFFA EIGHT DEPARTURE

SL-6079 (FAA)

CLNC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

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

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

TAKEOFF OBSTACLE NOTES

Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.

Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.

Rwy 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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

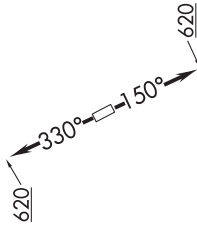
SC-5, 10 NOV 2016 to 05 JAN 2017

CINC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

TOP ALTITUDE:
4000



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



SCHOLES
VUH



HOODO (32)
11000
*1400
087°

SBIRD (36)

CFOOD (60)

BOWFN (68)

LEEVILLE
LEV (60)
076°
*1700
11000

HARVEY
HRV (60)
048°
*1100
1812'

TAKEOFF MINIMUMS
Rwys 15, 33: Standard with minimum climb of 500' per NM to 620.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb heading 150° to 620, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 33: Climb heading 330° to 620, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000. Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.

Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

600
SL-6079 (FAA)

WEST HOUSTON (IWS)
HOUSTON, TEXAS

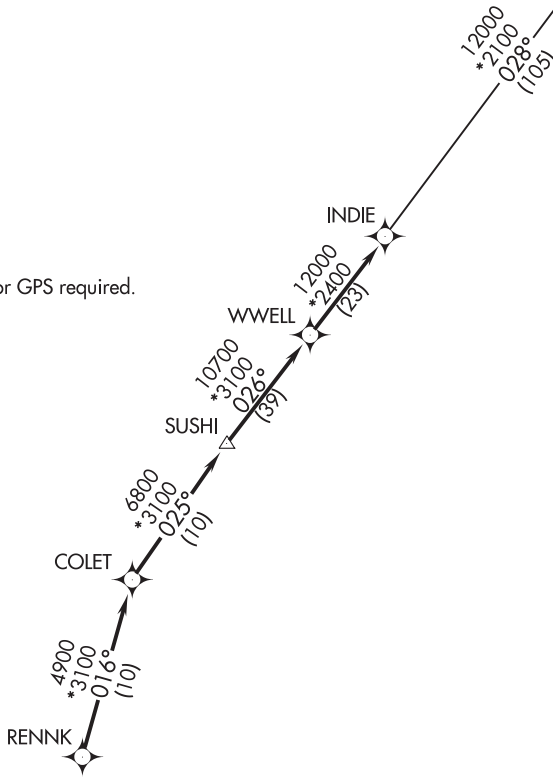
INDIE FOUR DEPARTURE (RNAV)

CLNC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

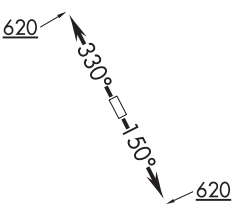
TPAKK

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.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

INDIE FOUR DEPARTURE (RNAV)
(INDIE4.INDIE) 10NOV16

HOUSTON, TEXAS
WEST HOUSTON (IWS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb heading 150° to 620, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 33: Climb heading 330° to 620, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF OBSTACLE NOTES

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

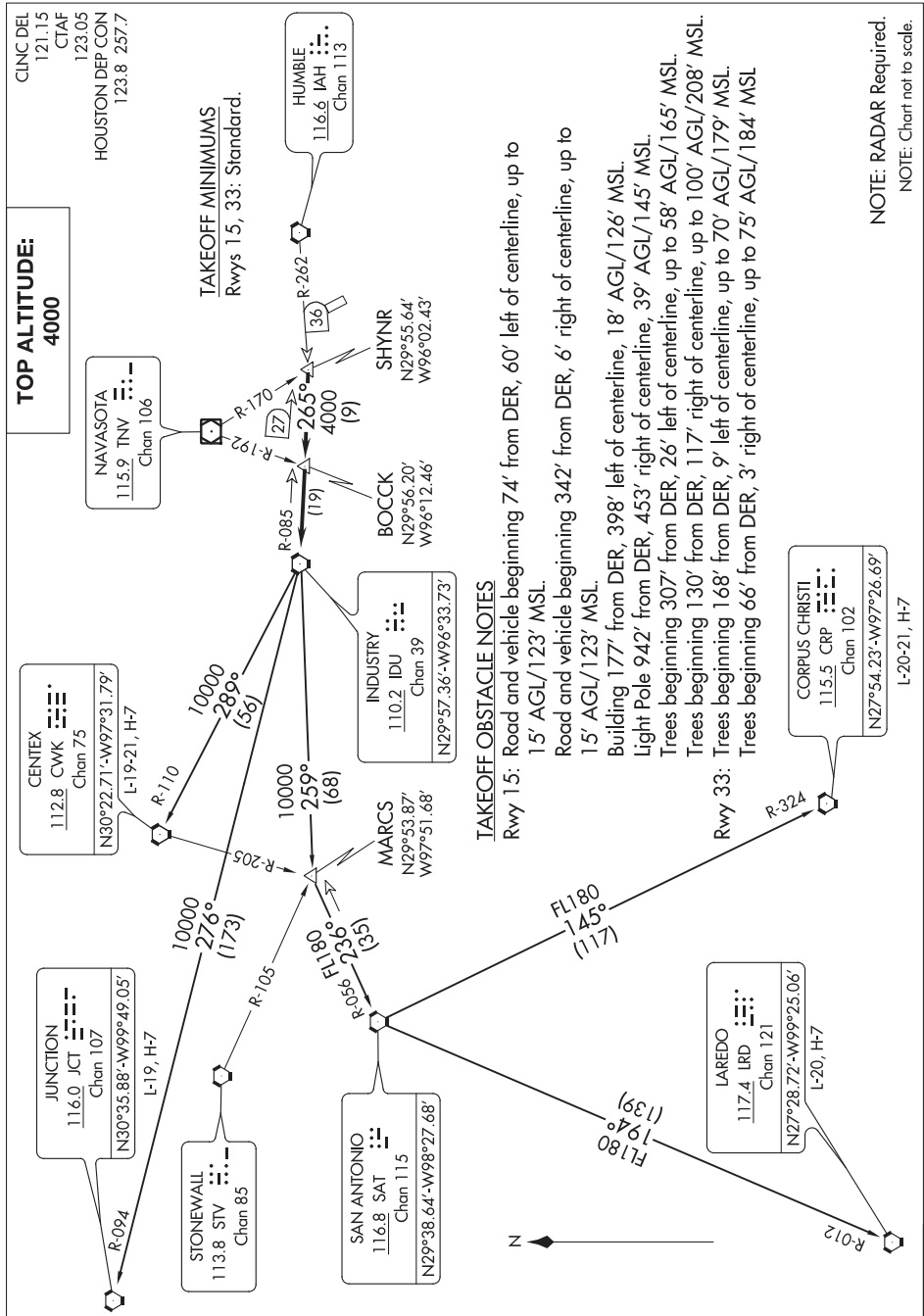
SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SL-6079 (FAA)

WEST HOUSTON (IWS)
HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



NOTE: RADAR Required.
NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

(IDU8.IDU) 10NOV16

HOUSTON, TEXAS
WEST HOUSTON (IWS)



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

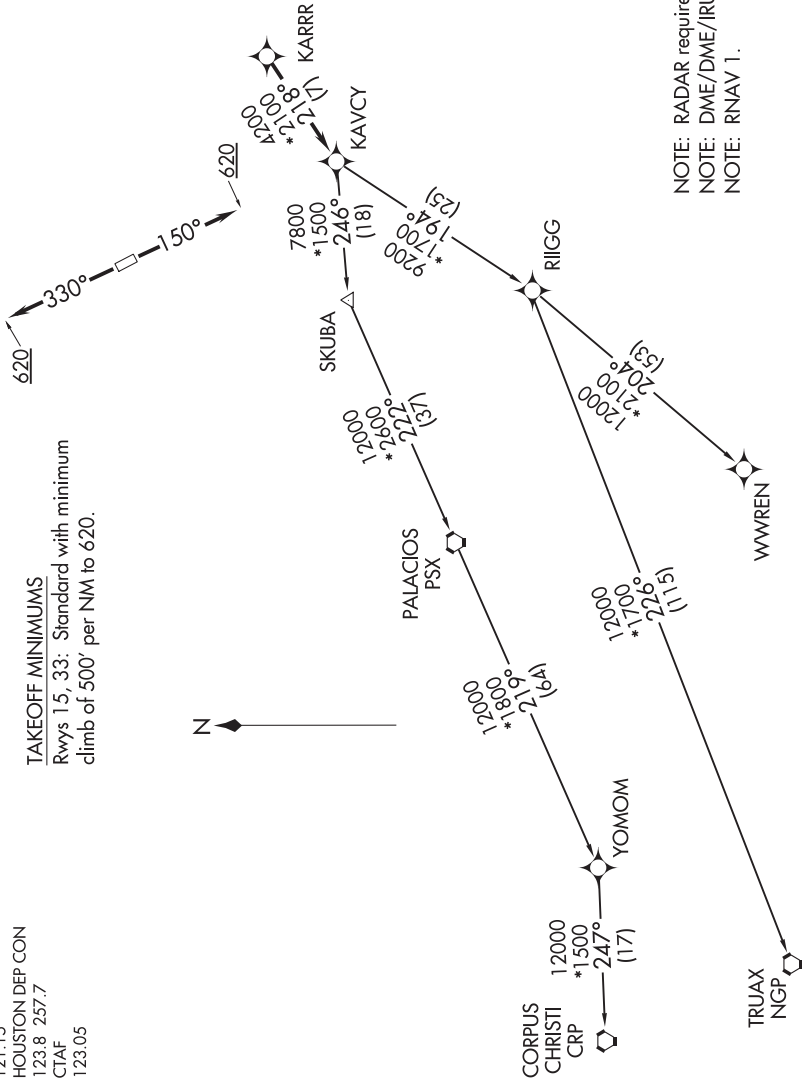
KARR THREE DEPARTURE (RNAV)

TOP ALTITUDE:
4000

SC-5, 10 NOV 2016 to 05 JAN 2017

CINC DEL
121.15
HOUSTON DEP CON
123.8 257.7
CTAF
123.05

TAKEOFF MINIMUMS
Rwys 15, 33: Standard with minimum
climb of 500' per NM to 620.



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb on heading 150° to 620, expect radar vectors to KARRR, thence

TAKEOFF RWY 33: Climb on heading 330° to 620, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

TAKEOFF OBSTACLE NOTES:

Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.

Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEONA TWO DEPARTURE

SL-6079 (FAA)

WEST HOUSTON (IWS)

HOUSTON, TEXAS

**TOP ALTITUDE:
4000**

CLNC DEL 121.15
CTAF 123.05
HOUSTON DEP CON 123.8 257.7

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'

BONHAM
114.6 BYP
Chan 93
N33°32.25' - W96°14.05'
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°23.08'

CEDAR CREEK
114.8 CQY
Chan 95
N32°11.14' - W96°13.09'

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

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

NOTE: RADAR required.
NOTE: Except for aircraft destined
ACT or the DFW terminal area,
all aircraft filing the LOA2 SID
must file one of the published
transitions via FUZ (LOA2.FUZ)
ADM (LOA2.ADM) or
BYP (LOA2.BYP).

WLLIS
N30°32.08'
W95°39.10'

NAVASOTA
115.9 TNV
Chan 106

HUMBLE
116.6 IAH
Chan 113

TAKEOFF MINIMUMS
Rwys 15, 33: Standard

(NOTES ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

LEONA TWO DEPARTURE

(LOA2.LOA) 10NOV16

HOUSTON, TEXAS

WEST HOUSTON (IWS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

TAKEOFF OBSTACLE NOTES

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CLNC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

LITTLE ROCK
113.9 LIT : : :
Chan 86
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: RADAR 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

TAKEOFF MINIMUMS:
Rwys 15, 33: Standard.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

TAKEOFF OBSTACLE NOTES:

Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL. Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.

Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

610
SL-6079 (FAA)

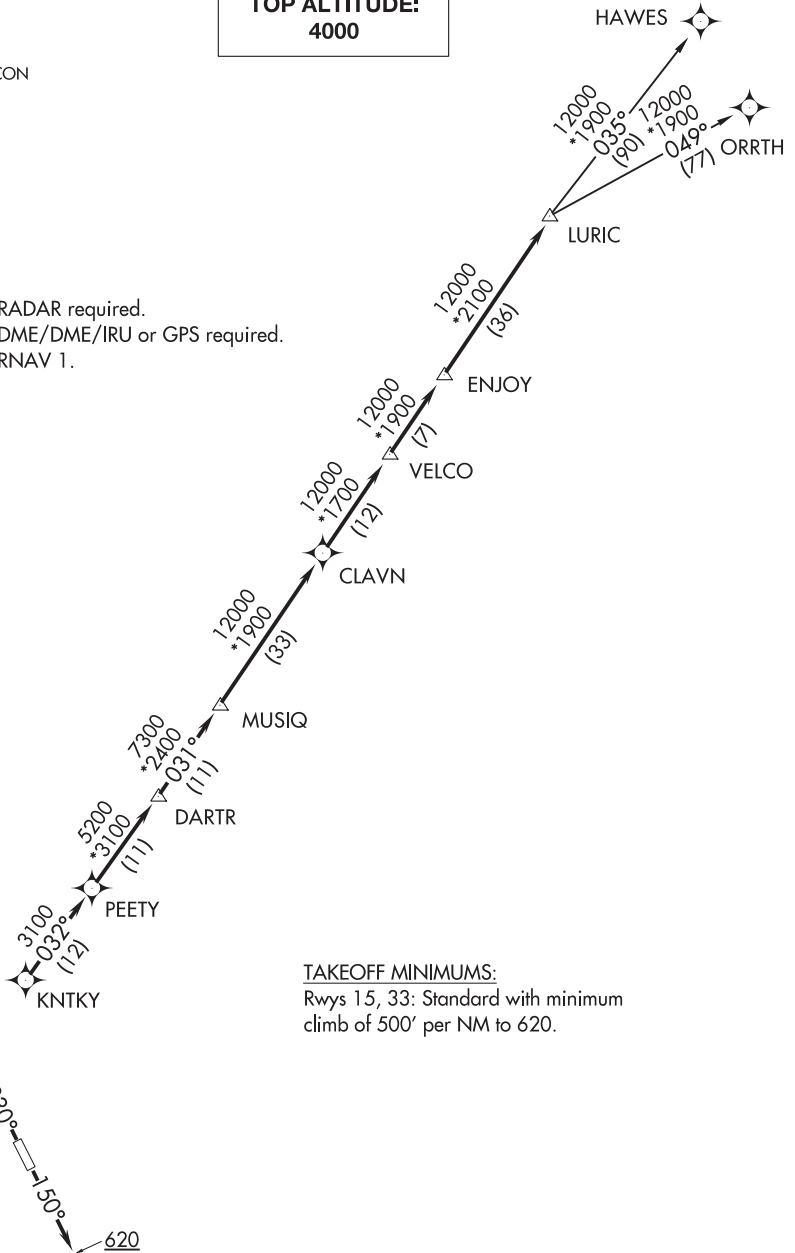
WEST HOUSTON (IWS)
HOUSTON, TEXAS

LURIC FOUR DEPARTURE (RNAV)

CLNC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**

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



TAKEOFF MINIMUMS:
Rws 15, 33: Standard with minimum
climb of 500' per NM to 620.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)
(LURIC4.LURIC) 10NOV16

HOUSTON, TEXAS
WEST HOUSTON (IWS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb heading 150° to 620, expect radar vectors to KNTKY, thence. . . .

TAKEOFF RWY 33: Climb heading 330° to 620, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

TAKEOFF OBSTACLE NOTES:

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

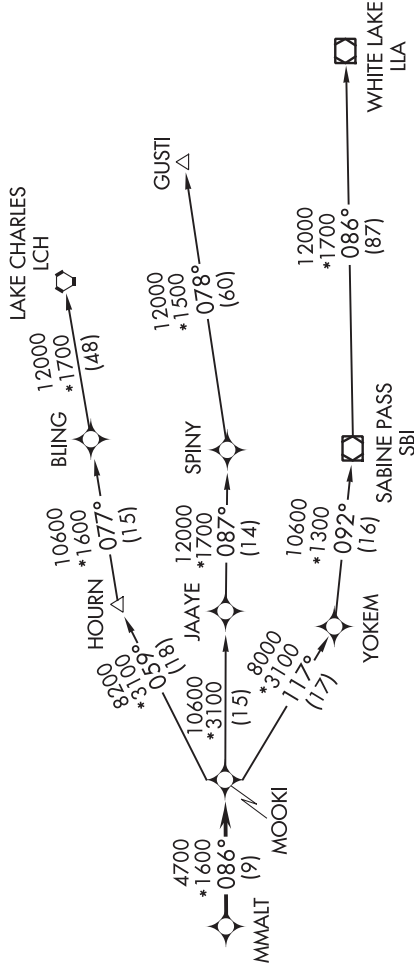
SC-5, 10 NOV 2016 to 05 JAN 2017

210Z NAV 01 910Z AON 10 10 'S-CS

CINC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:
Rwy 15, 33: Standard with minimum
climb of 500' per NM to 620.



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, IBX, LVJ, SGR, TME, T00, T41 and 54T.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb heading 150° to 620, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 33: Climb heading 330° to 620, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

TAKEOFF OBSTACLE NOTES:

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
- Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

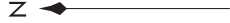
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CINC DEL
121.15
123.05
CTAF
HOUSTON DEP CON
123.8 257.7

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:
Rwys 15, 33: Standard



HOBBY
117.1 HUB
Chan 118

EAGLE LAKE
116.4 ELA
Chan 111

SKUBA
N29°11.72'
W95°47.47'
L-19-21, H-7

PALACIOS
117.3 PSX
Chan 120
N28°45.87'-W96°18.37'

SAN ANTONIO
116.8 SAT
Chan 115
N29°38.64'-W98°27.68'
L-19, H-7

FL180
338°
(70)

THREE RIVERS
111.4 THX
Chan 51
N28°30.30'-W98°09.03'

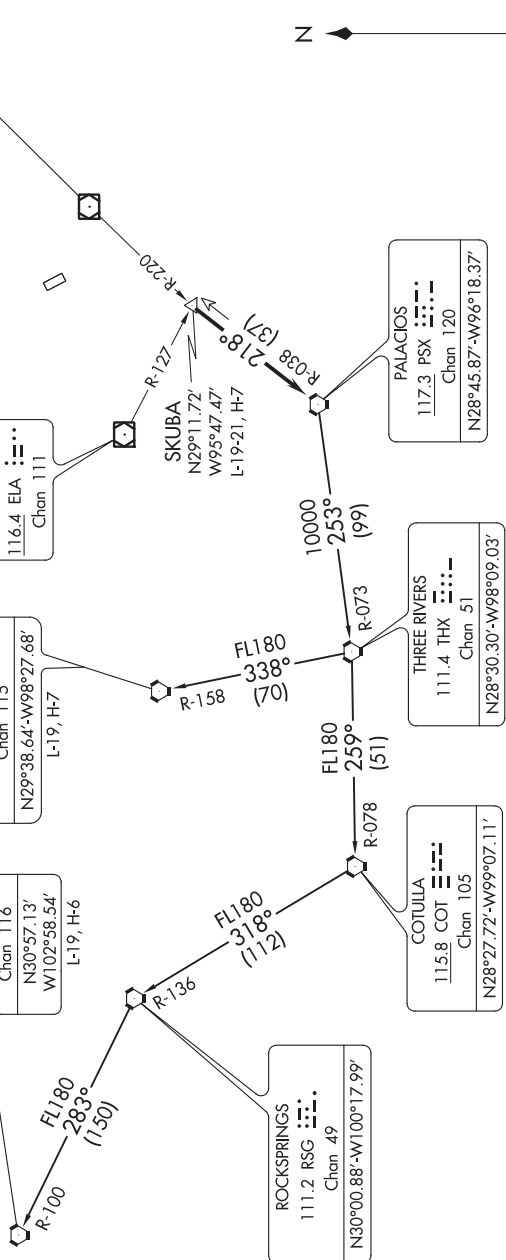
FORT STOCKTON
116.9 FST
Chan 116
N30°57.13'
W102°58.54'
L-19, H-6

FL180
259°
(51)

COTUILA
115.8 COT
Chan 105
N28°27.72'-W99°07.11'

ROCKSPRINGS
111.2 RSG
Chan 49
N30°00.88'-W100°17.99'

FL180
283°
(130)



(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required
NOTE: Chart not to scale

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

TAKEOFF OBSTACLE NOTES:

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(STRYA4.STRYA) 16315

616
SL-6079 (FAA)

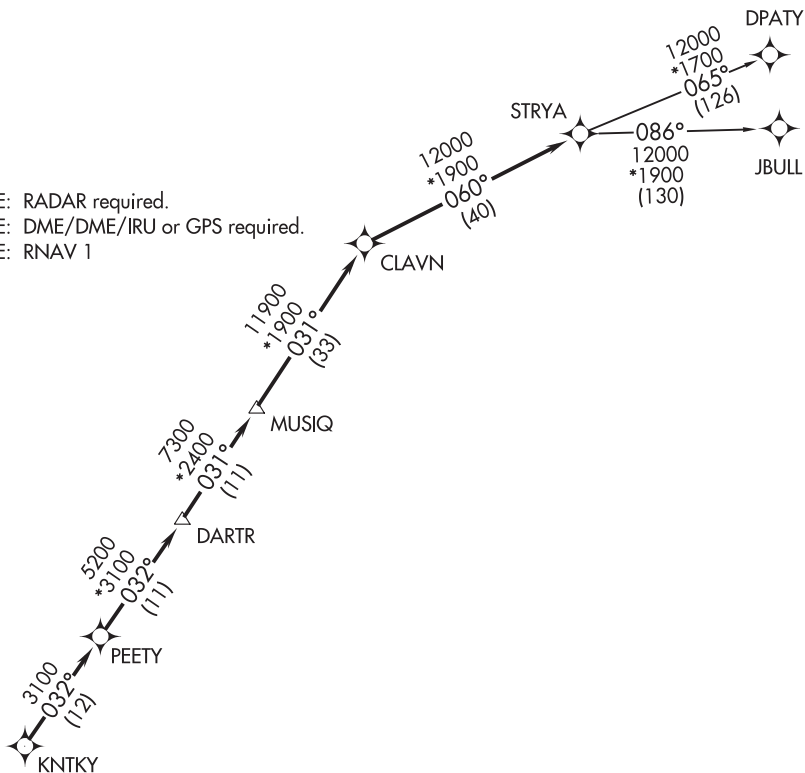
WEST HOUSTON (IWS)
HOUSTON, TEXAS

STRYA FOUR DEPARTURE (RNAV)

CLNC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

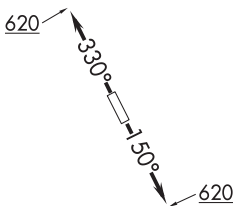
**TOP ALTITUDE:
4000**

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.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

(STRYA4.STRYA) 10NOV16

HOUSTON, TEXAS
WEST HOUSTON (IWS)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb heading 150° to 620, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 33: Climb heading 330° to 620, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

CLNC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

TAKEOFF MINIMUMS:

Rwys 15, 33: Standard with minimum climb of 500' per NM to 620.

NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

TAKEOFF OBSTACLE NOTES:

Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL. Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.

Rwy 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.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb heading 150° to 620, expect RADAR vectors to BBYSE, thence. . .

TAKEOFF RWY 33: Climb heading 330° to 620, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

STYCK FOUR DEPARTURE (RNAV)

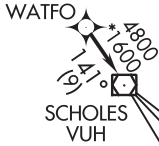
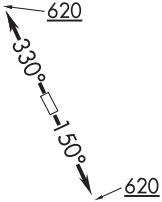
WATFO THREE DEPARTURE (RNAV)

CLNC DEL 121.15
HOUSTON DEP CON 123.8 257.7
CTAF 123.05

TAKEOFF OBSTACLE NOTES

Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
 Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.

Rwy 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.

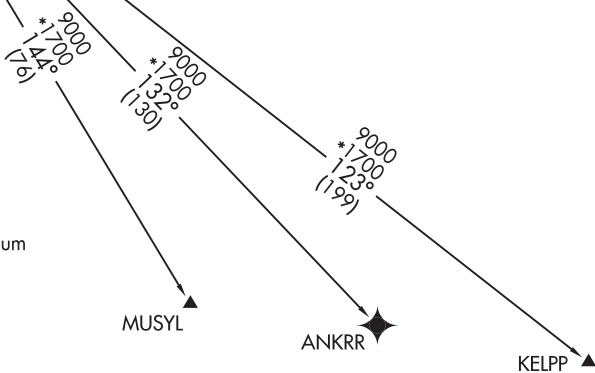


TOP ALTITUDE:
4000

NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS

Rwys 15, 33: Standard with minimum climb of 500' per NM to 620.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb on heading 150° to 620, expect RADAR vectors to WATFO, thence

TAKEOFF RWY 33: Climb on heading 330° to 620, expect RADAR vectors to WATFO, thence

. . . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

MUSYL TRANSITION (WATFO3.MUSYL)::

WATFO THREE DEPARTURE (RNAV)

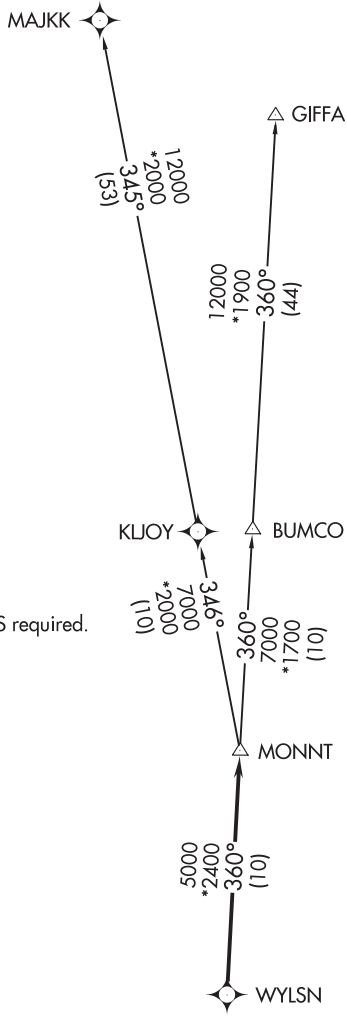
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

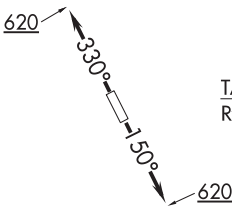
CLNC DEL
121.15
CTAF
123.05
HOUSTON DEP CON
123.8 257.7

**TOP ALTITUDE:
4000**



- 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.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Climb on heading 150° to 620, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 33: Climb on heading 330° to 620, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJJK)

TAKEOFF OBSTACLE NOTES:

- Rwy 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, 26' left of centerline, up to 58' AGL/165' MSL.
 Trees beginning 130' from DER, 117' right of centerline, up to 100' AGL/208' MSL.
- Rwy 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

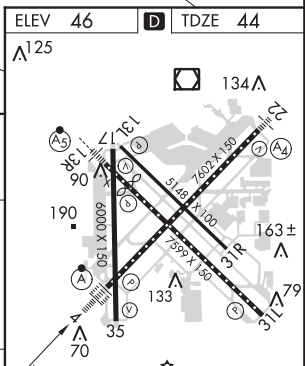
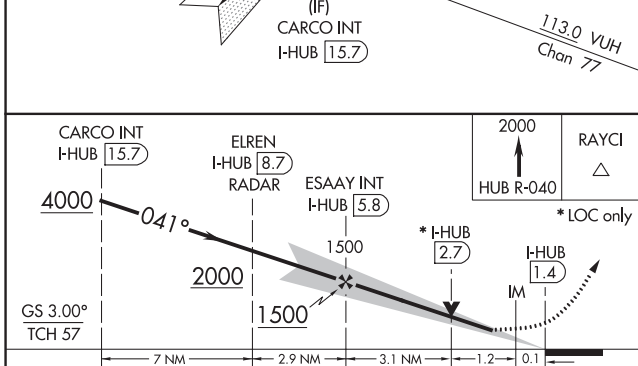
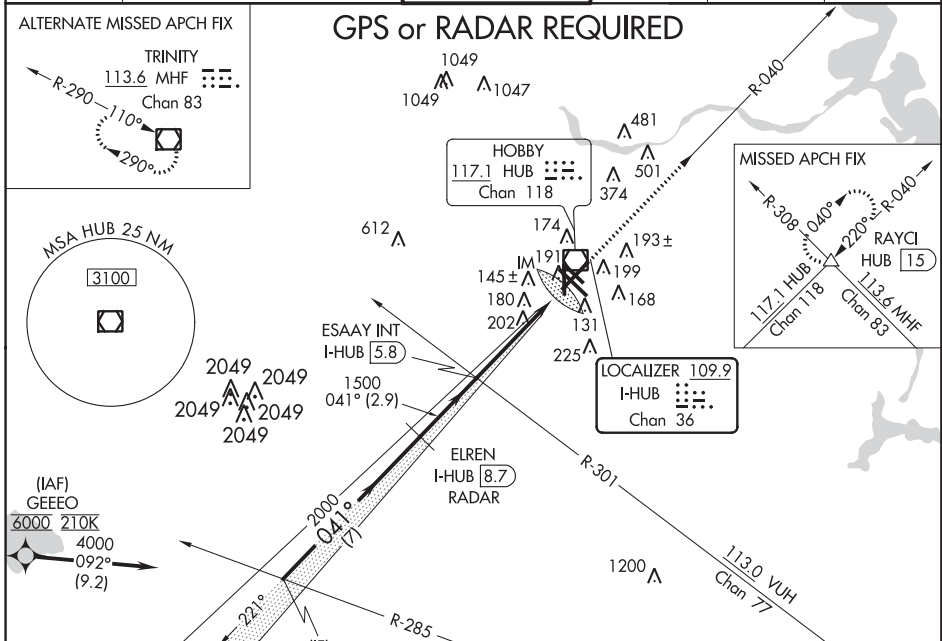
SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-HUB	APP CRS	Rwy Idg	7602
109.9	041°	TDZE	44
Chan 36		Apt Elev	46

ILS or LOC RWY 4
WILLIAM P. HOBBY (HOU)

<p>▽ For inop ALSF-2, increase S-ILS 4 Cat E visibility to RVR 4000; △ S-LOC 4 Cat C/D/E visibility to 1¾.</p>	<p>ALSF-2</p>	<p>MISSED APPROACH: Climb to 2000 on HUB VOR/DME R-040 RAYCI INT/HUB 1.5 DME and hold.</p>
---	---------------	--

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	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------



CATEGORY	A	B	C	D	E
S-ILS 4	244/18 200 (200-½)				
S-LOC 4	520/24	476 (500-½)	520/50 476 (500-1)		
C CIRCLING	520-1	474 (500-1)	740-2¼	694 (700-2¼)	860-3 814 (900-3)


ELEV	46	TDZE	44		
<p>REIL Rwy's 31L and 35 MIRL Rwy's 13L-31R and 17-35 HIRL Rwy's 4-22 and 13R-31L TDZ/CL Rwy's 4, 13R and 31L FAF to MAP 4.4 NM</p>					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

LOC/DME I-PRQ 111.3 Chan 50	APP CRS 131°	Rwy Idg 6565 TDZE 46 Apt Elev 46
---	------------------------	---

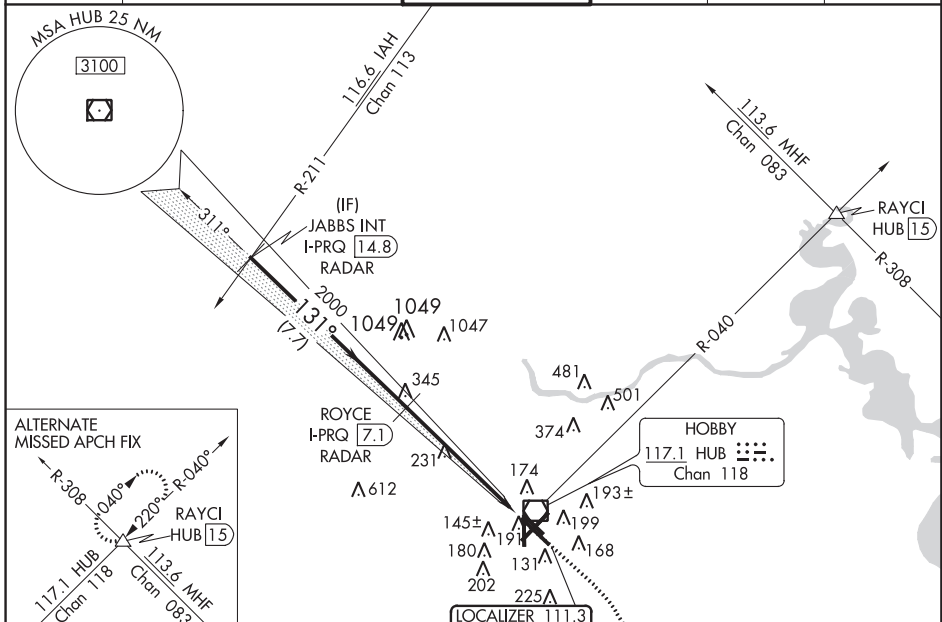
ILS or LOC RWY 13R

WILLIAM P HOBBY (HOU)

▼ Inop table does not apply to S-ILS Rwy 13R. DME or RADAR required.
▲ 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 to 1 3/8 SM, Cat E to 1 3/4 SM.


MALSR  MISSED APPROACH: Climb to 800 then climbing right turn to 2200 direct VUH VOR/DME.

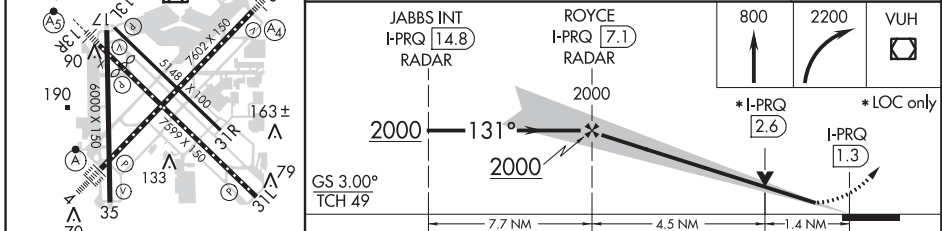
ATIS 124.6	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOBBY TOWER 118.7 256.9	GND CON 121.9	CLNC DEL 125.45	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------



ELEV 46	D	TDZE 46
---------	----------	---------

RADAR REQUIRED

MISSED APCH FIX
SCHOLES VUH  113.0 Chan 77



CATEGORY	A	B	C	D	E
S-ILS 13R	296/40 250 (300-3/4)				
S-LOC 13R	540/40	494 (500-3/4)	540/50	494 (500-1)	540/60 494 (500-1 1/4)
C CIRCLING	540-1	494 (500-1)	740-2 1/4	694 (700-2 1/4)	860-3 814 (900-3)

HOUSTON, TEXAS
Amdt 12C 10NOV16

WILLIAM P HOBBY (HOU) ILS or LOC RWY 13R

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

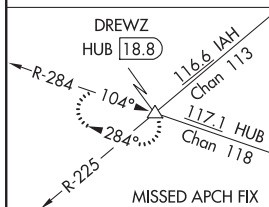
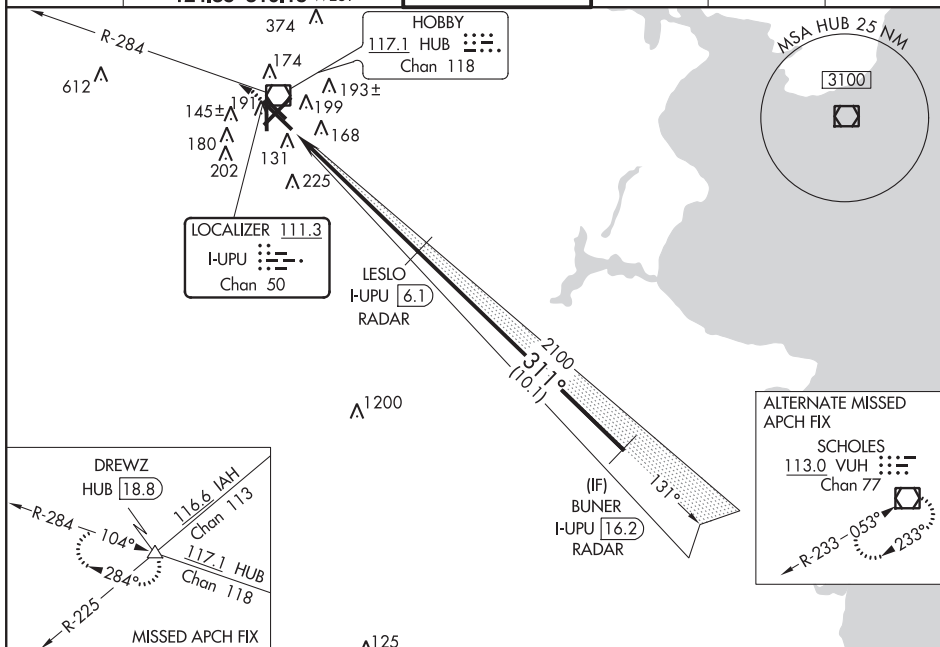
LOC/DME I-UPU 111.3 Chan 50	APP CRS 311°	Rwy Idg TDZE 43 Apt Elev 46	7599
---	------------------------	---	-------------

ILS or LOC RWY 31L

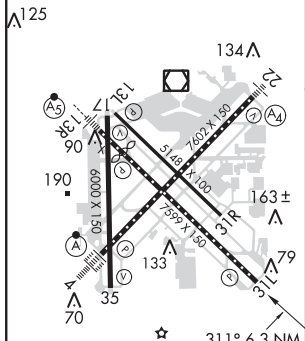
WILLIAM P HOBBY (HOU)

▲ MISSED APPROACH: Climb to 800 then climbing left turn to 2000 on HUB VOR/DME R-284 to DREWZ INT/HUB 18.8 DME and hold.

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	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------

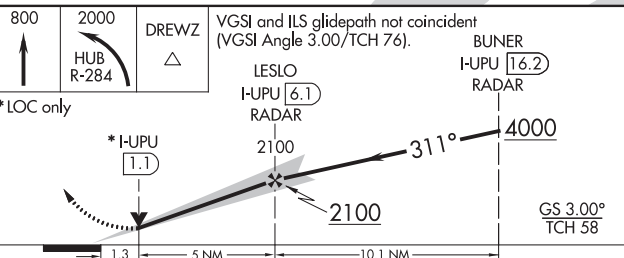


ELEV 46	D	TDZE 43
----------------	----------	----------------



REIL Rwy 31L and 35	311° 6.3 NM from FAF
HIRL Rwy 4-22 and 13R-31L	
MIRL Rwy 13L-31R and 17-35	
TDZ/CL Rwy 4, 13R and 31L	
FAF to MAP 6.3 NM	
Knots	60 90 120 150 180
Min:Sec	6:18 4:12 3:09 2:31 2:06

RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 31L	243/40 200 (200-¾)			
S-LOC 31L	520/55 477 (500-1¼)	520-1⅓ 477 (500-1⅓)		
C CIRCLING	520-1 474 (500-1)	740-2¼ 694 (700-2¼)		

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

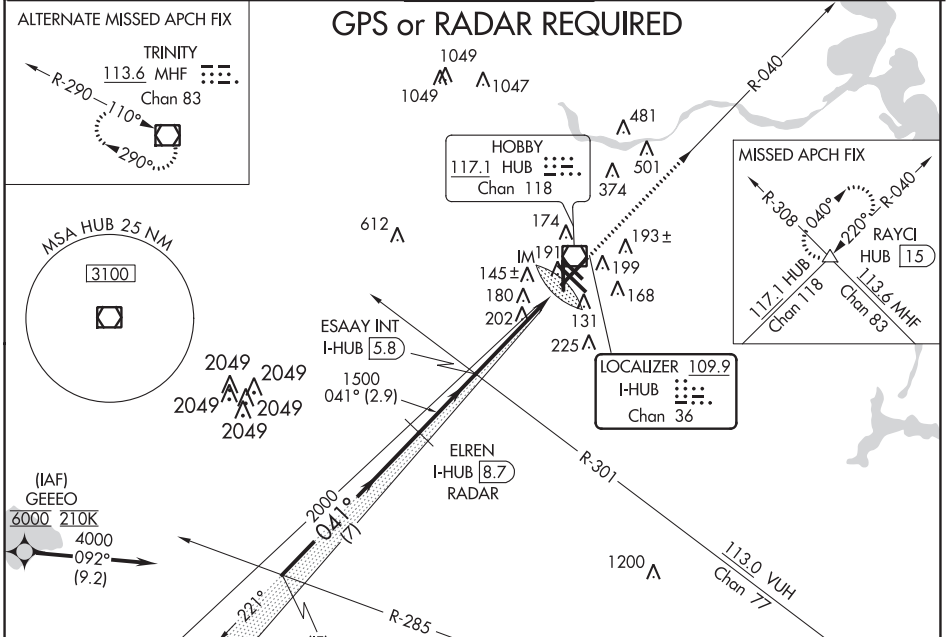
LOC/DME I-HUB 109.9 Chan 36	APP CRS 041°	Rwy Idg 7602 TDZE 44 Apt Elev 46
---	------------------------	---

ILS RWY 4 (SA CAT I)

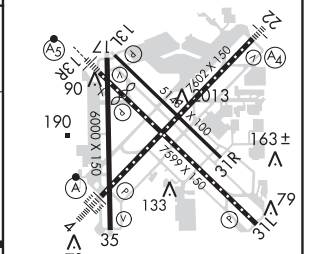
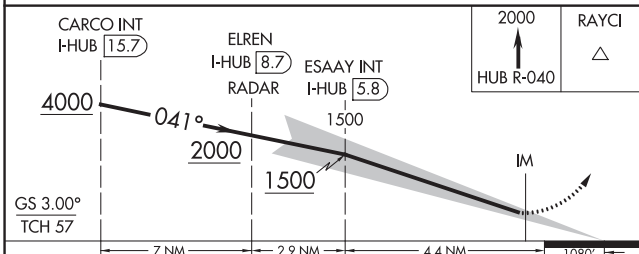
WILLIAM P. HOBBY (HOU)

▽ ▲	Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.	ALS-F-2 (A)	MISSED APPROACH: Climb to 2000 on HUB VOR/DME R-040 RAYCI INT/HUB 1.5 DME and hold.
----------------------	--	-----------------------	---

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	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------



ELEV 46	D TDZE 44
---------	------------------



CATEGORY	A	B	C	D
S-ILS 4	RA 146/14		150 DA 194	

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

REIL Rwy 31L and 35
MIRL Rwy 13L-31R and 17-35
HIRL Rwy 4-22 and 13R-31L
TDZ/CL Rwy 4, 13R and 31L

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

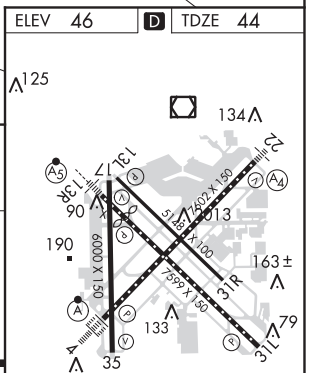
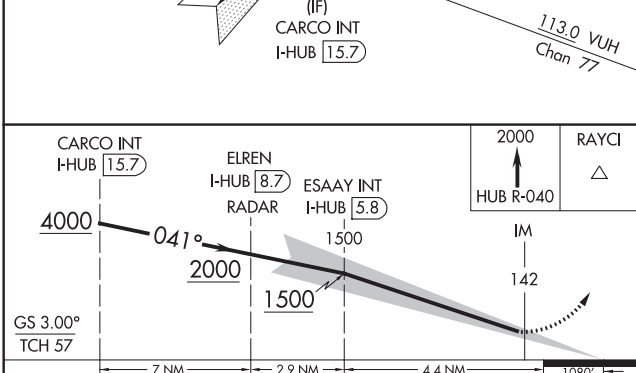
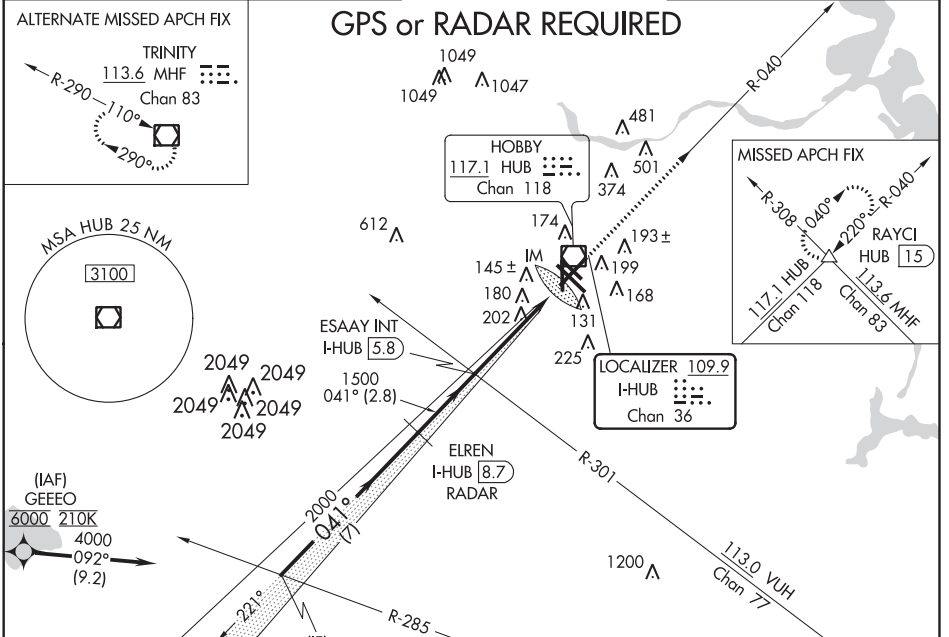
LOC/DME I-HUB 109.9 Chan 36	APP CRS 041°	Rwy Idg 7602 TDZE 44 Apt Elev 46
--	------------------------	---

ILS RWY 4 (CAT II & III)

WILLIAM P. HOBBY (HOU)

▽ CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.	ALSF-2 	MISSED APPROACH: Climb to 2000 on HUB VOR/DME R-040 RAYCI INT/HUB 1.5 DME and hold.
--	------------	---

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	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------



CATEGORY	A	B	C	D
S-ILS 4	CAT II RA 100/12		100 DA 144	
S-ILS 4	CAT III		RVR 06	

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

REIL Rwy 31L and 35
MIRL Rwy 13L-31R and 17-35
HIRL Rwy 4-22 and 13R-31L
TDZ/CL Rwy 4, 13R and 31L

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 86209 W04A	APP CRS 041°	Rwy Idg 7602 TDZE 44 Apt Elev 46
--	------------------------	---

RNAV (GPS) RWY 4

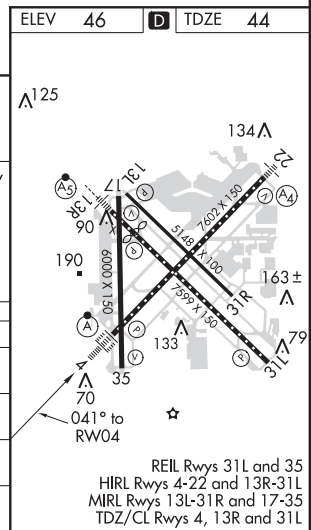
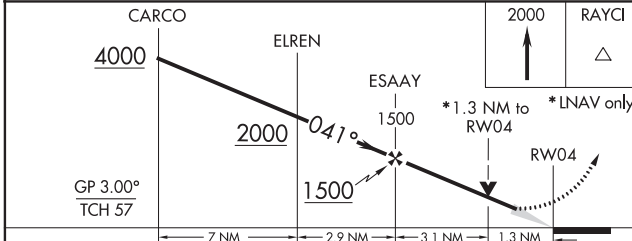
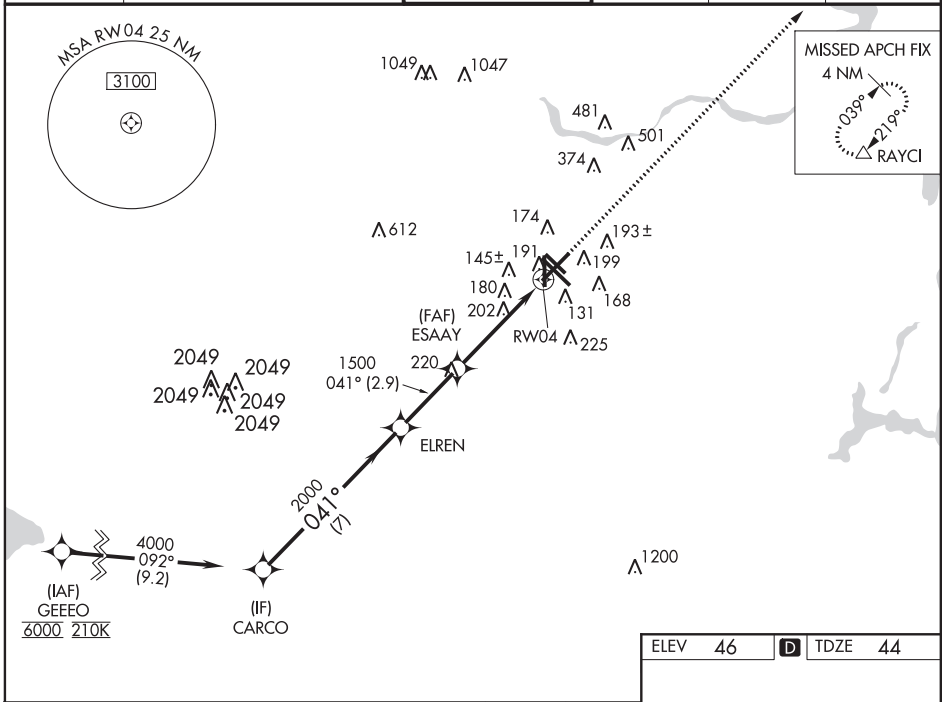
WILLIAM P. HOBBY (HOU)

⚠ 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 1½ miles and LNAV Cat C/D/E visibility to 1¾ mile. DME/DME RNP-0.3 NA.



MISSED APPROACH:
Climb to 2000 direct RAYCI and hold.

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	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------



CATEGORY	A	B	C	D	E
LPV DA		244/24	200 (200-½)		
LNAV/VNAV DA		440/45	396 (400-¾)		
LNAV MDA	520/24	476 (500-½)	520/50	476 (500-1)	
C CIRCLING	520-1	474 (500-1)	740-2¼	694 (500-2¼)	860-3 814 (900-3)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 70310 W13A	APP CRS 131°	Rwy ldg 6565 TDZE 46 Apt Elev 46
--	------------------------	---

RNAV (GPS) RWY 13R

WILLIAM P HOBBY (HOU)

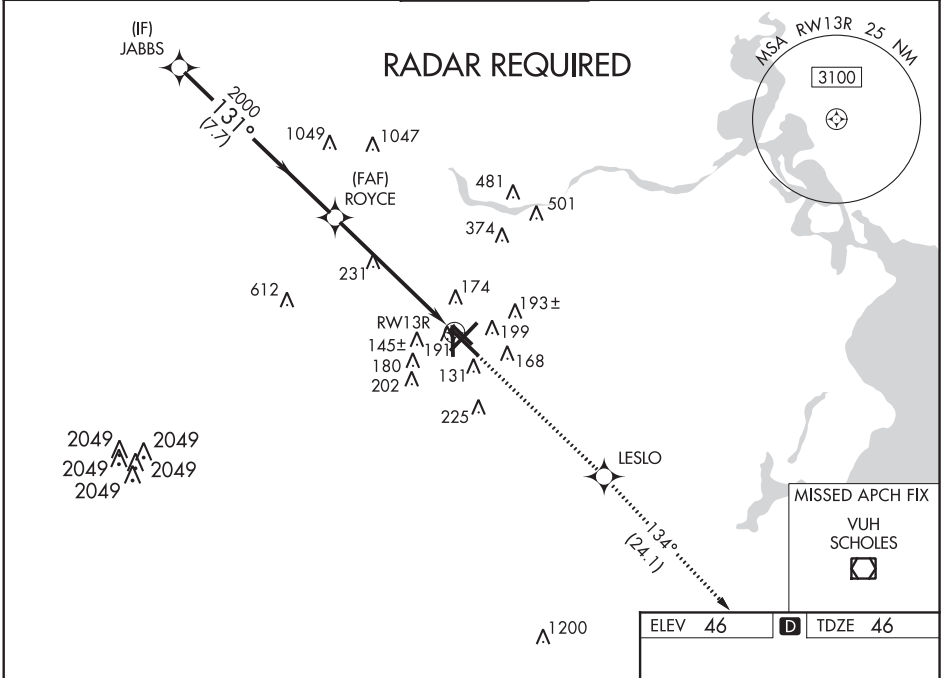
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA. For inop ALS, increase LPV all Cats visibility to RVR 5000; increase LNAV/VNAV Cats A/B/C/D visibility to 1½ SM, Cat E to 1½ SM; and increase LNAV Cats A/B visibility to RVR 5500, Cats C/D to 1½ SM, Cat E to 1¼ SM. Rwy 13R helicopter visibility reduction below ¾ SM NA.

MALSR

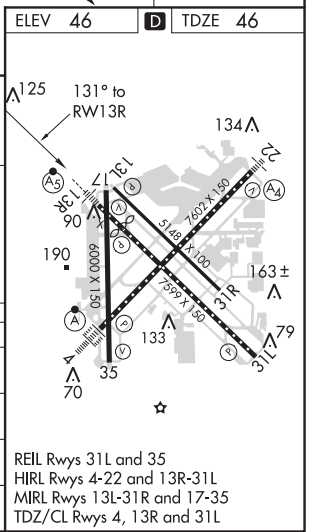


MISSED APPROACH: Climb to 2200 direct LESLO and on track 134° to VUH VOR/DME.

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	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------



	JABBS	ROYCE	2200	LESLO	tr 134°	VUH
	2000	2000	2000			
	131°		*1.4 NM to RWY13R		*LNAV only	
	7.7 NM		4.5 NM		1.4 NM	
GP 3.00° TCH 49						
CATEGORY	A	B	C	D	E	
LPV DA	330/40		284 (300-¾)			
LNAV/VNAV DA	475/50		429 (500-1)			
LNAV MDA	540/40	494 (500-¾)	540/50	494 (500-1)	540/60	494 (500-1¼)
C CIRCLING	540-1	494 (500-1)	740-2¼	694 (700-2¼)	860-3	814 (900-3)



REIL Rwy 31L and 35
HIRL Rwy 4-22 and 13R-31L
MIRL Rwy 13L-31R and 17-35
TDZ/CL Rwy 4, 13R and 31L

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS	Rwy Idg	6000
176°	TDZE	46
	Apt Elev	46

RNAV (GPS) RWY 17

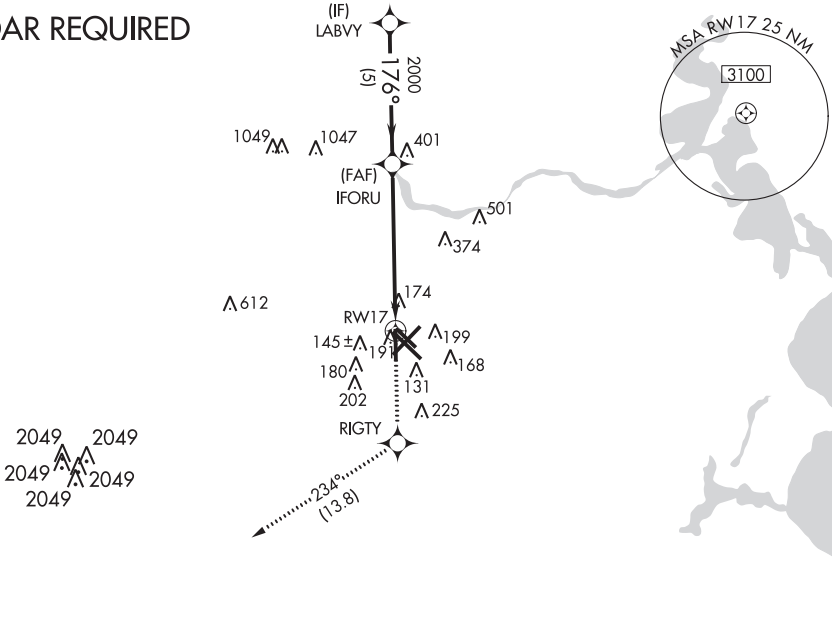
WILLIAM P HOBBY (HOU)

⚠ 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. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3000 direct RIGTY and on track 234° to ACOLA and hold.

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	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------

RADAR REQUIRED



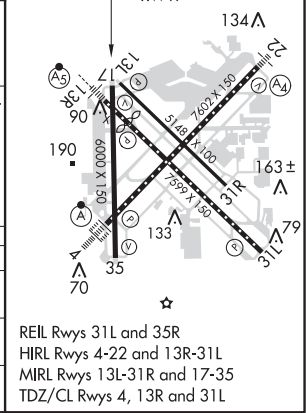
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



ELEV 46	D	TDZE 46
---------	----------	---------

	LABVY	IFORU	3000	RIGTY	tr 234°	ACOLA
	2000	2000				
	5 NM		4.3 NM		1.6 NM	
CATEGORY	A	B	C	D		
LNAV/VNAV DA	480-1½		434 (500-1½)			
LNAV MDA	580-1	534 (600-1)	580-1½	580-1¾ 534 (600-1¾)		
CIRCLING	580-1	534 (600-1)	580-1½	600-2 554 (600-2)		



REIL Rwy 311 and 35R
HIRL Rwy 4-22 and 13R-31L
MIRL Rwy 13L-31R and 17-35
TDZ/CL Rwy 4, 13R and 31L

WAAS CH 65610 W22A	APP CRS 221°	Rwy ldg 7602 TDZE 41 Apt Elev 46
--	------------------------	---

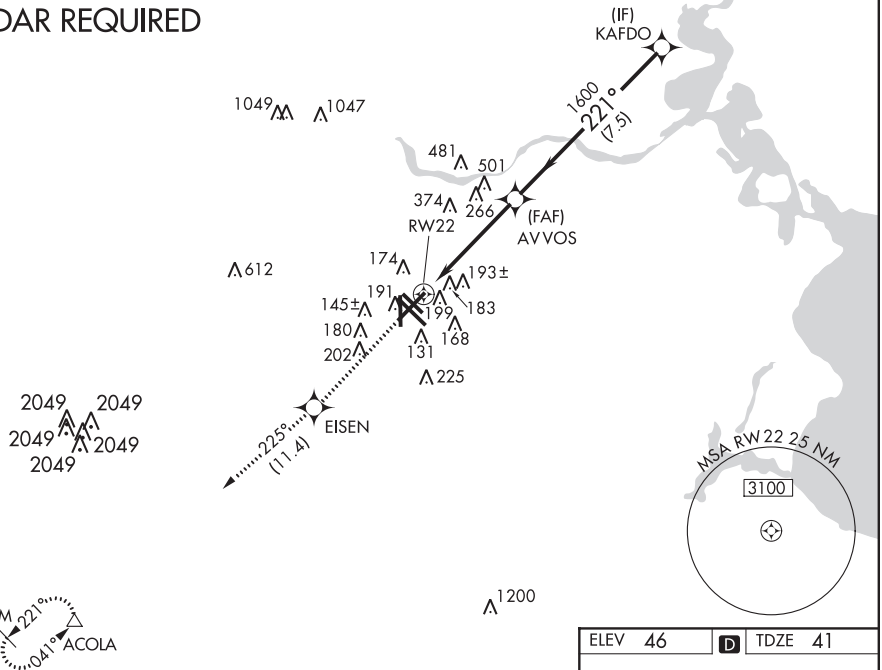
RNAV (GPS) RWY 22

WILLIAM P HOBBY (HOU)

<p>⚠ Inop table does not apply to LPV, LNAV/VNAV all Cats, and LNAV Cat C. 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.</p>	<p>MALS</p>	<p>MISSED APPROACH: Climb to 3000 direct EISEN and on track 225° to ACOLA and hold.</p>
---	-------------	---

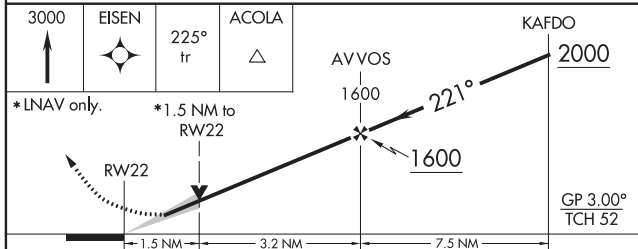
ATIS 124.6	HOUSTON APP CON 120.05 379.1 EAST 124.35 316.15 WEST	HOBBY TOWER 118.7 256.9	GND CON 121.9	CLNC DEL 125.45	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------

RADAR REQUIRED

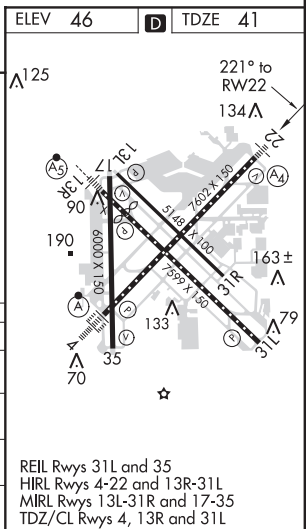


SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D	E
LPV DA	360-1		319 (400-1)		
LNAV/VNAV DA	480-1½		439 (500-1½)		
LNAV MDA	580-¾	539 (600-¾)	580-1½	580-1¾	580-2
CIRCLING	580-1	534 (600-1)	580-1½	600-2	860-3
			534 (600-1½)	554 (600-2)	814 (900-3)



REIL Rwy 31L and 35
HIRL Rwy 4-22 and 13R-31L
MIRL Rwy 13L-31R and 17-35
TDZ/CL Rwy 4, 13R and 31L

WAAS CH 77510 W31A	APP CRS 311°	Rwy Idg 7599 TDZE 43 Apt Elev 46
--	------------------------	---

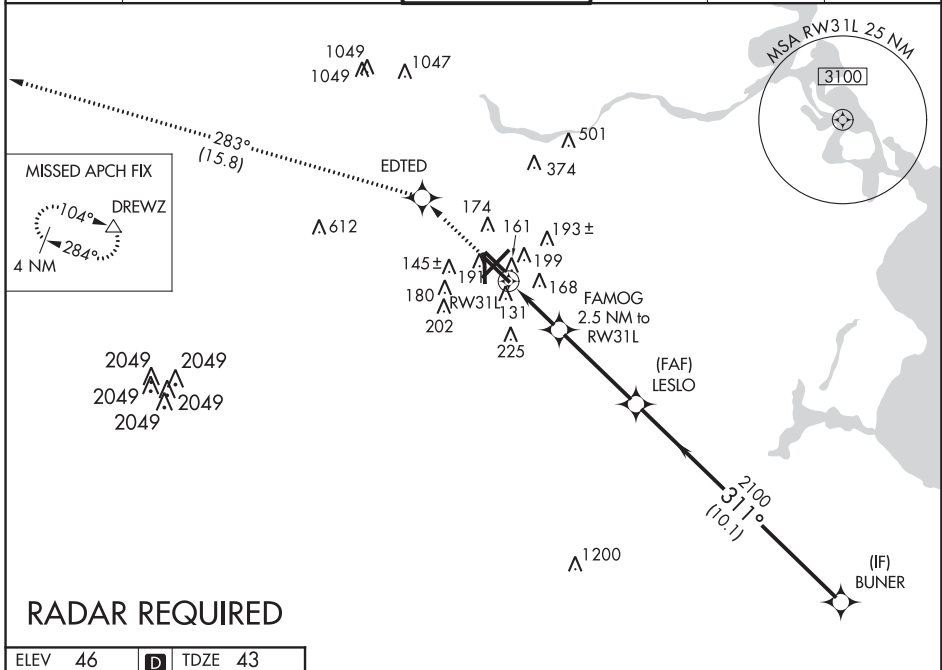
RNAV (GPS) RWY 31L

WILLIAM P HOBBY (HOU)

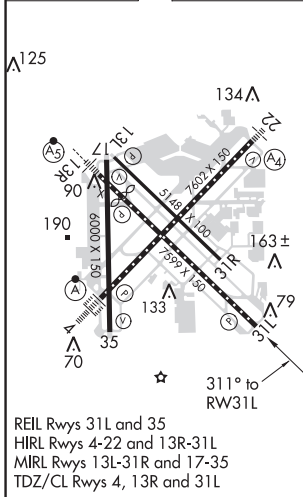
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 43°C (109°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct EDTED and on track 283° to DREWZ and hold.

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	CPDLC
----------------------	--	-----------------------------------	-------------------------	---------------------------	-------



ELEV 46	D	TDZE 43
---------	----------	---------



2000	EDTE	DREWZ	VGSi and RNAV glidepath not coincident (VGSi Angle 3.00/TCH 76).	
↑	✦	tr 283°	△	BUNER
*LNAV only.				
RW31L → 1.2 NM → FAMOG (2.5 NM to RW31L) → LESLO (2100) → BUNER (4000)				
Altitudes: 2100, 2100, 311°, 4000 Distances: 1.2 NM, 1.3, 3.8 NM, 10.1 NM				
CATEGORY	A	B	C	D
LPV DA		243/40	200 (200-¾)	
LNAV/VNAV DA		323/45	280 (300-⅞)	
LNAV MDA	500/55	457 (500-1¼)	500-1⅜	457 (500-1⅜)
C CIRCLING	500-1 454 (500-1)	520-1 474 (500-1)	740-2¼	694 (700-2¼)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

AIRPORT DIAGRAM

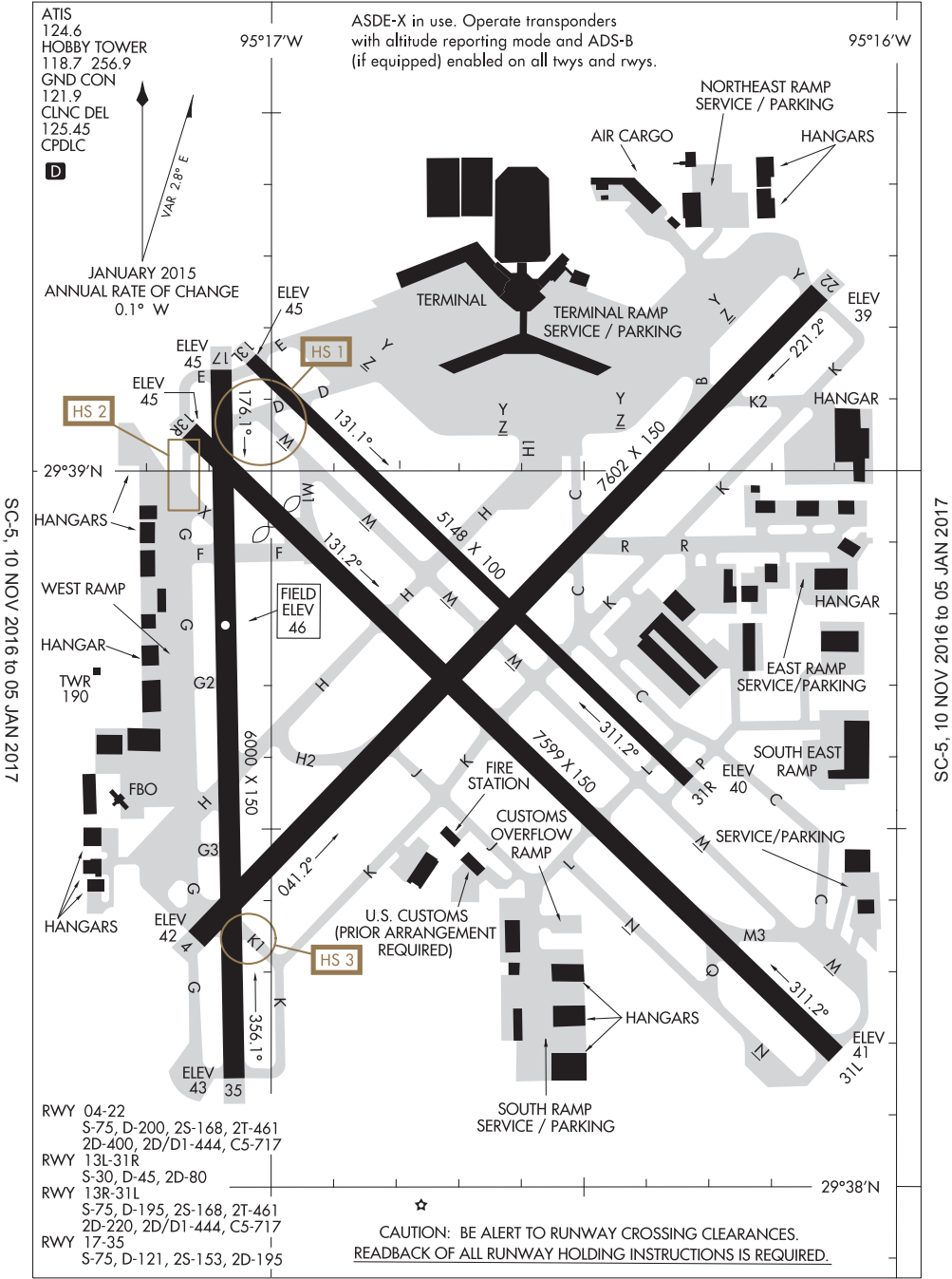
AL-198 (FAA)

WILLIAM P HOBBY (HOU)
HOUSTON, TEXAS

ATIS
124.6
HOBBY TOWER
118.7 256.9
GND CON
121.9
CLNC DEL
125.45
CPDLC

D

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



JANUARY 2015
ANNUAL RATE OF CHANGE
0.1° W



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

RWY 04-22
S-75, D-200, 2S-168, 2T-461
2D-400, 2D/D1-444, C5-717

RWY 13-31R
S-30, D-45, 2D-80

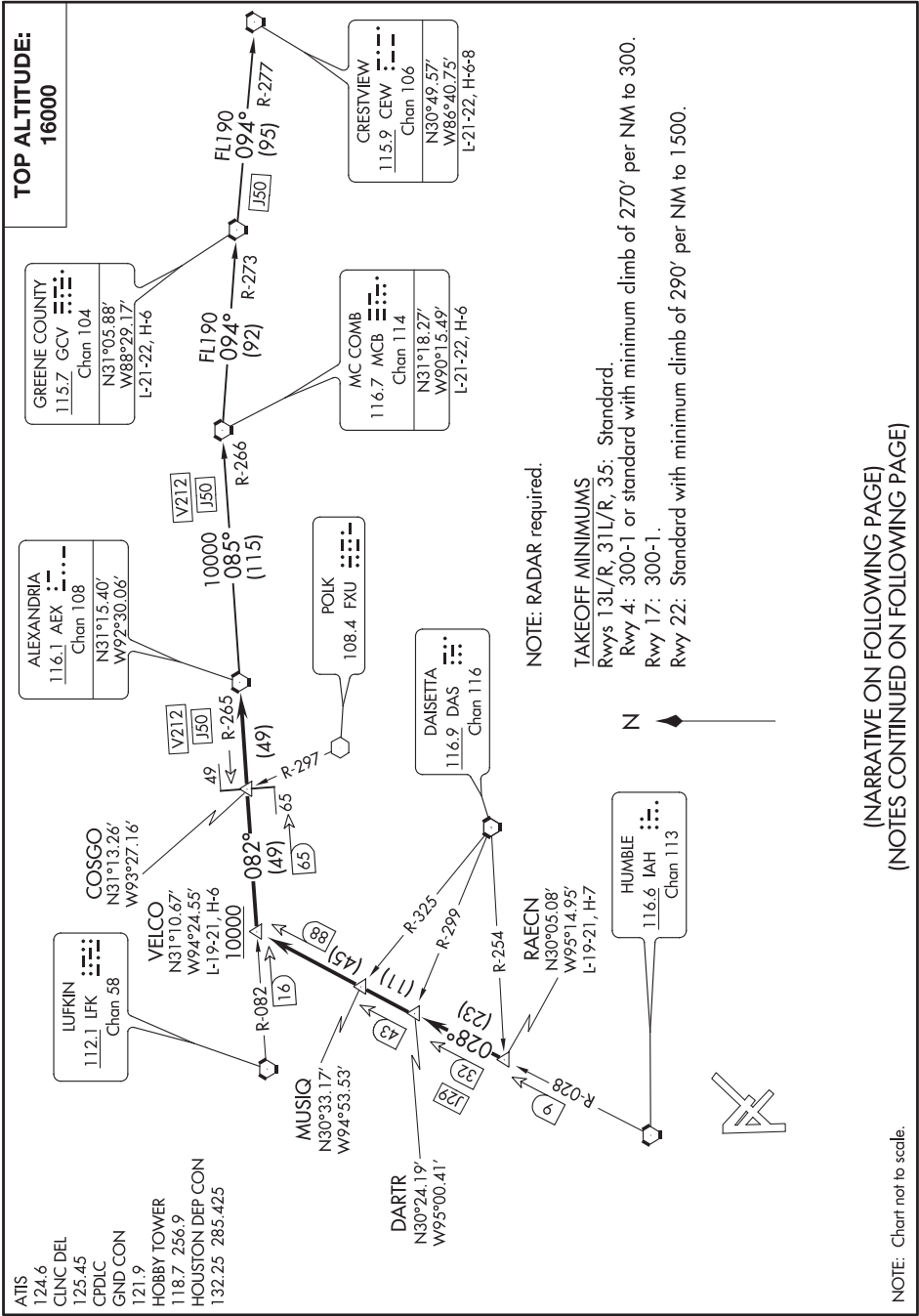
RWY 13R-31L
S-75, D-195, 2S-168, 2T-461
2D-220, 2D/D1-444, C5-717

RWY 17-35
S-75, D-121, 2S-153, 2D-195

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

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



ALEXANDRIA NINE DEPARTURE

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

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1069' right of centerline 121' AGL/166' MSL. Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL. Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL. Light on FLGPL pole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/ 85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL. Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL. Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL. Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL. Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL. Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL. ANT on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL. Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL. RADAR reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL. Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL. Antenna on LT pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL. Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL. Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL. Antenna on building 500' from DER, 525' left of centerline 33' AGL/69' MSL.
- Rwy 35: Antenna on LT pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL. LT pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL. Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE

(BLTWY3.BLTWY) 16315

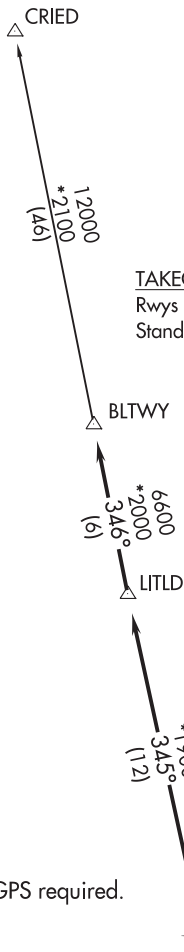
SL-198 (FAA)

WILLIAM P. HOBBY (HOU)
HOUSTON, TEXAS

BLTWY THREE DEPARTURE (RNAV)

ATIS 124.6
CLNC DEL
125.45
GND CON
121.9
HOBBY TOWER
118.7 256.9
HOUSTON DEP CON
132.25 285.425
CPDLC

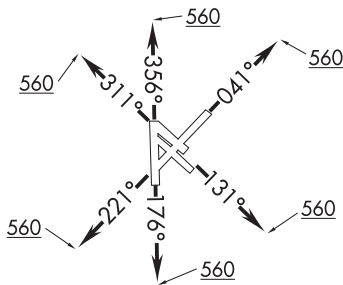
**TOP ALTITUDE:
16000**



TAKEOFF MINIMUMS

Rwys 4, 13L/R, 17, 22, 31L/R, 35:
Standard with minimum climb of 500' per NM to 560.

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



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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

HOUSTON, TEXAS
WILLIAM P. HOBBY (HOU)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to DREMR, thence

TAKEOFF RWYS 13L/R: Climb heading 131° to 560, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 17: Climb heading 176° to 560, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 22: Climb heading 221° to 560, expect RADAR vectors to DREMR, thence

TAKEOFF RWYS 31L/R: Climb heading 311° to 560, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 35: Climb heading 356° to 560, expect 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 (BLTWY3.CRIED)TAKEOFF OBSTACLE NOTES

Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL.

Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.

Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.

Light on flagpole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.

Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.

Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL. Tree

1217' from DER, 756' right of centerline, 43' AGL/89' MSL. Fence 85' from DER,

492' left of centerline, 4' AGL/45' MSL. Vehicle and road 176' from DER, 497'

left of centerline, 17' AGL/55' MSL. Pole 1011' from DER, 696' left of centerline,

33' AGL/73' MSL. Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.

Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to

79' AGL/124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150'

MSL. ANT on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.

Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.

RADAR RFLTR 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.

Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL. Tree 1310' from DER,

679' right of centerline, 27' AGL/76' MSL. Antenna on LT pole 1805' from DER,

968' right of centerline, 60' AGL/109' MSL.

Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.

Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.

Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.

Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL. Antenna on building

500' from DER, 525' left of centerline, 33' AGL/69' MSL.

Rwy 35: Antenna on LT pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.

LT pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL. Antenna on

building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

BLTWY THREE DEPARTURE (RNAV)

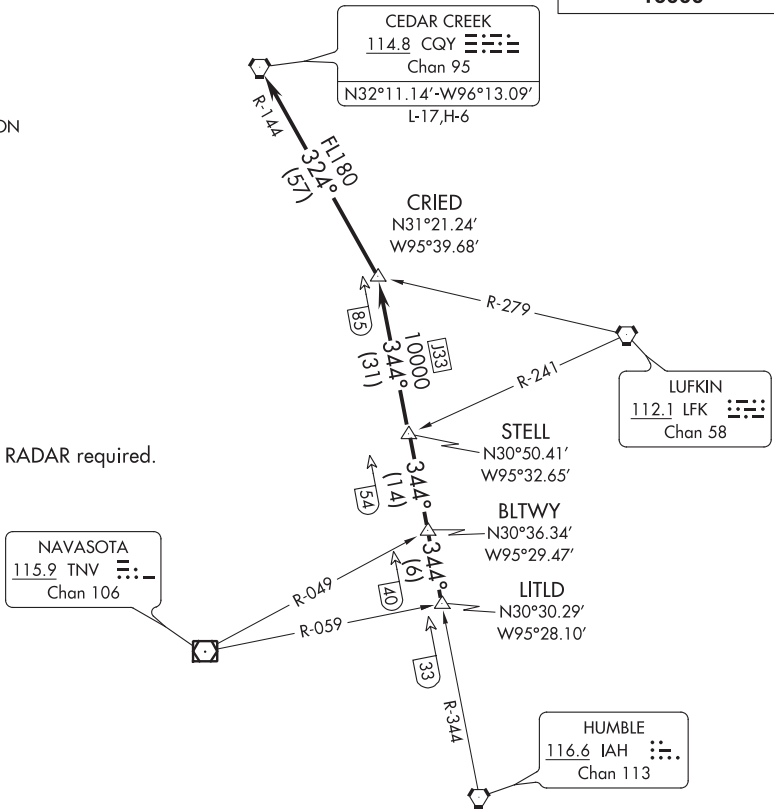
(BLTWY3.BLTWY) 10NOV16

HOUSTON, TEXAS
WILLIAM P HOBBY (HOU)

ATIS
 124.6
 CLNC DEL
 125.45
 GND CON
 121.9
 HOBBY TOWER
 118.7 256.9
 HOUSTON DEP CON
 132.25 285.425
 CPDLC

**TOP ALTITUDE:
16000**

NOTE: RADAR required.



TAKEOFF MINIMUMS

- Rwys 13L/R, 31L/R, 35: Standard.
- Rwy 4: 300-1 or standard with minimum climb of 270' per NM to 300.
- Rwy 17: 300-1.
- Rwy 22: Standard with minimum climb of 290' per NM to 1500.

(NOTES CONTINUED ON FOLLOWING PAGE)



NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

SL-198 (FAA)

HOUSTON, TEXAS

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1069' right of centerline 121' AGL/166' MSL.
 Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
 Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
 Light on FLGPL 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/ 85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
 Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
 Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
 Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
 Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
 Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
 Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
 ANT on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
 Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
 RADAR reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
 Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
 Antenna on LT pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
 Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
 Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
 Antenna on building 500' from DER, 525' left of centerline 33' AGL/69' MSL.
- Rwy 35: Antenna on LT pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
 LT pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
 Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

(CRIED8.CRIED) 10NOV16

HOUSTON, TEXAS

WILLIAM P HOBBY (HOU)

EL DORADO EIGHT DEPARTURE

ATIS
124.6
CLNC DEL
125.45
CPDLC
GND CON
121.9
HOBBY TOWER
118.7 256.9
HOUSTON DEP CON
132.25 285.425

**TOP ALTITUDE:
16000**

EL DORADO
115.5 ELD
Chan 102
N33°15.37'-W92°44.64'
L-17, H-6

NOTE: RADAR required.
NOTE: For aircraft destined MEM
or filed via Q32 or J42.

LUFKIN
112.1 LFK
Chan 58

ENJOY
N31°16.73'
W94°19.82'

MUSIQ
N30°33.17'
W94°53.53'

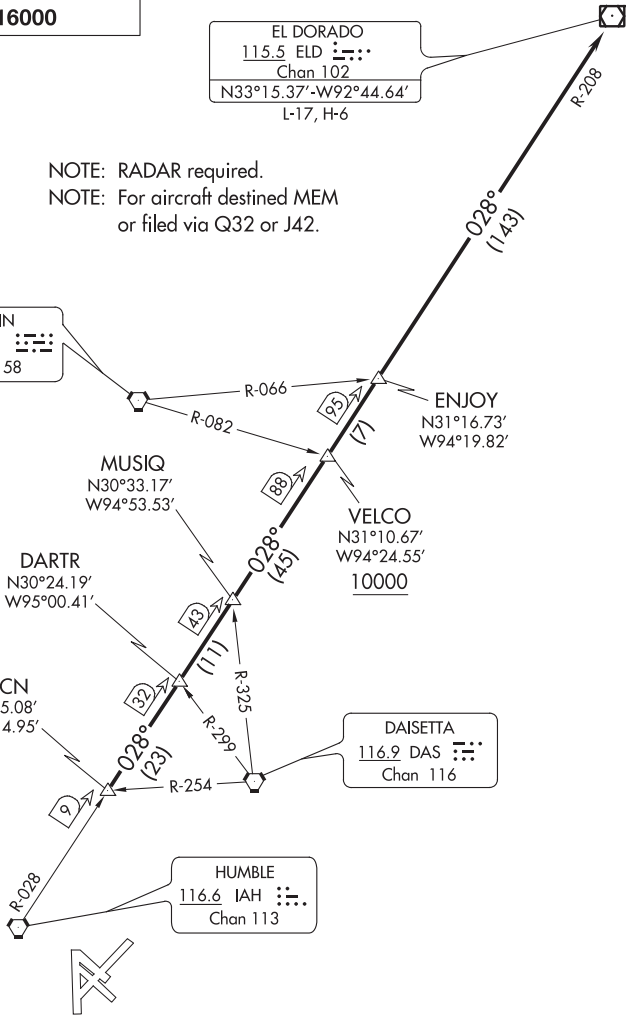
VELCO
N31°10.67'
W94°24.55'
10000

DARTR
N30°24.19'
W95°00.41'

RAECN
N30°05.08'
W95°14.95'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113



TAKEOFF MINIMUMS

- Rwys 13L/R, 31L/R, 35: Standard.
- Rwy 4: 300-1 or standard with minimum climb of 270' per NM to 300.
- Rwy 17: 300-1.
- Rwy 22: Standard with minimum climb of 290' per NM to 1500.

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

NOTE: Chart not to scale.

EL DORADO EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

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.

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1069' right of centerline 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flag pole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hangar 1548' from DER, 424' left of centerline, 45' AGL/ 85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
RADAR reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELOCO FOUR DEPARTURE (RNAV)

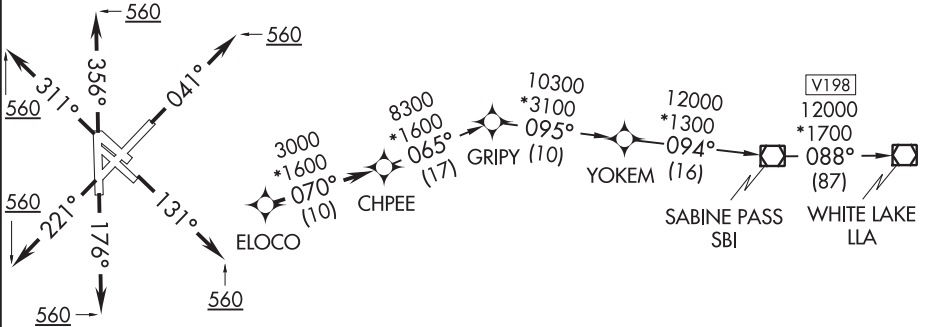
**TOP ALTITUDE:
16000**

TAKEOFF MINIMUMS

Rwys 4, 13L/R, 17, 22, 31L/R, 35:

Standard with minimum climb of 500' per NM to 560.

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



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

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

- TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to ELOCO, thence
- TAKEOFF RWYS 13L/R: Climb heading 131° to 560, expect RADAR vectors to ELOCO, thence
- TAKEOFF RWY 17: Climb heading 176° to 560, expect RADAR vectors to ELOCO, thence
- TAKEOFF RWY 22: Climb heading 221° to 560, expect RADAR vectors to ELOCO, thence
- TAKEOFF RWYS 31L/R: Climb heading 311° to 560, expect RADAR vectors to ELOCO, thence
- TAKEOFF RWY 35: Climb heading 356° 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 (ELOCO4.LLA)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELOCO FOUR DEPARTURE (RNAV)

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flagpole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hangar 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

GIFFA EIGHT DEPARTURE


SL-198 (FAA)

WILLIAM P HOBBY (HOU)
HOUSTON, TEXAS

ATIS
 124.6
 CLNC DEL
 125.45
 CPDLC
 GND CON
 121.9
 HOBBY TOWER
 118.7 256.9
 HOUSTON DEP CON
 132.25 285.425

CEDAR CREEK
 114.8 CQY 
 Chan 95

TOP ALTITUDE:
16000

LEONA
 110.8 LOA 
 Chan 45

GIFFA
 N31°22.89'
 W95°15.10'
 L-19-21, H-6
8500

TAKEOFF MINIMUMS

Rwy 13L, 13R, 31L, 31R, 35: Standard.
 Rwy 4: 300-1 or standard with minimum
 climb of 270' per NM to 300.
 Rwy 17: 300-1.
 Rwy 22: Standard with minimum climb
 of 290' per NM to 1500.

BUMCO
 N30°38.91'
 W95°18.03'

MONNT
 N30°28.65'
 W95°18.70'
 L19-21, H7

DAISSETA
 116.9 DAS 
 Chan 116

HUMBLE
 116.6 IAH 
 Chan 113

NOTE: RADAR required.
 NOTE: For aircraft destined for the DFW
 terminal area only.



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

NOTE: Chart not to scale.

GIFFA EIGHT DEPARTURE

(GIFFA8.GIFFA) 10NOV16

HOUSTON, TEXAS
WILLIAM P HOBBY (HOU)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

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 GIFFA INT at or above 8500.

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1069' right of centerline 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flag pole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/ 85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

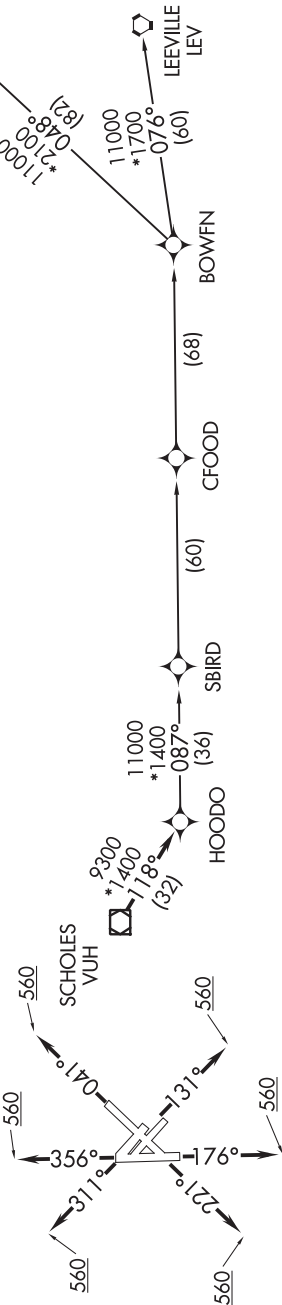
HOODO FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

- ATIS 124.6
- CINC DEL 125.45
- CPDLC 121.9
- GND CON 118.7 256.9
- HOBBY TOWER 127.125 269.075
- HOUSTON DEP CON

TOP ALTITUDE:
16000

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



TAKEOFF MINIMUMS

Rwys 4, 13L/R, 17, 22, 31L/R, 35:

Standard with minimum climb of 500' per NM to 560.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWYS 13L/R: Climb on heading 131° to 560, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 17: Climb on heading 176° to 560, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 22: Climb on heading 221° to 560, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWYS 31L/R: Climb on heading 311° to 560, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 35: Climb on heading 356° to 560, expect 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 (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1069' right of centerline, 121' AGL/166' MSL. Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL. Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL. Light on FLGPL 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hangar 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL. Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL. Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL. Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL. Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL. Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL. ANT on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL. Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL. RADAR reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL. Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL. Antenna on LT pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL. Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL. Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL. Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.
- Rwy 35: Antenna on LT pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL. LT pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL. Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

(INDIE4.INDIE) 16315

SL-198 (FAA)

WILLIAM P HOBBY (HOU)
HOUSTON, TEXAS

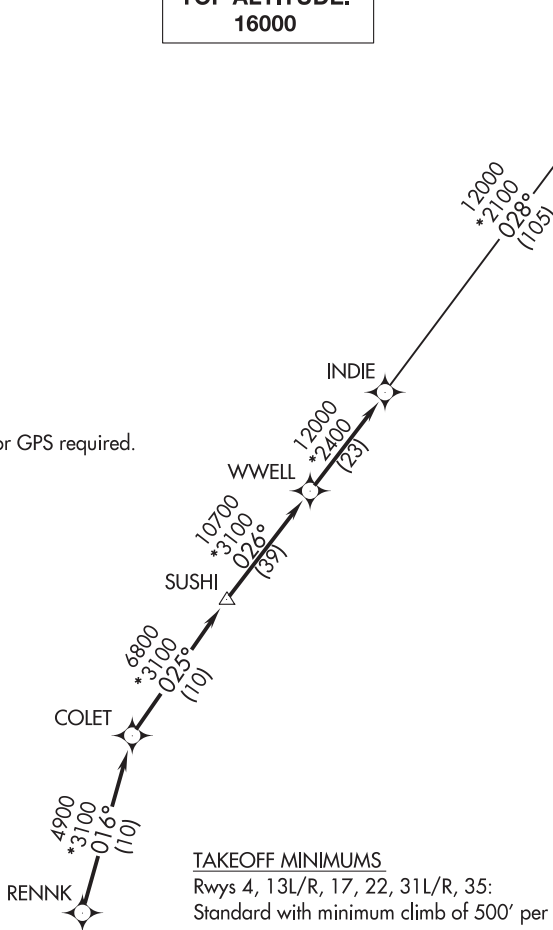
INDIE FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
16000**

ATIS 124.6
CLNC DEL
125.45
CPDLC
GND CON
121.9
HOBBY TOWER
118.7 256.9
HOUSTON DEP CON
132.25 285.425

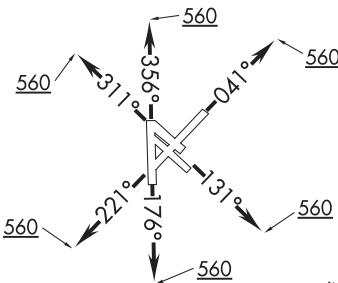
TPAKK

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



TAKEOFF MINIMUMS

Rwys 4, 13L/R, 17, 22, 31L/R, 35:
Standard with minimum climb of 500' per NM to 560.



NOTE: Chart not to scale.

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

INDIE FOUR DEPARTURE (RNAV)
(INDIE4.INDIE) 10NOV16

HOUSTON, TEXAS
WILLIAM P HOBBY (HOU)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to RENNK, thence

TAKEOFF RWYS 13L/R: Climb heading 131° to 560, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 17: Climb heading 176° to 560, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 22: Climb heading 221° to 560, expect RADAR vectors to RENNK, thence

TAKEOFF RWYS 31L/R: Climb heading 311° to 560, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 35: Climb heading 356° to 560, expect 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 (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flagpole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL. Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL. Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL. Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL. Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL. Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL. Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL. Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL. Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL. Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL. Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL. Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL. Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL. Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL. Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL. Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

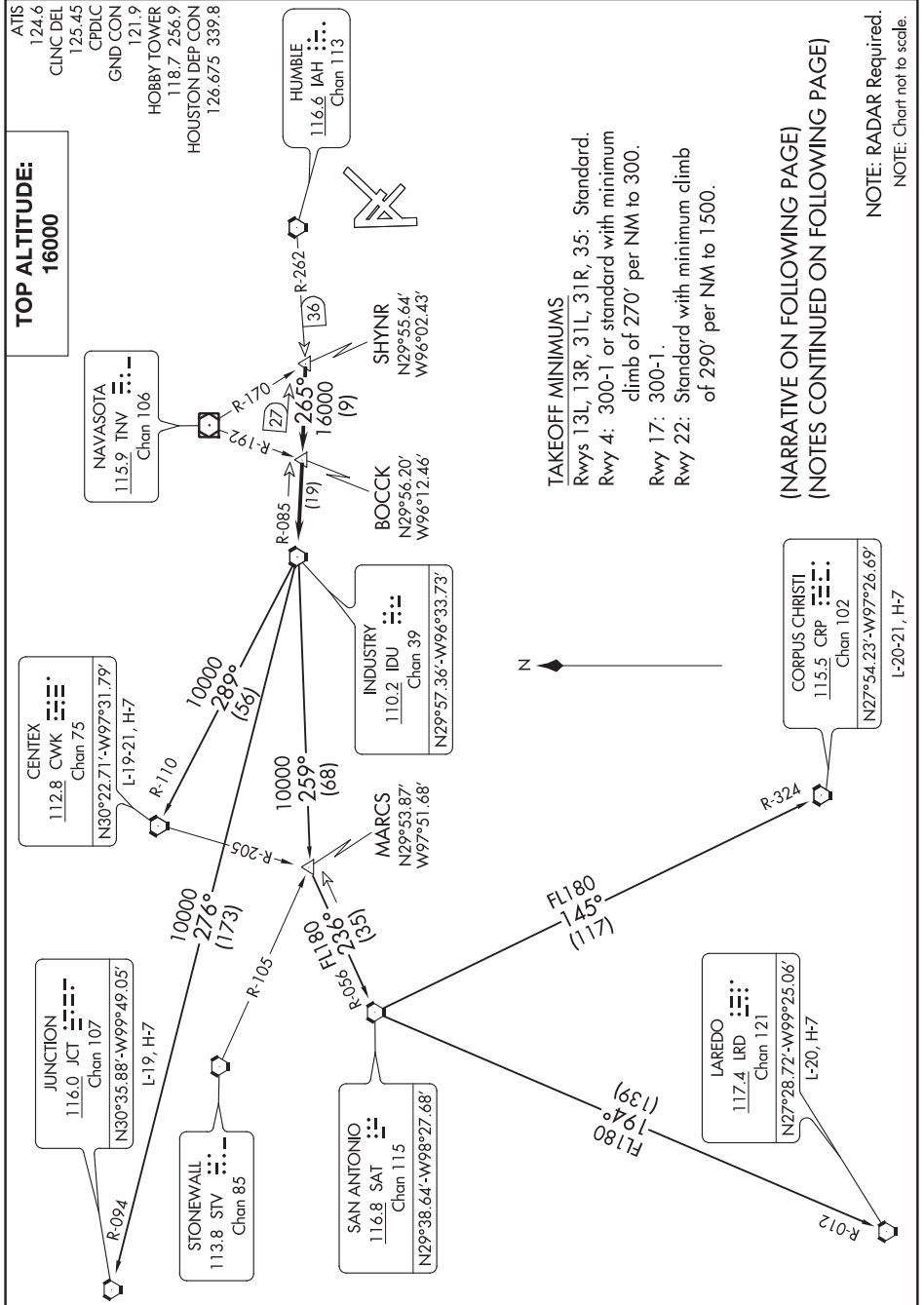
SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SL-198 (FAA)

WILLIAM P HOBBY (HOU)
HOUSTON, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



INDUSTRY EIGHT DEPARTURE

HOUSTON, TEXAS
WILLIAM P HOBBY (HOU)

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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 OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1069' right of centerline 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flag pole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/ 85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

LEONA TWO DEPARTURE

SL-198 (FAA)

WILLIAM P HOBBY (HOU)
HOUSTON, TEXAS

**TOP ALTITUDE:
16000**

ATIS 124.6
CLNC DEL 125.45
CPDLC
GND CON 121.9
HOBBY TOWER 118.7 256.9
HOUSTON DEP CON 132.25 285.425

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'

BONHAM
114.6 BYP
Chan 93
N33°32.25' - W96°14.05'
L-17, H-6

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

CEDAR CREEK
114.8 CQY
Chan 95
N32°11.14' - W96°13.09'

DOLEY
N32°11.35'
W96°23.08'

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

LEONA
110.8 LOA
Chan 45
N31°07.44' - W95°58.08'

NOTE: RADAR Required.
NOTE: Except for aircraft destined
ACT or the DFW terminal area,
all aircraft filing the LOA2 SID
must file one of the published
transitions via FUZ (LOA2.FUZ)
ADM (LOA2.ADM) or
BYP (LOA2.BYP).

WLLIS
N30°32.08'
W95°39.10'

NAVASOTA
115.9 TNV
Chan 106

HUMBLE
116.6 IAH
Chan 113

TAKEOFF MINIMUMS

Rwys 13L, 13R, 31L, 31R, 35: Standard.
Rwy 4: 300-1 or standard with minimum
climb of 270' per NM to 300.
Rwy 17: 300-1.
Rwy 22: Standard with minimum climb
of 290' per NM to 1500.

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



DEPARTURE ROUTE DESCRIPTION

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 (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1069' right of centerline 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flag pole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/ 85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/ 124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/ 116' MSL. Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL. Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

ATIS
124.6
CLNC DEL
125.45
CPDLC
GND CON
121.9
HOBBY TOWER
118.7 256.9
HOUSTON DEP CON
132.25 285.425

**TOP ALTITUDE:
16000**

LITTLE ROCK
113.9 LIT :...
Chan 86
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: RADAR 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



TAKEOFF MINIMUMS:

- Rwys 13L/R, 31L/R, 35: Standard.
- Rwy 4: 300-1 or standard with minimum climb of 270' per NM to 300.
- Rwy 17: 300-1.
- Rwy 22: Standard with minimum climb of 290' per NM to 1500.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

TAKEOFF OBSTACLE NOTES:

- Rwy 4: Pole 4403' from DER, 1069' right of centerline 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on FLGPL 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/ 85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
ANT on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL. RADAR reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on LT pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL. Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline 33' AGL/69' MSL.
- Rwy 35: Antenna on LT pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
LT pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

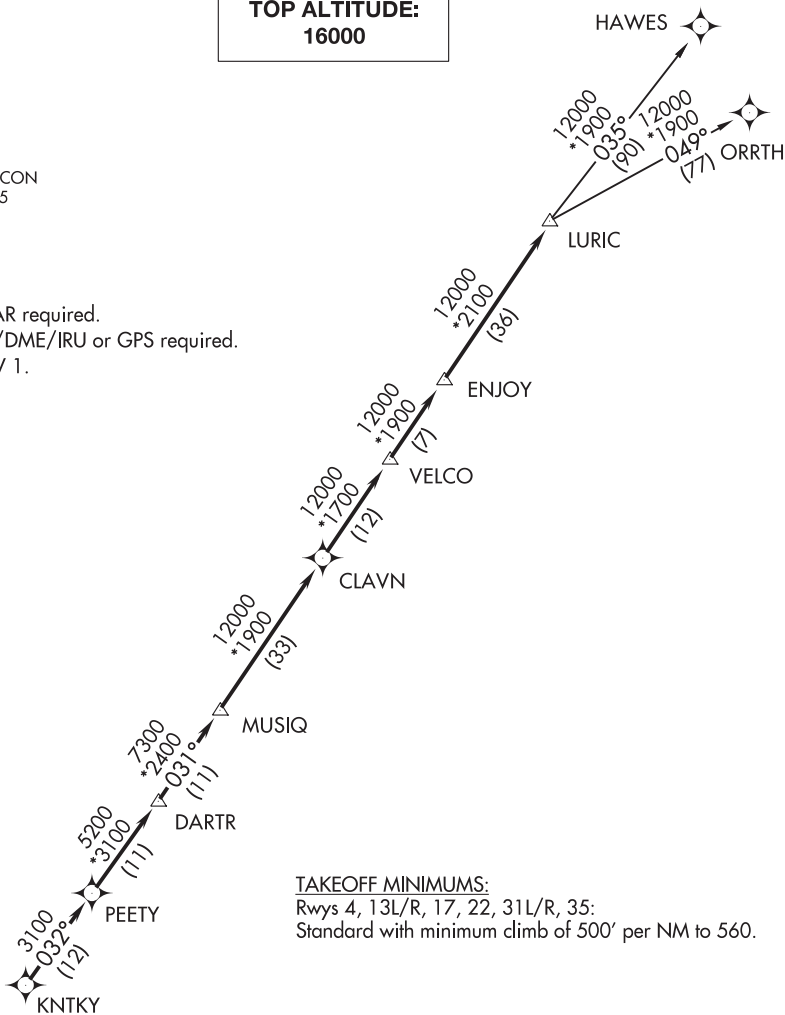
SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)

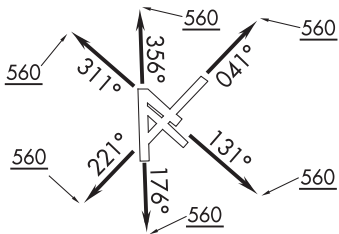
ATIS
 124.6
 CLNC DEL
 125.45
 CPDLC
 GND CON
 121.9
 HOBBY TOWER
 118.7 256.9
 HOUSTON DEP CON
 132.25 285.425

**TOP ALTITUDE:
16000**

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



TAKEOFF MINIMUMS:
 Rwy 4, 13L/R, 17, 22, 31L/R, 35:
 Standard with minimum climb of 500' per NM to 560.



NOTE: Chart not to scale

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

- TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to KNTKY, thence. . . .
- TAKEOFF RWYS 13L/R: Climb heading 131° to 560, expect RADAR vectors to KNTKY, thence. . . .
- TAKEOFF RWY 17: Climb heading 176° to 560, expect RADAR vectors to KNTKY, thence. . . .
- TAKEOFF RWY 22: Climb heading 221° to 560, expect RADAR vectors to KNTKY, thence. . . .
- TAKEOFF RWYS 31L/R: Climb heading 311° to 560, expect RADAR vectors to KNTKY, thence. . . .
- TAKEOFF RWY 35: Climb heading 356° to 560, expect 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 (LURIC4.HAWES)
- ORRTH TRANSITION (LURIC4.ORRTH)

TAKEOFF OBSTACLE NOTES:

- Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL. Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL. Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL. Light on flagpole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hangar 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL. Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL. Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL. Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL. Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL. Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL. Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL. Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL. Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL. Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL. Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL. Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL. Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL. Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL. Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL. Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TOP ALTITUDE:
16000

TAKEOFF MINIMUMS:

Rwys 13L/R, 31L/R, 35: Standard.
 Rwy 4: 300-1 or standard with minimum
 climb of 270' per NM to 300.
 Rwy 17: 300-1.
 Rwy 22: Standard with minimum climb
 of 290' per NM to 1500.



ATIS 124.6
 CLNC DEL 125.45
 CPDLC 121.9
 GND CON 121.9
 HOBBY TOWER 118.7 256.9
 HOUSTON DEP CON 127.125 269.075

HOBBY HUB
 117.1
 Chan 118

EAGLE LAKE
 116.4 ELA
 Chan 111

SAN ANTONIO
 116.8 SAT
 Chan 115
 N29°38.64'-W98°27.68'
 L-19, H-7

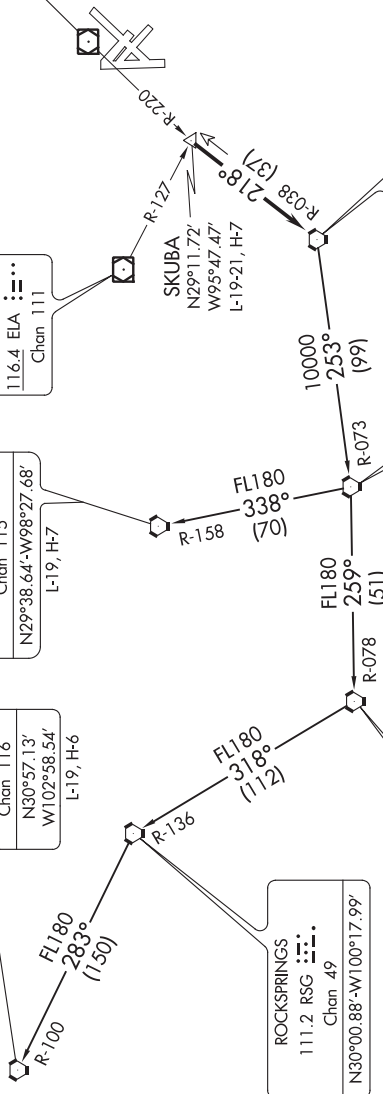
FORT STOCKTON
 116.9 FST
 Chan 116
 N30°57.13'
 W102°58.54'
 L-19, H-6

ROCKSPRINGS
 111.2 RSG
 Chan 49
 N30°00.88'-W100°17.99'

COTUILA
 115.8 COT
 Chan 105
 N28°27.72'-W99°07.11'

THREE RIVERS
 111.4 THX
 Chan 51
 N28°30.30'-W98°09.03'

PALACIOS
 117.3 PSX
 Chan 120
 N28°45.87'-W96°18.37'



(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required
 NOTE: Chart not to scale

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to SKUBA INT, maintain 16000.
Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

TAKEOFF OBSTACLE NOTES:

- Rwy 4: Pole 4403' from DER, 1069' right of centerline 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flag pole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/ 85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

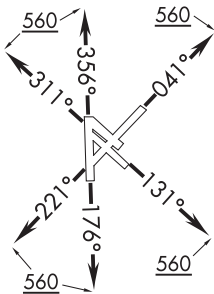
(PEECE4.PEECE) 16315

PEECE FOUR DEPARTURE (RNAV) SL-198 (FAA)

WILLIAM P HOBBY (HOU)
HOUSTON, TEXAS

**TOP ALTITUDE:
16000**

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 3800.
- Rwys 13L, 17: 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.
- Rwy 35: Standard with minimum climb of 500' per NM to 3400.



ANKRR

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

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

KELPP

PEECE FOUR DEPARTURE (RNAV)
(PEECE4.PEECE) 10NOV16

HOUSTON, TEXAS
WILLIAM P HOBBY (HOU)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(PEECE4.PEECE) 16315

PEECE FOUR DEPARTURE (RNAV) SL-198 (FAA)

WILLIAM P HOBBY (HOU)
HOUSTON, TEXAS

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to PEECE, thence. . . .TAKEOFF RWYS 13L/R: Climb heading 131° to 560, expect RADAR vectors to PEECE, thence. . . .TAKEOFF RWY 17: Climb heading 176° to 560, expect RADAR vectors to PEECE, thence. . . .TAKEOFF RWY 22: Climb heading 221° to 560, expect RADAR vectors to PEECE, thence. . . .TAKEOFF RWYS 31L/R: Climb heading 311° to 560, expect RADAR vectors to PEECE, thence. . . .TAKEOFF RWY 35: Climb heading 356° 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 (PEECE4.ANKRR): (GPS required).KELPP TRANSITION (PEECE4.KELPP): (GPS required).MUSYL TRANSITION (PEECE4.MUSYL): (GPS required).TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flagpole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hangar 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

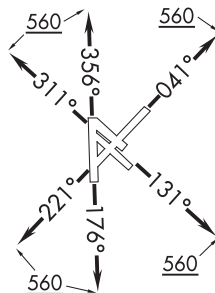
PEECE FOUR DEPARTURE (RNAV)
(PEECE4.PEECE) 10NOV16HOUSTON, TEXAS
WILLIAM P HOBBY (HOU)

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

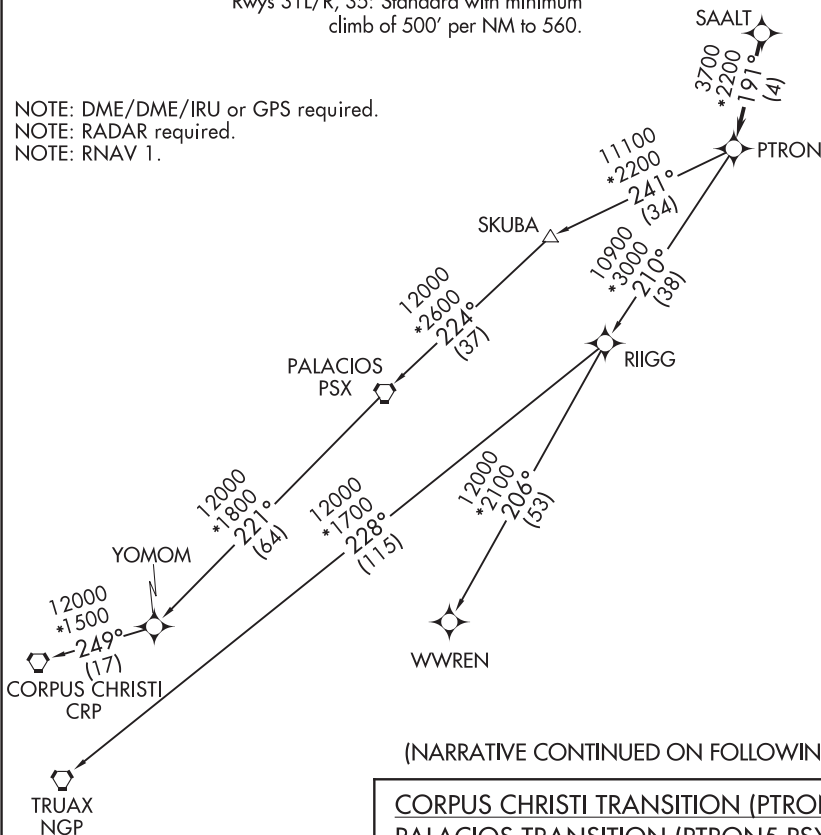
**TOP ALTITUDE:
 16000**

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 3800.
- Rwy 17: Standard with minimum climb of 500' per NM to 3500.
- Rwy 22: Standard with minimum climb of 500' per NM to 1900.
- Rwys 31L/R, 35: Standard with minimum climb of 500' per NM to 560.



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



(NARRATIVE CONTINUED ON FOLLOWING PAGE)

- CORPUS CHRISTI TRANSITION (PTRON5.CRP)
- PALACIOS TRANSITION (PTRON5.PSX)
- TRUAX TRANSITION (PTRON5.NGP)
- WWREN TRANSITION (PTRON5.WWREN)
- YOMOM TRANSITION (PTRON5.YOMOM)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to SAALT, thence. . . .

TAKEOFF RWYS 13L/R: Climb heading 131° to 560, expect RADAR vectors to SAALT, thence. . . .

TAKEOFF RWY 17: Climb heading 176° to 560, expect RADAR vectors to SAALT, thence. . . .

TAKEOFF RWY 22: Climb heading 221° to 560, expect RADAR vectors to SAALT, thence. . . .

TAKEOFF RWYS 31L/R: Climb heading 311° to 560, expect RADAR vectors to SAALT, thence. . . .

TAKEOFF RWY 35: Climb heading 356° 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.

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flagpole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hangar 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

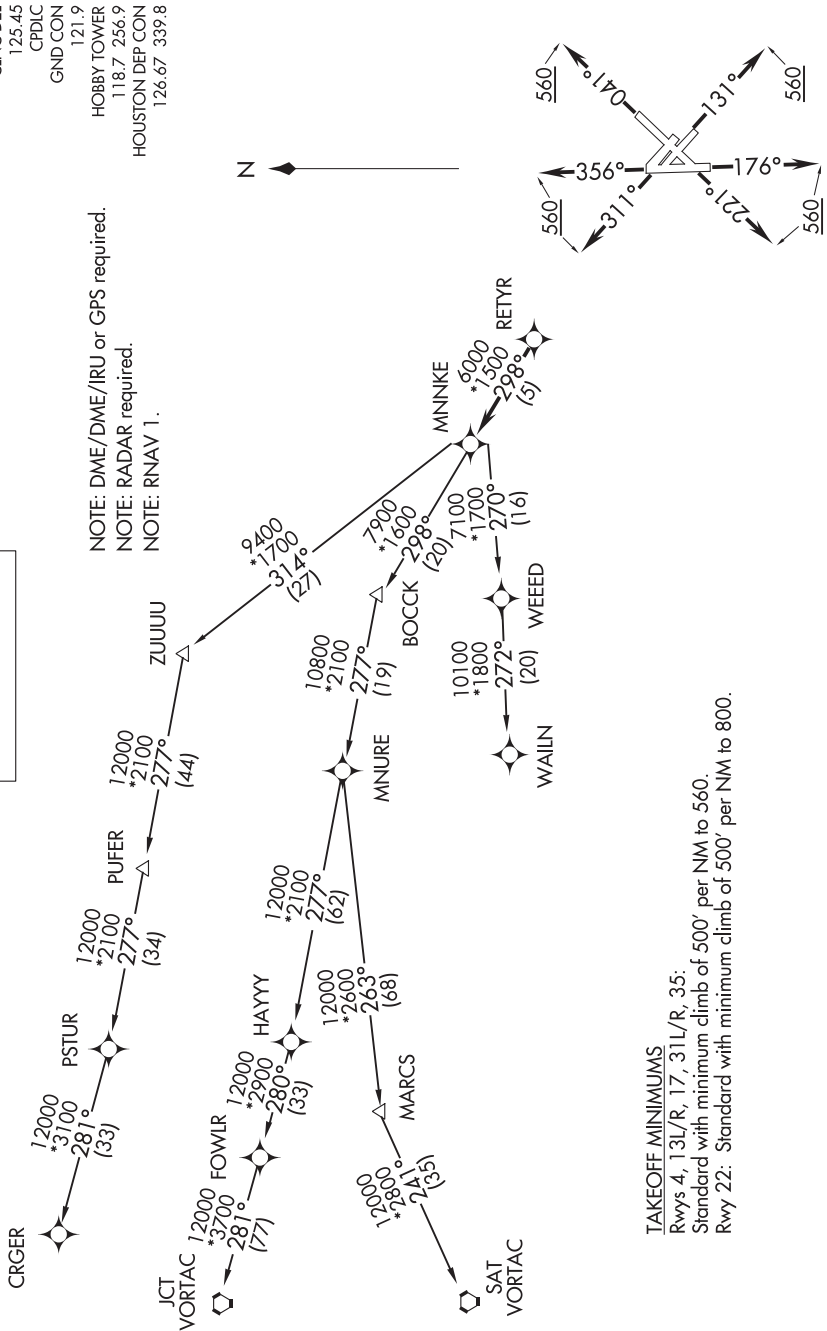
RETYR FIVE DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

ATIS 124.6
 CLNC DEL 125.45
 CPDIC
 GND CON 121.9
 HOBBY TOWER 118.7 256.9
 HOUSTON DEP CON 126.67 339.8

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

**TOP ALTITUDE:
16000**



TAKEOFF MINIMUMS
 Rwy 4, 13L/R, 17, 31L/R, 35:
 Standard with minimum climb of 500' per NM to 560.
 Rwy 22: Standard with minimum climb of 500' per NM to 800.

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

RETYR FIVE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to RETYR, thence

TAKEOFF RWYS 13L/R: Climb heading 131° to 560, expect RADAR vectors to RETYR, thence

TAKEOFF RWY 17: Climb heading 176° to 560, expect RADAR vectors to RETYR, thence

TAKEOFF RWY 22: Climb heading 221° to 560, expect RADAR vectors to RETYR, thence

TAKEOFF RWYS 31L/R: Climb heading 311° to 560, expect RADAR vectors to RETYR, thence

TAKEOFF RWY 35: Climb heading 356° 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.

CRGR TRANSITION (RETYR5.CRGR): (ATC assigned only)

JUNCTION TRANSITION (RETYR5.JCT)

MNURE TRANSITION (RETYR5.MNURE)

SAN ANTONIO TRANSITION (RETYR5.SAT)

WAILN TRANSITION (RETYR5.WAILN)

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flagpole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hangar 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
Radar reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

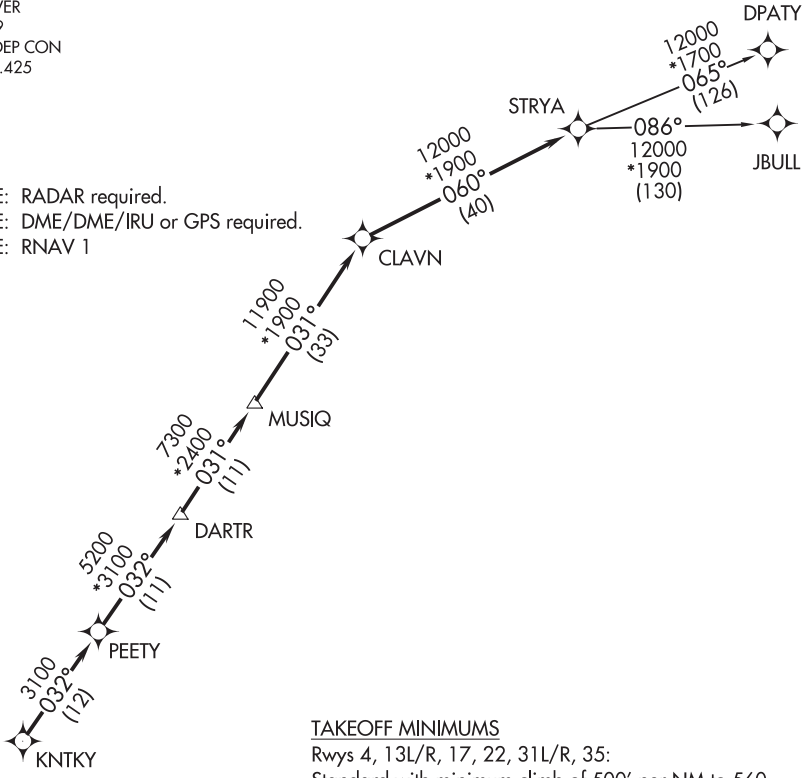
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

ATIS
124.6
CLNC DEL
125.45
CPDLC
GND CON
121.9
HOBBY TOWER
118.7 256.9
HOUSTON DEP CON
132.25 285.425

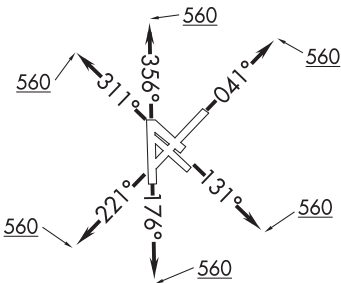
**TOP ALTITUDE:
16000**

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



TAKEOFF MINIMUMS

Rwys 4, 13L/R, 17, 22, 31L/R, 35:
Standard with minimum climb of 500' per NM to 560.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to KNTKY, thence

TAKEOFF RWYS 13L/R: Climb on heading 131° to 560, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 17: Climb on heading 176° to 560, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 22: Climb on heading 221° to 560, expect RADAR vectors to KNTKY, thence

TAKEOFF RWYS 31L/R: Climb on heading 311° to 560, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 35: Climb on heading 356° to 560, expect RADAR vectors to KNTKY, thence

. . . . on track 032° then to PEETY, 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 (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

- Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on FLGPL 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL. Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL. Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL. Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL. Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL. Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL. ANT on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL. Multiple trees beginning 1392' from DER, 260' left of centerline, up to 71' AGL/116' MSL. RADAR RFLTR 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL. Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL. Antenna on LT pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL. Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL. Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL. Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.
- Rwy 35: Antenna on LT pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL. LT pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL. Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 16315

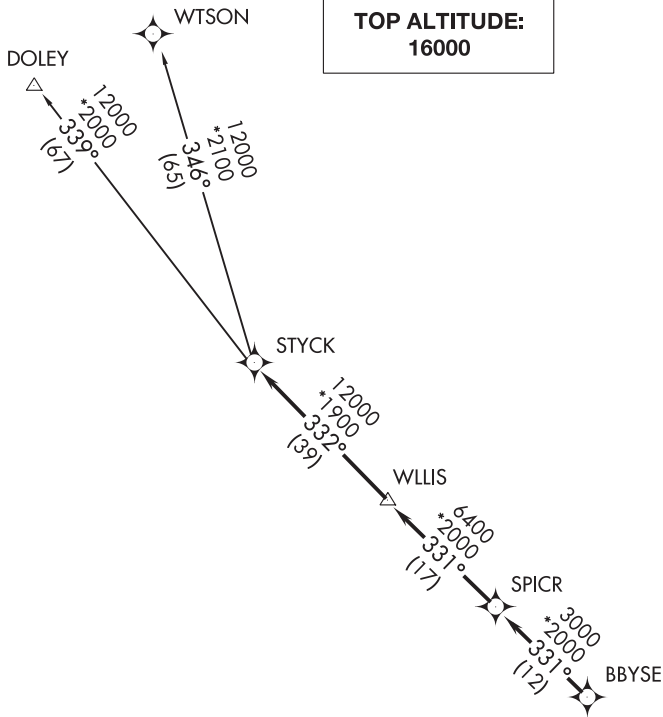
SL-198 (FAA)

WILLIAM P HOBBY(HOU)
HOUSTON, TEXAS

STYCK FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
16000**

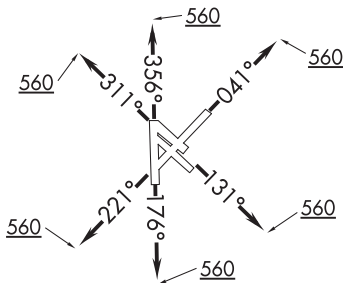
ATIS
124.6
CLNC DEL
125.45
CPDLC
GND CON
121.9
HOBBY TOWER
118.7 256.9
HOUSTON DEP CON
132.25 285.425



TAKEOFF MINIMUMS:

Rwys 4, 13L/R, 17, 22, 31L/R, 35:

Standard with minimum climb of 500' per NM to 560.



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

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

HOUSTON, TEXAS
WILLIAM P HOBBY(HOU)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWYS 13L/R: Climb heading 131° to 560, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 17: Climb heading 176° to 560, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 22: Climb heading 221° to 560, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWYS 31L/R: Climb heading 311° to 560, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 35: Climb heading 356° to 560, expect 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 (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

TAKEOFF OBSTACLE NOTES:

Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL.

Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.

Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.

Light on flagpole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.

Rwy 13L: Antenna on hangar 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.

Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL. Tree

1217' from DER, 756' right of centerline, 43' AGL/89' MSL. Fence 85' from DER,

492' left of centerline, 4' AGL/45' MSL. Vehicle and road 176' from DER, 497'

left of centerline, 17' AGL/55' MSL. Pole 1011' from DER, 696' left of centerline,

33' AGL/73' MSL. Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.

Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to

79' AGL/124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150'

MSL. Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.

Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.

RADAR reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.

Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL. Tree 1310' from DER,

679' right of centerline, 27' AGL/76' MSL. Antenna on light pole 1805' from DER,

968' right of centerline, 60' AGL/109' MSL.

Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.

Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.

Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.

Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL. Antenna on building

500' from DER, 525' left of centerline, 33' AGL/69' MSL.

Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.

Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL. Antenna on

building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

HOUSTON, TEXAS
WILLIAM P HOBBY (HOU)

(NGP6.NGP) 16315


TRUAX SIX DEPARTURE


SL-198 (FAA)


WILLIAM P HOBBY (HOU)
HOUSTON, TEXAS

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

**TOP ALTITUDE:
16000**

HOBBY
117.1 HUB 
Chan 118

EAGLE LAKE
116.4 ELA 
Chan 111

SCHOLES
113.0 VUH 
Chan 77

TAKEOFF MINIMUMS:


Rwys 13L/R, 31L/R, 35: Standard.

Rwy 4: 300-1 or standard with minimum climb of 270' per NM to 300.

Rwy 17: 300-1.

Rwy 22: Standard with minimum climb of 290' per NM to 1500.

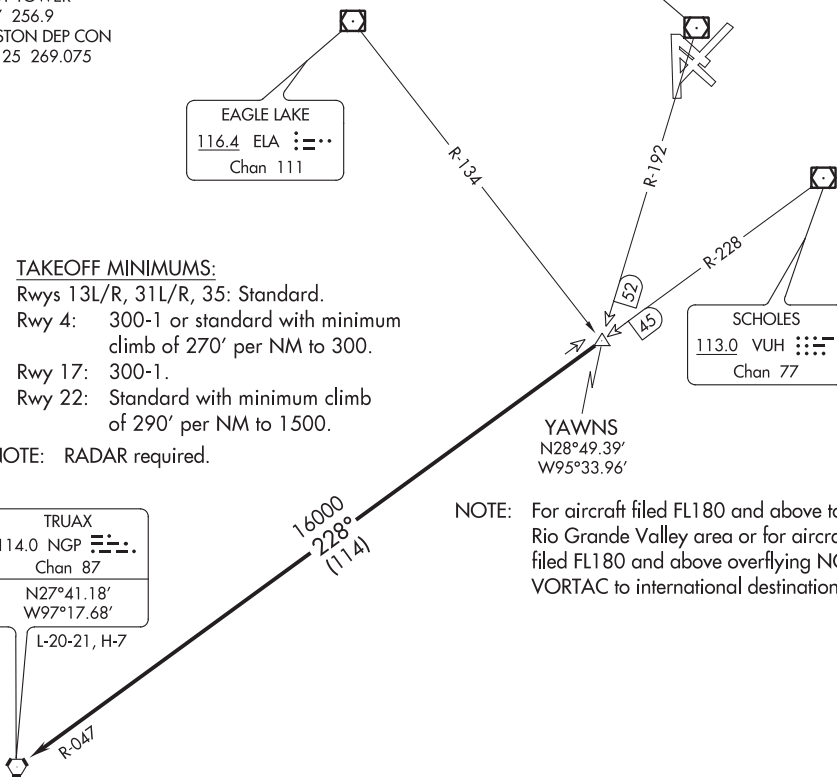
NOTE: RADAR required.

TRUAX
114.0 NGP 
Chan 87
N27°41.18'
W97°17.68'

L-20-21, H-7

YAWNS
N28°49.39'
W95°33.96'

NOTE: For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP VORTAC to international destinations.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

Climb on assigned heading for RADAR vectors to YAWNS INT, maintain 16000. Expect filed altitude 10 minutes after departure, thence . . .

. . . on VUH R-228 and NGP R-047 to NGP VORTAC.

TRUAX SIX DEPARTURE
(NGP6.NGP) 10NOV16

HOUSTON, TEXAS
WILLIAM P HOBBY (HOU)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

TRUAX SIX DEPARTURE

TAKEOFF OBSTACLE NOTES:

- Rwy 4: Pole 4403' from DER, 1069' right of centerline 121' AGL/166' MSL.
Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.
Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.
Light on flag pole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.
- Rwy 13L: Antenna on hanger 1548' from DER, 424' left of centerline, 45' AGL/ 85' MSL.
- Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL.
Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL.
Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL.
Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL.
Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL.
Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.
- Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL.
Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL.
Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL.
Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL.
RADAR reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.
- Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL.
Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL.
Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.
- Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL.
Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL.
Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.
- Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL.
Antenna on building 500' from DER, 525' left of centerline 33' AGL/69' MSL.
- Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL.
Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL.
Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

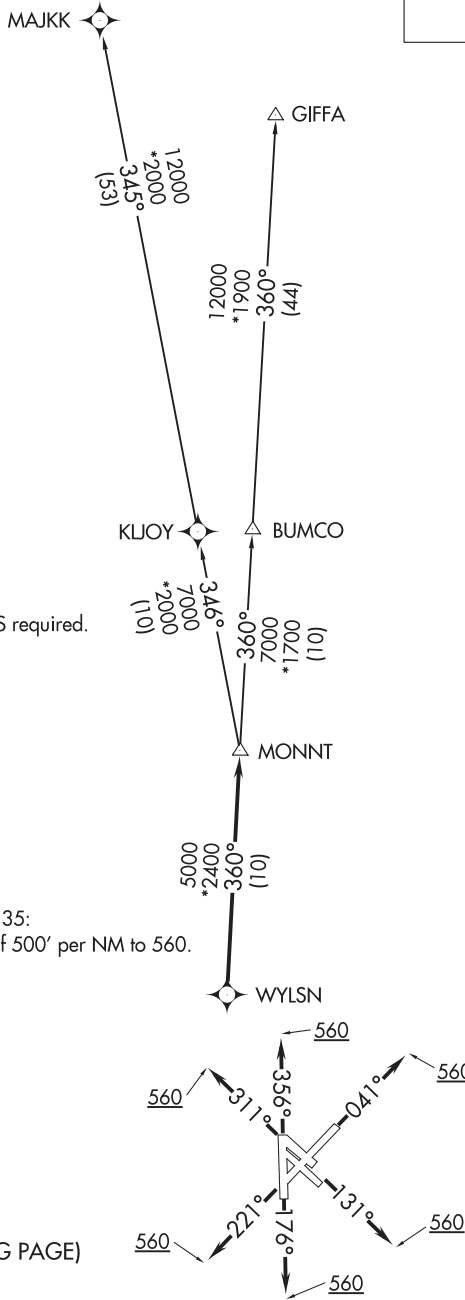
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
16000**

ATIS
124.6
CLNC DEL
125.45
CPDLC
GND CON
121.9
HOBBY TOWER
118.7 256.9
HOUSTON DEP CON
132.25 285.425



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

TAKEOFF MINIMUMS:
Rwys 4, 13L/R, 17, 22, 31L/R, 35:
Standard with minimum climb of 500' per NM to 560.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 4: Climb heading 041° to 560, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWYS 13L/R: Climb on heading 131° to 560, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 17: Climb on heading 176° to 560, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 22: Climb on heading 221° to 560, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWYS 31L/R: Climb on heading 311° to 560, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 35: Climb on heading 356° to 560, expect 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 (WYLSN4.GIFFA)

MAJKK TRANSITION (WYLSN4.MAJKK)

TAKEOFF OBSTACLE NOTES:

Rwy 4: Pole 4403' from DER, 1609' right of centerline, 121' AGL/166' MSL.

Light on building 1562' from DER, 859' right of centerline, 59' AGL/103' MSL.

Building 3990' from DER, 1223' right of centerline, 139' AGL/174' MSL.

Light on flagpole 4618' from DER, 768' right of centerline, 117' AGL/161' MSL.

Rwy 13L: Antenna on hangar 1548' from DER, 424' left of centerline, 45' AGL/85' MSL.

Rwy 13R: Vehicle and road 514' from DER, 543' right of centerline, 17' AGL/55' MSL. Tree 1217' from DER, 756' right of centerline, 43' AGL/89' MSL. Fence 85' from DER, 492' left of centerline, 4' AGL/45' MSL. Vehicle and road 176' from DER, 497' left of centerline, 17' AGL/55' MSL. Pole 1011' from DER, 696' left of centerline, 33' AGL/73' MSL. Tree 1256' from DER, 783' left of centerline, 38' AGL/78' MSL.

Rwy 17: Multiple poles beginning 606' from DER, 393' right of centerline, up to 79' AGL/124' MSL. Crane 1795' from DER, 689' right of centerline, 100' AGL/150' MSL. Antenna on building 620' from DER, 312' left of centerline, 27' AGL/72' MSL. Multiple trees beginning 721' from DER, 260' left of centerline, up to 71' AGL/116' MSL. RADAR reflector 1214' from DER, 258' left of centerline, 32' AGL/77' MSL.

Rwy 22: Pole 727' from DER, 626' right of centerline, 28' AGL/77' MSL. Tree 1310' from DER, 679' right of centerline, 27' AGL/76' MSL. Antenna on light pole 1805' from DER, 968' right of centerline, 60' AGL/109' MSL.

Rwy 31L: Antenna on building 547' from DER, 274' right of centerline, 23' AGL/69' MSL. Multiple poles beginning 341' from DER, 501' left of centerline, up to 39' AGL/84' MSL. Multiple trees beginning 1392' from DER, 466' left of centerline, up to 78' AGL/118' MSL.

Rwy 31R: Pole 1096' from DER, 785' right of centerline, 29' AGL/75' MSL. Antenna on building 500' from DER, 525' left of centerline, 33' AGL/69' MSL.

Rwy 35: Antenna on light pole 738' from DER, 519' right of centerline, 40' AGL/86' MSL. Light pole 1119' from DER, 353' right of centerline, 31' AGL/77' MSL. Antenna on building 66' from DER, 471' left of centerline, 33' AGL/69' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

WAAS CH 72811 W18A	APP CRS 180°	Rwy Idg TDZE Apt Elev	5005 338 363
--	------------------------	-----------------------------	---

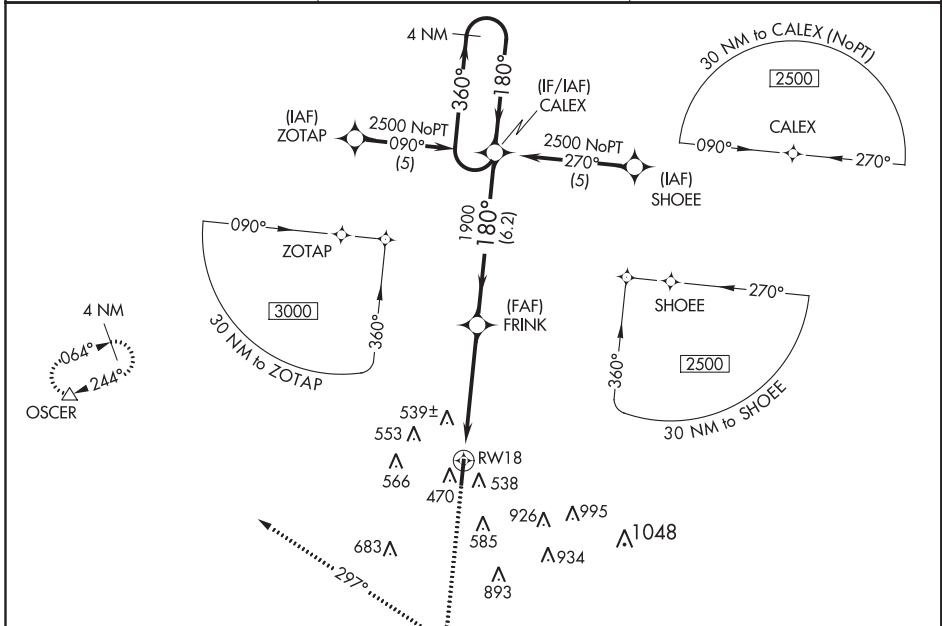
RNAV (GPS) RWY 18

HUNTSVILLE MUNI (UTS)

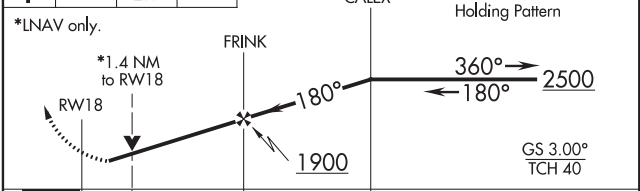
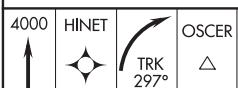
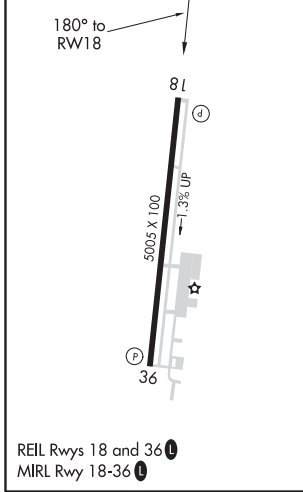
⚠ Baro-VNAV NA when using Lone Star Executive altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP NA when using Lone Star Executive altimeter setting. When local altimeter setting not received, use Lone Star Executive 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.

MISSED APPROACH: Climb to 4000 direct HINET and right turn via track 297° to OSCER and hold.

ASOS 119.425	HOUSTON CENTER 134.8 269.6	UNICOM 122.8 (CTAF) 0
------------------------	--------------------------------------	---------------------------------



ELEV 363	TDZE 338
-----------------	-----------------



CATEGORY	A	B	C	D
LPV DA		588-1	250 (300-1)	NA
LNAV/VNAV DA		886-2	548 (600-2)	NA
LNAV MDA	840-1	502 (500-1)	840-1½ 502 (500-1½)	NA
CIRCLING	900-1	537 (600-1)	900-1½ 537 (600-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

HUNTSVILLE, TEXAS

AL-5813 (FAA)

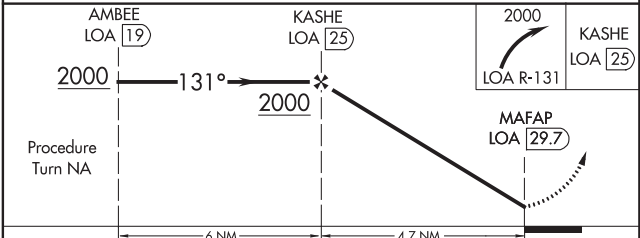
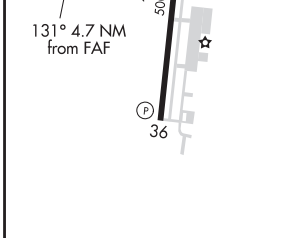
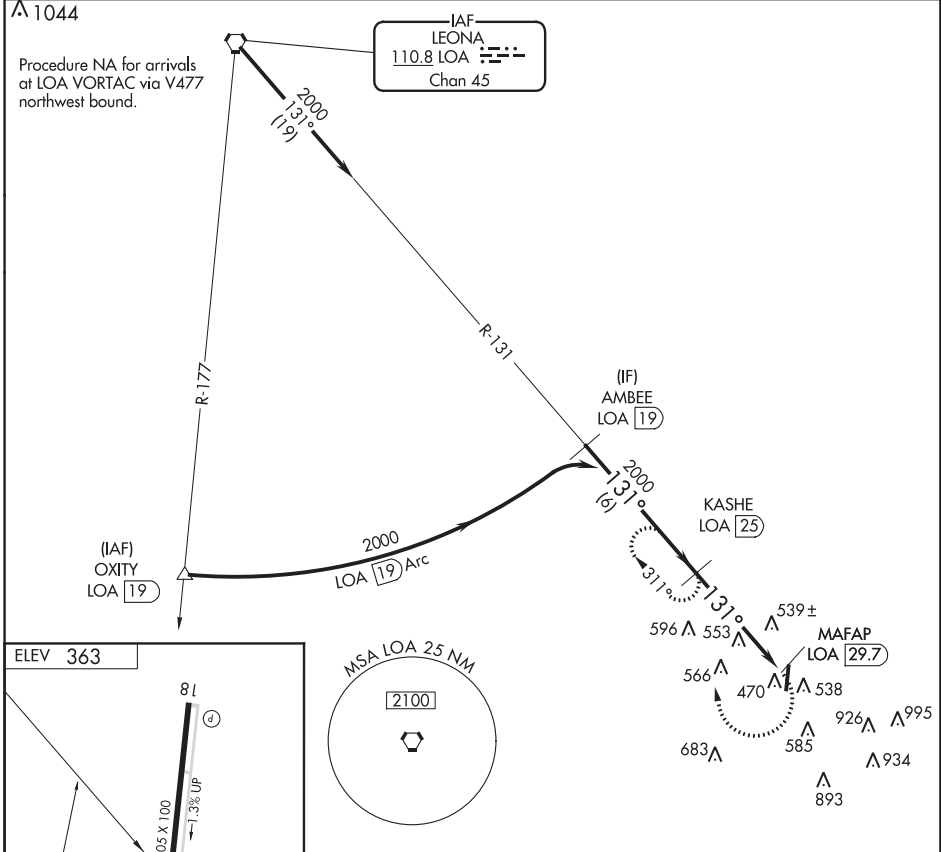
VOR/DME-A
HUNTSVILLE MUNI (UTS)

VOR LOA 110.8 Chan 45	APP CRS 131°	Rwy Idg TDZE Apt Elev	NA NA 363
------------------------------------	------------------------	-----------------------------	--------------------------------------

When local altimeter setting not received, use Lone Star Executive altimeter setting and increase MDA 80 feet, increase circling Cat C visibility ¼ mile.

MISSED APPROACH: Climbing right turn to 2000 via LOA VORTAC R-131 to KASHE/25 DME and hold.

ASOS 119.425	HOUSTON CENTER 134.8 269.6	UNICOM 122.8 (CTAF)
------------------------	--------------------------------------	-------------------------------



REIL Rwys 18 and 36	MIRL Rwy 18-36			
CATEGORY	A	B	C	D
CIRCLING	1000-1 637 (700-1)	1000-1¼ 637 (700-1¼)	1000-1¾ 637 (700-1¾)	NA

HUNTSVILLE, TEXAS
Amdt 6 12040

30°45'N-95°35'W

HUNTSVILLE MUNI (UTS)
VOR/DME-A

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

NDB RWY 18

HUNTSVILLE MUNI (UTS)

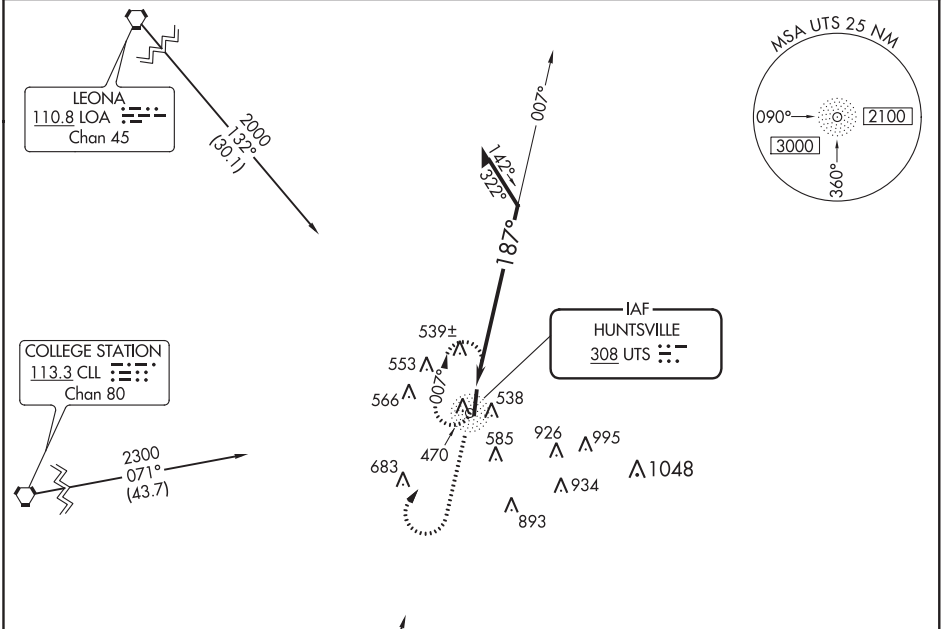
NDB UTS 308	APP CRS 187°	Rwy Idg 5005
		TDZE 338
		Apt Elev 363

▽ Visibility reduction by helicopters NA. When local altimeter setting not received use Lone Star Executive altimeter setting and increase all MDA 80 feet, increase S-18 and Circling Cat C visibility 1/4 mile.

▲ NA

MISSED APPROACH: Climb to 1500 then climbing right turn to 3000 direct UTS NDB and hold, continue climb-in-hold to 3000.

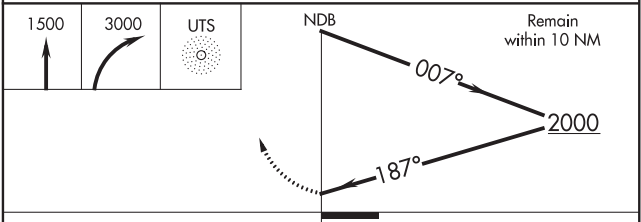
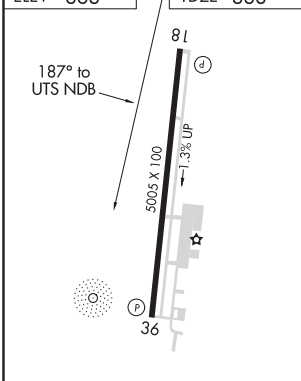
ASOS 119.425	HOUSTON CENTER 134.8 269.6	UNICOM 122.8 (CTAF) 0
------------------------	--------------------------------------	---------------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 363	TDZE 338
----------	----------



CATEGORY	A	B	C	D
S-18	960-1	622 (700-1)	960-1 3/4 622 (700-1 3/4)	NA
CIRCLING	960-1	597 (600-1)	960-1 3/4 597 (600-1 3/4)	NA

WAAS CH 56429 W14A	APP CRS 135°	Rwy Idg THRE 678 Apt Elev 678	5006
--	------------------------	---	-------------

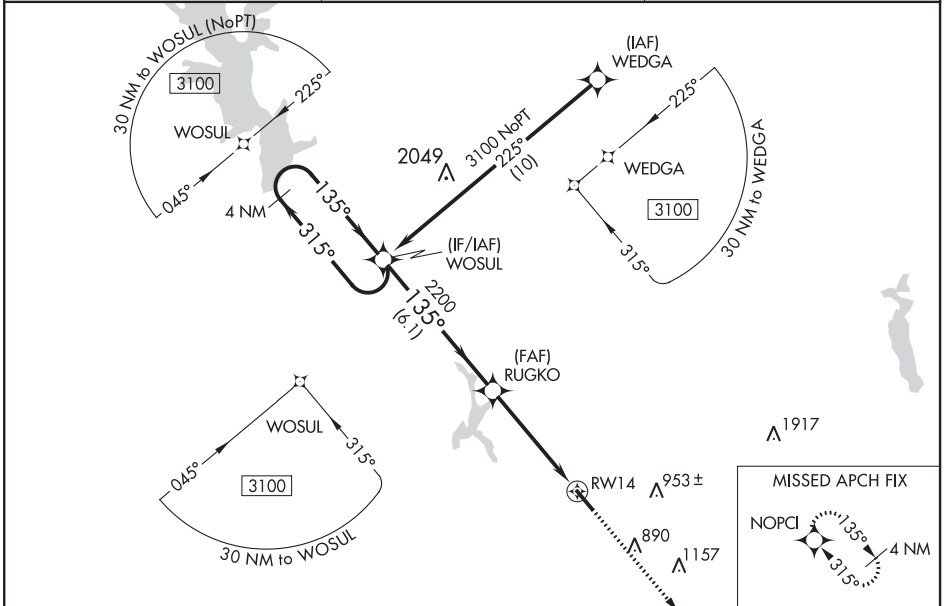
RNAV (GPS) RWY 14

CHEROKEE COUNTY (JSO)

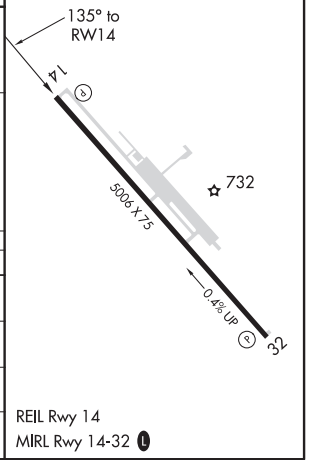
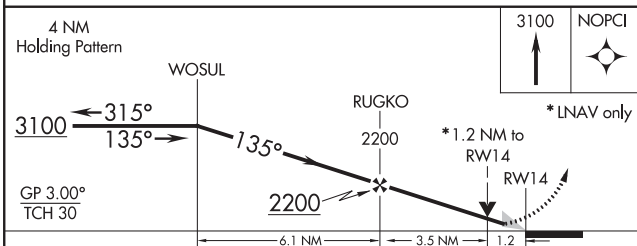
⚠ Baro-VNAV NA when using Nacogdoches altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). When local altimeter setting not received, use Nacogdoches altimeter setting and increase DA 118 feet, increase MDA 120 feet and LPV visibility all Cats 1/8 mile, LNAV/VNAV visibility all Cats 1/4 mile, LNAV visibility Cat C 3/8 mile. 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) ①
--------------------------	--	---------------------------------



ELEV 678	THRE 678
----------	----------



CATEGORY	A	B	C	D
LPV DA	878-1	200 (200-1)		NA
LNAV/VNAV DA	928-1	250 (300-1)		NA
LNAV MDA	1080-1	402 (500-1)	1080-1 1/8 402 (500-1 1/8)	NA
CIRCLING	1080-1 402 (500-1)	1140-1 462 (500-1)	1140-1 1/2 462 (500-1 1/2)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 90327 W32A	APP CRS 315°	Rwy Idg TDZE Apt Elev	5006 665 678
--	------------------------	-----------------------------	---

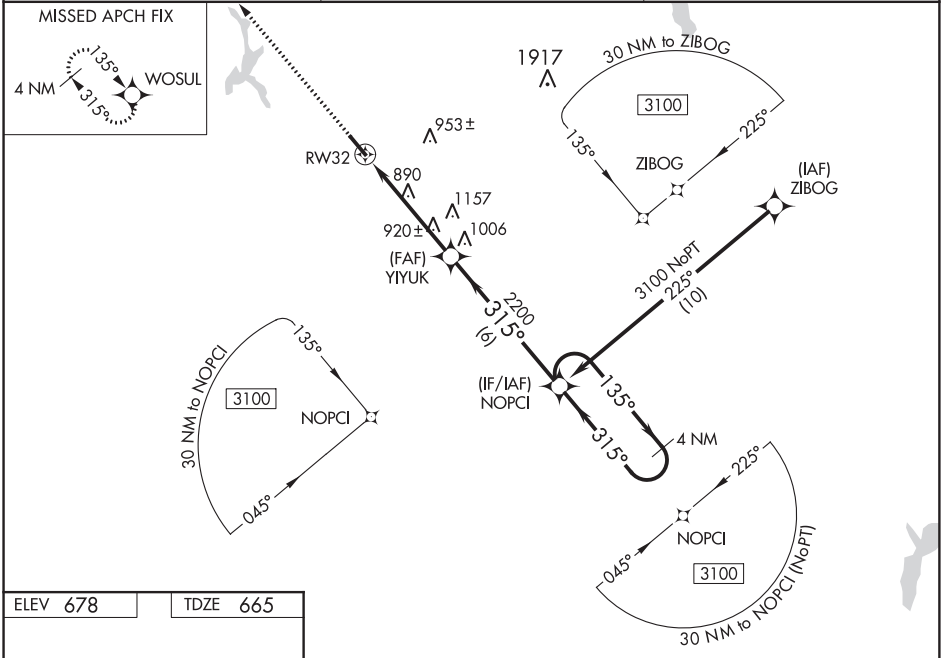
RNAV (GPS) RWY 32

CHEROKEE COUNTY (JSO)

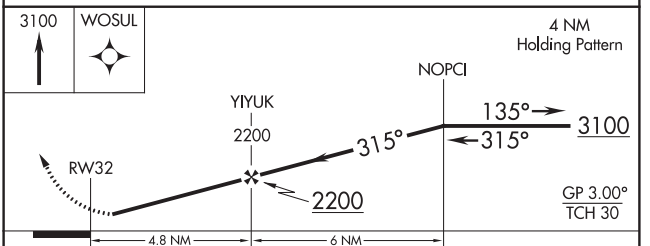
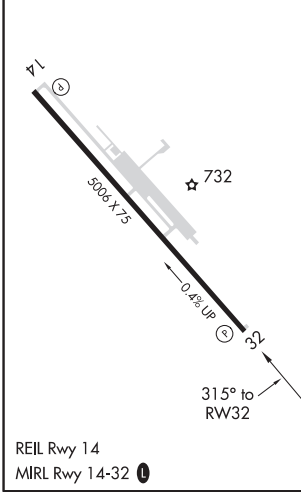
⚠ Baro-VNAV NA when using Nacogdoches altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). When local altimeter setting not received, use Nacogdoches altimeter setting and increase DA 118 feet, increase all MDA 120 feet and LPV, LNAV/VNAV visibility all Cats ¼ mile, LNAV and Circling Cat C visibility ¾ mile. When VGSi inop, Straight-in/Circling Rwy 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) ①
--------------------------	---	---------------------------------



ELEV 678	TDZE 665
-----------------	-----------------



CATEGORY	A	B	C	D
LPV DA	915-1	250 (300-1)		NA
LNAV/VNAV DA	915-1	250 (300-1)		NA
LNAV MDA	1220-1	555 (600-1)	1220-1½ 555 (600-1½)	NA
CIRCLING	1220-1	542 (600-1)	1220-1½ 542 (600-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

JACKSONVILLE, TEXAS

AL-6470 (FAA)

16175

VOR/DME FZT 111.4 Chan 51	APP CRS 121°	Rwy Idg TDZE Apt Elev	5006 678 678
--	------------------------	-----------------------------	---

VOR/DME RWY 14

CHEROKEE COUNTY (JSO)

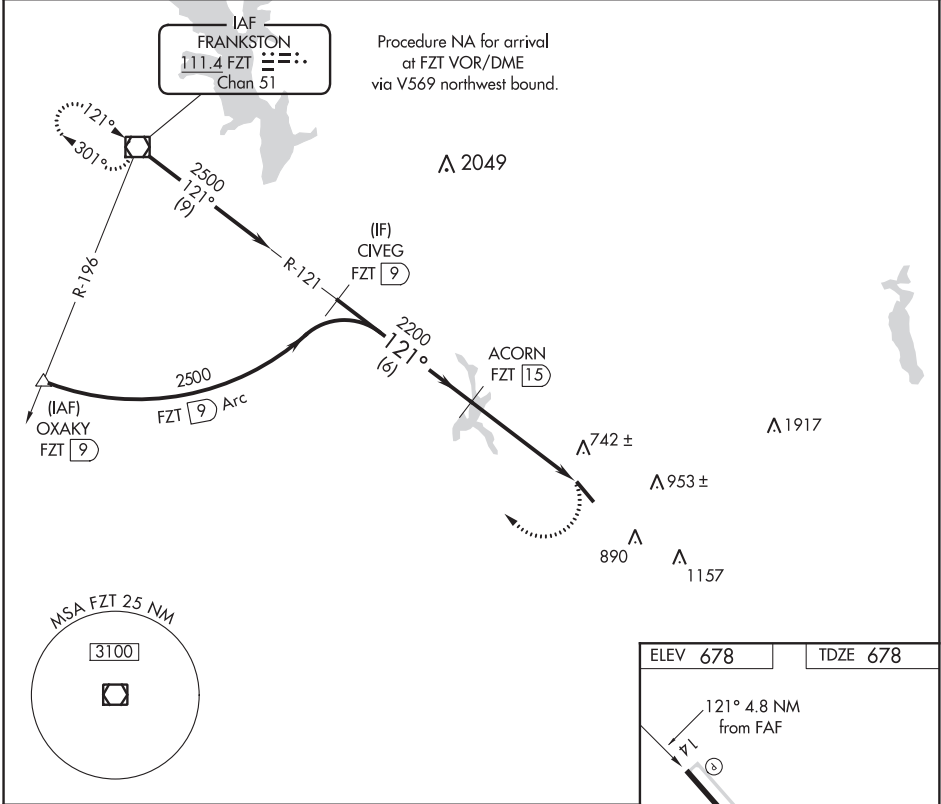
⚠ If local altimeter setting not received, use Palestine Muni altimeter setting and increase all MDAs 100 feet.

MISSED APPROACH: Climbing right turn to 2500 direct FZT VOR/DME and hold.

AWOS-3
119.075

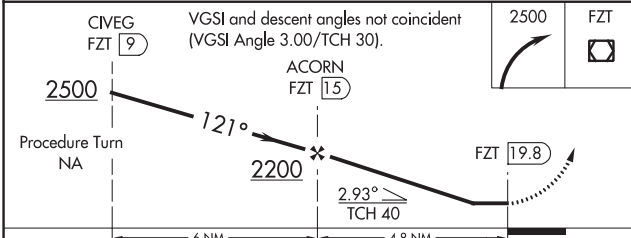
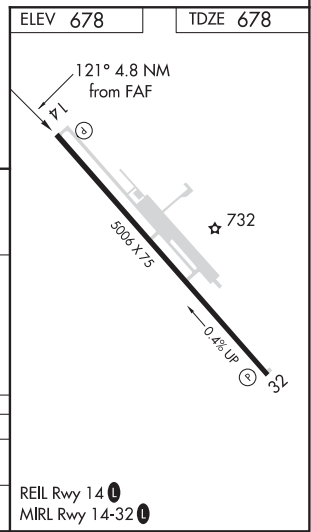
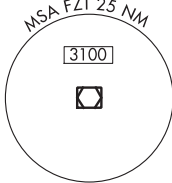
LONGVIEW APP CON *
128.75 379.15

UNICOM
122.7 (CTAF) 0



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D
S-14	1080-1	402 (500-1)	1080-1¼ 402 (500-1¼)	NA
CIRCLING	1080-1 402 (500-1)	1140-1 462 (500-1)	1140-1½ 462 (500-1½)	NA

JACKSONVILLE, TEXAS
Amdt 4A 23JUN16

31°52'N-95°13'W

VOR/DME RWY 14

CHEROKEE COUNTY (JSO)

WAA CH 87013 W18A	APP CRS 177°	Rwy Idg TDZE Apt Elev	5500 213 213
---------------------------------------	------------------------	-----------------------------	---

RNAV (GPS) RWY 18

JASPER COUNTY-BELL FIELD (JAS)

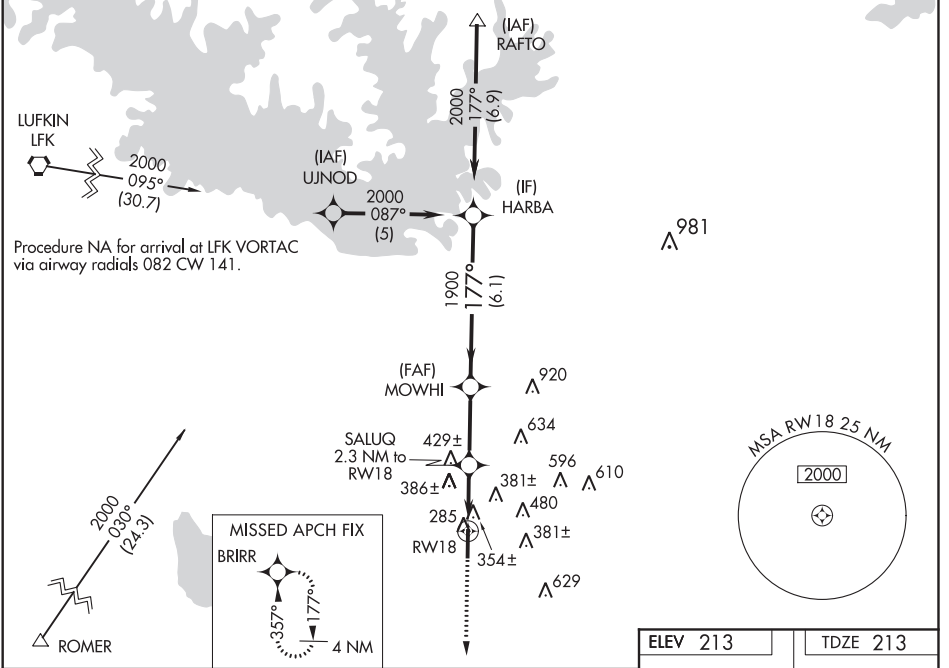
▼ Baro-VNAV NA when using De Ridder altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.
▲ Visibility reduction by helicopters NA. VDP NA when using De Ridder altimeter setting. When local altimeter setting not received, use De Ridder altimeter setting and increase all DA 85 feet, all MDA 100 feet, increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ½ mile, LNAV Cat C visibility ¼ mile, Circling Cat C ¼ mile.

MISSED APPROACH:
Climb to 3000 direct BRIRR and hold.

AWOS-3
118.375

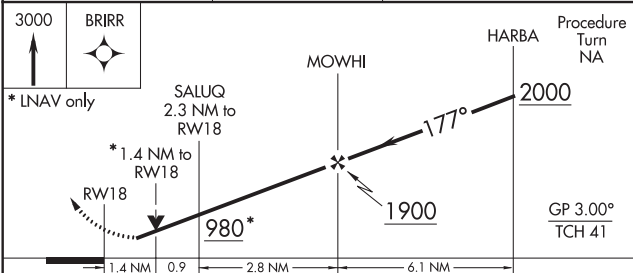
HOUSTON CENTER
126.95 363.05

UNICOM
122.8 (CTAF)



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



ELEV 213	TDZE 213
MIRL Rwy 18-36	

CATEGORY	A	B	C	D
LPV DA	567-1¼ 354 (400-1¼)			NA
LNAV/VNAV DA	730-1¾ 517 (600-1¾)			NA
LNAV MDA	700-1	487 (500-1)	700-1¼ 487 (500-1¼)	NA
CIRCLING	740-1	527 (600-1)	740-1½ 527 (600-1½)	NA

JASPER, TEXAS

AL-5773 (FAA)

16175

WAAS CH 42813 W36A	APP CRS 357°	Rwy Idg TDZE Apt Elev	5500 192 213
--	------------------------	-----------------------------	---

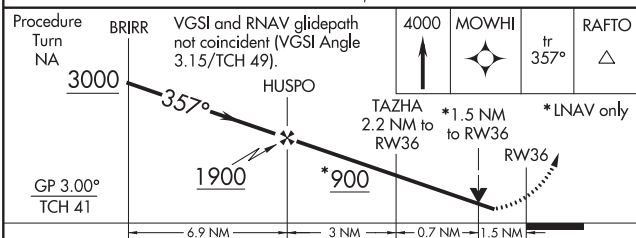
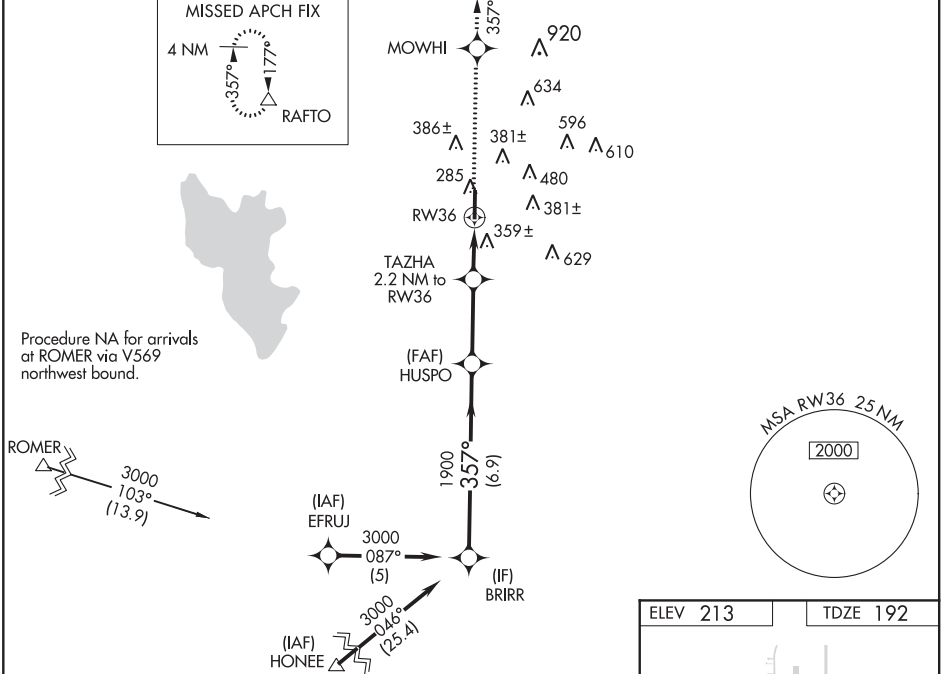
RNAV (GPS) RWY 36

JASPER COUNTY-BELL FIELD (JAS)

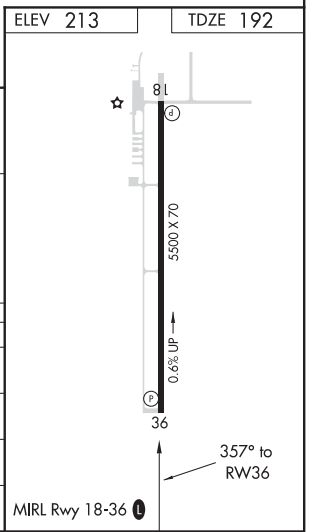
⚠ Baro-VNAV NA when using De Ridder altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. **⚠** Helicopter visibility reduction below 3/4 SM NA. VDP NA when using De Ridder altimeter setting. When local altimeter setting not received, use De Ridder altimeter setting and increase all DA 85 feet, all MDA 100 feet; increase LPV visibility all Cats and LNAV Cat C 3/8 mile, LNAV/VNAV visibility all Cats and Circling Cat C 1/4 mile.

MISSED APPROACH: Climb to 4000 direct MOWHI and via track 357° to RAFTO and hold.

AWOS-3 118.375	HOUSTON CENTER 126.95 363.05	UNICOM 122.8 (CTAF) 0
--------------------------	--	---------------------------------



CATEGORY	A	B	C	D
LPV DA	594-1 3/8	402 (400-1 3/8)		NA
LNAV/VNAV DA	675-1 3/4	483 (500-1 3/4)		NA
LNAV MDA	680-1 488 (500-1)		680-1 3/8 488 (500-1 3/8)	NA
CIRCLING	740-1 527 (600-1)		740-1 1/2 527 (600-1 1/2)	NA



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

JASPER, TEXAS
Orig-B 23JUN16

30°53'N-94°02'W

JASPER COUNTY-BELL FIELD (JAS)
RNAV (GPS) RWY 36

WAAS CH 42929 W13A	APP CRS 136°	Rwy Idg 4303 TDZE 71 Apt Elev 71
--	------------------------	---

RNAV (GPS) RWY 13
KOUNTZE/SILSBEE/HAWTHORNE FIELD (45R)

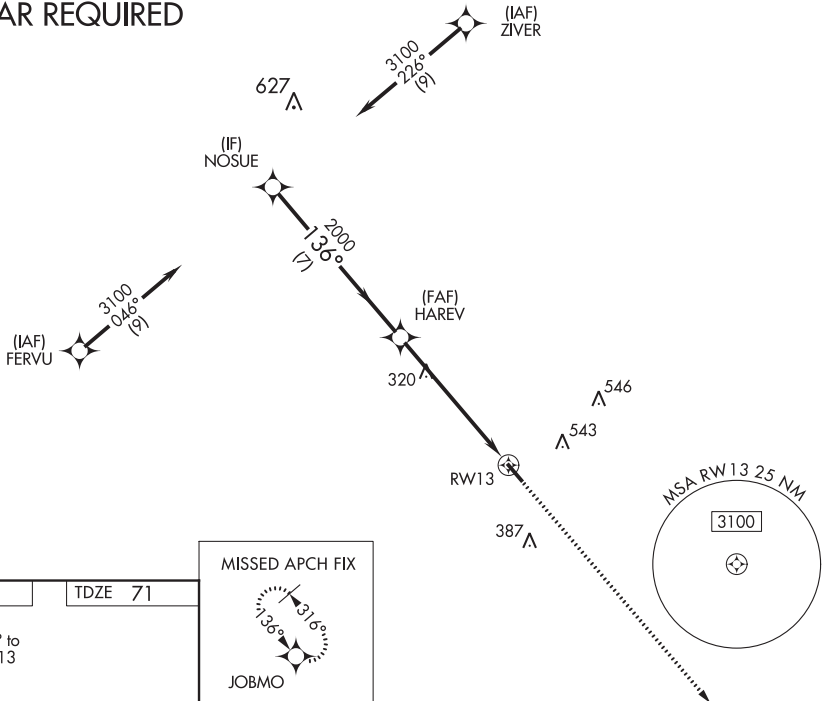
▼ When VGSI inop, Circling Rwy 31 NA at night. Use Jack Brooks Rgnl altimeter setting; when not received, use Orange altimeter setting. When VGSI inop, Straight-in/Circling Rwy 13 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000 direct JOBMO and hold.

HOUSTON APP CON
121.3 377.1

UNICOM
122.8 (CTAF) 0

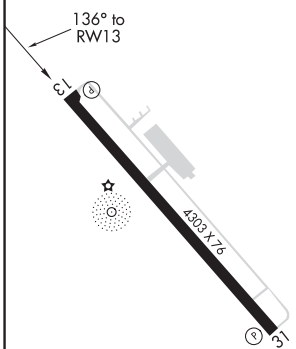
RADAR REQUIRED



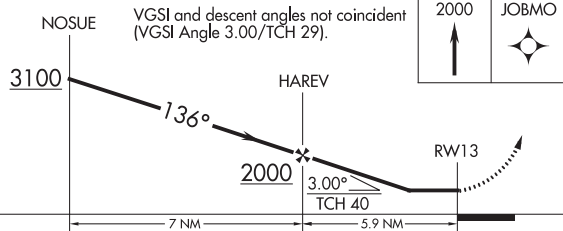
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ELEV 71	TDZE 71
---------	---------



MISSED APCH FIX



CATEGORY	A	B	C	D
LP MDA	700-1	629 (700-1)	700-1¾ 629 (700-1¾)	NA
LNAV MDA	720-1	649 (700-1)	720-1⅞ 649 (700-1⅞)	NA
CIRCLING	720-1	649 (700-1)	780-2 709 (800-2)	NA

KOUNTZE/SILSBEE, TEXAS

AL-6577 (FAA)

NDB RWY 13

KOUNTZE/SILSBEE/HAWTHORNE FIELD (45R)

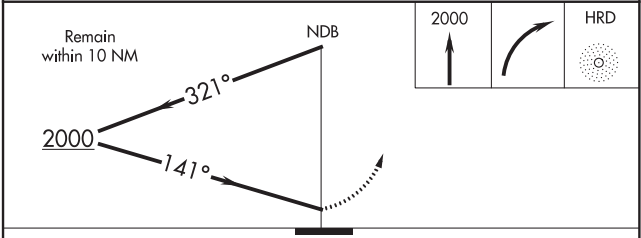
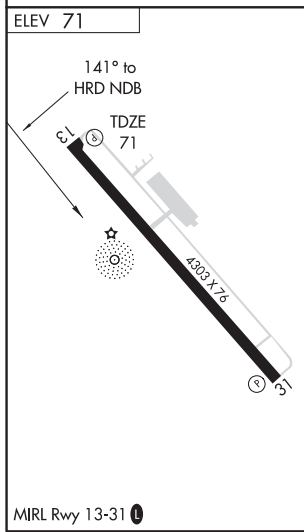
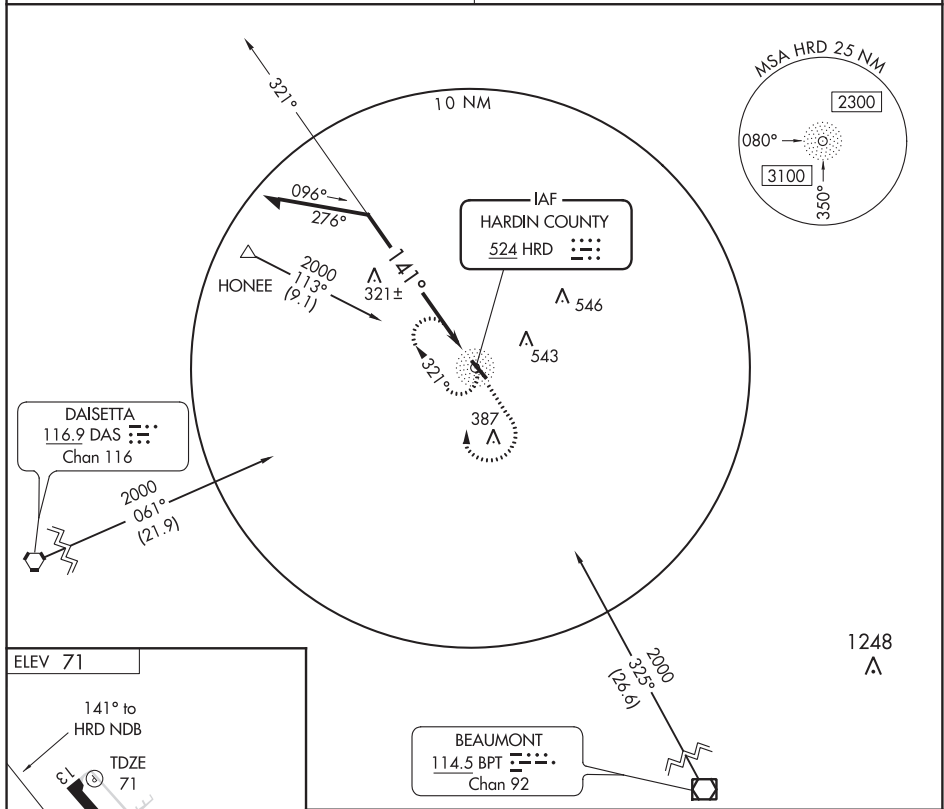
NDB HRD 524	APP CRS 141°	Rwy Idg 4303
		TDZE 71
		Apt Elev 71

▼ Use Jack Brooks Rgnl altimeter setting; when not received,
▲ NA use Orange altimeter setting. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000 then right turn direct HRD NDB and hold.

HOUSTON APP CON
121.3 377.1

UNICOM
122.8 (CTAF) 0



CATEGORY	A	B	C	D
S-13	800-1	729 (800-1)	800-2 729 (800-2)	NA
CIRCLING	800-1	729 (800-1)	800-2 729 (800-2)	NA

KOUNTZE/SILSBEE, TEXAS
Amdt 3 10322

30° 20' N - 94° 15' W

KOUNTZE/SILSBEE/HAWTHORNE FIELD (45R)
NDB RWY 13

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 42928 W16A	APP CRS 156°	Rwy Idg 5000 TDZE 318 Apt Elev 324
--	------------------------	---

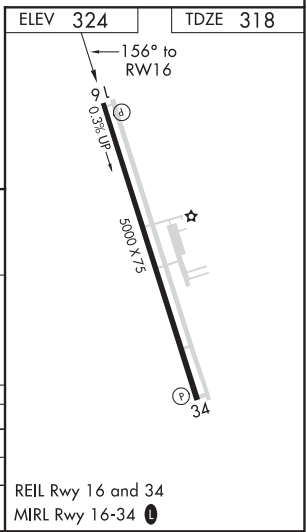
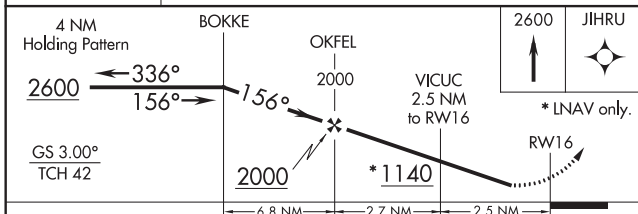
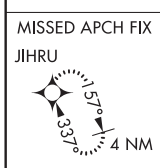
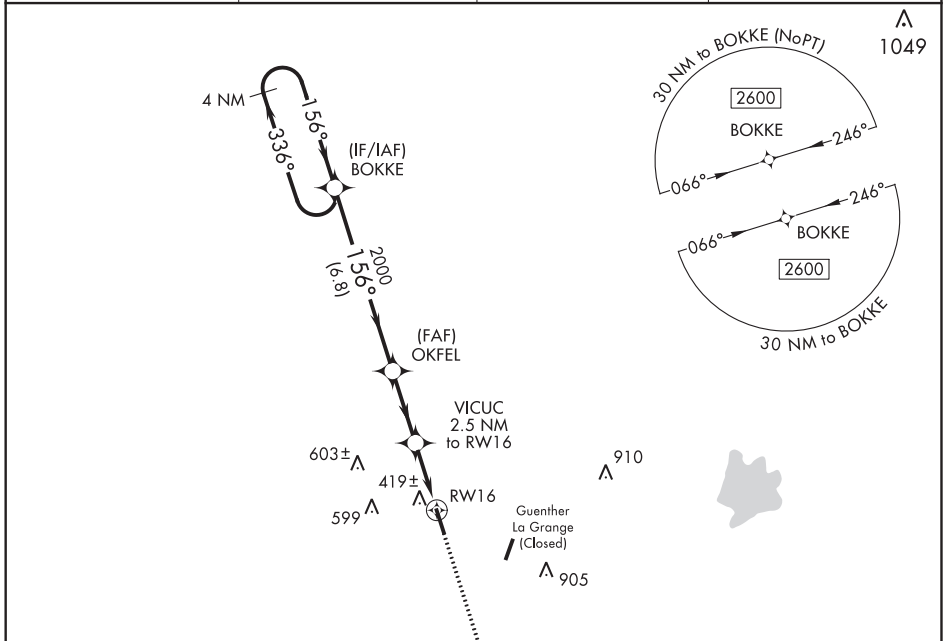
RNAV (GPS) RWY 16

FAYETTE RGNL AIR CENTER (3T5)

⚠ When VGSi inop, Circling Rwy 34 NA at night. 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 ¼ mile. When VGSi inop, Straight-In/Circling Rwy 16 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

⚠ MISSED APPROACH: Climb to 2600 direct JIHRU and hold.

AWOS-3 124.175	AUSTIN APP CON 120.875 270.25	GCO 121.725	UNICOM 122.7 (CTAF) 0
--------------------------	---	-----------------------	---------------------------------



CATEGORY	A	B	C	D
LPV DA	568-1	250 (300-1)		NA
LNAV MDA	680-1	362 (400-1)		NA
CIRCLING	740-1 416 (500-1)	780-1 456 (500-1)	780-1½ 456 (500-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LA GRANGE, TEXAS

AL-9154 (FAA)

15092

WAAS CH 86929 W34A	APP CRS 336°	Rwy Idg 5000
	TDZE 324	
	Apt Elev 324	

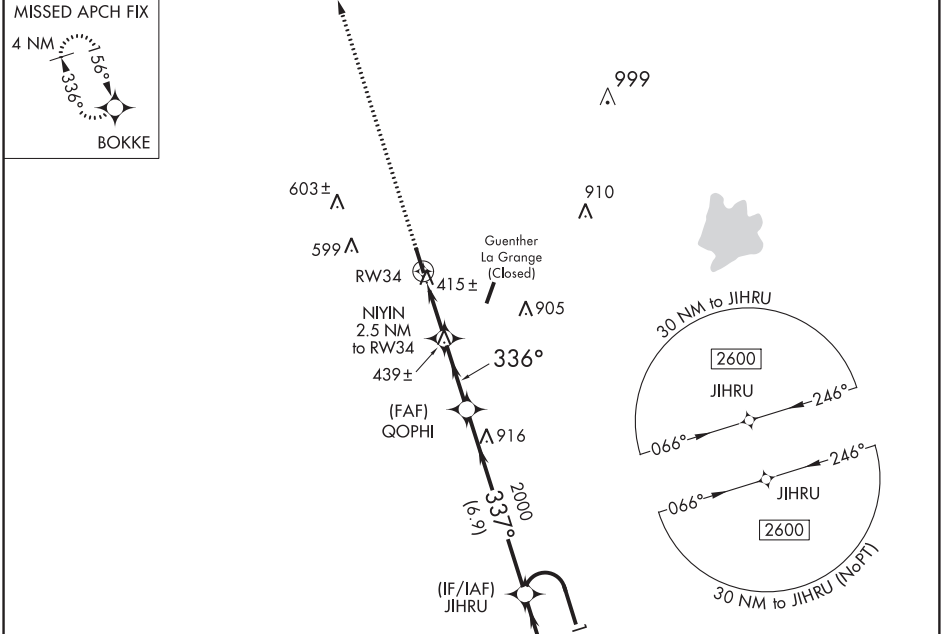
RNAV (GPS) RWY 34

FAYETTE RGNL AIR CENTER (3T5)

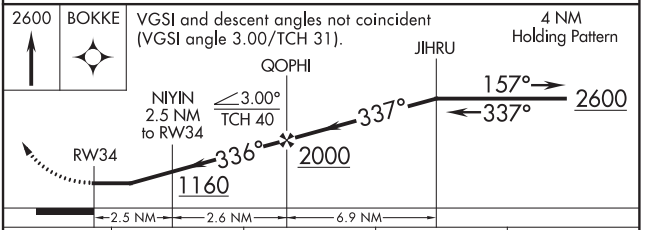
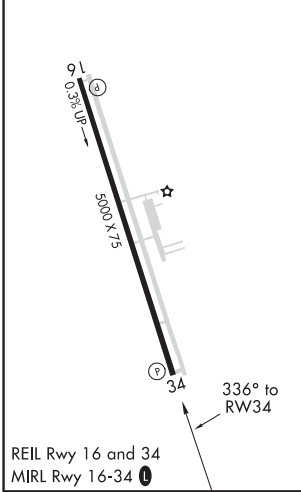
⚠ When VGSI inop, Circling Rwy 16 NA at night. When local altimeter setting not received, use Giddings-Lee altimeter setting and increase all MDA 60 feet, increase LP and LNAV Cat C visibility ¼ mile. When VGSI inop, Straight-In/Circling Rwy 34 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

⚠ MISSED 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) 0
--------------------------	---	-----------------------	---------------------------------



ELEV 324	TDZE 324
-----------------	-----------------



CATEGORY	A	B	C	D
LP MDA	700-1		376 (400-1)	NA
LNAV MDA	740-1	416 (500-1)	740-1½ 416 (500-1½)	NA
CIRCLING	740-1 416 (500-1)	780-1 456 (500-1)	780-1½ 456 (500-1½)	NA

LA GRANGE, TEXAS
Amdt 2A 02APR15

29°54'N-96°57'W

FAYETTE RGNL AIR CENTER (3T5) RNAV (GPS) RWY 34

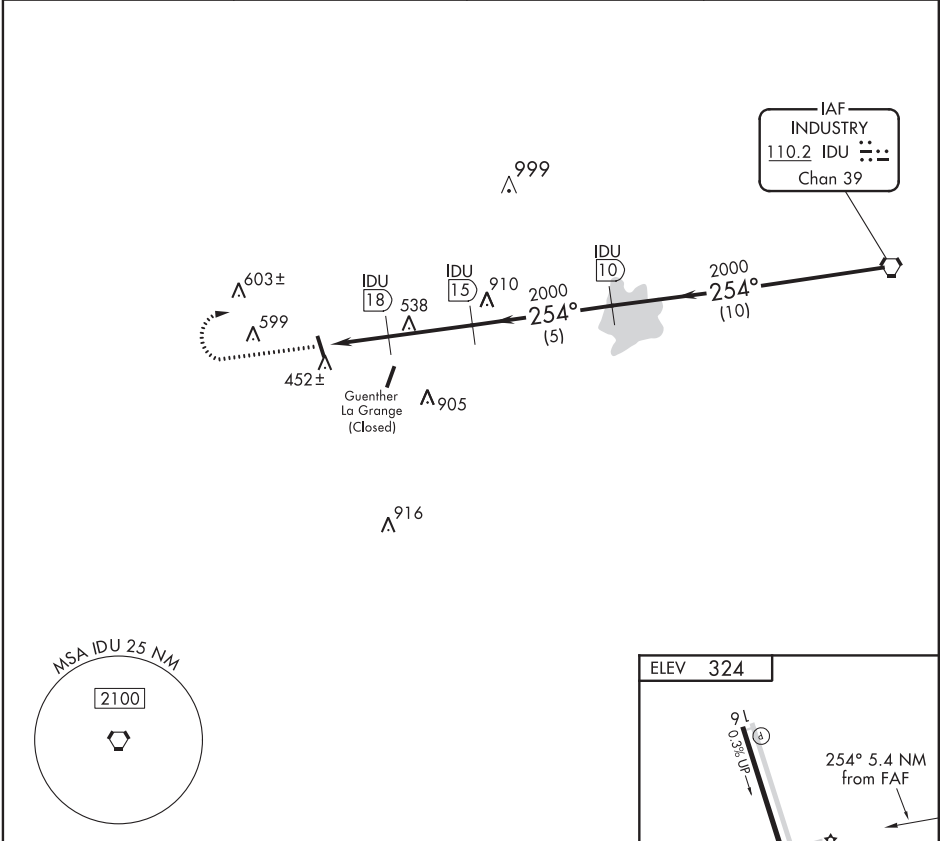
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

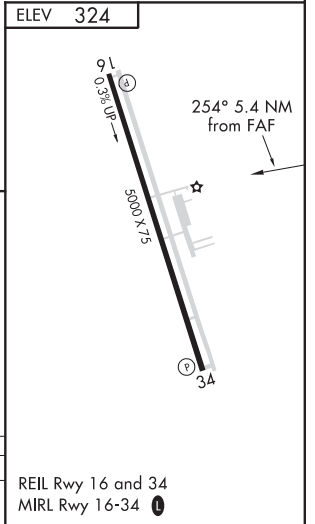
VORTAC IDU 110.2 Chan 39	APP CRS 254°	Rwy Idg TDZE Apt Elev 324	N/A N/A 324
--	------------------------	---	--

VOR/DME-A
FAYETTE RGNL AIR CENTER (3T5)

NA		MISSED APPROACH: Climb to 1500 then climbing right turn to 2000 direct IDU VORTAC.	
AWOS-3 124.175	AUSTIN APP CON 120.875 270.25	GCO 121.725	UNICOM 122.7 (CTAF)



1500 2000 IDU	Procedure Turn NA IDU VORTAC			
	IDU 20.4 1320	IDU 18 2000	IDU 15 2000	IDU 10 2000
	2.4 NM	3 NM	5 NM	10 NM
CATEGORY	A	B	C	D
CIRCLING	780-1 456 (500-1)	780-1¼ 456 (500-1¼)	780-1½ 456 (500-1½)	NA



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

AIRPORT DIAGRAM

FAYETTE RGNL AIR CENTER (3T5)
LA GRANGE, TEXAS

AL-9154 (FAA)

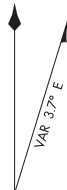
AWOS-3
124.175
CTAF/UNICOM
122.7
GCO
121.725

29° 55' N

ELEV 308
91
158.8°

5000 X 75

JANUARY 2015
ANNUAL RATE OF CHANGE
0.1° W



29° 54.5' N

MAINTENANCE HANGARS

TERMINAL

HANGARS

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

RWY 16-34
S-30

338.8°
34
FIELD ELEV 324

29° 54' N

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

96° 57' W

96° 56.5' W

AIRPORT DIAGRAM

LA GRANGE, TEXAS
FAYETTE RGNL AIR CENTER (3T5)

WAAS CH 93928 W30A	APP CRS 301°	Rwy Idg TDZE Apt Elev	3760 25 25
--	------------------------	-----------------------------	---------------------------------------

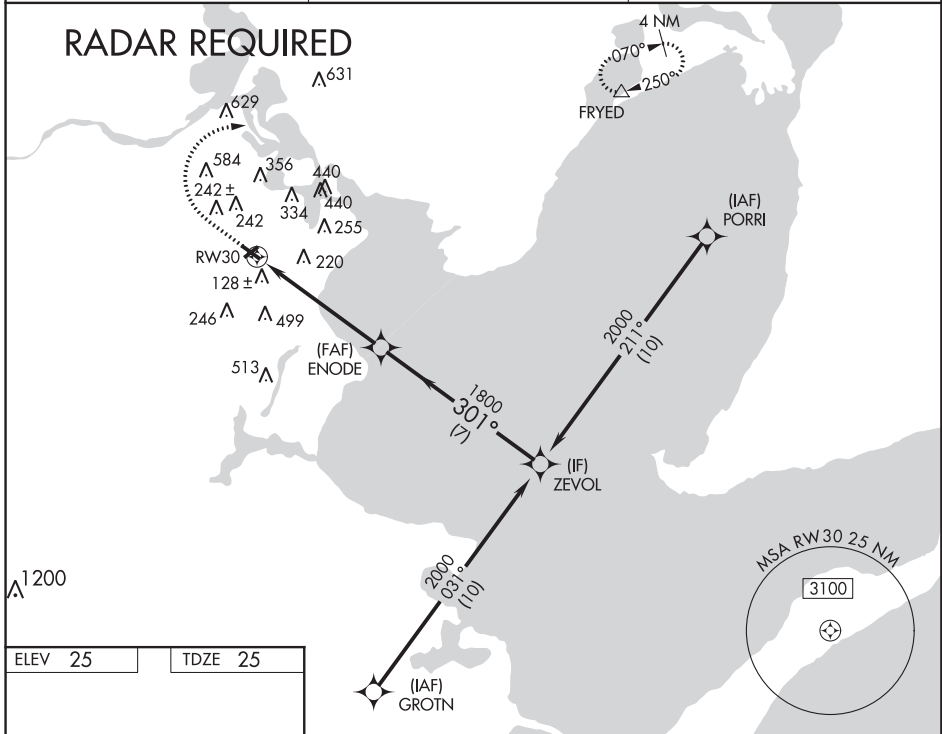
RNAV (GPS) RWY 30

LA PORTE MUNI (T41)

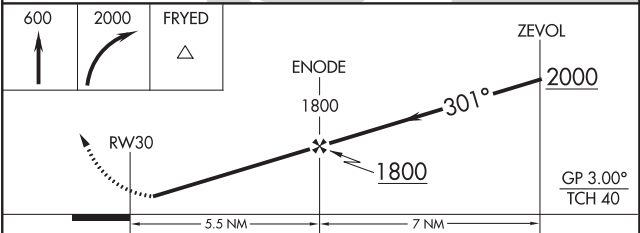
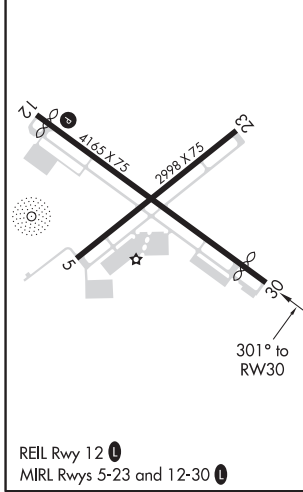
▼ Baro-VNAV NA. Use Ellington altimeter setting. DME/DME RNP-0.3 NA.
▲ NA Rwy 30 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 30 NA at night, Circling Rwy 5, 23, 30 NA at night.

MISSED APPROACH: Climb to 600 then climbing right turn to 2000 direct FRYED and hold.

HOUSTON APP CON 134.45 284.0	CLNC DEL 125.6	UNICOM 122.7 (CTAF) 0
--	--------------------------	---------------------------------



ELEV 25	TDZE 25
---------	---------



CATEGORY	A	B	C	D
LPV DA	291-1 266 (300-1)			NA
LNAV/VNAV DA	345-1½ 320 (400-1½)			NA
LNAV MDA	520-1 495 (500-1)		520-1½ 495 (500-1½)	NA
CIRCLING	600-1 575 (600-1)	620-1 595 (600-1)	620-1½ 595 (600-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

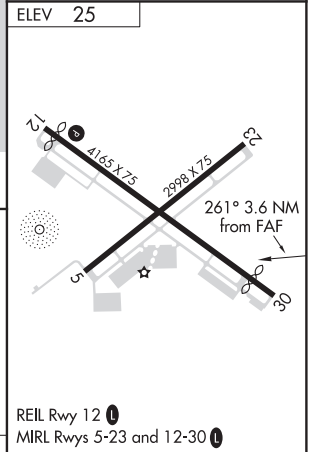
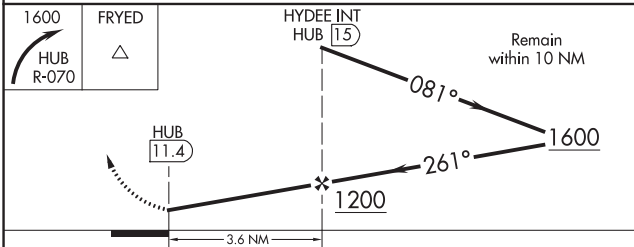
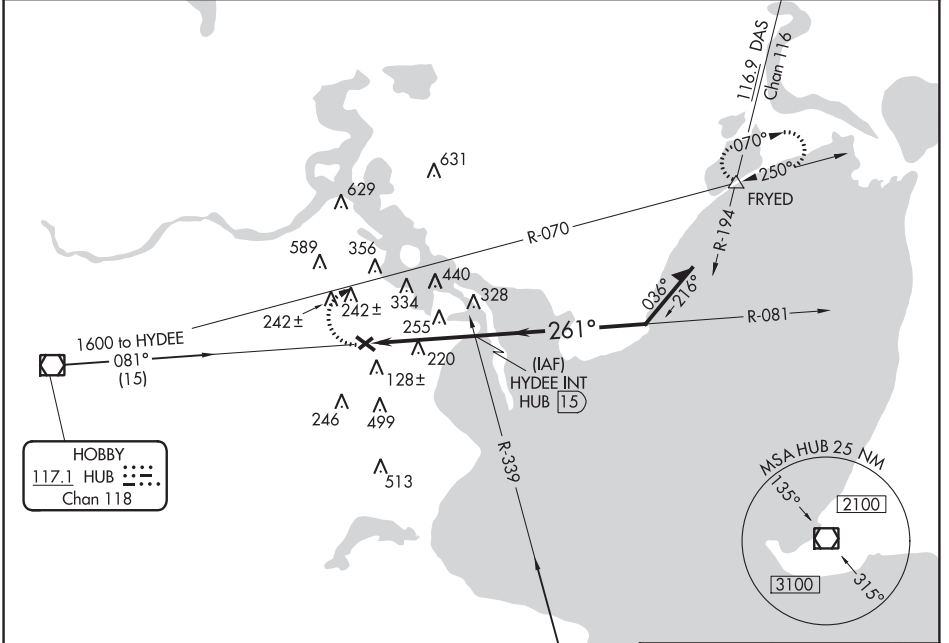
SC-5, 10 NOV 2016 to 05 JAN 2017

VOR/DME HUB 117.1 Chan 118	APP CRS 261°	Rwy Idg TDZE Apt Elev N/A N/A 25
--	------------------------	---

VOR-A
LA PORTE MUNI (T41)

<p>▼ ▲ NA</p> <p>Use Ellington altimeter setting.</p>	<p>MISSED APPROACH: Climbing right turn to 1600 via HUB R-070 to FRYED INT and hold.</p>
---	--

<p>HOUSTON APP CON 134.45 284.0</p>	<p>CLNC DEL 125.6</p>	<p>UNICOM 122.7 (CTAF) 0</p>
--	----------------------------------	---



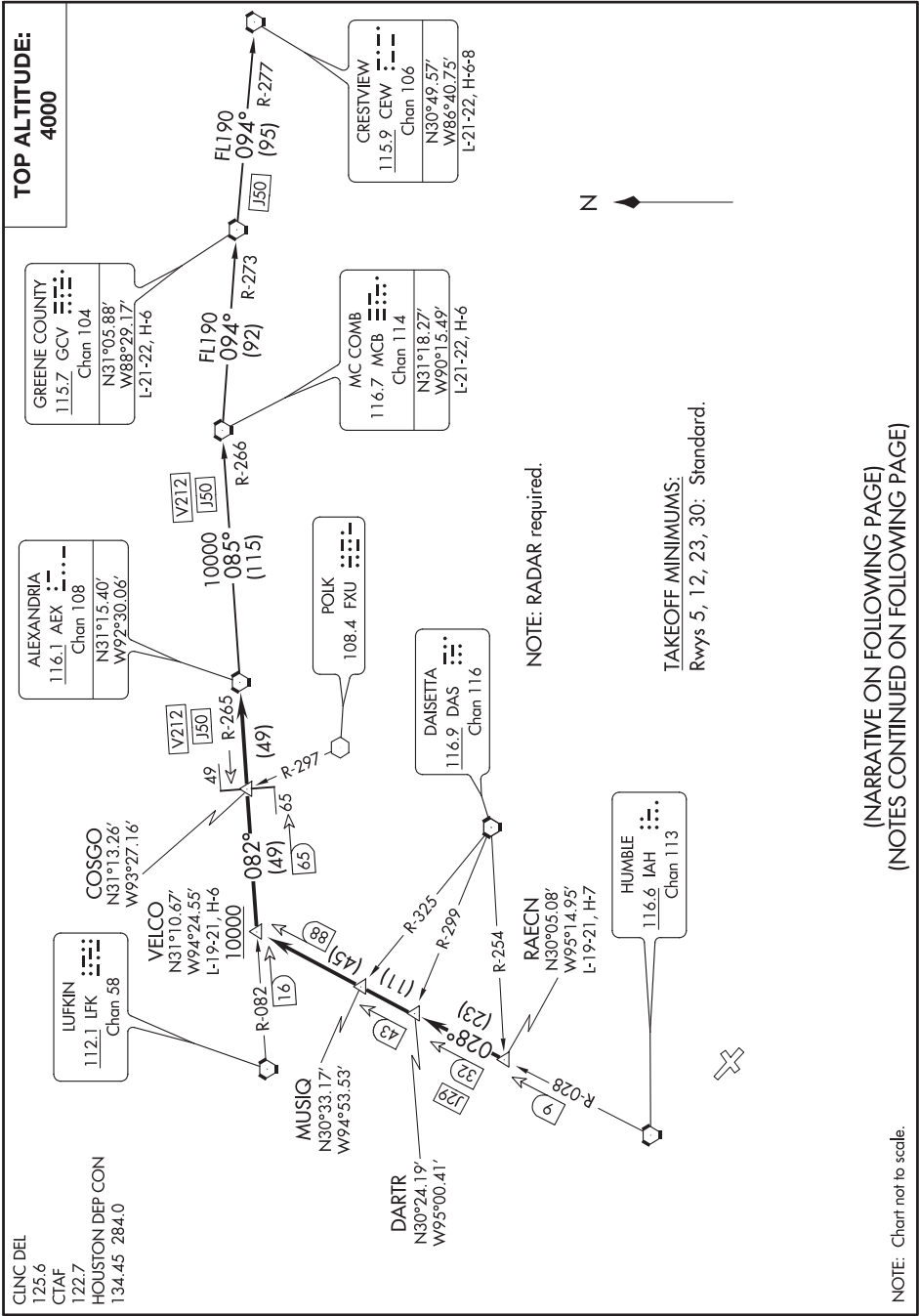
CATEGORY	A	B	C	D	FAF to MAP 3.6 NM					
CIRCLING	660-1	635 (700-1)	660-1¼ 635 (700-1¼)	NA	Knots	60	90	120	150	180
					Min:Sec	3:36	2:24	1:48	1:26	1:12

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017



ALEXANDRIA NINE DEPARTURE

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

ALEXANDRIA NINE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

THE FOLLOWING TRANSITIONS ARE ATC ASSIGNED ONLY. DO NOT FILE.

CRESTVIEW TRANSITION (AEX9.CEW): (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC, then on GCV R-094 and CEW R-277 to CEW VORTAC.

GREENE COUNTY TRANSITION (AEX9.GCV): (For aircraft being weather rerouted to join a jet route off GCV VORTAC or overflying GCV VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC, then on MCB R-094 and GCV R-273 to GCV VORTAC.

MC COMB TRANSITION (AEX9.MCB): (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route). From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

TAKEOFF OBSTACLE NOTES

Rwy 12: Trees and poles beginning 128' from DER, 42' left of centerline, up to 50' AGL/74' MSL. Trees and poles beginning 131' from DER, 114' right of centerline, up to 39' AGL/63' MSL. Chimney 676' from DER, 412' right of centerline, 31' AGL/55' MSL.

Rwy 23: Trees beginning 1320' from DER, 43' left of centerline, up to 63' AGL/87' MSL. Hangars beginning 233' from DER, 288' right of centerline, up to 35' AGL/59' MSL. Vehicle on road, 594' from DER, 513' left of centerline, 15' AGL/39' MSL. Trees 1010' from DER, 1010' right of centerline, up to 63' AGL/87' MSL.

Rwy 30: Trees and poles beginning 114' from DER, 67' left of centerline, up to 63' AGL/87' MSL. Buildings 335' from DER, 356' left of centerline, 25' AGL/50' MSL. Trees and poles beginning 44' from DER, 35' right of centerline, up to 52' AGL/76' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

SL-5433 (FAA)

LA PORTE MUNI (T41)

BLTWY THREE DEPARTURE (RNAV)

LA PORTE, TEXAS

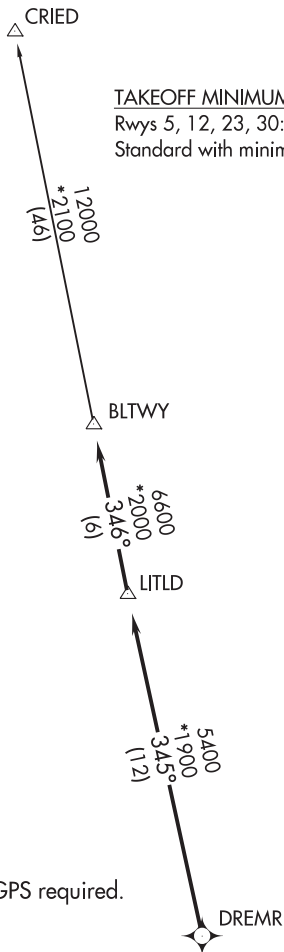
CLNC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

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.



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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)

(BLTWY3.BLTWY) 10NOV16

LA PORTE, TEXAS
LA PORTE MUNI (T41)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb heading 046° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 12: Climb heading 121° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 23: Climb heading 226° to 540, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 30: Climb heading 301° to 540, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)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.

BORRN TWO DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

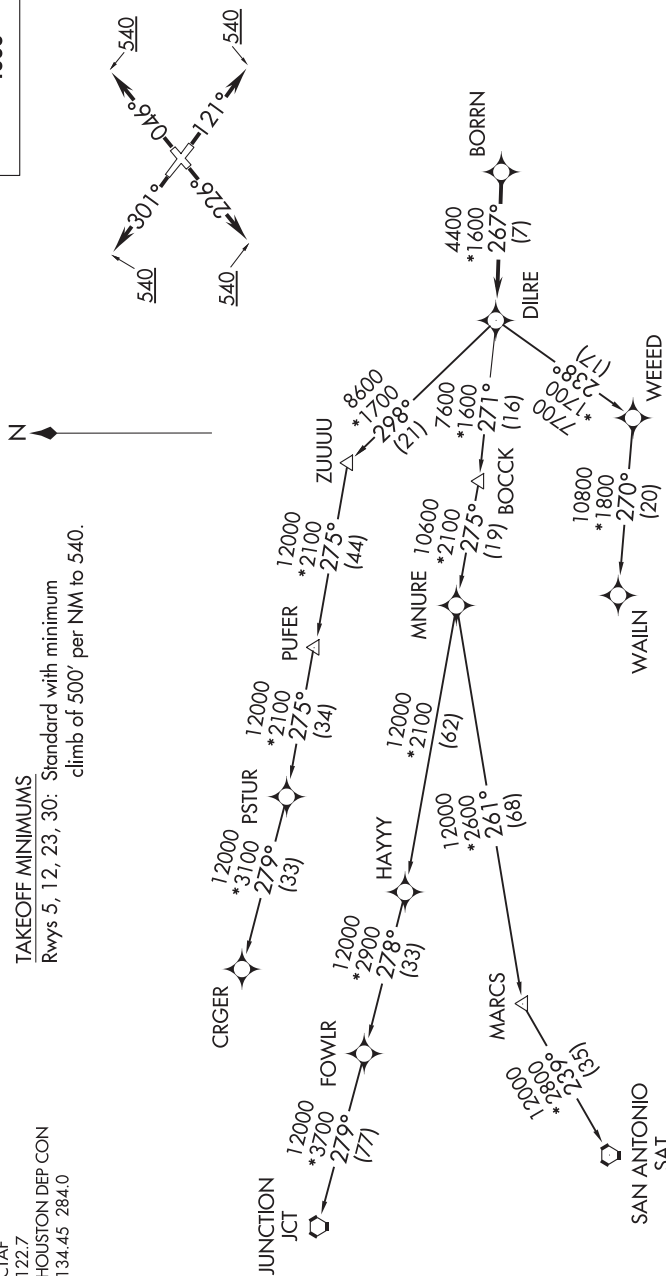
CINC DEL
125.6
CTAF
122.7

HOUSTON DEP CON
134.45 284.0

TAKEOFF MINIMUMS

Rwys 5, 12, 23, 30: Standard with minimum
climb of 500' per NM to 540.

TOP ALTITUDE:
4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb on heading 046° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 12: Climb on heading 121° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 23: Climb on heading 226° to 540, expect RADAR vectors to BORRN, thence

TAKEOFF RWY 30: Climb on heading 301° to 540, expect RADAR vectors to BORRN, thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGR TRANSITION (BORRN2.CRGR): (ATC assigned only)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

TAKEOFF OBSTACLES 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, 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, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CRIED EIGHT DEPARTURE

SL-5433 (FAA)

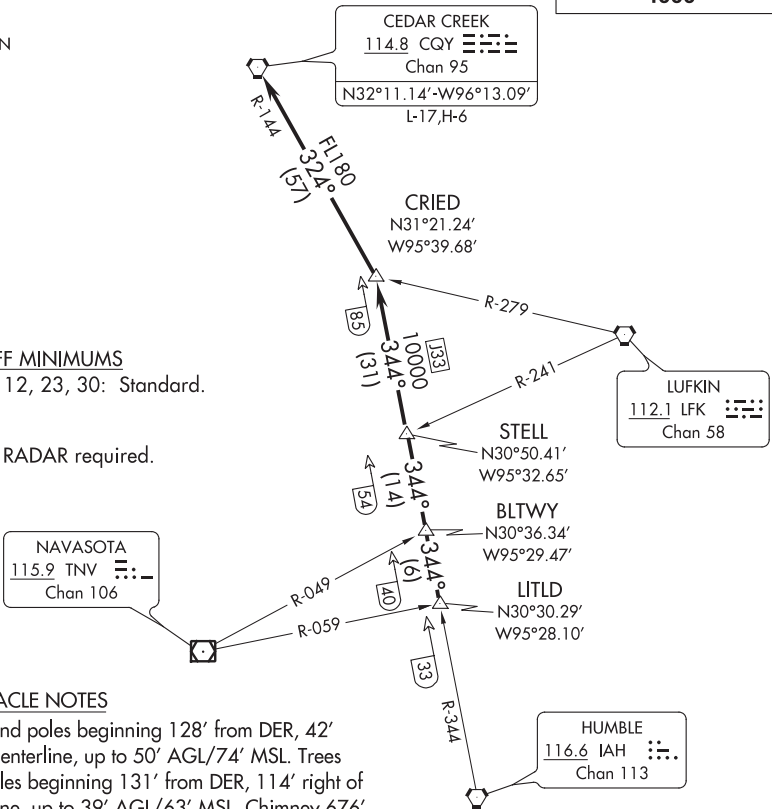
LA PORTE MUNI (T41)
LA PORTE, TEXAS

CLINC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30: Standard.

NOTE: RADAR required.



TAKEOFF OBSTACLE NOTES

- Rwy 12: Trees and poles beginning 128' from DER, 42' left of centerline, up to 50' AGL/74' MSL. Trees and poles beginning 131' from DER, 114' right of centerline, up to 39' AGL/63' MSL. Chimney 676' from DER, 412' right of centerline, 31' AGL/55' MSL.
- Rwy 23: Trees beginning 1320' from DER, 43' left of centerline, up to 63' AGL/87' MSL. Hangars beginning 233' from DER, 288' right of centerline, up to 35' AGL/59' MSL. Vehicle on road 594' from DER, 513' left of centerline, 15' AGL/39' MSL. Trees 1010' from DER, 1010' right of centerline, up to 63' AGL/87' MSL.
- Rwy 30: Trees and poles beginning 114' from DER, 67' left of centerline, up to 63' AGL/87' MSL. Buildings 335' from DER, 356' left of centerline, 25' AGL/50' MSL. Trees and poles beginning 44' from DER, 35' right of centerline, up to 52' AGL/76' MSL.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT, maintain 4000. 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.

CRIED EIGHT DEPARTURE

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(ELD8.ELD) 16315

698
SL-5433 (FAA)

LA PORTE MUNI (T41)
LA PORTE, TEXAS

EL DORADO EIGHT DEPARTURE

CLNC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

TOP ALTITUDE:
4000

EL DORADO
115.5 ELD
Chan 102
N33°15.37'-W92°44.64'
L-17, H-6

NOTE: RADAR required.
NOTE: For aircraft destined MEM
or filed via Q32 or J42.

LUFKIN
112.1 LFK
Chan 58

ENJOY
N31°16.73'
W94°19.82'

MUSIQ
N30°33.17'
W94°53.53'

VELCO
N31°10.67'
W94°24.55'
10000

DARTR
N30°24.19'
W95°00.41'

RAECN
N30°05.08'
W95°14.95'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113

TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30: Standard.

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

NOTE: Chart not to scale.

EL DORADO EIGHT DEPARTURE
(ELD8.ELD) 10NOV16

LA PORTE, TEXAS
LA PORTE MUNI (T41)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

EL DORADO EIGHT DEPARTURE



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT, maintain 4000. 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.

TAKEOFF OBSTACLE NOTES

- Rwy 12: Trees and poles beginning 128' from DER, 42' left of centerline, up to 50' AGL/74' MSL.
Trees and poles beginning 131' from DER, 114' right of centerline, up to 39' AGL/63' MSL.
Chimney 676' from DER, 412' right of centerline, 31' AGL/55' MSL.
- Rwy 23: Trees beginning 1320' from DER, 43' left of centerline, up to 63' AGL/87' MSL.
Hangars beginning 233' from DER, 288' right of centerline, up to 35' AGL/59' MSL.
Vehicle on road 594' from DER, 513' left of centerline, 15' AGL/39' MSL.
Trees 1010' from DER, 1010' right of centerline, up to 63' AGL/87' MSL.
- Rwy 30: Trees and poles beginning 114' from DER, 67' left of centerline, up to 63' AGL/87' MSL.
Buildings 335' from DER, 356' left of centerline, 25' AGL/50' MSL.
Trees and poles beginning 44' from DER, 35' right of centerline, up to 52' AGL/76' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CLNC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

CEDAR CREEK
114.8 CQY
Chan 95

LEONA
110.8 LOA
Chan 45

GIFFA
N31°22.89'
W95°15.10'
L-19-21, H-6
8500

BUMCO
N30°38.91'
W95°18.03'

DAISETTA
116.9 DAS
Chan 116

HUMBLE
116.6 IAH
Chan 113

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30: Standard.

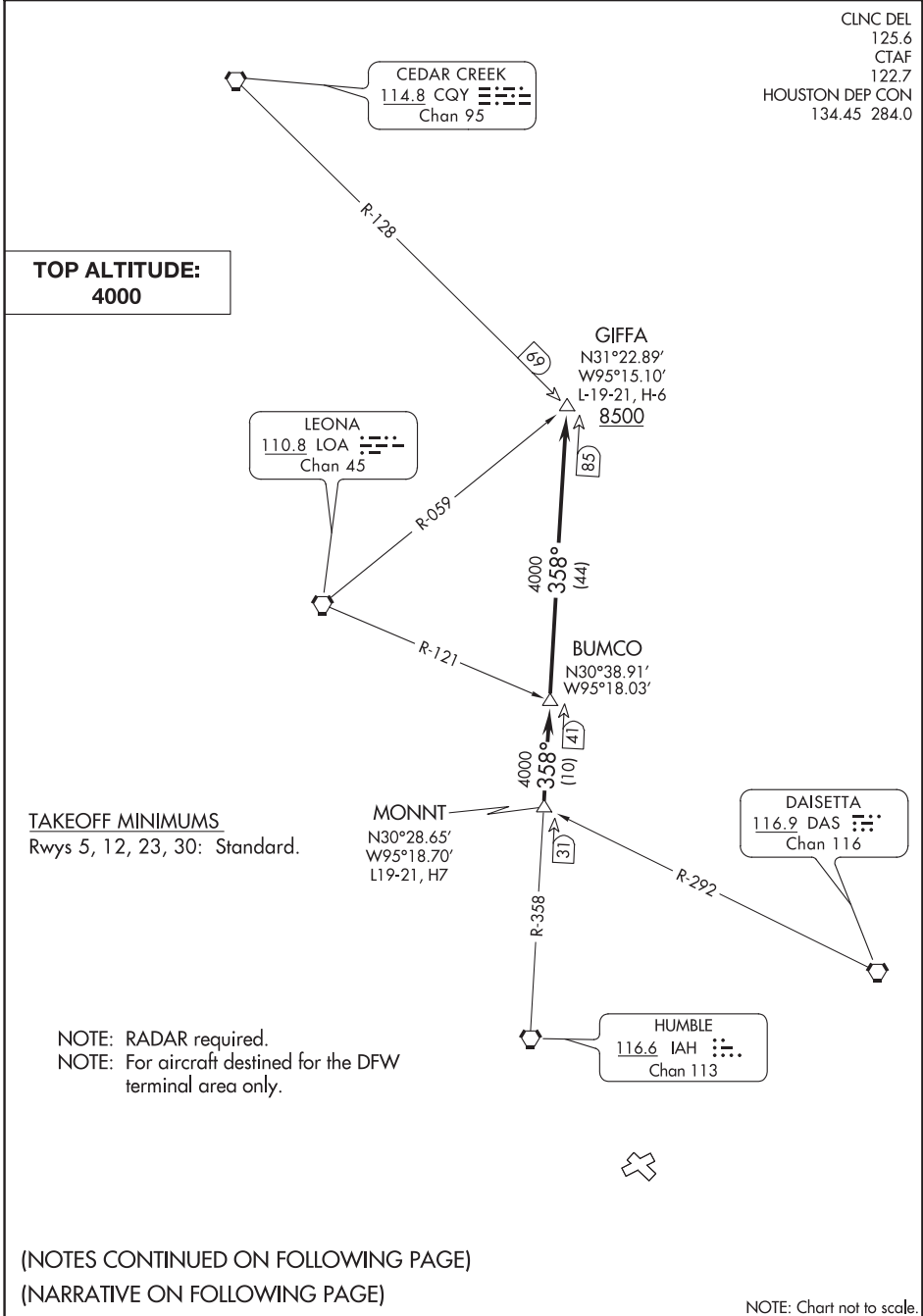
NOTE: RADAR required.
NOTE: For aircraft destined for the DFW
terminal area only.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017





DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

. . . . on IAH R-358 to GIFFA INT at or above 8500.

TAKEOFF OBSTACLE NOTES

Rwy 12: Trees and poles beginning 128' from DER, 42' left of centerline, up to 50' AGL/74' MSL.

Trees and poles beginning 131' from DER, 114' right of centerline, up to 39' AGL/63' MSL.

Chimney 676' from DER, 412' right of centerline, 31' AGL/55' MSL.

Rwy 23: Trees beginning 1320' from DER, 43' left of centerline, up to 63' AGL/87' MSL.

Hangars beginning 233' from DER, 288' right of centerline, up to 35' AGL/59' MSL.

Vehicle on road 594' from DER, 513' left of centerline, 15' AGL/39' MSL.

Trees 1010' from DER, 1010' right of centerline, up to 63' AGL/87' MSL.

Rwy 30: Trees and poles beginning 114' from DER, 67' left of centerline, up to 63' AGL/87' MSL.

Buildings 335' from DER, 356' left of centerline, 25' AGL/50' MSL.

Trees and poles beginning 44' from DER, 35' right of centerline, up to 52' AGL/76' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

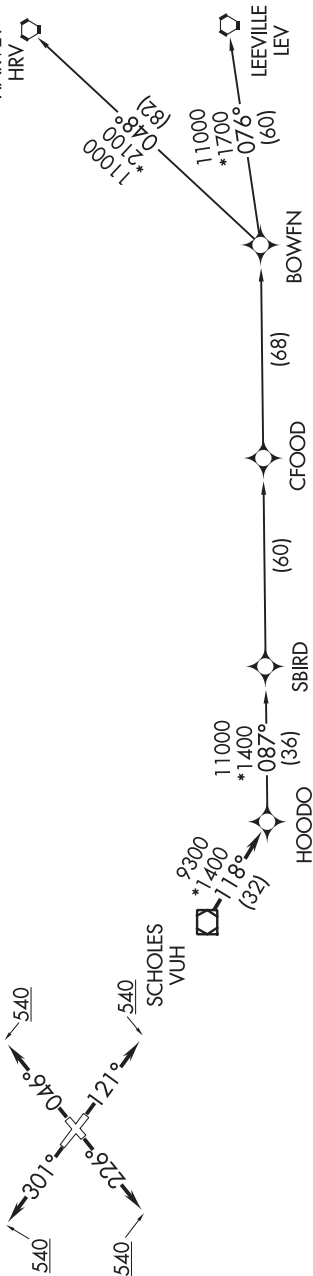
HOODO FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

CINC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

TOP ALTITUDE:
4000

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



TAKEOFF MINIMUMS
 Rwy 5, 12, 23, 30:
 Standard with minimum climb of 500' per NM to 540.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb heading 046° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAY 12: Climb heading 121° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAY 23: Climb heading 226° to 540, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RUNWAY 30: Climb heading 301° to 540, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

- Rwy 12: Trees and poles beginning 128' from DER, 42' left of centerline, up to 50' AGL/74' MSL.
Trees and poles beginning 131' from DER, 114' right of centerline, up to 39' AGL/63' MSL.
Chimney 676' from DER, 412' right of centerline, 31' AGL/55' MSL.
- Rwy 23: Trees beginning 1320' from DER, 43' left of centerline, up to 63' AGL/87' MSL.
Hangars beginning 233' from DER, 288' right of centerline, up to 35' AGL/59' MSL.
Vehicle on road, 594' from DER, 513' left of centerline, 15' AGL/39' MSL.
Trees 1010' from DER, 1010' right of centerline, up to 63' AGL/87' MSL.
- Rwy 30: Trees and poles beginning 114' from DER, 67' left of centerline, up to 63' AGL/87' MSL.
Buildings 335' from DER, 356' left of centerline, 25' AGL/50' MSL.
Trees and poles beginning 44' from DER, 35' right of centerline, up to 52' AGL/76' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

INDIE FOUR DEPARTURE (RNAV)

704
SL-5433 (FAA)

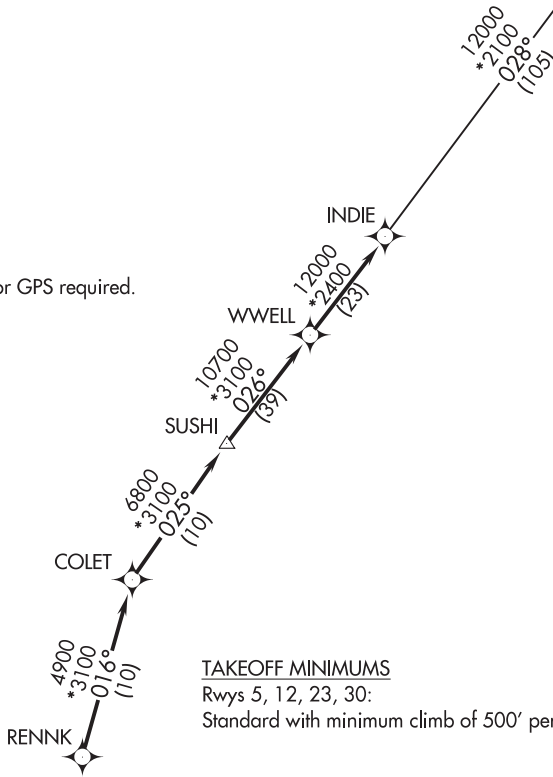
LA PORTE MUNI (T41)
LA PORTE, TEXAS

CLNC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

TPAKK

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.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

LA PORTE, TEXAS
LA PORTE MUNI (T41)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb heading 046° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 12: Climb heading 121° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 23: Climb heading 226° to 540, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 30: Climb heading 301° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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, 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, 10 NOV 2016 to 05 JAN 2017

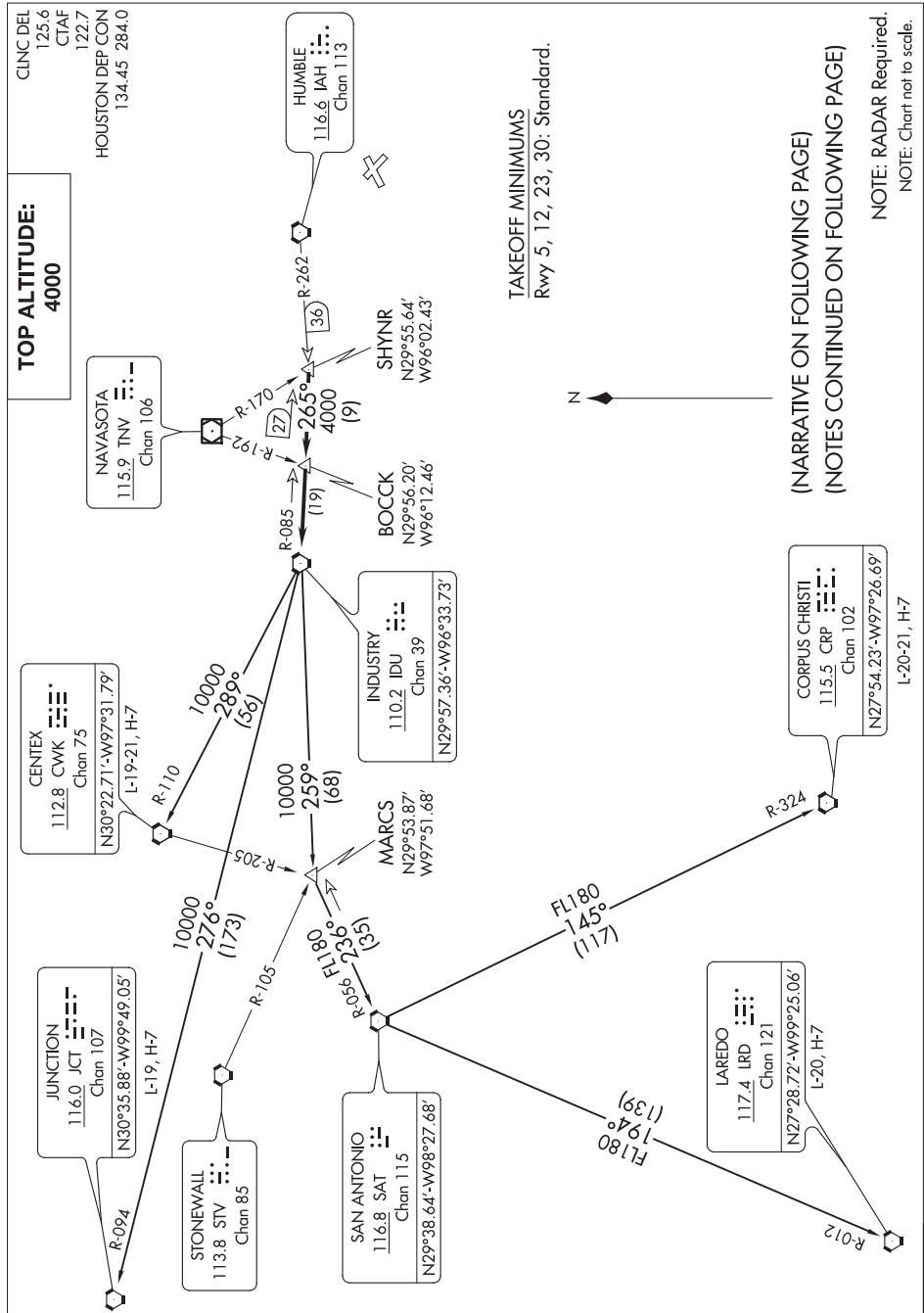
SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

SL-5433 (FAA)

LA PORTE MUNI (T41)
LA PORTE, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



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

NOTE: RADAR Required.
NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

INDUSTRY EIGHT DEPARTURE

(IDU8.IDU) 10NOV16

LA PORTE, TEXAS
LA PORTE MUNI (T41)



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT, maintain 4000. 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 (IDU8.CWK): (ATC assigned only. For aircraft inbound to the DFW Metroplex area that are being rerouted due to bad weather.) From over IDU VORTAC on IDU R-289 and CWK R-110 to CWK VORTAC.

CORPUS CHRISTI TRANSITION (IDU8.CRP): (ATC assigned only.) 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 (IDU8.JCT): (For aircraft overflying JCT VORTAC via J2, J15, or J86.) From over IDU VORTAC on IDU R-276 and JCT R-094 to JCT VORTAC.

LAREDO TRANSITION (IDU8.LRD): (ATC assigned only.) 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 OBSTACLE NOTES

Rwy 12: Trees and poles beginning 128' from DER, 42' left of centerline, up to 50' AGL/74' MSL. Trees and poles beginning 131' from DER, 114' right of centerline, up to 39' AGL/63' MSL. Chimney 676' from DER, 412' right of centerline, 31' AGL/55' MSL.

Rwy 23: Trees beginning 1320' from DER, 43' left of centerline, up to 63' AGL/87' MSL. Hangars beginning 233' from DER, 288' right of centerline, up to 35' AGL/59' MSL. Vehicle on road 594' from DER, 513' left of centerline, 15' AGL/39' MSL. Trees 1010' from DER, 1010' right of centerline, up to 63' AGL/87' MSL.

Rwy 30: Trees and poles beginning 114' from DER, 67' left of centerline, up to 63' AGL/87' MSL. Buildings 335' from DER, 356' left of centerline, 25' AGL/50' MSL. Trees and poles beginning 44' from DER, 35' right of centerline, up to 52' AGL/76' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

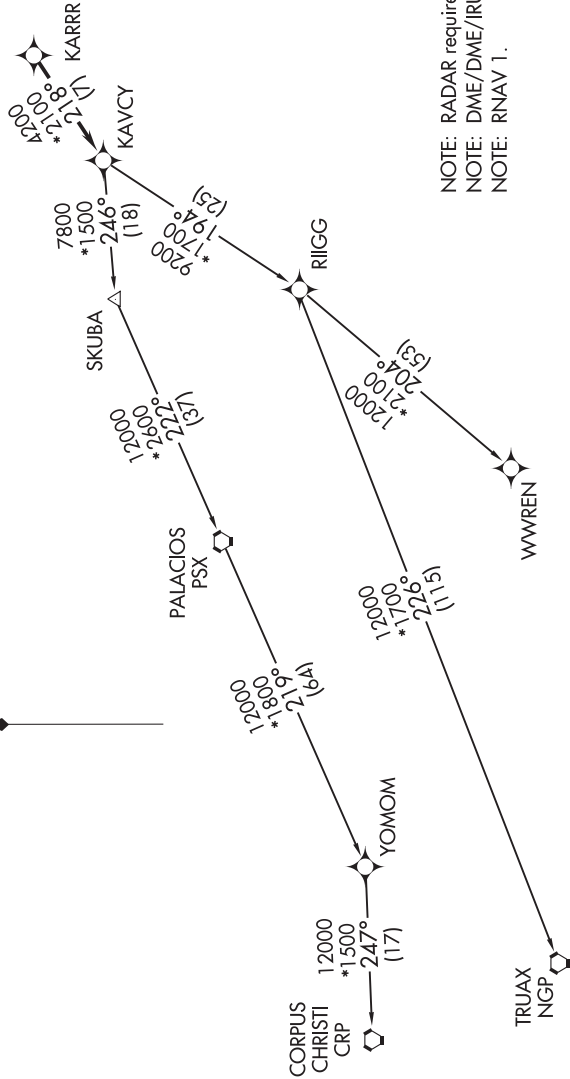
CINC DEL
125.6
HOUSTON DEP CON
134.45 284.0
CTAF
122.7

TAKEOFF MINIMUMS

Rwys 5, 12, 23, 30:

Standard with minimum climb of 500' per NM to 540.

TOP ALTITUDE:
4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb on heading 046° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 12: Climb on heading 121° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 23: Climb on heading 226° to 540, expect radar vectors to KARRR, thence

TAKEOFF RWY 30: Climb on heading 301° to 540, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

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, 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, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LEONA TWO DEPARTURE

SL-5433 (FAA)

LA PORTE, TEXAS

**TOP ALTITUDE:
4000**

CLNC DEL	125.6
CTAF	122.7
HOUSTON DEP CON	134.45 284.0

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'	

BONHAM	114.6 BYP
Chan 93	
N33°32.25' - W96°14.05'	
L-17, H-6	

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

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'	

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

NOTE: RADAR required.
NOTE: Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LOA2 SID must file one of the published transitions via FUZ (LOA2.FUZ) ADM (LOA2.ADM) or BYP (LOA2.BYP).

WLLIS	N30°32.08'
	W95°39.10'

NAVASOTA	115.9 TNV
Chan 106	

HUMBLE	116.6 IAH
Chan 113	

TAKEOFF MINIMUMS
Rwys 5, 12, 23, 30: Standard.



(NOTES ON FOLLOWING PAGE)
(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

LEONA TWO DEPARTURE

(LOA2.LOA) 10NOV16

LA PORTE, TEXAS

LA PORTE MUNI (T41)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT, maintain 4000. Expect filed altitude 10 minutes after departure. Thence

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

ARDMORE TRANSITION (LOA2.ADM): (For aircraft overflying north/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on ADM R-156 to ADM VORTAC.

BONHAM TRANSITION (LOA2.BYP): (For aircraft overflying/landing TUL VORTAC FL240 and above.) From over LOA VORTAC on LOA R-341 and CQY R-163 to CQY VORTAC, then on CQY R-353 and BYP R-173 to BYP VORTAC.

RANGER TRANSITION (LOA2.FUZ): (For aircraft overflying west/northwest of the DFW terminal area FL240 and above.) From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

TAKEOFF OBSTACLE NOTES

- Rwy 12: Trees and poles beginning 128' from DER, 42' left of centerline, up to 50' AGL/74' MSL.
Trees and poles beginning 131' from DER, 114' right of centerline, up to 39' AGL/63' MSL.
Chimney 676' from DER, 412' right of centerline, 31' AGL/55' MSL.
- Rwy 23: Trees beginning 1320' from DER, 43' left of centerline, up to 63' AGL/87' MSL.
Hangars beginning 233' from DER, 288' right of centerline, up to 35' AGL/59' MSL.
Vehicle on road 594' from DER, 513' left of centerline, 15' AGL/39' MSL.
Trees 1010' from DER, 1010' right of centerline, up to 63' AGL/87' MSL.
- Rwy 30: Trees and poles beginning 114' from DER, 67' left of centerline, up to 63' AGL/87' MSL.
Buildings 335' from DER, 356' left of centerline, 25' AGL/50' MSL.
Trees and poles beginning 44' from DER, 35' right of centerline, up to 52' AGL/76' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

CLNC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

LITTLE ROCK
113.9 LIT : : :
Chan 86
N34°40.66'
W92°10.83'
L-18, H-6

NOTE: RADAR 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'
5000
02.0°
(6)

SUSHI
N30°35.48'
W95°04.39'
4000
02.3°
(39)

COLET
N30°26.96'
W95°09.66'
4000
02.3°
(48)

KYANN
N30°15.53'
W95°13.96'
4000
01.3°
(12)

4000
01.3°
(19)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

4000
01.3°
(12)

TAKEOFF MINIMUMS:
Rwys 5, 12, 23, 30: Standard.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT, maintain 4000. 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 (LFK1.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

TAKEOFF OBSTACLE NOTES:

- Rwy 12: Trees and poles beginning 128' from DER, 42' left of centerline, up to 50' AGL/74' MSL.
Trees and poles beginning 131' from DER, 114' right of centerline, up to 39' AGL/63' MSL.
Chimney 676' from DER, 412' right of centerline, 31' AGL/55' MSL.
- Rwy 23: Trees beginning 1320' from DER, 43' left of centerline, up to 63' AGL/87' MSL.
Hangars beginning 233' from DER, 288' right of centerline, up to 35' AGL/59' MSL.
Vehicle on road, 594' from DER, 513' left of centerline, 15' AGL/39' MSL.
Trees 1010' from DER, 1010' right of centerline, up to 63' AGL/87' MSL.
- Rwy 30: Trees and poles beginning 114' from DER, 67' left of centerline, up to 63' AGL/87' MSL.
Buildings 335' from DER, 356' left of centerline, 25' AGL/50' MSL.
Trees and poles beginning 44' from DER, 35' right of centerline, up to 52' AGL/76' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

714
SL-5433 (FAA)

LA PORTE MUNI (T41)

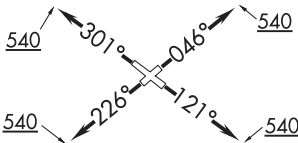
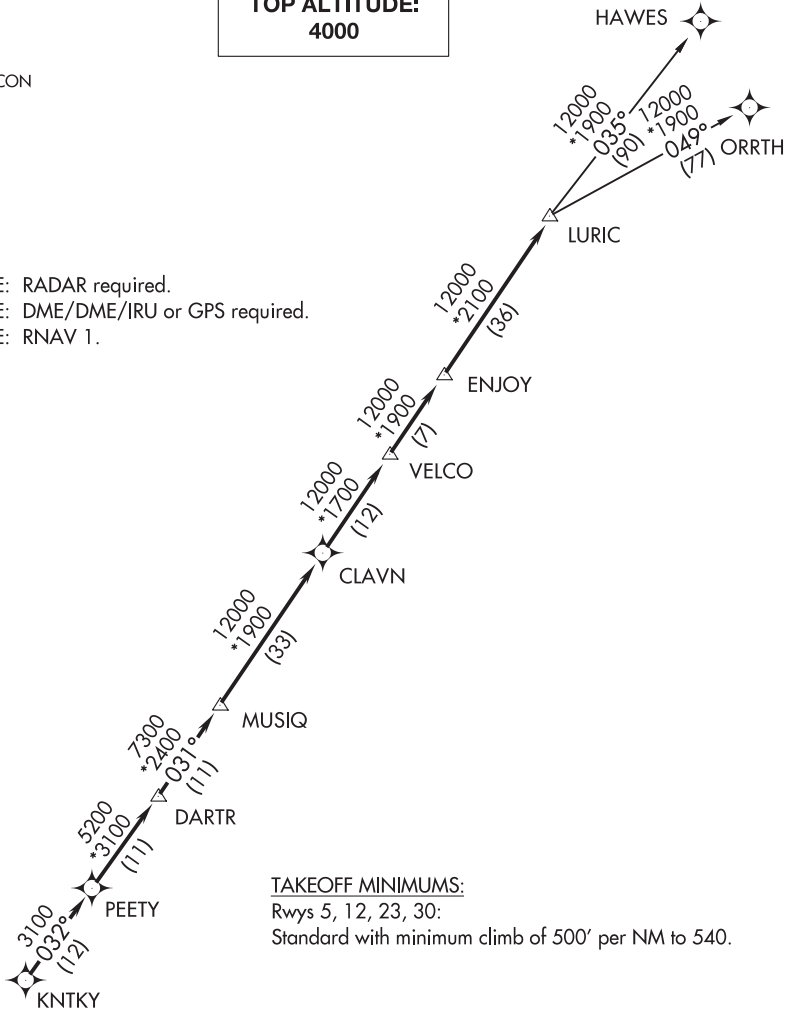
LURIC FOUR DEPARTURE (RNAV)

LA PORTE, TEXAS

CLNC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**

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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)
(LURIC4.LURIC) 10NOV16

LA PORTE, TEXAS
LA PORTE MUNI (T41)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb heading 046° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 12: Climb heading 121° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 23: Climb heading 226° to 540, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 30: Climb heading 301° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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, 37' AGL/57' MSL.
Building 669' from DER, 415' right of centerline, up to 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, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

SL-5433 (FAA)

LA PORTE, TEXAS

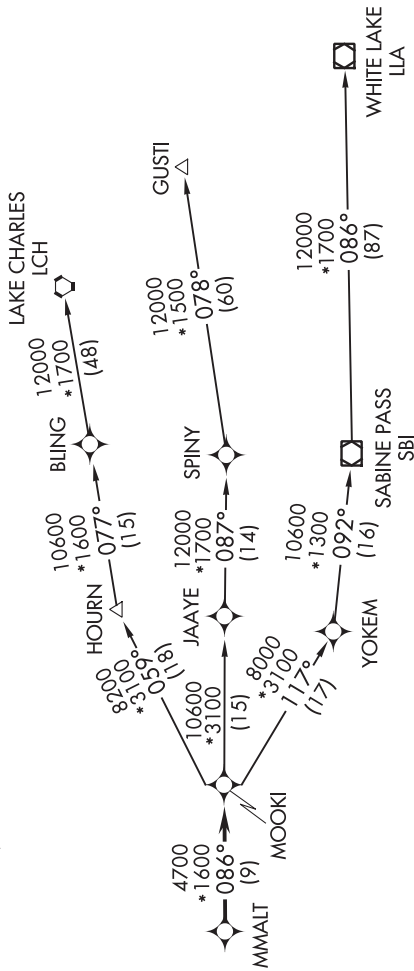
210Z NAV 01 910Z AON 10 10 15CS

CINC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0



TAKEOFF MINIMUMS:
Rwys 5, 12, 23, 30:
Standard with minimum
climb of 500' per NM to 540.

TOP ALTITUDE:
4000



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, IBX, LVJ, SGR, TME, T00, T41 and 54T.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb on heading 046° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 12: Climb on heading 121° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 23: Climb on heading 226° to 540, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 30: Climb on heading 301° to 540, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

TAKEOFF OBSTACLES 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, 37' AGL/57' MSL.
Building 669' from DER, 415' right of centerline, up to 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, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(PSX8.PSX) 16315

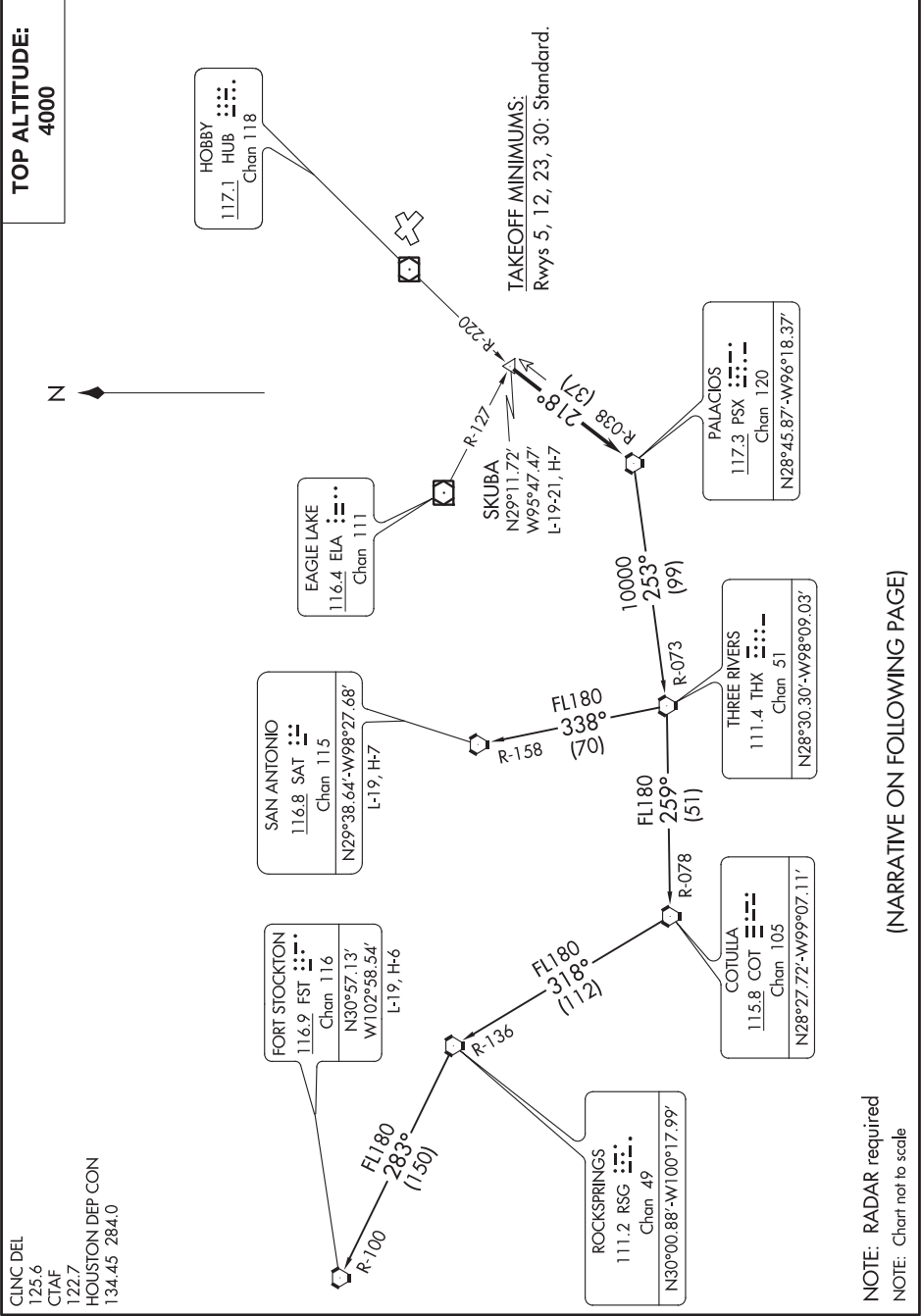
PALACIOS EIGHT DEPARTURE

SL-5433 (FAA)

LA PORTE MUNI (T41)

LA PORTE, TEXAS

SC-5, 10 NOV 2016 to 05 JAN 2017



CLINC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

HOBBY
HUB
117.1 HUB
Chan 118

EAGLE LAKE
116.4 ELA
Chan 111

SAN ANTONIO
116.8 SAT
Chan 115
N29°38.64'-W98°27.68'
L-19, H+7

FORT STOCKTON
116.9 FST
Chan 116
N30°57.13'
W102°58.54'
L-19, H+6

ROCKSPRINGS
111.2 RSG
Chan 49
N30°00.88'-W100°17.99'

COTUILA
115.8 COT
Chan 105
N28°27.72'-W99°07.11'

THREE RIVERS
111.4 THX
Chan 51
N28°30.30'-W98°09.03'

PALACIOS
117.3 PSX
Chan 120
N28°45.87'-W96°18.37'

TAKEOFF MINIMUMS:
Rwys 5, 12, 23, 30: Standard.

TOP ALTITUDE:
4000

NOTE: RADAR required
NOTE: Chart not to scale

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 10 NOV 2016 to 05 JAN 2017

PALACIOS EIGHT DEPARTURE

(PSX8.PSX) 10NOV16

LA PORTE, TEXAS

LA PORTE MUNI (T41)



DEPARTURE ROUTE DESCRIPTION

When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA INT, maintain 4000. Expect filed altitude 10 minutes after departure, thence. . . .

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

FORT STOCKTON TRANSITION (PSX8.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 (PSX8.SAT): From over PSX VORTAC on PSX R-253 and THX R-073 to THX VORTAC, then on THX R-339 and SAT R-158 to SAT VORTAC.

TAKEOFF OBSTACLE NOTES:

- Rwy 12: Trees and poles beginning 128' from DER, 42' left of centerline, up to 50' AGL/74' MSL.
Trees and poles beginning 131' from DER, 114' right of centerline, up to 39' AGL/63' MSL.
Chimney 676' from DER, 412' right of centerline, 31' AGL/55' MSL.
- Rwy 23: Trees beginning 1320' from DER, 43' left of centerline, up to 63' AGL/87' MSL.
Hangars beginning 233' from DER, 288' right of centerline, up to 35' AGL/59' MSL.
Vehicle on road 594' from DER, 513' left of centerline, 15' AGL/39' MSL.
Trees 1010' from DER, 1010' right of centerline, up to 63' AGL/87' MSL.
- Rwy 30: Trees and poles beginning 114' from DER, 67' left of centerline, up to 63' AGL/87' MSL.
Buildings 335' from DER, 356' left of centerline, 25' AGL/50' MSL.
Trees and poles beginning 44' from DER, 35' right of centerline, up to 52' AGL/76' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(STRYA4.STRYA) 16315

720
SL-5433 (FAA)

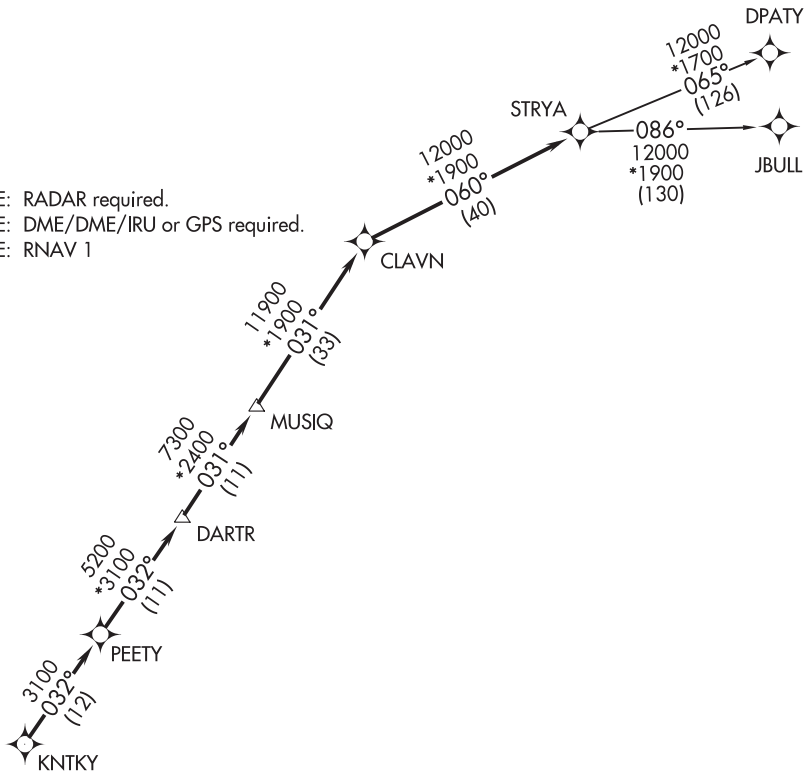
LA PORTE MUNI (T41)
LA PORTE, TEXAS

STRYA FOUR DEPARTURE (RNAV)

CLNC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

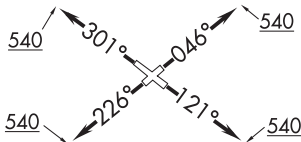
**TOP ALTITUDE:
4000**

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.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

(STRYA4.STRYA) 10NOV16

LA PORTE, TEXAS
LA PORTE MUNI (T41)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb heading 046° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 12: Climb heading 121° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 23: Climb heading 226° to 540, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 30: Climb heading 301° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

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.

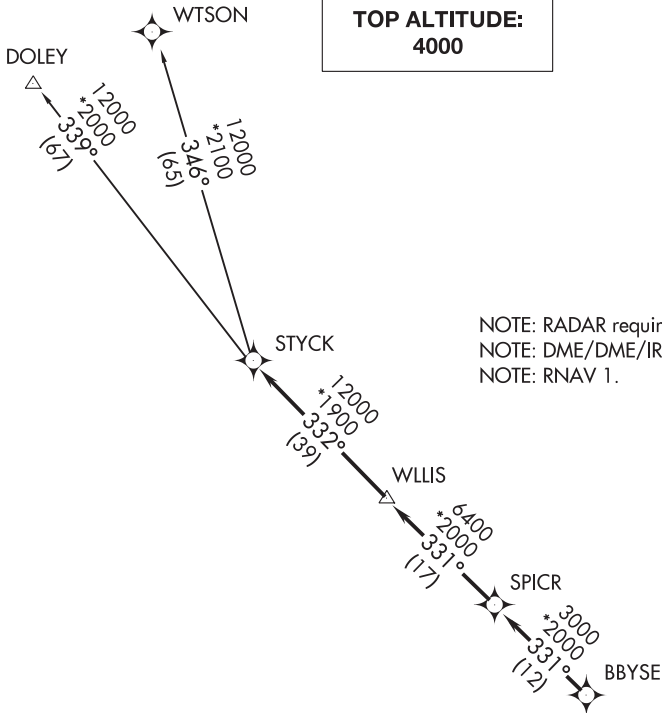
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

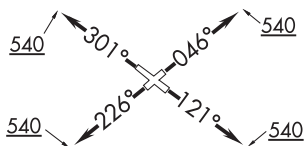
STYCK FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

CLNC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0



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.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

STYCK FOUR DEPARTURE (RNAV)

(STYCK4.STYCK) 10NOV16

STYCK FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb heading 046° to 540, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 12: Climb heading 121° to 540, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 23: Climb heading 226° to 540, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 30: Climb heading 301° to 540, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

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, 37' AGL/57' MSL.
Building 669' from DER, 415' right of centerline, up to 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.

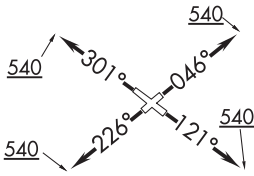
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WATFO THREE DEPARTURE (RNAV)

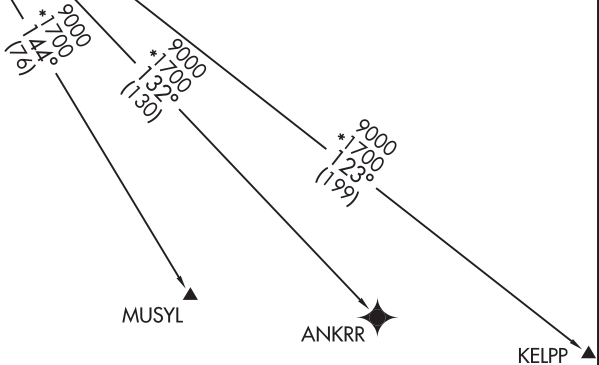
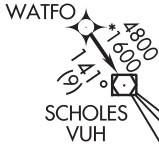
**TOP ALTITUDE:
4000**

CLNC DEL 125.6
CTAF 122.7
HOUSTON DEP CON 134.45 284.0



TAKEOFF MINIMUMS

Rwys 5, 12, 23, 30:
Standard with minimum climb of 500' per NM to 540.



NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

- TAKEOFF RWY 5: Climb on heading 046° to 540, expect RADAR vectors to WATFO, then . . .
- TAKEOFF RWY 12: Climb on heading 121° to 540, expect RADAR vectors to WATFO, then . . .
- TAKEOFF RWY 23: Climb on heading 226° to 540, expect RADAR vectors to WATFO, then . . .
- TAKEOFF RWY 30: Climb on heading 301° to 540, expect RADAR vectors to WATFO, then . . .

. . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

- ANKRR TRANSITION (WATFO3.ANKRR):
- KELPP TRANSITION (WATFO3.KELPP):
- MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

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, 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.

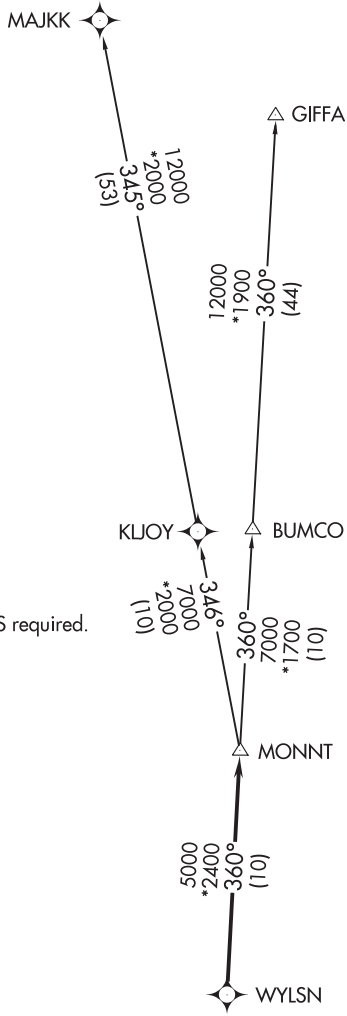
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

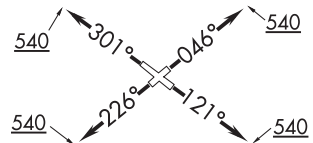
CLNC DEL
125.6
CTAF
122.7
HOUSTON DEP CON
134.45 284.0

**TOP ALTITUDE:
4000**



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.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 5: Climb on heading 046° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 12: Climb on heading 121° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 23: Climb on heading 226° to 540, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 30: Climb on heading 301° to 540, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJKK)

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, 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, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LIBERTY, TEXAS

AL-5196 (FAA)

16203

WAAS CH 78130 W16A	APP CRS 161°	Rwy Idg TDZE Apt Elev	3801 70 70
--	------------------------	-----------------------------	---------------------------------------

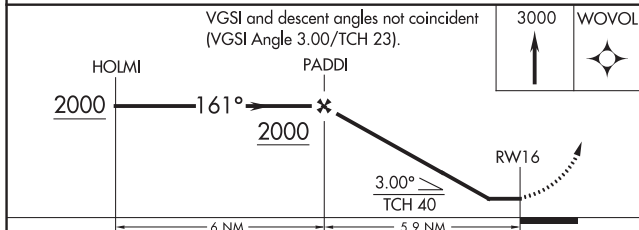
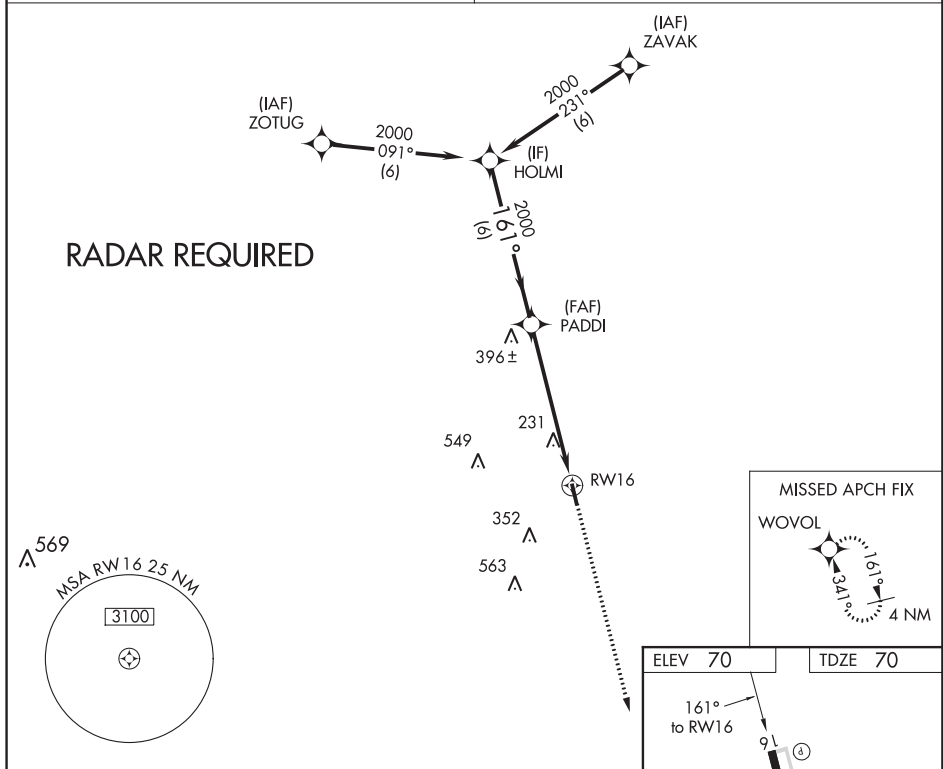
RNAV (GPS) RWY 16

LIBERTY MUNI (T78)

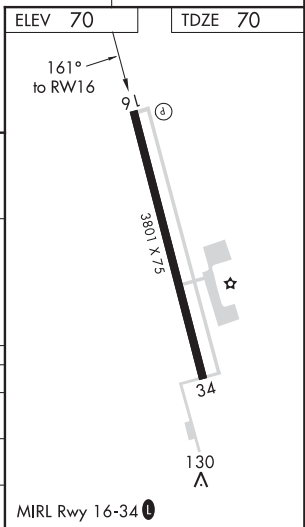
Procedure NA at night. Use George Bush Intercontinental/Houston altimeter setting. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3000 direct WOVOL and hold.

HOUSTON APP CON 119.7 281.4	CTAF 122.9
---------------------------------------	----------------------



CATEGORY	A	B	C	D
IP MDA	620-1	550 (600-1)		NA
RNAV MDA	640-1	570 (600-1)		NA
CIRCLING	640-1	570 (600-1)		NA



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LIBERTY, TEXAS
Amdt 2B 23JUN16

30°05'N-94°42'W

RNAV (GPS) RWY 16

LIBERTY MUNI (T78)

VORTAC DAS 116.9 Chan 116	APP CRS 198°	Rwy Idg TDZE Apt Elev	N/A N/A 70
---	------------------------	-----------------------------	---------------------------------------

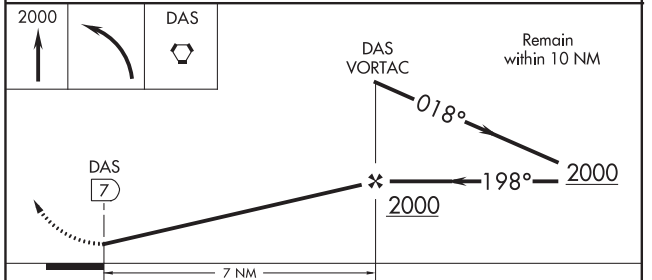
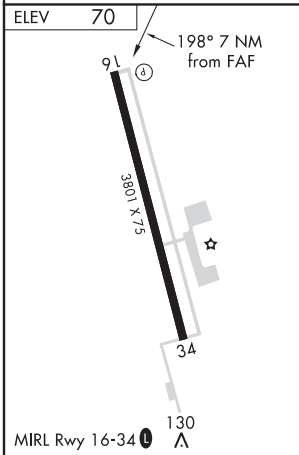
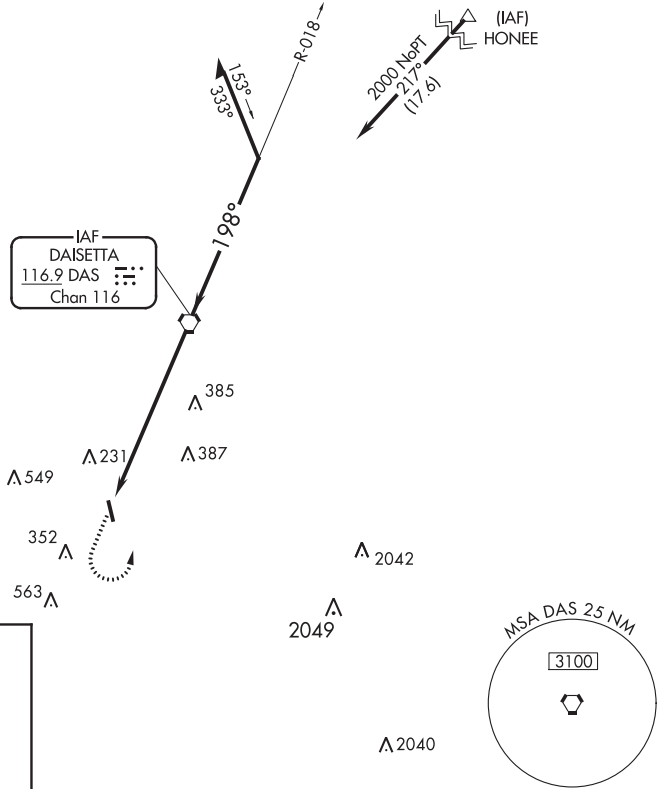
VOR-A
LIBERTY MUNI (T78)

▼ Use George Bush Intercontinental/Houston altimeter setting. Procedure NA at night.
▲NA Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000, then left turn direct DAS VORTAC.

HOUSTON APP CON
119.7 281.4

CTAF
122.9 0



FAF to MAP 7 NM						CATEGORY	A	B	C	D
Knots	60	90	120	150	180	CIRCLING	600-1	530 (600-1)	NA	
Min:Sec	7:00	4:40	3:30	2:48	2:20					

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

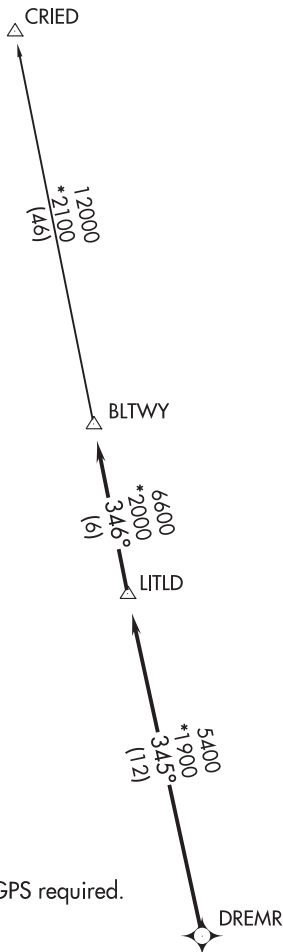
730
SI-5196 (FAA)

LIBERTY MUNI (T78)
LIBERTY, TEXAS

BLTWY THREE DEPARTURE (RNAV)

CTAF
122.9
HOUSTON DEP CON
119.7 281.4

**TOP ALTITUDE:
4000**



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.

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



NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)
(BLTWY3.BLTWY) 10NOV16

LIBERTY, TEXAS
LIBERTY MUNI (T78)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 161° to 1700, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 34: Climb heading 341° to 1000, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

TAKEOFF OBSTACLE NOTES

Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.
Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
Trees and poles 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

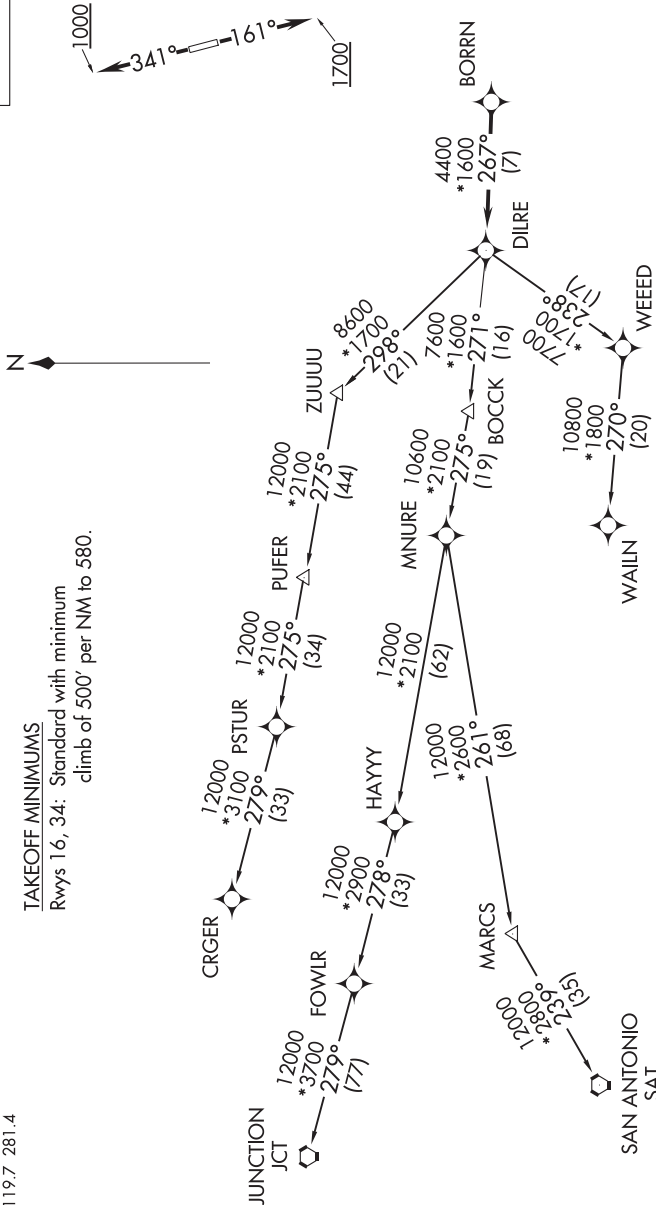
SC-5, 10 NOV 2016 to 05 JAN 2017

CTAF
122.9
HOUSTON DEP CON
119.7 281.4

TAKEOFF MINIMUMS

Rwys 16, 34: Standard with minimum
climb of 500' per NM to 580.

TOP ALTITUDE:
4000



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

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

BORRN TWO DEPARTURE (RNAV)

BORRN TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 161° to 1700, expect RADAR vectors to BORRN, Thence

TAKEOFF RWY 34: Climb on heading 341° to 1000, expect RADAR vectors to BORRN, Thence

. . . . on track 267° to DILRE, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRGER TRANSITION (BORRN2.CRGER)

JUNCTION TRANSITION (BORRN2.JCT)

MNURE TRANSITION (BORRN2.MNURE)

SAN ANTONIO TRANSITION (BORRN2.SAT)

WAILN TRANSITION (BORRN2.WAILN)

TAKEOFF OBSTACLE NOTES

- Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
 Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.
 Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
 Trees and poles 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

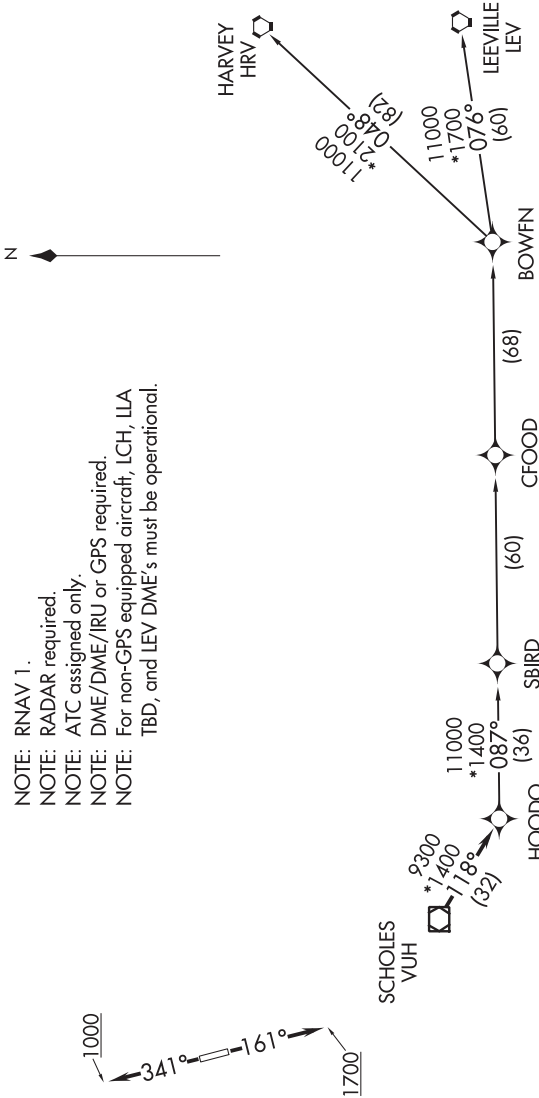
HOODO FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

CTAF
122.9
HOUSTON DEP CON
119.7 281.4

TOP ALTITUDE:
4000

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



SCHOLES
VUH

TAKEOFF MINIMUMS

Rwys 16, 34: Standard with minimum climb of 500' per NM to 580.

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

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

HOODO FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 161° to 1700, expect RADAR vectors to VUH VOR/DME, thence

TAKEOFF RWY 34: Climb heading 341° to 1000, expect RADAR vectors to VUH VOR/DME, thence

. . . . on track 118° to HOODO, then on (transition). Maintain 4000.
Expect filed altitude 10 minutes after departure.

BOWFN TRANSITION (HOODO4.BOWFN)

CFOOD TRANSITION (HOODO4.CFOOD)

HARVEY TRANSITION (HOODO4.HRV)

LEEVILLE TRANSITION (HOODO4.LEV)

SBIRD TRANSITION (HOODO4.SBIRD)

TAKEOFF OBSTACLE NOTES

Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.
Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
Trees and poles 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(INDIE4.INDIE) 16315

736
SL-5196 (FAA)

LIBERTY MUNI (T78)
LIBERTY, TEXAS

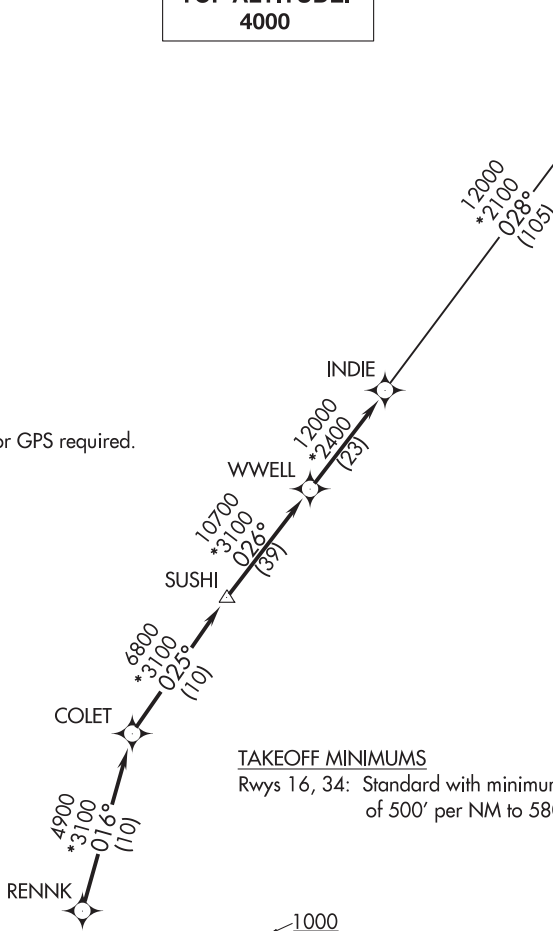
INDIE FOUR DEPARTURE (RNAV)

CTAF
122.9
HOUSTON DEP CON
119.7 281.4

**TOP ALTITUDE:
4000**

TPAKK

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.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

INDIE FOUR DEPARTURE (RNAV)

(INDIE4.INDIE) 10NOV16

LIBERTY, TEXAS
LIBERTY MUNI (T78)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INDIE FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 161° to 1700, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 34: Climb heading 341° to 1000, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

TAKEOFF OBSTACLE NOTES

Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.
Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
Trees and poles beginning 1166' from DER, 48' right of centerline, up to 85' AGL/155' MSL.

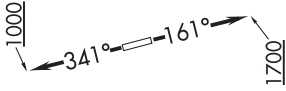
Rwy 34: Trees beginning 176' from DER, 262' left of centerline, up to 52' AGL/117' MSL.
Poles beginning 427' from DER, 318' right of centerline, up to 40' AGL/105' MSL.
Poles beginning 451' from DER, 236' left of centerline, up to 39' AGL/106' MSL.
Trees beginning 758' from DER, 101' right of centerline, up to 101' AGL/166' MSL.
Trees beginning 1953' from DER, 40' left of centerline, up to 96' AGL/161' MSL.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

KARR THREE DEPARTURE (RNAV)

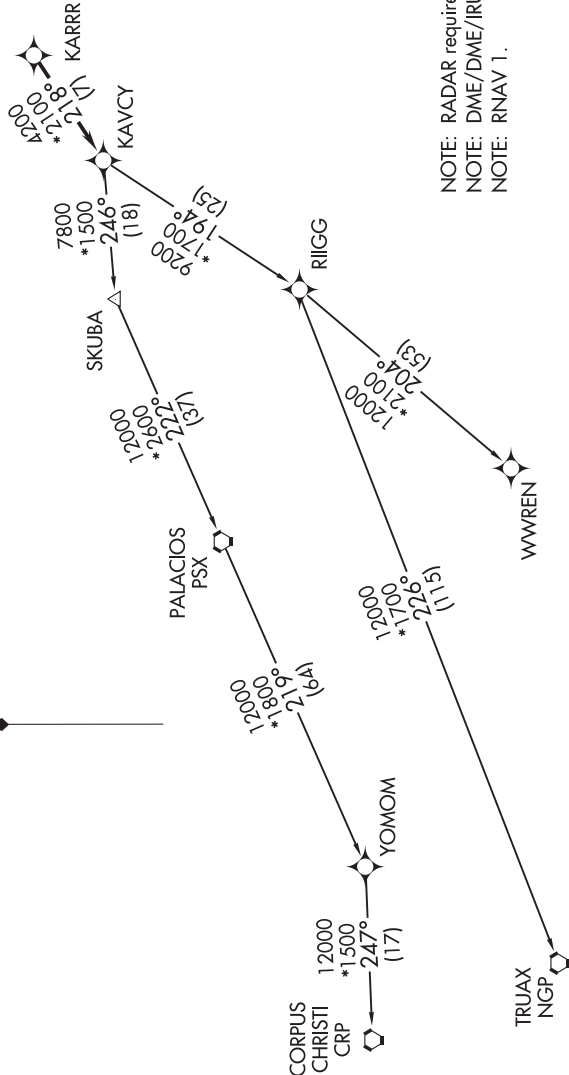
TOP ALTITUDE:
4000



TAKEOFF MINIMUMS
Rwys 16, 34: Standard with minimum climb of 500' per NM to 580.



HOUSTON DEP CON
119.7 281.4
CTAF
122.9



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

NOTE: Chart not to scale.

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

KARRR THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 161° to 1700, expect radar vectors to KARRR, thence

TAKEOFF RWY 34: Climb on heading 341° to 1000, expect radar vectors to KARRR, thence

. . . . on track 218° to KAVCY, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CORPUS CHRISTI TRANSITION (KARRR3.CRP)

PALACIOS TRANSITION (KARRR3.PSX)

TRUAX TRANSITION (KARRR3.NGP)

WWREN TRANSITION (KARRR3.WWREN)

YOMOM TRANSITION (KARRR3.YOMOM)

TAKEOFF OBSTACLE NOTES:

Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.
Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
Trees and poles 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(LURIC4.LURIC) 16315

740

SL-5196 (FAA)

LIBERTY MUNI (T78)

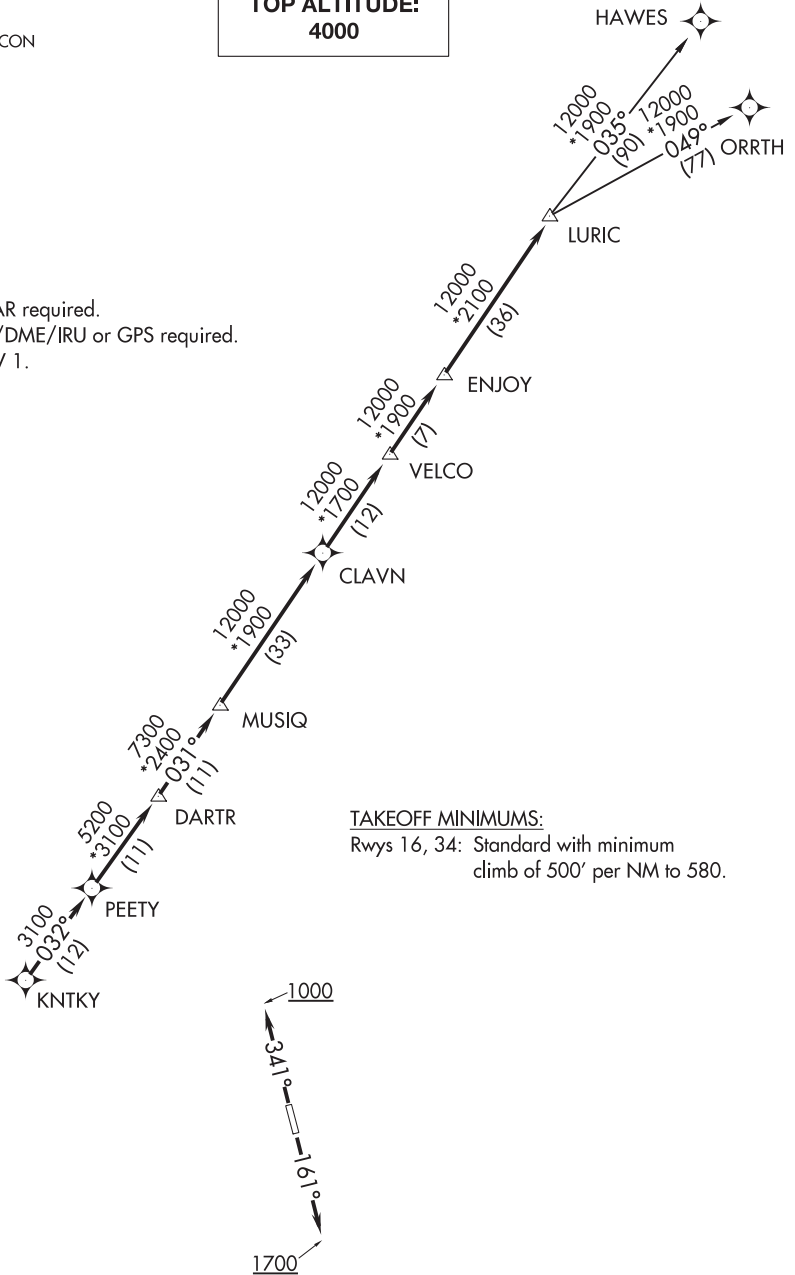
LURIC FOUR DEPARTURE (RNAV)

LIBERTY, TEXAS

CTAF
122.9
HOUSTON DEP CON
119.7 281.4

**TOP ALTITUDE:
4000**

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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)

(LURIC4.LURIC) 10NOV16

LIBERTY, TEXAS

LIBERTY MUNI (T78)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 161° to 1700, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 34: Climb heading 341° to 1000, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

TAKEOFF OBSTACLE NOTES:

Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.
Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
Trees and poles 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

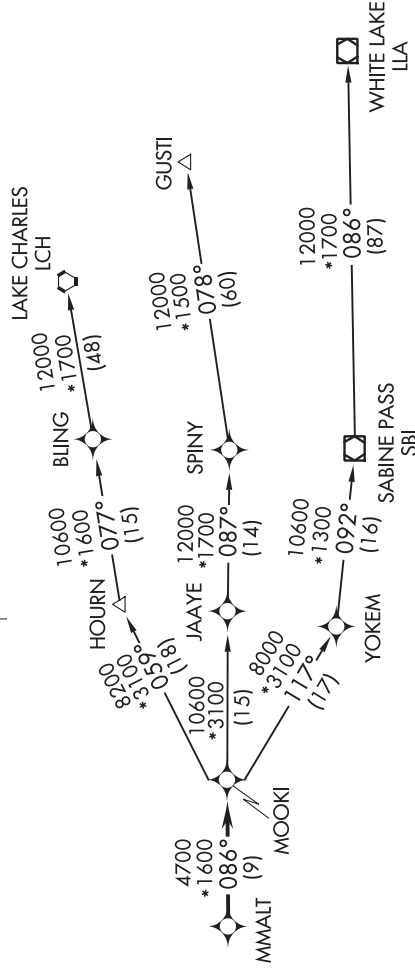
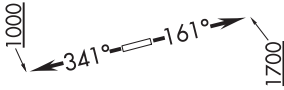
SC-5, 10 NOV 2016 to 05 JAN 2017

210Z NAV 01 910Z AON 10 10 'S-CS

CTAF
122.9
HOUSTON DEP CON
119.7 281.4

TOP ALTITUDE:
4000

TAKEOFF MINIMUMS:
Rwys 16, 34: Standard with minimum
climb of 500' per NM to 580.



- NOTE: DME/DME/IRU or GPS required.
- NOTE: RADAR required.
- NOTE: RNAV 1.
- NOTE: GUSTI and LCH transitions ATC assigned only for aircraft departing AXH, EFD, GLS, HOU, HPY, IWS, LBX, LVJ, SGR, TME, T00, T41 and 54T.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 161° to 1700, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 34: Climb on heading 341° to 1000, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

TAKEOFF OBSTACLE NOTES:

- Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.
Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
Trees and poles 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

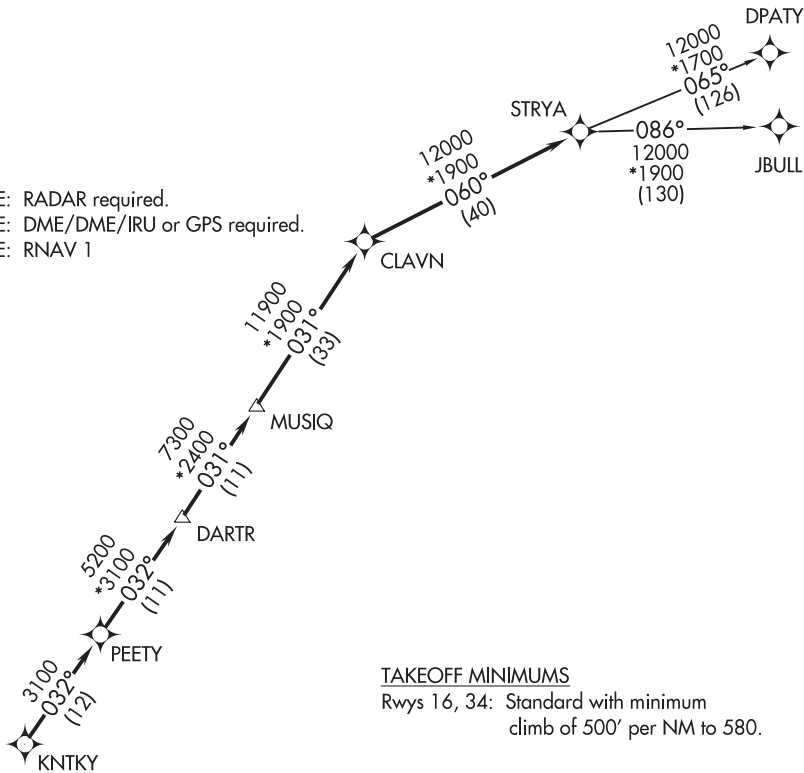
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

CTAF
122.9
HOUSTON DEP CON
119.7 281.4

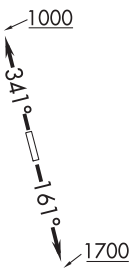
**TOP ALTITUDE:
4000**

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



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



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

NOTE: Chart not to scale.

STRYA FOUR DEPARTURE (RNAV)

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 161° to 1700, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 34: Climb heading 341° to 1000, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

TAKEOFF OBSTACLE NOTES

Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.
Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
Trees and poles 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

CTAF
122.9
HOUSTON DEP CON
119.7 281.4

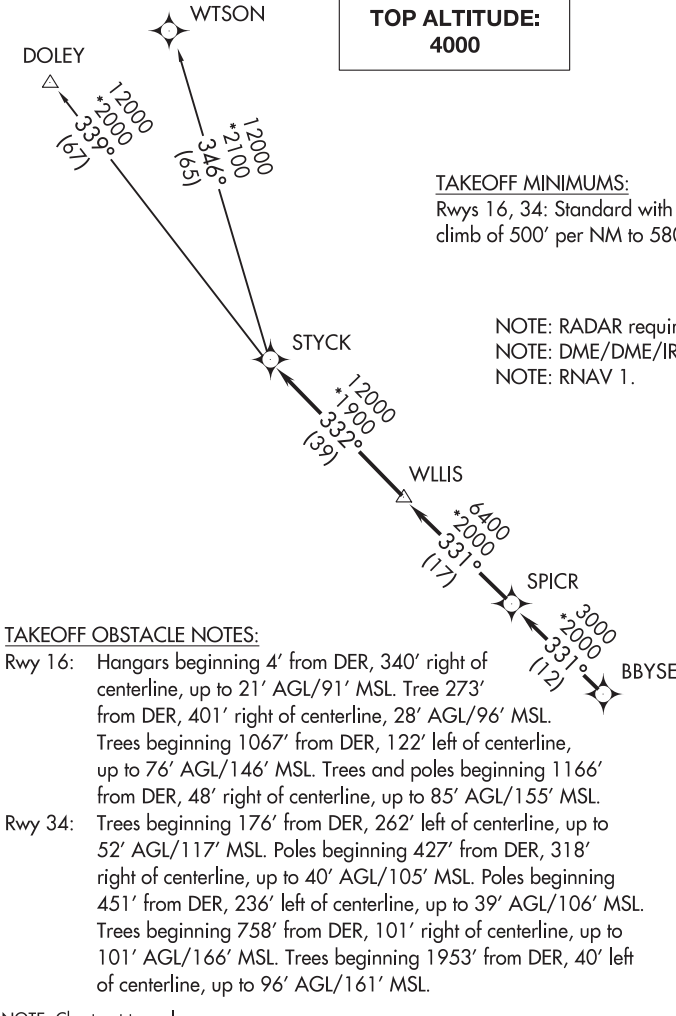
TAKEOFF MINIMUMS:

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.



TAKEOFF OBSTACLE NOTES:

Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL. Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL. Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL. Trees and poles 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.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb heading 161° to 1700, expect RADAR vectors to BBYSE, thence. . .

TAKEOFF RWY 34: Climb heading 341° to 1000, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

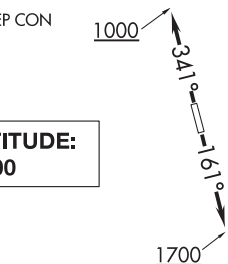
WTSON TRANSITION (STYCK4.WTSON)



WATFO THREE DEPARTURE (RNAV)

HOUSTON DEP CON
119.7 281.4
CTAF
122.9

**TOP ALTITUDE:
4000**



TAKEOFF OBSTACLE NOTES

Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.

Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.

Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.

Trees and poles 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.

NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS

Rwys 16, 34: Standard with minimum climb of 500' per NM to 580.

MUSYL

ANKRR

KELPP

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 161° to 1700, expect RADAR vectors to WATFO, thence . . .

TAKEOFF RWY 34: Climb on heading 341° to 1000, expect RADAR vectors to WATFO, thence . . .

. . . on track 141° to VUH VOR/DME, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

ANKRR TRANSITION (WATFO3.ANKRR):

KELPP TRANSITION (WATFO3.KELPP):

MUSYL TRANSITION (WATFO3.MUSYL):

WATFO THREE DEPARTURE (RNAV)

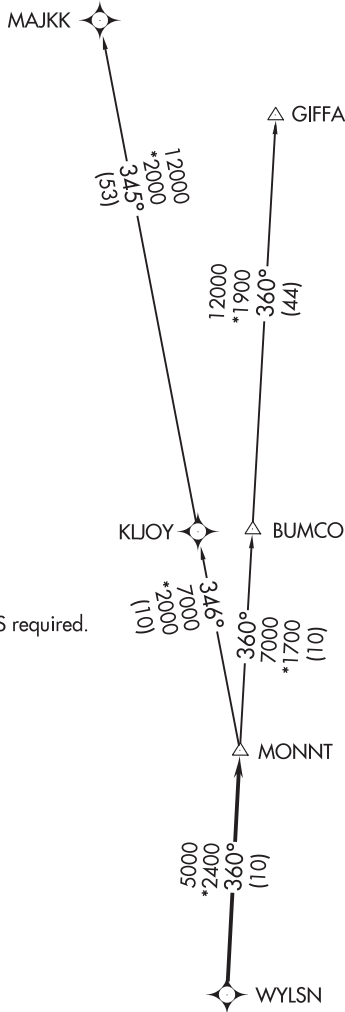
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

**TOP ALTITUDE:
4000**

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:

Rwys 16, 34: Standard with minimum climb of 500' per NM to 580.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climb on heading 161° to 1700, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 34: Climb on heading 341° to 1000, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJJK TRANSITION (WYLSN4.MAJJK)

TAKEOFF OBSTACLE NOTES:

Rwy 16: Hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.
Tree 273' from DER, 401' right of centerline, 28' AGL/96' MSL.
Trees beginning 1067' from DER, 122' left of centerline, up to 76' AGL/146' MSL.
Trees and poles 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LIVINGSTON, TEXAS

AL-9044 (FAA)

16231

APP CRS 305°	Rwy Idg TDZE Apt Elev	3704 151 151
------------------------	-----------------------------	---

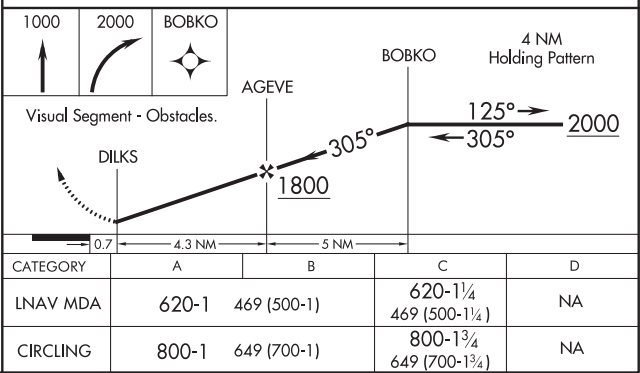
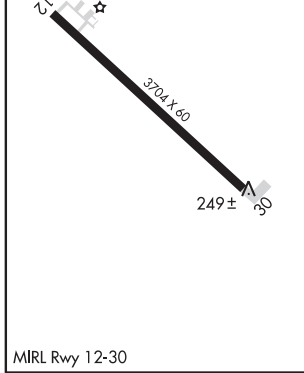
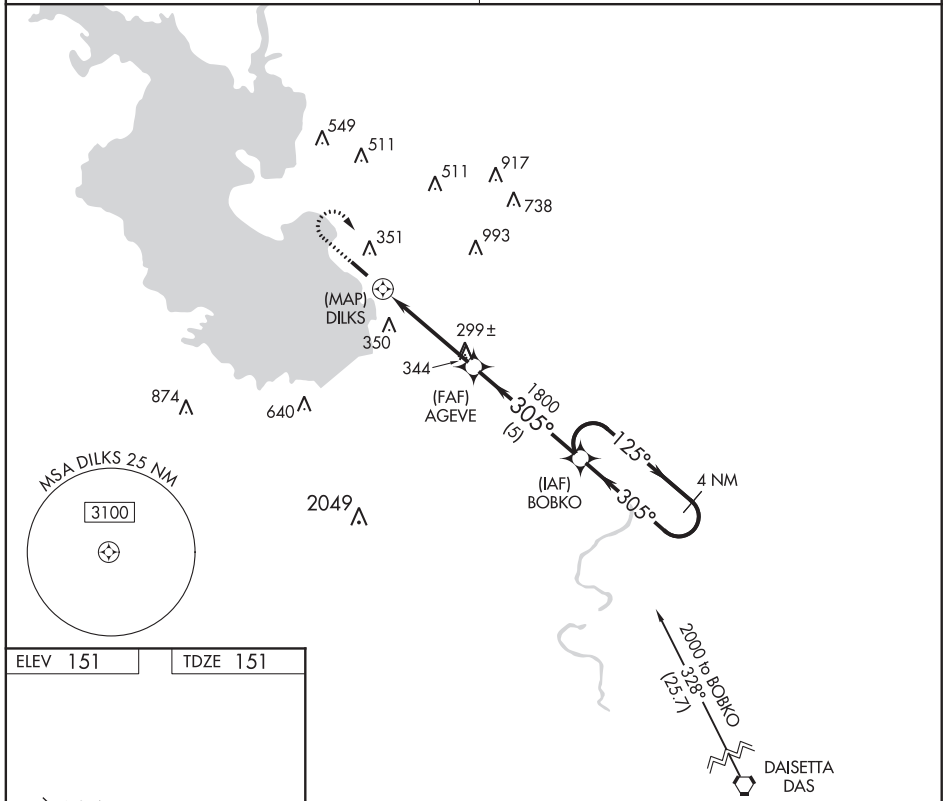
RNAV (GPS) RWY 30

LIVINGSTON MUNI (ØØR)

NA Use Houston/Lone Star Executive altimeter setting. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. Night landing: Rwy 30 NA.

MISSED APPROACH: Climb to 1000 then climbing right turn to 2000 direct BOBKO WP and hold.

HOUSTON CENTER 125.175 285.575	UNICOM 122.7 (CTAF)
--	-------------------------------



LIVINGSTON, TEXAS
Orig-C 23JUN16

30°41'N-95°01'W

RNAV (GPS) RWY 30

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

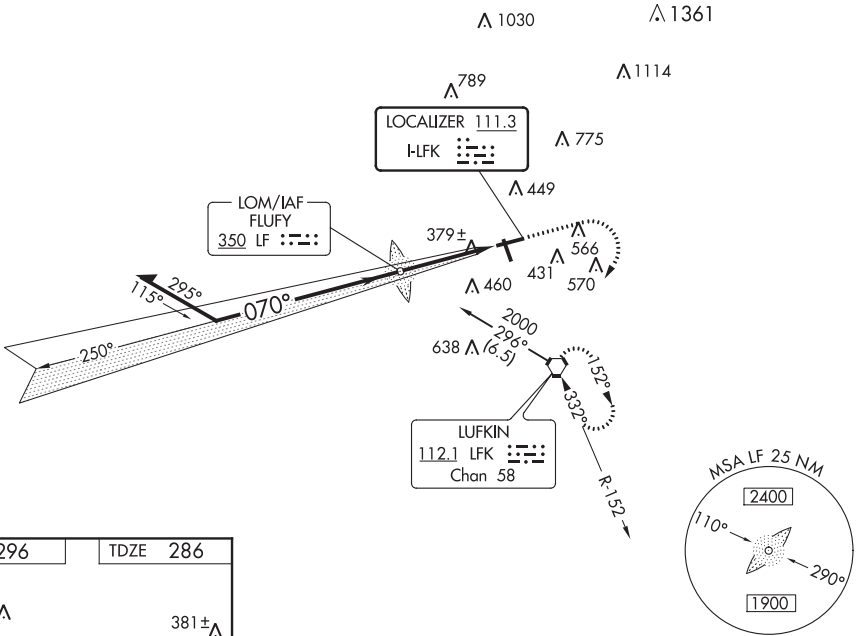
LOC I-LFK 111.3	APP CRS 070°	Rwy Idg 5400
		TDZE 286
		Apt Elev 296

ILS or LOC RWY 7

ANGELINA COUNTY (L'FK)

<p>NA Circling NA for Cat D to Rwy 15 and 33.</p>	<p>MALSR</p>	<p>MISSED APPROACH: Climb to 800 then climbing right turn to 2000 direct LFK VORTAC and hold.</p>
---	--------------	---

ASOS 120.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF)
------------------------	--	-------------------------------



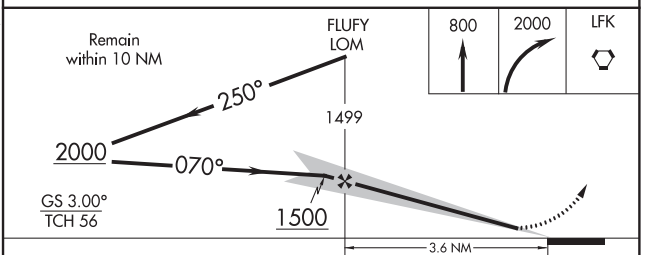
ELEV 296	TDZE 286
----------	----------

Diagram details: 363, 381±, 312±, 5400 X 100, 431 X 100, 0.43 NM, 33, 327±, 356, 348±, 070° 3.6 NM from FAF, 33.

MRL Rwy 7-25 and 15-33

FAF to MAP 3.6 NM

Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12



CATEGORY	A	B	C	D
S-ILS 7	486-1/2 200 (200-1/2)			
S-LOC 7	640-1/2 354 (400-1/2)		640-3/4 354 (400-3/4)	
CIRCLING	740-1 444 (500-1)	760-1 464 (500-1)	760-1 1/2 464 (500-1 1/2)	880-2 584 (600-2)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LUFKIN, TEXAS

AL-870 (FAA)


15064

WAAS CH 50105 W07A	APP CRS 070°	Rwy Idg TDZE 286 Apt Elev 296	5400
--	------------------------	---	-------------

RNAV (GPS) RWY 7

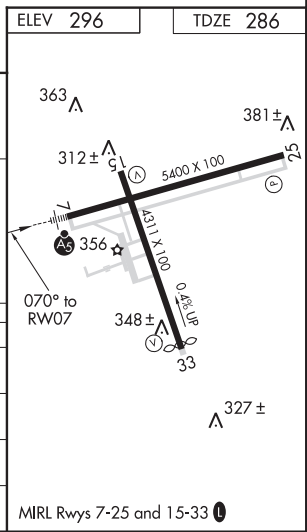
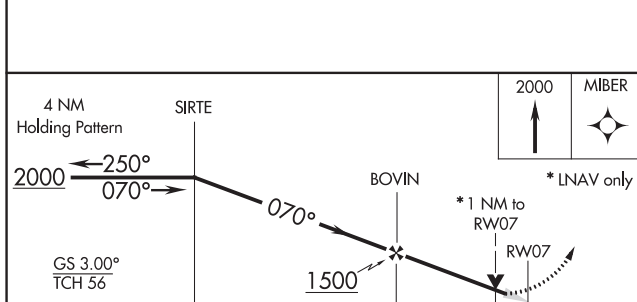
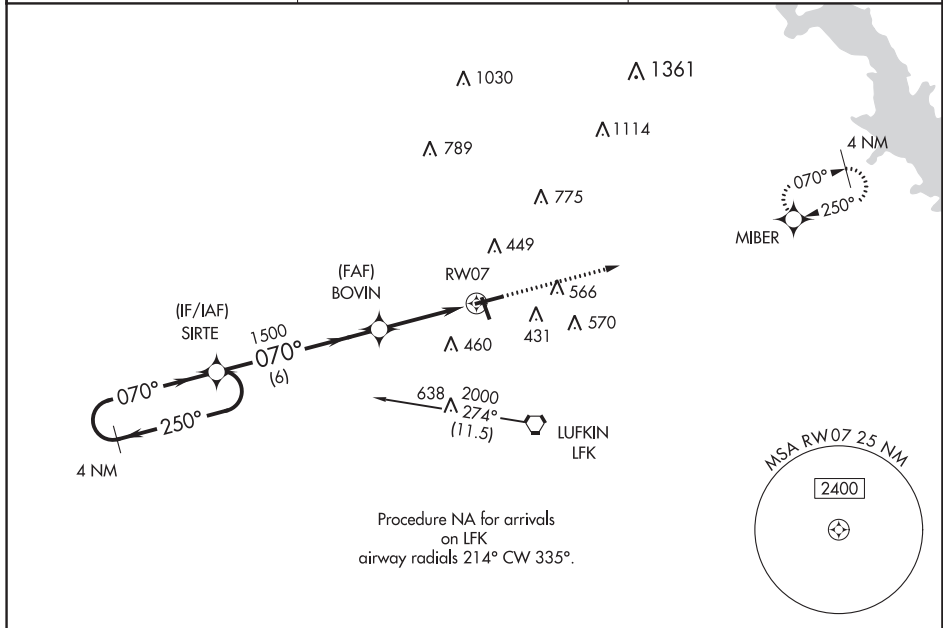
ANGELINA COUNTY (L.F.K)

▼ Baro-VNAV NA below -17°C (2°F). DME/DME RNP-0.3 NA.
For inoperative MALS, increase LNAV Cats A/B/C visibility to 1 and Cat D visibility to 1½. Circling NA for Cat D to Rwy 15-33.
Visibility reduction by helicopters NA.

MALS 

MISSED APPROACH: Climb to 2000 direct MIBER and hold.

ASOS 120.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF) 0
------------------------	--	---------------------------------



CATEGORY	A	B	C	D
LPV DA		583-¾	297 (300-¾)	
LNAV/VNAV DA		654-¾	368 (400-¾)	
LNAV MDA	660-¾	374 (400-¾)		660-1 374 (400-1)
CIRCLING	740-1 444 (500-1)	760-1 464 (500-1)	760-1½ 464 (500-1½)	880-2 584 (600-2)

LUFKIN, TEXAS
Orig-A 08APR10

31°14'N-94°45'W

ANGELINA COUNTY (L.F.K)

RNAV (GPS) RWY 7

SC-5, 10 NOV 2016 to 05 JAN 2017

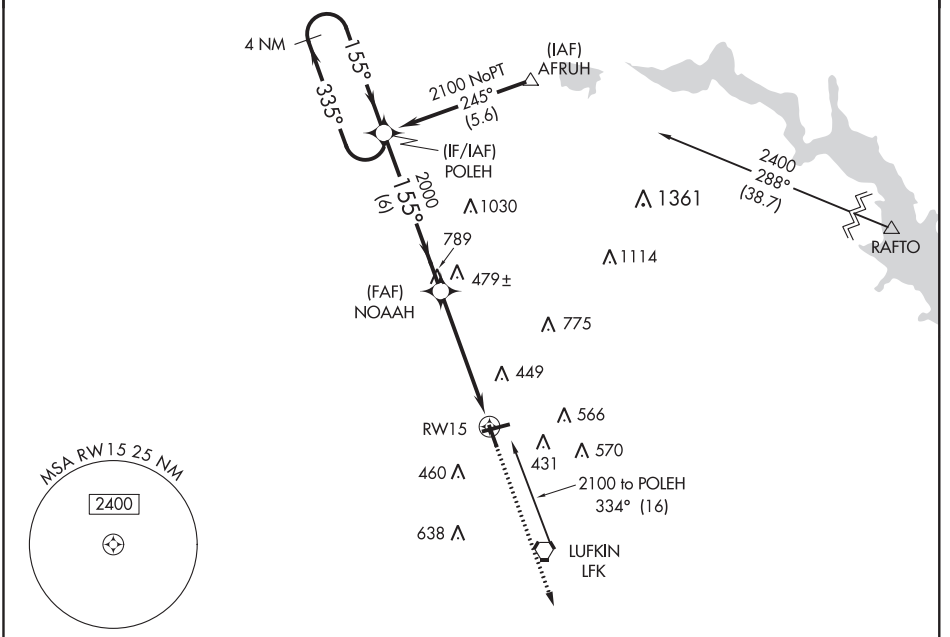
SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS 155°	Rwy Idg TDZE Apt Elev	4311 289 296
------------------------	-----------------------------	---

RNAV (GPS) RWY 15

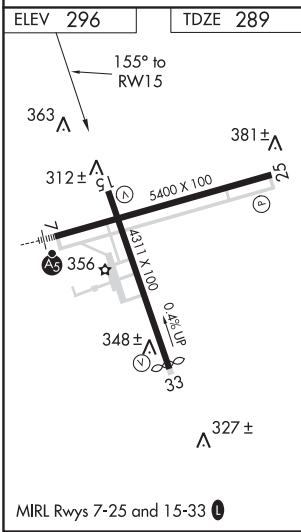
ANGELINA COUNTY (L^FK)

<p>⚠ DME/DME RNP-0.3 NA. Rwy 15 Straight-in and Circling and Circling to Rwy 25 NA at night. Helicopter visibility reduction below 1 SM not authorized.</p>		<p>MISSED APPROACH: Climb to 2000 direct EXISE and hold.</p>
ASOS 120.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF) 0



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



<p>EXISE</p>		<p>2000</p>	<p>EXISE</p>	
<p>4 NM Holding Pattern POLEH</p>		<p>NOAAH</p>	<p>1.1 NM to RWY 15</p>	
<p>2100 ← 335°</p>		<p>155° →</p>	<p>3.05° TCH 48</p>	
<p>6 NM</p>		<p>4 NM</p>	<p>1.1</p>	
CATEGORY	A	B	C	D
LNAV MDA	700-1	411 (500-1)	700-1¼ 411 (500-1¼)	NA
CIRCLING	740-1 444 (500-1)	760-1 464 (500-1)	760-1½ 464 (500-1½)	NA

APP CRS 250°	Rwy Idg TDZE Apt Elev	5400 296 296
------------------------	-----------------------------	---

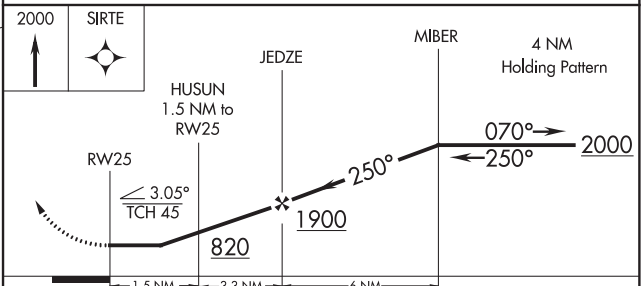
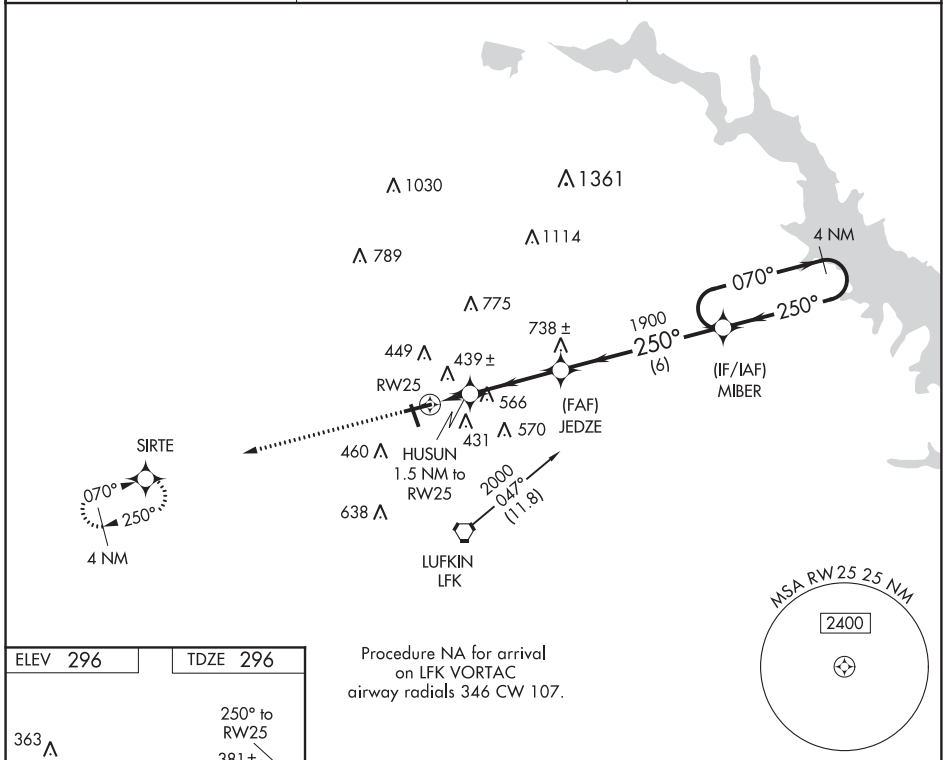
RNAV (GPS) RWY 25

ANGELINA COUNTY (L'FK)

▼ DME/DME RNP-0.3 NA. Circling NA for Cat D to Rwy 15-33. Rwy 25 Straight-in and Circling and Circling to Rwy 15 NA at night. Helicopter visibility reduction below 1 SM not authorized.

MISSED APPROACH: Climb to 2000 direct SIRTE and hold.

ASOS 120.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF) 0
------------------------	--	--



CATEGORY	A	B	C	D
LNAV MDA	660-1 364 (400-1)			660-1¼ 364 (400-1¼)
CIRCLING	740-1 444 (500-1)	760-1 464 (500-1)	760-1½ 464 (500-1½)	880-2 584 (600-2)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS 335°	Rwy Idg TDZE Apt Elev	4206 286 296
------------------------	-----------------------------	---

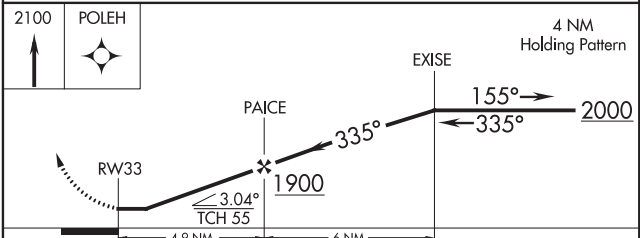
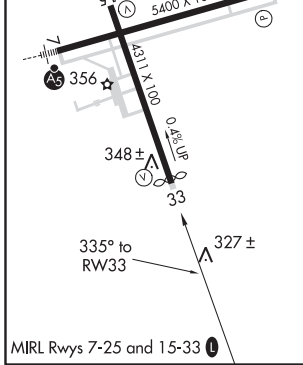
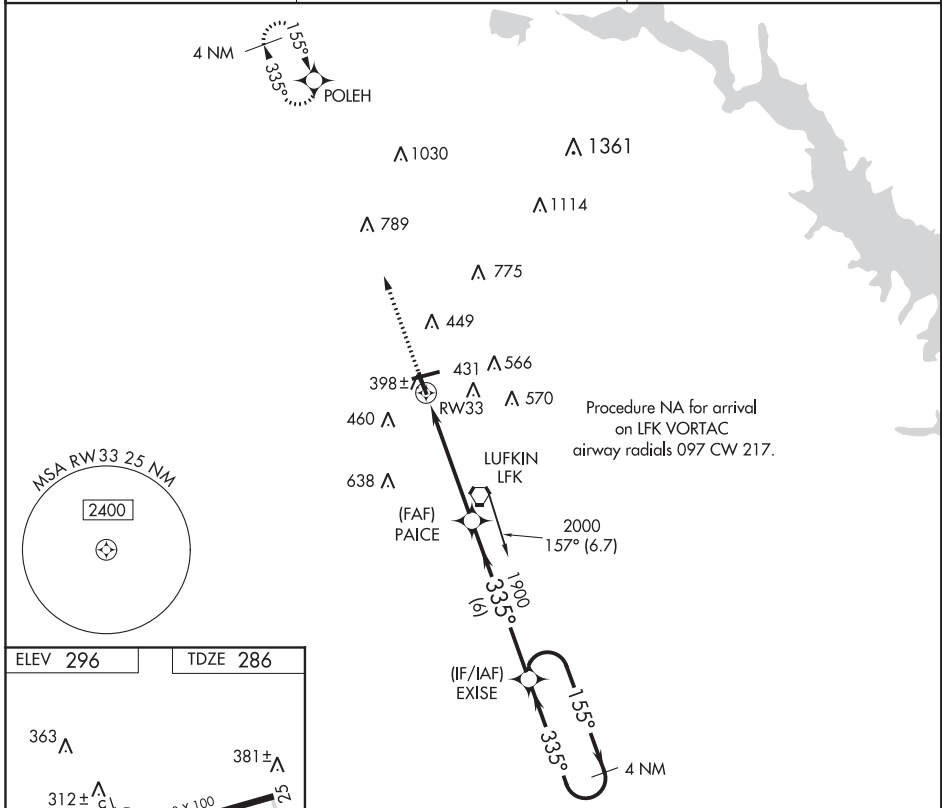
RNAV (GPS) RWY 33

ANGELINA COUNTY (L.F.K)

▼ DME/DME RNP- 0.3 NA. Rwy 33 Straight-in and Circling to Rwy 15 and 25 NA at night. Helicopter visibility reduction below 1 SM not authorized.

MISSED APPROACH: Climb to 2100 direct POLEH and hold.

ASOS 120.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF) 0
------------------------	--	---------------------------------



CATEGORY	A	B	C	D
LNAV MDA	660-1 374 (400-1)			NA
CIRCLING	740-1 444 (500-1)	760-1 464 (500-1)	760-1½ 464 (500-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LUFKIN, TEXAS

AL-870 (FAA)

15064

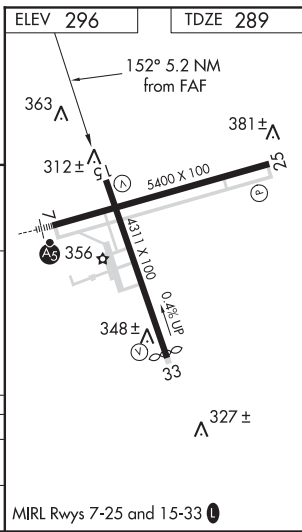
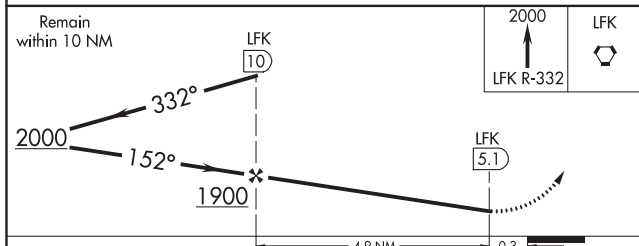
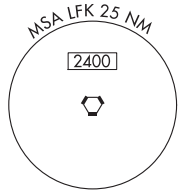
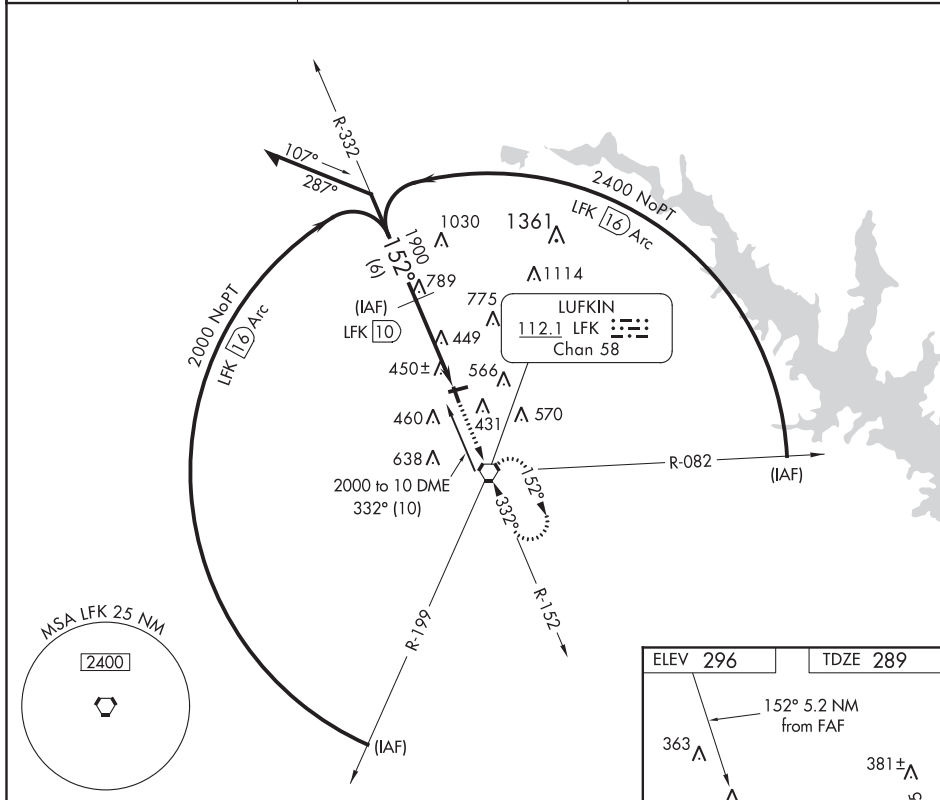
VORTAC LFK	APP CRS	Rwy Idg	4311
112.1	152°	TDZE	289
Chan 58		Apt Elev	296

VOR/DME RWY 15

ANGELINA COUNTY (L.F.K)

▼ Straight-in minimums NA at night.
 MISSED APPROACH: Climb to 2000 via LFK R-332 to LFK VORTAC and hold.

ASOS 120.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF) 📻
------------------------	--	--



CATEGORY	A	B	C	D
S-15	700-1	411 (500-1)	700-1¼ 411 (500-1¼)	NA
CIRCLING	760-1	464 (500-1)	760-1½ 464 (500-1½)	NA

LUFKIN, TEXAS
Amdt 3 18AUG94

31°14'N-94°45'W

ANGELINA COUNTY (L.F.K) VOR/DME RWY 15

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

VORTAC LFK	APP CRS	Rwy Idg	4206
112.1	332°	TDZE	286
Chan 58		Apt Elev	296

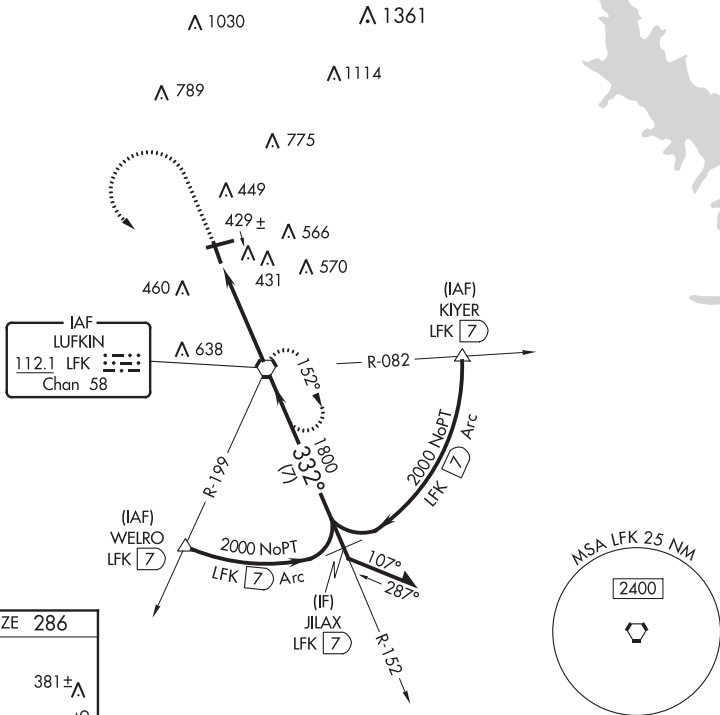
VOR RWY 33

ANGELINA COUNTY (L'F'K)

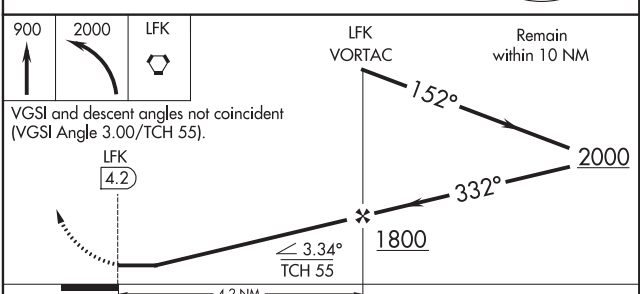
▽ If local altimeter setting not received, use A L Mangham Jr Rgnl altimeter setting and increase all MDAs 60 feet. Rwy 33 Straight-in and Circling to Rwy 15 and 25 NA at night. Helicopter visibility reduction below 1 SM not authorized.

MISSED APPROACH: Climb to 900 then climbing left turn to 2000 direct LFK VORTAC and hold.

ASOS 120.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF) 0
------------------------	--	---------------------------------



ELEV 296	TDZE 286
MIRL Rwy 7-25 and 15-33	
FAF to MAP 4.2 NM	
Knots	60 90 120 150 180
Min:Sec	4:12 2:48 2:06 1:41 1:24



CATEGORY	A	B	C	D
S-33	680-1 394 (400-1)			680-1½ 394 (400-1½)
CIRCLING	760-1 464 (500-1)		760-1½ 464 (500-1½)	880-2 584 (600-2)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MADISONVILLE, TEXAS

AL-6843 (FAA)

15344

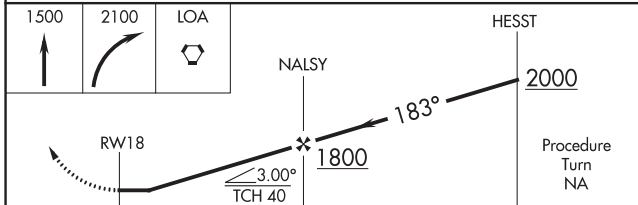
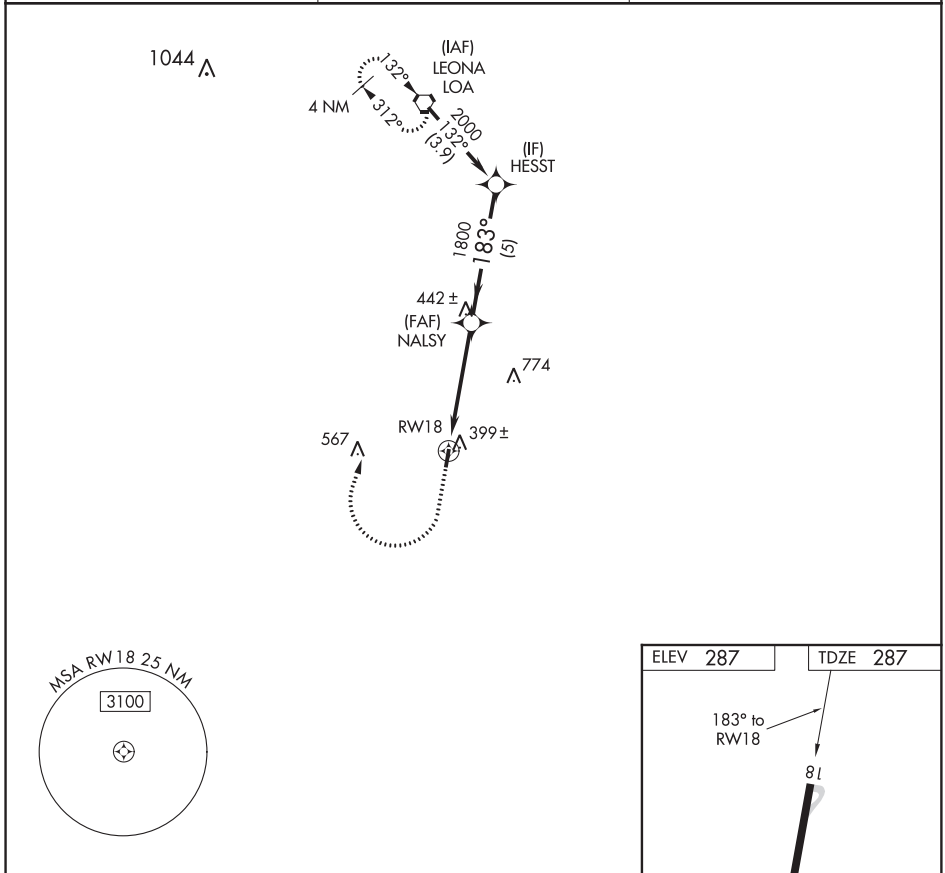
APP CRS	Rwy Idg	3202
183°	TDZE	287
	Apt Elev	287

RNAV (GPS) RWY 18

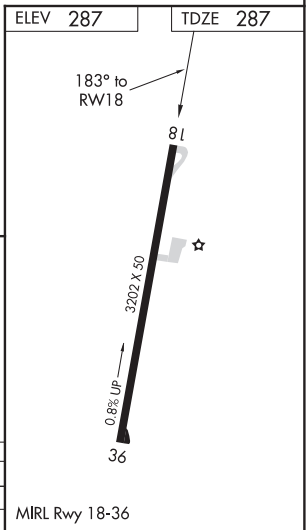
MADISONVILLE MUNI (51R)

<p>▼ Use Huntsville Muni altimeter setting. ▲ NA DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.</p>	<p>MISSED APPROACH: Climb to 1500, then climbing right turn to 2100 direct LOA VORTAC and hold.</p>
--	---

<p>HUNTSVILLE ASOS 119,425</p>	<p>HOUSTON CENTER 134.8 269.6</p>	<p>CTAF 122.9</p>
---	--	------------------------------



CATEGORY	A	B	C	D
LNAV MDA	720-1	433 (500-1)		NA
CIRCLING	780-1	493 (500-1)		NA



MADISONVILLE, TEXAS
 Orig-B 12NOV15

30°55'N-95°57'W

MADISONVILLE MUNI (51R) RNAV (GPS) RWY 18

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS 003°	Rwy Idg 3202
	TDZE 283
	Apt Elev 287

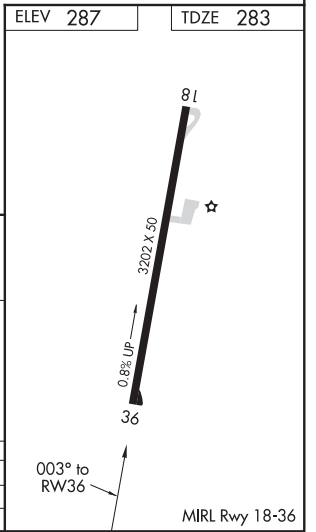
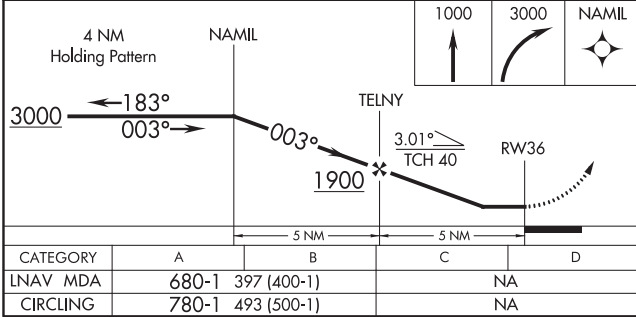
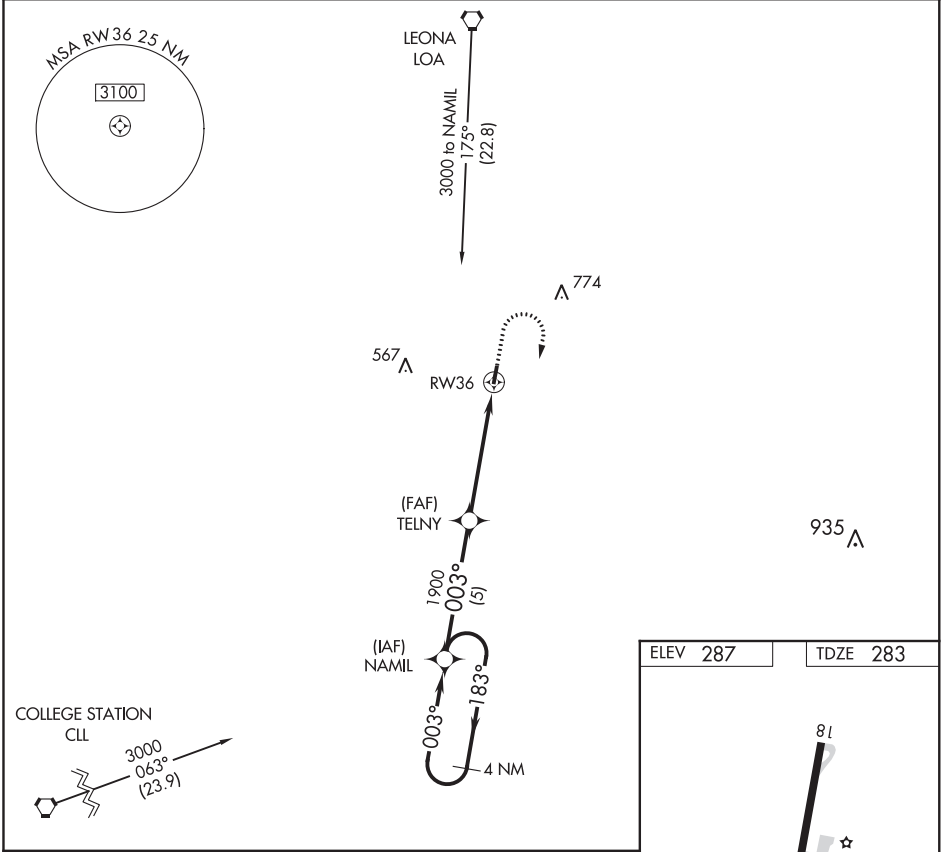
RNAV (GPS) RWY 36

MADISONVILLE MUNI (51R)

▼ Use Huntsville Muni altimeter setting.
▲ NA DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct NAMIL WP and hold.

HUNTSVILLE ASOS 119.425	HOUSTON CENTER 134.8 269.6	CTAF 122.9
-----------------------------------	--------------------------------------	----------------------



CATEGORY	A	B	C	D
LNVA MDA	680-1	397 (400-1)		NA
CIRCLING	780-1	493 (500-1)		NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MADISONVILLE, TEXAS

AL-6843 (FAA)

15344

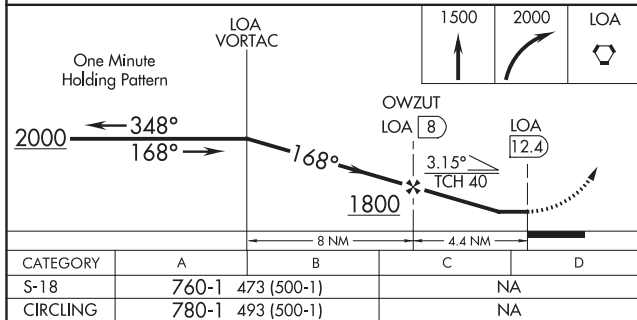
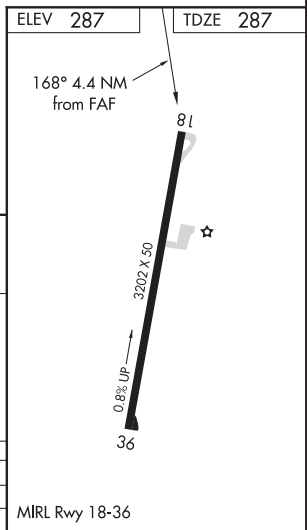
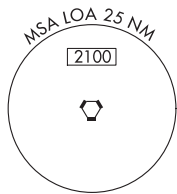
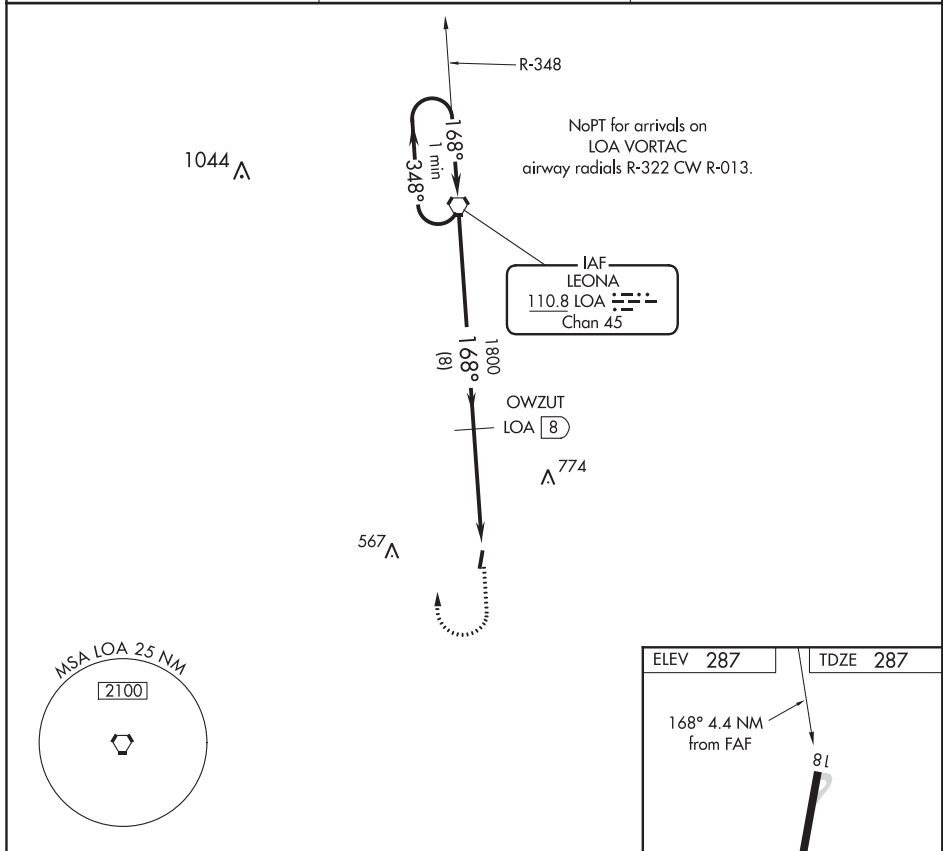
VORTAC LOA 110.8 Chan 45	APP CRS 168°	Rwy Idg 3202 TDZE 287 Apt Elev 287
--	------------------------	---

VOR/DME RWY 18

MADISONVILLE MUNI (51R)

<p>▼ Use Huntsville Muni altimeter setting. ▲ NA Procedure NA at night. ▲ NA Helicopter visibility reduction below 1 SM NA.</p>	<p>MISSED APPROACH: Climb to 1500, then climbing right turn to 2000 direct LOA VORTAC and hold.</p>
---	---

HUNTSVILLE ASOS 119.425	HOUSTON APP CON 134.8 269.6	CTAF 122.9
-----------------------------------	---------------------------------------	----------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MADISONVILLE, TEXAS
Amdt 2B 12NOV15

30°55'N-95°57'W

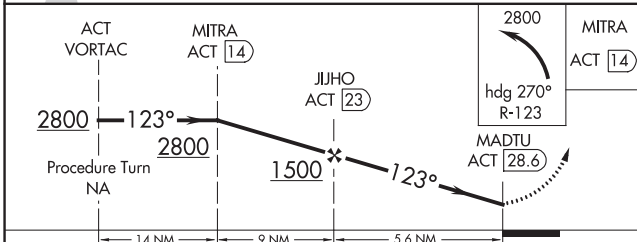
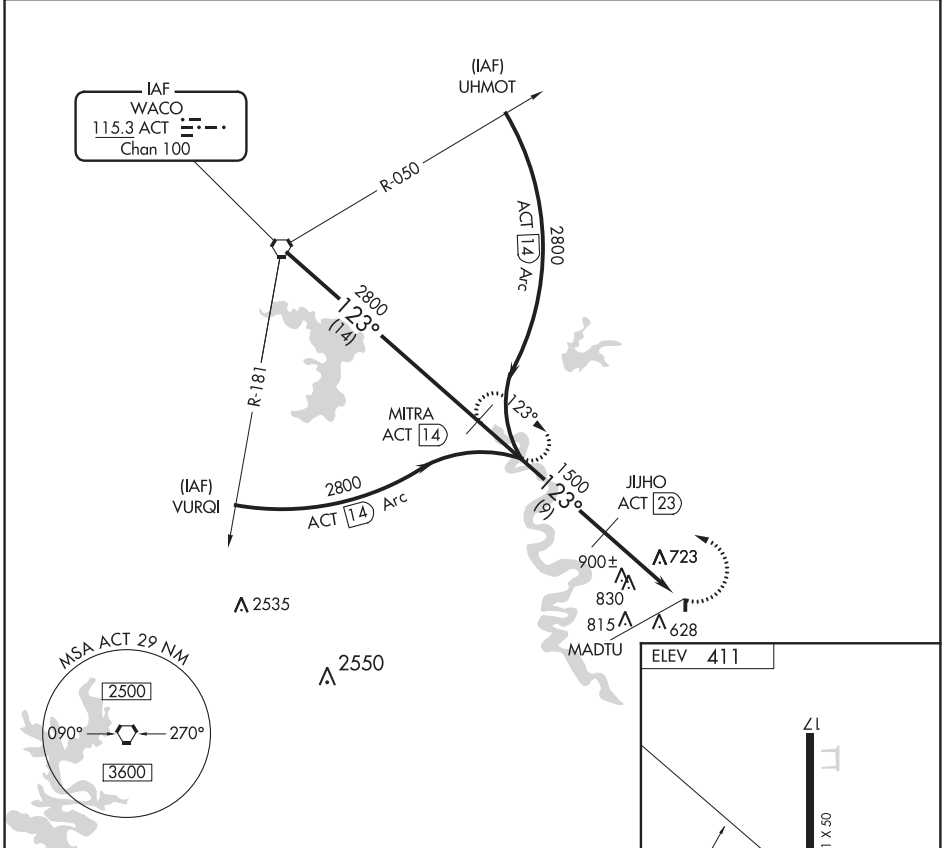
MADISONVILLE MUNI (51R) VOR/DME RWY 18

VOR ACT 115.3 Chan 100	APP CRS 123°	Rwy Idg TDZE Apt Elev N/A N/A 411
--	------------------------	---

VOR/DME or GPS-A

MARLIN (T15)

Use Waco Rgnl altimeter setting. NA	MISSED APPROACH: Climbing left turn to 2800 via heading 270° and R-123 to MITRA/1.4 DME and hold.
WACO APP CON ★ 127.65 352.0	CTAF 122.9



ELEV 411
123° 5.6 NM from FAF
IRL Rwy 17-35

CATEGORY	A	B	C	D
CIRCLING	1280-1 869 (900-1)	1280-1¼ 869 (900-1¼)	NA	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

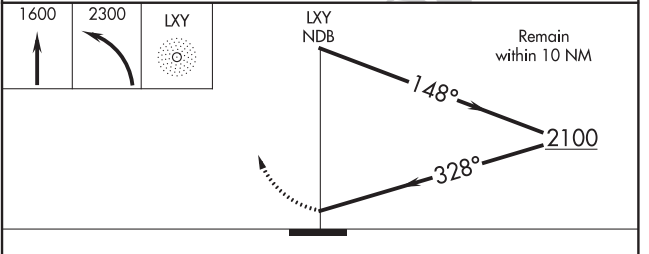
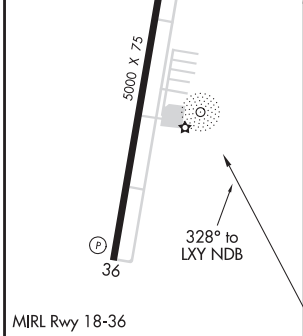
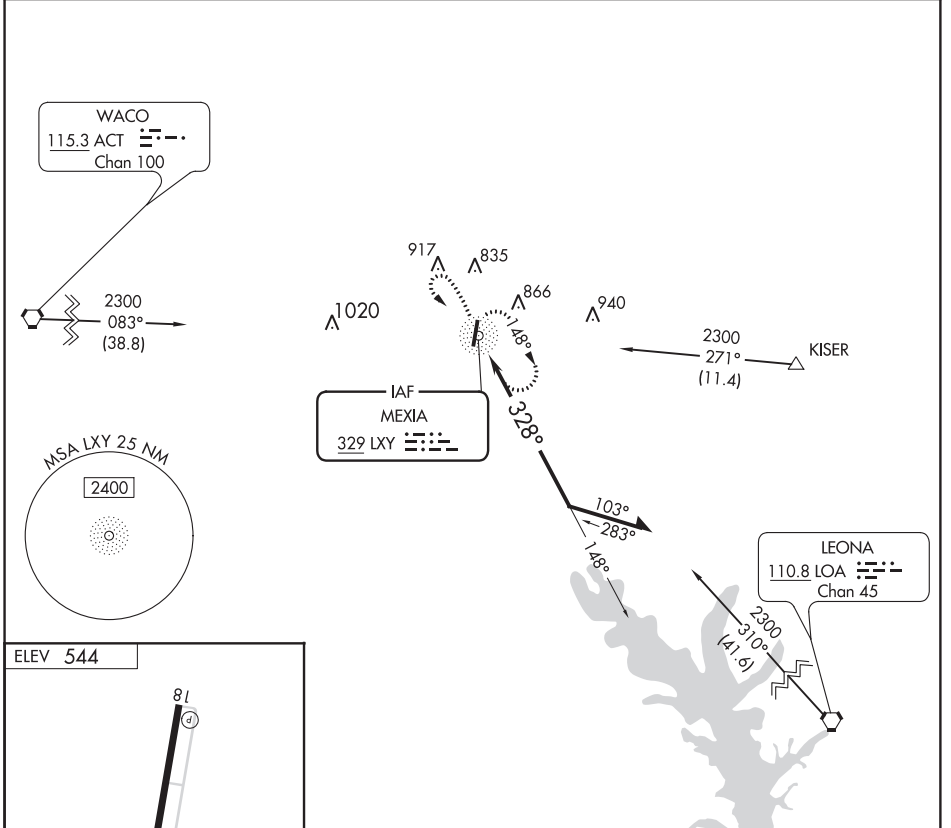
NDB LX _Y 329	APP CRS 328°	Rwy Idg TDZE Apt Elev N/A N/A 544
-----------------------------------	------------------------	---

NDB-A
MEXIA-LIMESTONE COUNTY (LX_Y)

NA Obtain local altimeter setting on CTAF; when not received, use Waco Rgnl altimeter setting and increase all MDA 100 feet and Cat C visibility ¼ mile. When VGSi inop, procedure NA at night.

MISSED APPROACH: Climb to 1600 then climbing left turn to 2300 direct LX_Y NDB and hold.

AWOS-3 127.275	WACO APP CON 127.65 352.0	UNICOM 122.8 (CTAF)
--------------------------	-------------------------------------	-------------------------------



CATEGORY	A	B	C	D
CIRCLING	1080-1	536 (600-1)	1180-1¾ 636 (700-1¾)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I- OCH 111.5 Chan 52	APP CRS 359°	Rwy ldg 5000 TDZE 343 Apt Elev 355
--	------------------------	--

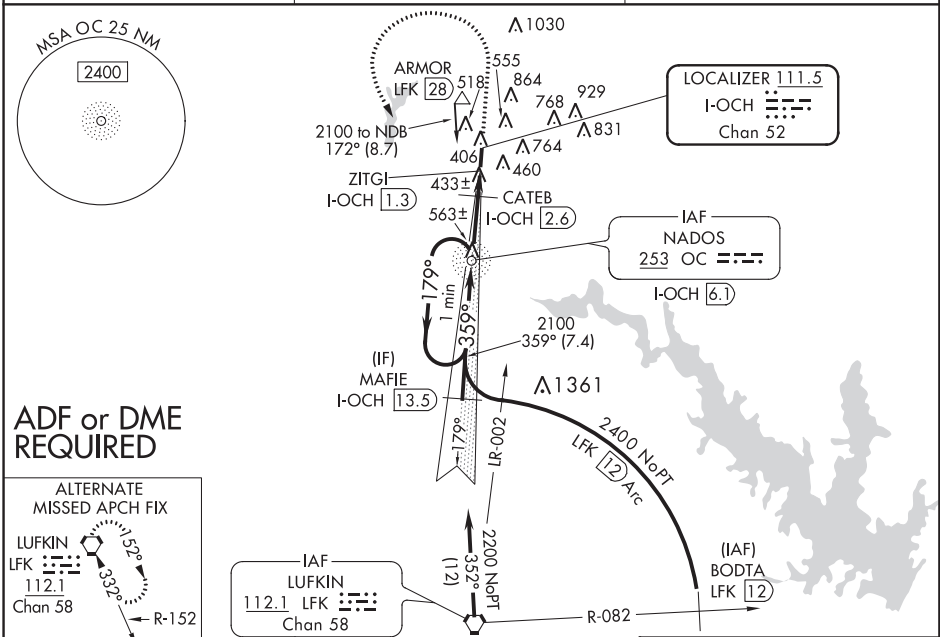
ILS or LOC RWY 36

A L MANGHAM JR RGNL (OCH)

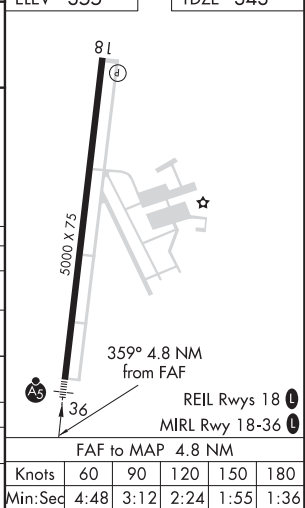
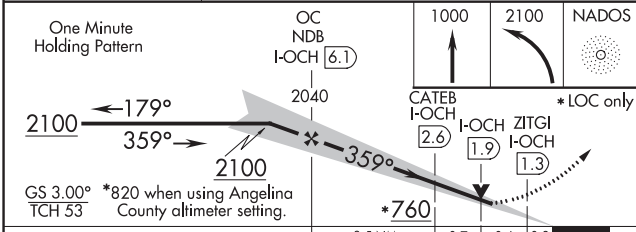
NA ADF Required. When local altimeter setting not received, use Angelina County altimeter setting and increase all DA/MDA 60 feet and increase all S-LOC 36 Cat C visibility ¼ mile. VDP NA when using Angelina County altimeter setting. Localizer unusable inside 0.3 NM from threshold. Night landing: Rwy 18 NA. Autopilot coupled approach NA below 740.

MALS MISSED APPROACH: Climb to 1000 then climbing left turn to 2100 direct NADOS NDB and hold.

AWOS-3 135.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF)
--------------------------	--	-------------------------------



ELEV 355	TDZE 343
----------	----------



CATEGORY	A	B	C	D
S-ILS 36	546-½	203 (200-½)		NA
S-LOC 36	760-½	417 (500-½)	760-¾ 417 (500-¾)	NA
CIRCLING	860-1	505 (600-1)	860-1½ 505 (600-1½)	NA
CATEB FIX MINIMUMS (DME REQUIRED)				
S-LOC 36	700-½	357 (400-½)		NA
CIRCLING	860-1	505 (600-1)	860-1½ 505 (600-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

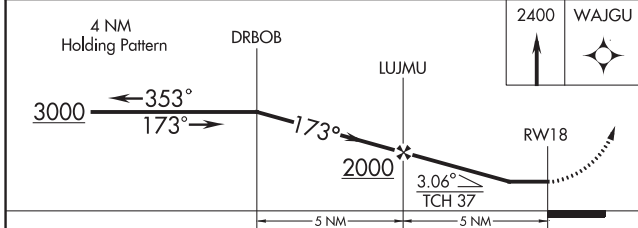
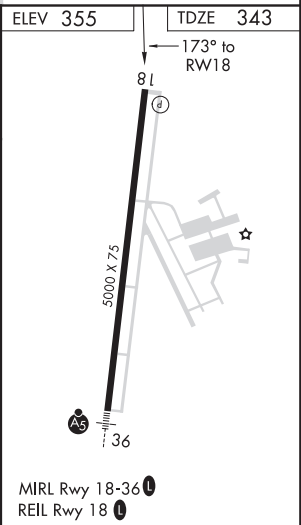
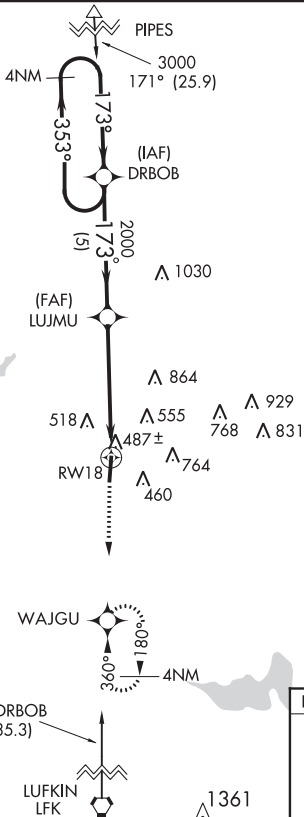
SC-5, 10 NOV 2016 to 05 JAN 2017

APP CRS 173°	Rwy Idg TDZE Apt Elev	5000 343 355
------------------------	-----------------------------	---

RNAV (GPS) RWY 18

A L MANGHAM JR RGNL (OCH)

NA	GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.	MISSED APPROACH: Climb to 2400 direct WAJGU and hold.
AWOS-3 135.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF)



CATEGORY	A	B	C	D
LNAV/VNAV MDA	NA			
LNAV MDA	740-1 397 (400-1)			NA
CIRCLING	860-1	505 (600-1)	860-1½ 505 (600-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

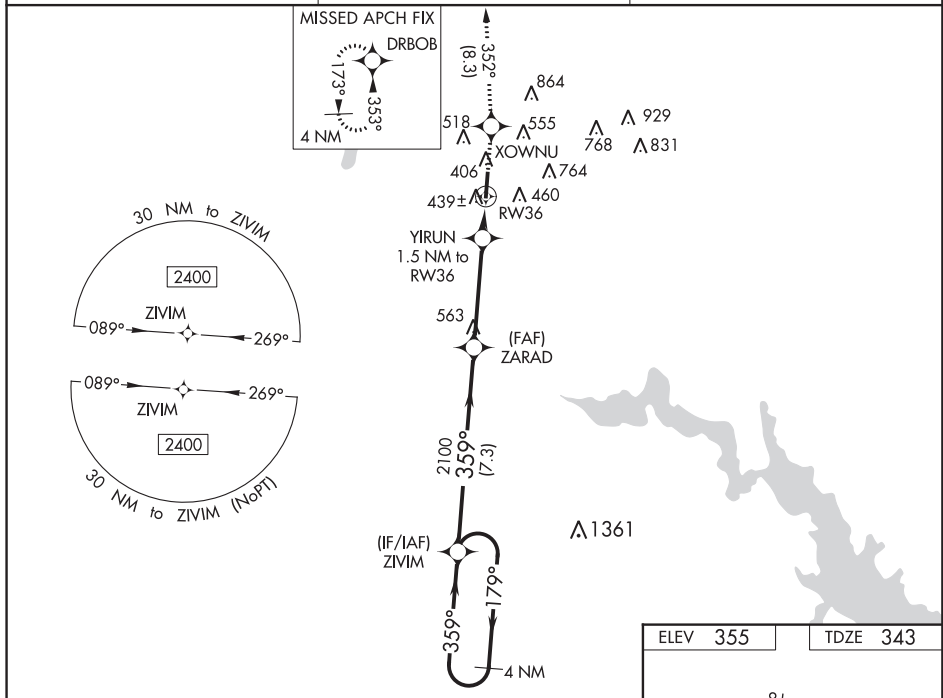
WAAS CH 93528 W36A	APP CRS 359°	Rwy Idg TDZE Apt Elev	5000 343 355
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 36

A L MANGHAM JR RGNL (OCH)

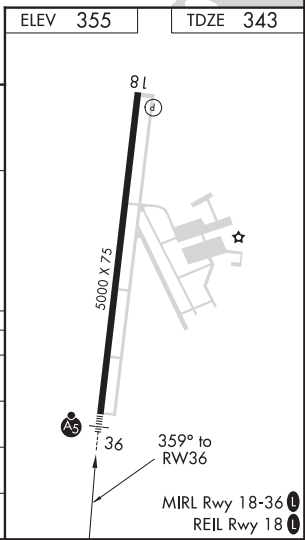
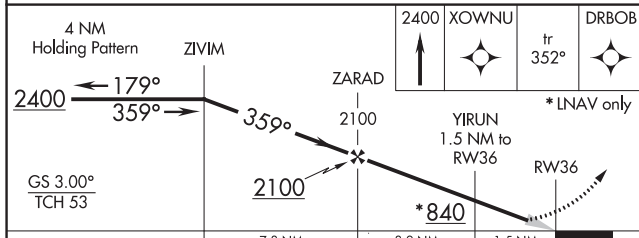
<p>⚠ Baro-VNAV NA when using Lufkin altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). When local altimeter setting not received, use Lufkin altimeter setting and increase all DA 56 feet and all MDA 60 feet; increase LNAV/VNAV all Cats visibility 1/8 mile, increase LNAV Cat C visibility 1/8 mile. DME/DME RNP-0.3 NA. Night landing: Rwy 18 NA.</p>	<p>MALS R</p>	<p>MISSED APPROACH: Climb to 2400 direct XOWNU and on track 352° to DRBOB and hold.</p>
---	---------------	--

AWOS-3 135.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF) 1
--------------------------	--	---------------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D
LPV DA	543-1/2	200 (200-1/2)		NA
LNAV/VNAV DA	625-1/2	282 (300-1/2)		NA
LNAV MDA	700-1/2	357 (400-1/2)	700-5/8 357 (400-5/8)	NA
CIRCLING	860-1	505 (600-1)	860-1/2 505 (600-1/2)	NA

NDB GXD 391	APP CRS 178°	Rwy ldg 5000
		TDZE 343
		Apt Elev 355

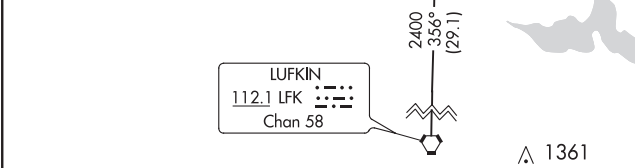
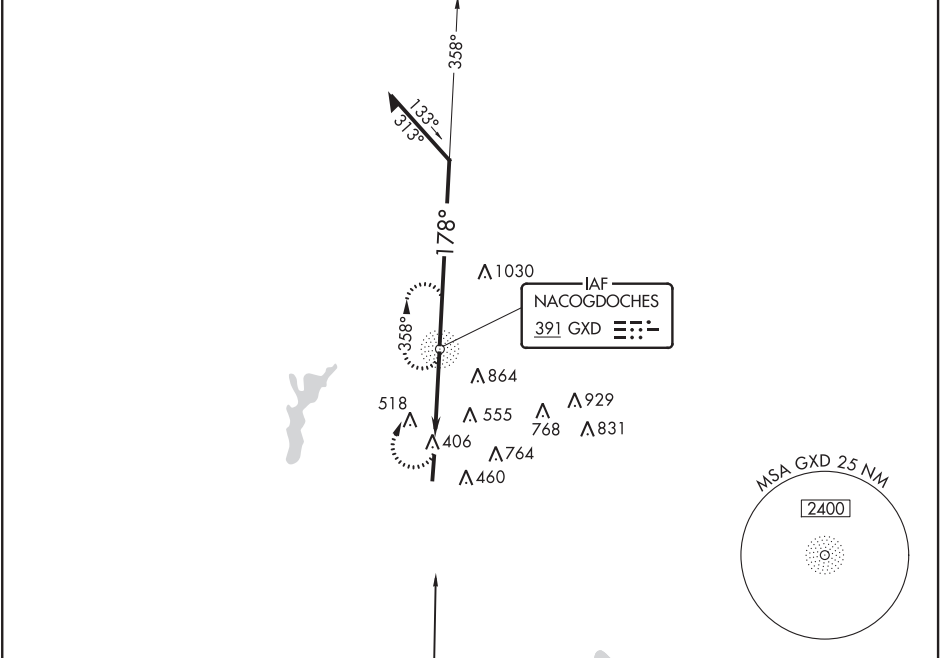
NDB RWY 18

A L MANGHAM JR RGNL (OCH)

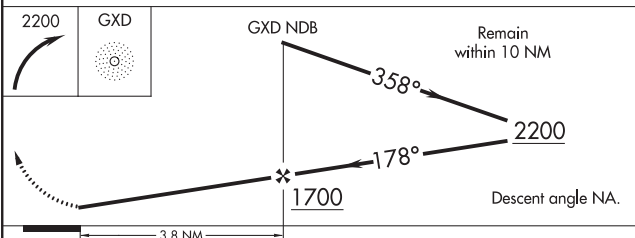
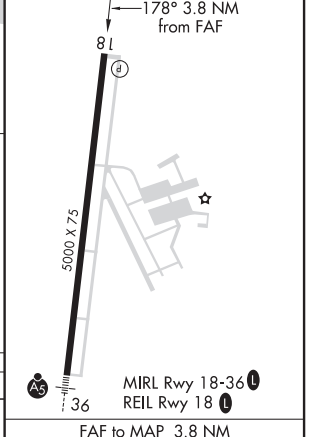
⚠ When local altimeter setting not received, use Lufkin altimeter setting and increase all MDA 60 feet, and increase S-18 and Circling Cat C visibility to 1 3/4. **⚠ NA** Night Landing: Rwy 18 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 2200 direct GXD NDB and hold.

AWOS-3 135.625	HOUSTON CENTER 125.175 285.575	UNICOM 123.0 (CTAF) 0
--------------------------	--	---------------------------------



ELEV 355	TDZE 343
----------	----------



CATEGORY	A	B	C	D
S-18	880-1 537 (600-1)		880-1 1/2 537 (600-1 1/2)	NA
CIRCLING	880-1 525 (600-1)		880-1 1/2 525 (600-1 1/2)	NA

FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 42931 W17A	APP CRS 174°	Rwy Idg TDZE 229 Apt Elev 229	5003
--	------------------------	---	-------------

RNAV (GPS) RWY 17

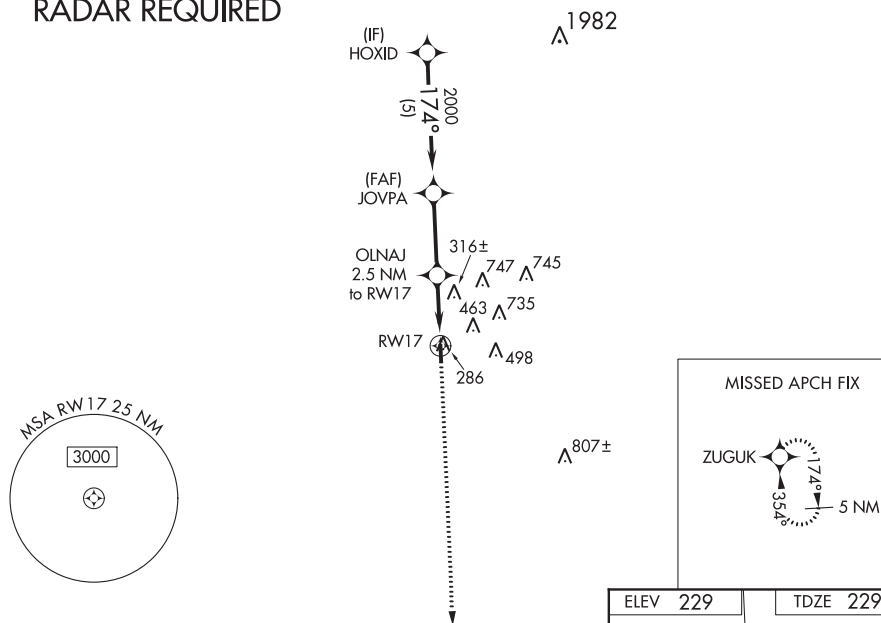
NAVASOTA MUNI (60R)

▽ DME/DME RNP-0.3 NA. Use Brenham altimeter setting; when not received, use College Station altimeter setting and increase all DA 6 feet and all MDA 20 feet, and increase Circling Cat C visibility ¼ mile. Baro-VNAV NA.
△ NA Helicopter visibility reduction below ¾ SM NA.

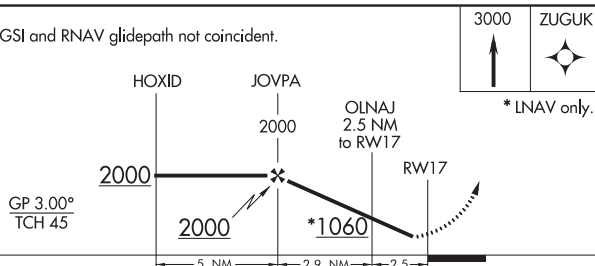
MISSED APPROACH: Climb to 3000 direct ZUGUK and hold.

BREHAM AWOS-3 121.125	HOUSTON APP CON 134.3 360.85	CTAF 122.9	123.3 0
---------------------------------	--	----------------------	----------------

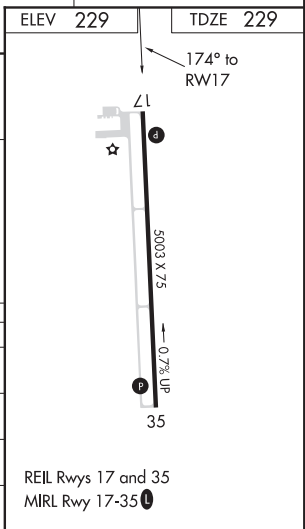
RADAR REQUIRED



VGSI and RNAV glidepath not coincident.



CATEGORY	A	B	C	D
LPV DA		529-1	300 (300-1)	
LNAV/VNAV DA		635-1 $\frac{3}{8}$	406 (500-1 $\frac{3}{8}$)	
LNAV MDA	620-1	391 (400-1)	620-1 $\frac{1}{8}$	391 (400-1 $\frac{1}{8}$)
CIRCLING	820-1	591 (600-1)	820-1 $\frac{1}{2}$ 591 (600-1 $\frac{1}{2}$)	980-2 $\frac{1}{2}$ 751 (800-2 $\frac{1}{2}$)



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 42831 W35A	APP CRS 354°	Rwy Idg TDZE Apt Elev	5003 215 229
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 35

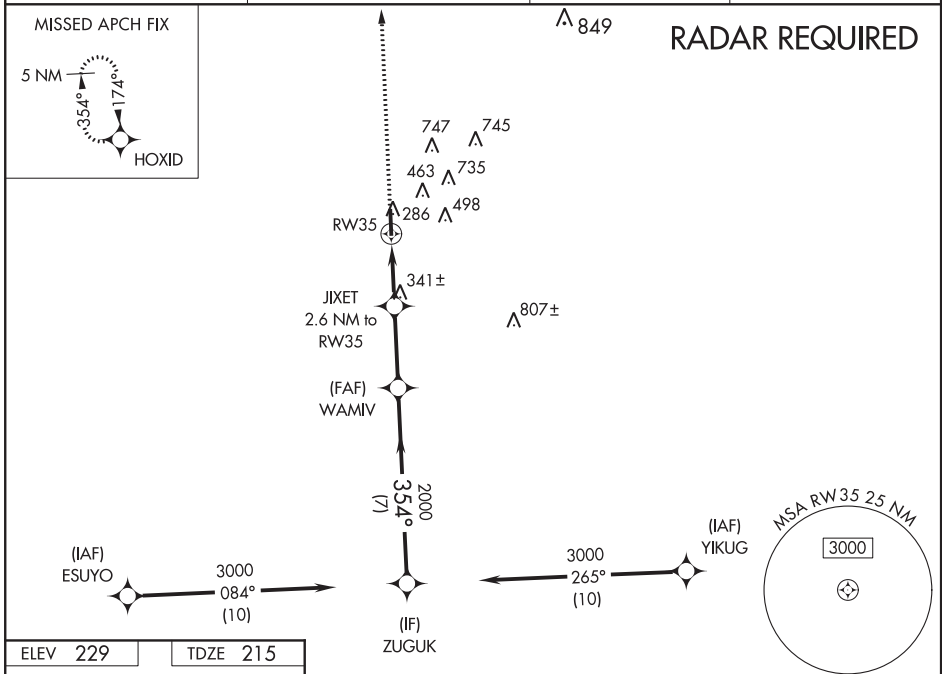
NAVASOTA MUNI (60R)

▽ DME/DME RNP-0.3 NA. Use Brenham altimeter setting, when not received use College Station altimeter setting and increase all DA 6 feet and all MDA 20 feet and increase Circling Cat C visibility ¼ mile. Helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA.

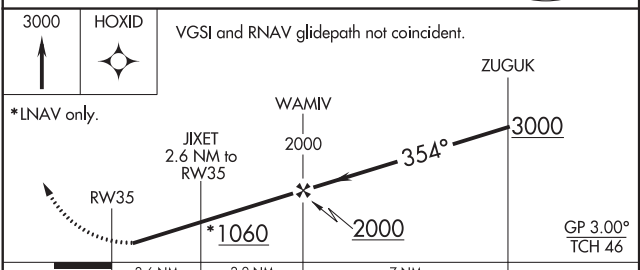
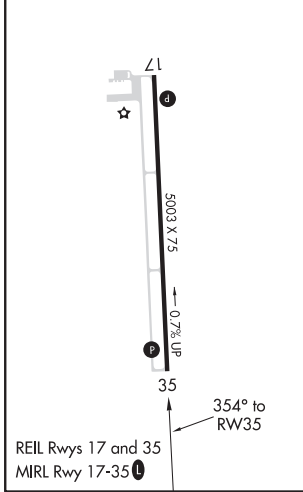
▲ NA

MISSED APPROACH: Climb to 3000 direct HOXD and hold.

BRENHAM AWOS-3 121.125	HOUSTON APP CON 134.3 360.85	CTAF 122.9	123.3 0
----------------------------------	--	----------------------	----------------



ELEV 229	TDZE 215
----------	----------



CATEGORY	A	B	C	D
LPV DA	525-1 310 (300-1)			
LNAV/VNAV DA	609-1 ³ / ₈ 394 (400-1 ³ / ₈)			
LNAV MDA	660-1	445 (500-1)	660-1 ³ / ₈	445 (500-1 ³ / ₈)
CIRCLING	820-1	591 (600-1)	820-1 ¹ / ₂ 591 (600-1 ¹ / ₂)	980-2 ¹ / ₂ 751 (800-2 ¹ / ₂)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

NAVASOTA, TEXAS

AL-6576 (FAA)

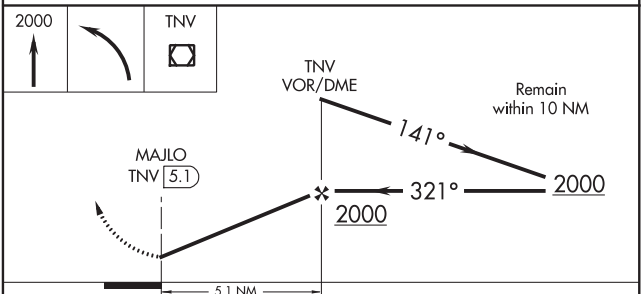
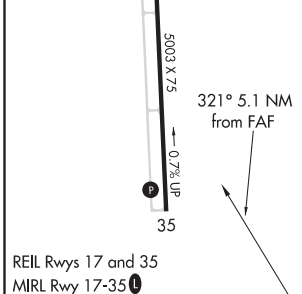
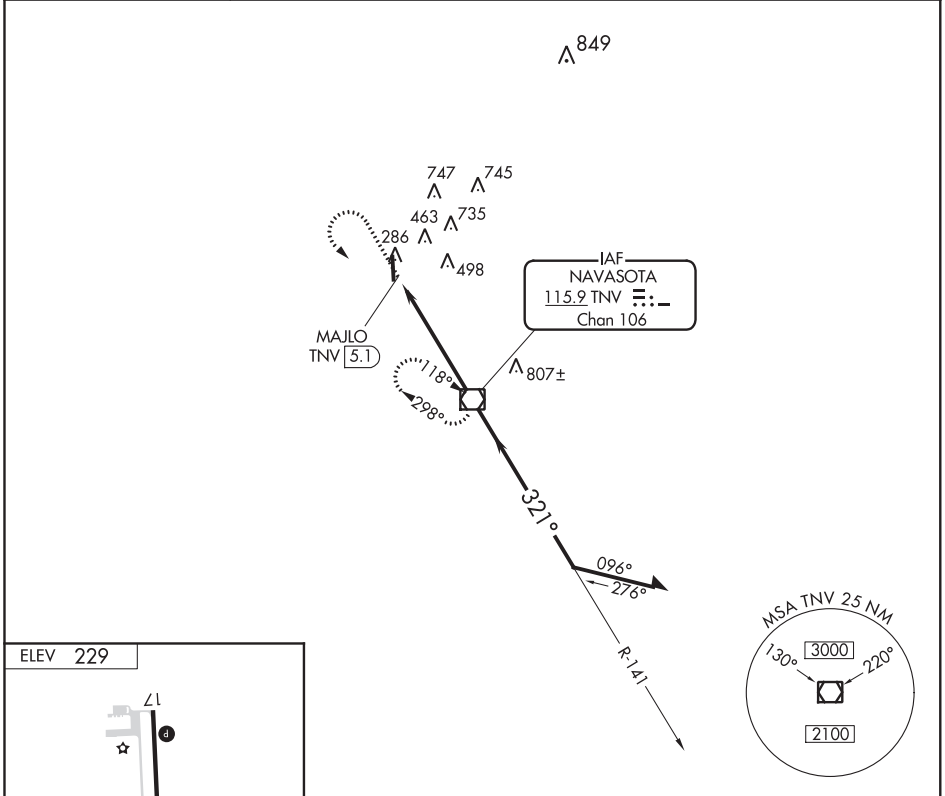
16315

VOR/DME TNV 115.9 Chan 106	APP CRS 321°	Rwy Idg TDZE Apt Elev	N/A N/A 229
--	------------------------	-----------------------------	--

VOR-A
NAVASOTA MUNI (60R)

▼ Use Brenham altimeter setting; when not received, use College Station altimeter setting and increase all MDA 20 feet and increase Cat C visibility ¼ mile.
▲ NA MISSED APPROACH: Climb to 2000 then left turn direct TNV VOR/DME and hold.

BRENHAM MUNI AWOS-3 121.125	HOUSTON APP CON 134.3 360.85	CTAF 122.9	123.3 0
---------------------------------------	--	----------------------	----------------



FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42
CATEGORY	A	B	C	D	
CIRCLING	820-1 591 (600-1)		820-1½ 591 (600-1½)	980-2½ 751 (800-2½)	

NAVASOTA, TEXAS
Amdt 2B 10NOV16

30°22'N-96°07'W

NAVASOTA MUNI (60R)
VOR-A

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 56614 W22A	APP CRS 220°	Rwy Idg TDZE 13 Apt Elev 13
--	------------------------	---

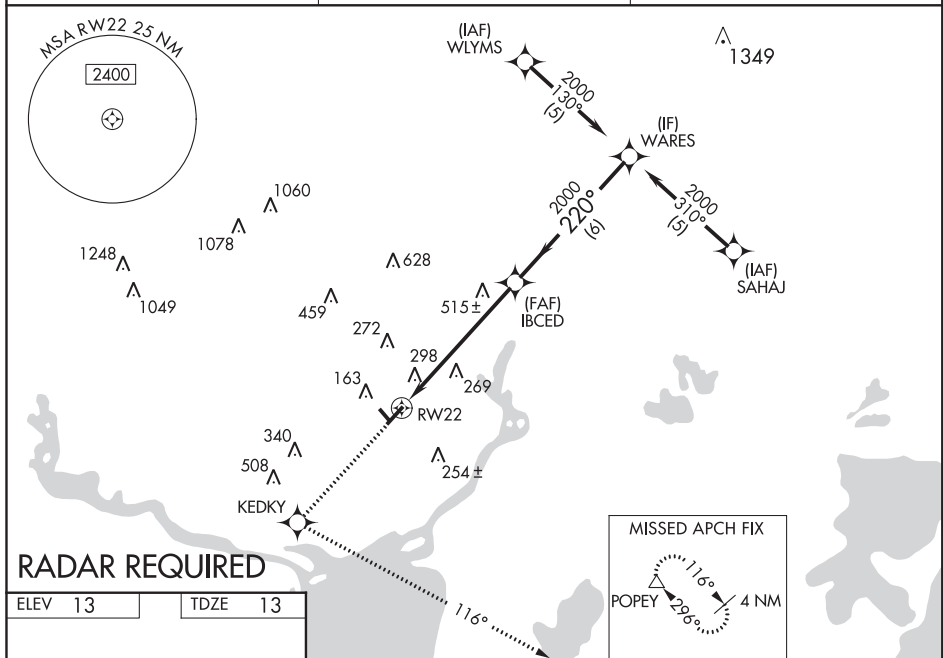
RNAV (GPS) RWY 22

ORANGE COUNTY (OR.G)

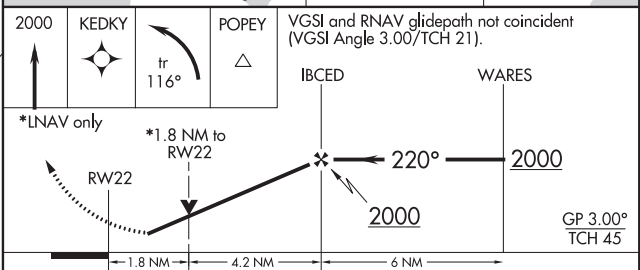
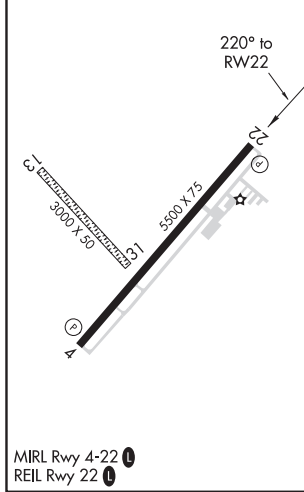
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Jack Brooks Rgnl altimeter setting and increase all DA 32 feet and all MDA 40 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ mile, and LNAV and Circling Cat C visibility ¼ 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.

AWOS-3 118.975	HOUSTON APP CON 121.3 377.1	UNICOM 122.8 (CTAF) 0
--------------------------	---------------------------------------	---------------------------------



ELEV 13	TDZE 13
---------	---------



CATEGORY	A	B	C	D
LPV DA		329-1	316 (400-1)	NA
LNAV/VNAV DA		674-2 ¼	661 (700-2 ¼)	NA
LNAV MDA	600-1	587 (600-1)	600-1 ½ 587 (600-1 ½)	NA
CIRCLING	660-1	647 (700-1)	660-1 ¾ 647 (700-1 ¾)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

ORANGE, TEXAS

AL-6312 (FAA)

16203

VOR/DME BPT 114.5 Chan 92	APP CRS 229°	Rwy Idg 5500 TDZE 13 Apt Elev 13
---	------------------------	---

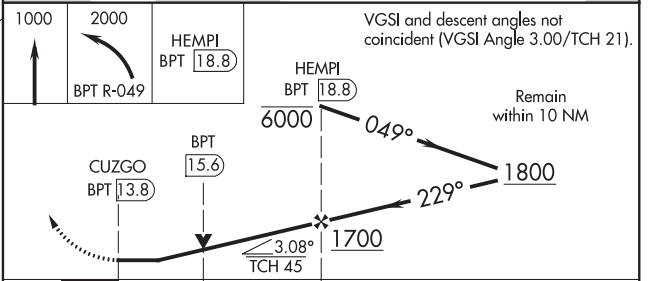
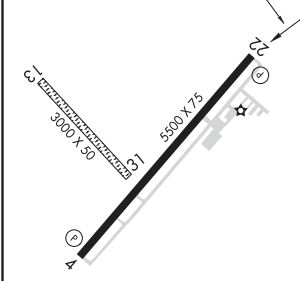
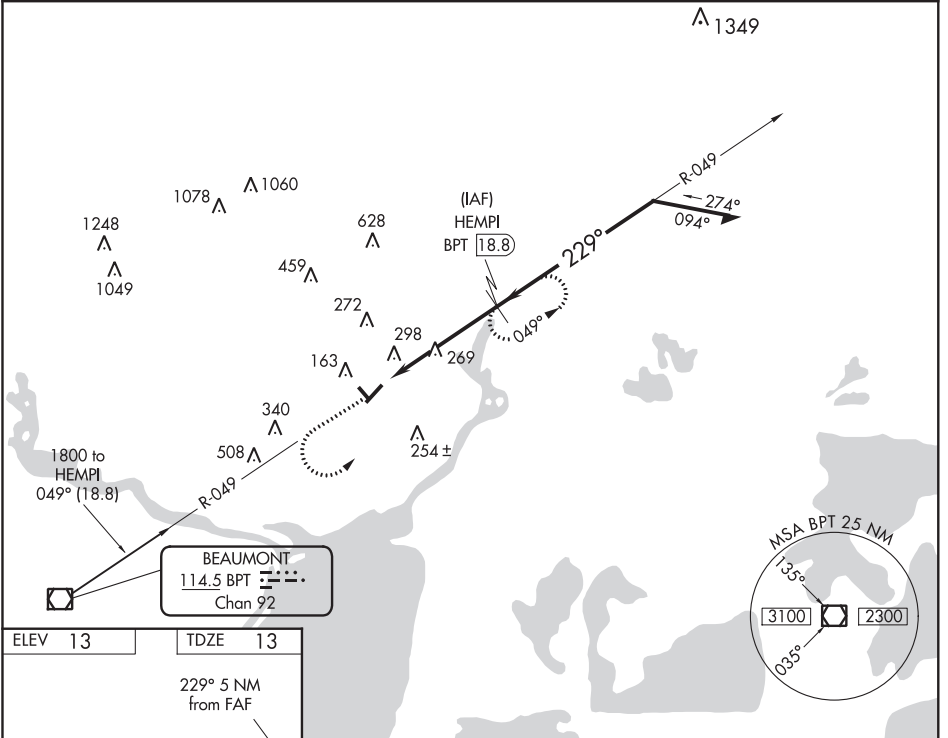
VOR/DME RWY 22

ORANGE COUNTY (OR.G)

⚠ 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.

MISSED 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
--------------------------	---------------------------------------	---------------------------------



CATEGORY	A	B	C	D
S-22	600-1	587 (600-1)	600-1½ 587 (600-1½)	NA
CIRCLING	660-1	647 (700-1)	660-1¾ 647 (700-1¾)	NA

MIRL Rwy 4-22 0
REIL Rwy 22 0

ORANGE, TEXAS
Amdt 2A 26AUG10

30°04'N-93°48'W

ORANGE COUNTY (OR.G)

VOR/DME RWY 22

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 53630 W13A	APP CRS 132°	Rwy Idg 5001 TDZE 13 Apt Elev 14
--	------------------------	---

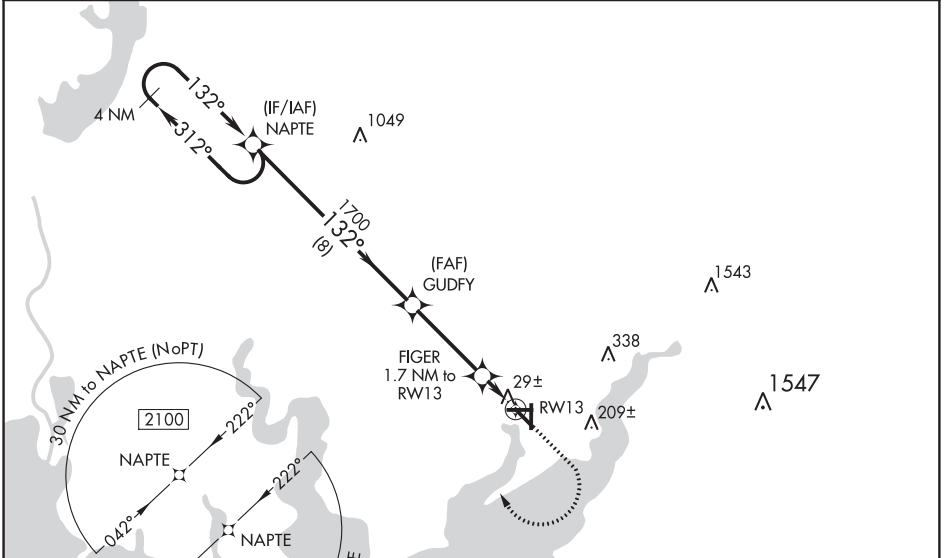
RNAV (GPS) RWY 13

PALACIOS MUNI (PSX)

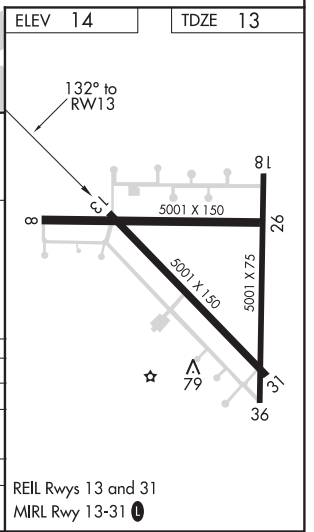
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). When local altimeter setting not received, use Port Lavaca altimeter setting and increase all DA and MDA 60 feet. Increase LPV and LNAV/VNAV all Cats visibility ½ mile and LNAV Cat C and D and Circling Cat C visibility ¼ mile. DME/DME RNP -0.3 NA. Helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA when using Port Lavaca altimeter setting.

MISSED APPROACH:
Climb to 500 then climbing right turn to 2100 direct NAPTE and hold.

ASOS 118.025	HOUSTON CENTER 128.6 360.8	UNICOM 122.8 (CTAF) 📻
------------------------	--------------------------------------	--



4 NM Holding Pattern		NAPTE		GUDFY		FIGER		RW13		NAPTE	
2100 ← 312°		→ 132°		1700		1700		1.7 NM to RW13		*LNAV only	
GS 3.00°		TCH 40		*580		*0.7 NM to RW13		RW13			
8 NM		3.5 NM		1 NM		0.7					
CATEGORY	A	B	C	D							
LPV DA	263-7/8				250 (300-7/8)						
LNAV/VNAV DA	263-7/8				250 (300-7/8)						
LNAV MDA	280-1		267 (300-1)		280-7/8		267 (300-7/8)				
CIRCLING	380-1		480-1		480-1½		580-2				
	366 (400-1)		466 (500-1)		466 (500-1½)		566 (600-2)				



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

PALACIOS, TEXAS

AL-309 (FAA)

15288

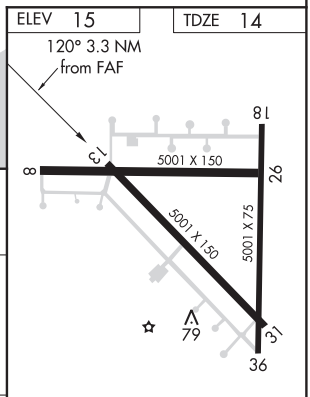
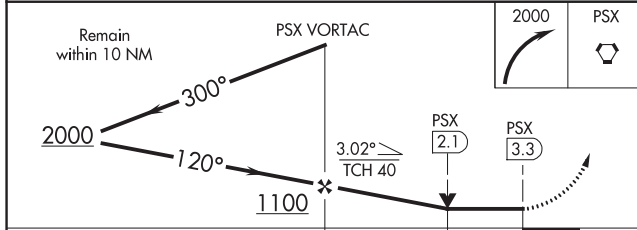
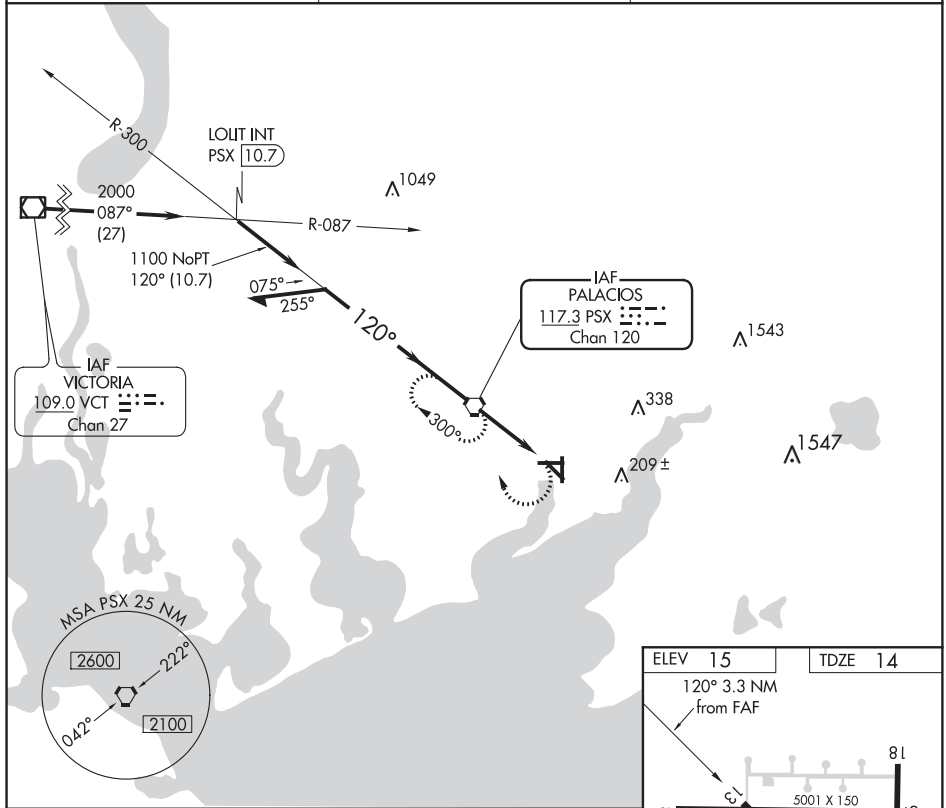
VOR PSX 117.3 Chan 120	APP CRS 120°	Rwy Idg TDZE 14 Apt Elev 15	5001
--	------------------------	---	-------------

VOR RWY 13

PALACIOS MUNI (PSX)

Visibility reduction by helicopters NA. MISSED APPROACH: Climbing right turn to 2000 direct PSX VORTAC and hold.

ASOS 118.025	HOUSTON CENTER 128.6 360.8	UNICOM 122.8 (CTAF) 0
------------------------	--------------------------------------	--



CATEGORY	A	B	C	D
S-13		380-1 366 (400-1)		380-1½ 366 (400-1¼)
CIRCLING	420-1 405 (500-1)	480-1 465 (500-1)	480-1½ 465 (500-1½)	580-2 565 (600-2)

REIL Rwys 13 and 31
MIRL Rwy 13-31 **0**

FAF to MAP 3.3 NM

Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

PALACIOS, TEXAS
Amdt 10D 15OCT15

28°44'N-96°15'W

PALACIOS MUNI (PSX)
VOR RWY 13

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

RNAV (GPS) RWY 18

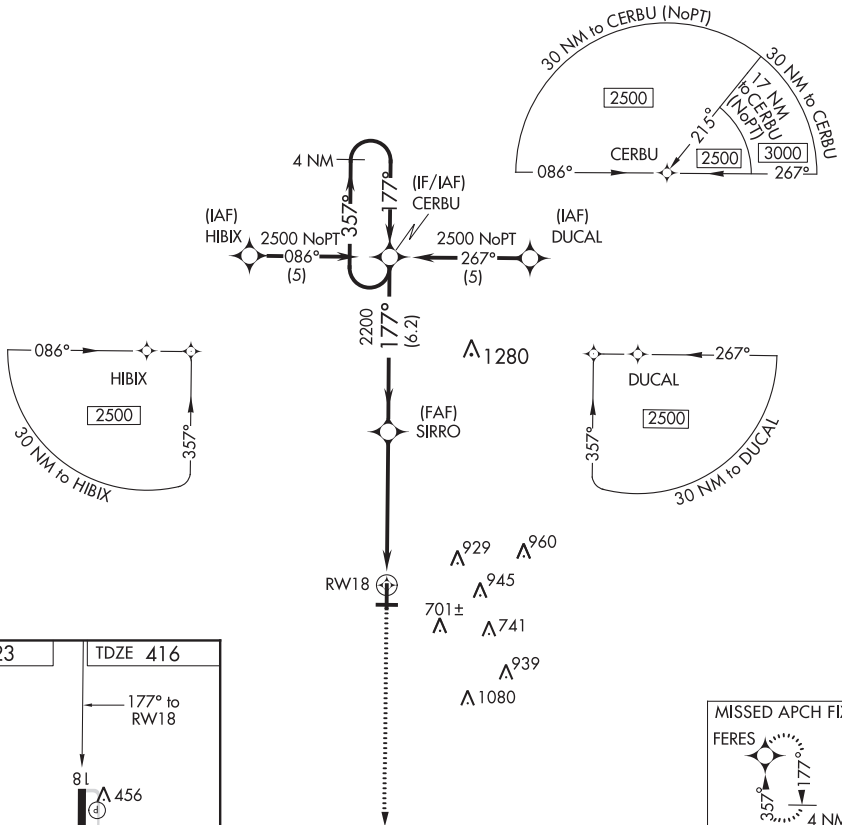
PALESTINE MUNI (PSN)

APP CRS 177°	Rwy Idg 5005
	TDZE 416
	Apt Elev 423

▼ VDP NA with C. David Campbell Field-Corsicana Muni altimeter setting. DME/DME RNP-0.3 NA.
▲ Circling to Rwy 9-27, NA at night. If local weather not received, use C. David Campbell Field-Corsicana Muni altimeter setting and increase all MDAs 100 feet.

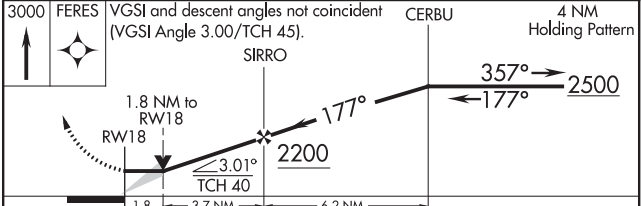
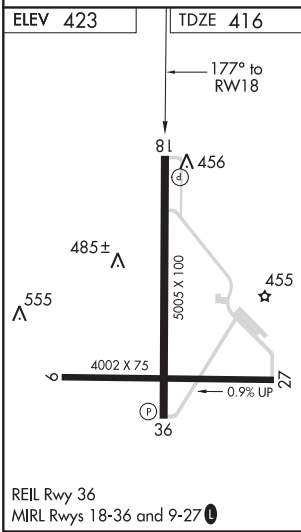
MISSED APPROACH:
 Climb to 3000 direct FERES and hold.

AWOS-3 118.025	FORT WORTH CENTER 135.25 265.1	UNICOM 122.7 (CTAF)
--------------------------	--	-------------------------------



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



CATEGORY	A	B	C	D
LNAV MDA	1040-1	624 (700-1)	1040-1¼ 624 (700-1¾)	1040-2 624 (700-2)
CIRCLING	1040-1	617 (700-1)	1040-1¼ 617 (700-1¾)	1060-2 637 (700-2)

PALESTINE, TEXAS

AL-871 (FAA)

RNAV (GPS) RWY 36

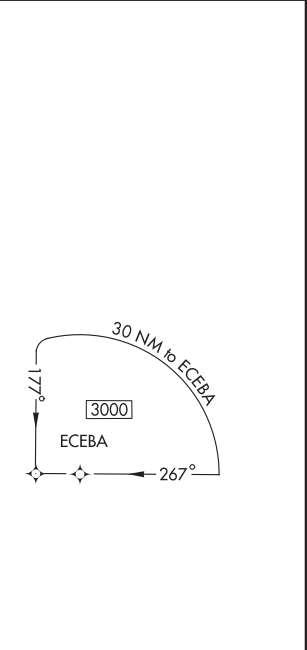
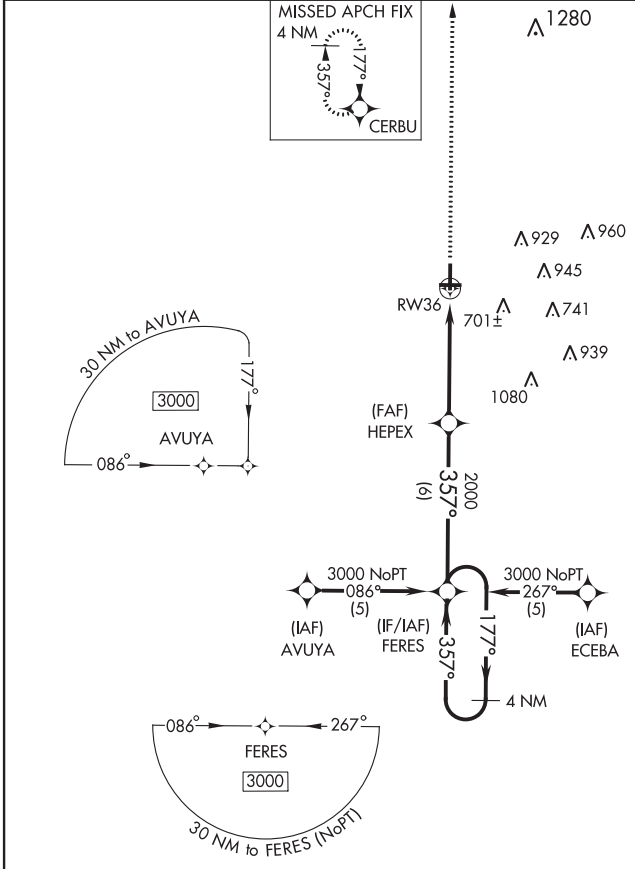
PALESTINE MUNI (PSN)

APP CRS 357°	Rwy Idg 5005
	TDZE 415
	Apt Elev 423

▽ VDP NA with C. David Campbell Field-Corsicana Muni altimeter setting.
▲ DME/DME RNP-0.3 NA. If local altimeter setting not received, use C. David Campbell Field-Corsicana Muni altimeter setting and increase all MDAs 100 feet.

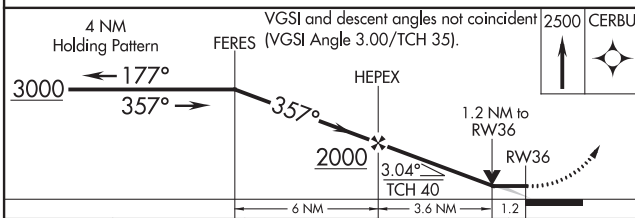
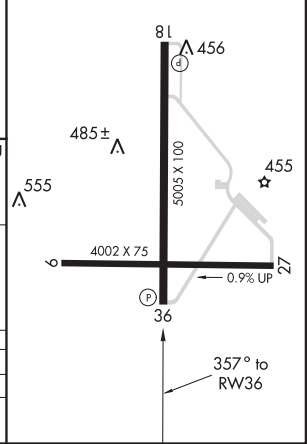
MISSED APPROACH: Climb to 2500 direct CERBU WP and hold.

AWOS-3 118.025	FORT WORTH CENTER 135.25 265.1	UNICOM 122.7 (CTAF) 0
--------------------------	--	---------------------------------



ELEV 423	TDZE 415
----------	----------

MIRL Rwy 18-36 and 9-27
 REIL Rwy 36



CATEGORY	A	B	C	D
LNAV MDA	820-1	405 (400-1)	820-1¼	405 (400-1¼)
CIRCLING	860-1 437 (500-1)	1040-1 617 (700-1)	1040-1¾ 617 (700-1¾)	1060-2 637 (700-2)

PALESTINE, TEXAS
 Amdt 1A 13178

31°47'N - 95°42'W

RNAV (GPS) RWY 36

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

VOR/DME FZT	APP CRS	Rwy Idg	5005
111.4	201°	TDZE	416
Chan 51		Apt Elev	423

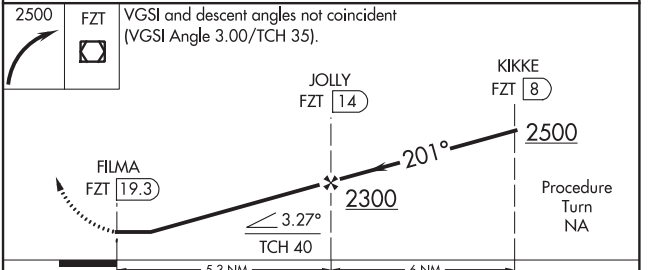
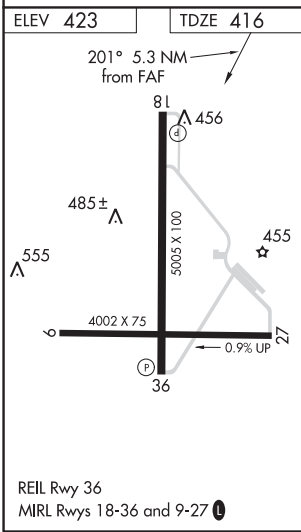
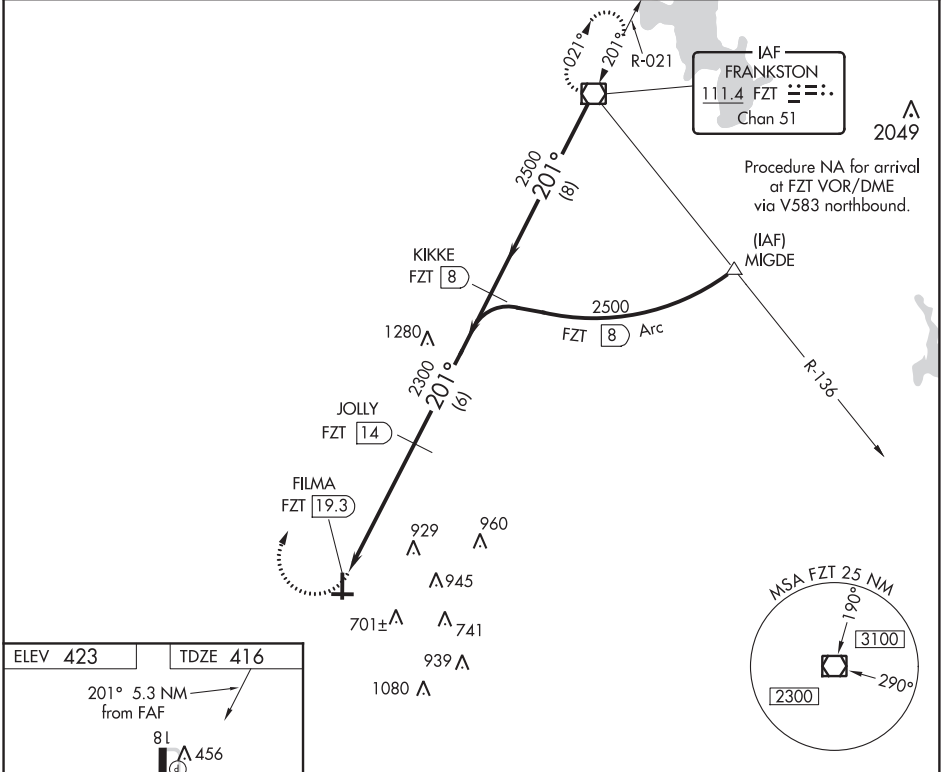
VOR/DME RWY 18

PALESTINE MUNI (PSN)

▲ NA If local altimeter setting not received, use C. David Campbell Field-Corsicana Muni altimeter setting and increase all MDAs 100 feet.

MISSING APPROACH: Climbing right turn to 2500 direct FZT VOR/DME and hold.

AWOS-3 118.025	FORT WORTH CENTER 135.25 265.1	UNICOM 122.7 (CTAF) 0
--------------------------	--	--



CATEGORY	A	B	C	D
S-18	1240-1 824 (900-1)	1240-1¼ 824 (900-1½)	1240-2½ 824 (900-2½)	1240-2¾ 824 (900-2¾)
CIRCLING	1240-1 817 (900-1)	1240-1¼ 817 (900-1½)	1240-2½ 817 (900-2½)	1240-2¾ 817 (900-2¾)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

PALESTINE, TEXAS

AL-871 (FAA)

NDB RWY 36

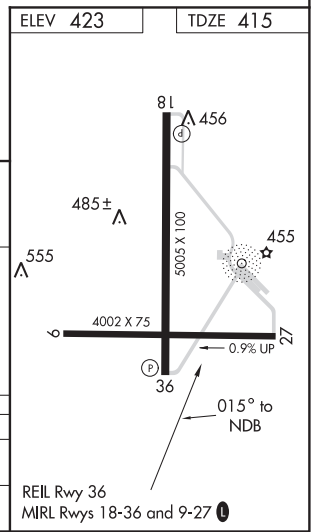
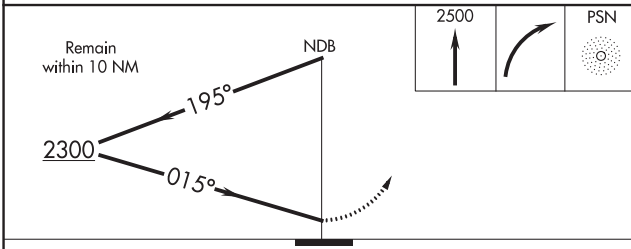
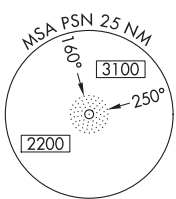
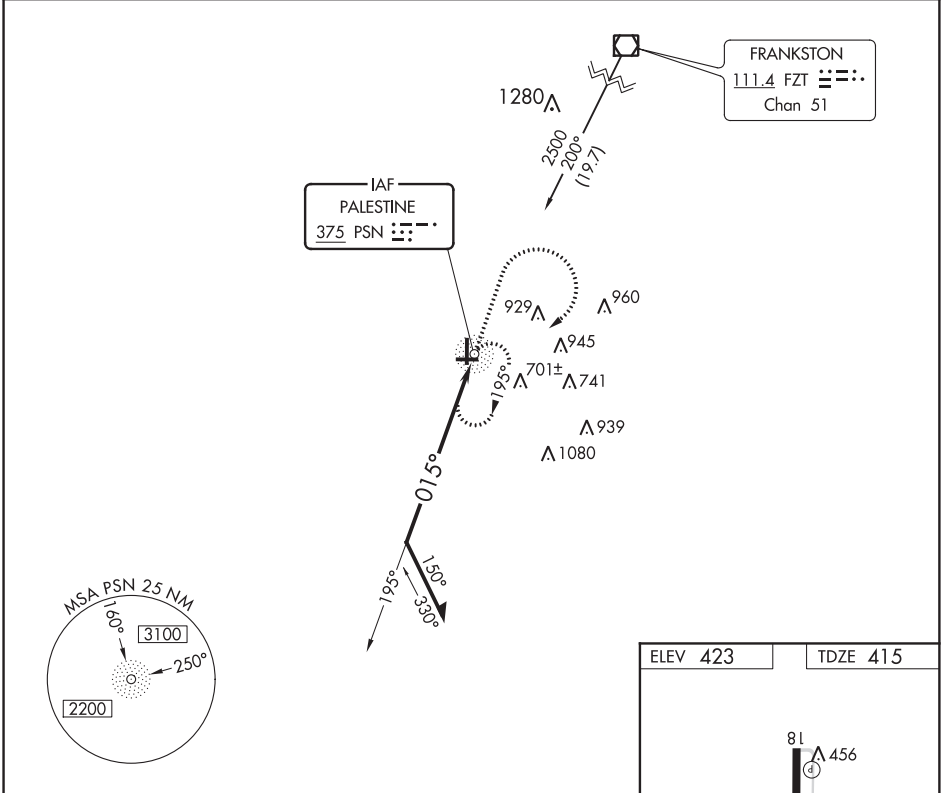
PALESTINE MUNI (PSN)

NDB PSN 375	APP CRS 015°	Rwy Idg TDZE Apt Elev	5005 415 423
-----------------------	------------------------	-----------------------------	---

⚠ If local altimeter setting not received, use C. David Campbell Field-Corsicana Muni altimeter setting and increase all MDAs 100 feet.

⚠ NA MISSED APPROACH: Climb to 2500 then right turn direct PSN NDB and hold.

AWOS-3 118.025	FORT WORTH CENTER 135.25 265.1	UNICOM 122.7 (CTAF)
--------------------------	--	-------------------------------



CATEGORY	A	B	C	D
S-36	1000-1 585 (600-1)		1000-1½ 585 (600-1½)	1000-1¾ 585 (600-1¾)
CIRCLING	1000-1 577 (600-1)	1040-1 617 (700-1)	1040-1¾ 617 (700-1¾)	1060-2 637 (700-2)

PALESTINE, TEXAS
Amdt 8 13178

31°47'N - 95°42'W

PALESTINE MUNI (PSN)

NDB RWY 36

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WAAS CH 53437 W14A	APP CRS 139°	Rwy ldg TDZE Apt Elev	5004 30 32
--	------------------------	-----------------------------	---------------------------------------

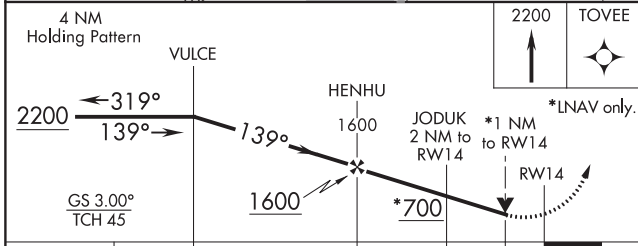
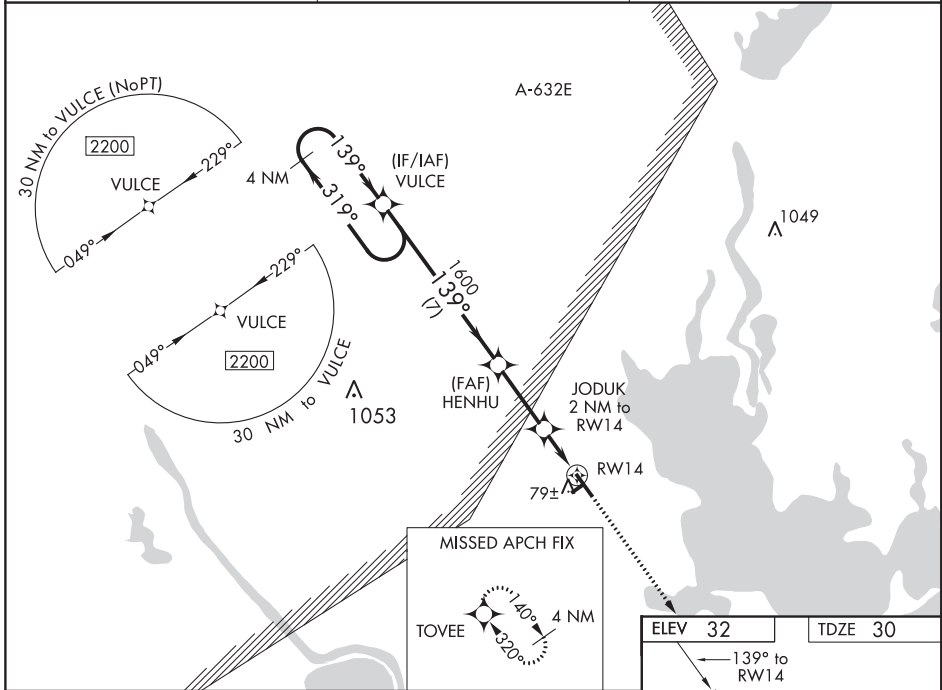
RNAV (GPS) RWY 14

CALHOUN COUNTY (PKV)

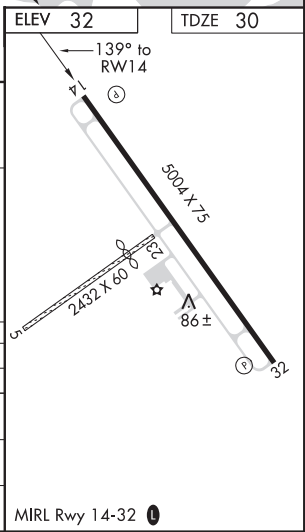
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). When local altimeter setting not received, use Victoria altimeter setting and increase all DA/MDA 60 feet and visibilities ¼ mile. DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA with Victoria altimeter setting. Helicopter visibility reduction below ¾ SM NA. Night landing: Rwy 32 NA. Circling NA to Rws 5 and 23.

MISSED APPROACH:
Climb to 2200 direct TOVEE and hold.

AWOS-3 118,275	HOUSTON CENTER 128,15 350,3	UNICOM 122.8 (CTAF) Ⓛ
--------------------------	---------------------------------------	--



		7 NM	2.8 NM	1 NM	1 NM	
CATEGORY	A	B	C	D		
LPV DA	280-¾	250 (300-¾)		NA		
LNAV/VNAV DA	280-¾	250 (300-¾)		NA		
LNAV MDA	440-1	410 (500-1)	440-1½ 410 (500-1½)	NA		
C CIRCLING	480-1 448 (500-1)	500-1 468 (500-1)	560-1½ 528 (600-1½)	NA		



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

PORT LAVACA, TEXAS

AL-5904 (FAA)

15176

WAAS CH 58037 W32A	APP CRS 319°	Rwy ldg TDZE 30 Apt Elev 32	5004
--	------------------------	---	-------------

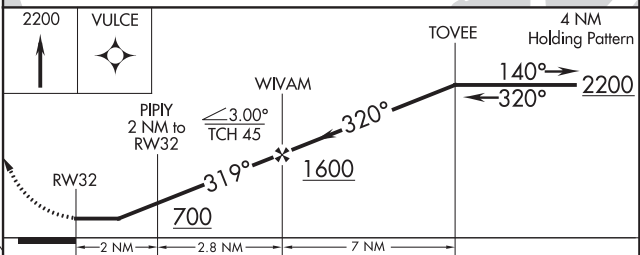
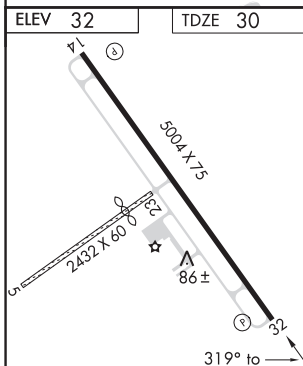
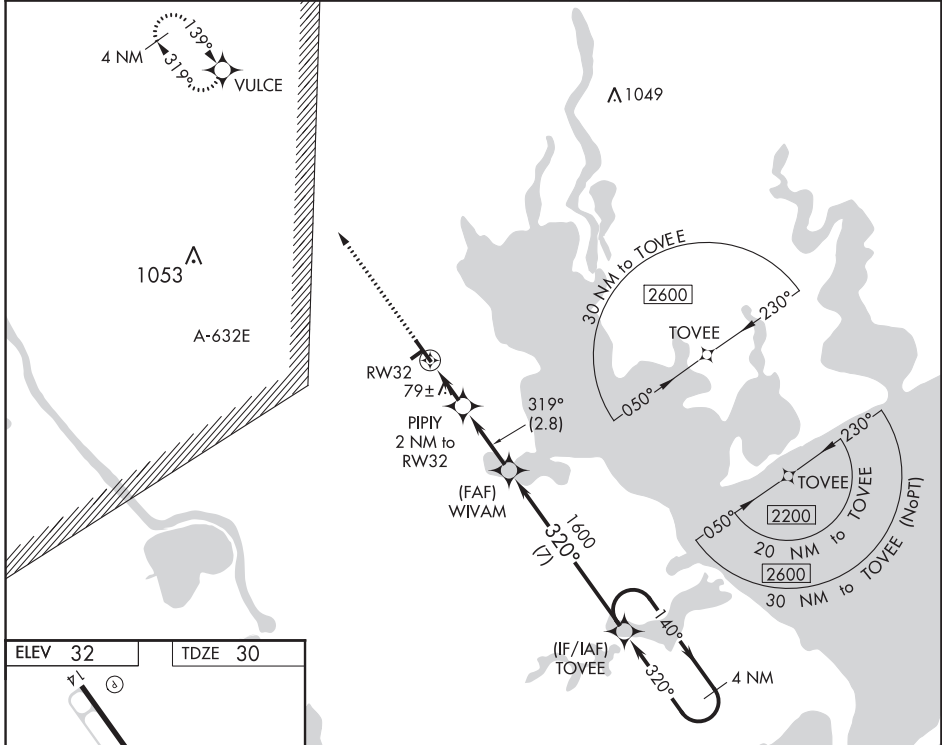
RNAV (GPS) RWY 32

CALHOUN COUNTY (PKV)

⚠ When local alimeter setting not received, use Victoria alimeter setting and increase all MDA 60 feet and increase LNAV Cat C and Circling Cat C visibilities ¼ mile.
DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.
Night landing: Rwy 32 NA. Circling NA to Rwy 5 and 23.

MISSED APPROACH: Climb to 2200 direct VULCE and hold.

AWOS-3 118.275	HOUSTON CENTER 128.15 350.3	UNICOM 122.8 (CTAF) 0
--------------------------	---------------------------------------	---------------------------------



CATEGORY	A	B	C	D
LP MDA	340-1	310 (400-1)		NA
LNAV MDA	400-1	370 (400-1)		NA
C CIRCLING	480-1 448 (500-1)	500-1 468 (500-1)	560-1½ 528 (600-1½)	NA

PORT LAVACA, TEXAS
Orig-A 25JUN15

28°39'N-96°41'W

RNAV (GPS) RWY 32

CALHOUN COUNTY (PKV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

PORT LAVACA, TEXAS

AL-5904 (FAA)

15288

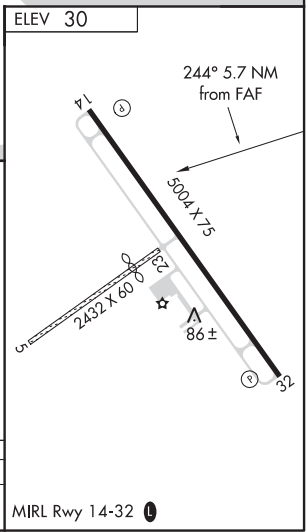
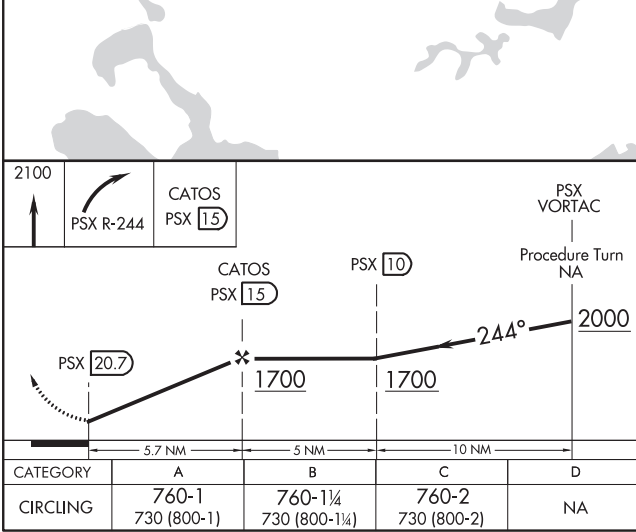
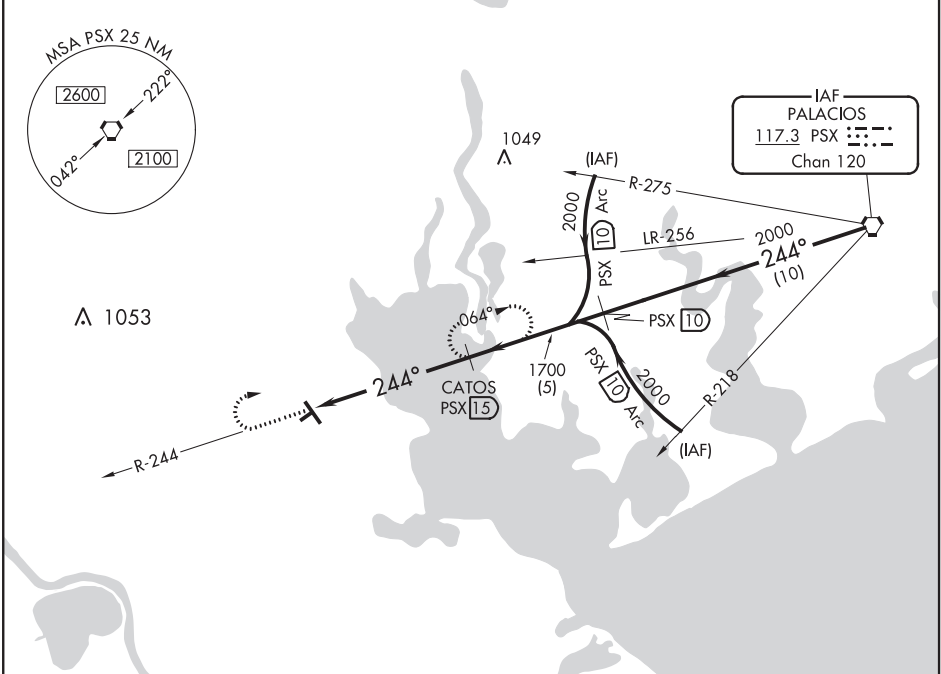
VORTAC PSX 117.3 Chan 120	APP CRS 244°	Rwy ldg TDZE Apt Elev	N/A N/A 30
--	------------------------	-----------------------------	---------------------------------------

VOR/DME-A
CALHOUN COUNTY (PKV)

NA When local altimeter setting not received, use Victoria altimeter setting. Circling NA to Rwy 5 and 23. Night landing: Rwy 32 NA. Helicopter visibility reduction below 1 SM 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 128.15 350.3	UNICOM 122.8 (CTAF) 0
--------------------------	---------------------------------------	--



PORT LAVACA, TEXAS
Amdt 4C 15OCT15

28° 39' N-96° 41' W
781

CALHOUN COUNTY (PKV)
VOR/DME-A

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

LOC/DME I-VCT 111.5 Chan 52	APP CRS 128°	Rwy Idg TDZE 115 Apt Elev 115	9111
---	------------------------	---	-------------

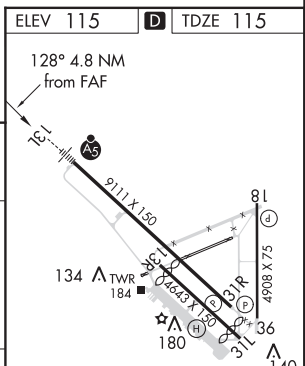
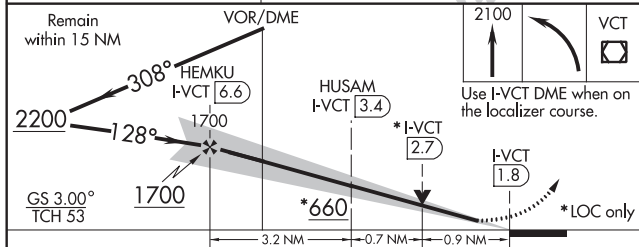
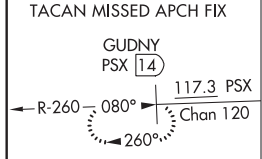
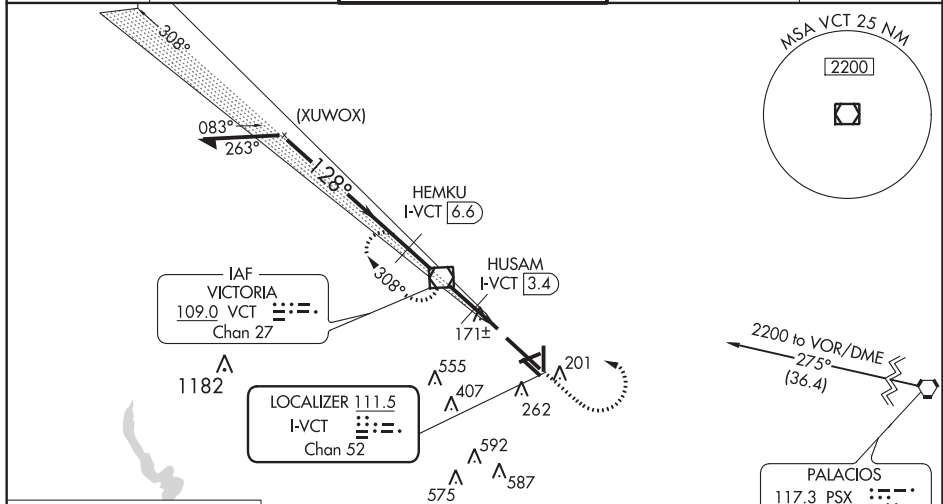
ILS or LOC/DME RWY 13L

VICTORIA RGNL (VCT)

NA When local altimeter setting not received, use Port Lavaca altimeter setting and increase all DA 58 feet and all MDA 60 feet. increase S-LOC 13L Cat C/D/E visibility to 3/8 mile. For inoperative MALS, increase S-ILS 13L Cat E visibility to 3/4 mile and S-LOC 13L Cat E visibility to 1 mile. VDP NA with Port Lavaca altimeter setting. For inoperative MALS, when using Port Lavaca altimeter setting, increase S-ILS 13L Cat E visibility to 3/4 mile and S-LOC 13L Cat C/D/E visibility to 1 1/8 mile.

MALS R
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/14 DME and hold W, RT, 080° inbound.)

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
------------------------	---------------------------------------	--	----------------------------------	------------------------



CATEGORY	A	B	C	D	E
S-ILS 13L		315-1/2	200 (200-1/2)		
S-LOC 13L		440-1/2	325 (400-1/2)		
CIRCLING	580-1	465 (500-1)	580-1 1/2 465 (500-1 1/2)	680-2 565 (600-2)	NA


MIRL Rwy 18-36
REIL Rwy 18 and 36
HIRL Rwy 13L-31R

WAAS CH 82709 W13A	APP CRS 128°	Rwy ldg 9111 TDZE 115 Apt Elev 115
--	------------------------	---

RNAV (GPS) RWY 13L

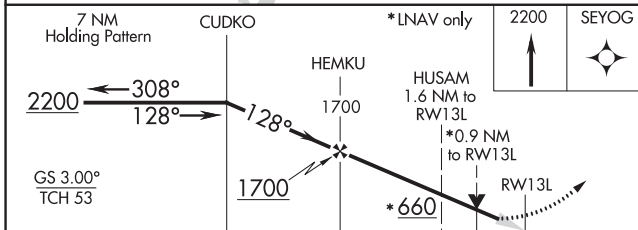
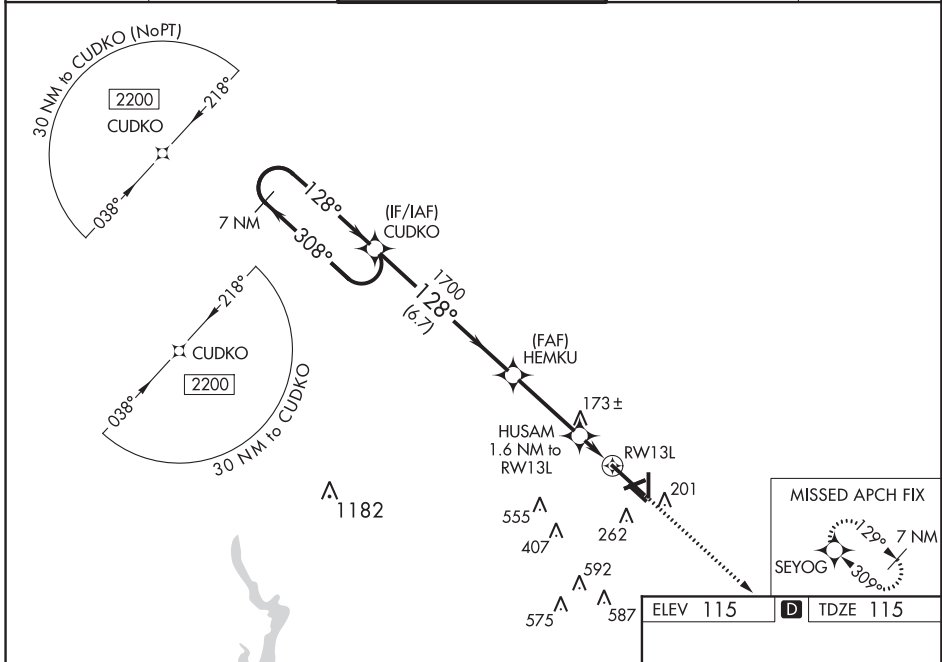
VICTORIA RGNL (VCT)

⚠ Baro-VNAV NA when using Port Lavaca altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). When local altimeter setting not received, use Port Lavaca altimeter setting and increase all DA 52 feet and all MDA 60 feet. Increase LNAV Cats C/D/E visibility to ½ mile. DME/DME RNP-0.3 NA. VDP NA with Port Lavaca altimeter setting. For inoperative MALSRS, increase LPV and LNAV/VNAV Cat E visibility to ¾ mile and LNAV Cat E visibility to 1 mile. For inoperative MALSRS when using Port Lavaca altimeter setting, increase LPV Cat E visibility to ¾ mile, LNAV/VNAV all Cats visibility to 1 mile and LNAV Cats C/D/E visibility to 1½ mile.

MALSRS 

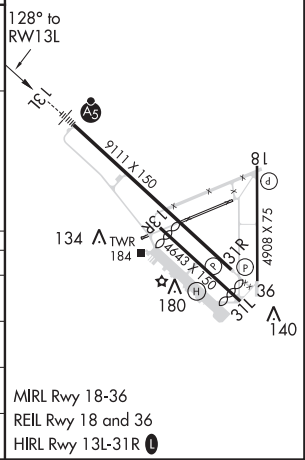
MISSED APPROACH:
Climb to 2200
direct SEYOG
and hold.

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	D TDZE 115
----------	-------------------

CATEGORY	A	B	C	D	E
LPV DA		315-½	200 (200-½)		
LNAV/VNAV DA		365-½	250 (300-½)		
LNAV MDA		440-½	325 (400-½)		
CIRCLING	580-1	465 (500-1)	580-1½ 465 (500-1½)	680-2 565 (600-2)	NA



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

VICTORIA, TEXAS

AL-438 (FAA)

15092

WAAS CH 82726 W31A	APP CRS 308°	Rwy ldg 9111 TDZE 106 Apt Elev 115
---------------------------------	------------------------	---

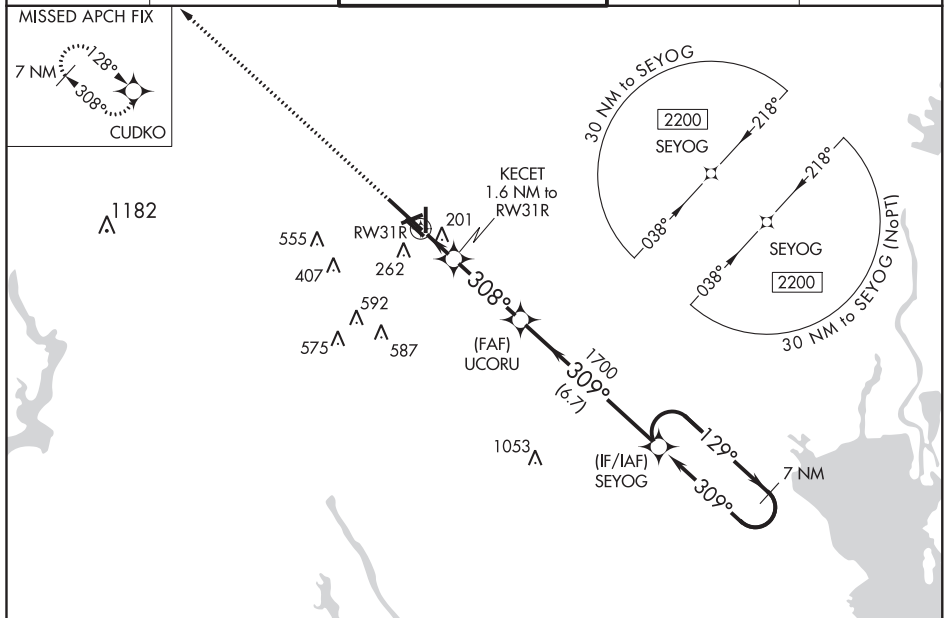
RNAV (GPS) RWY 31R

VICTORIA RGNL (VCT)

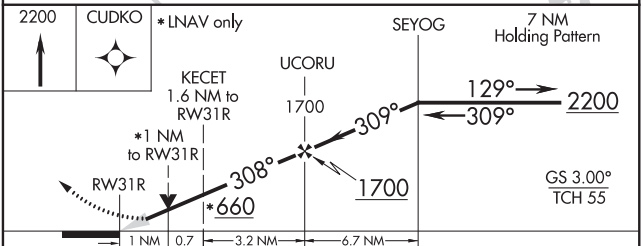
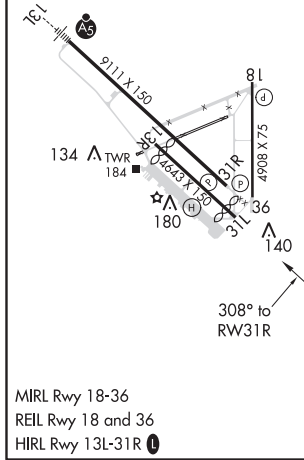
Baro-VNAV NA when using Port Lavaca altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). When local altimeter setting not received, use Port Lavaca altimeter setting and increase all DA 52 feet and all MDA 60 feet. Increase LNAV/VNAV all Cats visibility to 1 mile and LNAV Cats C/D/E visibility to 1½ mile. DME/DME RNP-0.3 NA. VDP NA with Port Lavaca altimeter setting.

MISSED APPROACH: Climb to 2200 direct CUDKO and hold.

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	D	TDZE 106
----------	----------	----------



CATEGORY	A	B	C	D	E
LPV DA		306-¾	200 (200-¾)		
LNAV/VNAV DA		374-7/8	268 (300-7/8)		
LNAV MDA		460-1	354 (400-1)		
CIRCLING	580-1	465 (500-1)	580-1½ 465 (500-1½)	680-2 565 (600-2)	NA

VICTORIA, TEXAS
Amdt 1A 02APR15

28°51'N-96°55'W

RNAV (GPS) RWY 31R

VICTORIA RGNL (VCT)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

VOR/DME VCT 109.0 Chan 27	APP CRS 307°	Rwy Idg TDZE Apt Elev	9111 106 115
--	------------------------	-----------------------------	---

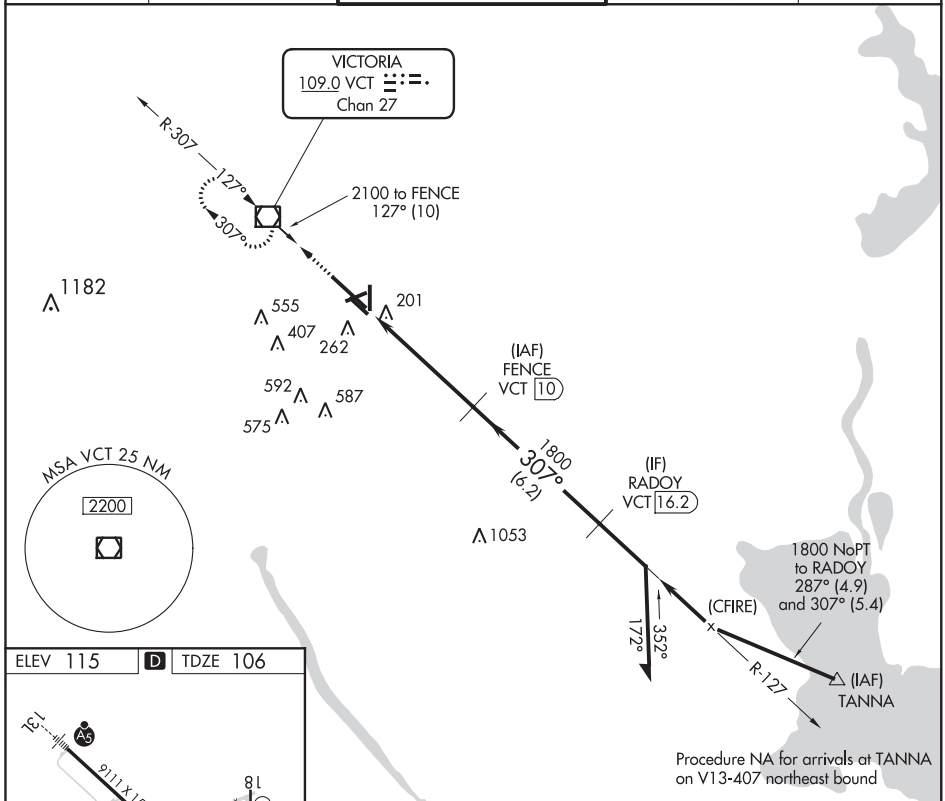
VOR/DME RWY 31R

VICTORIA RGNL (VCT)

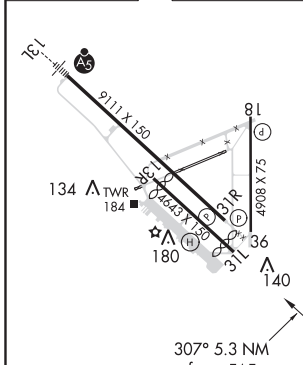
⚠ When local altimeter setting not received, use Port Lavaca altimeter setting and increase all MDA 60 feet. Increase S-31R Cats C/D/E visibility to 1½ mile. VDP NA when using Port Lavaca altimeter setting.

⚠ MISSED APPROACH: Climb to 2000 direct VCT VOR/DME and hold.

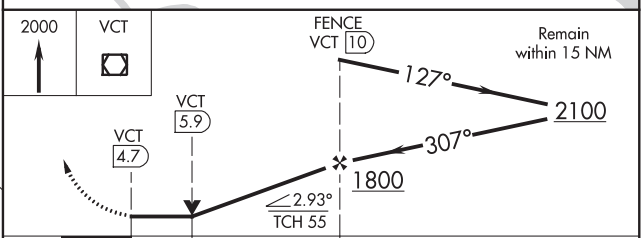
ATIS 119.025	HOUSTON CENTER 135.05 353.6	VICTORIA TOWER ★ 126.075 (CTAF) 0 257.95	GND CON 120.525 239.25	UNICOM 122.7
------------------------	---------------------------------------	---	----------------------------------	------------------------



ELEV 115	D	TDZE 106
----------	----------	----------



MIRL Rwy 18-36
REIL Rwy 18 and 36
HIRL Rwy 13L-31R **Ⓢ**



CATEGORY	A	B	C	D	E
S-31R	540-1	434 (500-1)	540-1¼ 434 (500-1¼)		
CIRCLING	580-1	465 (500-1)	580-1½ 465 (500-1½)	680-2 565 (600-2)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

VOR/DME VCT 109.0 Chan 27	APP CRS 127°	Rwy Idg TDZE Apt Elev	9111 115 115
--	------------------------	-----------------------------	---

VOR RWY 13L

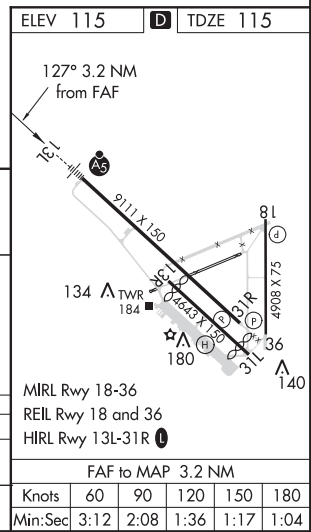
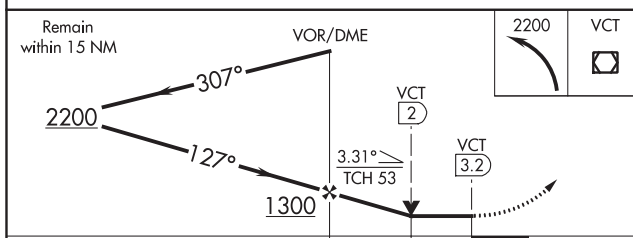
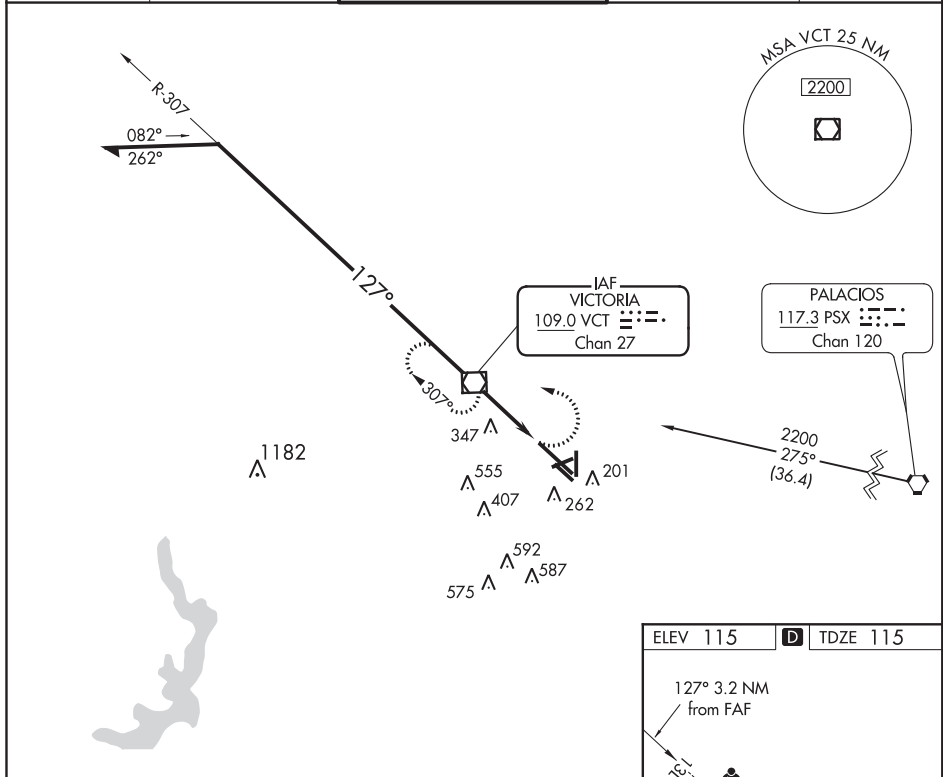
VICTORIA RGNL (VCT)

⚠ VDP NA when using Port Lavaca altimeter setting. When local altimeter setting not received, use Port Lavaca altimeter setting and increase all MDA 60 feet. Increase S-13L Cats C/D/E visibility 1½ mile. For inoperative MALSR, increase S-13L Cat C/D/E visibility to 1½ mile. For inoperative MALSR, when using Port Lavaca altimeter setting, increase S-13L Cat C/D/E visibility to 1½ mile.



MISSED APPROACH:
Climbing left turn to 2200 direct VCT VOR/DME and hold, continue climb-in-hold to 2200.

ATIS 119.025	HOUSTON CENTER 135.05 353.6	VICTORIA TOWER ★ 126.075 (CTAF) 0 257.95	GND CON 120.525 239.25	UNICOM 122.7
------------------------	---------------------------------------	--	----------------------------------	------------------------



CATEGORY	A	B	C	D	E
S-13L	600-½	485 (500-½)	600-1	485 (500-1)	
CIRCLING	600-1	485 (500-1)	600-1 ½ 485 (500-1 ½)	680-2 565 (600-2)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

AIRPORT DIAGRAM

AL-438 (FAA)

VICTORIA RGNL (VCT)
VICTORIA, TEXAS

ATIS
119.025
VICTORIA TOWER ★
126.075 257.95
GND CON
120.525 239.25

D

JANUARY 2015
ANNUAL RATE OF CHANGE
0.1° W

RWY 13L-31R
S-28, D-49, 2S-64, 2D-87
RWY 13R-31L
S-28, D-49, 2D-87
RWY 18-36
S-28, D-49, 2D-87

28°52'N

FIELD
ELEV
115

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

28°51'N

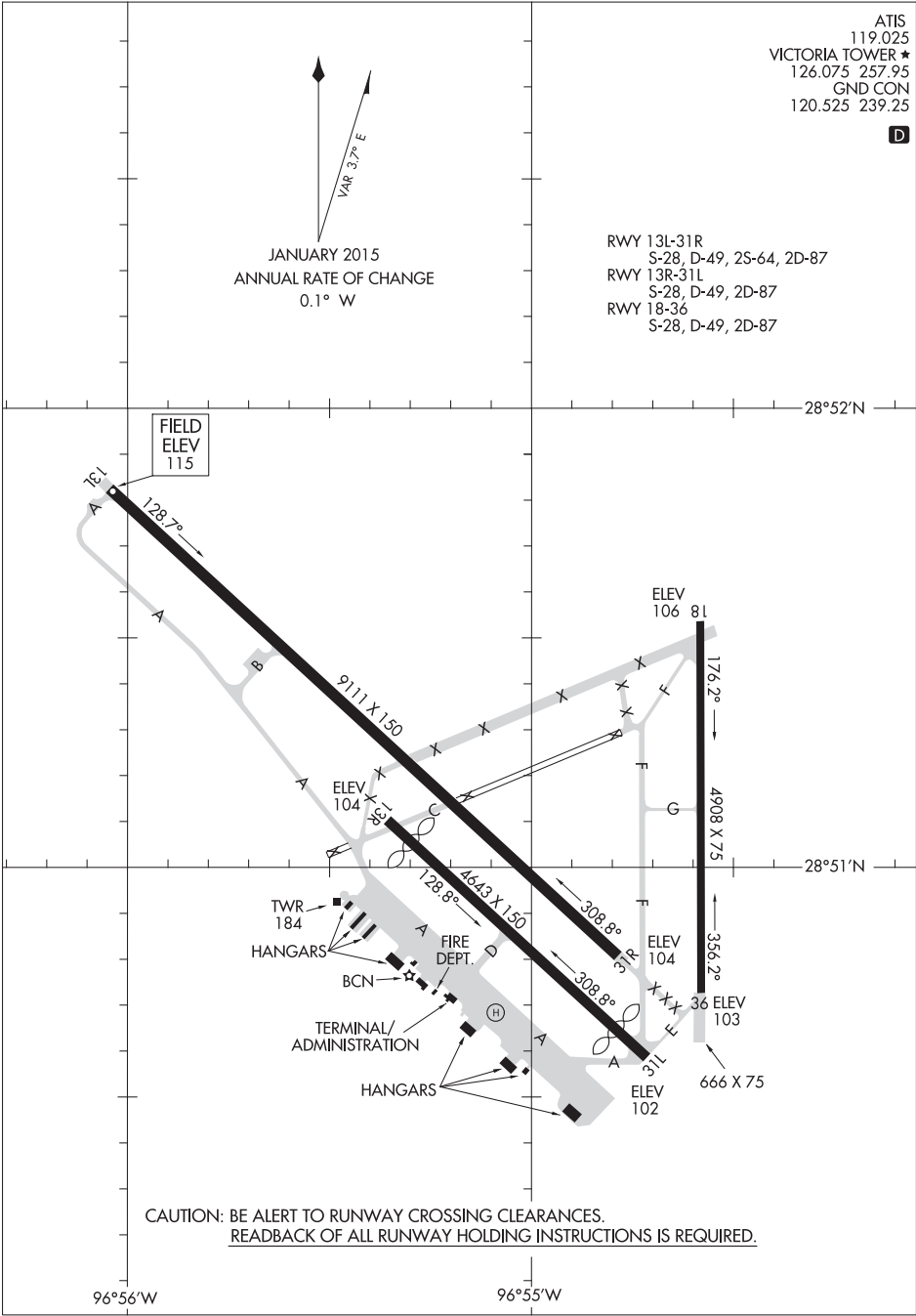
96°56'W

96°55'W

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

AIRPORT DIAGRAM

VICTORIA, TEXAS
VICTORIA RGNL (VCT)



WHARTON, TEXAS

AL-6032 (FAA)

16203

WAAS CH 77714 W14A	APP CRS 145°	Rwy Idg TDZE Apt Elev	5004 100 100
--	------------------------	-----------------------------	---

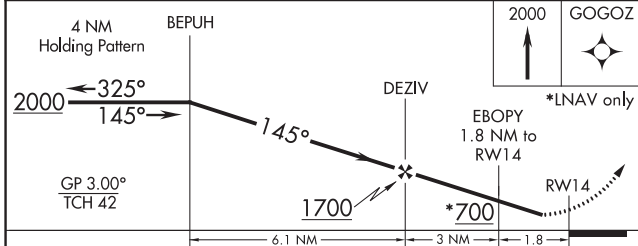
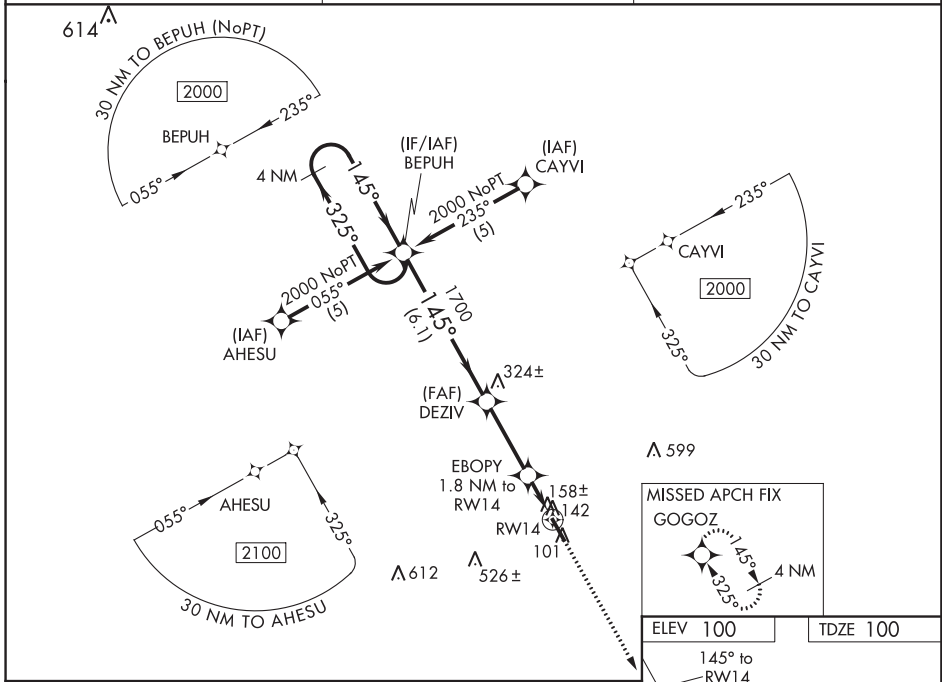
RNAV (GPS) RWY 14

WHARTON RGNL (A.R.M)

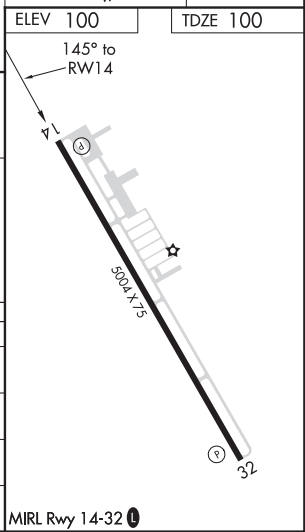
⚠ Baro-VNAV NA when using Victoria altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.
⚠ Visibility reduction by helicopters NA. When local altimeter setting not received, use Victoria altimeter setting and increase all DA 110 feet and all MDA 120 feet, increase LPV visibility ½ mile all Cats, LNAV/VNAV visibility ¼ mile all Cats, LNAV Cat C visibility ¼ mile.

MISSED APPROACH:
Climb to 2000 direct GOGOZ and hold.

AWOS-3 118.475	HOUSTON CENTER 128.6 360.8	UNICOM 122.7 (CTAF) ①
--------------------------	--------------------------------------	---------------------------------



CATEGORY	A	B	C	D
LPV DA	396-1	296 (300-1)		NA
LNAV/VNAV DA	428-1¼	328 (400-1¼)		NA
LNAV MDA	420-1	320 (400-1)		NA
CIRCLING	500-1 400 (400-1)	560-1 460 (500-1)	560-1½ 460 (500-1½)	NA



SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WHARTON, TEXAS
Orig 27AUG09

29°15'N-96°09'W

WHARTON RGNL (A.R.M) RNAV (GPS) RWY 14

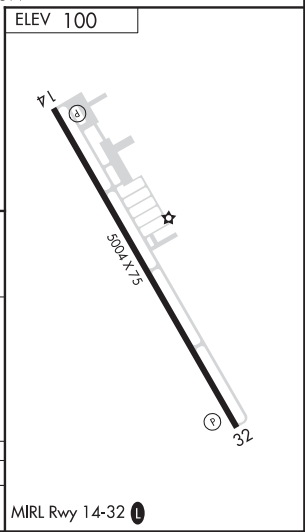
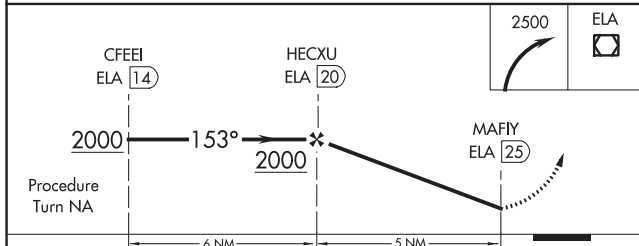
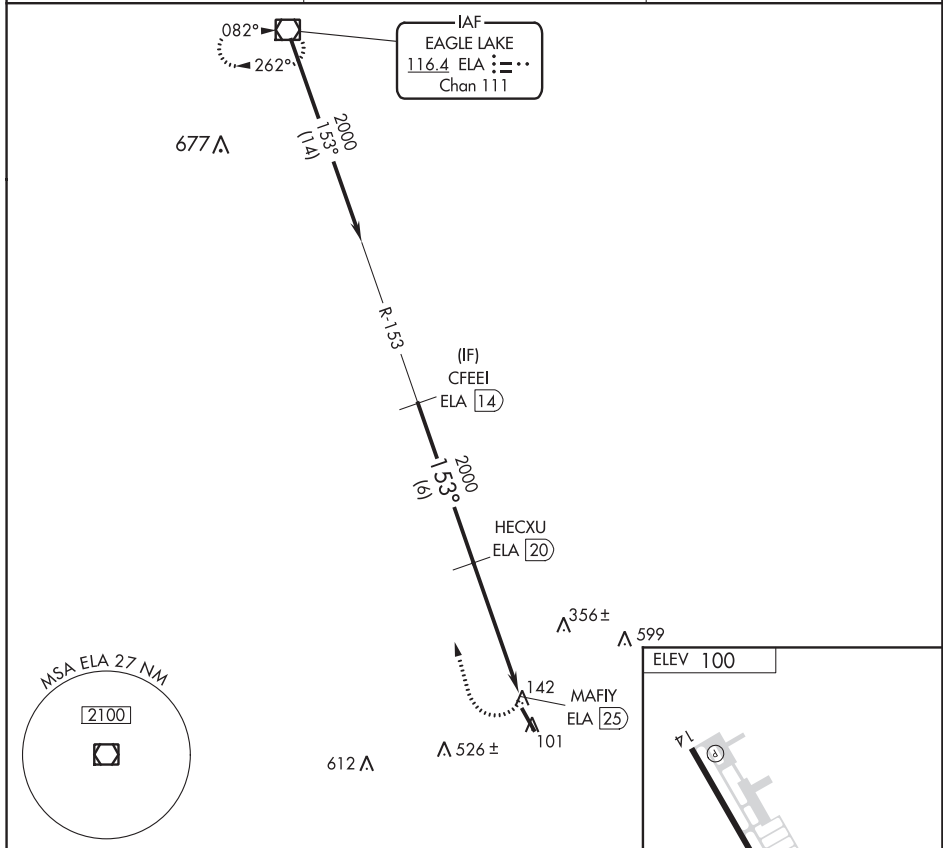
VOR/DME ELA 116.4 Chan 111	APP CRS 153°	Rwy Idg TDZE Apt Elev	N/A N/A 100
---	------------------------	-----------------------------	--

VOR/DME-A
WHARTON RGNL (A.R.M)

⚠ When local altimeter setting not received, use Victoria altimeter setting and increase all MDA 120 feet, increase Circling Cat C visibility ¼ mile.

⚠ MISSED APPROACH: Climbing right turn to 2500 direct ELA VOR/DME and hold.

AWOS-3 118.475	HOUSTON CENTER 128.6 360.8	UNICOM 122.7 (CTAF) Ⓛ
--------------------------	--------------------------------------	--



CATEGORY	A	B	C	D
CIRCLING	640-1 540 (600-1)	640-1¼ 540 (600-1¼)	640-1½ 540 (600-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

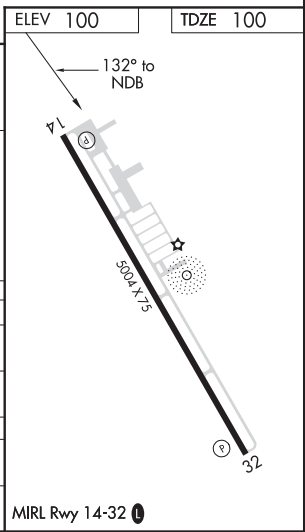
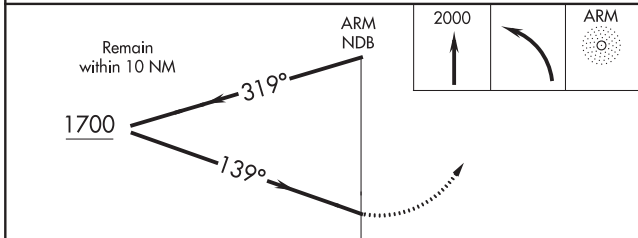
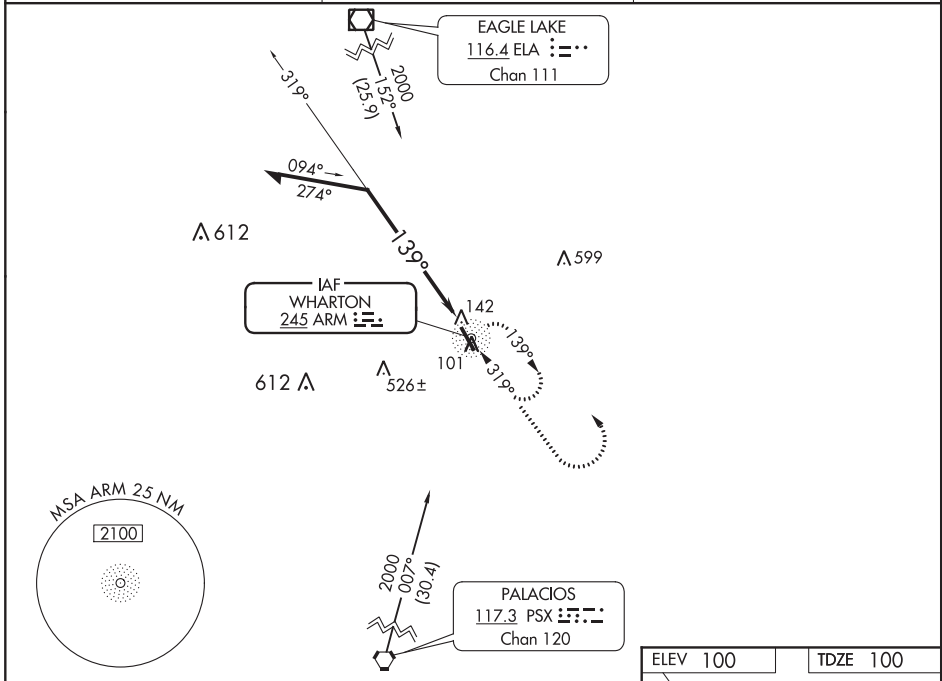
NDB ARM 245	APP CRS 139°	Rwy Idg TDZE Apt Elev	5004 100 100
-----------------------	------------------------	-----------------------------	---

NDB RWY 14
WHARTON RGNL (ARM)

▼ Obtain local altimeter setting on CTAF; when
▲ NA not received use Victoria altimeter setting.

MISSED APPROACH: Climb to 2000 then left turn to ARM NDB and hold.

AWOS-3 118.475	HOUSTON CENTER 128.6 360.8	UNICOM 122.7 (CTAF) ①
--------------------------	--------------------------------------	--



CATEGORY	A	B	C	D
S-14	560- 1	460 (500-1)	560- 1¼ 460 (500-1¼)	NA
CIRCLING	560- 1	460 (500-1)	560- 1½ 460 (500-1½)	NA
VICTORIA ALTIMETER SETTING MINIMUMS				
S-14	660- 1	560 (600-1)	660- 1½ 560 (600-1½)	NA
CIRCLING	660- 1	560 (600-1)	660- 1½ 560 (600-1½)	NA

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WHARTON, TEXAS

AL-6032 (FAA)

16203

NDB ARM 245	APP CRS 332°	Rwy Idg TDZE Apt Elev	5004 100 100
-----------------------	------------------------	-----------------------------	---

NDB RWY 32
WHARTON RGNL (A.R.M)

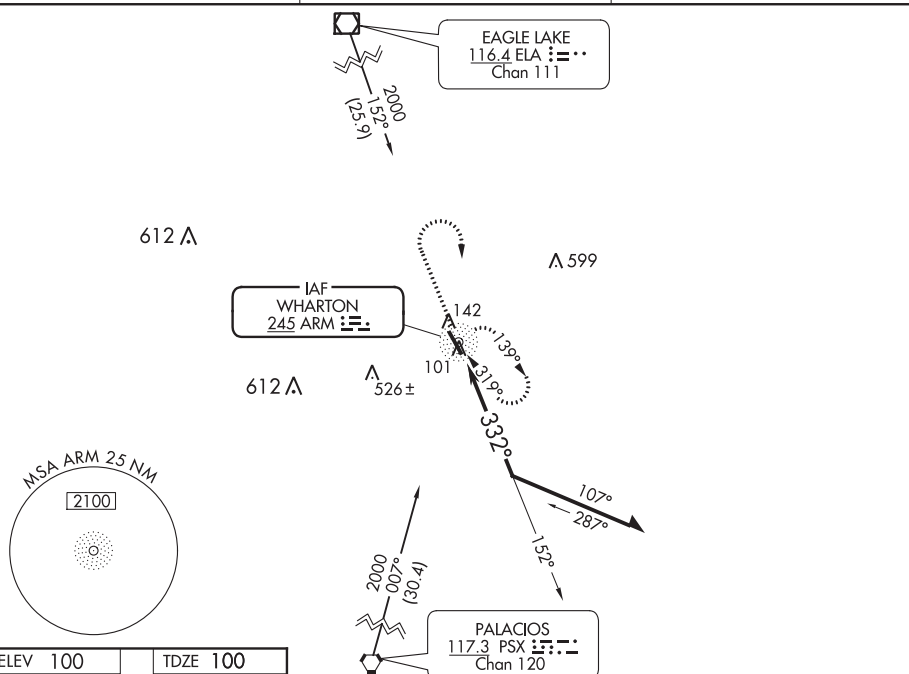
▼ Obtain local altimeter setting on CTAF; when
▲ NA not received use Victoria Regional altimeter setting.

MISSED APPROACH: Climb to 2000
then right turn direct ARM NDB and hold.

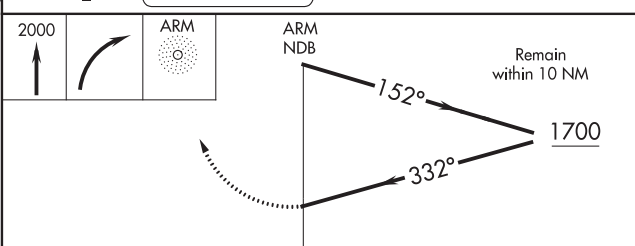
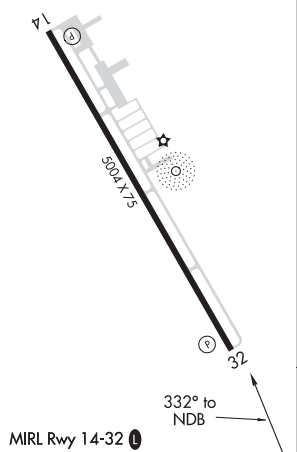
AWOS-3
118.475

HOUSTON CENTER
128.6 360.8

UNICOM
122.7 (CTAF) 0



ELEV 100 TDZE 100



CATEGORY	A	B	C	D
S-32	560-1	460 (500-1)	560-1¼ 460 (500-1¼)	NA
CIRCLING	560-1	460 (500-1)	560-1½ 460 (500-1½)	NA
VICTORIA ALTIMETER SETTING MINIMUMS				
S-32	680-1	580 (600-1)	680-1½ 580 (600-1½)	NA
CIRCLING	680-1	580 (600-1)	680-1½ 580 (600-1½)	NA

WHARTON, TEXAS
Orig 08OCT98

29°15'N-96°09'W

WHARTON RGNL (A.R.M)
NDB RWY 32

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

(BLTWY3.BLTWY) 16315

SL-6032 (FAA)

WHARTON RGNL (A.R.M)

WHARTON, TEXAS

BLTWY THREE DEPARTURE (RNAV)

HOUSTON CENTER
128.6 360.8

**TOP ALTITUDE:
4000**

△ CRIED

12000
*2100
(46)

△ BLTWY

6600
*2000
346°
(6)

△ LITLD

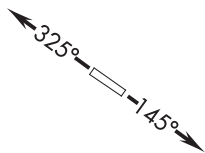
5400
*1900
345°
(12)

◆ DREMR

TAKEOFF MINIMUMS

Rwys 14, 32: Standard with minimum
climb of 500' per NM to 600.

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



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

NOTE: Chart not to scale.

BLTWY THREE DEPARTURE (RNAV)

(BLTWY3.BLTWY) 10NOV16

WHARTON, TEXAS

WHARTON RGNL (A.R.M)

BLTWY THREE DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 145° or as assigned by ATC, expect RADAR vectors to DREMR, thence

TAKEOFF RWY 32: Climb on heading 325° or as assigned by ATC, expect RADAR vectors to DREMR, thence

. . . . on track 345° to LITLD, then on track 346° to BLTWY, then on (transition).
Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

CRIED TRANSITION (BLTWY3.CRIED)

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, 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

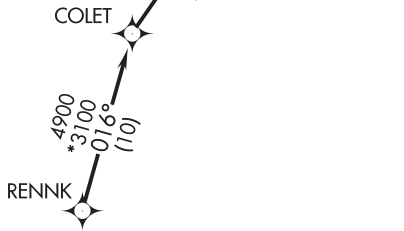
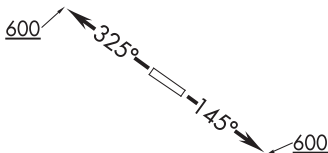
AWOS-3
118.475
CTAF
122.7
HOUSTON CENTER
128.6 360.8

**TOP ALTITUDE:
4000**

TPAKK

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 600.



(NARRATIVE ON FOLLOWING PAGE)

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 145° to 600, expect RADAR vectors to RENNK, thence

TAKEOFF RWY 32: Climb on heading 325° to 600, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

TPAKK TRANSITION (INDIE4.TPAKK): For non GPS equipped aircraft TNV DME must be operational.

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, 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

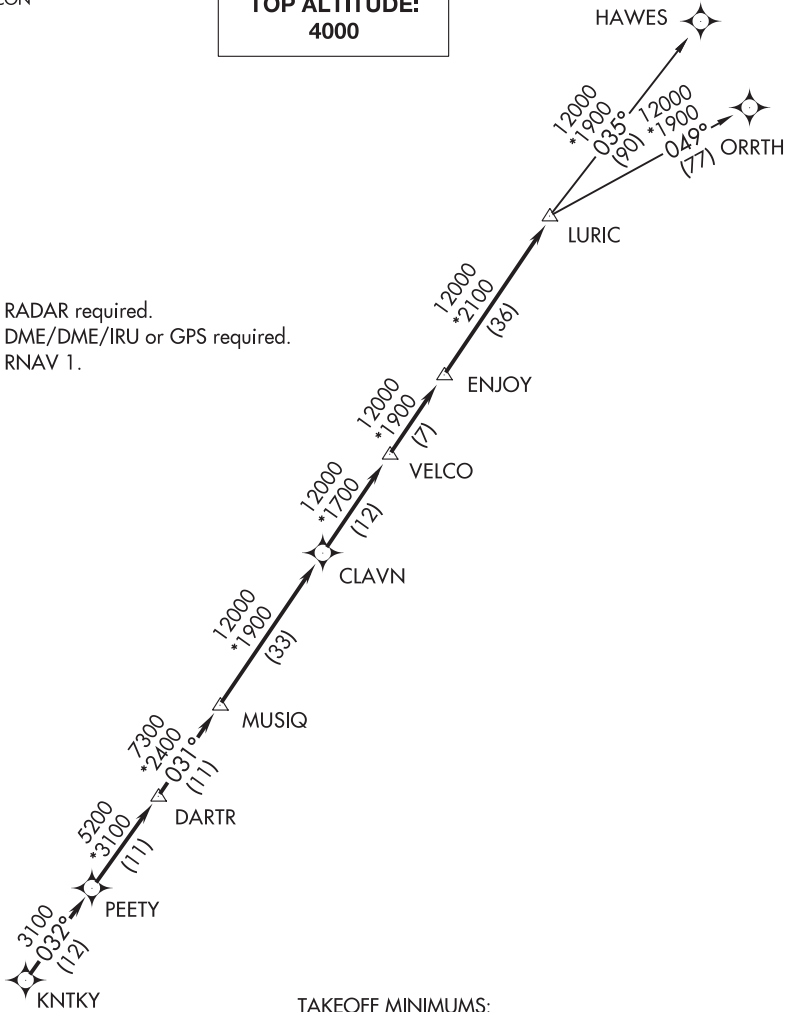
SC-5, 10 NOV 2016 to 05 JAN 2017

LURIC FOUR DEPARTURE (RNAV)

HOUSTON DEP CON
128.6 360.8

**TOP ALTITUDE:
4000**

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 600.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LURIC FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 145° to 600, expect RADAR vectors to KNTKY, thence. . . .

TAKEOFF RWY 32: Climb heading 325° to 600, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

HAWES TRANSITION (LURIC4.HAWES)

ORRTH TRANSITION (LURIC4.ORRTH)

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, 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)

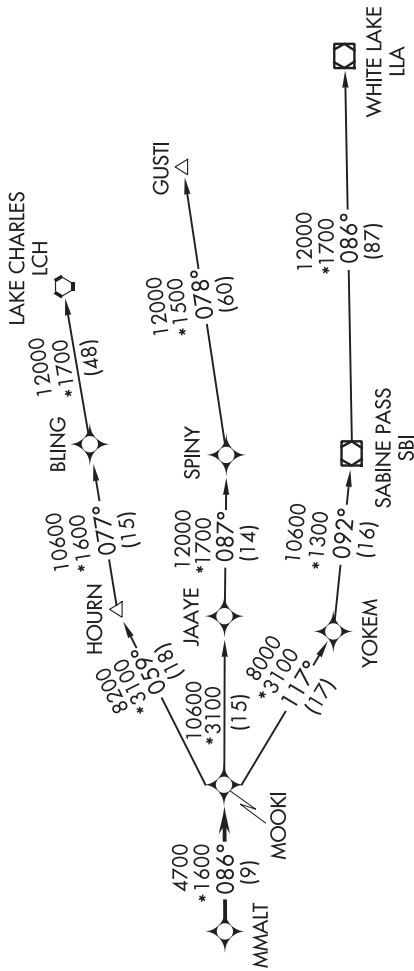
2102 NAV 9102 VON 01 05 JAN 2017

HOUSTON CENTER
128.6 360.8

**TOP ALTITUDE:
4000**

TAKEOFF MINIMUMS:

Rwys 14, 32 Standard with minimum climb of 500' per NM to 600.

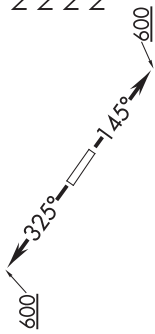


NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

NOTE: RNAV 1.

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



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

MMALT TWO DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb on heading 145° to 600, expect RADAR vectors to MMALT, thence

TAKEOFF RWY 32: Climb on heading 325° to 600, expect RADAR vectors to MMALT, thence

. . . . on track 086° to MOOKI, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMALT2.GUSTI):

LAKE CHARLES TRANSITION (MMALT2.LCH):

WHITE LAKE TRANSITION (MMALT2.LLA):

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, 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

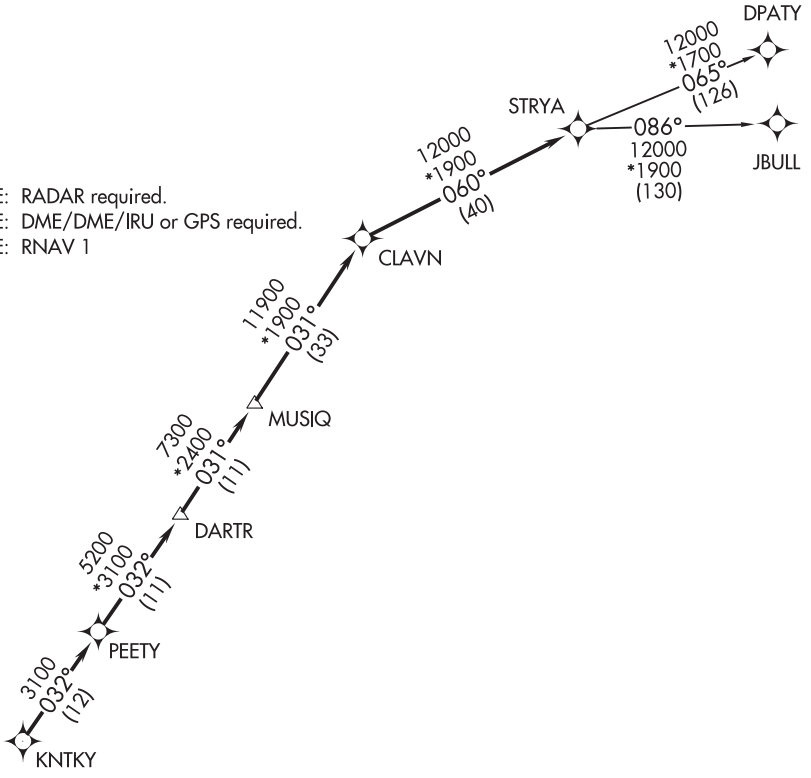
SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)

HOUSTON DEP CON
128.6 360.8

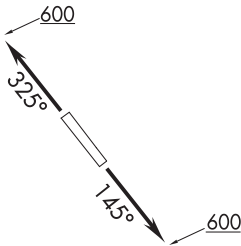
**TOP ALTITUDE:
4000**

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 600.



NOTE: Chart not to scale.

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

STRYA FOUR DEPARTURE (RNAV)

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STRYA FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 145° to 600, expect RADAR vectors to KNTKY, thence

TAKEOFF RWY 32: Climb heading 325° to 600, expect RADAR vectors to KNTKY, thence

. . . . on track 032° to PEETY, 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DPATY TRANSITION (STRYA4.DPATY)

JBULL TRANSITION (STRYA4.JBULL)

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, 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.

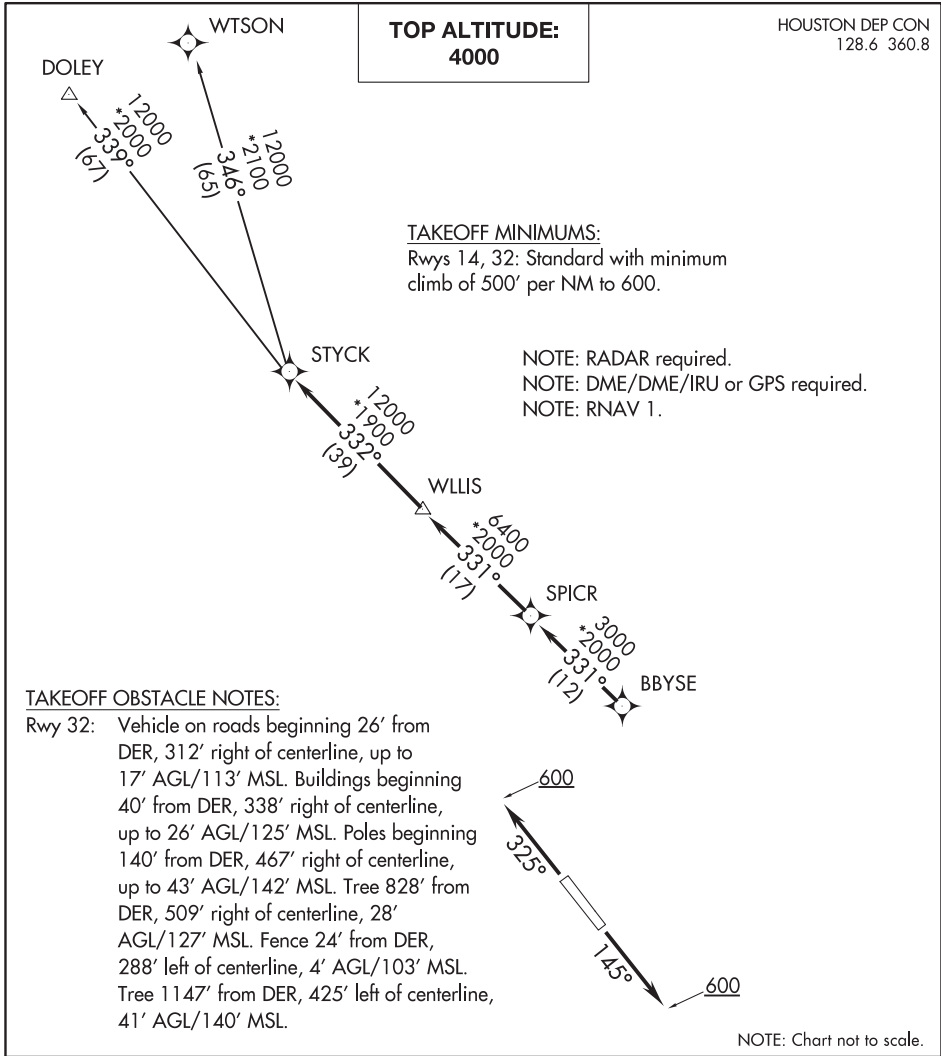
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

STYCK FOUR DEPARTURE (RNAV)

HOUSTON DEP CON
128.6 360.8

**TOP ALTITUDE:
4000**



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, 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.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 145° to 600, expect RADAR vectors to BBYSE, thence. . . .

TAKEOFF RWY 32: Climb heading 325° to 600, expect 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 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

DOLEY TRANSITION (STYCK4.DOLEY)

WTSON TRANSITION (STYCK4.WTSON)

STYCK FOUR DEPARTURE (RNAV)

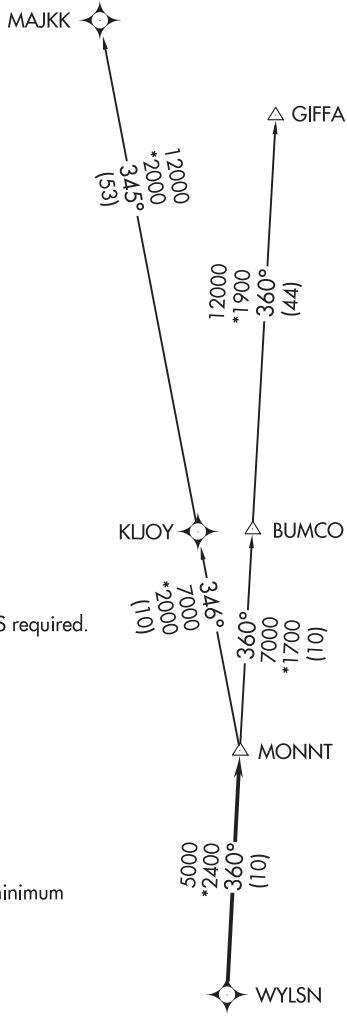
SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

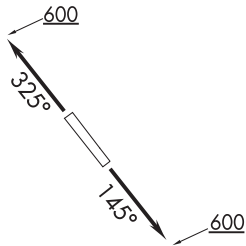
HOUSTON DEP CON
128.6 360.8

**TOP ALTITUDE:
4000**



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

TAKEOFF MINIMUMS:
 Rwy's 14, 32: Standard with minimum
 climb of 500' per NM to 600.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

WYLSN FOUR DEPARTURE (RNAV)

WYLSN FOUR DEPARTURE (RNAV)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 14: Climb heading 145° to 600, expect RADAR vectors to WYLSN, thence. . . .

TAKEOFF RWY 32: Climb heading 325° to 600, expect RADAR vectors to WYLSN, thence. . . .

. . . .on track 360° to MONNT, then on (transition). Maintain 4000 or as assigned by ATC. Expect filed altitude 10 minutes after departure.

GIFFA TRANSITION (WYLSN4.GIFFA)

MAJKK TRANSITION (WYLSN4.MAJKK)

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, 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.

SC-5, 10 NOV 2016 to 05 JAN 2017

SC-5, 10 NOV 2016 to 05 JAN 2017

INTENTIONALLY

LEFT

BLANK

CLIMB/DESCENT TABLE 10042

INSTRUMENT TAKEOFF OR APPROACH PROCEDURE CHARTS RATE OF CLIMB/DESCENT TABLE

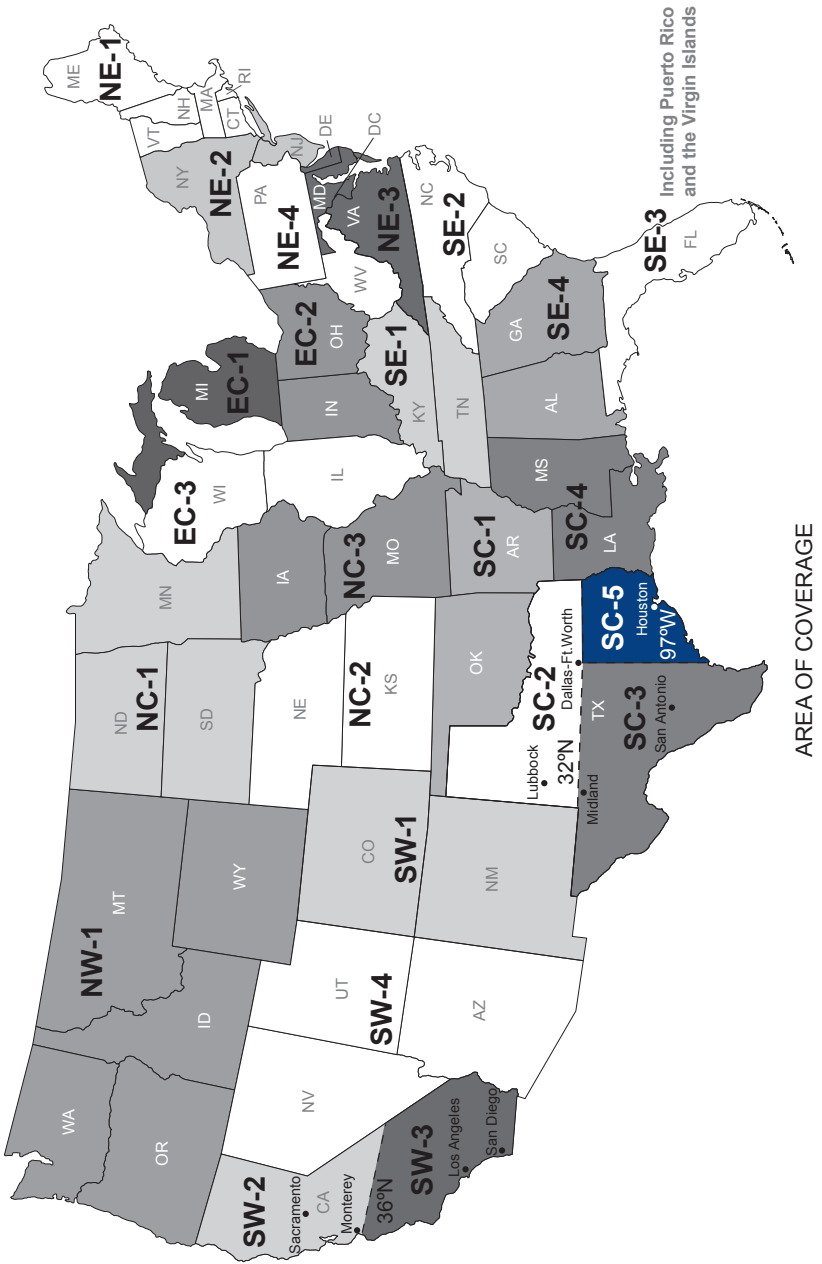
(ft. per min)

A rate of climb/descent table is provided for use in planning and executing climbs or descents under known or approximate ground speed conditions. It will be especially useful for approaches when the localizer only is used for course guidance. A best speed, power, altitude combination can be programmed which will result in a stable glide rate and altitude favorable for executing a landing if minimums exist upon breakout. Care should always be exercised so that minimum descent altitude and missed approach point are not exceeded.

CLIMB/ DESCENT ANGLE (degrees and tenths)	ft/NM	GROUND SPEED (knots)											
		60	90	120	150	180	210	240	270	300	330	360	
2.0	210	210	320	425	530	635	743	850	955	1060	1165	1275	
2.5	265	265	400	530	665	795	930	1060	1195	1325	1460	1590	
VERTICAL PATH ANGLE	2.7	287	287	430	574	717	860	1003	1147	1290	1433	1576	1720
	2.8	297	297	446	595	743	892	1041	1189	1338	1486	1635	1783
	2.9	308	308	462	616	770	924	1078	1232	1386	1539	1693	1847
	3.0	318	318	478	637	797	956	1115	1274	1433	1593	1752	1911
	3.1	329	329	494	659	823	988	1152	1317	1481	1646	1810	1975
	3.2	340	340	510	680	850	1020	1189	1359	1529	1699	1869	2039
	3.3	350	350	526	701	876	1052	1227	1402	1577	1752	1927	2103
	3.4	361	361	542	722	903	1083	1264	1444	1625	1805	1986	2166
3.5	370	370	555	745	930	1115	1300	1485	1670	1860	2045	2230	
4.0	425	425	640	850	1065	1275	1490	1700	1915	2125	2340	2550	
4.5	480	480	715	955	1195	1435	1675	1915	2150	2390	2630	2870	
5.0	530	530	795	1065	1330	1595	1860	2125	2390	2660	2925	3190	
5.5	585	585	880	1170	1465	1755	2050	2340	2635	2925	3220	3510	
6.0	640	640	960	1275	1595	1915	2235	2555	2875	3195	3510	3830	
6.5	690	690	1040	1385	1730	2075	2425	2770	3115	3460	3805	4155	
7.0	745	745	1120	1490	1865	2240	2610	2985	3355	3730	4105	4475	
7.5	800	800	1200	1600	2000	2400	2800	3200	3600	4000	4400	4800	
8.0	855	855	1280	1710	2135	2560	2990	3415	3845	4270	4695	5125	
8.5	910	910	1360	1815	2270	2725	3180	3630	4085	4540	4995	5450	
9.0	960	960	1445	1925	2405	2885	3370	3850	4330	4810	5295	5775	
9.5	1015	1015	1525	2035	2540	3050	3560	4065	4575	5085	5590	6100	
10.0	1070	1070	1605	2145	2680	3215	3750	4285	4820	5355	5890	6430	

CLIMB/DESCENT TABLE 10042

U.S. TERMINAL PUBLICATION VOLUMES



FAA Product ID: BTPPSC5



NSN 7641015059590

NGA REF. NO. OK-10-2859 TERMXFAABTTPPSC5



EFF. DATE 16315