

# AIRPORT DIAGRAM

AL-5537 (FAA)

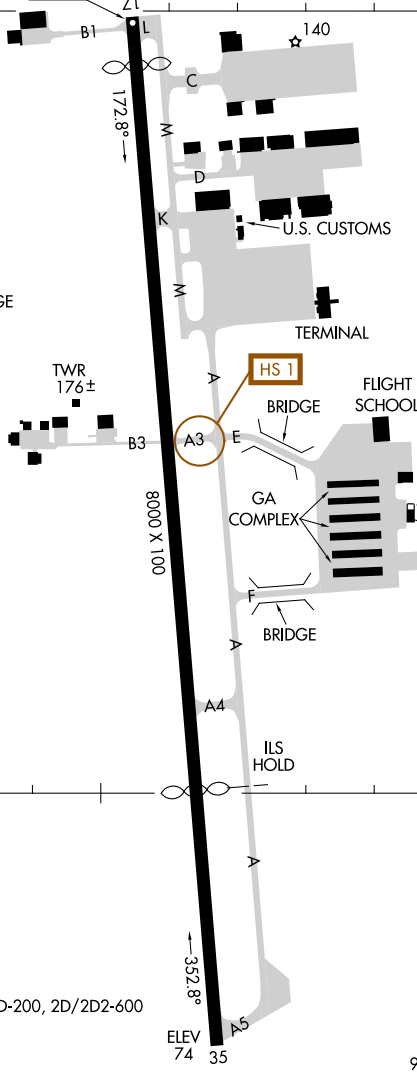
SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

ATIS ★  
 118.125  
 SUGAR LAND TOWER ★  
 118.65  
 GND CON  
 121.4  
 CLNC DEL  
 121.4  
 119.25 (When Tower Closed)

FIELD  
ELEV  
81

29°38'N

VAR 2.3° E  
 JANUARY 2020  
 ANNUAL RATE OF CHANGE  
 0.1° W



8000 X 100

ELEV 74

29°37'N

403  
 ▲  
 RWY 17-35  
 S-80, D-120, 2S-152, 2D-200, 2D/2D2-600

95°40'W

95°39'W

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

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

# AIRPORT DIAGRAM

HOUSTON, TEXAS  
SUGAR LAND RGNL (SGR)

ALEXANDRIA THREE DEPARTURE  
(AEX3.AEX) 07OCT21

HOUSTON, TEXAS  
SUGAR LAND RGNL (SGR)

ATIS ★  
118.125  
CLNC DEL  
121.4  
CLNC DEL  
119.25 (when twr closed)  
GND CON  
121.4  
SUGARLAND TOWER ★  
118.65 (CTAF)  
HOUSTON DEP CON  
123.8 257.7

LUFKIN  
112.1 LFK  
Chan 58

COSGO  
N31°13.26'  
W93°27.16'

ALEXANDRIA  
116.1 AEX  
Chan 108  
N31°15.40'  
W92°30.06'

VELCO  
N31°10.67'  
W94°24.55'  
10000

V212  
J50

V212  
J50

TOP ALTITUDE:  
ASSIGNED BY ATC

FL190  
095°  
(187)

MC COMB  
116.7 MCB  
Chan 114  
N31°18.27'  
W90°15.49'  
L-21-22, H-6

CRESTVIEW  
115.9 CEW  
Chan 106  
N30°49.57'  
W86°40.75'  
L-21-22, H-6

POLK  
108.4 FXU  
Chan 116

DAISETTA  
116.9 DAS  
Chan 116

HUMBLE  
116.6 IAH  
Chan 113

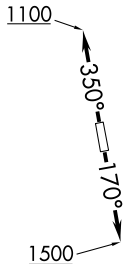
MUSIQ  
N30°33.17'  
W94°53.53'

DARTR  
N30°24.19'  
W95°00.41'

RAECN  
N30°05.08'  
W95°14.95'

NOTE: RADAR required.  
NOTE: The following TRANSITIONS are ATC assigned only. Do not file.  
CRESTVIEW TRANSITION: (For aircraft being weather rerouted to join a jet route off CEW VORTAC or overflying CEW VORTAC to join a direct route).  
MC COMB TRANSITION: (For aircraft being weather rerouted to join a jet route off MCB VORTAC or overflying MCB VORTAC to join a direct route).

TAKEOFF MINIMUMS  
Rwys 17, 35: Standard.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

(AEX3.AEX) 21280  
ALEXANDRIA THREE DEPARTURE

AL-5537 (FAA)  
SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

# ALEXANDRIA THREE DEPARTURE



## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

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

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

MC COMB TRANSITION (AEX3.MCB): From over AEX VORTAC on AEX R-085 and MCB R-266 to MCB VORTAC.

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SC-5, 22 FEB 2024 to 21 MAR 2024

# BLTWY SEVEN DEPARTURE (RNAV)

SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

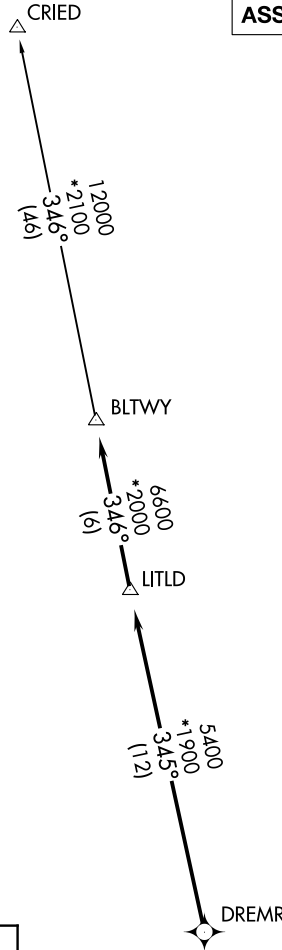
ATIS★  
 118.125  
 CLNC DEL  
 121.4  
 CLNC DEL  
 119.25 (when twr closed)  
 GND CON  
 121.4  
 SUGARLAND TOWER★  
 118.65 (CTAF)  
 HOUSTON DEP CON  
 123.8 257.7

**TOP ALTITUDE:  
ASSIGNED BY ATC**

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.



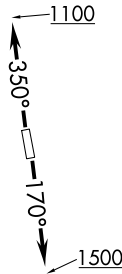
### DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 for RADAR vectors to DREMR, then . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 for RADAR vectors to DREMR, then . . .

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

CRIED TRANSITION (BLTWY7.CRIED)



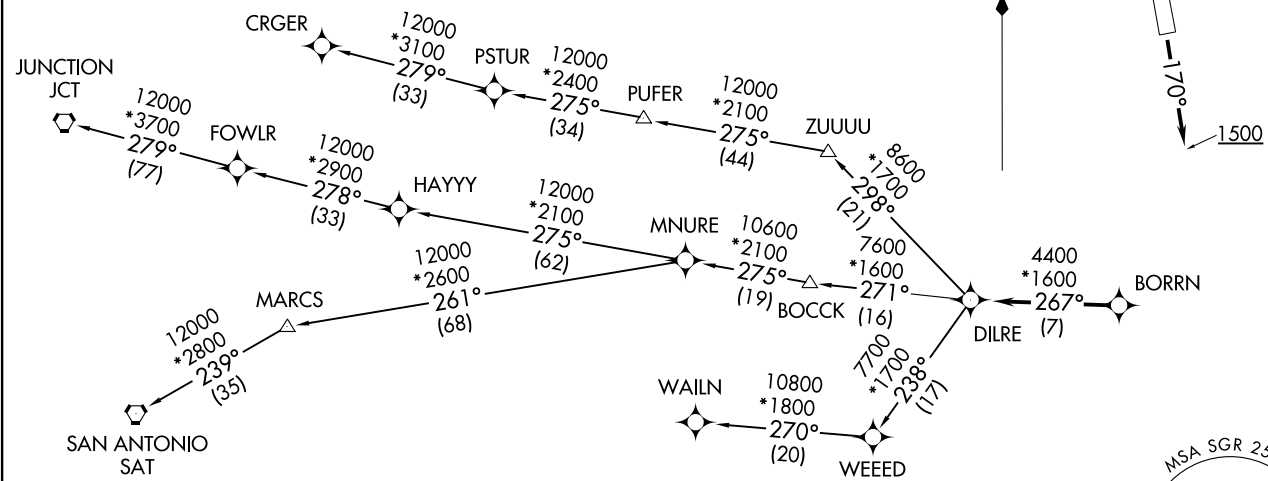
NOTE: Chart not to scale.

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

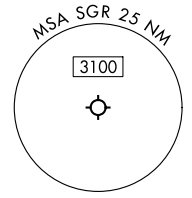
**TOP ALTITUDE:  
ASSIGNED BY ATC**

ATIS ★  
118.125  
CLNIC DEL  
121.4  
CLNIC DEL (When twr closed)  
119.25  
GND CON  
121.4  
SUGAR LAND TOWER ★  
118.65 (CTAF)  
HOUSTON DEP CON  
123.8 257.7

TAKEOFF MINIMUMS  
Rwys 17, 35: Standard with minimum  
climb of 500'/NM to 600.



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



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

BORRN SIX DEPARTURE (RNAV)  
BORRN6.BORRN 30NOV23  
SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

(BORRN6.BORRN) 23334  
BORRN SIX DEPARTURE (RNAV)  
AL-5537 (FAA)  
SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

# BORRN SIX DEPARTURE (RNAV)



## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500, for RADAR vectors to BORRN, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100, for RADAR vectors to BORRN, thence. . . .

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

CRGER TRANSITION (BORRN6.CRGER)

JUNCTION TRANSITION (BORRN6.JCT)

MNURE TRANSITION (BORRN6.MNURE)

SAN ANTONIO TRANSITION (BORRN6.SAT)

WAILN TRANSITION (BORRN6.WAILN)

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

# CRIED ONE DEPARTURE

AL-5537 (FAA)

SUGAR LAND RGNL (SGR)

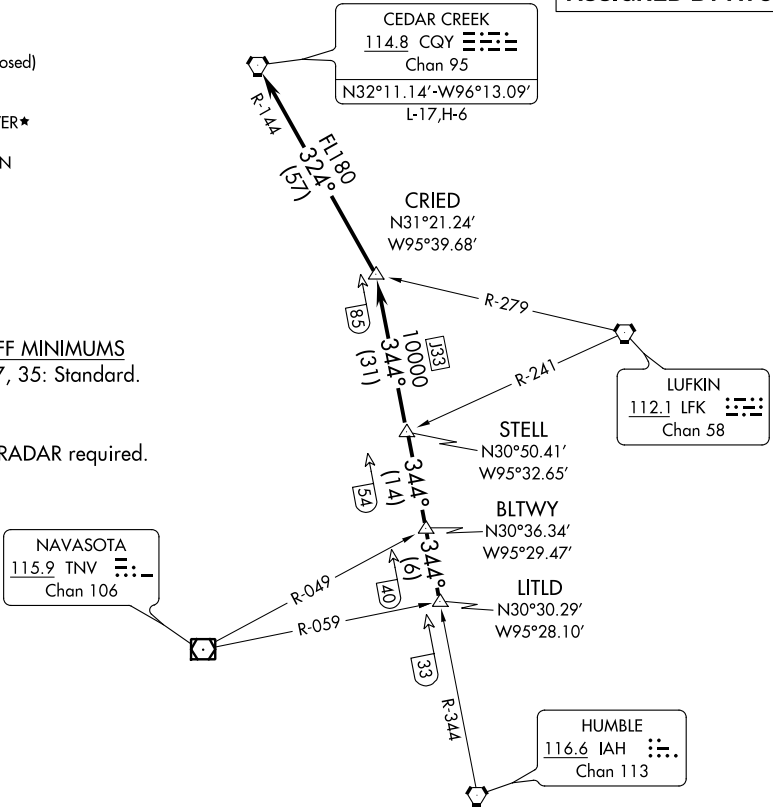
HOUSTON, TEXAS

ATIS ★  
 118.125  
 CLNC DEL  
 121.4  
 CLNC DEL  
 119.25 (when twr closed)  
 GND CON  
 121.4  
 SUGAR LAND TOWER★  
 118.65 (CTAF)  
 HOUSTON DEP CON  
 123.8 257.7

**TOP ALTITUDE:  
 ASSIGNED BY ATC**

TAKEOFF MINIMUMS  
 Rwys 17, 35: Standard.

NOTE: RADAR required.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

# CRIED ONE DEPARTURE

HOUSTON, TEXAS

SUGAR LAND RGNL (SGR)

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

# CRIED ONE DEPARTURE



## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

. . . . on IAH R-344 to STELL INT, then on IAH R-344 to CRIED INT, then left turn on CQY R-144 to CQY VORTAC.

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024



# EL DORADO ONE DEPARTURE

ATIS ★  
 118.125  
 CLNC DEL  
 121.4  
 CLNC DEL  
 119.25 (when twr closed)  
 GND CON  
 121.4  
 SUGAR LAND TOWER ★  
 118.65 (CTAF)  
 HOUSTON DEP CON  
 123.8 257.7

**TOP ALTITUDE:  
 ASSIGNED BY ATC**

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

NOTE: RADAR required.  
 NOTE: For aircraft destined KMEM  
 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'

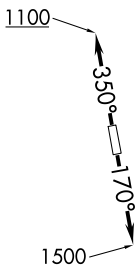
VELCO  
 N31°10.67'  
 W94°24.55'  
 10000

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 17, 35: Standard.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

# EL DORADO ONE DEPARTURE

# EL DORADO ONE DEPARTURE



## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . .on IAH R-028 and the ELD R-208 to ELD VOR/DME, cross VELCO INT at or above 10000.

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

ATIS★  
 118.125  
 CLNC DEL  
 121.4  
 CLNC DEL  
 119.25 (when twr closed)  
 GND CON  
 121.4  
 SUGAR LAND TOWER★  
 118.65 (CTAF)  
 HOUSTON DEP CON  
 123.8 257.7

**TOP ALTITUDE:  
 ASSIGNED BY ATC**

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

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  
 10000

(85)

358°  
 (44)

BUMCO  
 N30°38.91'  
 W95°18.03'

358°  
 (110)

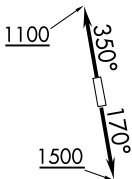
MONNT  
 N30°28.65'  
 W95°18.70'  
 L19-21, H7

(31)

DAISETTA  
 116.9 DAS  
 Chan 116

HUMBLE  
 116.6 IAH  
 Chan 113

TAKEOFF MINIMUMS  
 Rwy 17, 35: Standard.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

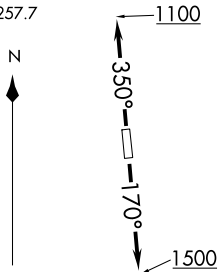
. . . . on IAH R-358 to cross GIFFA INT at or above 10000.

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

HOODO SEVEN DEPARTURE (RNAV)  
(HOODO7.HOODO) 07OC121

ATIS ★  
118.125  
CLNC DEL  
121.4  
CLNC DEL  
119.25 (when twr closed)  
GND CON  
121.4  
SUGARLAND TOWER ★  
118.65 (CTAF)  
HOUSTON DEP CON  
123.8 257.7

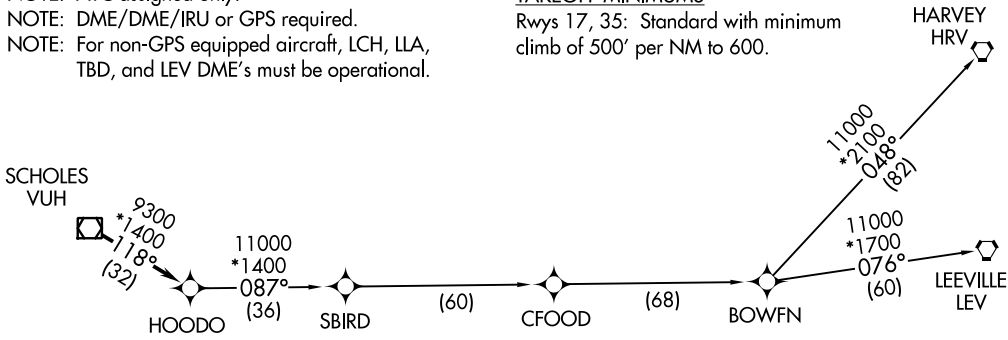


NOTE: RNAV 1.  
NOTE: RADAR required.  
NOTE: ATC assigned only.  
NOTE: DME/DME/IRU or GPS required.  
NOTE: For non-GPS equipped aircraft, LCH, LLA, TBD, and LEV DME's must be operational.

**TOP ALTITUDE:  
ASSIGNED BY ATC**

TAKEOFF MINIMUMS

Rwys 17, 35: Standard with minimum climb of 500' per NM to 600.



NOTE: Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500, for RADAR vectors to VUH VOR/DME, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100, for RADAR vectors to VUH VOR/DME, thence . . . .

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

BOWFN TRANSITION (HOODO7.BOWFN)

CFOOD TRANSITION (HOODO7.CFOOD)

HARVEY TRANSITION (HOODO7.HRV)

LEEVILLE TRANSITION (HOODO7.LEV)

SBIRD TRANSITION (HOODO7.SBIRD)

HOUSTON, TEXAS  
SUGAR LAND RGNL (SGR)

(HOODO7.HOODO) 21280  
HOODO SEVEN DEPARTURE (RNAV)  
AL-5537 (FAA)

SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

(INDIE8.INDIE) 21280

AL-5537 (FAA)

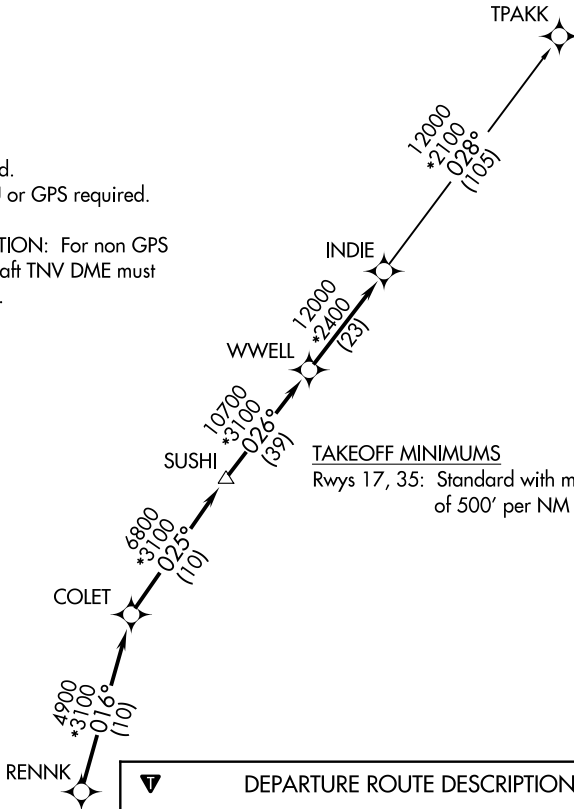
SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

# INDIE EIGHT DEPARTURE (RNAV)

ATIS ★  
 118.125  
 CLNC DEL  
 121.4  
 CLNC DEL  
 119.25 (when twr closed)  
 GND CON  
 121.4  
 SUGARLAND TOWER ★  
 118.65 (CTAF)  
 HOUSTON DEP CON  
 123.8 257.7

**TOP ALTITUDE:  
 ASSIGNED BY ATC**

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



**TAKEOFF MINIMUMS**  
 Rws 17, 35: Standard with minimum climb  
 of 500' per NM to 600.

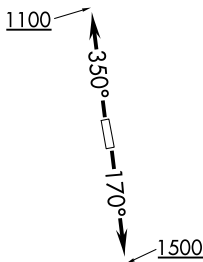
## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 for RADAR vectors to RENNK, then . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 for RADAR vectors to RENNK, then . . . .

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

TPAKK TRANSITION (INDIE8.TPAKK)



NOTE: Chart not to scale.

SC-5, 22 FEB 2024 to 21 MAR 2024

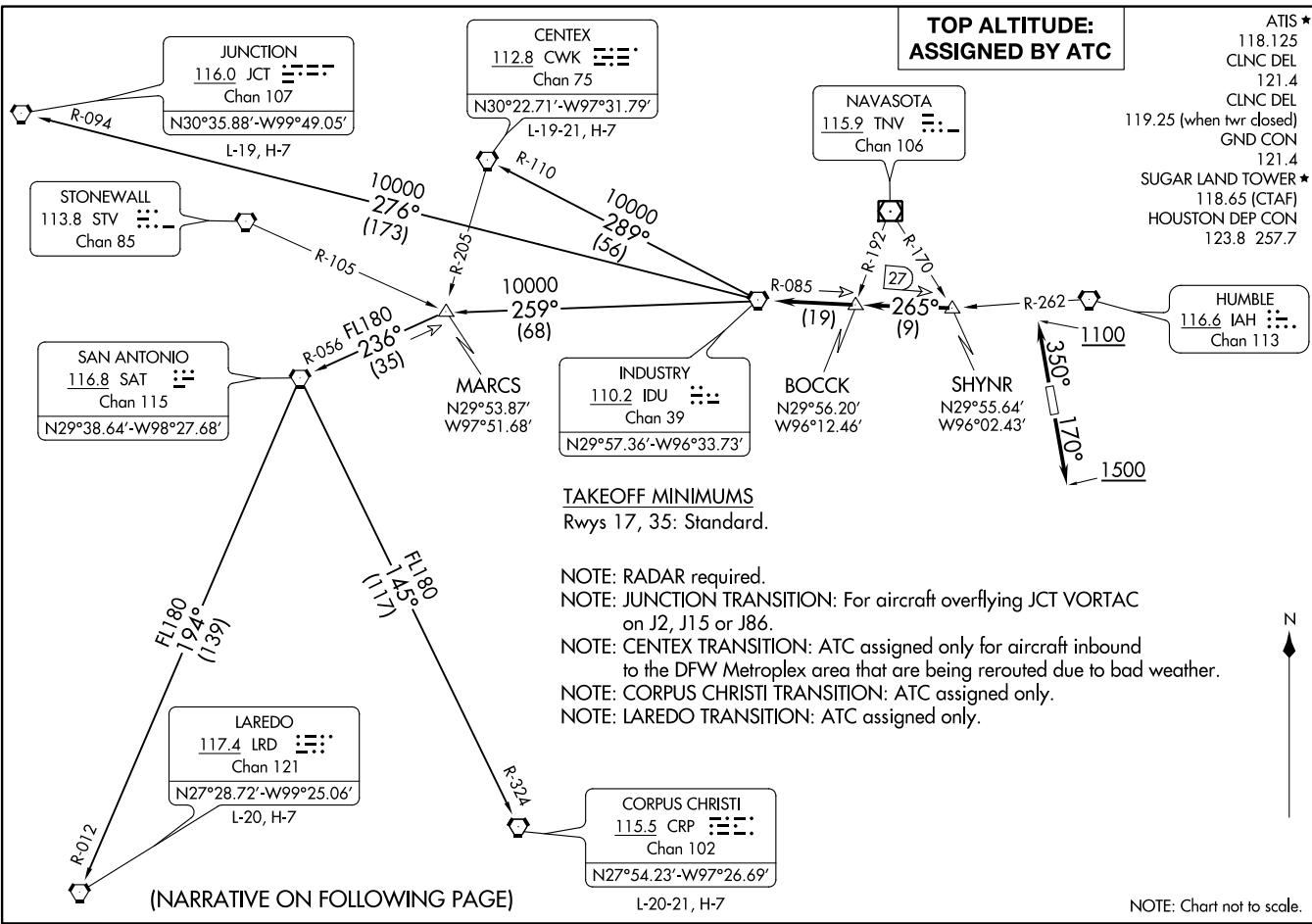
SC-5, 22 FEB 2024 to 21 MAR 2024

INDIE EIGHT DEPARTURE (RNAV)  
 (INDIE8.INDIE) 07OCT21

HOUSTON, TEXAS  
 SUGAR LAND RGNL (SGR)

INDUSTRY ONE DEPARTURE  
(IDU1, IDU) 07OCT21

HOUSTON, TEXAS  
SUGAR LAND RGNL (SGR)



(IDU1, IDU) 21280  
INDUSTRY ONE DEPARTURE

AL-5537 (FAA)

SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

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

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

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

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

LAREDO TRANSITION (IDU1.LRD): From over IDU VORTAC on IDU R-259 to MARCS INT, then on SAT R-056 to SAT VORTAC, then on SAT R-194 and LRD R-012 to LRD VORTAC.

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024



KARRR SEVEN DEPARTURE (RNAV)  
(KARRR7 .KARRR) 29DEC22

HOUSTON, TEXAS  
SUGAR LAND RGNL (SGR)

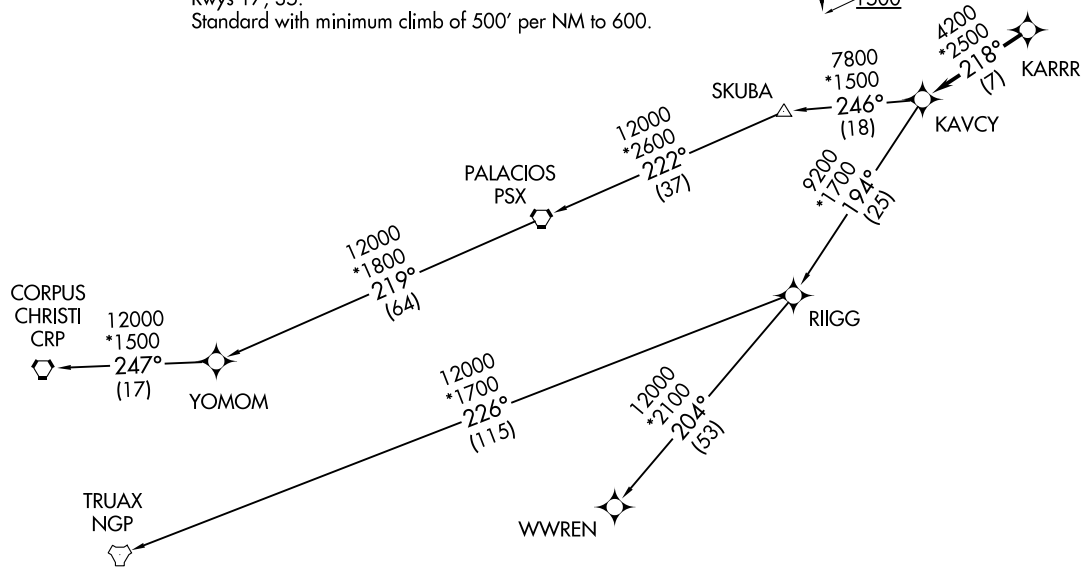
ATIS★  
118.125  
CLNC DEL  
121.4  
CLNC DEL (when twr closed)  
119.25  
GND CON  
121.4  
SUGARLAND TOWER★  
118.65 (CTAF)  
HOUSTON DEP CON  
123.8 257.7

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

TAKEOFF MINIMUMS

Rwys 17, 35:  
Standard with minimum climb of 500' per NM to 600.

**TOP ALTITUDE:  
ASSIGNED BY ATC**



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

(KARRR7 .KARRR) 22363  
KARRR SEVEN DEPARTURE (RNAV)

HOUSTON, TEXAS  
SUGAR LAND RGNL (SGR)

AL-5537 (FAA)

# KARRR SEVEN DEPARTURE (RNAV)



## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500, for RADAR vectors to KARRR, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100, for RADAR vectors to KARRR, thence. . . .

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

CORPUS CHRISTI TRANSITION (KARRR7.CRP)

PALACIOS TRANSITION (KARRR7.PSX)

TRUAX TRANSITION (KARRR7.NGP)

WWREN TRANSITION (KARRR7.WWREN)

YOMOM TRANSITION (KARRR7.YOMOM)

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

# LEONA FOUR DEPARTURE

AL-5537 (FAA)

SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

**TOP ALTITUDE: ASSIGNED BY ATC**

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

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

ATIS ★  
118.125  
CLNC DEL  
121.4  
CLNC DEL  
119.25 (when twr closed)  
GND CON  
121.4  
SUGAR LAND TOWER ★  
118.65 (CTAF)  
HOUSTON DEP CON  
123.8 257.7

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

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'

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

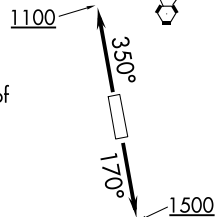
LEONA  
110.8 LOA   
Chan 45  
N31°07.44' - W95°58.08'

TAKEOFF MINIMUMS  
Rwys 17, 35: Standard.

NAVASOTA  
115.2 TNV   
Chan 106

WLLIS  
N30°32.08'  
W95°39.10'

HUMBLE  
116.6 IAH   
Chan 113



- NOTE: RADAR required.
- NOTE: Except for aircraft destined ACT or the DFW terminal area, all aircraft filing the LEONA SID must file one of the published transitions via FUZ (LOA4.FUZ) ADM (LOA4.ADM) or BYP (LOA4.BYP).
- NOTE: RANGER TRANSITION: For aircraft overflying west/northwest of the DFW terminal area FL240 and above.
- NOTE: ARDMORE TRANSITION: For aircraft overflying north/northwest of the DFW terminal area FL240 and above.
- NOTE: BONHAM TRANSITION: For aircraft overflying/landing TUL VORTAC FL240 and above.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

# LEONA FOUR DEPARTURE

(LOA4.LOA) 07OCT21

HOUSTON, TEXAS  
SUGAR LAND RGNL (SGR)

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to WLLIS INT. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

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

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

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

RANGER TRANSITION (LOA4.FUZ): From over LOA VORTAC on LOA R-334 to DOLEY INT, then on FUZ R-130 to FUZ VORTAC.

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

# LUFKIN THREE DEPARTURE

HOUSTON, TEXAS

ATIS ★  
 118.125  
 CLNC DEL  
 121.4  
 CLNC DEL  
 119.25 (when twr closed)  
 GND CON  
 121.4  
 SUGAR LAND TOWER ★  
 118.65 (CTAF)  
 HOUSTON DEP CON  
 123.8 257.7

**TOP ALTITUDE:  
 ASSIGNED BY ATC**

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

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

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

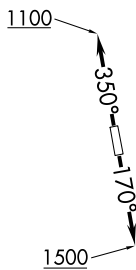
SUSHI
N30°35.48'
W95°04.39'

COLET
N30°26.96'
W95°09.66'

KYANN
N30°15.53'
W95°13.96'

HUMBLE
116.6 IAH
Chan 113

DAISETTA
116.9 DAS
Chan 116



TAKEOFF MINIMUMS  
 Rwy 17, 35: Standard.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

# LUFKIN THREE DEPARTURE

(LFK3.LFK) 07OCT21

HOUSTON, TEXAS

SUGAR LAND RGNL (SGR)

# LUFKIN THREE DEPARTURE



## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT.

Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN INT.

Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence. . . .

. . . .on IAH R-013 to COLET INT, then right turn on LFK R-203 to LFK VORTAC.

LITTLE ROCK TRANSITION (LFK3.LIT): From over LFK VORTAC on LFK R-026 to SKKIP INT, then on LFK R-026 and LIT R-207 to LIT VORTAC.

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

LURIC EIGHT DEPARTURE (RNAV)

ATIS ★  
 118.125  
 CLNC DEL  
 121.4  
 CLNC DEL  
 119.25 (when twr closed)  
 GND CON  
 121.4  
 SUGAR LAND TOWER ★  
 118.65 (CTAF)  
 HOUSTON DEP CON  
 123.8 257.7

TOP ALTITUDE: ASSIGNED BY ATC

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.

DEPARTURE ROUTE DESCRIPTION

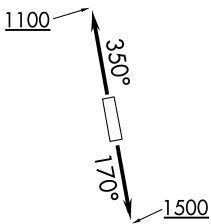
TAKEOFF RWY 17: Climb on heading 170° to 1500  
 for RADAR vectors to KNTKY, thence . . .

TAKEOFF RWY 35: Climb on heading 350° to 1100  
 for RADAR vectors to KNTKY, thence . . .

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

HAWES TRANSITION (LURIC8.HAWES)

ORRTH TRANSITION (LURIC8.ORRTH)



NOTE: Chart not to scale.

LURIC EIGHT DEPARTURE (RNAV)

(LURIC8.LURIC) 07OCT21

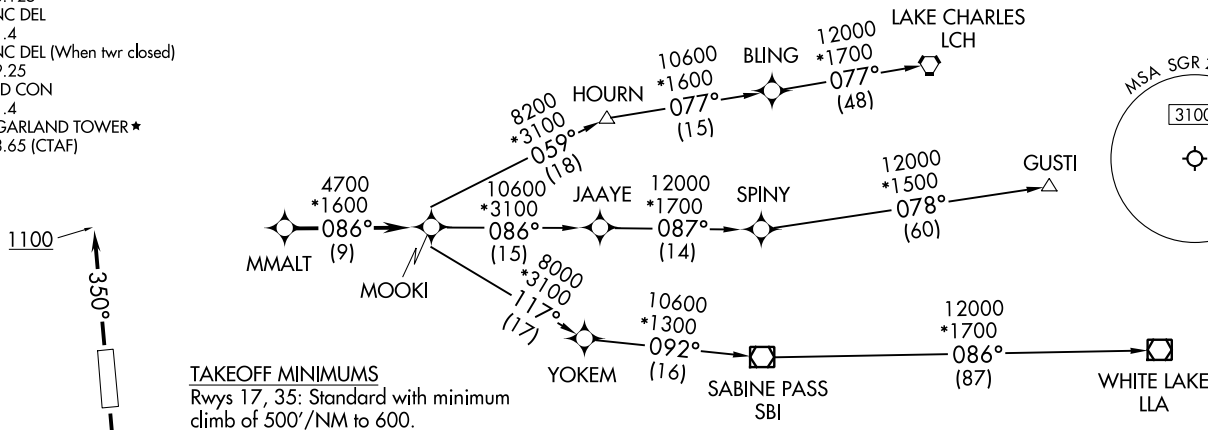
MMALT SEVEN DEPARTURE (RNAV)  
(MMALT7.MMALT) 30NOV23

SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

HOUSTON DEP CON  
123.8 257.7  
ATIS ★  
118.125  
CLNC DEL  
121.4  
CLNC DEL (When twr closed)  
119.25  
GND CON  
121.4  
SUGARLAND TOWER ★  
118.65 (CTAF)

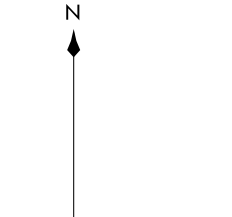
RNAV 1 - DME/DME/IRU or GPS.  
RADAR required.

**TOP ALTITUDE:  
ASSIGNED BY ATC**



**TAKEOFF MINIMUMS**  
Rwys 17, 35: Standard with minimum climb of 500'/NM to 600.

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



NOTE: Chart not to scale.

**▼ DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 17:** Climb on heading 170° to 1500, for RADAR vectors to MMALT, thence. . . .

**TAKEOFF RUNWAY 35:** Climb on heading 350° to 1100, for RADAR vectors to MMALT, thence. . . .

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

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

(MMALT7.MMALT) 23334  
MMALT SEVEN DEPARTURE (RNAV)

AL-5537 (FAA)  
SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS



RADAR and DME required.

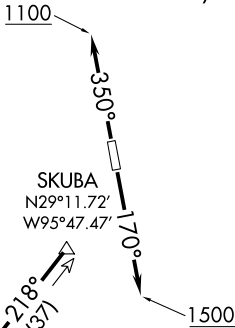
**TOP ALTITUDE:  
ASSIGNED BY ATC**

TAKEOFF MINIMUMS  
Rwys 17, 35: Standard.

ATIS ★  
118.125  
CLNC DEL  
121.4  
CLNC DEL  
119.25 (when twr closed)  
GND CON  
121.4  
SUGAR LAND TOWER ★  
118.65 (CTAF)  
HOUSTON DEP CON  
123.8 257.7

FORT STOCKTON  
116.9 FST   
Chan 116  
N30°57.13'  
W102°58.54'  
L-19, H-6

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



ROCKSPRINGS  
114.55 RSG   
Chan 92 (Y)  
N30°00.88'-W100°17.99'

COTULLA  
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'



PALACIOS THREE DEPARTURE  
(PSX3, PSX) 03NOV22  
SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

(PSX3, PSX) 22207  
PALACIOS THREE DEPARTURE  
AL-5537 (FAA)  
SUGAR LAND RGNL (SGR)  
HOUSTON, TEXAS

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 before turning. When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure, thence . . . .

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

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

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

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

# STRYA EIGHT DEPARTURE (RNAV)

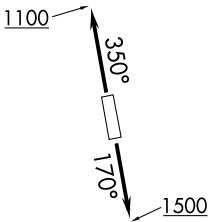
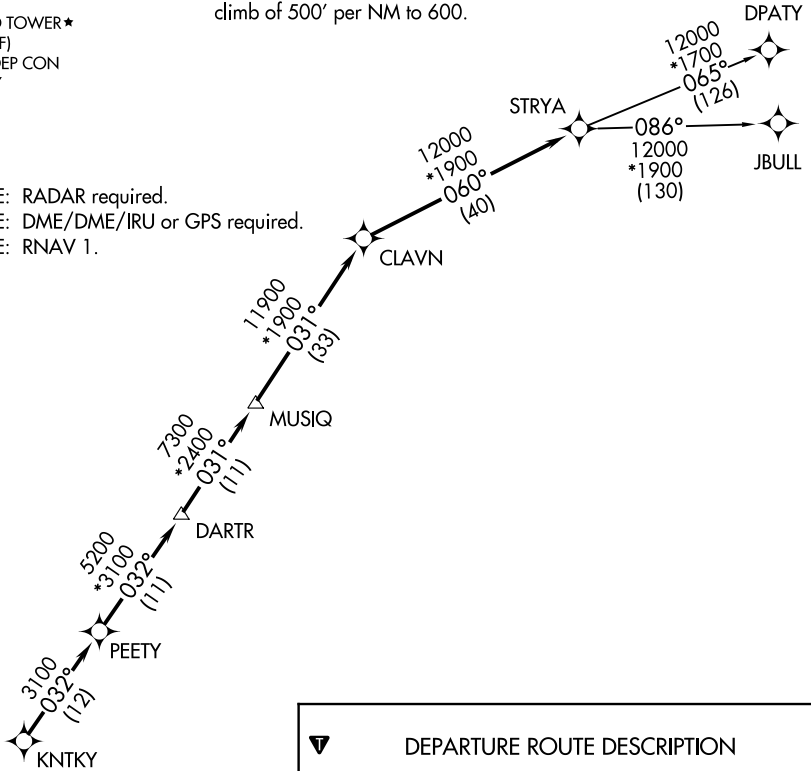
**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS★  
118.125  
CLNC DEL  
121.4  
CLNC DEL  
119.25 (when twr 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.



NOTE: Chart not to scale.



### DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 for RADAR vectors to KNTKY, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 for RADAR vectors to KNTKY, thence. . . .

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

DPATY TRANSITION (STRYA8.DPATY)

JBULL TRANSITION (STRYA8.JBULL)

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

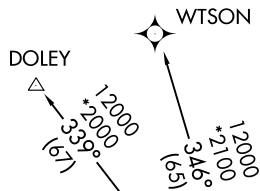
(STYCK8.STYCK) 21280

AL-5537 (FAA)

# STYCK EIGHT DEPARTURE (RNAV)

SUGAR LAND RGNL (SGR)

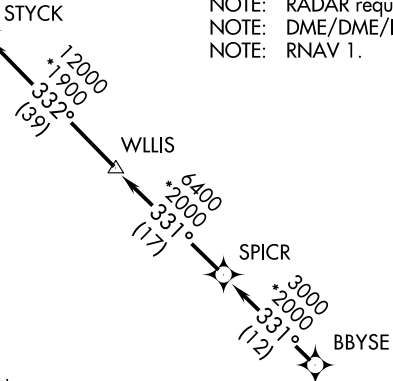
HOUSTON, TEXAS



**TOP ALTITUDE:  
ASSIGNED BY ATC**

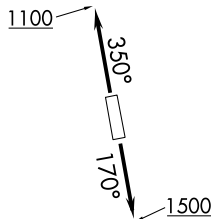
- ATIS ★ 118.125
- CLNC DEL 121.4
- CLNC DEL 119.25 (when twr closed)
- GND CON 121.4
- SUGARLAND TOWER ★ 118.65 (CTAF)
- HOUSTON DEP CON 123.8 257.7

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



### TAKEOFF MINIMUMS

Rwys 17, 35: Standard with minimum climb of 500' per NM to 600.



NOTE: Chart not to scale.



## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 for RADAR vectors to BBYSE, thence. . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 for RADAR vectors to BBYSE, thence. . .

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

DOLEY TRANSITION (STYCK8.DOLEY)

WTSON TRANSITION (STYCK8.WTSON)

# STYCK EIGHT DEPARTURE (RNAV)

(STYCK8.STYCK) 07OCT21

HOUSTON, TEXAS

SUGAR LAND RGNL (SGR)

SC-5, 22 FEB 2024 to 21 MAR 2024

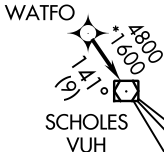
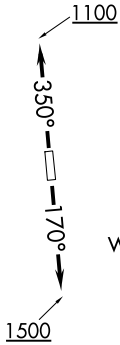
SC-5, 22 FEB 2024 to 21 MAR 2024

# WATFO SIX DEPARTURE (RNAV)

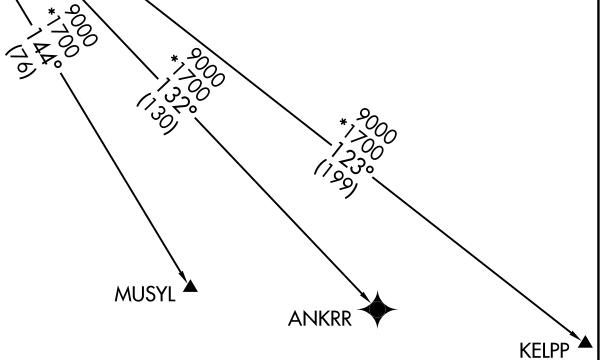
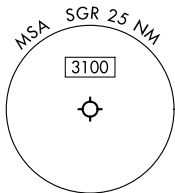
RNAV 1 - DME/DME/IRU or GPS.  
RADAR required.

**TOP ALTITUDE:  
ASSIGNED BY ATC**

ATIS ★  
118.125  
CLNC DEL  
121.4  
CLNC DEL (when twr closed)  
119.25  
GND CON  
121.4  
SUGARLAND TOWER ★  
118.65 (CTAF)  
HOUSTON DEP CON  
123.8 257.7



TAKEOFF MINIMUMS:  
Rwy 17, 35: Standard with minimum  
climb of 500'/NM to 600.



NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500, for RADAR vectors to WATFO, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100, for RADAR vectors to WATFO, thence. . . .

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

ANKRR TRANSITION (WATFO6.ANKRR)

KELPP TRANSITION (WATFO6.KELPP)

MUSYL TRANSITION (WATFO6.MUSYL)

# WYLSN EIGHT DEPARTURE (RNAV)

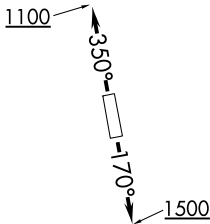
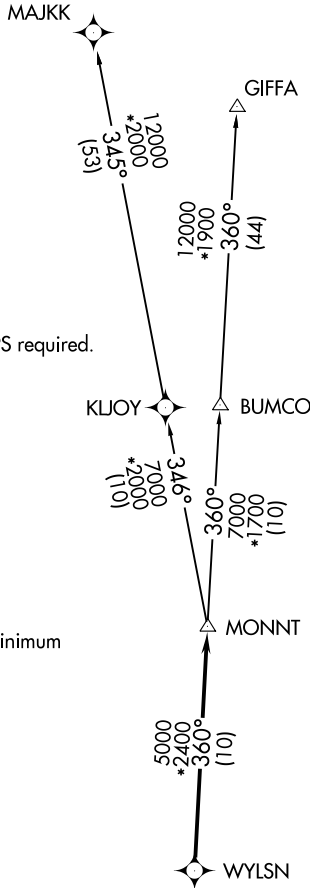
ATIS★  
 118.125  
 CLNC DEL  
 121.4  
 CLNC DEL  
 119.25 (when twr closed)  
 GND CON  
 121.4  
 SUGAR LAND TOWER★  
 118.65 (CTAF)  
 HOUSTON DEP CON  
 123.8 257.7

**TOP ALTITUDE:  
 ASSIGNED BY ATC**

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.



### DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 170° to 1500 for RADAR vectors to WYLSN, thence. . . .

TAKEOFF RUNWAY 35: Climb on heading 350° to 1100 for RADAR vectors to WYLSN, thence. . . .

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

GIFFA TRANSITION (WYLSN8.GIFFA)

MAJKK TRANSITION (WYLSN8.MAJKK)

NOTE: Chart not to scale.

# WYLSN EIGHT DEPARTURE (RNAV)

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.
COLLEGE STATION, TX EASTERWOOD FLD (CLL)	HS 1	Rwy holding position marking Twy B and Rwy 11.
HOUSTON, TX DAVID WAYNE HOOKS MEML (DWH)	HS 1 HS 2 HS 3 HS 4 HS 5 HS 6	Ramp A and Twy C at Rwy 17R. Twy E, Twy D, Twy K at Rwy 17L. Twy E at Rwy 17R-35L. Int of Twy G and Rwy 17L-35R. Int of Twy H and Rwy 17L-35R. Twy K at Rwy 17L.
HOUSTON, TX CONROE/NORTH HOUSTON RGNL (CXO)	HS 1	Twy F west of Twy D.
HOUSTON, TX SUGAR LAND RGNL (SGR)	HS 1	Twy E int with Twy A, Twy A3 from Rwy 17-35.
HOUSTON, TX WILLIAM P. HOBBY (HOU)	HS 1 HS 2	Twy G at Rwy 13R. Twy E at int Rwy 13L.

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

22 FEB 2024 to 21 MAR 2024

22 FEB 2024 to 21 MAR 2024

LOC/DME I-TXH <b>110.7</b> Chan <b>44</b>	APP CRS <b>350°</b>	Rwy Idg <b>6016</b> TDZE <b>78</b> Apt Elev <b>82</b>
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# ILS or LOC RWY 35

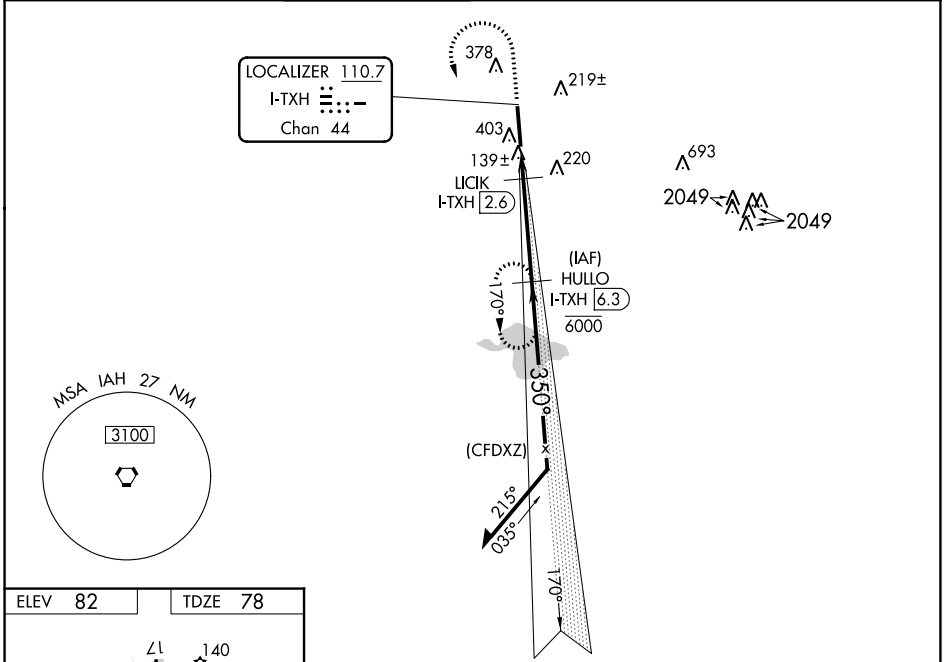
SUGAR LAND RGNL (SGR)

DME required.  
RADAR required for procedure entry.

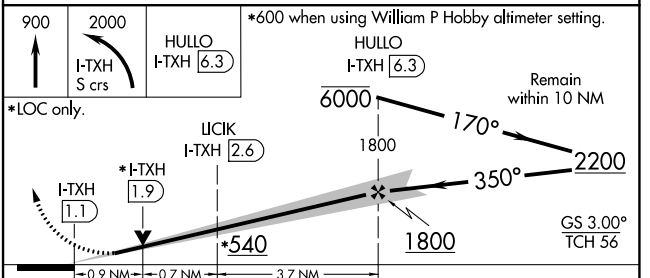
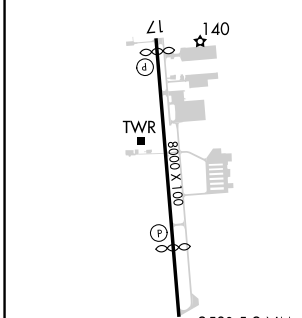
VDP NA when using William P Hobby altimeter setting. When local altimeter setting not received, use William P Hobby altimeter setting and increase all DA 51 feet and all MDA 60 feet and S-LOC 35 Cat C/D visibility 1/8 mile, and Circling Cat C/D visibility 1/4 mile.

MISSED APPROACH: Climb to 900 then climbing left turn to 2000 on I-TXH localizer south course to HULLO/I-TXH 6.3 DME and hold.

ATIS★ <b>118.125</b>	HOUSTON APP CON <b>123.8 257.7</b>	SUGAR LAND TOWER★ <b>118.65</b> (CTAF) <b>0</b>	GND CON <b>121.4</b>	CLNC DEL <b>121.4</b>	CLNC DEL <b>119.25</b> (when twr closed)	UNICOM <b>122.95</b>
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ELEV 82	TDZE 78
---------	---------



CATEGORY	A	B	C	D
S-ILS 35	278-3/4		200 (200-3/4)	
S-LOC 35	400-1		322 (400-1)	
<input checked="" type="checkbox"/> CIRCLING	720-1	638 (700-1)	720-1 3/4 638 (700-1 3/4)	720-2 638 (700-2)



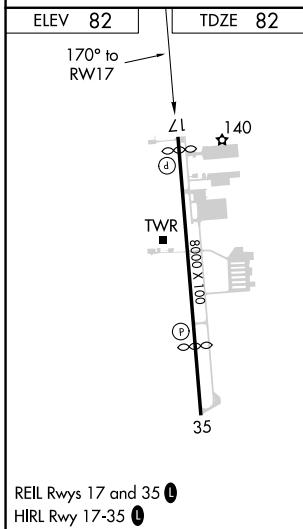
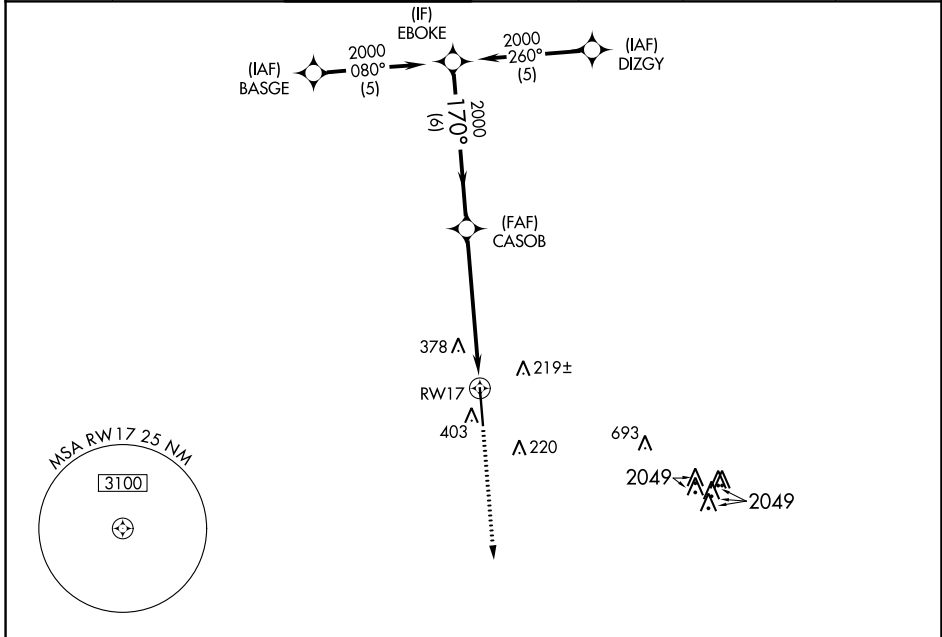
WAAS CH <b>82513</b> <b>W17A</b>	APP CRS <b>170°</b>	Rwy Idg TDZE Apt Elev	<b>7620</b> <b>82</b> <b>82</b>
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# RNAV (GPS) RWY 17

SUGAR LAND RGNL (SGR)

RNP APCH.	MISSED APPROACH: Climb to 2000 direct POPAM and hold.
<p><b>▼</b> Rwy 17 helicopter visibility reduction below 3/4 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 54°C.</p>	

ATIS★ <b>118.125</b>	HOUSTON APP CON <b>123.8 257.7</b>	SUGAR LAND TOWER★ <b>118.65</b> (CTAF) <b>0</b>	GND CON <b>121.4</b>	CLNC DEL <b>121.4</b>	CLNC DEL <b>119.25</b> (when twr closed)	UNICOM <b>122.95</b>
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ELEV 82		TDZE 82	
<p>170° to RWY 17</p>			
<p>REIL Rwy 17 and 35 <b>0</b> HIRL Rwy 17-35 <b>0</b></p>			
<p>POPAM</p>			
<p>VGSI and RNAV glidepath not coincident (VGSI Angle 3.5/TCH 52).</p>			
<p>EBOKE</p> <p>2000</p> <p>GP 3.00° TCH 52</p>		<p>CASOB</p> <p>2000</p> <p>*1.4 NM to RWY 17</p>	
<p>6 NM</p>		<p>4.4 NM</p>	
<p>1.4 NM</p>		<p>RWY 17</p>	
<p>2000</p> <p>POPAM</p>	<p>*LNAV only.</p>		
CATEGORY	A	B	C
LPV DA		398-1	316 (400-1)
LNAV/VNAV DA		704-2	622 (700-2)
LNAV MDA	640-1	558 (600-1)	640-1 5/8 558 (600-1 5/8)
<b>C</b> CIRCLING	720-1	638 (700-1)	720-2 638 (700-1 3/4) 720-2 638 (700-2)

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WAAS CH <b>56219</b> <b>W35A</b>	APP CRS <b>350°</b>	Rwy Idg TDZE <b>78</b> Apt Elev <b>82</b>	<b>6016</b>
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# RNAV (GPS) RWY 35

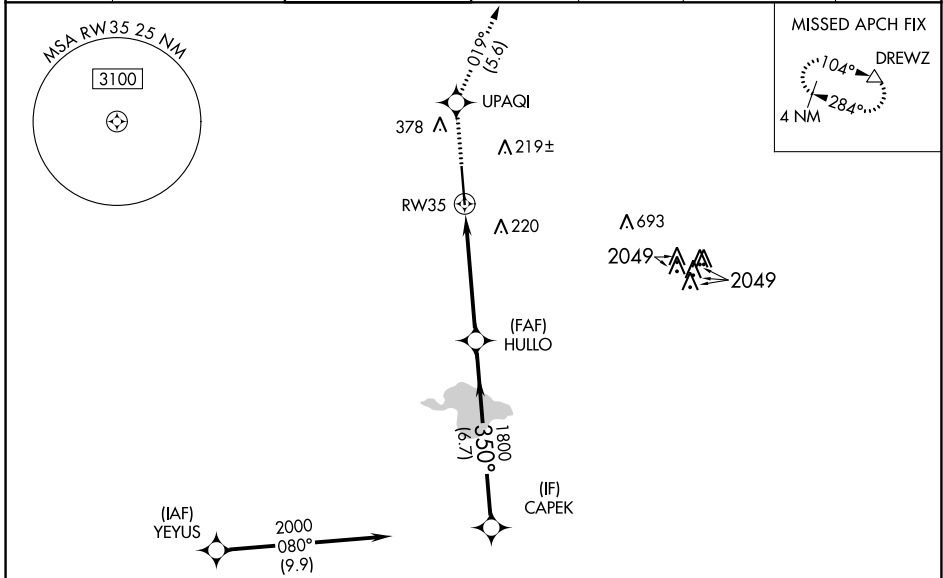
SUGAR LAND RGNL (SGR)

**RNP APCH.**

**⚠** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F).  
**⚠** Baro-VNAV and VDP NA when using William P Hobby altimeter setting. When local altimeter setting not received, use William P Hobby altimeter setting: increase all DA 51 feet; increase all MDA 60 feet and increase LNAV-VNAV all Cats visibility to 1¾, LNAV Cat C/D visibility to 1⅞, and Circling Cat C visibility to 2, Cat D to 2¼. When VGSI inop., Circling Rwy 17 NA at night.

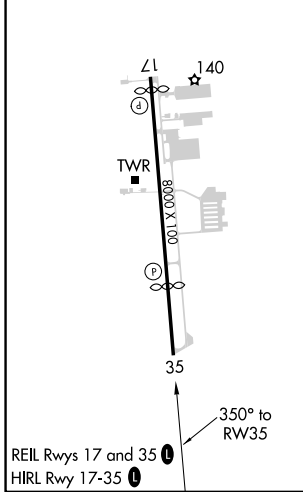
**MISSED APPROACH:** Climb to 2000 direct UPAQI and on track 019° to DREWZ and hold.

ATIS★ <b>118.125</b>	HOUSTON APP CON <b>123.8 257.7</b>	SUGAR LAND TOWER★ <b>118.65</b> (CTAF) <b>0</b>	GND CON <b>121.4</b>	CLNC DEL <b>121.4</b>	CLNC DEL <b>119.25</b> (when twr closed)	UNICOM <b>122.95</b>
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ELEV 82	TDZE 78
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## RADAR REQUIRED



2000	UPAQI	DREWZ	CAPEK	
↑	⬠	tr 019°	△	
* LNAV only.				
* 1.7 NM to RW35		HULLO 1800	CAPEK 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	567-1⅝		489 (500-1⅞)	
LNAV MDA	660-1 582 (600-1)		660-1¾ 582 (600-1¾)	
<b>C</b> CIRCLING	720-1 638 (700-1)		720-2 638 (700-2)	

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INSTRUMENT APPROACH PROCEDURE CHARTS

**A** IFR ALTERNATE AIRPORT MINIMUMS

Pilots must review the IFR Alternate Minimums Notes to determine alternate airport suitability.

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

Alternate Minima (ref: 14 CFR 91.169)

	Precision Approach	Non-Precision Approach
Standard	<b>600-2</b>	<b>800-2</b>
<b>A</b> Non-Standard or restrictions	As indicated below	As indicated below
Helicopters	For the selected approach: Ceiling: 200' above published ceiling Visibility: the greater of 1 SM visibility or the published visibility	
US Military (USA/USN/USAF)	See Service Regulations	

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

NAME ALTERNATE MINIMUMS

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

**BAY CITY, TX**  
BAY CITY  
RGNL (BYY).....**RNAV (GPS) Rwy 13<sup>1</sup>**  
**RNAV (GPS) Rwy 31<sup>1</sup>**  
**VOR-A<sup>2</sup>**

<sup>1</sup>NA when local weather not available.  
<sup>2</sup>Categories A, B, 1100-2; Category C, 1100-3.

**BEAUMONT, TX**  
BEAUMONT  
MUNI (BMT).....**RNAV (GPS) Rwy 13**  
Category D, 800-2½;

NAME ALTERNATE MINIMUMS

**BEAUMONT/PORT ARTHUR, TX**  
JACK BROOKS  
RGNL (BPT).....**ILS or LOC Rwy 12<sup>12</sup>**  
**RNAV (GPS) Rwy 12<sup>3</sup>**  
**RNAV (GPS) Rwy 16**  
**RNAV (GPS) Rwy 30**  
**RNAV (GPS) Rwy 34**

NA when local weather not available.  
<sup>1</sup>NA when control tower closed.  
<sup>2</sup>LOC, Categories A, B, C, D, E, 900-2.  
<sup>3</sup>Category D, 800-2½; Category E, 900-2¾.

**BRENHAM, TX**  
BRENHAM  
MUNI (11R).....**RNAV (GPS) Rwy 16**  
**RNAV (GPS) Rwy 34**  
NA when local weather not available.  
Category D, 800-2¾.

**CALDWELL, TX**  
CALDWELL  
MUNI (RWW).....**RNAV (GPS) Rwy 15**  
**RNAV (GPS) Rwy 33**  
**VOR/DME-A**

NA when local weather not available.  
Category B, 900-2.

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

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NAME ALTERNATE MINIMUMS

**COLLEGE STATION, TX**

EASTERWOOD  
FLD (CLL).....**ILS or LOC Rwy 35<sup>12</sup>**  
**LOC BC Rwy 17<sup>13</sup>**  
**RNAV (GPS) Rwy 11<sup>34</sup>**  
**RNAV (GPS) Rwy 17<sup>34</sup>**  
**RNAV (GPS) Rwy 29<sup>34</sup>**  
**RNAV (GPS) Rwy 35<sup>34</sup>**  
**VOR Rwy 29<sup>5</sup>**  
**VOR or TACAN Rwy 11<sup>34</sup>**

<sup>1</sup>NA when control tower closed.  
<sup>2</sup>LOC, Category D, 900-2¼; Category E, 900-3.  
<sup>3</sup>Category D, 900-2¼; Category E, 900-3.  
<sup>4</sup>NA when local weather not available.  
<sup>5</sup>Category D, 900-2¼.

**CROCKETT, TX**

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

**EAGLE LAKE, TX**

EAGLE LAKE (ELA).....**RNAV (GPS) Rwy 17<sup>1</sup>**  
**RNAV (GPS) Rwy 35**  
Category C, 900-2½.  
<sup>1</sup>NA when local weather not available.

**GALVESTON, TX**

SCHOLES INTL  
AT GALVESTON (GLS).....**RNAV (GPS) Rwy 14**  
**RNAV (GPS) Rwy 18<sup>1</sup>**  
**RNAV (GPS) Rwy 32<sup>1</sup>**  
**RNAV (GPS) Rwy 36<sup>1</sup>**  
NA when local weather not available.  
<sup>1</sup>Category E, 800-2¼.

**GIDDINGS, TX**

GIDDINGS-  
LEE COUNTY (GYB).....**RNAV (GPS) Rwy 17**  
**RNAV (GPS) Rwy 35**  
NA when local weather not available.  
Category C, 800-2¼.

**HEARNE, TX**

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

**HOUSTON, TX**

CONROE/NORTH HOUSTON  
RGNL (CXO).....**RNAV (GPS) Rwy 1**  
**RNAV (GPS) Rwy 14**  
**RNAV (GPS) Rwy 19**  
**RNAV (GPS) Rwy 32**  
Category D, 800-2¼.

DAVID WAYNE HOOKS  
MEML (DWH).....**RNAV (GPS) Rwy 35L**  
NA when local weather not available.

NAME ALTERNATE MINIMUMS

**HOUSTON, TX (CON'T)**

ELLINGTON (EFD).....**ILS Z or LOC Z Rwy 17R<sup>1</sup>**  
**ILS Z or LOC Z Rwy 22<sup>1</sup>**  
**ILS Z or LOC Z Rwy 35L<sup>1</sup>**  
**RNAV (GPS) Rwy 4<sup>2</sup>**  
**RNAV (GPS) Rwy 17R<sup>2</sup>**  
**RNAV (GPS) Rwy 22<sup>2</sup>**  
**RNAV (GPS) Rwy 35L<sup>2</sup>**

<sup>1</sup>LOC, Category E, 800-2¼.  
<sup>2</sup>Category E, 800-2¼.

HOUSTON  
EXEC (TME).....**RNAV (GPS) Rwy 18**  
**RNAV (GPS) Rwy 36**

NA when local weather not available.  
Category D, 900-2¼.

PEARLAND RGNL (LVJ).....**RNAV (GPS) Rwy 32**  
NA when local weather not available.

SUGAR LAND  
RGNL (SGR).....**ILS or LOC Rwy 35<sup>1</sup>**  
**RNAV (GPS) Rwy 35**

NA when local weather not available.  
<sup>1</sup>NA when control tower closed.

WILLIAM P  
HOBBY (HOU).....**ILS or LOC Rwy 4<sup>1</sup>**  
**ILS or LOC Rwy 13R<sup>1</sup>**  
**ILS or LOC Rwy 31L<sup>2</sup>**  
**LOC Rwy 22<sup>3</sup>**  
**RNAV (GPS) Rwy 4<sup>4</sup>**  
**RNAV (GPS) Rwy 13R<sup>4</sup>**  
**RNAV (GPS) Rwy 22<sup>3</sup>**  
**RNAV (GPS) Rwy 31L<sup>5</sup>**

<sup>1</sup>LOC, Categories C, D, 800-2¼;  
Category E, 900-3.  
<sup>2</sup>LOC, Categories C, D, 800-2¼.  
<sup>3</sup>Category D, 800-2¼; Category E, 800-2¼.  
<sup>4</sup>Categories C, D, 800-2¼; Category E, 900-3.  
<sup>5</sup>Categories C, D, 800-2¼.

**HUNTSVILLE, TX**

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

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

**JACKSONVILLE, TX**

CHEROKEE  
COUNTY (JSO).....**RNAV (GPS) Rwy 14**  
**RNAV (GPS) Rwy 32**  
**VOR Rwy 14**

NA when local weather not available.

**JASPER, TX**

JASPER COUNTY/BELL  
FLD (JAS).....**RNAV (GPS) Rwy 18**  
**RNAV (GPS) Rwy 36**

NA when local weather not available.

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NAME ALTERNATE MINIMUMS

NAME ALTERNATE

**LA GRANGE, TX**

FAYETTE RGNL  
AIR CENTER (3T5).....RNAV (GPS) Rwy 16  
RNAV (GPS) Rwy 34

NA when local weather not available.

**LUFKIN, TX**

ANGELINA  
COUNTY (LFK).....RNAV (GPS) Rwy 7  
RNAV (GPS) Rwy 16  
RNAV (GPS) Rwy 25  
RNAV (GPS) Rwy 34  
VOR Rwy 16  
VOR Rwy 34

Category D, 900-2¼.

**NACOGDOCHES, TX**

NACOGDOCHES A L MANGHAM JR  
RGNL (OCH).....RNAV (GPS) Rwy 18  
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  
VOR Rwy 13

NA when local weather not available.

Category D, 800-2¼.

**PALESTINE, TX**

PALESTINE  
MUNI (PSN).....RNAV (GPS) Rwy 18  
RNAV (GPS) Rwy 36

NA when local weather not available.

Category C, 1000-2¼; Category D, 1000-3.

**PORT LAVACA, TX**

CALHOUN  
COUNTY (PKV).....RNAV (GPS) Rwy 14  
RNAV (GPS) Rwy 32  
VOR/DME-A

NA when local weather not available.

**VICTORIA, TX**

VICTORIA  
RGNL (VCT).....ILS or LOC Rwy 13<sup>12</sup>  
RNAV (GPS) Rwy 13<sup>3</sup>  
RNAV (GPS) Rwy 31<sup>3</sup>  
VOR Rwy 13<sup>3</sup>  
VOR Rwy 31<sup>3</sup>

NA when local weather not available.

<sup>1</sup>NA when control tower closed.

<sup>2</sup>LOC, Category D, 800-2½.

<sup>3</sup>Category D, 800-2½.

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M3

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

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## 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. An entry may also be listed that contains only Takeoff Obstacle Notes. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

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

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

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

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

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

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

#### ANAHUAC, TX

##### CHAMBERS COUNTY (T00)

##### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 10MAR11 (11069) (FAA)

##### TAKEOFF MINIMUMS:

**Rwy 17,35**, NA-Environmental.

##### TAKEOFF OBSTACLE NOTES:

**Rwy 12**, vehicles on roadway beginning 19' from DER, left and right of centerline, up to 15' AGL/34' MSL.

Trees beginning 986' from DER, 732' left of centerline, up to 100' AGL/119' MSL.

**Rwy 30**, trees beginning 60' from DER, left and right of centerline, up to 100' AGL/124' MSL.

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.

#### ANGLETON/LAKE JACKSON, TX

##### TEXAS GULF COAST RGNL (LBX)

##### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 22JUN17 (17173) (FAA)

##### TAKEOFF OBSTACLE NOTES:

**Rwy 35**, tree 1330' from DER, 797' left of centerline, 71' MSL.

Tree 1404' from DER, 796' left of centerline, 73' MSL.

Trees beginning 1467' from DER, 788' left of centerline, up to 75' MSL.

Tree 1474' from DER, 670' right of centerline, 72' MSL.

Tree 1516' from DER, 684' right of centerline, 73' MSL.

Tree 1578' from DER, 759' right of centerline, 74' MSL.

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

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

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## BAY CITY, TX

### BAY CITY RGNL (BYY)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 22JUN17 (17173) (FAA)

##### TAKEOFF OBSTACLE NOTES:

- Rwy 13**, trees and poles beginning 51' from DER, 306' left of centerline, up to 91' MSL.  
Tree 337' from DER, 442' right of centerline, 79' MSL. Tree 478' from DER, 473' right of centerline, 83' MSL.  
Trees beginning 714' from DER, 496' right of centerline, up to 86' MSL.
- Rwy 31**, tree 102' from DER, 340' right of centerline, 61' MSL.  
Tree 548' from DER, 272' left of centerline, 59' MSL.  
Tree 944' from DER, 272' right of centerline, 70' MSL.  
Trees beginning 1002' from DER, 255' right of centerline, up to 78' MSL.  
Tree 1139' from DER, 750' right of centerline, 80' MSL.

## BAYTOWN, TX

### BAYTOWN (HPY)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 10OCT19 (19283) (FAA)

##### TAKEOFF MINIMUMS:

- Rwy 14**, 300-1 or std. w/min. climb of 460' per NM to 300.

##### TAKEOFF OBSTACLE NOTES:

- Rwy 14**, tree 9' from DER, 214' left of centerline, 47' MSL.  
Trees, poles, traverse way beginning 11' from DER, 33' right of centerline, up to 54' MSL.  
Tree 89' from DER, 413' left of centerline, 51' MSL.  
Poles, building, trees, traverse way beginning 122' from DER, 9' left of centerline, up to 58' MSL.  
Trees, poles beginning 316' from DER, 158' left of centerline, up to 66' MSL.  
Poles, trees beginning 462' from DER, 237' left of centerline, up to 67' MSL.  
Tree 977' from DER, 447' left of centerline, 68' MSL.  
Tree 1223' from DER, 90' left of centerline, 70' MSL.  
Tree 1356' from DER, 427' left of centerline, 72' MSL.  
Tree 1467' from DER, 531' right of centerline, 80' MSL.  
Tree 1886' from DER, 558' left of centerline, 91' MSL.  
Tower 4066' from DER, 1217' right of centerline, 156' AGL/180' MSL.
- Rwy 32**, trees, building, fence, poles beginning 131' from DER, 6' right of centerline, up to 76' MSL.  
Buildings beginning 251' from DER, 38' left of centerline, up to 42' MSL.  
Poles, building, trees, traverse way beginning 289' from DER, 4' left of centerline, up to 38' AGL/71' MSL.  
Poles, trees beginning 688' from DER, 70' right of centerline, up to 48' AGL/80' MSL.

## RWJ AIRPARK (54T)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 25APR19 (19115) (FAA)

##### TAKEOFF MINIMUMS:

- Rwys 14, 32**, NA - Environmental.

##### TAKEOFF OBSTACLE NOTES:

- Rwy 8**, trees beginning 21' from DER, 152' left of centerline, up to 100' AGL/129' MSL.  
Vehicle on road beginning 100' from DER, crossing centerline, up to 15' AGL/44' MSL.  
Fence beginning abeam DER, 115' right of centerline, up to 6' AGL/35' MSL.  
Trees beginning 133' from DER, 333' right of centerline, up to 100' AGL/129' MSL.  
Buildings beginning 266' from DER, left and right of centerline, up to 30' AGL/59' MSL.  
Power lines beginning 356' from DER, 460' left of centerline, up to 32' AGL/61' MSL.  
Pole 663' from DER, 188' right of centerline, 100' AGL/129' MSL.
- Rwy 26**, buildings beginning 47' from DER, 118' right of centerline, up to 30' AGL/64' MSL.  
Buildings beginning 187' from DER, 85' left of centerline, up to 30' AGL/64' MSL.  
Power lines beginning 407' from DER, crossing centerline, up to 32' AGL/66' MSL.  
Vehicle on road beginning 448' from DER, crossing centerline, up to 15' AGL/49' MSL.  
Trees beginning 619' from DER, left and right of centerline, up to 100' AGL/134' MSL.  
Quarry equipment 2800' from DER, 193' right of centerline, up to 100' AGL/134' MSL.

## BEAUMONT, TX

### BEAUMONT MUNI (BMT)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15JAN09 (09015) (FAA)

##### TAKEOFF MINIMUMS:

- Rwys 16,34**, NA - Obstacles.

##### TAKEOFF OBSTACLE NOTES:

- Rwy 13**, multiple trees, poles and buildings beginning 82' from DER, 2' left of centerline, up to 74' AGL/106' MSL.  
Multiple trees, poles and 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.

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

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

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## BEAUMONT/PORT ARTHUR, TX

JACK BROOKS RGNL (BPT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 17DEC09 (09351) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 12**, multiple trees beginning 1024' from DER, 202' left of centerline, up to 43' AGL/48' MSL.  
Trees 1676' from DER, 778' right of centerline, 51' AGL/56' MSL.

**Rwy 16**, multiple trees beginning 580' from DER, 519' right of centerline, up to 51' AGL/56' MSL.

**Rwy 30**, trees 1005' from DER, 629' right of centerline, 54' AGL/64' MSL.

Multiple trees beginning 1041' from DER, 617' left of centerline, up to 67' AGL/77' MSL.

**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 11FEB10 (10042) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 16**, trees and poles beginning 45' from DER, 272' right of centerline to 305' left of centerline, up to 89' AGL/299' MSL.

**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 FLD (CFD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 05JUL07 (22139) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 15**, vehicle on road 266' from DER, on centerline, 17' AGL/386' MSL.

Multiple trees and poles beginning 169' from DER, 339' right of centerline, up to 20' AGL/389' MSL.

Multiple trees and poles beginning 203' from DER, 245' left of centerline, up to 35' AGL/400' MSL.

**Rwy 33**, multiple poles and T-L towers beginning 36' from DER, 207' left of centerline, up to 35' AGL/382' MSL.

Trees 508' from DER, 290' right of centerline, 25' AGL/371' MSL.

## CALDWELL, TX

CALDWELL MUNI (RWV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 20SEP12 (12264) (FAA)

TAKEOFF MINIMUMS:

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

TAKEOFF OBSTACLE NOTES:

**Rwy 15**, trees beginning 323' from DER, left and right of centerline, up to 40' AGL/399' MSL.

Train on tracks 372' from DER, left and right of centerline, up to 23' AGL/382' MSL.

Power lines beginning 1896' from DER, left and right of centerline, up to 100' AGL/499' MSL.

**Rwy 33**, trees beginning 5' from DER, left and right of centerline, up to 40' AGL/449' MSL.

Power lines beginning 925' from DER, left and right of centerline, up to 50' AGL/499' MSL.

Water tank 3624' from DER, 1031' left of centerline 215' AGL/648' MSL.

## CENTER, TX

CENTER MUNI (F17)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 29JUL10 (10210) (FAA)

DEPARTURE PROCEDURE:

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

TAKEOFF OBSTACLE NOTES:

**Rwy 17**, numerous trees beginning 326' from DER, 432' right and left of centerline, up to 100' AGL/414' MSL.

Vehicle on road 234' from DER, 530' left of centerline, up to 15' AGL/314' MSL.

**Rwy 35**, numerous trees beginning 1724' from DER, 388' left and right of centerline, up to 100' AGL/459' MSL. Vehicle on road 1091' from DER, 742' right of centerline, up to 15' AGL/354' MSL.

22 FEB 2024 to 21 MAR 2024

22 FEB 2024 to 21 MAR 2024

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

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

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## CLEVELAND, TX

### CLEVELAND MUNI (6R3)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 22SEP11 (11265) (FAA)

##### DEPARTURE PROCEDURE:

**Rwy 16**, climb heading 157° to 1400 before turning right.

**Rwy 34**, climb heading 312° to 2000 before proceeding on course.

##### TAKEOFF OBSTACLE NOTES:

**Rwy 16**, trees beginning abeam DER, right and left of centerline, up to 100' AGL/239' MSL.

**Rwy 34**, trees beginning 120' from DER, 243' left of centerline, up to 100' AGL/259' MSL.

Trees and poles beginning 225' from DER, 363' right of centerline, up to 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 FLD (CLL)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4A 28FEB19 (21112) (FAA)

##### DEPARTURE PROCEDURE:

**Rwy 35**, climb heading 346° to 900 before turning right .

##### TAKEOFF OBSTACLE NOTES:

**Rwy 11**, traverse way 5' from DER, 275' right of centerline, 322' MSL.

Tree 8' from DER, 497' right of centerline, 40' AGL/346' MSL.

Tree 10' from DER, 323' right of centerline, 39' AGL/347' MSL.

Pole 10' from DER, 55' left of centerline, 2' AGL/312' MSL.

Tree, traverse way beginning 44' from DER, 162' right of centerline, up to 44' AGL/352' MSL.

Electrical system 139' from DER, 498' left of centerline, 315' MSL.

Tree 496' from DER, 30' left of centerline, 42' AGL/325' MSL.

Trees beginning 497' from DER, 101' left of centerline, up to 331' MSL.

Elevator, building beginning 1888' from DER, 704' left of centerline, up to 64' AGL/366' MSL.

Transmission line 2483' from DER, 1148' left of centerline, 374' MSL.

**Rwy 29**, pole 11' from DER, 55' right of centerline, 1' AGL/320' MSL.

Tree 30' from DER, 414' left of centerline, 322' MSL.

Tree 135' from DER, 530' left of centerline, 343' MSL.

Trees beginning 305' from DER, 533' left of centerline, up to 361' MSL.

Trees beginning 536' from DER, 561' right of centerline, up to 346' MSL.

Tree 838' from DER, 665' right of centerline, 348' MSL.

Trees beginning 1010' from DER, 371' left of centerline, up to 362' MSL.

Pole beginning 1083' from DER, 692' right of centerline, up to 358' MSL.

Trees beginning 1174' from DER, 244' left of centerline, up to 363' MSL.

Tree, pole beginning 1257' from DER, 251' left of centerline, up to 365' MSL.

Trees beginning 1429' from DER, 420' right of centerline, up to 366' MSL.

Trees beginning 1542' from DER, 528' right of centerline, up to 370' MSL.

Pole beginning 1735' from DER, 278' left of centerline, up to 42' AGL/367' MSL.

Trees beginning 1865' from DER, 87' right of centerline, up to 379' MSL.

Tree, pole beginning 1879' from DER, 37' left of centerline, up to 49' AGL/369' MSL.

Trees beginning 1945' from DER, 65' left of centerline, up to 48' AGL/371' MSL.

Tree 2059' from DER, 378' left of centerline, 372' MSL.

**Rwy 35**, pole 11' from DER, 55' left of centerline, 1' AGL/321' MSL.

Sign 23' from DER, 251' left of centerline, 322' MSL.

Tree 232' from DER, 552' left of centerline, 38' AGL/361' MSL.

Trees beginning 297' from DER, 460' left of centerline, up to 41' AGL/364' MSL.

Tree 774' from DER, 598' right of centerline, 341' MSL.

Tree 808' from DER, 607' right of centerline, 349' MSL.

Tree, building beginning 883' from DER, 235' left of centerline, up to 366' MSL.

Tree 1085' from DER, 649' right of centerline, 355' MSL.

Tree 1181' from DER, 719' right of centerline, 356' MSL.

Pole 1552' from DER, 818' left of centerline, 376' MSL.

Trees beginning 1740' from DER, 751' left of centerline, up to 380' MSL.

## CROCKETT, TX

### HOUSTON COUNTY (DKR)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15DEC11 (11349) (FAA)

##### TAKEOFF MINIMUMS:

**Rwy 2**, 400-2 or std. w/min. climb of 280' per NM to 800.

**Rwy 20**, 300-1½ or std. w/min. climb of 459' per NM to 700.

##### TAKEOFF OBSTACLE NOTES:

**Rwy 2**, multiple trees beginning 57' from DER, 61' right of centerline, up to 50' AGL/399' MSL.

Multiple trees and terrain beginning 27' from DER, 109' left of centerline, up to 50' AGL/409' MSL.

Tower 1.5 NM from DER, 2864' left of centerline 233' AGL/623' MSL.

**Rwy 20**, multiple towers beginning 4567' from DER, 1025' right of centerline, up to 200' AGL/529' MSL.

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

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

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## EAGLE LAKE, TX

### EAGLE LAKE (ELA)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 05DEC19 (19339) (FAA)

#### TAKEOFF MINIMUMS:

**Rwy 17**, 300-2¼, or std. w/min. climb of 210' per NM to 400.

#### TAKEOFF OBSTACLE NOTES:

**Rwy 17**, vehicles on road, tree, vegetation beginning 38' from DER, 126' left of centerline, up to 197' MSL.

Tree 153' from DER, 110' left of centerline, 202' MSL.

Vehicles on road, tree beginning 155' from DER, 6' right of centerline, up to 197' MSL.

Trees beginning 155' from DER, 12' left of centerline, up to 36' AGL/216' MSL.

Trees, vehicles on road beginning 216' from DER, 205' right of centerline, up to 212' MSL.

Trees beginning 270' from DER, 357' left of centerline, up to 40' AGL/220' MSL.

Tree 1682' from DER, 458' left of centerline, 233' MSL.

Tower 2588' from DER, 792' left of centerline, 192' AGL/317' MSL.

Tower 1.7 NM from DER, 3144' right of centerline, 270' AGL/443' MSL.

**Rwy 35**, terrain beginning 5' from DER, 287' left of centerline, up to 186' MSL.

Terrain 9' from DER, 270' right of centerline, 185' MSL.

Trees beginning 96' from DER, 271' right of centerline, up to 17' AGL/199' MSL.

Vegetation 116' from DER, 366' left of centerline, 193' MSL.

Trees, vehicles on road, pole beginning 323' from DER, 127' left of centerline, up to 219' MSL.

Tree 641' from DER, 21' right of centerline, 200' MSL.

Tree 696' from DER, 31' right of centerline, 202' MSL.

Tree, vehicles on road beginning 702' from DER, 16' right of centerline, up to 207' MSL.

Pole 1055' from DER, 441' right of centerline, 219' MSL.

Tree, poles beginning 1062' from DER, 580' right of centerline, up to 223' MSL.

## EDNA, TX

### JACKSON COUNTY (26R)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 10DEC15 (15344) (FAA)

#### TAKEOFF OBSTACLE NOTES:

**Rwy 15**, trees beginning 758' from DER, left and right of centerline, up to 20' AGL/84' MSL.

**Rwy 33**, vehicle on road beginning 292' from DER, 576' left of centerline, up to 15' AGL/79' MSL.

Power poles beginning 783' from DER, 397' left of centerline, 40' AGL/104' MSL.

Power pole 1169' from DER, 506' right of centerline, 40' AGL/104' MSL.

## GALVESTON, TX

### SCHOLES INTL AT GALVESTON (GLS)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 22AUG13 (13234) (FAA)

#### DEPARTURE PROCEDURE:

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

#### TAKEOFF OBSTACLE NOTES:

**Rwy 14**, building 2614' from DER, 376' right of centerline, 76' AGL/81' MSL.

**Rwy 18**, buildings beginning 2560' from DER, 284' left of centerline, up to 121' AGL/178' MSL.

T-L tower 636' from DER, 551' right of centerline, 55' AGL/60' MSL.

Trees and poles beginning 50' from DER, 75' right of centerline, up to 60' AGL/65' MSL.

**Rwy 32**, crane 4434' from DER, 1081' left of centerline, 131' AGL/131' MSL.

**Rwy 36**, bush 419' from DER, 577' left of centerline, 12' AGL/17' MSL.

Tree 526' from DER, 371' left of centerline, 14' AGL/19' MSL.

Trees beginning 713' from DER, 383' right of centerline, up to 27' AGL/32' MSL.

## GIDDINGS, TX

### GIDDINGS-LEE COUNTY (GYB)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 29JUL10 (10210) (FAA)

#### TAKEOFF OBSTACLE NOTES:

**Rwy 17**, numerous trees beginning 720' from DER, 58' right of centerline, up to 50' AGL/479' MSL.

Numerous trees beginning 754' from DER, 340' left of centerline, up to 50' AGL/479' MSL.

**Rwy 35**, numerous trees beginning 613' from DER, 272' right of centerline, up to 50' AGL/539' MSL.

Numerous trees beginning 558' from DER, 265' left of centerline, up to 50' AGL/559' MSL.

Vehicle on road 516' from DER, 246' left of centerline, 15' AGL/514' MSL.

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

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

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## HOUSTON, TX

### CONROE/NORTH HOUSTON RGNL (CXO)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 22JUN17 (21336) (FAA)

##### TAKEOFF OBSTACLE NOTES:

- Rwy 1**, tree 829' from DER, 548' right of centerline, 297' MSL.
- Tree 1252' from DER, 553' right of centerline, 312' MSL.
- Trees beginning 1609' from DER, 300' left of centerline, up to 322' MSL.
- Trees beginning 3635' from DER, 464' left of centerline, up to 327' MSL.
- Tree 3830' from DER, 580' right of centerline, 347' MSL.
- Tree 4658' from DER, 135' right of centerline, 348' MSL.
- Rwy 14**, NAVAID 399' from DER, 266' right of centerline, 20' AGL/255' MSL.
- Tree 1478' from DER, 691' right of centerline, 291' MSL.
- Tree 1653' from DER, 682' left of centerline, 294' MSL.
- Tree 2129' from DER, 80' right of centerline, 306' MSL.
- Tree 2153' from DER, 407' left of centerline, 300' MSL.
- Rwy 19**, tree 1' from DER, 474' left of centerline, 292' MSL.
- Trees beginning 16' from DER, 264' left of centerline, up to 295' MSL.
- Tree 67' from DER, 322' right of centerline, 263' MSL.
- Trees beginning 855' from DER, 324' right of centerline, up to 303' MSL.
- Trees beginning 2139' from DER, 65' right of centerline, up to 316' MSL.
- Trees beginning 2365' from DER, 331' left of centerline, up to 312' MSL.
- Trees beginning 2475' from DER, 158' left of centerline, up to 315' MSL.
- Tree 3423' from DER, 123' right of centerline, 323' MSL.

### DAVID WAYNE HOOKS MEML (DWH)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3A 20APR23 (23110) (FAA)

##### TAKEOFF MINIMUMS:

- Rwys 17L, 35R**, NA-Environmental.
- Waterways 17, 35**, NA-Air traffic.

##### TAKEOFF OBSTACLE NOTES:

- Rwy 17R**, trees, pole beginning 84' from DER, 294' right of centerline, up to 189' MSL.
- Building 432' from DER, 526' left of centerline, 27' AGL/172' MSL.
- Building, NAVAID beginning 643' from DER, 256' left of centerline, up to 29' AGL/173' MSL.
- Trees beginning 708' from DER, 430' left of centerline, up to 188' MSL.
- Tree 1383' from DER, 860' right of centerline, 190' MSL.
- Tree 1514' from DER, 164' left of centerline, 189' MSL.
- Trees beginning 1648' from DER, 394' left of centerline, up to 197' MSL.
- Trees beginning 2100' from DER, 67' left of centerline, up to 214' MSL.
- Tree 2407' from DER, 188' left of centerline, 215' MSL.
- Tree 2469' from DER, 81' left of centerline, 217' MSL.
- Trees beginning 2743' from DER, 163' left of centerline, up to 220' MSL.
- Rwy 35L**, building, pole, tree beginning 85' from DER, 68' left of centerline, up to 48' AGL/202' MSL.
- Tree, vehicle on road beginning 100' from DER, on centerline, up to 175' MSL.
- Tree 487' from DER, 488' right of centerline, 200' MSL.
- Trees beginning 750' from DER, 123' right of centerline, up to 203' MSL.
- Tree, building, pole beginning 797' from DER, 42' left of centerline, up to 211' MSL.
- Tree, pole beginning 868' from DER, 144' right of centerline, up to 228' MSL.
- Tree 898' from DER, 283' left of centerline, 223' MSL.
- Tree, pole beginning 930' from DER, 31' left of centerline, up to 226' MSL.
- Trees beginning 1190' from DER, 613' right of centerline, up to 233' MSL.
- Tree 1266' from DER, 330' left of centerline, 228' MSL.
- Tree 1333' from DER, 76' left of centerline, 231' MSL.
- Tree, building, transmission line beginning 1342' from DER, 152' left of centerline, up to 233' MSL.
- Transmission line, tree beginning 1428' from DER, 245' right of centerline, up to 107' AGL/254' MSL.
- Building 1649' from DER, 252' left of centerline, 48' AGL/199' MSL.
- Tree, transmission line beginning 2084' from DER, 569' left of centerline, up to 238' MSL.

### ELLINGTON (EFD)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 10JAN13 (13010) (FAA)

##### TAKEOFF MINIMUMS:

- Rwy 22**, 200-1% or std w/min. climb of 214' per NM to 300, or alternatively with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to DER.

##### TAKEOFF OBSTACLE NOTES:

- Rwy 4**, tree 1526' from DER, 737' right of centerline, 39' AGL/69' MSL.
- Rwy 17R**, pole 1488' from DER, 817' right of centerline, 40' AGL/74' MSL.
- Rwy 22**, obstruction light on GS and equipment 321' from DER, 544' left of centerline, 39' AGL/68' MSL.
- Sign 213' from DER, 472' right of centerline, 6' AGL/32' MSL.
- Antenna on building 1998' from DER, 598' right of centerline, 54' AGL/83' MSL.
- Obstruction light on communication equipment and antenna 1626' from DER, 837' right of centerline, 88' AGL/114' MSL.
- Obstruction light on water tower and tank 6114' from DER, 1635' right of centerline, 159' AGL/192' MSL.

CON'T

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

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

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## HOUSTON, TX (CON'T)

### ELLINGTON (EFD) (CON'T)

**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 INTCNL/HOUSTON (IAH)

### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 05JUN08 (21112) (FAA)

#### TAKEOFF OBSTACLE NOTES:

**Rwy 8L**, tree 2866' from DER, 921' left of centerline, 107' AGL/201' MSL.

Multiple trees beginning 2750' from DER, 106' right of centerline, up to 80' AGL/174' MSL.

**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.

## HOUSTON EXEC (TME)

### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 30AUG07 (21112) (FAA)

#### DEPARTURE PROCEDURE:

**Rwy 36**, climb heading 355° to 700 before turning east.

#### TAKEOFF OBSTACLE NOTES:

**Rwy 36**, power poles from left to right beginning 703' from DER, 623' left to 685' right of centerline, up to 32' AGL/196' MSL.

## HOUSTON/SOUTHWEST (AXH)

### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 05JUN08 (21336) (FAA)

#### DEPARTURE PROCEDURE:

**Rwy 9**, climb heading 089° to 2000 before turning left.

**Rwy 27**, climb heading 269° to 2200 before turning right.

#### TAKEOFF OBSTACLE NOTES:

**Rwy 9**, multiple hangars beginning 239' from DER, 360' right of centerline, up to 42' AGL/106' MSL.

Multiple trees beginning 501' from DER, 355' right of centerline, up to 43' AGL/111' MSL.

Multiple 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.

## PEARLAND RGNL (LVJ)

### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 03APR14 (14093) (FAA)

#### DEPARTURE PROCEDURE:

**Rwy 14**, climb heading 142° to 1600 before turning right.

**Rwy 32**, climb heading 322° to 700 before proceeding on course.

#### TAKEOFF OBSTACLE NOTES:

**Rwy 14**, vehicles on road beginning 11' from DER, 450' right of centerline, up to 15' AGL/54' MSL.

Hangars 99' from DER, 521' left of centerline, up to 13' AGL/53' MSL.

Trees beginning 102' from DER, 328' left of centerline, up to 27' AGL/71' MSL.

Trees beginning 199' from DER, 307' right of centerline, up to 64' AGL/98' MSL.

Vehicles on road beginning 364' from DER, left and right of centerline, up to 15' AGL/59' MSL.

Trees beginning 618' from DER, 331' left of centerline, up to 32' AGL/71' MSL.

Trees beginning 983' from DER, 94' right of centerline, up to 20' AGL/90' MSL.

Trees beginning 1251' from DER, 72' left of centerline, up to 60' AGL/94' MSL.

**Rwy 32**, multiple trees beginning 30' from DER, 142' right of centerline, up to 59' AGL/100' MSL.

Multiple trees beginning 41' from DER, 200' left of centerline, up to 74' AGL/118' MSL.

Pole 68' from DER, 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.

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

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

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## HOUSTON, TX (CON'T)

### SUGAR LAND RGNL (SGR)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7A 20SEP12 (12264) (FAA)

##### DEPARTURE PROCEDURE:

**Rwy 17**, climb heading 170° to 1500 before turning eastbound.

**Rwy 35**, climb heading 350° to 1100 before turning southbound.

##### 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.

## WEST HOUSTON (IWS)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 20SEP12 (12264) (FAA)

##### 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 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.

## WILLIAM P HOBBY (HOU)

AMDT 7A 07OCT21 (21280) (FAA)

##### TAKEOFF MINIMUMS:

**Rwy 22**, std. w/min. climb of 290' per NM to 2700.

##### DEPARTURE PROCEDURE:

**Rwys 31L/R**, climb on heading 311° to 800 before turning westbound.

##### TAKEOFF OBSTACLE NOTES:

**Rwy 4**, lighting beginning 2' from DER, 85' left of centerline, up to 1' AGL/39' MSL.

Lighting beginning 2' from DER, 84' right of centerline, up to 1' AGL/39' MSL.

Lighting beginning 9' from DER, 4' left of centerline, up to 1' AGL/40' MSL.

Lighting beginning 9' from DER, 5' right of centerline, up to 1' AGL/40' MSL.

Building 1562' from DER, 858' right of centerline, 69' AGL/103' MSL.

Tree 2399' from DER, 154' left of centerline, 66' AGL/99' MSL.

Pole beginning 4403' from DER, 767' right of centerline, up to 121' AGL/166' MSL.

**Rwy 13L**, tree, lighting, sign beginning 3' from DER, 39' right of centerline, up to 75' AGL/115' MSL.

Lighting beginning 9' from DER, 39' left of centerline, up to 1' AGL/40' MSL.

Sign 26' from DER, 149' left of centerline, 2' AGL/42' MSL.

Trees, building, tree beginning 174' from DER, 9' left of centerline, up to 75' AGL/115' MSL.

Trees beginning 423' from DER, 24' right of centerline, up to 75' AGL/118' MSL.

Trees beginning 2389' from DER, 55' left of centerline, up to 75' AGL/118' MSL.

Trees 2448' from DER, 1149' right of centerline, 75' AGL/121' MSL.

**Rwy 13R**, lighting beginning 12' from DER, 85' right of centerline, up to 1' AGL/42' MSL.

Lighting beginning 12' from DER, 94' left of centerline, up to 1' AGL/42' MSL.

Lighting 41' from DER, 115' left of centerline, 3' AGL/44' MSL.

Lighting 42' from DER, 114' right of centerline, 2' AGL/43' MSL.

Fence 87' from DER, 492' left of centerline, 7' AGL/45' MSL.

Traverse way 178' from DER, 497' left of centerline, 55' MSL.

Traverse way 516' from DER, 542' right of centerline, 55' MSL.

Pole, tree beginning 752' from DER, 686' left of centerline, up to 50' AGL/90' MSL.

Trees beginning 1113' from DER, 737' right of centerline, up to 58' AGL/98' MSL.

Tree 1930' from DER, 905' left of centerline, 50' AGL/92' MSL.

Tree 2313' from DER, 948' right of centerline, 58' AGL/101' MSL.

Tree 2365' from DER, 1030' right of centerline, 59' AGL/105' MSL.

Tree 2716' from DER, 1128' right of centerline, 70' AGL/117' MSL.

**Rwy 22**, lighting beginning 5' from DER, 84' right of centerline, up to 1' AGL/43' MSL.

Pole, tree beginning 727' from DER, 626' right of centerline, up to 34' AGL/77' MSL.

Pole 1353' from DER, 776' left of centerline, 38' AGL/82' MSL.

Pole 1804' from DER, 968' right of centerline, 64' AGL/109' MSL.

Pole 2942' from DER, 1189' right of centerline, 72' AGL/117' MSL.

**CON'T**

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## HOUSTON, TX (CON'T)

### WILLIAM P HOBBY (HOU) (CON'T)

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

## HUNTSVILLE, TX

### HUNTSVILLE MUNI (UTS)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES DEPARTURE PROCEDURE:

**Rwy 18**, climb runway heading to 700 before turning.

## JACKSONVILLE, TX

### CHEROKEE COUNTY (JSO)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 16FEB06 (06047) (FAA)

#### DEPARTURE PROCEDURE:

**Rwy 14**, climb via heading 135° to 1200 before proceeding on course.

## JASPER, TX

### JASPER COUNTY/BELL FLD (JAS)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 27AUG09 (21336) (FAA)

#### TAKEOFF OBSTACLE NOTES:

**Rwy 18**, trees beginning 2081' from DER, 118' left of centerline, up to 100' AGL/327' MSL.  
Trees beginning 690' from DER, 87' right of centerline, up to 100' AGL/329' MSL.  
**Rwy 36**, hangar 320' from DER, 504' left of centerline, 27' AGL/236' MSL.  
Trees beginning 534' from DER, 139' left of centerline, up to 100' AGL/329' MSL.  
Pole 1968' from DER, 409' left of centerline, 33' AGL/262' MSL.  
Bush 94' from DER, 476' right of centerline, 8' AGL/217' MSL.  
Trees beginning 514' from DER, 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 FLD (45R)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 14FEB08 (21280) (FAA)

#### TAKEOFF OBSTACLE NOTES:

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

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## LA GRANGE, TX

### FAYETTE RGNL AIR CENTER (3T5)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 13SEP18 (18256) (FAA)

##### TAKEOFF OBSTACLE NOTES:

**Rwy 16**, trees, terrain beginning 146' from DER, 389' right of centerline, up to 45' AGL/378' MSL.  
Vehicles on traverse way beginning 199' from DER, 481' left of centerline, up to 15' AGL/336' MSL.  
Trees beginning 246' from DER, 454' right of centerline, up to 47' AGL/381' MSL.  
Tree 525' from DER, 533' right of centerline, 49' AGL/383' MSL.  
Tree 570' from DER, 540' left of centerline, 35' AGL/355' MSL.  
Tree, building beginning 760' from DER, 527' right of centerline, up to 45' AGL/384' MSL.  
Tree 769' from DER, 569' left of centerline, 43' AGL/361' MSL.  
Tree 880' from DER, 524' right of centerline, 45' AGL/386' MSL.  
Tree, pole, catenary beginning 926' from DER, 589' right of centerline, up to 48' AGL/390' MSL.  
Tree 945' from DER, 532' left of centerline, 45' AGL/364' MSL.  
Trees beginning 1005' from DER, 367' left of centerline, up to 46' AGL/365' MSL.  
Tree 1183' from DER, 632' right of centerline, 49' AGL/396' MSL.  
Trees beginning 1319' from DER, 259' left of centerline, up to 44' AGL/369' MSL.  
Trees beginning 1465' from DER, 297' right of centerline, up to 56' AGL/406' MSL.  
Trees beginning 1467' from DER, 28' left of centerline, up to 48' AGL/380' MSL.  
Tree 1570' from DER, 652' right of centerline, 54' AGL/407' MSL.  
Tree, catenary, pole beginning 1625' from DER, 32' right of centerline, up to 56' AGL/411' MSL.  
Tree 2052' from DER, 188' left of centerline, 34' AGL/381' MSL.  
Tree 2111' from DER, 523' left of centerline, 42' AGL/382' MSL.  
Trees beginning 2456' from DER, 51' left of centerline, up to 44' AGL/399' MSL.  
Trees beginning 2599' from DER, 5' right of centerline, up to 60' AGL/415' MSL.  
**Rwy 34**, trees beginning 35' from DER, 322' left of centerline, up to 53' AGL/358' MSL.  
Tree 200' from DER, 482' right of centerline, 13' AGL/315' MSL.  
Tree 262' from DER, 335' right of centerline, 24' AGL/326' MSL.  
Trees beginning 310' from DER, 361' right of centerline, up to 29' AGL/331' MSL.  
Tree 494' from DER, 396' left of centerline, 58' AGL/360' MSL.  
Tree, pole, catenary beginning 513' from DER, 205' left of centerline, up to 61' AGL/365' MSL.  
Trees beginning 634' from DER, 389' right of centerline, up to 52' AGL/352' MSL.  
Trees beginning 799' from DER, 162' right of centerline, up to 55' AGL/353' MSL.

## LA PORTE, TX

### LA PORTE MUNI (T41)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 29MAY14 (14149) (FAA)

##### DEPARTURE PROCEDURE:

**Rwy 5**, climb heading 046° to 500 before proceeding on course.

**Rwy 12**, climb heading 121° to 500 before turning right.

**Rwy 30**, climb heading 301° to 700 before turning right.

##### TAKEOFF OBSTACLE NOTES:

**Rwy 5**, trees beginning 334' from DER, left and right of centerline, up to 67' AGL/91' MSL.  
Poles beginning 973' from DER, 387' left of centerline, up to 40' AGL/64' MSL.  
Buildings beginning 319' from DER, left and right of centerline, up to 30' AGL/54' MSL.  
Stack 2.3 NM from DER, 3296' left of centerline, 300' AGL/334' MSL.  
**Rwy 12**, poles beginning 127' from DER, left and right of centerline, up to 54' AGL/74' MSL.  
Trees beginning 183' from DER, 446' right of centerline, up to 40' AGL/60' MSL.  
Building 675' from DER, 411' right of centerline, up to 32' AGL/55' MSL.  
Trees beginning 888' from DER, 113' right of centerline, up to 43' AGL/63' MSL.  
**Rwy 23**, buildings beginning 30' from DER, 242' left of centerline, up to 30' AGL/54' MSL.  
Buildings beginning 231' from DER, 134' right of centerline, up to 30' AGL/54' MSL.  
Trees beginning 243' from DER, 494' right of centerline, up to 67' AGL/91' MSL.  
Poles beginning 363' from DER, left and right of centerline, up to 40' AGL/64' MSL.  
Vehicle on road beginning 493' from DER, 562' left of centerline, up to 15' AGL/39' MSL.  
Trees beginning 570' 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.

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## LIBERTY, TX

### LIBERTY MUNI (T78)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 29MAY14 (14149) (FAA)

##### DEPARTURE PROCEDURE:

**Rwy 16**, climb heading 161° to 1700 before turning left.

**Rwy 34**, climb heading 341° to 1000 before turning right.

##### TAKEOFF OBSTACLE NOTES:

**Rwy 16**, hangars beginning 4' from DER, 340' right of centerline, up to 21' AGL/91' MSL.

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.

## LIVINGSTON, TX

### LIVINGSTON MUNI (00R)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 05MAY11 (11125) (FAA)

##### DEPARTURE PROCEDURE:

**Rwy 12**, climb heading 125° to 1700 before proceeding on course.

**Rwy 30**, climb heading 305° to 800 before turning south.

##### TAKEOFF OBSTACLE NOTES:

**Rwy 12**, trees beginning at DER, right and left of centerline, up to 100' AGL/249' MSL.

**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

AMDT 1 07DEC17 (17341) (FAA)

##### TAKEOFF OBSTACLE NOTES:

**Rwy 7**, trees beginning 109' from DER, 333' right of centerline, up to 354' MSL.

Trees beginning 358' from DER, 293' left of centerline, up to 350' MSL.

Trees beginning 467' from DER, 452' right of centerline, up to 365' MSL.

Trees beginning 513' from DER, 302' left of centerline, up to 381' MSL.

Tree 1470' from DER, 328' right of centerline, 366' MSL.

Trees beginning 1477' from DER, 483' right of centerline, up to 367' MSL.

Trees beginning 1599' from DER, 36' left of centerline, up to 387' MSL.

Trees beginning 1618' from DER, 274' right of centerline, up to 369' MSL.

Trees beginning 1636' from DER, 42' right of centerline, up to 376' MSL.

Trees beginning 1977' from DER, 44' right of centerline, up to 379' MSL.

Trees beginning 3207' from DER, 1351' left of centerline, up to 391' MSL.

Tree 3787' from DER, 965' left of centerline, 395' MSL.

Trees beginning 3798' from DER, 1035' left of centerline, up to 403' MSL.

**Rwy 16**, trees beginning 6' from DER, 384' left of centerline, up to 56' AGL/324' MSL.

Tree 138' from DER, 529' right of centerline, 284' MSL.

Trees beginning 184' from DER, 3' left of centerline, up to 79' AGL/344' MSL.

Tree 260' from DER, 229' right of centerline, 289' MSL.

Tree, rd (n) beginning 264' from DER, 164' right of centerline, up to 320' MSL.

Trees beginning 1333' from DER, 388' right of centerline, up to 324' MSL.

Trees beginning 1932' from DER, 49' right of centerline, up to 327' MSL.

Tree 2612' from DER, 448' right of centerline, 90' AGL/342' MSL.

**Rwy 25**, tree 265' from DER, 511' right of centerline, 302' MSL.

Trees beginning 403' from DER, 283' right of centerline, up to 354' MSL.

Trees beginning 407' from DER, 555' left of centerline, up to 299' MSL.

Trees beginning 1375' from DER, 605' left of centerline, up to 328' MSL.

Tree 1627' from DER, 629' left of centerline, 330' MSL.

Tree 2655' from DER, 144' left of centerline, 353' MSL.

Tree 3109' from DER, 417' right of centerline, 362' MSL.

**Rwy 34**, sign 20' from DER, 200' left of centerline, 1' AGL/290' MSL.

Ldg 48' from DER, 457' right of centerline, 303' MSL.

Tree 95' from DER, 328' right of centerline, 330' MSL.

Trees beginning 166' from DER, 314' right of centerline, up to 54' AGL/338' MSL.

Pole and trees beginning 344' from DER, 310' right of centerline, up to 346' MSL.

Vehicles on road 571' from DER, 3' left of centerline, 312' MSL.

Vehicle on road beginning 579' from DER, 75' right of centerline, up to 306' MSL.

Trees beginning 602' from DER, 166' left of centerline, up to 367' MSL.

Trees beginning 620' from DER, 446' right of centerline, up to 354' MSL.

Tree, pole beginning 809' from DER, 230' right of centerline, up to 361' MSL.

Trees beginning 1249' from DER, 233' right of centerline, up to 364' MSL.

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## MADISONVILLE, TX

MADISONVILLE MUNI (51R)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 31MAY12 (12152) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 18**, multiple trees and power poles beginning at DER, 179' right of centerline, up to 50' AGL/310' MSL.

Multiple trees and power poles beginning at DER, 200' left of centerline, up to 50' AGL/309' MSL.

**Rwy 36**, multiple trees and power poles beginning 99' from DER, 50' left of centerline, up to 50' AGL/341' MSL. Multiple trees beginning 50' from DER, 75' right of centerline, up to 50' AGL/ 346' MSL.

## MARLIN, TX

MARLIN (T15)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 10JAN13 (13010) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 17**, power lines beginning 411' from DER, left and right of centerline, up to 125' AGL/524' MSL.

Building 7' from DER, 155' left of centerline, 30' AGL/439' MSL.

Trees beginning 656' from DER, left and right of centerline, up to 50' AGL/449' MSL.

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.

## MEXIA, TX

MEXIA-LIMESTONE CO (LXY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 11AUG22 (22223) (FAA)

TAKEOFF MINIMUMS:

**Rwy 36**, 300-2¼ or std. w/min. climb of 259' per NM to 1000, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1700' prior to the DER.

TAKEOFF OBSTACLE NOTES:

**Rwy 18**, vehicles on road beginning 202' from DER, 400' left of centerline, up to 15' AGL/554' MSL.

Tree 419' from DER, 292' right of centerline, up to 80' AGL/619' MSL.

**Rwy 36**, trees beginning 179' from DER, 382' right of centerline, up to 80' AGL/619' MSL.

Trees beginning 391' from DER, 315' left of centerline, up to 80' AGL/629' MSL.

## NACOGDOCHES, TX

NACOGDOCHES A L MANGHAM JR RGNL (OCH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 22JUN17 (17173) (FAA)

DEPARTURE PROCEDURE:

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

TAKEOFF OBSTACLE NOTES:

**Rwy 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 02FEB84 (84033) (FAA)

DEPARTURE PROCEDURE:

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

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## ORANGE, TX

### ORANGE COUNTY (ORG)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 22OCT09 (09295) (FAA)

#### TAKEOFF MINIMUMS:

**Rwy 4**, 400-1¼ or std. w/ min. climb of 425' per NM to 500.

**Rwys 13, 31**, NA-Environmental.

#### TAKEOFF OBSTACLE NOTES:

**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 26MAY16 (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.

#### TAKEOFF OBSTACLE NOTES:

**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 3 30JAN20 (20030) (FAA)

#### TAKEOFF MINIMUMS:

**Rwy 9**, 400-3 w/min. climb of 262' per NM to 1200 or std. w/min. climb of 316' per NM to 900 or 1000-3 for VCOA.

#### VCOA:

**Rwy 9**, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Palestine Muni at or above 1300 before proceeding on course.

#### TAKEOFF OBSTACLE NOTES:

**Rwy 9**, trees beginning 201' from DER, 195' left of centerline, up to 100' AGL/381' MSL.

Trees beginning 207' from DER, 87' right of centerline, up to 100' AGL/378' MSL.

Trees beginning 2276' from DER, 216' left of centerline, up to 100' AGL/384' MSL.

Trees beginning 2535' from DER, 218' left of centerline, up to 100' AGL/388' MSL.

Trees beginning 2538' from DER, 84' right of centerline, up to 100' AGL/388' MSL.

Trees beginning 2794' from DER, 221' left of centerline, up to 100' AGL/394' MSL.

Trees beginning 2796' from DER, 69' right of centerline, up to 100' AGL/401' MSL.

Trees beginning 3052' from DER, 223' left of centerline, up to 100' AGL/401' MSL.

Trees beginning 4085' from DER, 233' left of centerline, up to 100' AGL/407' MSL.

Trees beginning 4344' from DER, 236' left of centerline, up to 100' AGL/414' MSL.

Trees beginning 4350' from DER, 66' right of centerline, up to 100' AGL/407' MSL.

Trees beginning 4603' from DER, 238' left of centerline, up to 100' AGL/420' MSL.

Trees beginning 4609' from DER, 64' right of centerline, up to 100' AGL/414' MSL.

Trees beginning 4862' from DER, 241' left of centerline, up to 100' AGL/427' MSL.

Trees beginning 4868' from DER, 61' right of centerline, up to 100' AGL/420' MSL.

Trees beginning 5124' from DER, 243' left of centerline, up to 100' AGL/430' MSL.

Trees beginning 5127' from DER, 59' right of centerline, up to 100' AGL/430' MSL.

Tree 5380' from DER, 549' left of centerline, 100' AGL/434' MSL.

Trees beginning 5386' from DER, 56' right of centerline, up to 100' AGL/437' MSL.

Trees beginning 5404' from DER, 54' right of centerline, up to 100' AGL/440' MSL.

Trees beginning 5627' from DER, 855' left of centerline, up to 100' AGL/440' MSL.

Trees beginning 5639' from DER, 249' left of centerline, up to 100' AGL/443' MSL.

Tree 5663' from DER, 1872' right of centerline, 100' AGL/443' MSL.

Tree 5883' from DER, 2070' left of centerline, 100' AGL/447' MSL.

Trees beginning 5886' from DER, 251' left of centerline, up to 100' AGL/450' MSL.

Trees beginning 5904' from DER, 51' right of centerline, up to 100' AGL/450' MSL.

Tree 1 NM from DER, 2073' left of centerline, 100' AGL/457' MSL.

Trees beginning 1 nm from DER, 254' left of centerline, up to 100' AGL/460' MSL.

Trees beginning 1 NM from DER, 48' right of centerline, up to 100' AGL/457' MSL.

Tree 1 NM from DER, 1867' right of centerline, 100' AGL/460' MSL.

Tree 1 NM from DER, 2075' left of centerline, 100' AGL/463' MSL.

Trees beginning 1 NM from DER, 256' left of centerline, up to 100' AGL/470' MSL.

Trees beginning 1 NM from DER, 46' right of centerline, up to 100' AGL/463' MSL.

Tree 1 NM from DER, 2078' left of centerline, 100' AGL/473' MSL.

Trees beginning 1 NM from DER, 43' right of centerline, up to 100' AGL/473' MSL.

Tree 1.1 NM from DER, 2080' left of centerline, 100' AGL/483' MSL.

CON'T

22 FEB 2024 to 21 MAR 2024

22 FEB 2024 to 21 MAR 2024

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

23278

SC-5

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

23278

## PALESTINE, TX (CON'T)

### PALESTINE MUNI (PSN) (CON'T)

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

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

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

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

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

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

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

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

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

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

Trees beginning 1.2 NM from DER, 269' left of centerline, up to 100' AGL/532' MSL.

Trees beginning 1.2 NM from DER, 30' right of centerline, up to 100' AGL/525' MSL.

Trees beginning 1.3 NM from DER, 272' left of centerline, up to 100' AGL/552' MSL.

Trees beginning 1.3 NM from DER, 12' right of centerline, up to 100' AGL/552' MSL.

Trees beginning 1.3 NM from DER, 274' left of centerline, up to 100' AGL/568' MSL.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Tree 561' from DER, 481' left of centerline, 452' MSL.

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

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

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

## PORT LAVACA, TX

### CALHOUN COUNTY (PKV)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS:

**Rwys 5, 23**, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

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

**Rwy 32**, vegetation 65' from DER, 408' left of centerline, 34' MSL.

Pole and vehicles on road beginning 547' from DER, 412' right of centerline, up to 35' AGL/60' MSL.

Vehicles on road 570' from DER, 411' left of centerline, up to 45' MSL.

## VICTORIA, TX

### VICTORIA RGNL (VCT)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 12AUG21 (21224) (FAA)

TAKEOFF OBSTACLE NOTES:

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

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

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

## WHARTON, TX

### WHARTON RGNL (ARM)

#### TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 27AUG09 (09239) (FAA)

TAKEOFF OBSTACLE NOTES:

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

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

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

Tree 828' from DER, 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.

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

23278

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22 FEB 2024 to 21 MAR 2024

22 FEB 2024 to 21 MAR 2024


**TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND**

  
**DIVERSE VECTOR AREA (RADAR VECTORS)**

23278

**WINNIE/STOWELL, TX**

CHAMBERS COUNTY/WINNIE STOWELL (T90)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 05OCT23 (23278) (FAA)

TAKEOFF MINIMUMS:

**Rwy 17**, std w/min climb of 376'/NM to 2700, or 1800-3 for VCOA.**Rwy 35**, std w/min climb of 341'/NM to 2700, or 1800-3 for VCOA.

VCOA:

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

TAKEOFF OBSTACLE NOTES:

**Rwy 17**, trees beginning 616' from DER, 23' left of centerline, up to 125' MSL.

Trees beginning 1164' from DER, 475' right of centerline, up to 125' MSL.

**Rwy 35**, trees beginning 742' from DER, 212' left of centerline, up to 130' MSL.

Tree 1572' from DER, 672' right of centerline, 130' MSL.

22 FEB 2024 to 21 MAR 2024

22 FEB 2024 to 21 MAR 2024


**TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND**

  
**DIVERSE VECTOR AREA (RADAR VECTORS)**

23278

SC-5

BLUBELL FOUR ARRIVAL  
(BLUBL.BLUBL4) 26MAR20

HOUSTON APP CON  
124.225 306.975  
EFD ATIS  
135.575 269.9  
HOU D-ATIS  
124.6  
SGR ATIS \*  
118.125  
TME ATIS  
119.525

WACO  
115.3 ACT  
Chan 100

LLANO  
108.2 ILO  
Chan 19  
N30°47.78'  
W98°47.24'  
L-19, H-6

CENTEX  
112.8 CWK  
Chan 75

MAVERICK  
113.1 TTT  
Chan 78

COWBOY  
116.2 CVE  
Chan 109

LEONA  
110.8 LOA  
Chan 45  
N31°07.44'  
W95°58.08'  
L-19, H-6

COLLEGE STATION  
113.3 CLL  
Chan 80  
N30°36.30'-W96°25.24'  
L-19-21, H-7

BLUBL  
9000  
N30°18.27'  
W96°18.18'

NAVASOTA  
115.9 TNV  
Chan 106

JAYJO  
N30°20.23'  
W96°48.90'  
L-19-21, H-7

SNDAY  
N29°56.42'  
W96°09.68'  
9000

INDUSTRY  
110.2 IDU  
Chan 39

NOTE: RADAR required.  
NOTE: JAYJO TRANSITION  
for Austin Terminal Area  
Departures only.



NOTE: Chart not to scale.

HOUSTON, TEXAS

ARRIVAL ROUTE DESCRIPTION

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

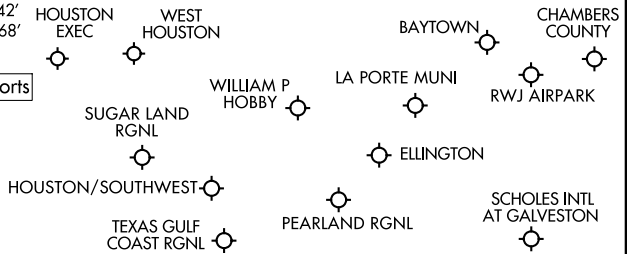
ELLVR TRANSITION (ELLVR.BLUBL4): From over ELLVR on CLL R-334 to CLL VORTAC, then on CLL R-153 to BLUBL. Thence . . .

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

LEONA TRANSITION (LOA.BLUBL4): From over LOA VORTAC on LOA R-209 and CLL R-029 to CLL VORTAC, then on CLL R-153 to BLUBL. Thence . . .

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

. . . From over BLUBL on CLL R-153 to cross SNDAY at 9000, from SNDAY fly heading 153°. Expect vectors to final approach course at or prior to SNDAY.



(BLUBL.BLUBL4) 23110  
BLUBELL FOUR ARRIVAL

AI-198 (FAA)

HOUSTON, TEXAS

(CESAN, CESAN4) 22JUN17

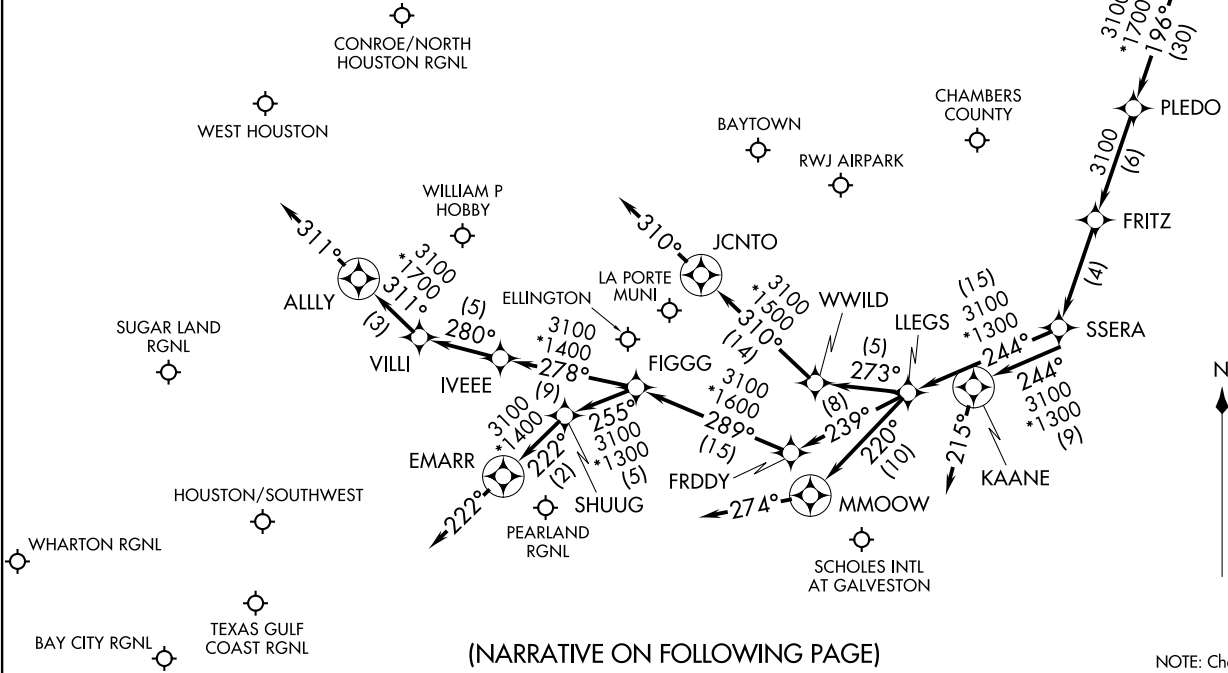
CESAN FOUR ARRIVAL (RNAV)

HOUSTON, TEXAS

HOUSTON APP CON  
121.3 377.1  
CXO ATIS  
118.325  
EFD ATIS  
135.575 269.9  
HOU D-ATIS  
124.6  
SGR ATIS \*  
118.125

NOTE: RADAR required.  
NOTE: RNAV 1.  
NOTE: DME/DME/IRU or GPS required.  
NOTE: DME/DME/IRU or GPS equipped Turbojet and Turboprop aircraft capable of 280K or greater must file the WAAPL (RNAV) STAR.

CESAN  
VERTICAL NAVIGATION  
PLANNING INFORMATION  
Expect 11000



(NARRATIVE ON FOLLOWING PAGE)

(CESAN, CESAN4) 23222

CESAN FOUR ARRIVAL (RNAV)

HOUSTON, TEXAS

AI-198 (FAA)

# CESAN FOUR 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 ALLY, 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, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

HUDZY FOUR ARRIVAL  
(HUDZY, HUDZY4) 100CT19

HUDZY FOUR ARRIVAL  
(HUDZY, HUDZY4) 23054

AL-198 (FAA)

HOUSTON, TEXAS

HOUSTON APP CON  
120.05 379.1  
CXO ATIS  
118.325  
DWH ATIS  
128.375  
EFD ATIS  
135.575 269.9  
HOU D-ATIS  
124.6  
IAH D-ATIS  
124.05  
SGR ATIS \*  
118.125  
TME ATIS  
119.525

LUFKIN  
112.1 LFK  
Chan 58

SAWMILL  
113.75 SWB  
Chan 84 (Y)  
N31°58.39-W92°40.63'  
L-22, H-6

WAPPL  
N30°13.91'  
W94°19.84'  
**VERTICAL NAVIGATION  
PLANNING INFORMATION**

BRWCK  
N30°35.23'  
W93°42.36'

ALEXANDRIA  
116.1 AEX  
Chan 108  
N31°15.40-W92°30.06'  
L-21-22, H-6

HUMBLE  
116.6 IAH  
Chan 113

CLEVELAND MUNI

CLWSN  
N30°04.42'  
W94°55.13'

LIBERTY MUNI

HUDZY  
N30°06.21'  
W94°48.53'  
**TURBOJETS:**  
Expect 14000 280K

LAKE CHARLES  
113.4 LCH  
Chan 81

SABINE PASS  
115.4 SBI  
Chan 101

TRINITY  
114.75 MHF  
Chan 94(Y)

DAVID WAYNE HOOKS MEML

GEORGE BUSH  
INTCNL/HOUSTON

WEST HOUSTON  
HOUSTON EXEC

BAYTOWN  
RWJ  
AIRPARK

CHAMBERS  
COUNTY

LA PORTE MUNI

WILLIAM P  
HOBBY

ELLINGTON

SUGAR LAND RGNL

HOUSTON/SOUTHWEST

PEARLAND  
RGNL

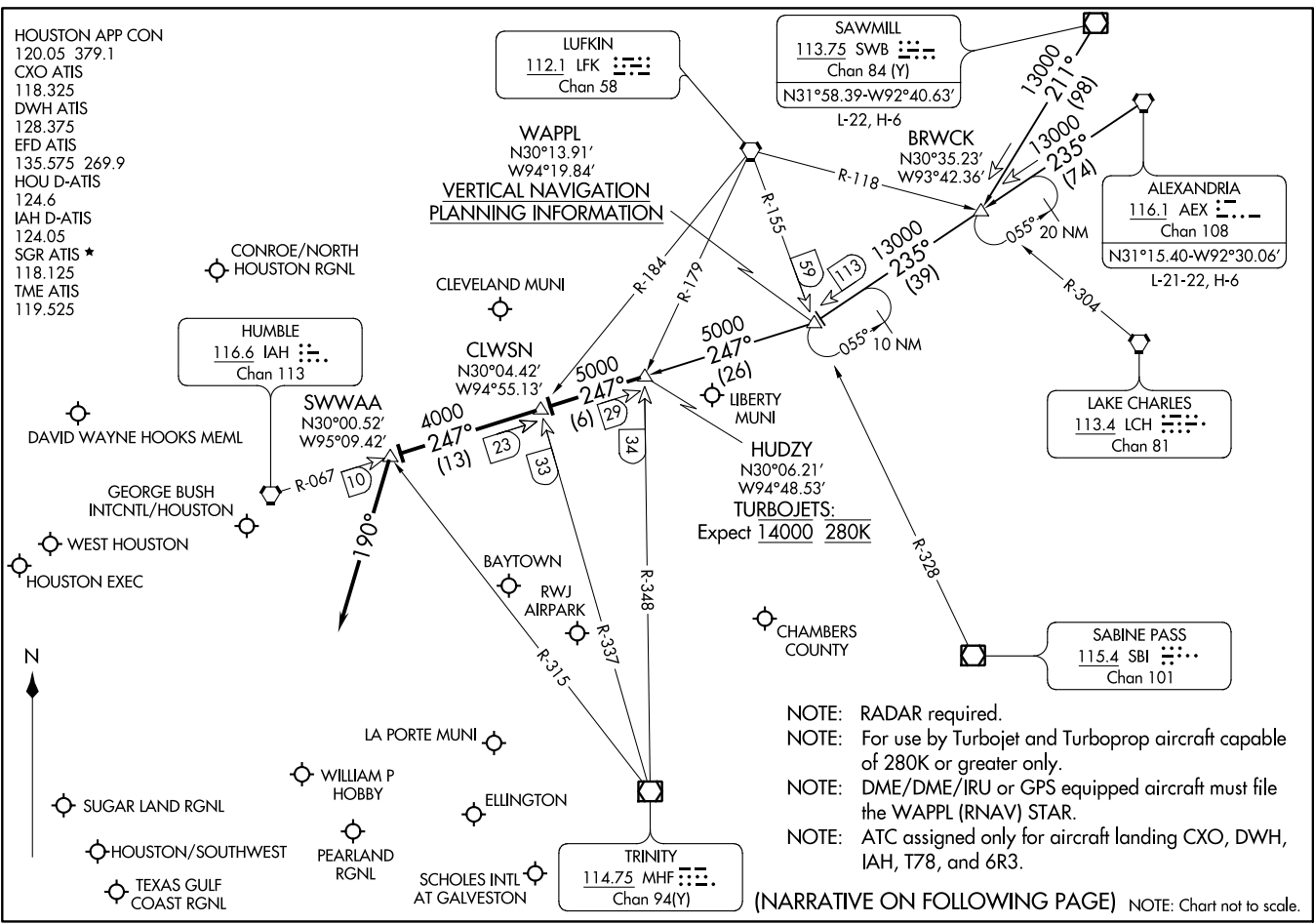
TEXAS GULF  
COAST RGNL

SCHOLES INTL  
AT GALVESTON

- NOTE: RADAR required.
- NOTE: For use by Turbojet and Turboprop aircraft capable of 280K or greater only.
- NOTE: DME/DME/IRU or GPS equipped aircraft must file the WAPPL (RNAV) STAR.
- NOTE: ATC assigned only for aircraft landing CXO, DWH, IAH, T78, and 6R3.

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

HOUSTON, TEXAS





ARRIVAL ROUTE DESCRIPTION

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

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

. . . .from over HUDZY on IAH R-067 to CLWSN, then on IAH R-067 to SWWAA, then on heading 190°. Expect RADAR vectors to final approach course.

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

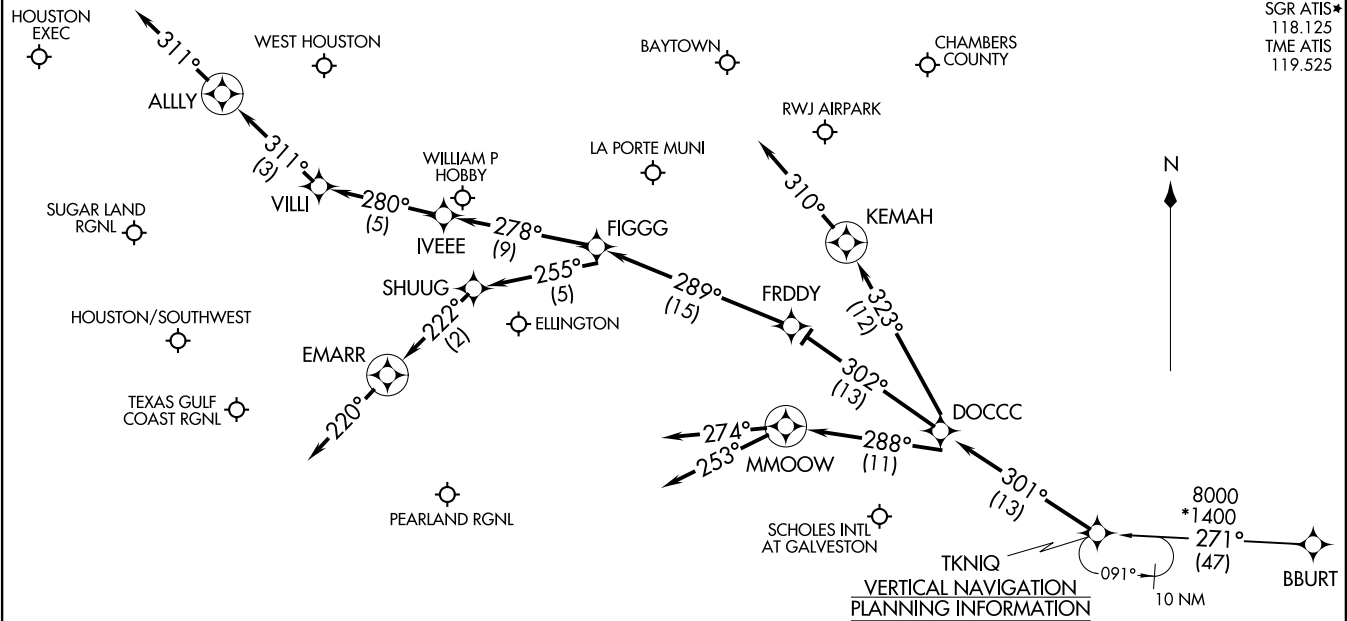
RNAV 1- DME/DME/IRU or GPS.  
RADAR required.

HOUSTON APP CON  
119.625 226.675  
EFD ATIS  
135.575 269.9  
HOU D-ATIS  
124.6  
SGR ATIS\*  
118.125  
TME ATIS  
119.525

TKNIQ THREE ARRIVAL (RNAV)  
(TKNIQ.TKNIQ3) 07OCT21

TKNIQ THREE ARRIVAL (RNAV)  
(TKNIQ.TKNIQ3) 21336

AI-198 (FAA)



NOTE: Turbojet and turboprop aircraft only.  
NOTE: ATC assigned only for aircraft landing HOU.

VERTICAL NAVIGATION  
PLANNING INFORMATION  
HOU TURBOJETS: Expect 12000 250K  
SOUTH SATELLITE TURBOJETS: Expect 12000 280K

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

HOUSTON, TEXAS

HOUSTON, TEXAS

ARRIVAL ROUTE DESCRIPTION

BBURT TRANSITION (BBURT.TKNIQ3)

From TKNIQ on track 301° to DOCCC.

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

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

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

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

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

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

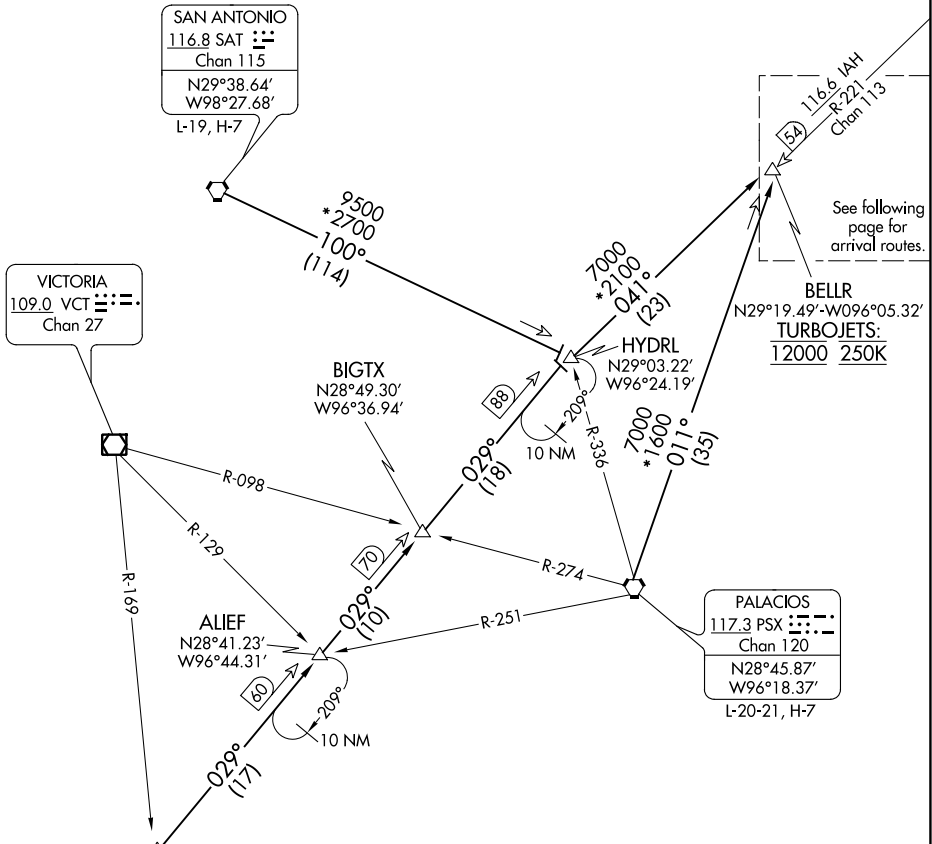
# TSHRT TWO ARRIVAL

## Transition Routes

HOUSTON, TEXAS

HOUSTON APP CON  
 119.175 291.675  
 EFD ATIS  
 135.575 269.9  
 HOU D-ATIS  
 124.6  
 SGR ATIS \*  
 118.125  
 TME ATIS  
 119.525

NOTE: RADAR required.  
 NOTE: DME/DME/IRU or GPS equipped turbojet and turboprop aircraft landing HOU must file the BELLR (RNAV) STAR.  
 NOTE: DME required.  
 NOTE: DME required for holding at HYDRL.



SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

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

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

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

**SAN ANTONIO TRANSITION (SAT.TSHRT2):** From over SAT VORTAC on SAT R-100 to HYDRL, then on IAH R-221 to BELLR. Thence . . . .

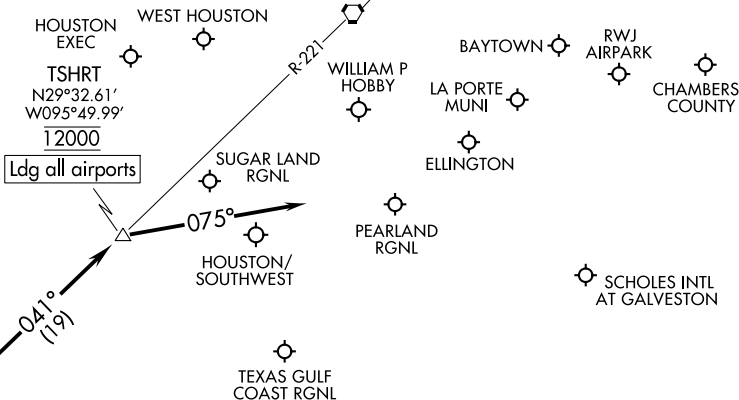
# TSHRT TWO ARRIVAL

## Transition Routes

HOUSTON, TEXAS

HOUSTON APP CON  
 119.175 291.675  
 EFD ATIS  
 135.575 269.9  
 HOU D-ATIS  
 124.6  
 SGR ATIS ★  
 118.125  
 TME ATIS  
 119.525

HUMBLE  
 116.6 IAH ☘☘☘  
 Chan 113



Ldg all airports

041°  
(19)

075°

IAH  
R-221

BELLR  
 N29°19.49'-W096°05.32'  
 TURBOJET:  
 12000 250K

HOUSTON EXEC  
 TSHRT  
 N29°32.61'  
 W095°49.99'  
 12000

SUGAR LAND RGNL

HOUSTON/SOUTHWEST

TEXAS GULF COAST RGNL

WILLIAM P HOBBY

PEARLAND RGNL

ELLINGTON

LA PORTE MUNI

BAYTOWN

RWJ AIRPARK

CHAMBERS COUNTY

SCHOLES INTL AT GALVESTON

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

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

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

SC-5, 22 FEB 2024 to 21 MAR 2024

SC-5, 22 FEB 2024 to 21 MAR 2024

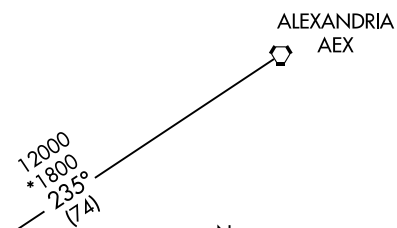
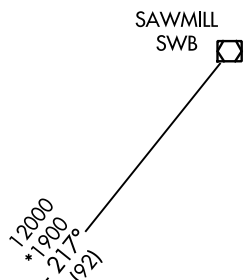
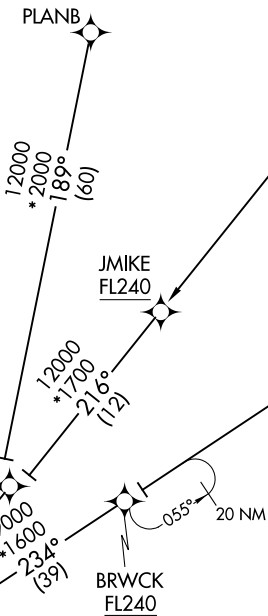
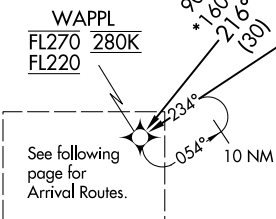
(WAPPL.WAPPL6) 070CT21

WAPPL SIX ARRIVAL (RNAV) Transition Routes

HOUSTON, TEXAS

HOUSTON APP CON  
120.05 379.1  
EFD ATIS  
135.575 269.9  
HOU D-ATIS  
124.6  
SGR ATIS ★  
118.125  
TME ATIS  
119.525

- NOTE: Expect runway assignment from Houston TRACON upon initial contact.
- NOTE: For turbojet and turboprop aircraft capable of 280K or greater only.
- NOTE: Turbojet aircraft descend via MACH number until intercepting 280K. Maintain 280K until slowed by the STAR.
- NOTE: ZEBBB TRANSITION ATC assigned only.
- NOTE: Except for aircraft departing SHV, PLANB TRANSITION is ATC assigned only. Do not file.



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

(CONTINUED ON FOLLOWING PAGES)

- ALEXANDRIA TRANSITION (AEX.WAPPL6)
- PLANB TRANSITION (PLANB.WAPPL6)
- SAWMILL TRANSITION (SWB.WAPPL6)
- ZEBBB TRANSITION (ZEBBB.WAPPL6)

NOTE: Chart not to scale.

(WAPPL.WAPPL6) 21280

AL-198 (FAA)  
Transition Routes

HOUSTON, TEXAS

WAPPL SIX ARRIVAL (RNAV) Arrival Routes  
 (WAPPL, WAPPL6) 07OCT21

Arrival Routes

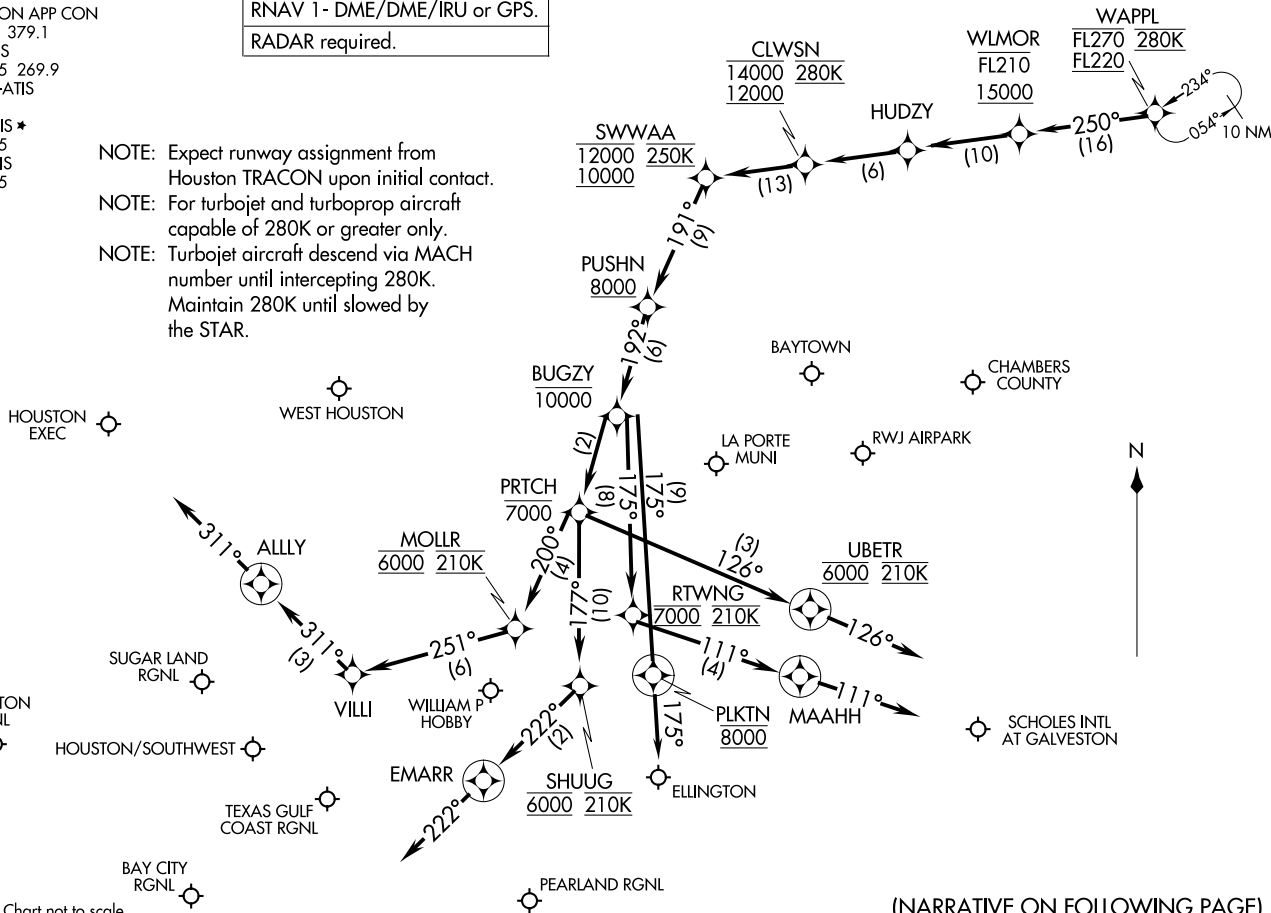
HOUSTON, TEXAS

HOUSTON APP CON  
 120.05 379.1  
 EFD ATIS  
 135.575 269.9  
 HOU D-ATIS  
 124.6  
 SGR ATIS \*  
 118.125  
 TME ATIS  
 119.525

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



(NARRATIVE ON FOLLOWING PAGE)

(WAPPL, WAPPL6) 23054  
 Arrival Routes

Arrival Routes

HOUSTON, TEXAS

AL-198 (FAA)

## ARRIVAL ROUTE DESCRIPTION

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

LANDING HOU RUNWAY 4: From PUSHN on track 192° to cross BUGZY at or below 10000, then on track 192° to cross 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 RADAR vectors to final approach course.

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

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

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

LANDING GLS, TME, AXH, HPY, T41, 54T, T00, SGR, ARM, BYY, LBX, LVJ, IWS, EFD: From WAPPL on track 250° to cross WLMOR between 15000 and FL210, then on track 250° to HUDZY, then on track 250° to cross CLWSN between 12000 and 14000 and at 280K, then on track 250° to cross SWWAA between 10000 and 12000 and at 250K, then on track 191° to cross PUSHN at or above 8000, then on track 192° to cross BUGZY at or below 10000, then on track 175° to cross PLKTN at 8000, then on track 175°. Expect RADAR vectors to final approach course.

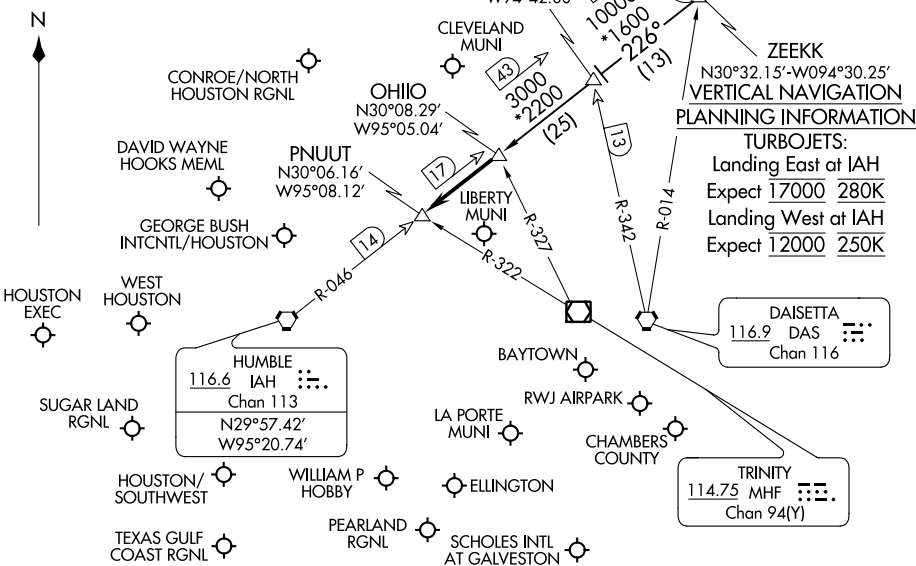


OHIO FOUR ARRIVAL  
(OHIO.OHIO4) 22JUN17

HOUSTON APP CON  
120.05 379.1  
CXO ATIS  
118.325  
DWH ATIS  
128.375  
EFD ATIS  
135.575 269.9  
HOU D-ATIS  
124.6  
IAH D-ATIS  
124.05  
SGR ATIS\*  
118.125  
TME ATIS  
119.525

NOTE: DME/DME/IRU or GPS equipped turbojet aircraft landing IAH must file the GESNR/ZEEKK or DOOBI/SKNRD (RNAV) STAR.

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

OHIO FOUR ARRIVAL  
(OHIO.OHIO4) 23222

AL-5461 (FAA)

HOUSTON, TEXAS