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Revision Letter For Cycle 04-2012
Change Notices
Notebook

General Information

Location: Longview TX USA
IATA Code: GGG
Lat/Long: N32° 23.0' W094° 42.7'
Elevation: 365 ft

Airport Use: Public
Magnetic Variation: 2.6°E
Sectional Chart: Memphis

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: HP Bottle, LP Bottle
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1249 Z
Sunset: 0014 Z,

Runway Information

Runway: 13
Length x Width: 10000 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 358 ft
Lighting: Edge, ALS, Pilot controlled
Displaced Threshold: 800 ft

Runway: 18
Length x Width: 6109 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 356 ft
Lighting: Edge

Runway: 31
Length x Width: 10000 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 354 ft
Lighting: Edge, Pilot controlled

Runway: 36
Length x Width: 6109 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 365 ft
Lighting: Edge

Communication Information

ATIS 119.65

ASOS 119.65

Eastex Tower 119.2 CTAF PCL

Eastex Ground Control 121.6

Longview Approach Control 128.75 At or below 5000 ft

Longview Approach Control 124.675 At or below 5000 ft

Longview Approach Control 133.1 At or above 4500 ft

Longview Approach Control 118.25 At or below 4000 ft

Longview Approach TRSA 128.75 At or below 5000 ft

Longview Approach TRSA 124.675 At or below 5000 ft

Longview Approach TRSA 133.1 At or below 4500 ft

Longview Approach TRSA 118.25 At or below 4000 ft

Longview Departure Control 128.75 At or below 5000 ft

Longview Departure Control 124.675 At or below 5000 ft

Longview Departure Control 133.1 At or above 4500 ft

Longview Departure Control 118.25 At or below 4000 ft

Stebbins Avn Unicom 130.25

Eastex Unicom 122.95

FT Worth Flight Service Station 122.2 RCO

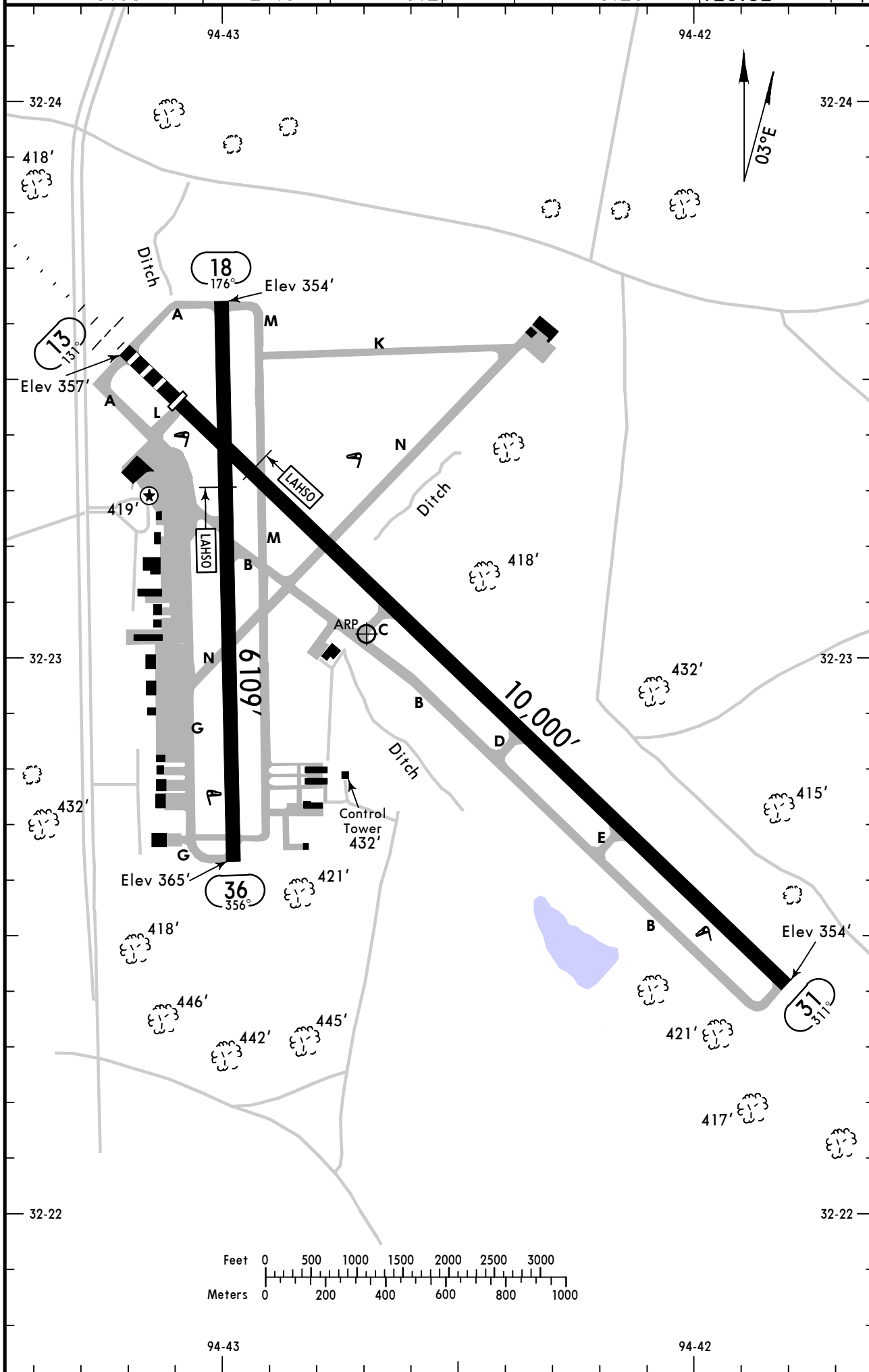
FT Worth Center 126.325 Remote Communications Air-Ground

KGGG/GGG
Apt Elev 365'
N32 23.0 W094 42.7

JEPPesen
10 JUN 11 (10-9)

LONGVIEW, TEXAS
EAST TEXAS REG

ATIS (ASOS when Twr Inop)	*EASTEX Ground	*Tower	UNICOM	*LONGVIEW Departure (R)	FT WORTH Center
119.65	121.6	CTAF 119.2	122.95	118.25	126.32 when Dep inop.



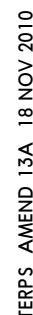
CHANGES: None.

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[illegible]

LONGVIEW, TEXAS
ILS or LOC Rwy 13

BRIEFING STRIP TM

TERPS AMEND 13A 18 NOV 2010TERPS AMEND 13A 18 NOV 2010

TERPS AMEND 13A 18 NOV 2010

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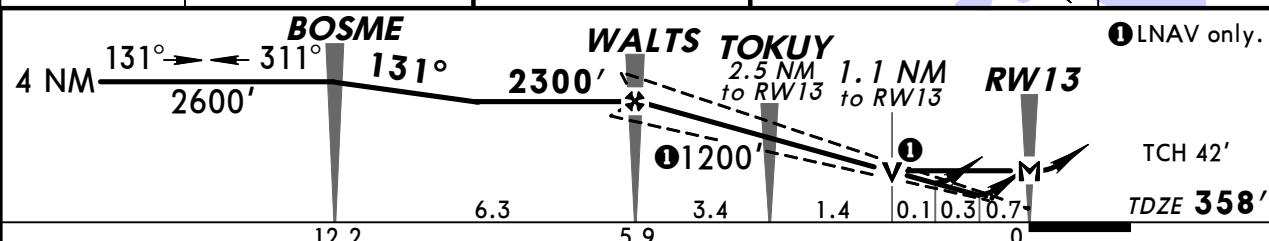
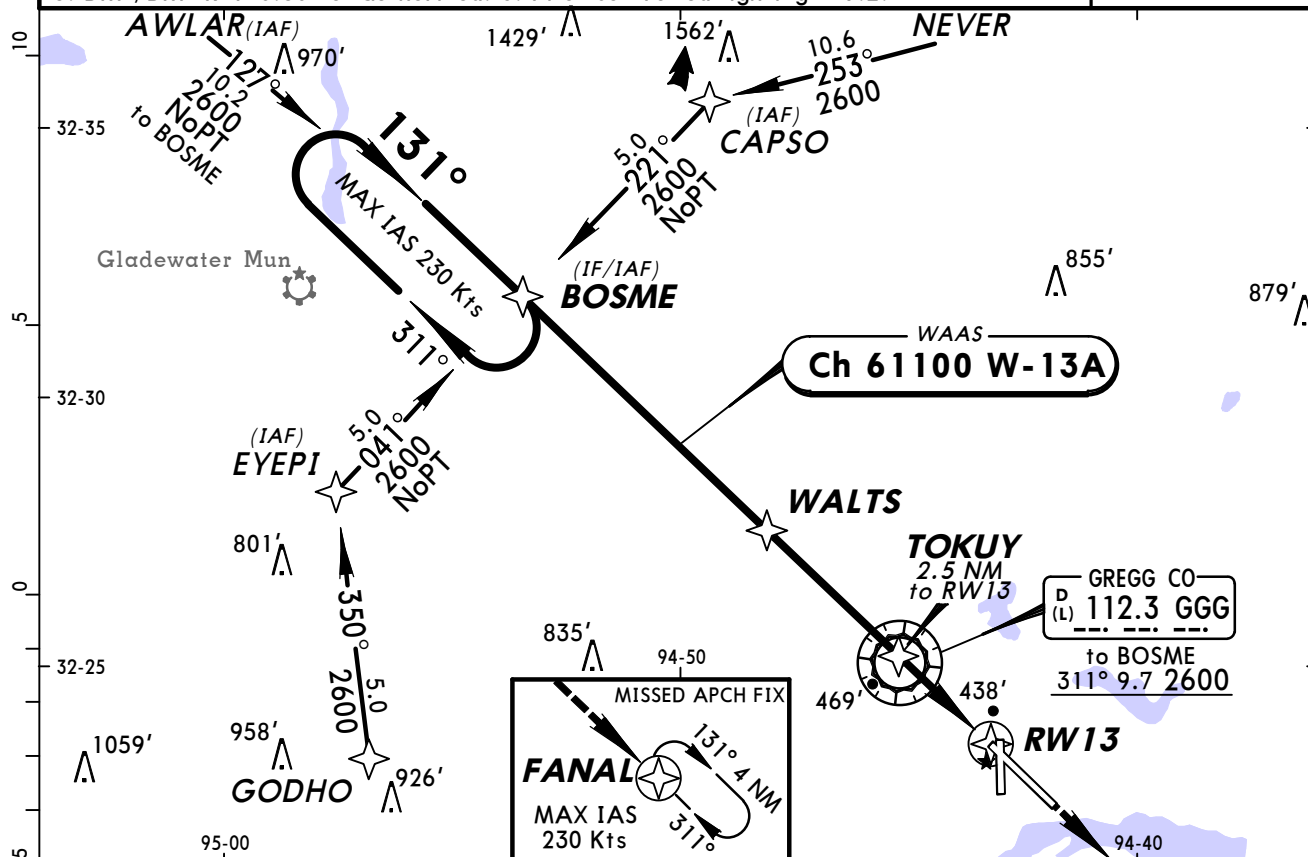
ATIS (ASOS when Twr Inop) 119.65	*LONGVIEW Approach (R) 118.25	FT WORTH Center 126.32 when App inop.	*EASTEX Tower CTAF 119.2	*Ground 121.6
WAAS Ch 61100 W-13A	Final Apch Crs 131°	Minimum Alt WALTS 2300' (1942')	LPV DA(H) (CONDITIONAL) 612' (254')	Apt Elev 365' TDZE 358'

MISSED APCH: Climb to 3000' direct FANAL and hold.

- Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'
1. Use local altimeter setting; if not received, use Gilmer altimeter setting.
 2. VDP not authorized when using Gilmer altimeter setting. 3. Baro-VNAV not authorized when using Gilmer altimeter setting. 4. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 48°C (118°F).
 5. DME/DME RNP-0.30 not authorized. 6. Pilot controlled lighting 119.2.

2800'

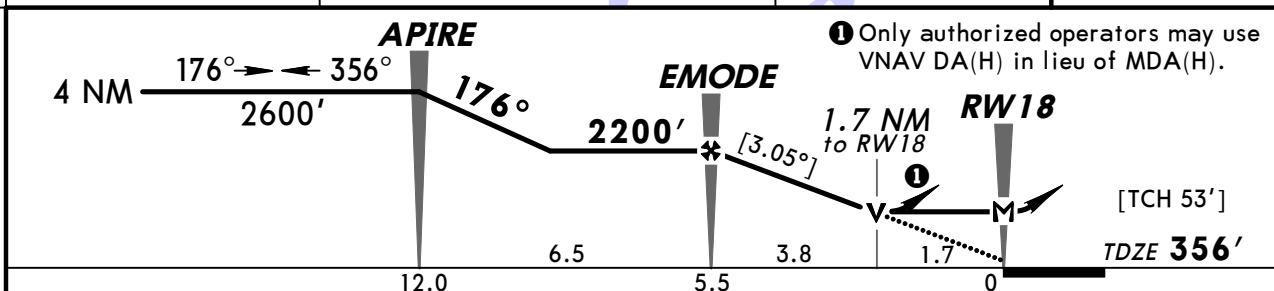
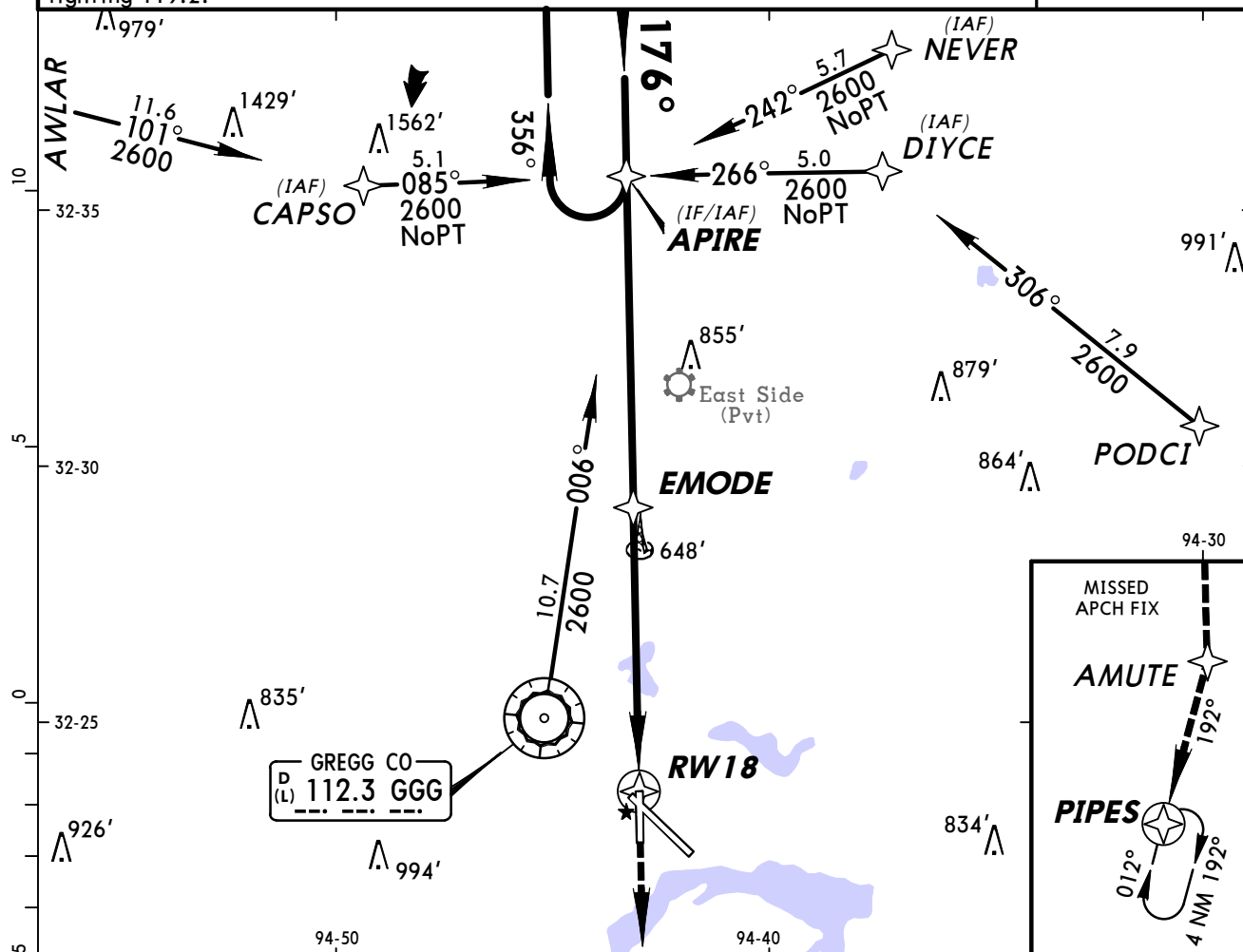
MSA RW13



Gnd speed-Kts	70	90	100	120	140	160	MALSR	3000'	FANAL
Glide Path Angle 3.00°	372	478	531	637	743	849			
MAP at RW13									

STRAIGHT-IN LANDING RWY 13 With Local Altimeter Setting										CIRCLE-TO-LAND With Local Altimeter Setting	
LPV DA(H) 612' (254')			LNAV/VNAV DA(H) 726' (368')			LNAV MDA(H) 760' (402')			Max Kts	MDA(H)	
RAILout	ALS out		RAILout	ALS out		RAILout	ALS out				
A									90	860' (495')-1	
B	RVR 24		RVR 40			RVR 24			120	860' (495')-1	
C	or 1/2	RVR 50 or 1	or 3/4			or 1/2			140	860' (495')-1 1/2	
D						or 3/4			165	920' (555')-2	
						or 1					
With Gilmer Altimeter Setting										With Gilmer Altimeter Setting	
DA(H) 671' (313')			DA(H) 785' (427')			MDA(H) 820' (462')			Max Kts	MDA(H)	
RAILout	ALS out		RAILout	ALS out		RAILout	ALS out				
A									90	920' (555')-1	
B	RVR 24		RVR 50			RVR 24			120	920' (555')-1	
C	or 1/2	RVR 50 or 1	or 1			or 1/2			140	920' (555')-1 1/2	
D						or 3/4			165	980' (615')-2	
						or 1					

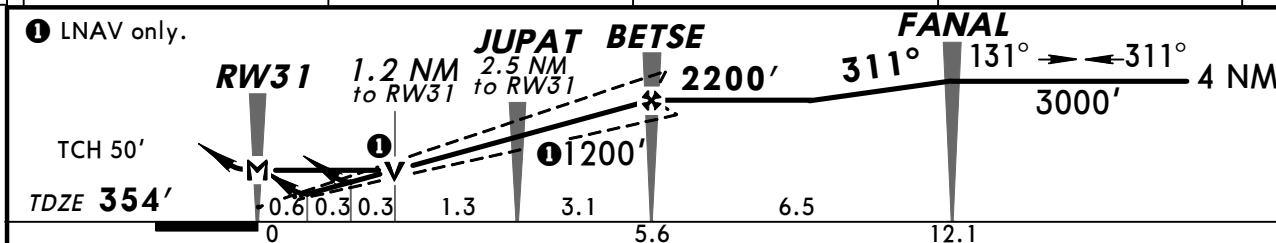
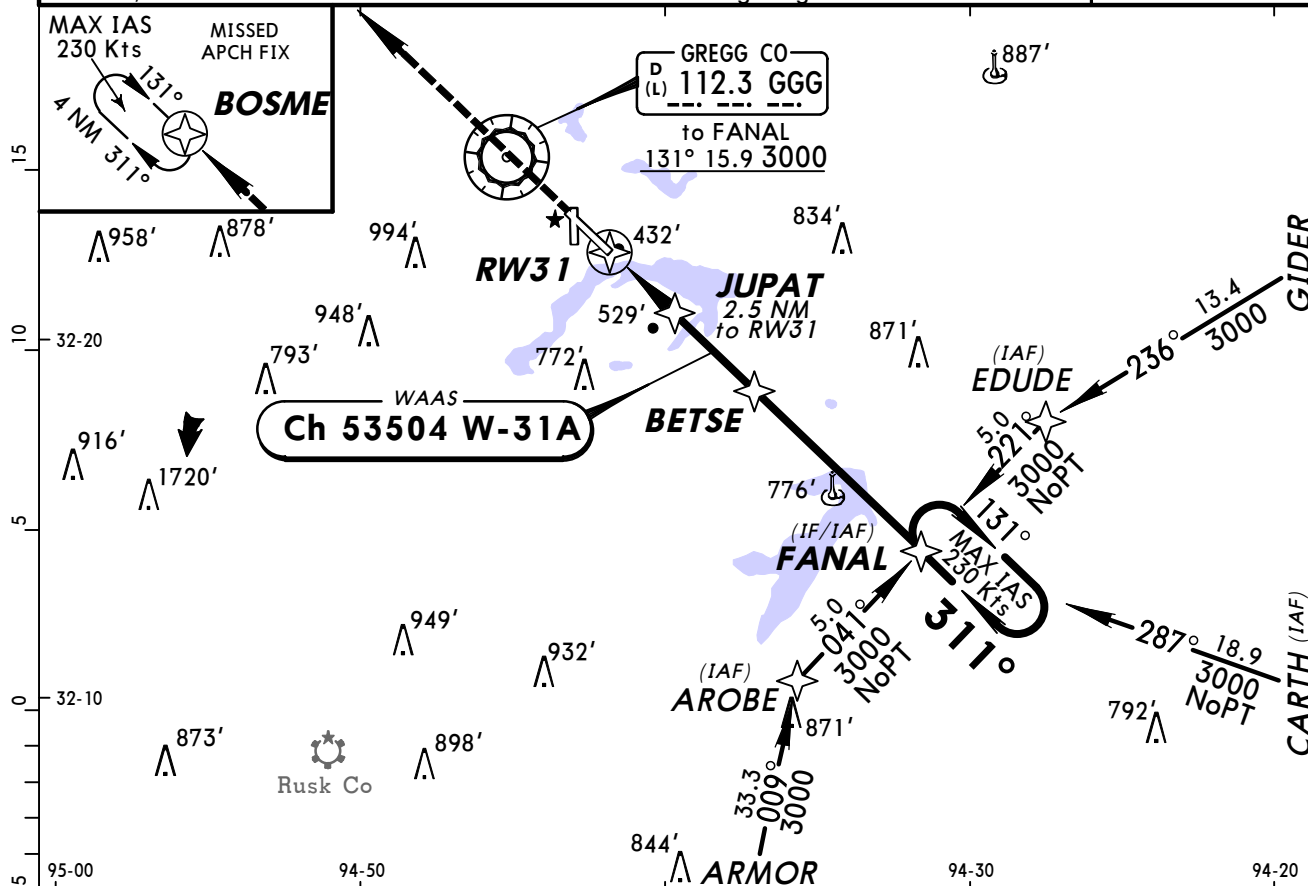
ATIS (ASOS when Twr Inop) 119.65	*LONGVIEW Approach (R) 118.25	FT WORTH Center 126.32 when App inop.	*EASTEX Tower CTAF 119.2	*Ground 121.6
RNAV	Final Apch Crs 176°	Minimum Alt EMODE 2200' (1844')	LNAV MDA(H) (CONDITIONAL) 960' (604')	Apt Elev 365' TDZE 356'
MISSED APCH: Climb to 2400' direct AMUTE and via 192° track to PIPES and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Gilmer altimeter setting. 2. VDP not authorized when using Gilmer altimeter setting. 3. DME/DME RNP-0.30 not authorized. 4. Visibility reduction by helicopters not authorized. 5. Pilot controlled lighting 119.2.				
2800' MSA RW18				



Gnd speed-Kts	70	90	100	120	140	160			
Descent Angle [3.05°]	378	486	540	648	755	863			
MAP at RW18									

STRAIGHT-IN LANDING RWY 18				CIRCLE-TO-LAND			
LNAV		LNAV		With Local Altimeter Setting		With Gilmer Altimeter Setting	
MDA(H) 960' (604')		MDA(H) 1020' (664')		MDA(H)		MDA(H)	
With Local Altimeter Setting		With Gilmer Altimeter Setting					
A	1	1	90	960' (595') - 1	1020' (655') - 1		
B	1	1	120	960' (595') - 1	1020' (655') - 1		
C	1 3/4	1 3/4	140	960' (595') - 1 3/4	1020' (655') - 1 3/4		
D	2	2	165	960' (595') - 2	1020' (655') - 2		

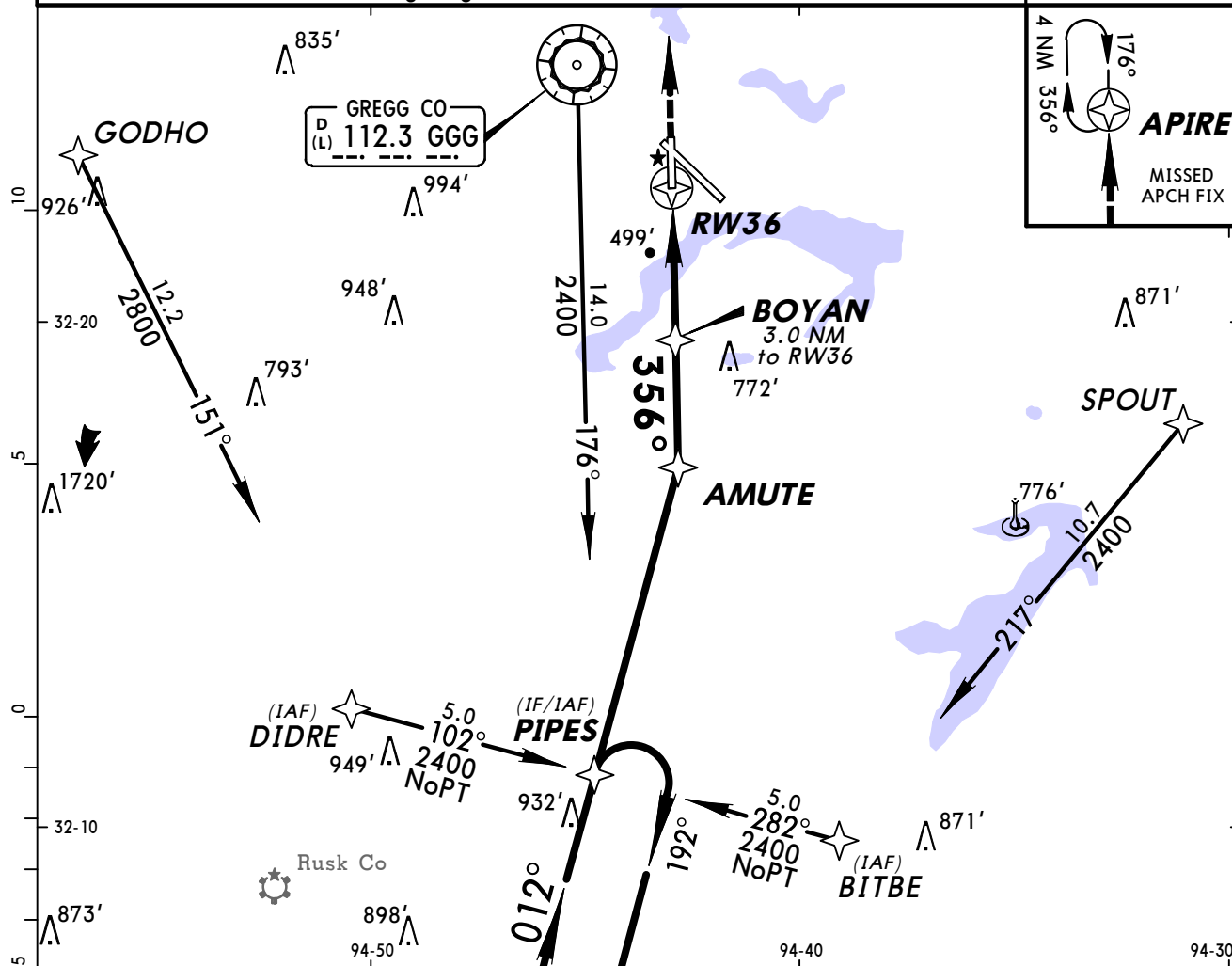
ATIS (ASOS when Twr Inop) 119.65	*LONGVIEW Approach (R) 118.25	FT WORTH Center 126.32 when App inop.	*EASTEX Tower CTAF 119.2	*Ground 121.6
WAAS Ch 53504 W-31A	Final Apch Crs 311°	Minimum Alt BETSE 2200' (1846')	LPV DA(H) (CONDITIONAL) 604' (250')	Apt Elev 365' TDZE 354'
MISSED APCH: Climb to 2600' direct BOSME and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Gilmer altimeter setting. 2. VDP not authorized when using Gilmer altimeter setting. 3. Baro-VNAV not authorized when using Gilmer altimeter setting. 4. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 48°C (118°F). 5. DME/DME RNP-0.30 not authorized. 6. Pilot controlled lighting 119.2.				



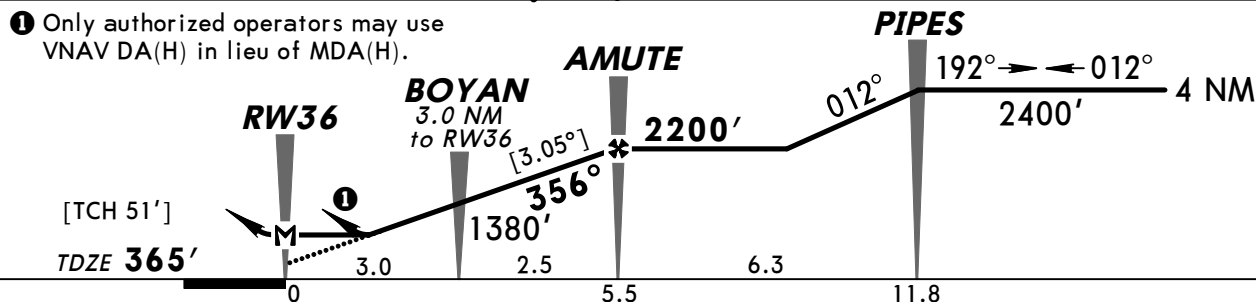
Gnd speed-Kts	70	90	100	120	140	160				
Glide Path Angle 3.00°	372	478	531	637	743	849				
MAP at RW31										

STRAIGHT-IN LANDING RWY 31 With Local Altimeter Setting						CIRCLE-TO-LAND With Local Altimeter Setting	
LPV DA(H) 604' (250')		LNAV/VNAV DA(H) 682' (328')		LNAV MDA(H) 800' (446')		Max Kts	MDA(H)
A	3/4	1 1/4	1	90	860'(495')-1		
B				120			
C				140			
D				165			
DA(H) 663' (309')		With Gilmer Altimeter Setting DA(H) 741' (387')		MDA(H) 860' (506')		Max Kts	With Gilmer Altimeter Setting MDA(H)
A	1	1 1/2	1 1/4	90	920'(555')-1 1/4		
B				120			
C				140			
D				165			

ATIS (ASOS when Twr Inop) 119.65	*LONGVIEW Approach (R) 118.25	FT WORTH Center 126.32 when App inop.	*EASTEX Tower CTAF 119.2	*Ground 121.6
RNAV	Final Apch Crs 356°	Minimum Alt AMUTE 2200' (1835')	LNAV MDA(H) (CONDITIONAL) 760' (395')	Apt Elev 365' TDZE 365'
MISSED APCH: Climb to 2600' direct APIRE and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. Use local altimeter setting; if not received, use Gilmer altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. Visibility reduction by helicopters not authorized. 4. Pilot controlled lighting 119.2.				
				2800' MSA RW36



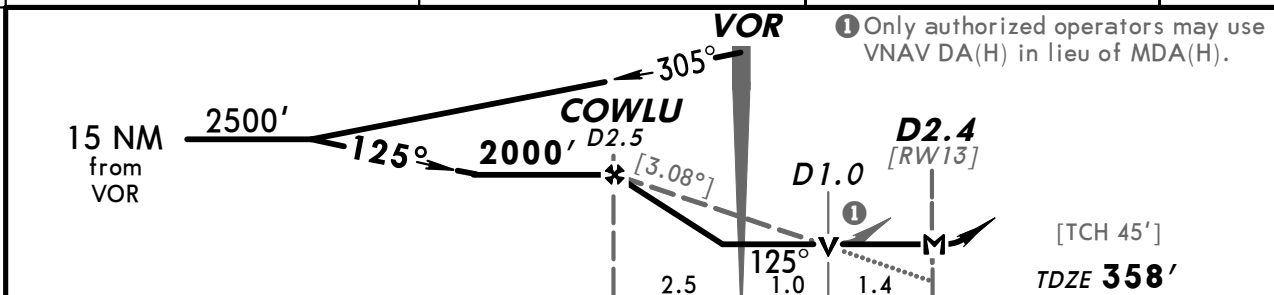
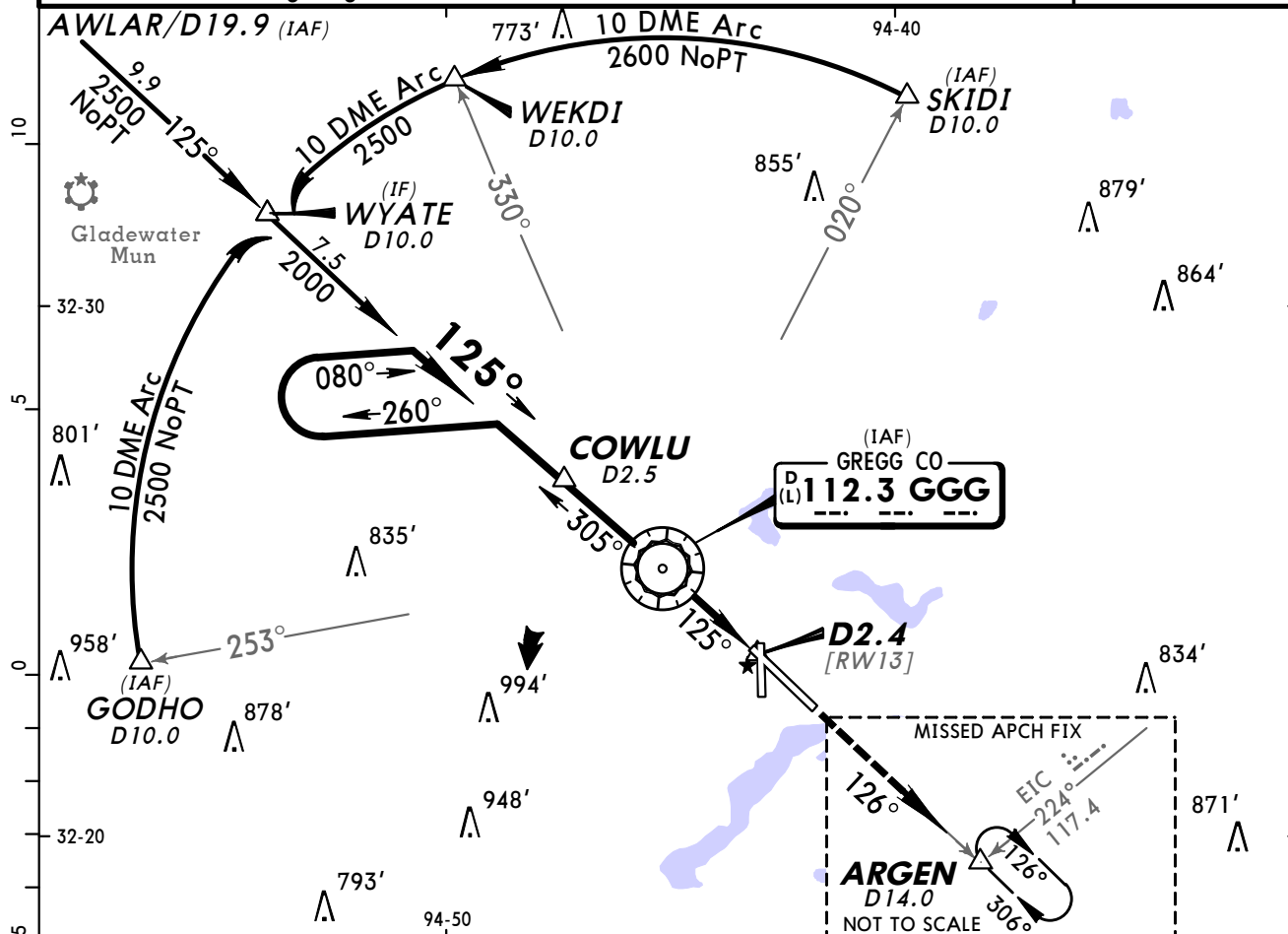
① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160		VASI-L	2600'	→	APIRE
Descent Angle [3.05°]	378	486	540	648	755	863					
MAP at RW36											

STRAIGHT-IN LANDING RWY 36				CIRCLE-TO-LAND			
MDA(H) 760' (395') With Local Altimeter Setting		MDA(H) 820' (455') With Gilmer Altimeter Setting		With Local Altimeter Setting		With Gilmer Altimeter Setting	
LNAV		LNAV		Max Kts	MDA(H)	MDA(H)	
A				90	860' (495') - 1	920' (555') - 1	
B	1		1	120			
C			1 1/4	140	860' (495') - 1 1/2	920' (555') - 1 1/2	
D	1 1/4		1 1/2	165	920' (555') - 2	980' (615') - 2	

ATIS (ASOS when Twr Inop)	*LONGVIEW Approach (R)	FT WORTH Center	*EASTEX Tower	*Ground
119.65	118.25	126.32 when App inop.	CTAF 119.2	121.6
VOR GGG 112.3	Final Apch Crs 125°	Minimum Alt COWLU 2000' (1642')	MDA(H) (CONDITIONAL) 860' (502')	Apt Elev 365' TDZE 358'
MISSED APCH: Climb to 3000' outbound via GGG VOR R-126 to ARGEN INT/D14.0 and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Gilmer altimeter setting. 2. VDP not authorized when using Gilmer altimeter setting. 3. Pilot controlled lighting 119.2.				
				2800' MSA GGG VOR



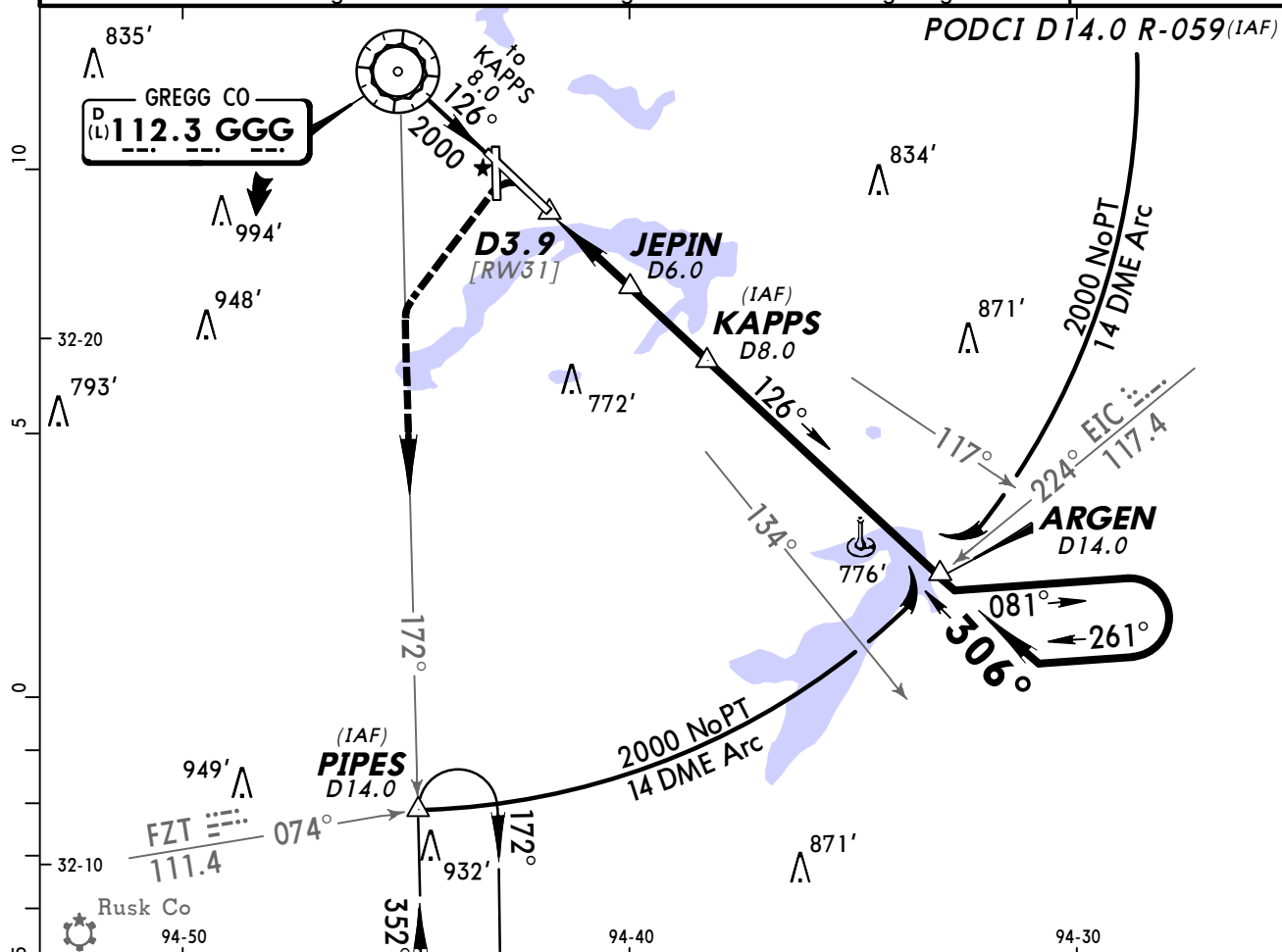
Gnd speed-Kts	70	90	100	120	140	160	MALSR	3000'	GGG via 112.3 R-126	ARGEN
Descent Angle [3.08°]	381	490	545	654	763	872				
MAP at D2.4										

STRAIGHT-IN LANDING RWY 13						CIRCLE-TO-LAND			
MDA(H) 860' (502') With Local Altimeter Setting			MDA(H) 920' (562') With Gilmer Altimeter Setting			With Local Altimeter Setting		With Gilmer Altimeter Setting	
	RAIL out	ALS out		RAIL out	ALS out	Max Kts	MDA(H)		MDA(H)
A	RVR 24	RVR 40	RVR 50	RVR 24	RVR 40	90	860' (495') - 1		920' (555') - 1
B	or 1/2	or 3/4	or 1	or 1/2	or 3/4	120			
C	RVR 50			RVR 50	1 1/2	140	860' (495') - 1 1/2		920' (555') - 1 1/2
D	or 1	1 1/2		RVR 60	1 3/4	165	920' (555') - 2		980' (615') - 2
				or 1 1/4					

ATIS (ASOS when Twr Inop)	*LONGVIEW Approach (R)	FT WORTH Center	*EASTEX Tower	*Ground
119.65	118.25	126.32 when App inop.	CTAF 119.2	121.6
VOR GGG 112.3	Final Apch Crs 306°	Minimum Alt KAPPS 1700' (1346')	MDA(H) (CONDITIONAL) 740' (386')	Apt Elev 365' TDZE 354'
MISSED APCH: Climb to 800' then climbing LEFT turn to 2500' outbound via GGG VOR R-172 to PIPES INT and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Gilmer altimeter setting. 2. VDP not authorized when using Gilmer altimeter setting. 3. Pilot controlled lighting 119.2.				

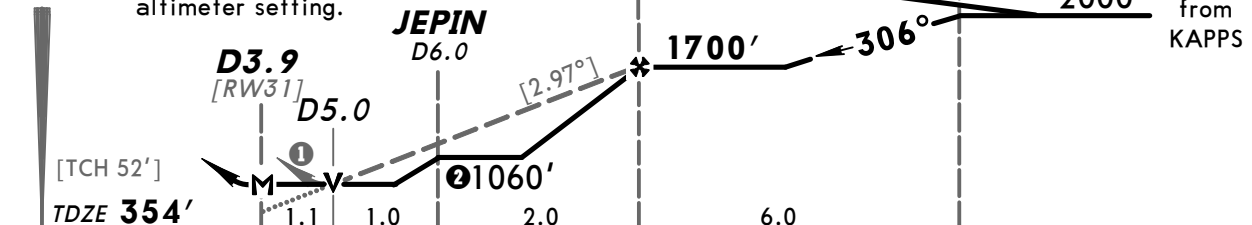
2800'

MSA GGG VOR



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).

VOR ② 1120' when using Gilmer altimeter setting.

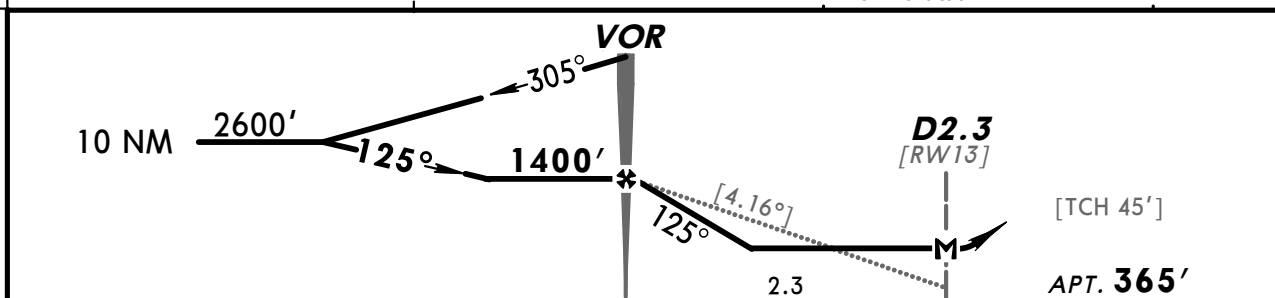
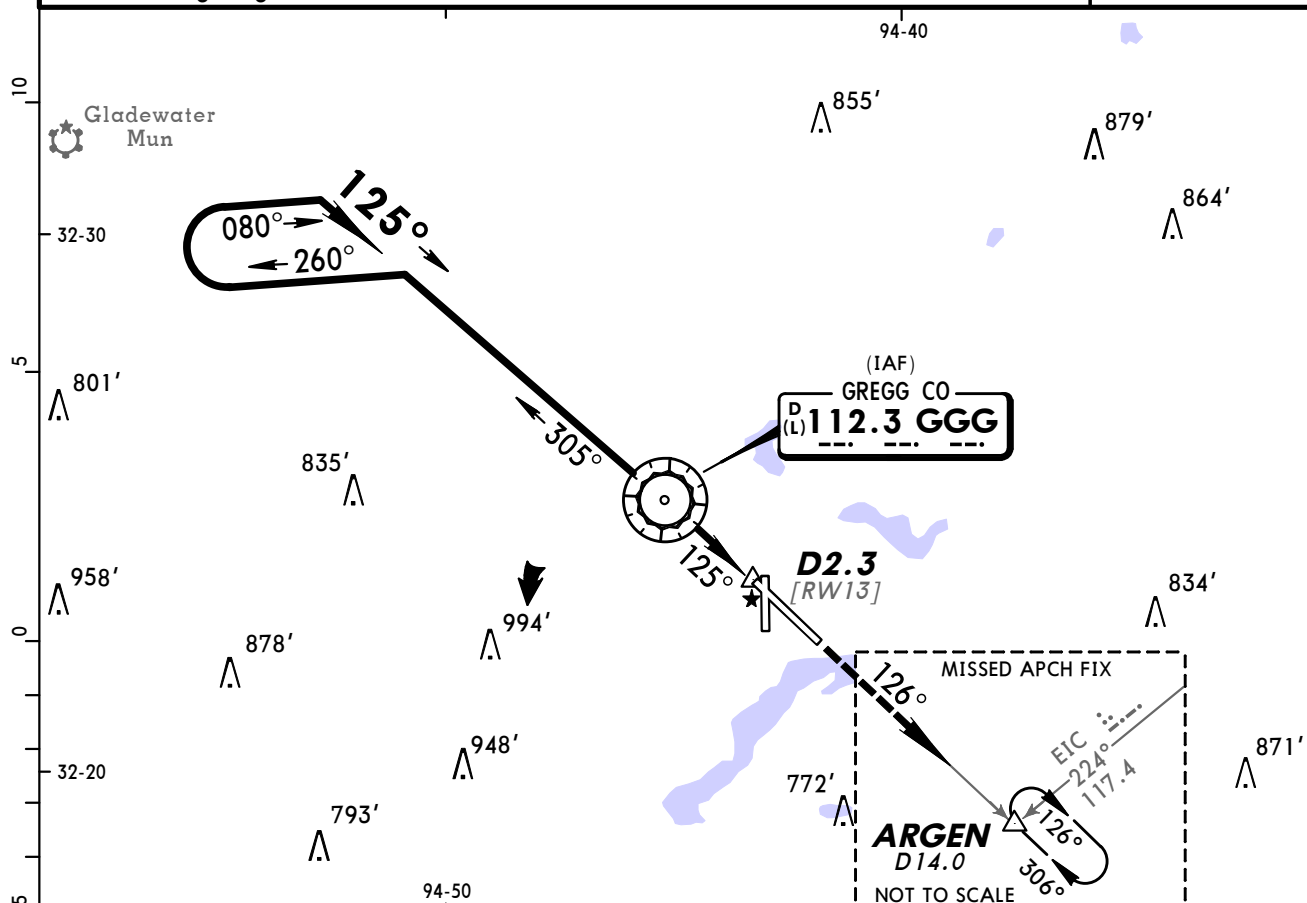


Gnd Speed-Kts	70	90	100	120	140	160	VASI-L	800'	2500'	GGG	PIPES
Descent Angle [2.97°]	368	473	525	630	736	841		↑	↙	via 112.3	
MAP at D3.9										R-172	

STRAIGHT-IN LANDING RWY 31				CIRCLE-TO-LAND			
MDA(H) 740' (386')		MDA(H) 800' (446')		With Local Altimeter Setting		With Gilmer Altimeter Setting	
With Local Altimeter Setting		With Gilmer Altimeter Setting		Max Kts	MDA(H)	MDA(H)	
A	1	1	1	90	860' (495') - 1	920' (555') - 1	
				120	860' (495') - 1½	920' (555') - 1½	
B	1	1	1	140	860' (495') - 1½	920' (555') - 1½	
C	1	1	1	165	920' (555') - 2	980' (615') - 2	

BRIEFING STRIP™

ATIS (ASOS when Twr Inop)	*LONGVIEW Approach (R)	FT WORTH Center	*EASTEX Tower	*Ground
119.65	118.25	126.32 when App inop.	CTAF 119.2	121.6
VOR GGG 112.3	Final Apch Crs 125°	Minimum Alt VOR 1400' (1035')	MDA(H) Refer to Minimums	Apt Elev 365'
MISSED APCH: Climb to 3000' outbound via GGG VOR R-126 to ARGEN INT/D14.0 and hold.				2800' MSA GGG VOR
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Gilmer altimeter setting. 2. Pilot controlled lighting 119.2.				

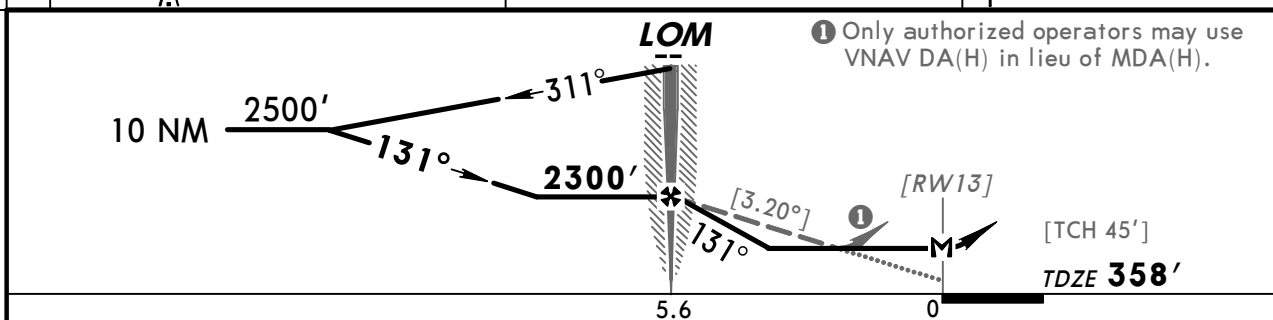
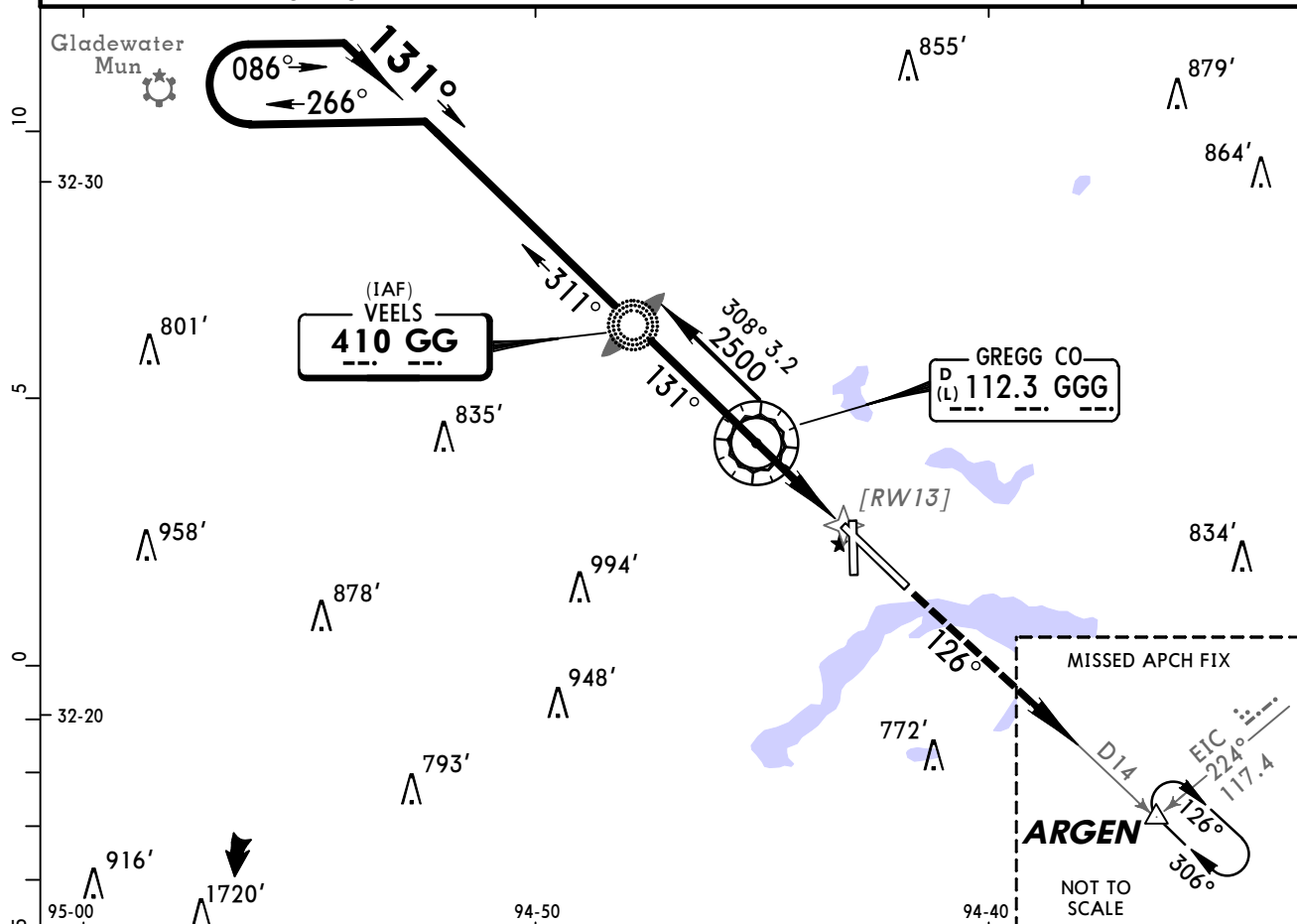


Gnd speed-Kts	70	90	100	120	140	160	Lighting - Refer to Airport Chart	3000' ↑ via GGG 112.3 R-126 ARGEN	
Descent Angle [4.16°]	516	663	737	884	1031	1178			
MAP at D2.3 or VOR to MAP	2.3	1:58	1:32	1:23	1:09	0:59			

				CIRCLE-TO-LAND	
				With Local Altimeter Setting	With Gilmer Altimeter Setting
				Max Kts	MDA(H)
				A 90	860' (495') - 1
				B 120	920' (555') - 1
				C 140	860' (495') - 1½
				D 165	920' (555') - 2

TERPS AMEND 0A 14 JAN 2010

ATIS (ASOS when Twr Inop)	*LONGVIEW Approach (R)	FT WORTH Center	*EASTEX Tower	*Ground
119.65	118.25	126.32 when App inop.	CTAF 119.2	121.6
LOM GG 410	Final Apch Crs 131°	Minimum Alt LOM 2300' (1942')	MDA(H) (CONDITIONAL) 960' (602')	Apt Elev 365' TDZE 358'
MISSED APCH: Climb to 3000' outbound via GGG VOR R-126 to ARGEN INT and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Gilmer altimeter setting. 2. Pilot controlled lighting 119.2.				
2800' MSA GG LOM				



Gnd speed-Kts	70	90	100	120	140	160
Descent angle [3.20°]	396	510	566	679	793	906
LOM to MAP	5.6	4:48	3:44	3:22	2:48	2:24

STRAIGHT-IN LANDING RWY 13						CIRCLE-TO-LAND			
MDA(H) 960' (602')			MDA(H) 1020' (662')			With Local Altimeter Setting		With Gilmer Altimeter Setting	
With Local Altimeter Setting			With Gilmer Altimeter Setting			MDA(H)		MDA(H)	
RAIL out	ALS out		RAIL out	ALS out		Max Kts			
A	RVR 40 or 3/4	RVR 50 or 1	RVR 40 or 3/4	RVR 50 or 1		90	960' (595') - 1	1020' (655') - 1	
B						120			
C	RVR 60 or 1 1/4	1 3/4	RVR 60 or 1 1/4	1 3/4		140	960' (595') - 1 3/4	1020' (655') - 1 3/4	
D	1 3/4	2	1 3/4	2		165	960' (595') - 2	1020' (655') - 2	

General Information

Location: FT Hood TX USA
IATA Code: GRK
Lat/Long: N31° 04.0' W097° 49.7'
Elevation: 1015 ft

Airport Use: Joint
Magnetic Variation: 4.5°E
Sectional Chart: San Antonio

Fuel Types: Jet A, Jet 4
Customs: Upon Prior Request
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes

Sunrise: 1300 Z
Sunset: 0028 Z,

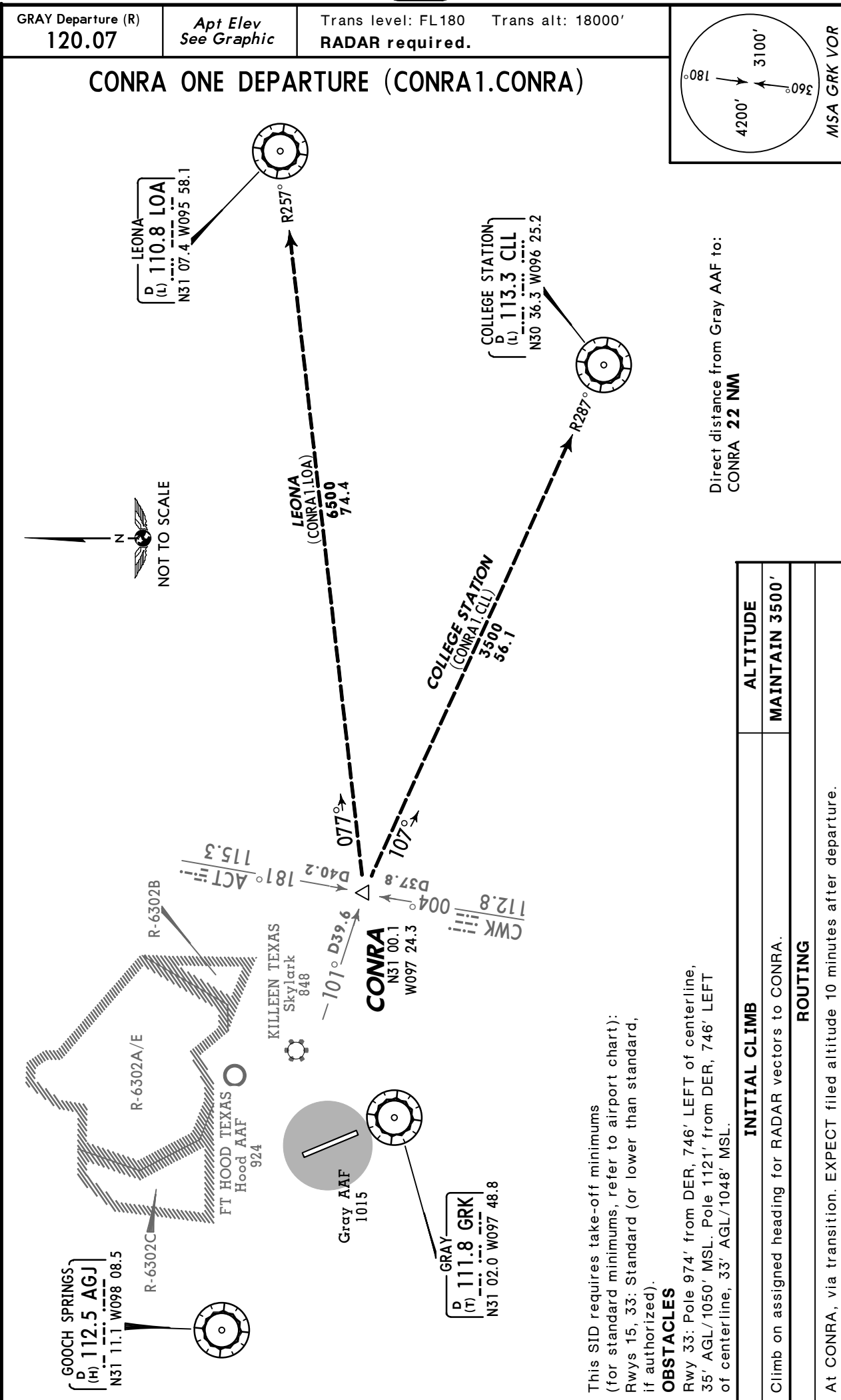
Runway Information

Runway: 15
Length x Width: 10000 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 1015 ft
Lighting: Edge, ALS

Runway: 33
Length x Width: 10000 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 995 ft
Lighting: Edge, ALS
Displaced Threshold: 194 ft

Communication Information

ATIS 124.9
Gray AAF Tower 120.75 CTAF
Gray Ground Control 126.2
Gray Clearance Delivery 121.8
Gray Approach Control 120.075
Gray Departure Control 120.075
Gray Radar 120.075
Gray Operations 125.05
FT Hood Flt Flw Information 143.0 Military

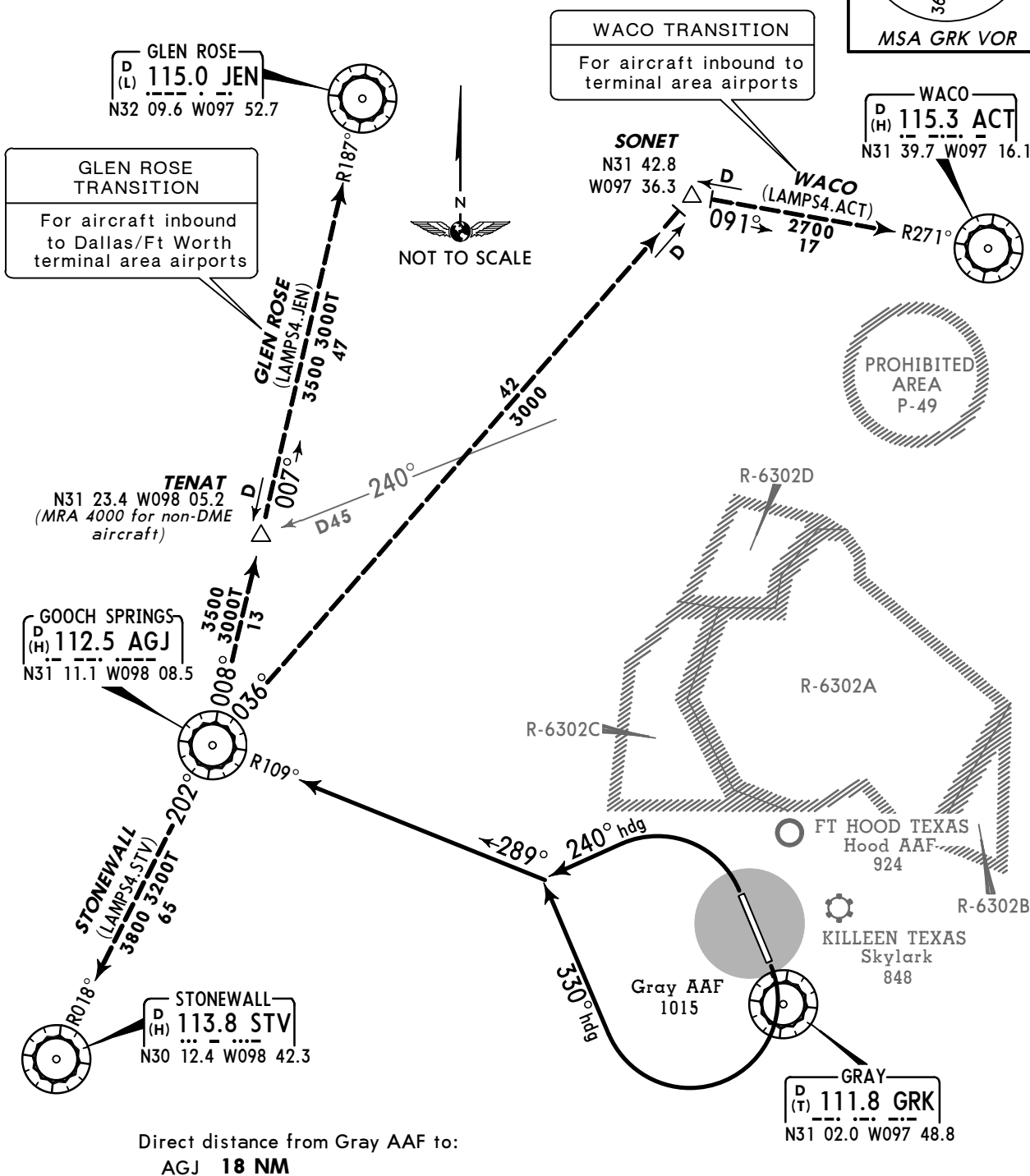


GRAY Departure (R)
120.07

Apt Elev
See Graphic

Trans level: FL180 Trans alt: 18000'
RADAR required.

LAMPS FOUR DEPARTURE (LAMPS4.AGJ)

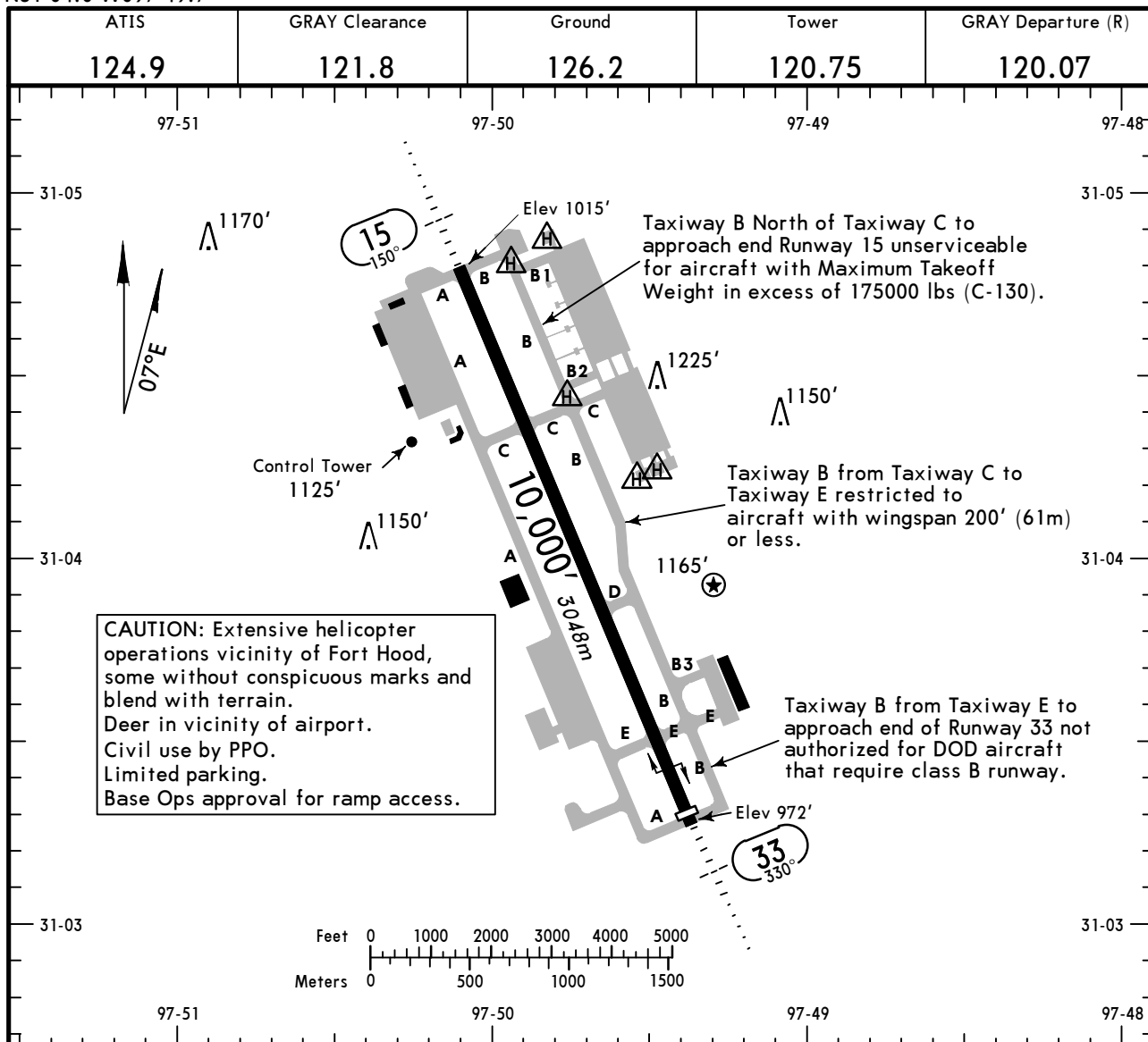


This SID requires take-off minimums
(for standard minimums, refer to airport chart):
Rwys 15, 33: Standard (or lower than standard,
if authorized).

OBSTACLES

Rwy 33: Pole 974' from DER, 746' LEFT of centerline,
35' AGL/1050' MSL. Pole 1121' from DER, 746' LEFT
of centerline, 33' AGL/1048' MSL.

RWY	INITIAL CLIMB
15	Climbing RIGHT turn heading 330° to assigned altitude, to intercept and proceed via AGJ R-109. Then via transition or assigned route.
33	Climbing LEFT turn heading 240° to assigned altitude, to intercept and proceed via AGJ R-109. Then via transition or assigned route.



ADDITIONAL RUNWAY INFORMATION

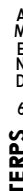
RWY				USABLE LENGTHS		TAKE-OFF	WIDTH
				LANDING BEYOND			
				Threshold	Glide Slope		
15	HIRL	MALSR	PAPI-L (angle 3.00°)	RVR	8947' 2727m		200'
33	HIRL	MALSR	PAPI-L (angle 2.77°)	9806' 2989m	8906' 2715m		61m

TAKE-OFF			FOR FILING AS ALTERNATE			
All Rwys			LOC Rwy 15 LOC Rwy 33		RNAV (GPS) Rwy 15 RNAV (GPS) Rwy 33	
Adequate Vis Ref		STD	ILS Rwy 15 ILS Rwy 33		NDB Rwy 15	Other
1 & 2 Eng	RVR 16 or 1/4	RVR 50 or 1	A	600-2	800-2	800-2
3 & 4 Eng		RVR 24 or 1/2	B			
			C			
			D			
						NA

TAKE-OFF OBSTACLES: Rwy 33, pole 974' from departure end of runway, 746' left of centerline, 35' AGL/1050' MSL. Pole 1121' from departure end of runway, 746' left of centerline, 33' AGL/1048' MSL.

FT HOOD, TEXAS
ILS or LOC Rwy 15

BRIFING STRIP TM

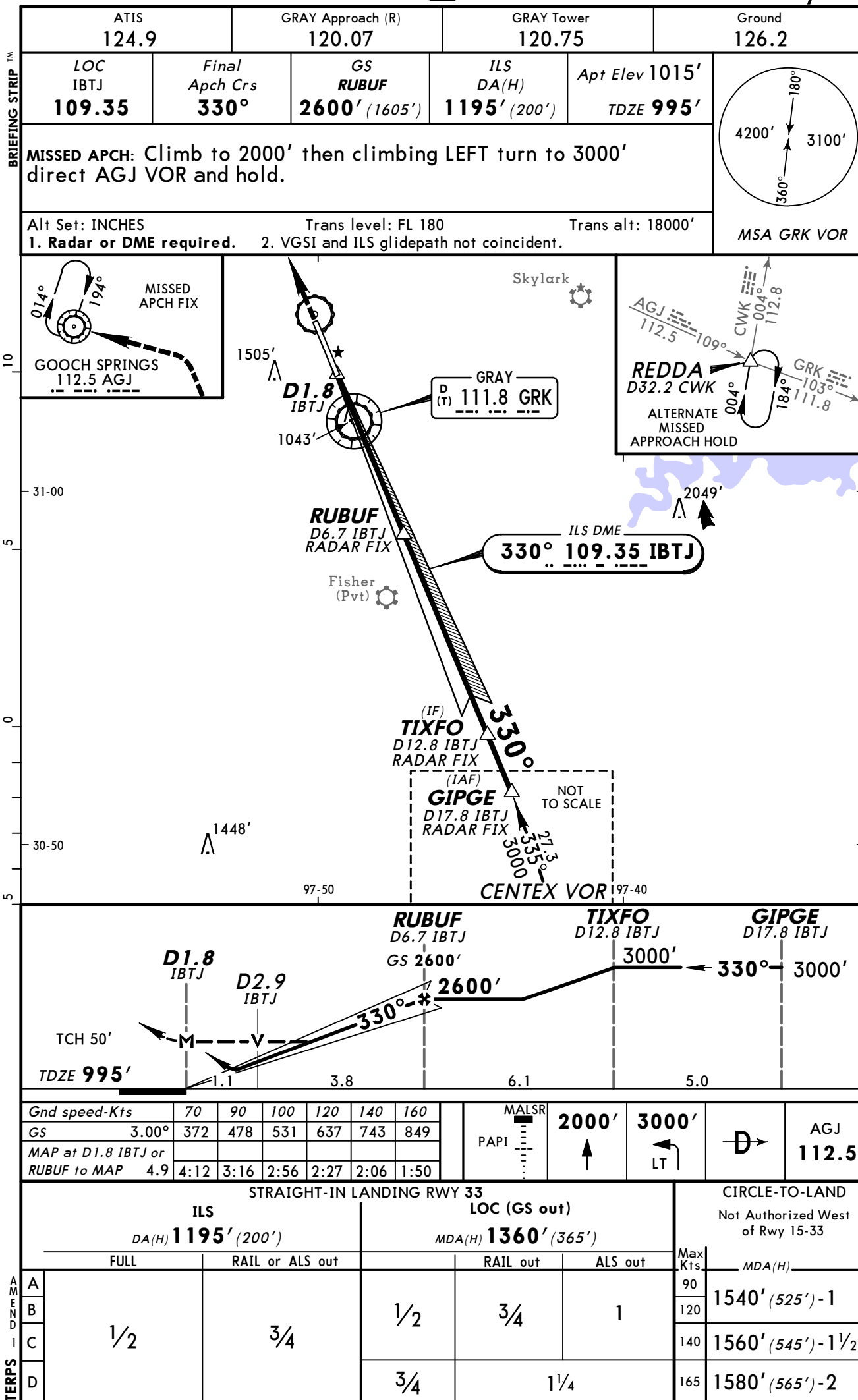
TERPSTERPS

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KGRK / GRK
GRAY AAF

JEPPESEN
6 JAN 12 **(11-2)** **Eff 12 Jan**

FT HOOD, TEXAS
ILS or LOC Rwy 33



CHANGES: Chart re-indexed.

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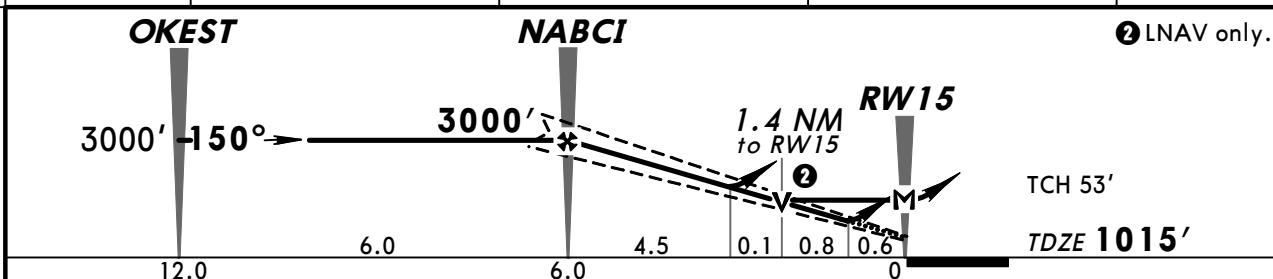
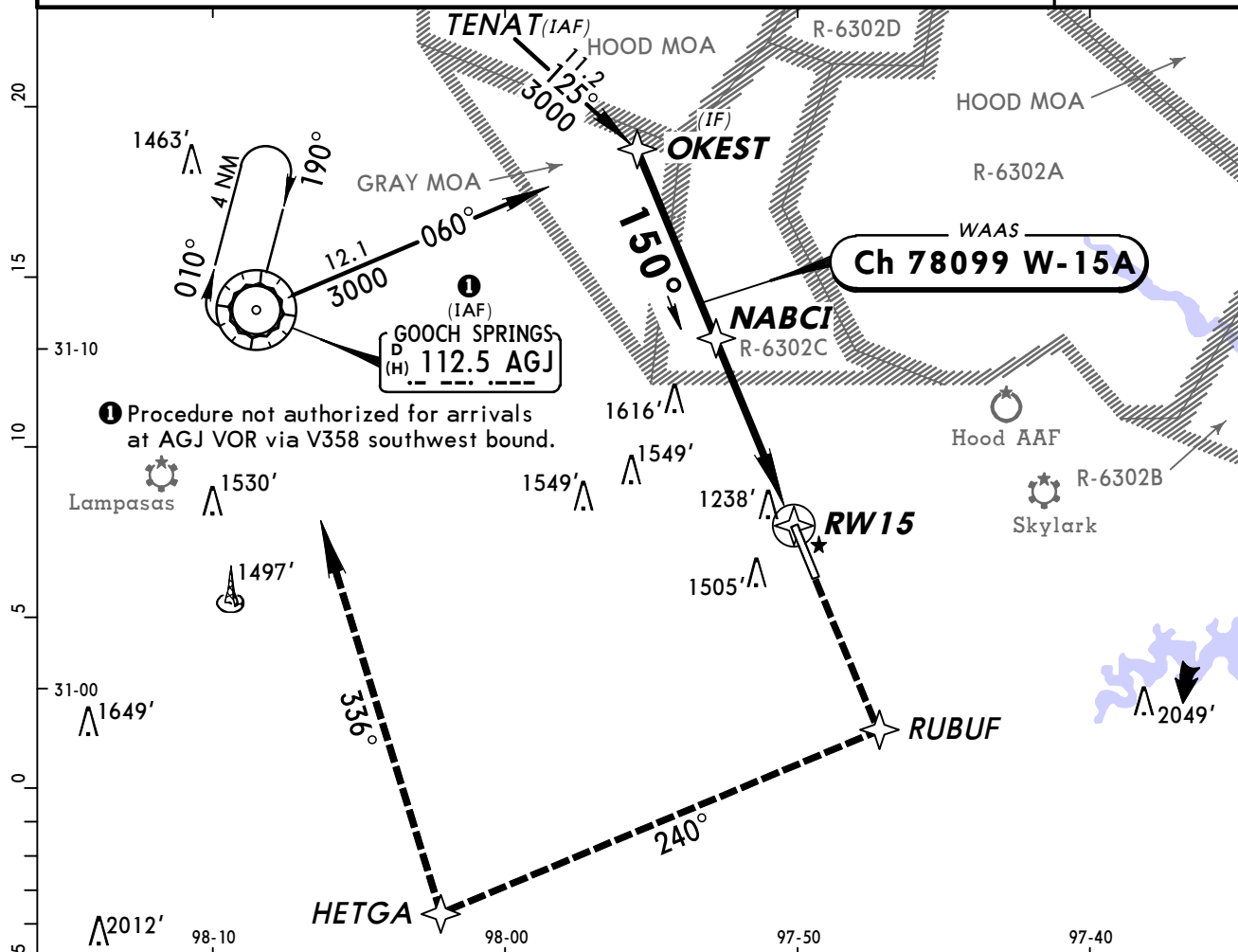
KGRK/GRK
GRAY AAF

JEPPESSEN
6 JAN 12 (12-1) Eff 12 Jan

FT HOOD, TEXAS
RNAV (GPS) Rwy 15

BRIEFING STRIP™

ATIS 124.9		GRAY Approach (R) 120.07		GRAY Tower 120.75		Ground 126.2
WAAS Ch 78099 W-15A	Final Apch Crs 150°	Minimum Alt NABCI 3000' (1985')	LPV DA(H) 1271' (256')	Apt Elev 1015' TDZE 1015'		4200' MSA RW15
MISSED APCH: Climb to 3000' direct RUBUF and RIGHT turn via 240° track to HETGA and RIGHT turn via 336° track to AGJ VOR and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -17°C (2°F) or above 46°C (116°F). 2. DME/DME RNP-0.30 not authorized. 3. VGSI and RNAV glidepath not coincident.						



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI 3000' ↗ RUBUF
Glide Path Angle 3.00°	372	478	531	637	743	849	
MAP at RW15							

STRAIGHT-IN LANDING RWY 15						CIRCLE-TO-LAND		
LPV DA(H) 1271' (256')		LNAV/VNAV DA(H) 1547' (532')		LNAV MDA(H) 1540' (525')		Not Authorized West of Runway 15-33		
RAIL or ALS out		RAIL out		RAIL out		MDA(H)		
A						Max Kts		
B						90	1540' (525') - 1	
C	RVR 24 or 1/2	RVR 40 or 3/4	RVR 60 or 1 1/4	1 3/4	RVR 24 or 1/2	120	1560' (545') - 1 1/2	
D					RVR 50 or 1	140	1580' (565') - 2	
					RVR 60 or 1 1/4	165		

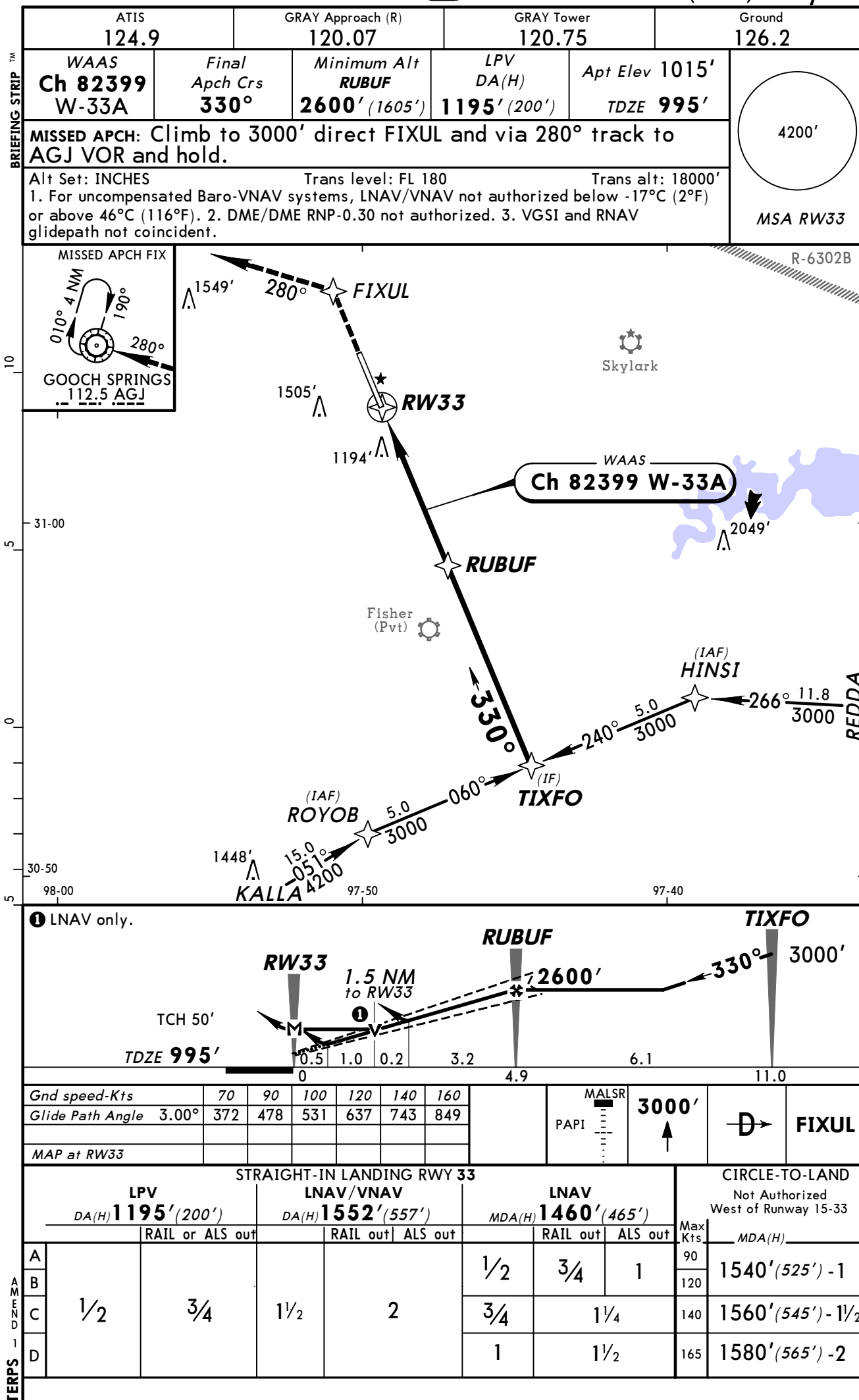
CHANGES: Chart re-indexed.

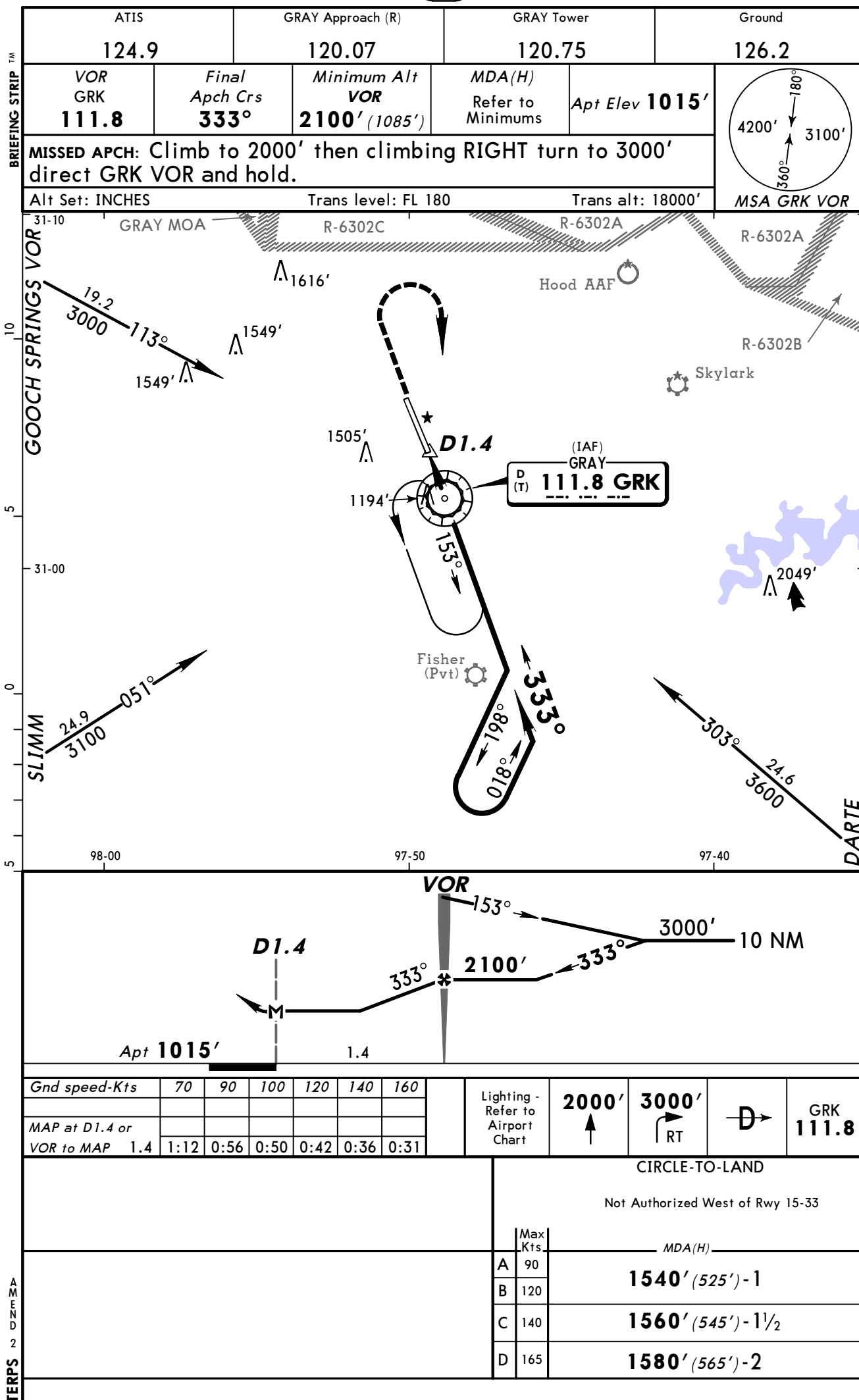
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KGRK/GRK
GRAY AAF

JEPPESSEN
6 JAN 12 (12-2) Eff 12 Jan

FT HOOD, TEXAS
RNAV (GPS) Rwy 33

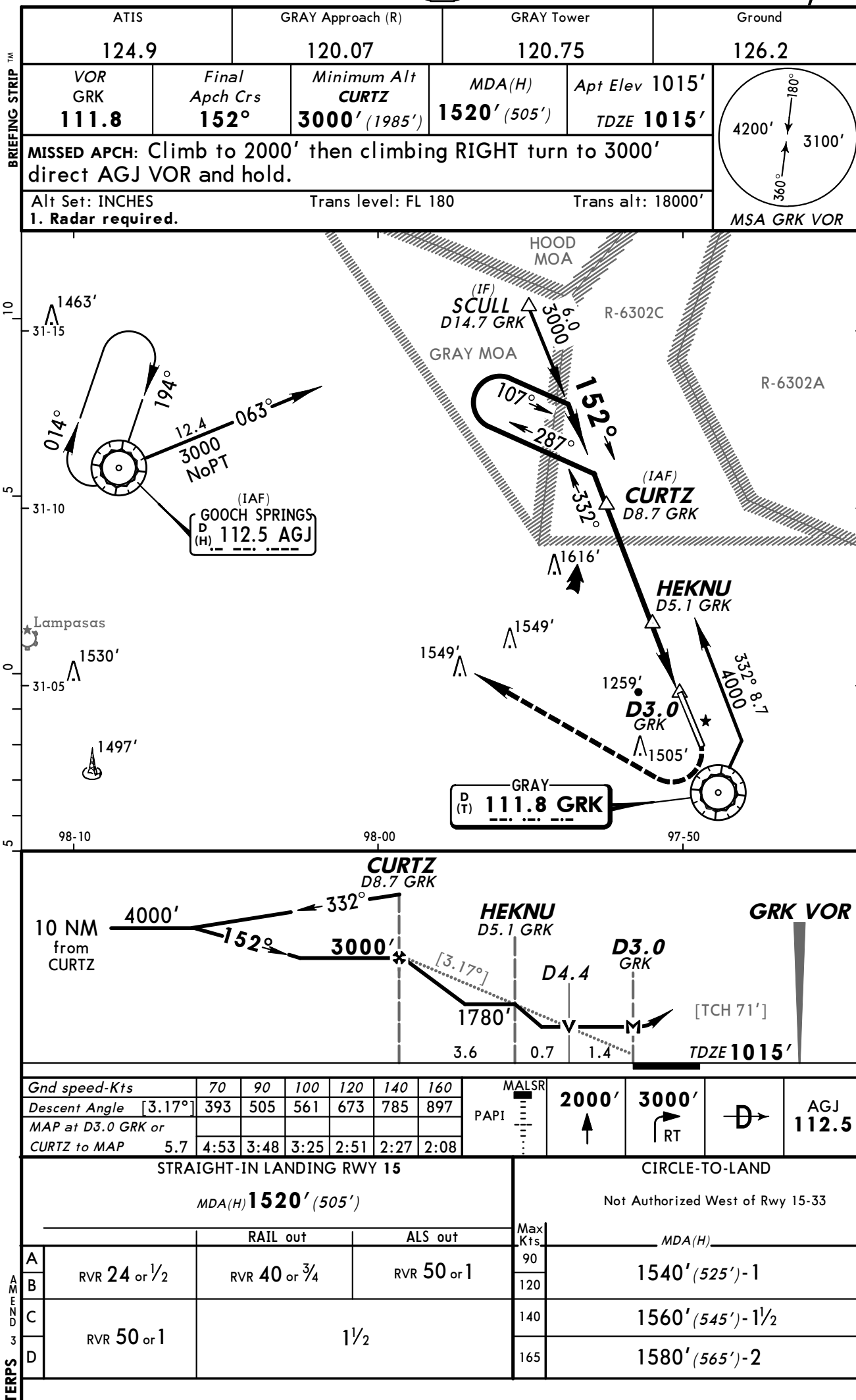




KGRK / GRK
GRAY AAF

JEPPESEN
 6 JAN 12 **(13-2)** **Eff 12 Jan**

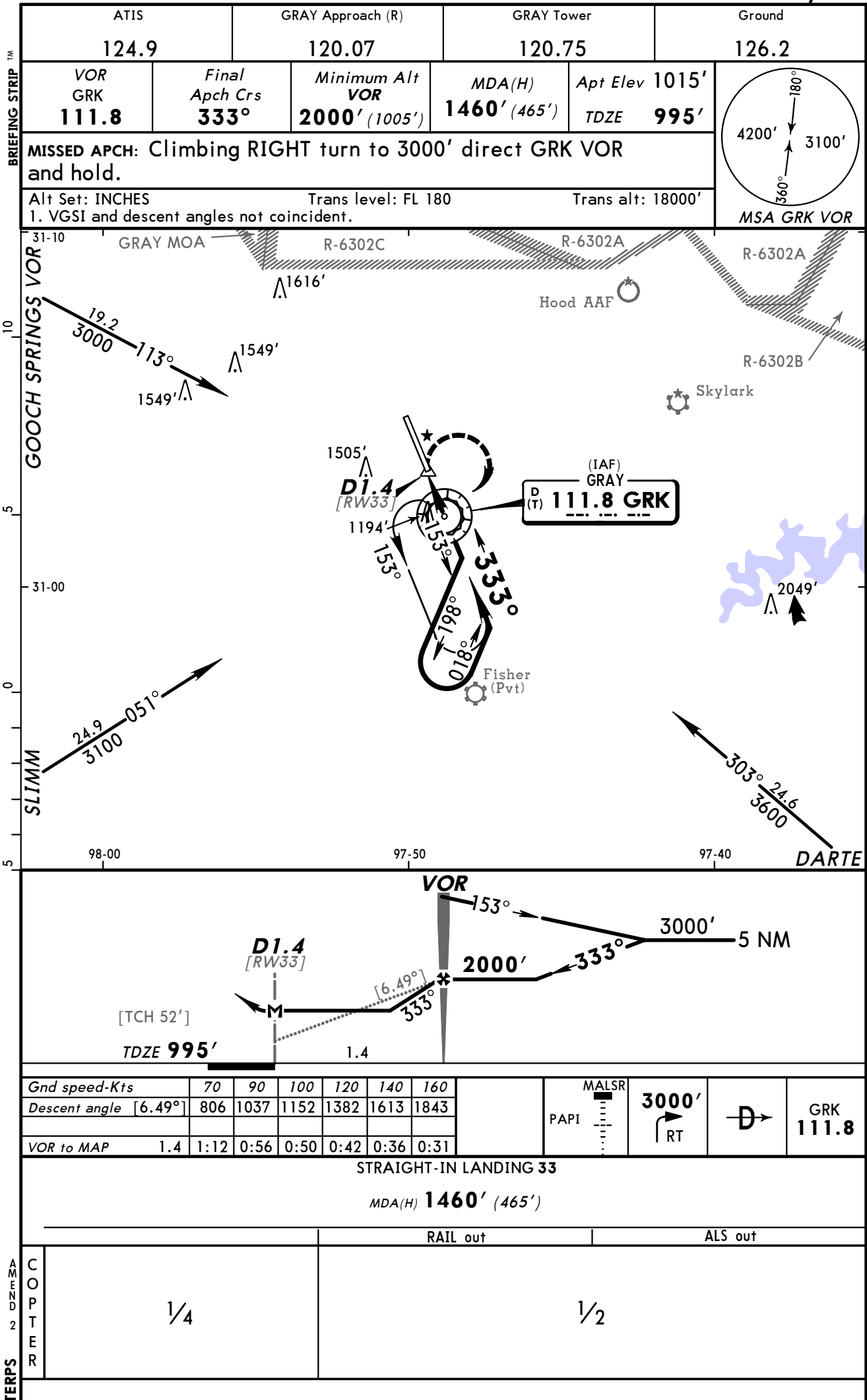
FT HOOD, TEXAS
VOR DME Rwy 15



KGRK/GRK
GRAY AAF

JEPPesen
6 JAN 12 13-3 Eff 12 Jan

FT HOOD, TEXAS
COPTER VOR Rwy 33

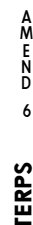


CHANGES: Chart-reindexed.

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FT HOOD, TEXAS
NDB Rwy 15

BRIEFING STRIP™



Gnd speed-Kts		70	90	100	120	140	160	MALSR PAPI	2000' ↑	3000' ↗ RT	→	GR 323	
Descent angle [3.16°]		391	503	559	671	783	895						
LOM to MAP 5.7		4:53	3:48	3:25	2:51	2:27	2:08						
STRAIGHT-IN LANDING RWY15								CIRCLE-TO-LAND					
MDA(H) 1660' (645')				MDA(H) 1740' (725')				Not Authorized West of Rwy 15-33					
With FIPAG				Without FIPAG									
		RAIL out	ALS out			RAIL out	ALS out	Max Kts	With FIPAG	Without FIPAG			
									MDA(H)	MDA(H)			
A	RVR 40 or 3/4		RVR 50 or 1		RVR 40 or 3/4		RVR 50 or 1		90	1660' (645') - 1		1740' (725') - 1	
B									120				
C	RVR 60 or 1 1/4	1 3/4		1 1/2		2		140	1660' (645') - 1 3/4		1740' (725') - 2		
D	1 3/4		2		2		2 1/4		165	1660' (645') - 2		1740' (725') - 2 1/4	

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KGRK/GRK

GRAY AAF

6 JAN 12

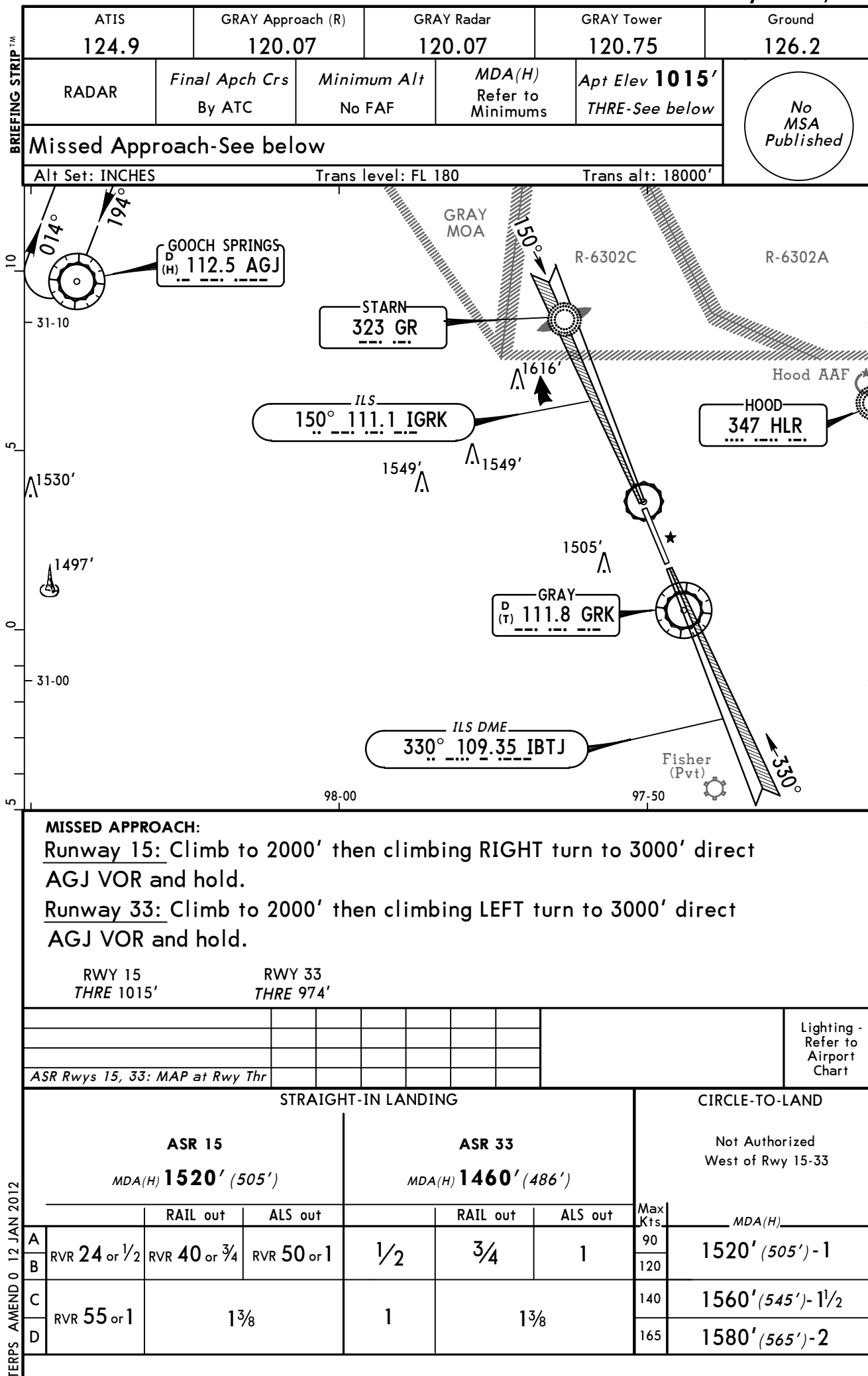
(18-1)

Eff 12 Jan

FT HOOD, TEXAS

RADAR-1

ASR Rwy 15, 33



CHANGES: New procedure.

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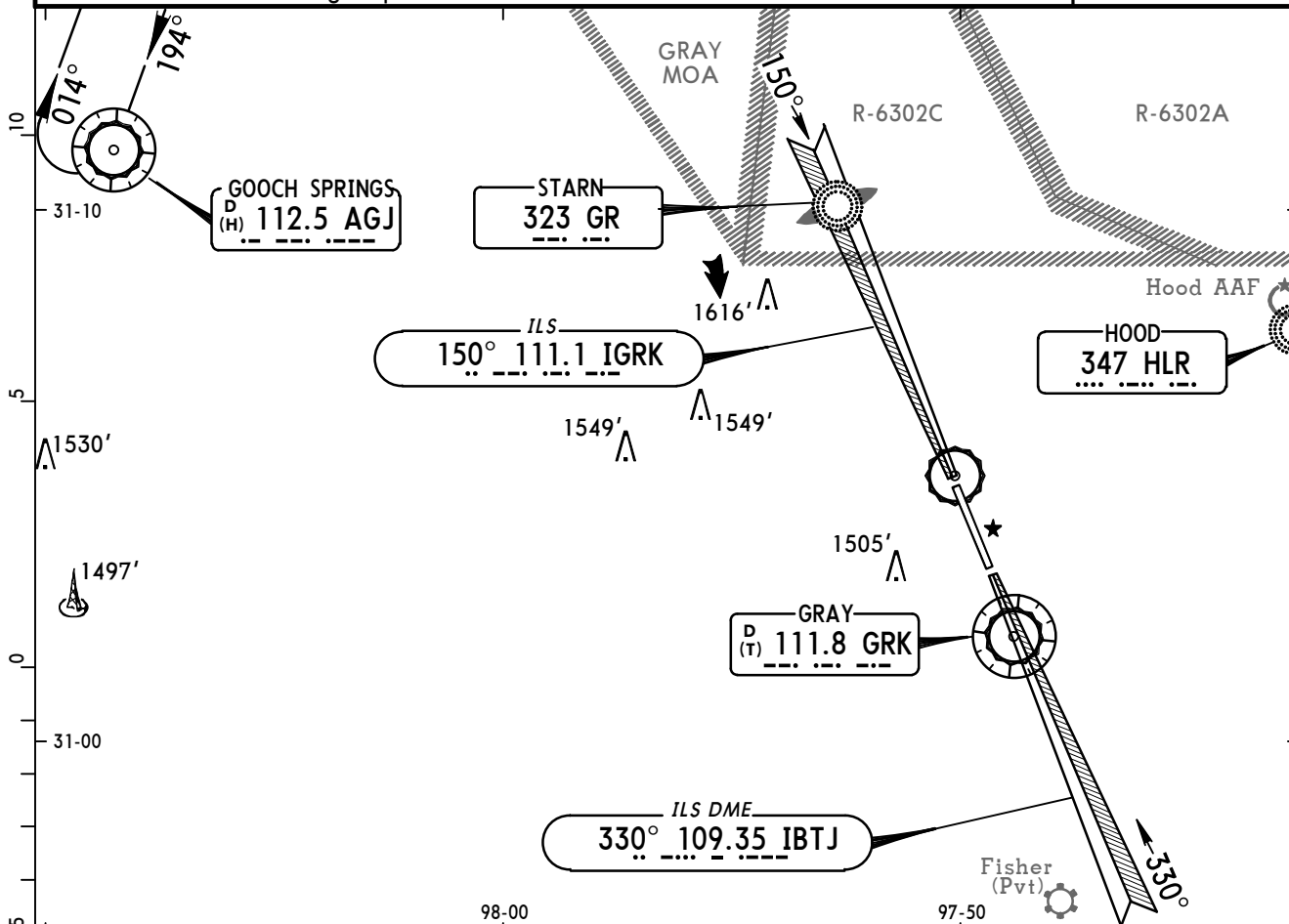
KGRK/GRK

GRAY AAF

6 JAN 12 (18-2) Eff 12 Jan

FT HOOD, TEXAS
RADAR-2
PAR RwyS 15, 33

ATIS 124.9	GRAY Approach (R) 120.07	GRAY Radar 120.07	GRAY Tower 120.75	Ground 126.2
RADAR	Final Apch Crs By ATC	Minimum Alt No FAF	DA(H) Refer to Minimums	Apt Elev 1015' THRE-See below
Missed Approach-See below				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. PAR 15-VGSI and PAR glidepath not coincident.				
No MSA Published				

**MISSED APPROACH:**

Runway 15: Climb to 2000' then climbing RIGHT turn to 3000' direct AGJ VOR and hold.

Runway 33: Climb to 2000' then climbing LEFT turn to 3000' direct AGJ VOR and hold.

RWY 15
PAR TCH 51'
THRE 1015'

RWY 33
PAR TCH 53'
THRE 974'

Gnd speed-Kts	70	90	100	120	140	160
Rwys 15, 33 PAR GS 3.00°	372	478	531	637	743	849

Lighting -
Refer to
Airport
Chart

STRAIGHT-IN LANDING

PAR 15
DA(H) **1215' (200')**

PAR 33
DA(H) **1187' (213')**

RAIL or ALS out

RAIL or ALS out

A				
B				
C	RVR 24 or 1/2	RVR 40 or 3/4	1/2	3/4
D				

CHANGES: New procedure.

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TERPS AMEND 0 12 JAN 2012

General Information

Location: Greenville TX USA
IATA Code: GVT
Lat/Long: N33° 04.1' W096° 03.9'
Elevation: 535 ft

Airport Use: Public
Magnetic Variation: 3.4 °E
Sectional Chart: Dallas Ft Worth

Fuel Types: 100 Octane (LL), Jet A
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes
Pattern Altitude: 965 ft AGL

Sunrise: 1255 Z
Sunset: 0019 Z,

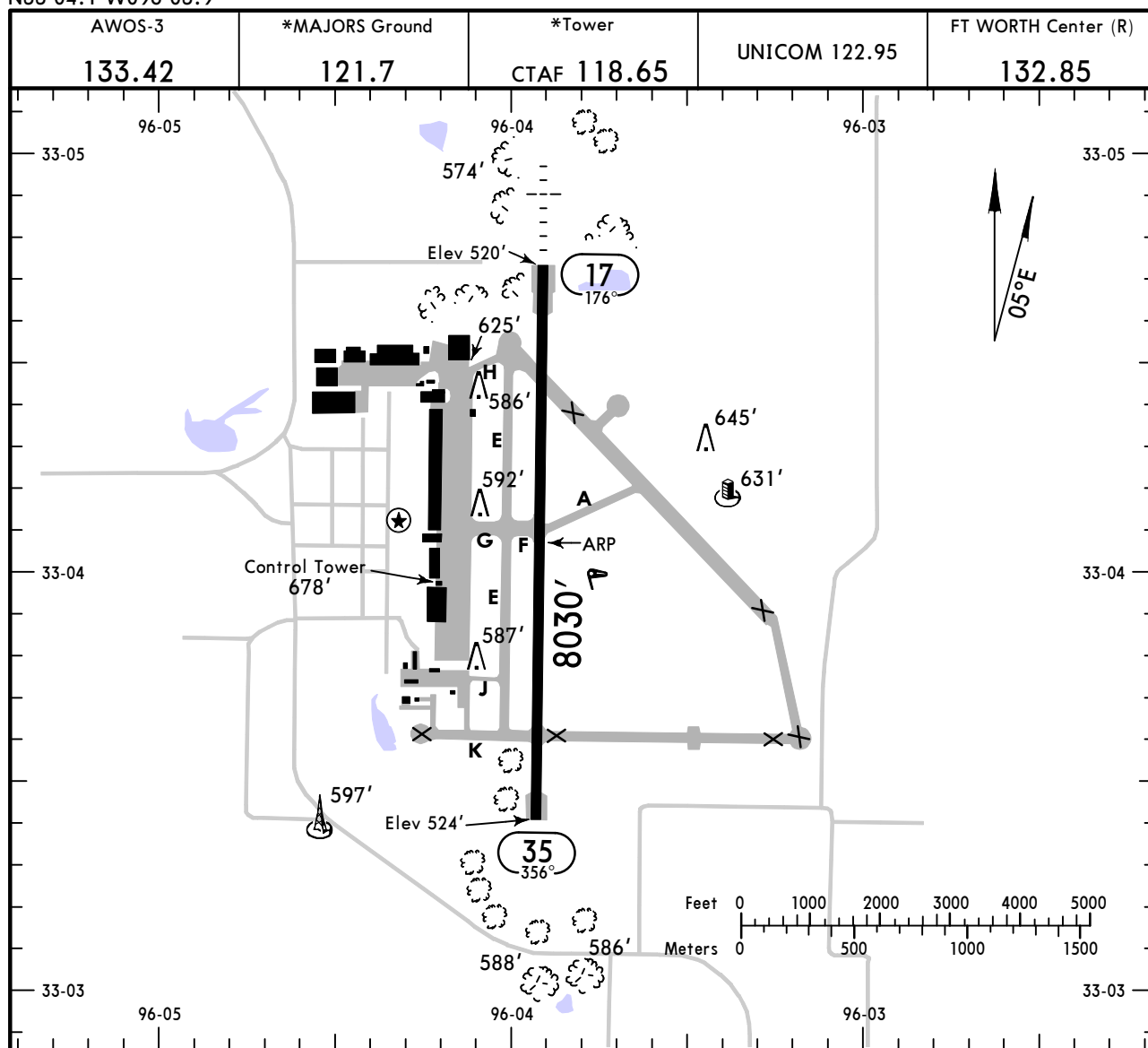
Runway Information

Runway: 17
Length x Width: 8030 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 534 ft
Lighting: Edge, ALS

Runway: 35
Length x Width: 8030 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 531 ft
Lighting: Edge, REIL

Communication Information

AWOS 133.425
Majors Tower 118.65 CTAF
Majors Ground Control 121.7
Majors Unicom 122.95
Same Control 1504.8 Military
FT Worth Center 132.85 Remote Communications Air-Ground



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			WIDTH
		Threshold	Landing Beyond Glide Slope	TAKE-OFF	
17	MIRL ① MALS PAPI-L (angle 3.0°)		7079'		150'
35	MIRL REIL PAPI-L (angle 3.0°)				

① Activate on 118.65.

TAKE-OFF			FOR FILING AS ALTERNATE			
All Rwy's			Authorized Only When Local Weather Available			Other
Adequate Vis Ref	STD		ILS Y Rwy 17 ILS Z Rwy 17	LOC Y Rwy 17 LOC Z Rwy 17 LOC (BACK CRS) Rwy 35	RNAV (GPS) Rwy 17 RNAV (GPS) Rwy 35 VOR DME Rwy 17	
1 & 2 Eng	1/4	1	A B C D 600-2	800-2	NA	
3 & 4 Eng		1/2				

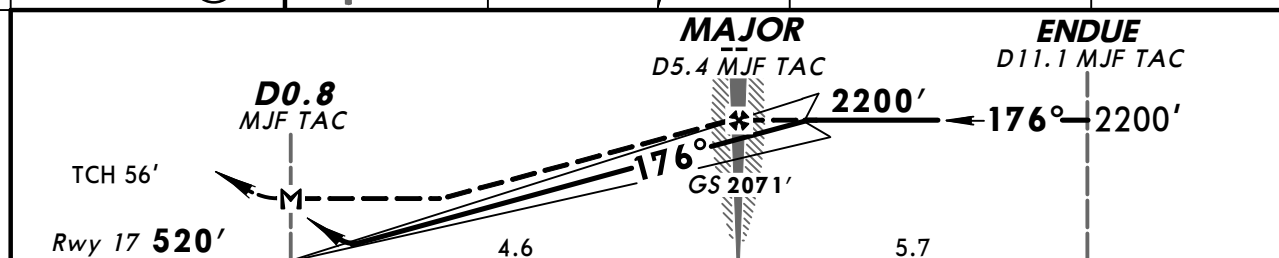
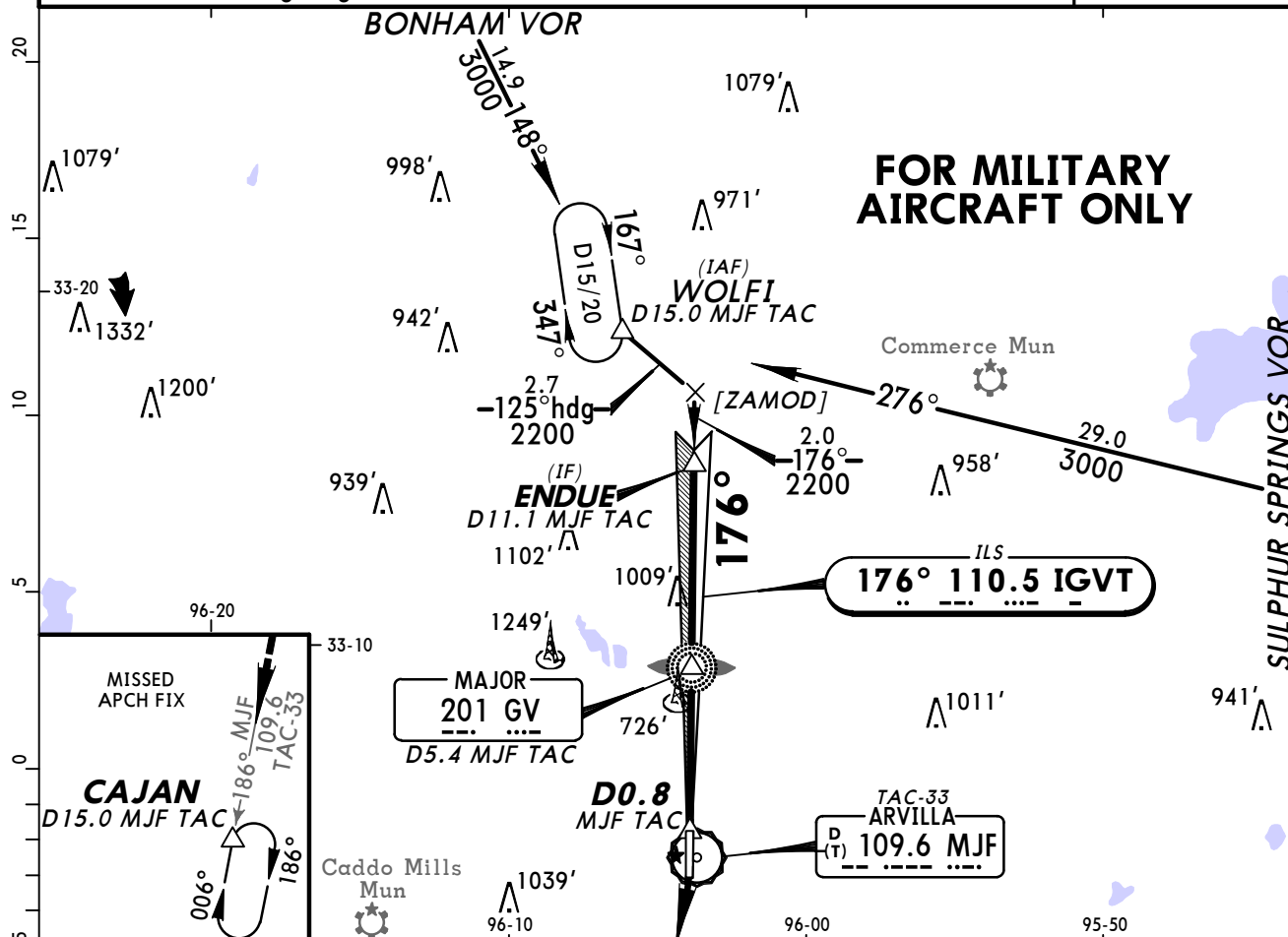
KGVT/GVT
MAJORS

JEPPESEN
14 OCT 11
Eff 20 Oct (11-1)

GREENVILLE, TEXAS
ILS or LOC Y Rwy 17

BRIEFING STRIP™

AWOS-3 133.42		FT WORTH Center (R) 132.85		*MAJORS Tower CTAF 118.65		*Ground 121.7	
LOC IGVT 110.5	Final Apch Crs 176°	GS MAJOR 2071' (1551')	ILS DA(H) (CONDITIONAL) 720' (200')	Apt Elev 535' Rwy 17 520'		2400' MSA MJF TAC	
MISSED APCH: Climbing RIGHT turn to 3000' on MJF TAC R-186 to CAJAN INT/D15.0 MJF and hold.							
Alt Set: INCHES							



Gnd speed-Kts	70	90	100	120	140	160	MALS PAPI	3000'	on RT	MJF	CAJAN	
GS	3.00°	372	478	531	637	743				849		TAC-33
MAP at D0.8 MJF TAC or MAJOR to MAP	4.6	3:57	3:04	2:46	2:18	1:58				1:43		(109.6)
										R-186		

STRAIGHT-IN LANDING RWY 17						CIRCLE-TO-LAND			
1 ILS		LOC (GS out)				With Local Altimeter Setting		With Terrell Mun Altimeter Setting	
DA(H) 720' (200')		MDA(H) 1060' (540')		MDA(H) 1140' (620')					
With Local Altimeter Setting		With Local Altimeter Setting		With Terrell Mun Altimeter Setting					
FULL	ALS out		ALS out		ALS out	Max Kts	MDA(H)	MDA(H)	
A		3/4	1	3/4	1	90	1060' (525') - 1	1140' (605') - 1	
B						120			
C	3/4					140	1060' (525') - 1 1/2	1140' (605') - 1 3/4	
D		1 1/4	1 1/2	1 1/2	1 3/4	165	1100' (565') - 2	1180' (645') - 2	

1 DA(H) 784' (264') VIS 7/8 with Terrell Mun altimeter setting.

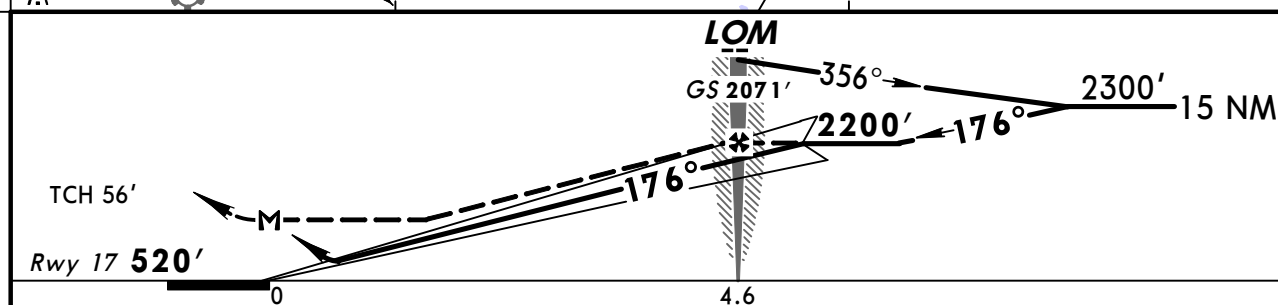
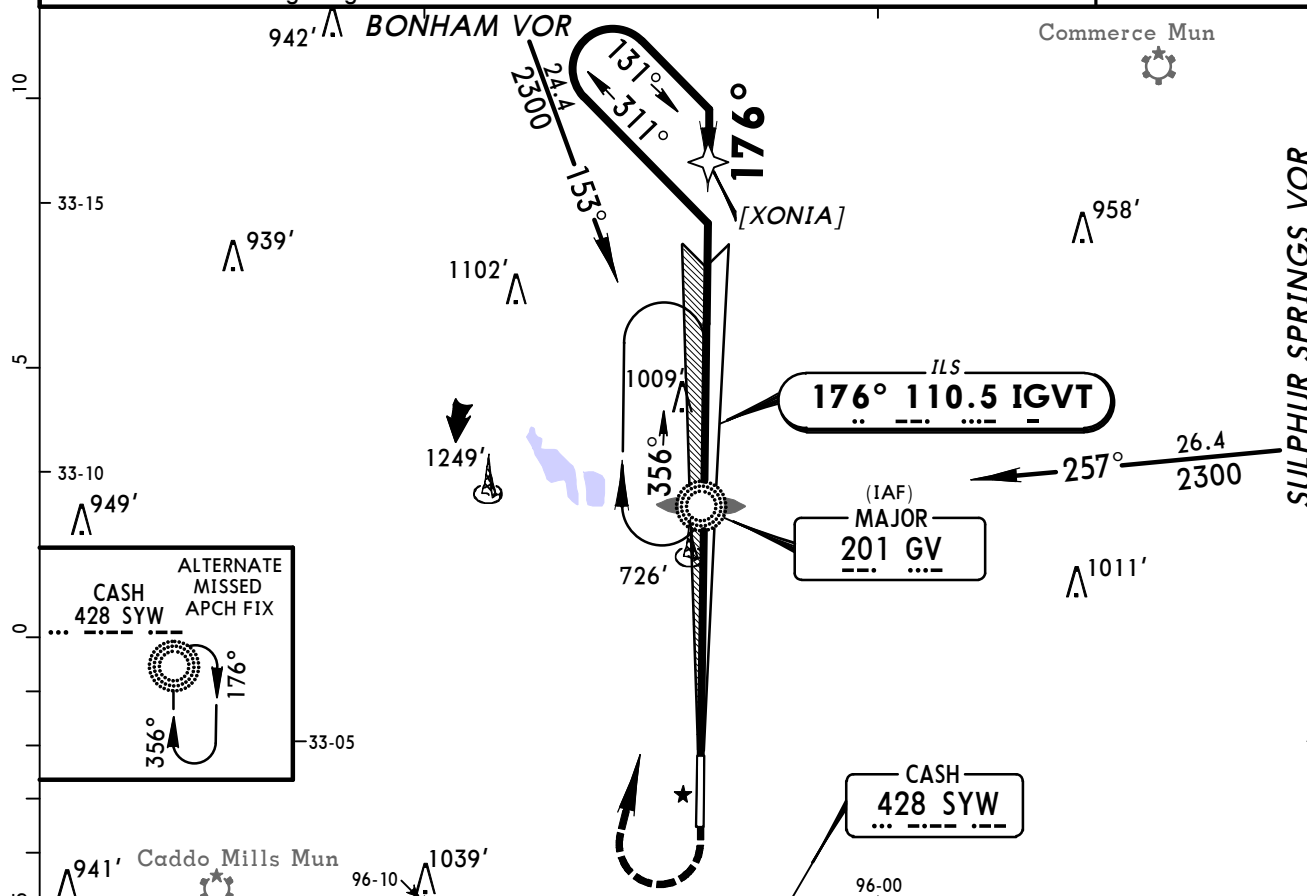
CHANGES: New procedure.

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TERPS AMEND 0 20 OCT 2011

BRIEFING STRIP™

AWOS-3		FT WORTH Center (R)		*MAJORS Tower		*Ground	
133.42		132.85		CTAF 118.65		121.7	
LOC IGVT 110.5	Final Apch Crs 176°	GS LOM 2071'(1551')	ILS DA(H) (CONDITIONAL) 720'(200')	Apt Elev 535' Rwy 17 520'		2400' MSA GV LOM	
MISSED APCH: Climb to 1000' then climbing RIGHT turn to 2300' direct GV LOM and hold. Continue climb-in-hold to 2300', or as directed by ATC.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. ADF required. 2. Use local altimeter setting; if not received, use Terrell Mun altimeter setting. 3. VGSI and ILS glidepath not coincident. 4. Pilot controlled lighting 118.65.							



Gnd speed-Kts	70	90	100	120	140	160	MALS PAPI 1000' 2300' GV 201	1000' 2300' GV 201	1000' 2300' GV 201	1000' 2300' GV 201
GS	3.00°	372	478	531	637	743				
LOM to MAP	4.6	3:57	3:04	2:46	2:18	1:58				

STRAIGHT-IN LANDING RWY 17						CIRCLE-TO-LAND	
1 ILS		LOC (GS out)				With Local Altimeter Setting	With Terrell Mun Altimeter Setting
DA(H) 720' (200')		MDA(H) 1060' (540')		MDA(H) 1140' (620')		MDA(H)	MDA(H)
With Local Altimeter Setting		With Local Altimeter Setting		With Terrell Mun Altimeter Setting			
FULL	ALS out		ALS out		ALS out		
A	3/4	3/4	1	3/4	1	1060' (525') - 1	1140' (605') - 1
B							
C		1 1/4	1 1/2	1 1/2	1 3/4	1060' (525') - 1 1/2	1140' (605') - 1 3/4
D						1100' (565') - 2	1180' (645') - 2

1 DA(H) 784' (264') VIS 7/8 with Terrell Mun altimeter setting.

CHANGES: Re-indexed, procedure.

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GREENVILLE, TEXAS
LOC (BACK CRS) Rwy 35

BRIEFING STRIP TM

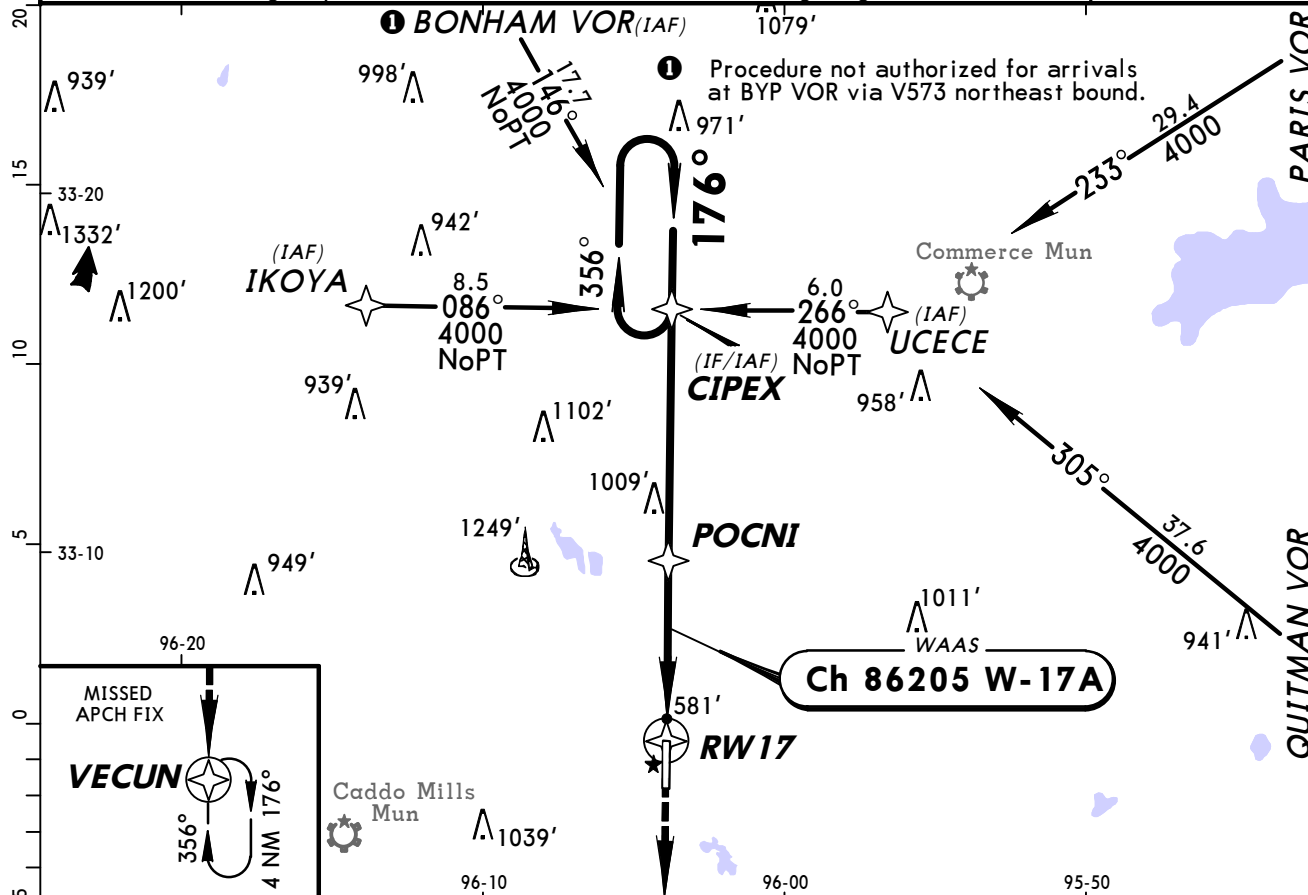
TERPS
1
B
A
M
E
N
D

STRAIGHT-IN LANDING RWY35			CIRCLE-TO-LAND		
MDA(H) 980' (449')		MDA(H) 1060' (529')		With Local Altimeter Setting	With Terrell Mun Altimeter Setting
With Local Altimeter Setting		With Terrell Mun Altimeter Setting	Max Kts	MDA(H)	MDA(H)
A	1	1	90	1040' (505') - 1	1120' (585') - 1
B			120		
C	1¼	1½	140	1040' (505') - 1½	1120' (585') - 1½
D	1½	1¾	165	1100' (565') - 2	1180' (645') - 2

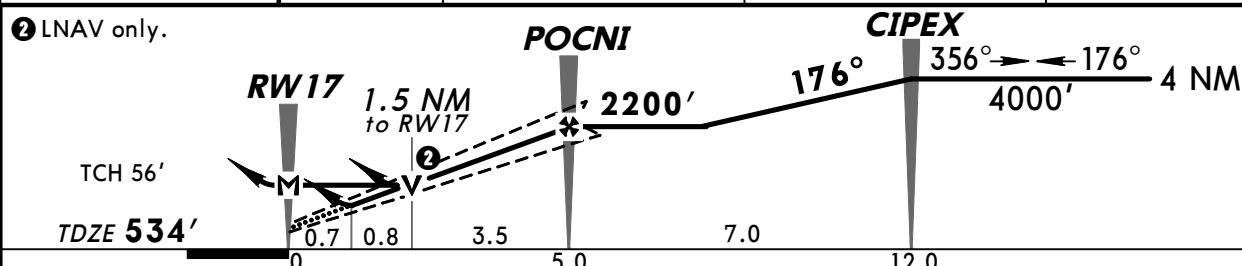
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BRIEFING STRIP™

AWOS-3 133.42		FT WORTH Center (R) 132.85		*MAJORS Tower CTAF 118.65		*Ground 121.7	
WAAS Ch 86205 W-17A		Final Apch Crs 176°	Minimum Alt POCNI 2200' (1666')	LPV (CONDITIONAL) DA(H) 798' (264')	Apt Elev 535' TDZE 534'		2400' MSA RW17
MISSED APCH: Climb to 4000' direct VECUN and hold. Continue climb-in-hold to 4000'.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. Use local altimeter setting; if not received, use Terrell Mun altimeter setting. 2. Baro-VNAV and VDP not authorized when using Terrell Mun altimeter setting. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C(4°F) or above 47°C (116°F). 4. DME/DME RNP-0.30 not authorized. 5. VGSI and RNAV glidepath not coincident. 6. Pilot controlled lighting 118.65.							



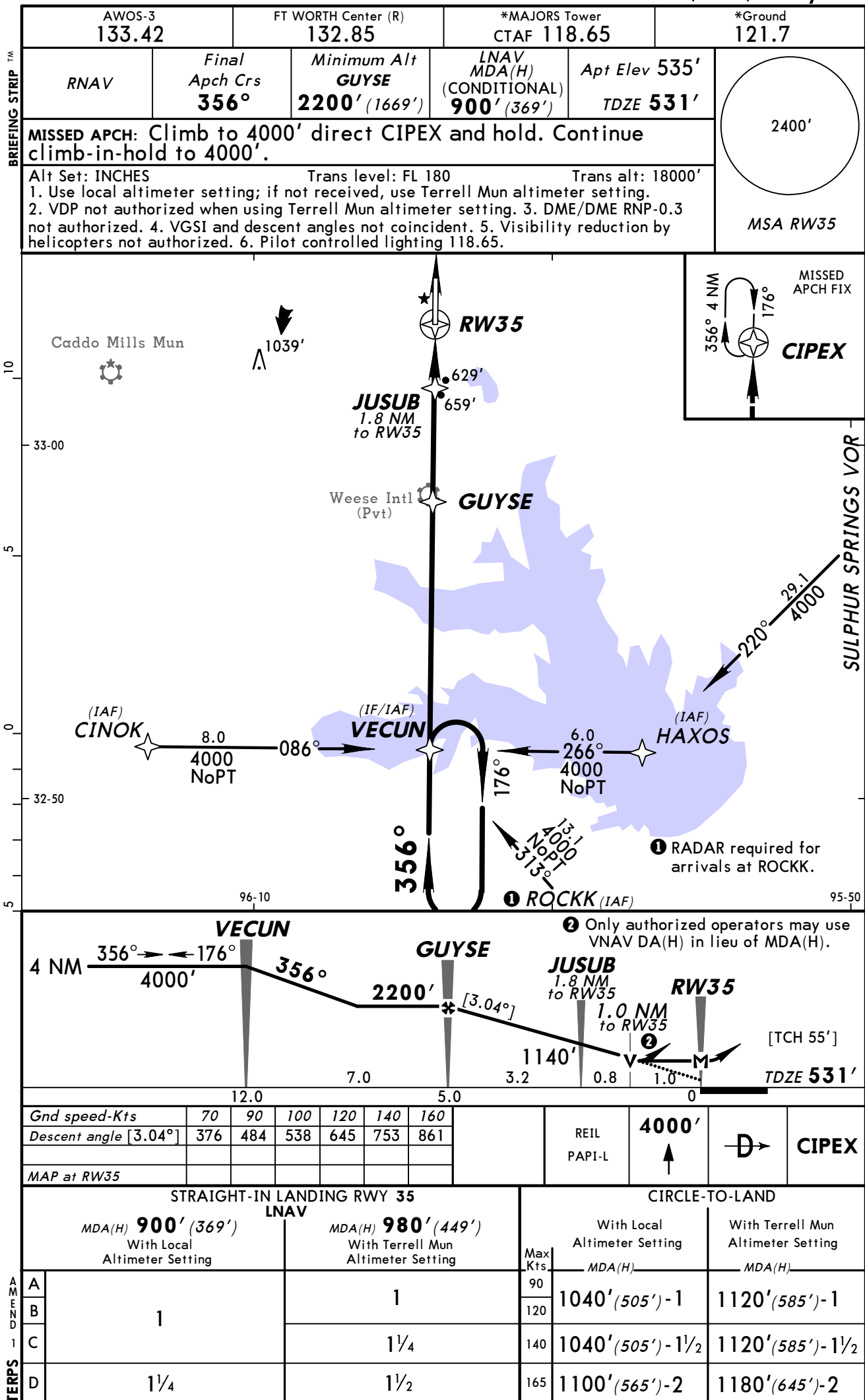
② LNAV only.



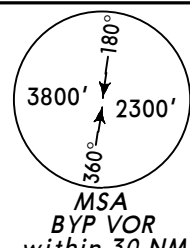
Gnd speed-Kts	70	90	100	120	140	160			
Glide Path Angle	3.00°	372	478	531	637	743			
MAP at RW17									

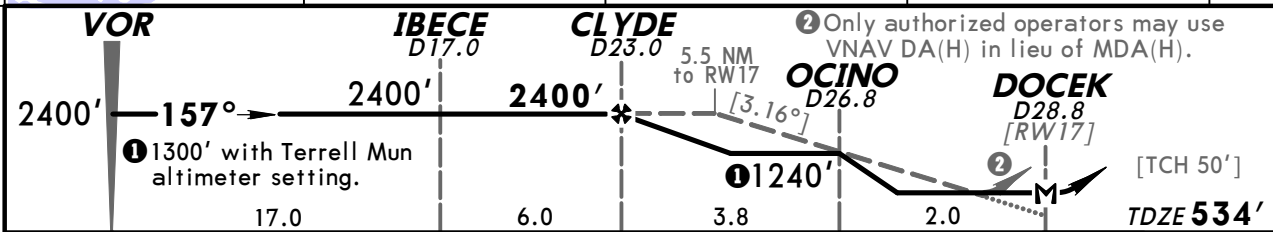
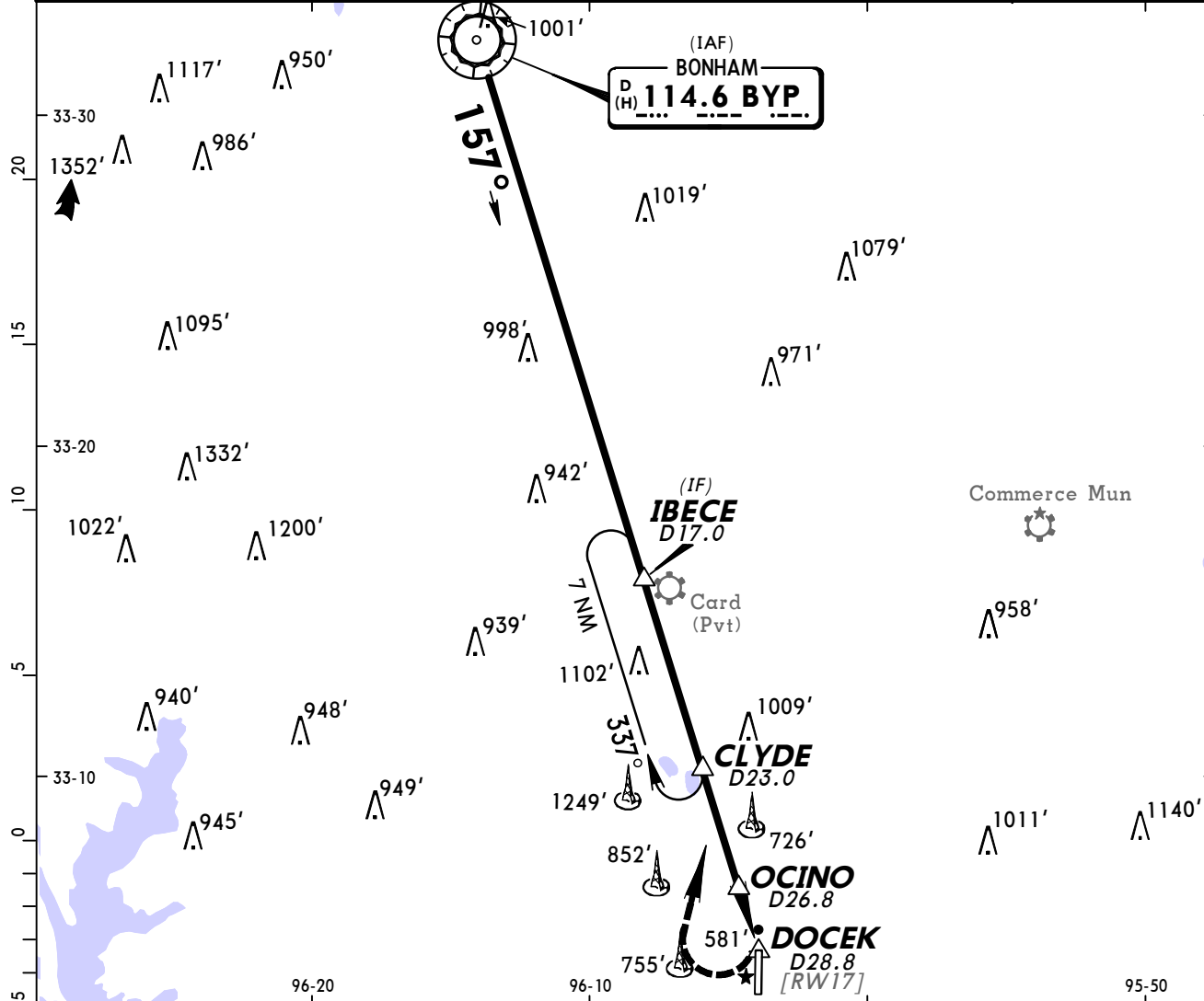
STRAIGHT-IN LANDING RWY 17						CIRCLE-TO-LAND	
① LPV DA(H) 798' (264')		② LNAV/VNAV DA(H) 849' (315')		③ LNAV MDA(H) 1060' (526')		With Local Altimeter Setting	With Terrell Mun Altimeter Setting
ALS out		ALS out		ALS out		Max Kts	MDA(H)
A		3/4		3/4		90	1060' (525') - 1
B		1		1		120	1140' (605') - 1
C		1		1 1/2		140	1060' (525') - 1 1/2
D		1		1 3/4		165	1180' (645') - 2

- ① DA(H) 862' (328') VIS 1 1/4 with Terrell Mun altimeter setting.
 ② DA(H) 913' (379') VIS 1 1/4 with Terrell Mun altimeter setting.
 ③ MDA(H) 1140' (606') VIS CAT C 1 3/4, CAT D 2 with Terrell Mun altimeter setting.



BRIEFING STRIP

AWOS-3 133.42		FT WORTH Center (R) 132.85		*MAJORS Tower CTAF 118.65		*Ground 121.7	
VOR BYP 114.6	Final Apch Crs 157°	Minimum Alt CLYDE 2400' (1866')	MDA(H) (CONDITIONAL) 1120' (586')	Apt Elev 535' TDZE 534'			
MISSED APCH: Climbing RIGHT turn to 2400' inbound via BYP VOR R-157 to CLYDE/D23.0 and hold.							
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'			
1. Use local altimeter setting; if not received, use Terrell Mun altimeter setting. 2. VGSI and descent angles not coincident. 3. Pilot controlled lighting 118.65.							



Gnd speed-Kts	70	90	100	120	140	160	MAL S PAPI 2400' BYP via 114.6 CLYDE RT R-157	
Descent angle [3.16°]	391	503	559	671	783	895		
MAP at DOCEK								

TERPS A M E N D 1	STRAIGHT-IN LANDING RWY 17			CIRCLE-TO-LAND					
	MDA(H) 1120' (586')		MDA(H) 1200' (666')		Max Kts	With Local Altimeter Setting		With Terrell Mun Altimeter Setting	
	With Local Altimeter Setting		With Terrell Mun Altimeter Setting						
		ALS out		ALS out		MDA(H)		MDA(H)	
	A	1		1		90	1120' (585')- 1		1200' (665')- 1
B	1 1/4		1 1/4		120	1120' (585')- 1 1/4		1200' (665')- 1 1/4	
C	1 1/2		1 1/2		140	1120' (585')- 1 1/2		1200' (665')- 1 1/2	
D	2		2		165	1120' (585')- 2		1200' (665')- 2	

General Information

Location: Houston TX USA
IATA Code: HOU
Lat/Long: N29° 38.7' W095° 16.7'
Elevation: 46 ft

Airport Use: Public
Magnetic Variation: 3.1 °E
Sectional Chart: Houston

Fuel Types: 100 Octane (LL), Jet A
Repair Types: Minor Airframe
Customs: Upon Prior Request
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1249 Z
Sunset: 0019 Z,

Runway Information

Runway: 04
Length x Width: 7602 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 44 ft
Lighting: Edge, ALS, Centerline

Runway: 12L
Length x Width: 5148 ft x 100 ft
Surface Type: concrete
TDZ-Elev: 45 ft
Lighting: Edge

Runway: 12R
Length x Width: 7602 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 46 ft
Lighting: Edge, ALS, TDZ
Displaced Threshold: 1034 ft

Runway: 17
Length x Width: 6000 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 46 ft
Lighting: Edge

Runway: 22
Length x Width: 7602 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 41 ft
Lighting: Edge, ALS, Centerline

Runway: 30L
Length x Width: 7602 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 43 ft
Lighting: Edge, REIL, TDZ

Runway: 30R
Length x Width: 5148 ft x 100 ft
Surface Type: concrete
TDZ-Elev: 44 ft
Lighting: Edge

Runway: 35
Length x Width: 6000 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 46 ft
Lighting: Edge, REIL

Communication Information

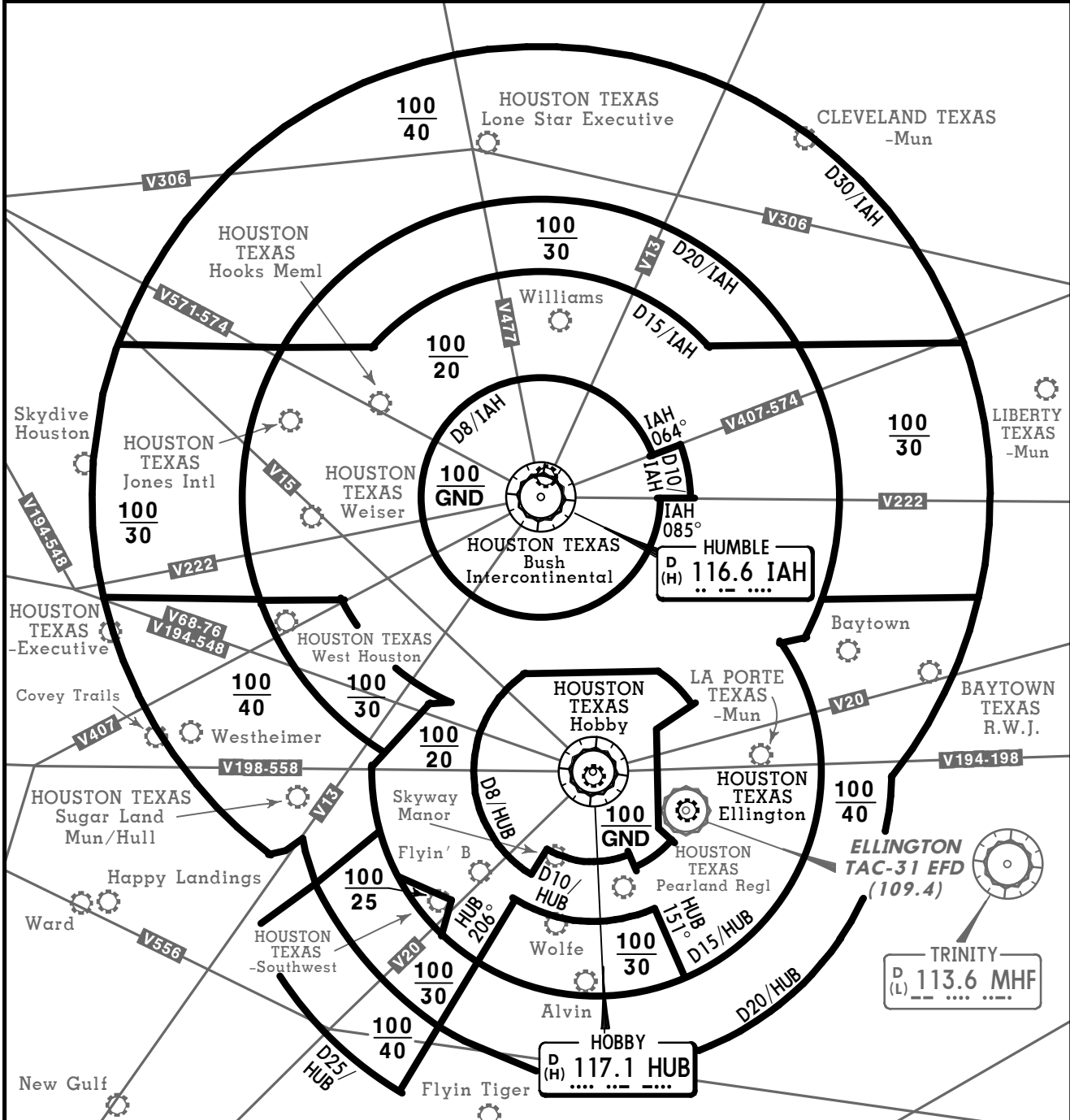
ATIS 124.6
Hobby Tower 118.7
Hobby Ground Control 121.9
Hobby Clearance Delivery 125.45 Pre-Departure Clearance
Hobby Pre-Taxi Clearance 125.45
Houston Approach Control 124.35 Initial Contact
Houston Approach Control 120.05 Initial Contact
Houston Approach Control 134.45
Houston Departure Control 132.25
Houston Departure Control 127.125
Houston Departure Control 126.675
Hobby Unicom 122.95
Montgomery Co Flight Service Station 122.35 RCO

HOUSTON CLASS B AIRSPACE

CLASS B AIRSPACE VFR COMMUNICATIONS

N	Houston App	119.7
E	Houston App	133.6

S	Houston App	134.45
W	Houston App	123.8



FOR OPERATING RULES AND PILOT AND EQUIPMENT REQUIREMENTS
SEE FAR 91.131, 91.117 AND 91.215

FLIGHT PROCEDURES

IFR Flights. Aircraft within Class B airspace are required to operate in accordance with current IFR procedures.

VFR Flights-

- a. Arriving aircraft should contact Houston Approach Control on the specified frequencies. Although arriving aircraft may be operating beneath the floor of Class B airspace on initial contact, communications should be established with Approach Control for sequencing and spacing purposes.
- b. Aircraft departing the primary airport are requested to advise clearance delivery prior to taxiing of their intended altitude and direction of flight to depart Class B airspace. Aircraft departing from other than Houston Intercontinental Airport whose route of flight would penetrate Class B airspace should give this information to ATC on appropriate frequencies.
- c. Aircraft desiring to transit Class B airspace must obtain an ATC clearance and will be handled on an ATC workload permitting basis.

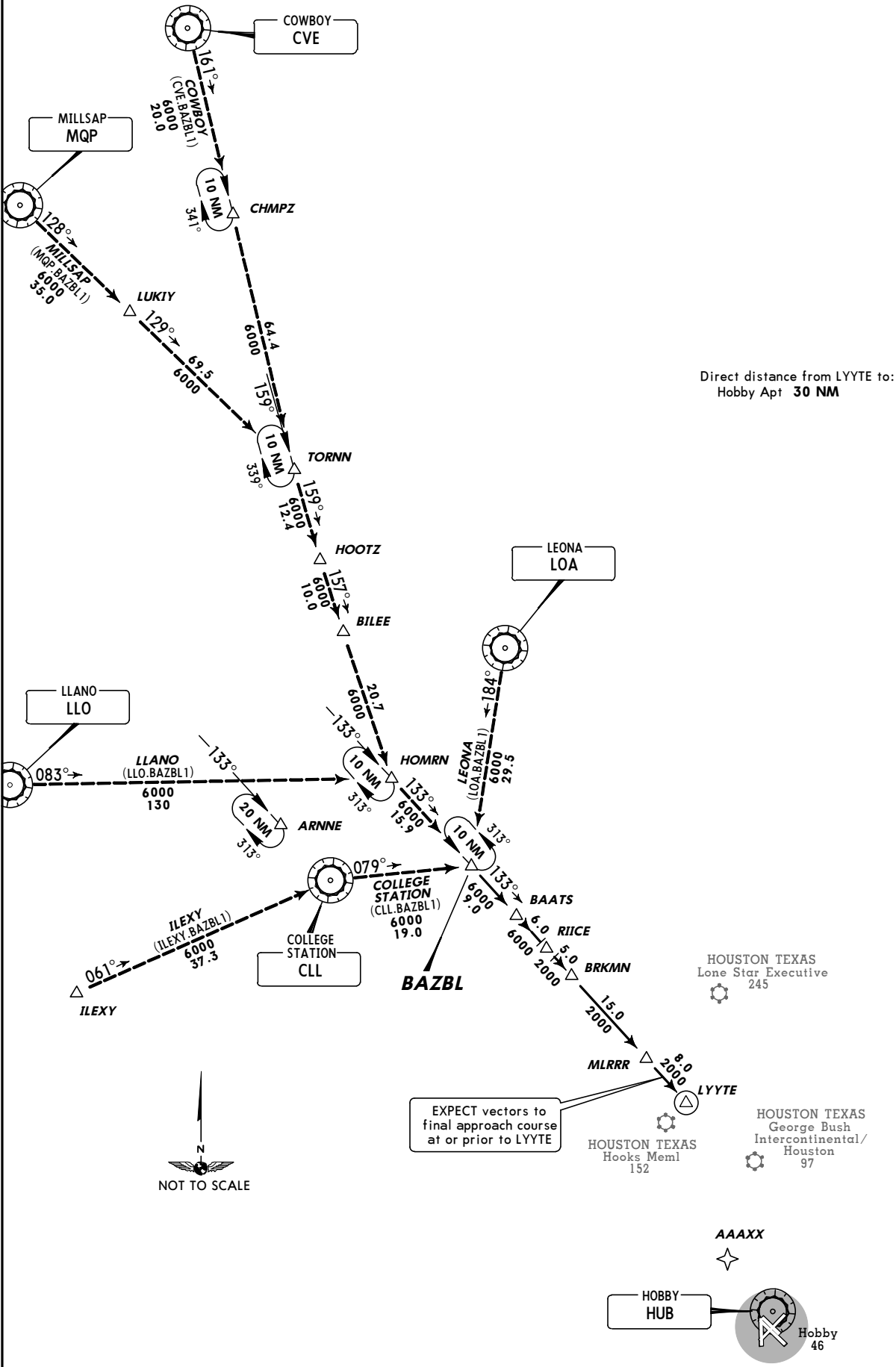
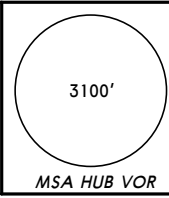
HOBBY D-ATIS
124.6

Apt Elev
See graphic

Alt Set: INCHES Trans level: FL180 Trans alt: 18000'

1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. COLLEGE STATION and ILEXY transitions: For non-GPS equipped aircraft TNV DME must be operational. 5. COWBOY transition: For non-GPS equipped aircraft CQY, LOA and TNV DMEs must be operational.

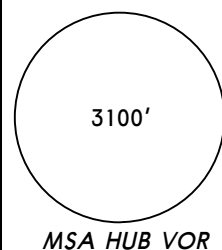
6. LEONA transition: For non-GPS equipped aircraft, CLL and TNV DMEs must be operational. 7. LLANO transition: For non-GPS equipped aircraft CLL, CWK, LOA and TNV DMEs must be operational. 8. MILLSAP transition: For non-GPS equipped aircraft ACT, GNL, LOA and TNV DMEs must be operational.



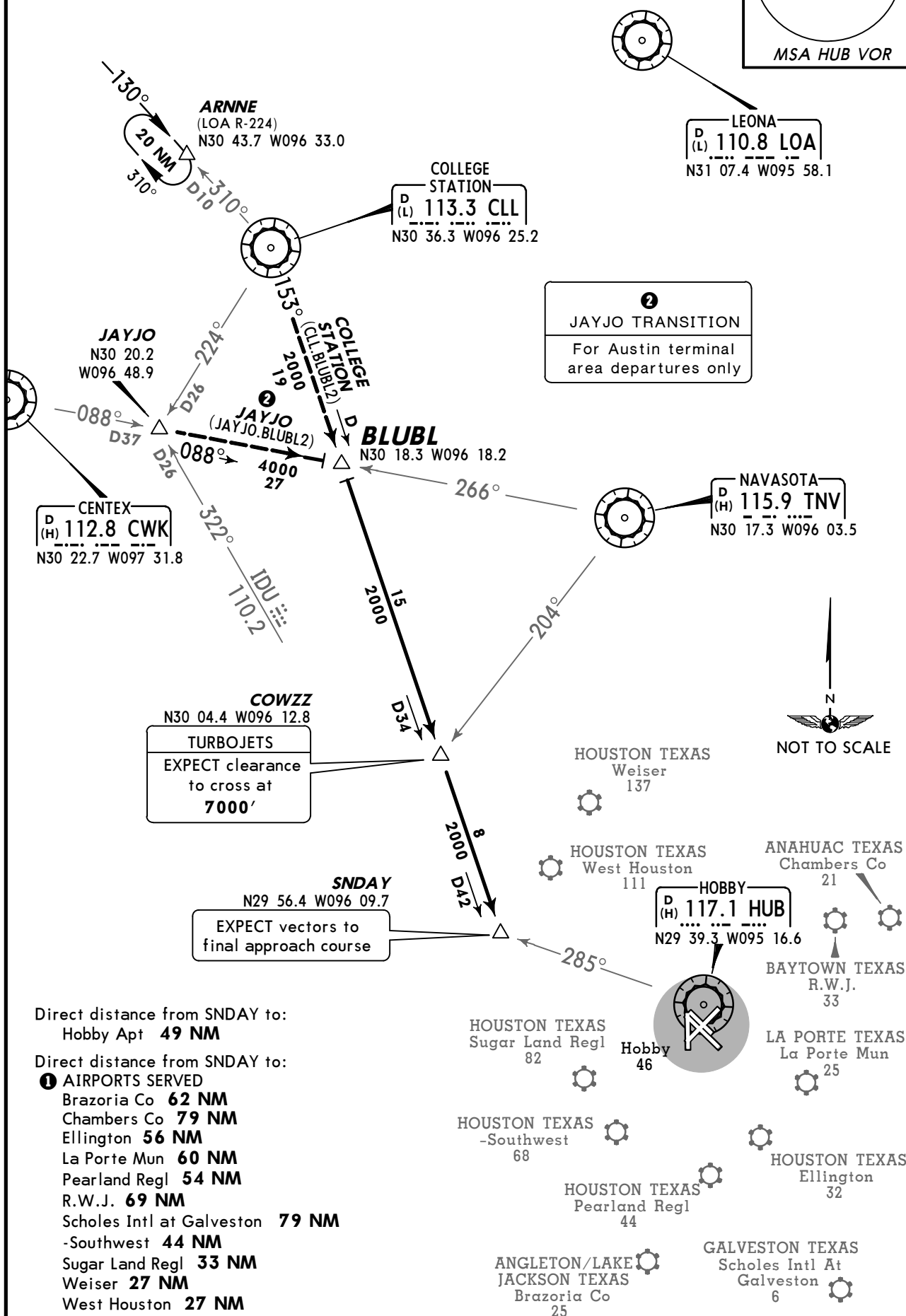
BAZBL ONE RNAV ARRIVAL
(BAZBL.BAZBL1)

ROUTING

From BAZBL via 133° track to BAATS. Then as depicted to RIICE. From RIICE via 133° track to BRKMN, then as depicted to LYYTE. EXPECT vectors to final approach course at or prior to LYYTE.

HOBBY
D-ATIS
124.6Apt Elev
See graphicAlt set: INCHES
Trans level: FL180 Trans alt: 18000'
Also Serves ①

BLUBELL TWO ARRIVAL (BLUBL.BLUBL2)



ROUTING

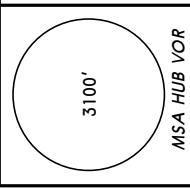
From over BLUBL via CLL R-153 to SNDAY. EXPECT vectors to final approach course.

HOBBY D-ATIS
124.6

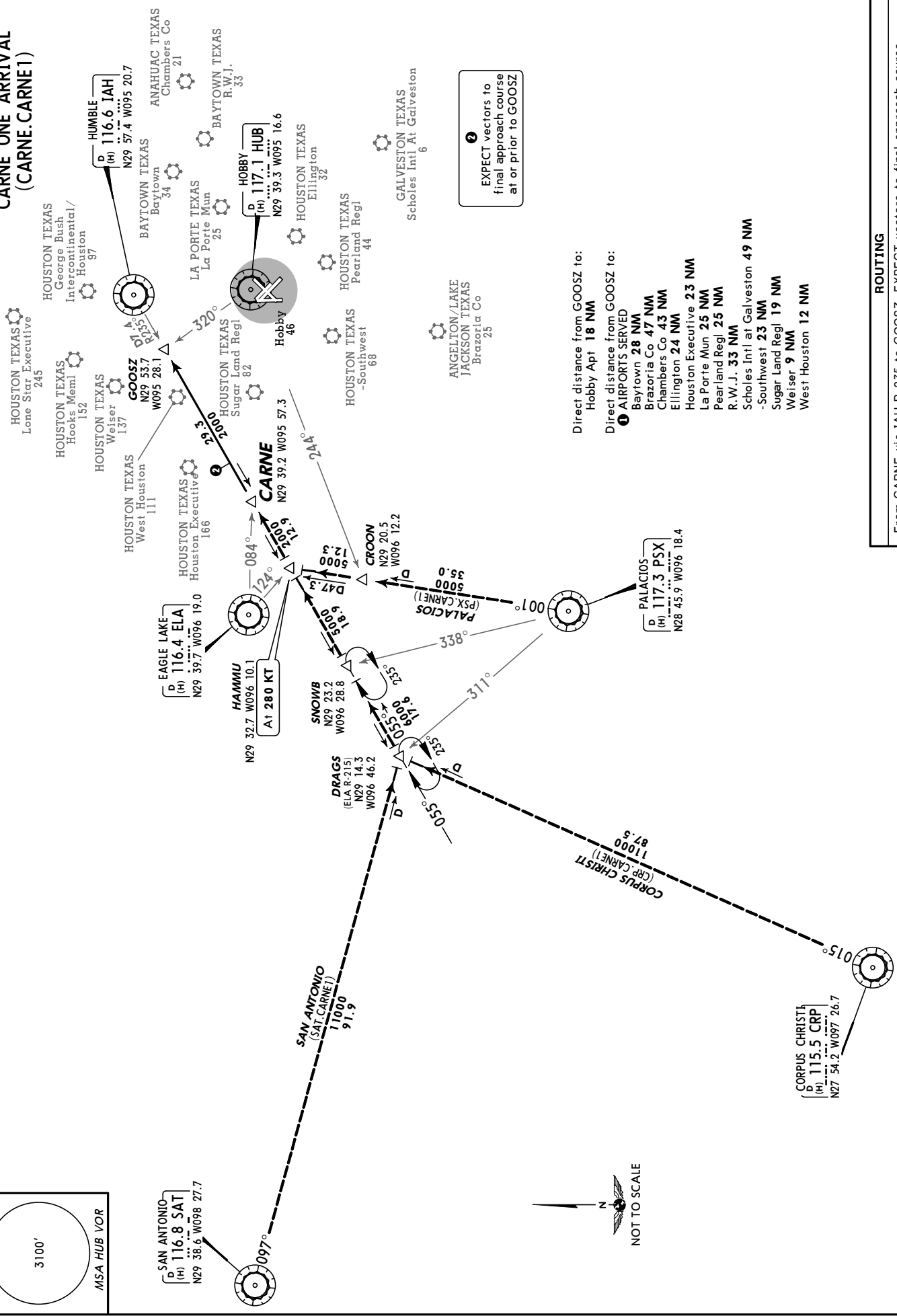
Apt Elev
See graphic

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

1. For conventional navigation equipped aircraft only.
2. DME/DME/IRU or GPS equipped aircraft file via the HAMMU (RNAV) STAR.
3. Also Serves 1

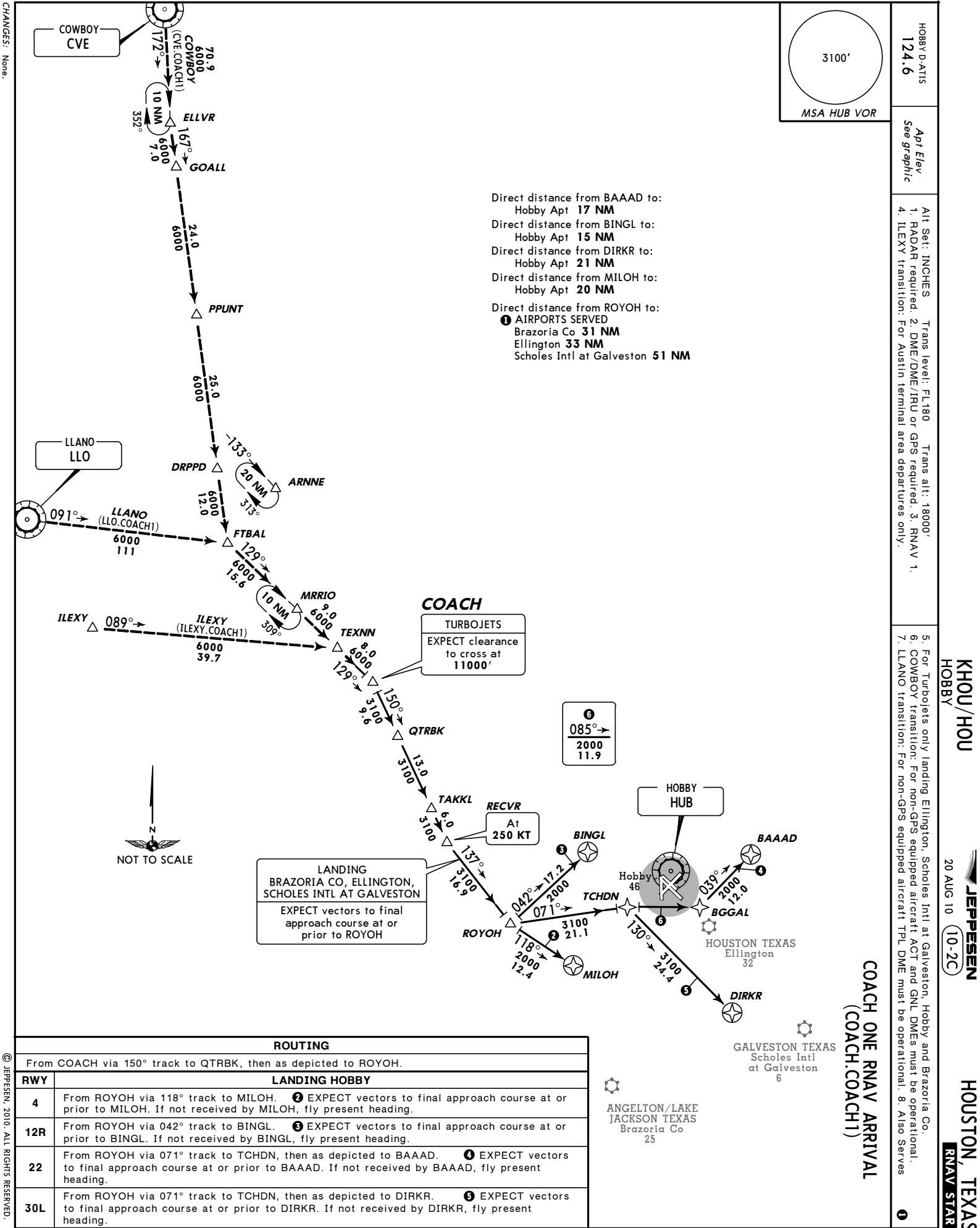


CARNE ONE ARRIVAL
(CARNE.CARNE1)



- Direct distance from GOOSZ to:
Hobby Apt 18 NM
- Direct distance from GOOSZ to:
1 AIRPORTS SERVED
Baytown 28 NM
Brazoria Co 47 NM
Chambers Co 43 NM
Ellington 24 NM
Houston Executive 23 NM
La Porte Mun 25 NM
Pearland Regl 25 NM
R.W.J. 33 NM
Scholes Intl at Galveston 49 NM
Southwest 23 NM
Sugar Land Regl 19 NM
Weiser 9 NM
West Houston 12 NM

ROUTING
From CARNE via IAH R-235 to GOOSZ. EXPECT vectors to final approach course at or prior to GOOSZ.



Direct distance from BAAAD to:
Hobby Apt **17 NM**
Direct distance from BINGL to:
Hobby Apt **15 NM**
Direct distance from DIRKR to:
Hobby Apt **21 NM**
Direct distance from MILOH to:
Hobby Apt **20 NM**
Direct distance from ROYOH to:
1 AIRPORTS SERVED
Brazoria Co **31 NM**
Ellington **33 NM**
Scholes Intl at Galveston **51 NM**

COACH ONE RNAV ARRIVAL
(COACH.COACH1)

ROUTING

From COACH via 150° track to QTRBK, then as depicted to ROYOH.

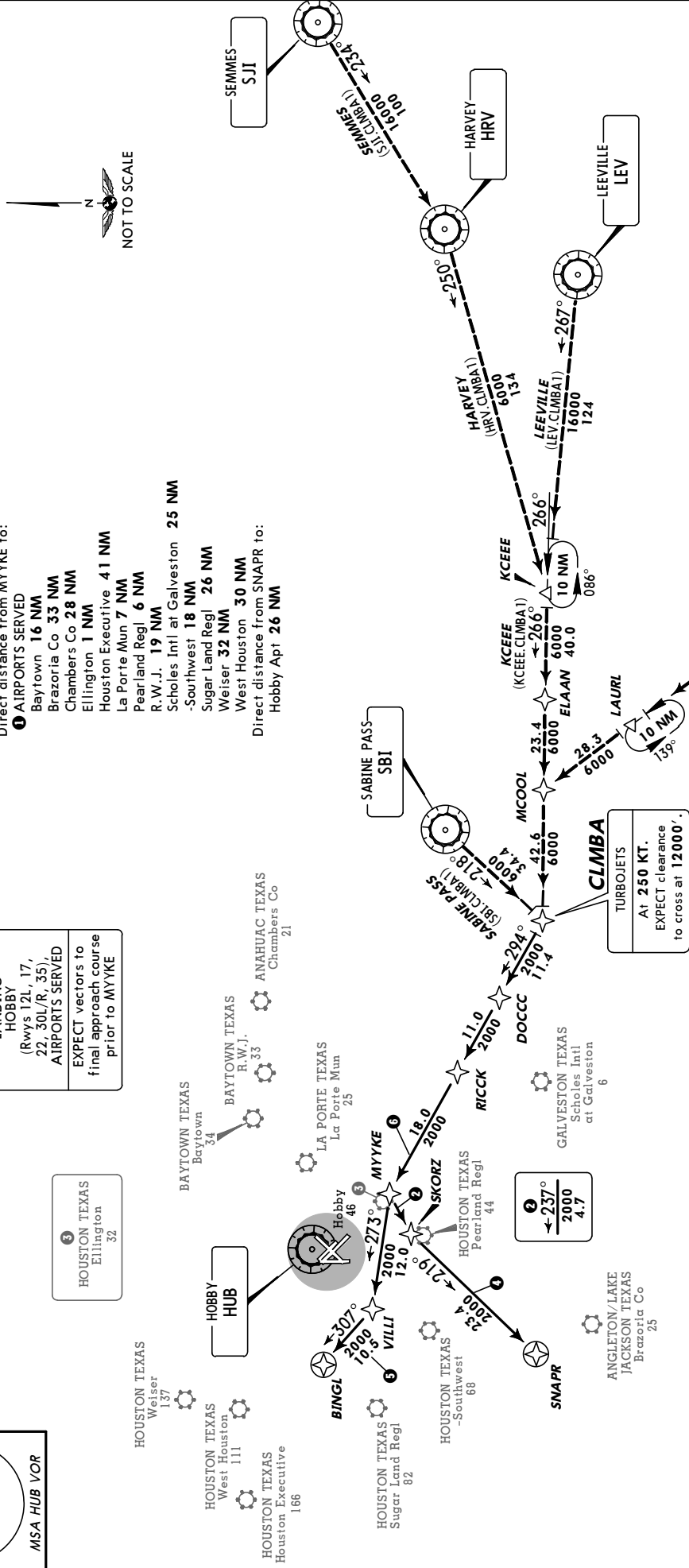
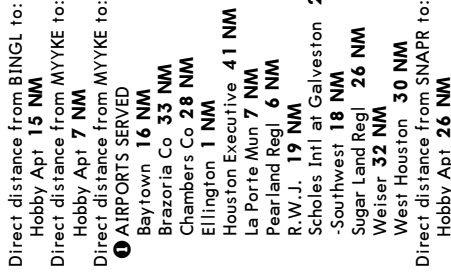
LANDING HOBBY

RWY	
4	From ROYOH via 118° track to MILOH. 2 EXPECT vectors to final approach course at or prior to MILOH. If not received by MILOH, fly present heading.
12R	From ROYOH via 042° track to BINGL. 3 EXPECT vectors to final approach course at or prior to BINGL. If not received by BINGL, fly present heading.
22	From ROYOH via 071° track to TCHDN, then as depicted to BAAAD. 4 EXPECT vectors to final approach course at or prior to BAAAD. If not received by BAAAD, fly present heading.
30L	From ROYOH via 071° track to TCHDN, then as depicted to DIRKR. 5 EXPECT vectors to final approach course at or prior to DIRKR. If not received by DIRKR, fly present heading.

HOBBY D-ATIS
124.6
Apt Elev
See graphic
Alt Set: INCHES
Trans alt: 18000'
1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. ILEXY transition: For Austin terminal area departures only.
5. For Turbojets only landing Ellington, Scholes Intl at Galveston, Hobby and Brazoria Co.
6. COWBOY transition: For non-GPS equipped aircraft ACT and GNL DMEs must be operational.
7. LLANO transition: For non-GPS equipped aircraft TPL DME must be operational. 8. Also Serves
1

5. KUEE transition: For non-GPS equipped aircraft DAS, LCH and LLA must be operational.
6. KLAMS transition: For non-GPS equipped aircraft DAS, LCH, MHF and VUH must be operational.
7. LEEVILLE transition: For non-GPS equipped aircraft DAS, LCH and LLA must be operational.
8. SEMMES transition: For non-GPS equipped aircraft DAS, HRV, LCH, LEV, LLA and RQR must be operational.
9. Also Serves **1**

**COLUMBIA ONE RNAV ARRIVAL
(CLMBA.CLMB1)**



ROUTING	
From CLMBA via 294° track to DOCCC, then as depicted to RICKK.	
RWY	LANDING HOBBY
4	From RICKK via 294° track to MYYKE, then as depicted to SNAPR. ④ EXPECT vectors to final approach course prior to SNAPR, if not received by SNAPR fly present heading.
12R	From RICKK via 294° track to MYYKE, then as depicted to BINGL. ⑤ EXPECT vectors to final approach course prior to BINGL, if not received by BINGL fly present heading.
ALL OTHER	From RICKK via 294° track to MYYKE. EXPECT vectors to final approach course prior to MYYKE.
LANDING AIRPORTS SERVED	
From RICKK via 294° track to MYYKE. EXPECT vectors to final approach course prior to MYYKE.	

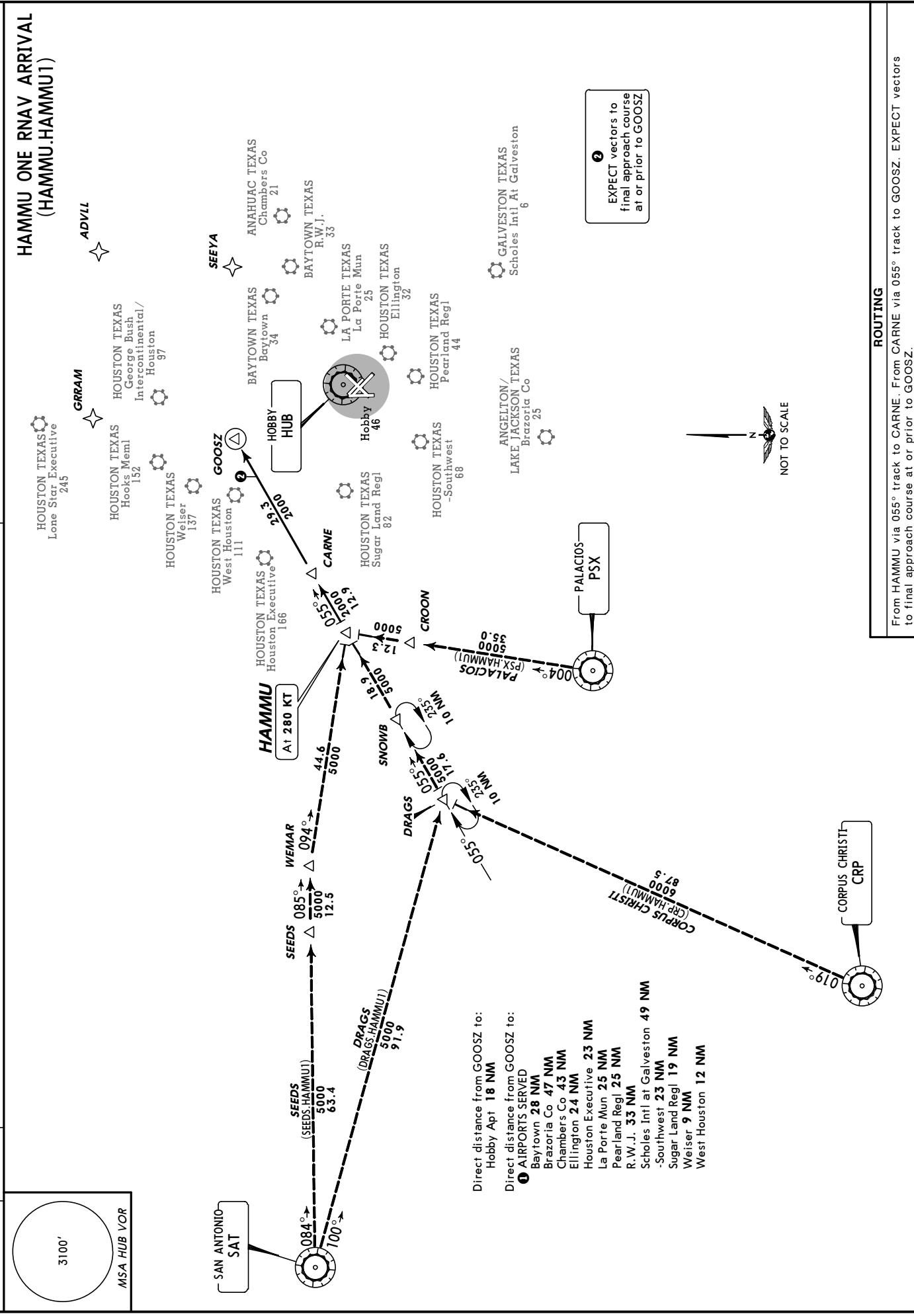
CHANGES: Procedure reindexed, airports served (LISSE Arrival cancelled).

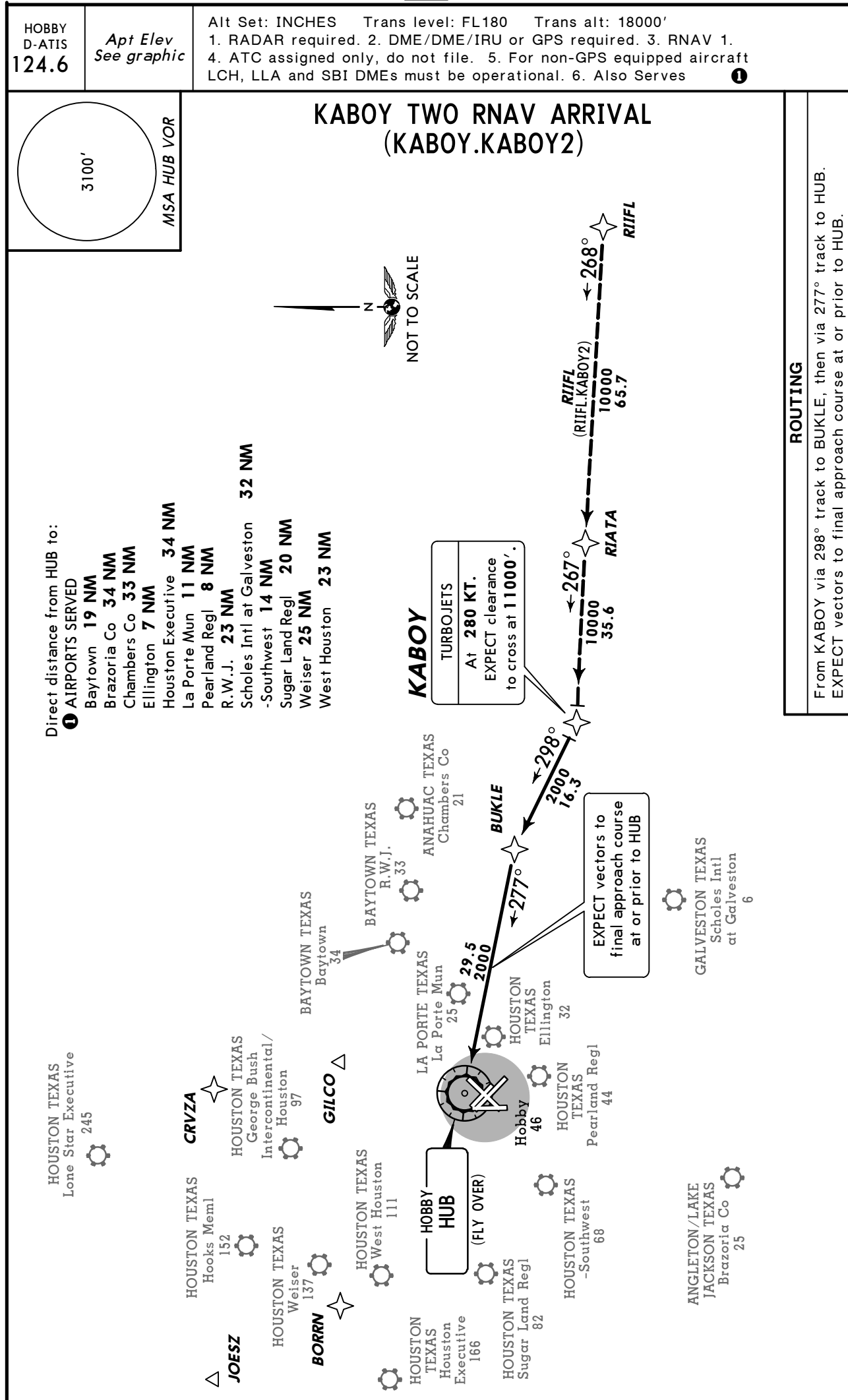
**TA EIGHT ARRIVAL
(DAS.DAS8)**



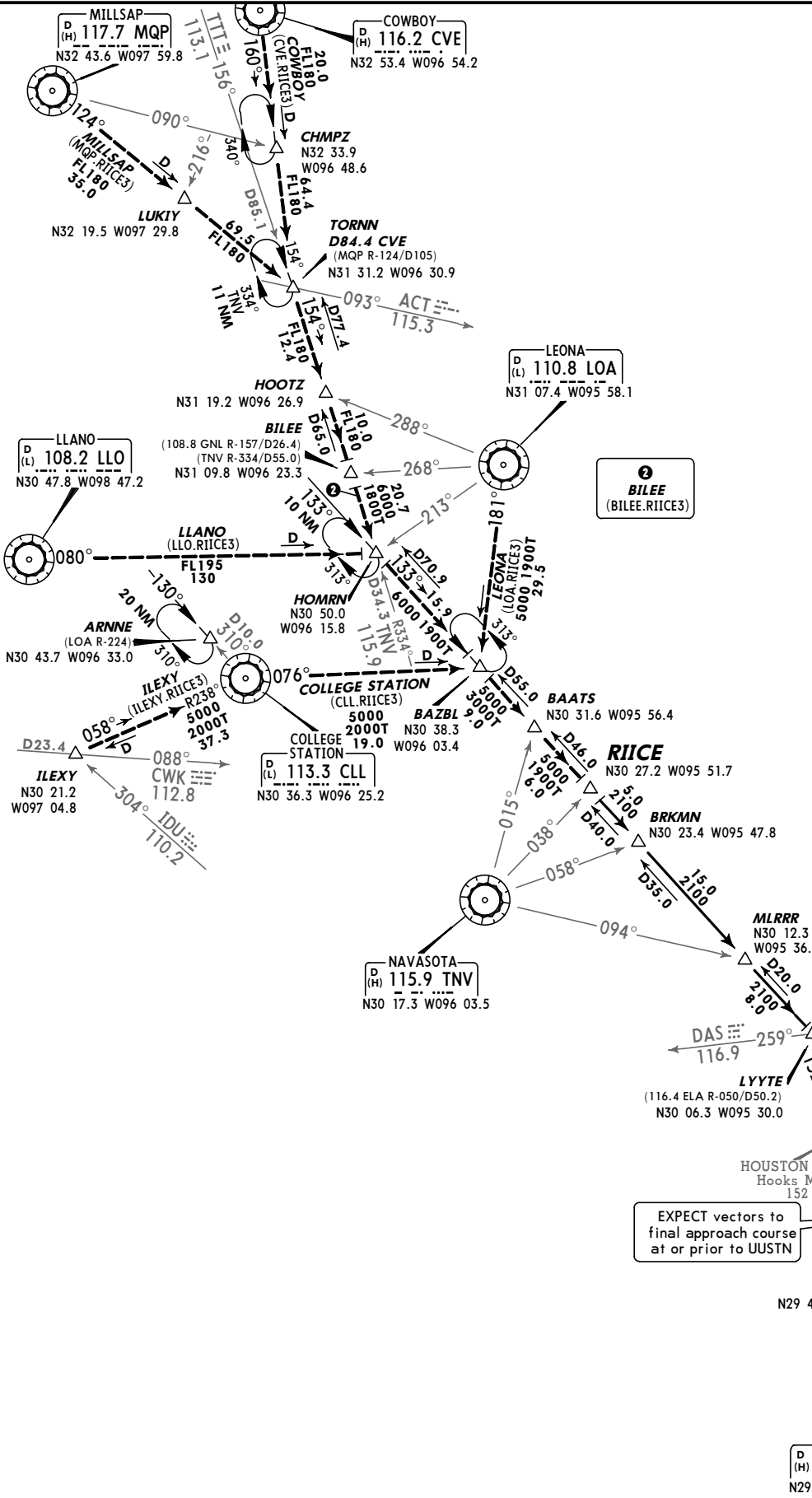
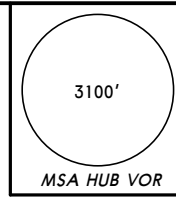
CHANGES: Procedure reindexed airports served

HOBBY D-ATIS 124.6	<i>Apt Elev</i> <i>See graphic</i>	Alt Set: INCHES Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1. 4. CORPUS CHRISTI transition: For non-GPS equipped aircraft IDU, PSX and VCT DMEs must be operational. 5. DRAGS transition: For non-GPS equipped aircraft IDU, PSX, SAT, THX and VCT DMEs must be operational.	6. PALACIOS transition: For non-GPS equipped aircraft VCT DME must be operational. 7. SEEDS transition: For non-GPS equipped aircraft ELA, IDU, SAT and THX DMEs must be operational. 8. Also Serves 1





D-ATIS
124.6
Apt Elev
See graphic
Alt Set: INCHES
Trans level: FL180
Trans alt: 18000'



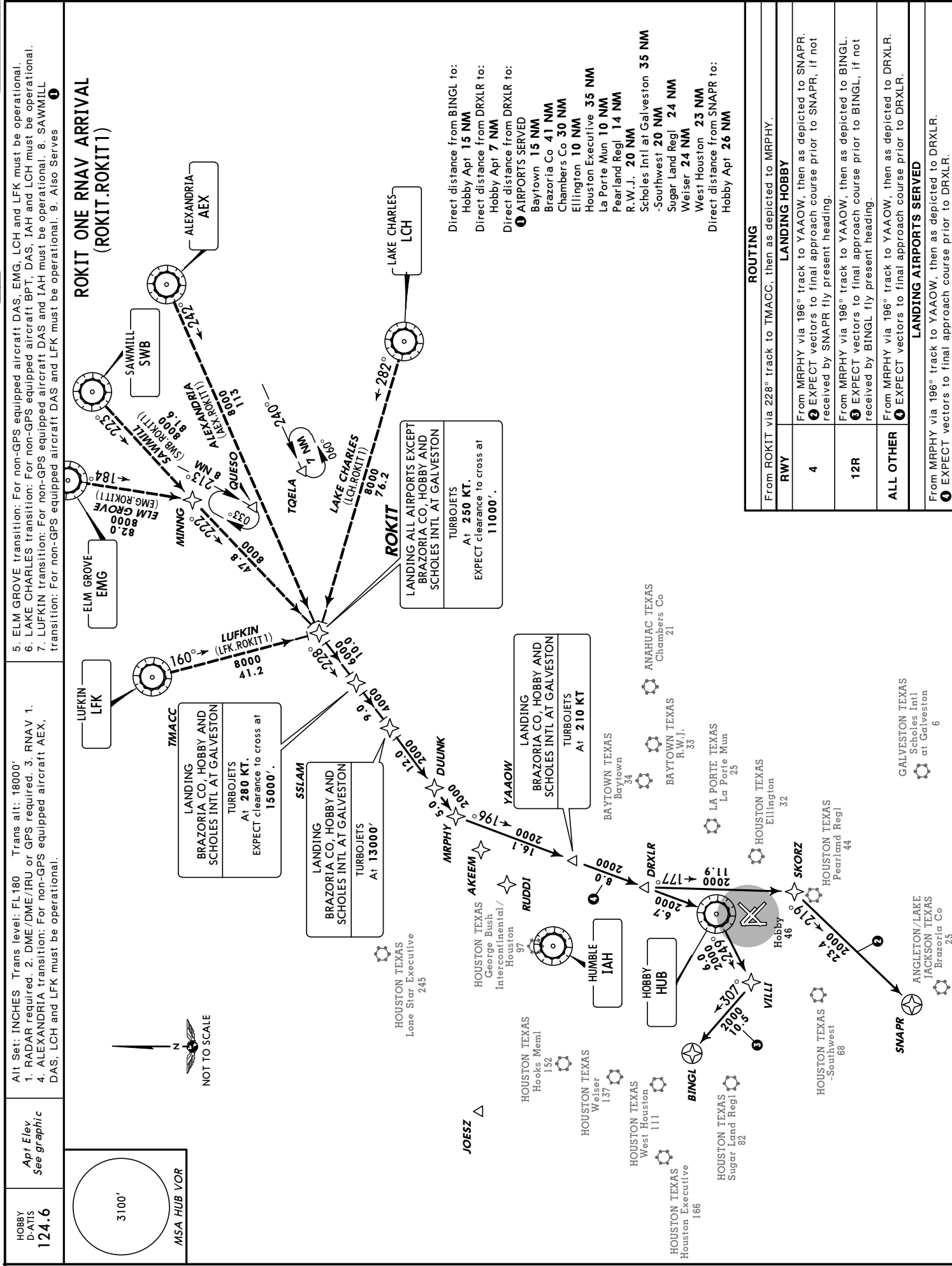
RIICE THREE ARRIVAL
(RIICE.RIICE3)

EXPECT vectors to final approach course at or prior to UUSTN

ROUTING

From over RIICE via IAH R-313 to LYYTE, then via HUB R-332 to UUSTN.
EXPECT vectors to final approach course at or prior to UUSTN.

1. For conventional navigation equipped aircraft only. 2. DME/DME/RU or GPS equipped aircraft file via the BAZBL (RNAV) STAR. 3. ILEXY transition for Austin terminal area departures only. 4. ATC assigned only.



CHANGES: Procedure reinforced airports served

Apt Elev
See graphic

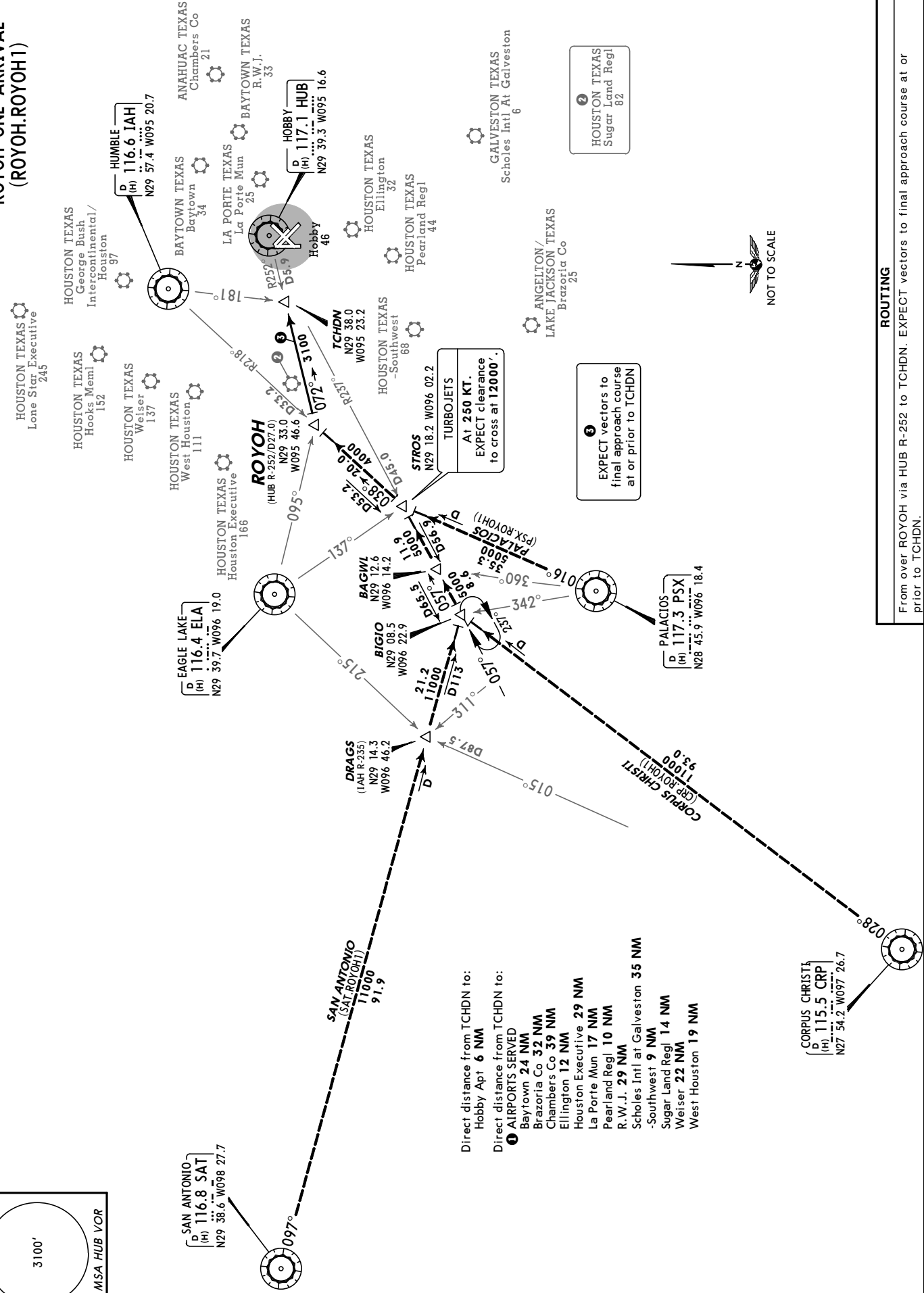
Trans alt: 18000'

3100'

MSA HUB VOR

**ROYOH ONE ARRIVAL
(ROYOH.ROYOH1)**

1. For conventional navigation equipped aircraft only.
2. DME/DME-IRU or GPS equipped aircraft file via the STROS (RNAV) STAR.
3. Also Serves **1**



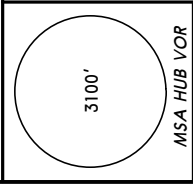
ROUTING

From over ROYOH via HUB R-252 to TCHDN. EXPECT vectors to final approach course at or prior to TCHDN.

CHANGES: New procedure at this airport.

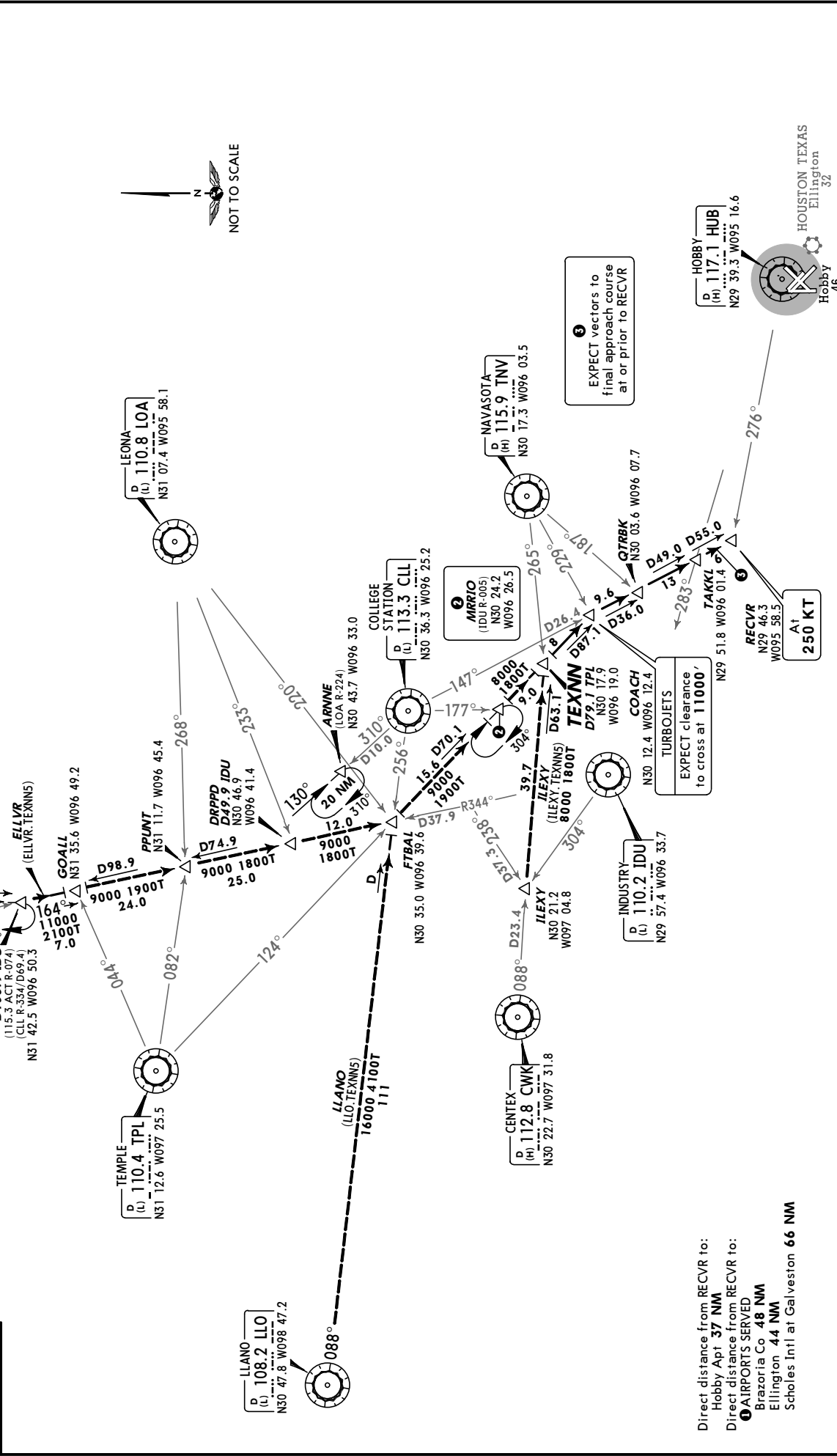
© JEPPESEN, 2010. ALL RIGHTS RESERVED

HOBBY D-ATIS 124.6	Apt Elev See graphic	Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'



TEXNN FIVE ARRIVAL
(TEXNN.TEXNN5)

1. For turbojets only landing Brazoria Co, Ellington, Hobby and Scholes Intl at Galveston.
2. For conventional navigation equipped aircraft only.
3. DME/DME/IRU or GPS equipped aircraft file via the COACH (RNAV) STAR.
4. ILEXY transition for Austin terminal area departures only.
5. Also Serves 1



Direct distance from RECVR to:
Hobby Apt **37 NM**
Direct distance from RECVR to:
AIRPORTS SERVED
Brazoria Co **48 NM**
Ellington **44 NM**
Scholes Intl at Galveston **66 NM**

ROUTING
From over TEXNN via TPL R-124 to COACH, then via CLL R-147 to RECVR, EXPECT vectors to final approach course at or prior to RECVR.

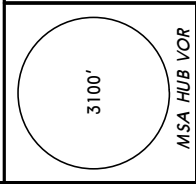
ANGLETON/LAKE JACKSON TEXAS Brazoria Co 25	HOUSTON TEXAS Ellington 32	GALVESTON TEXAS Scholes Intl at Galveston 6

HOUSTON Departure (R)
132.25

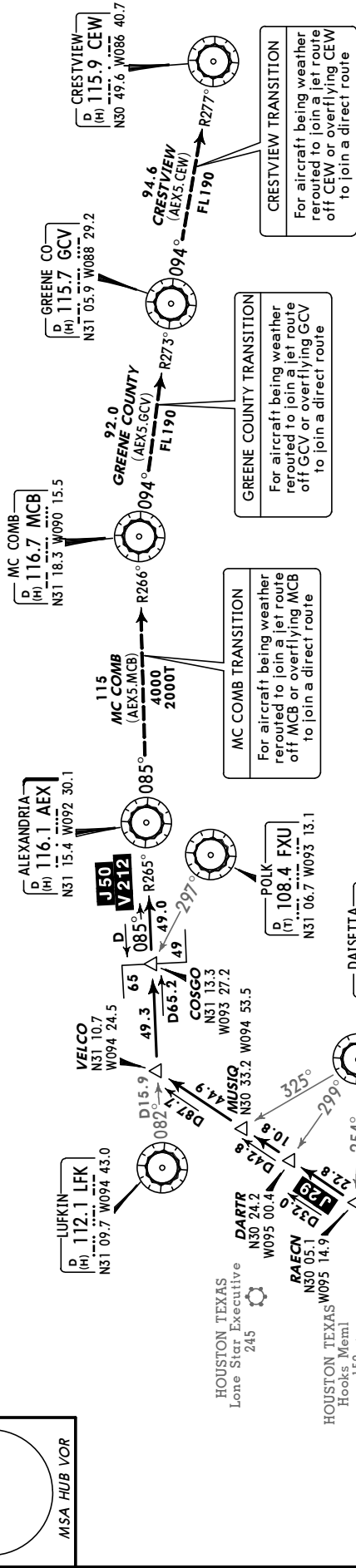
Apt Elev
See graphic

Trans level: FL180 Trans alt: 18000'

1. **RADAR required.**
2. CRESTVIEW, GREENE COUNTY and MC COMB Transitions are ATC assigned only, do not file.
3. Also serves **1**



ALEXANDRIA FIVE DEPARTURE
(AEX5.AEX)



OBSTACLE
For TAKEOFF OBSTACLE NOTES
see 10-30B1.

This SID requires take-off minimums
(for standard minimums, refer to airport chart):
ELLINGTON: Rwy 4, 17L/R, 22, 35L/R: Standard
(or lower than standard, if authorized).
HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.
Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).
Rwy 17: 300-1.
Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290' per
NM to **1500'**.
HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).
HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).
LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

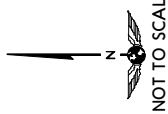
SCHOLES INTL at GALVESTON:
Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).
Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.
SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).
TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).
WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).
WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

Direct distance from Hobby Apt to:
RAECN **26 NM**
Direct distance from AIRPORTS
SERVED to RAECN:
1 AIRPORTS SERVED
Ellington **29 NM**
Houston Executive **38 NM**
La Porte Mun **27 NM**
Scholes Intl at Galveston **53 NM**
-Southwest **37 NM**
Sugar Land Regl **35 NM**
Texas Gulf Coast Regl **59 NM**
Weiser **22 NM**
West Houston **27 NM**

AIRPORT		INITIAL CLIMB		ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to RAECN.			MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to RAECN.			MAINTAIN 4000'
1 ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.			

ROUTING
At RAECN, via IAH R-028 to VELCO, then RIGHT turn via LFK R-082 and AEX R-265 to AEX.
EXPECT filed altitude 10 minutes after departure.



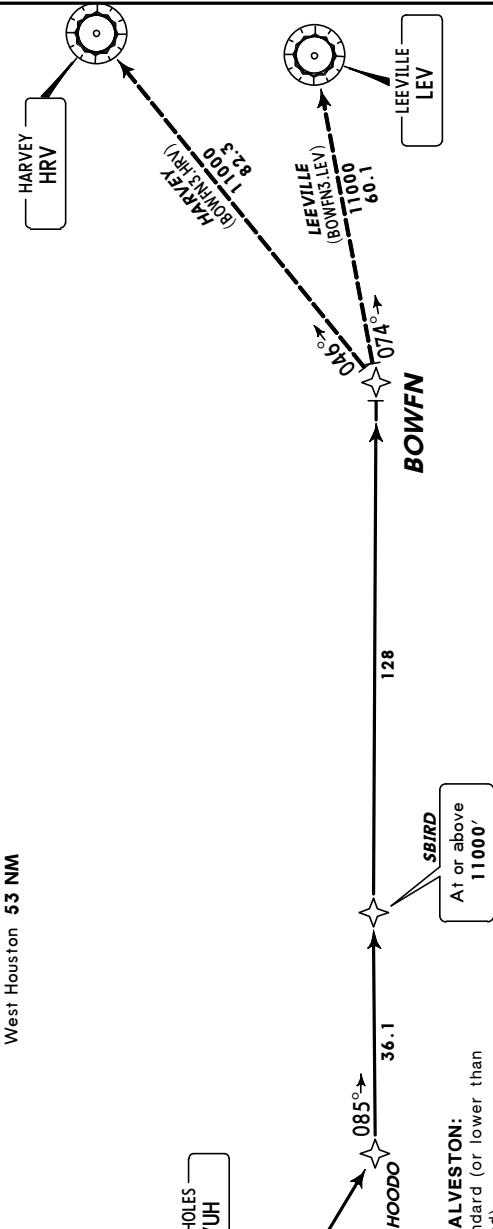
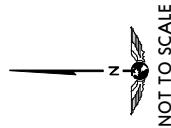
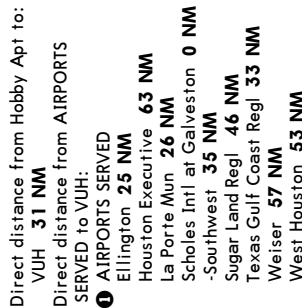
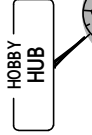
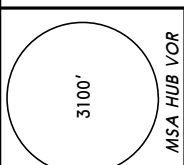
Trans level: FL180 Trans alt: 18000'

1. RADAR required. 2. RNAV 1.

3. DME/DME/IRU or GPS required.

Apt Elev
See graphic

HOUSTON Departure (R)
127.12



(This STD requires take-off minimums
(or standard minimums, refer to airport chart):
ELLINGTON: Rwy 4, 17L/R, 22, 35L/R: Standard
(or lower than standard, if authorized).
HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.
Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).
Rwy 17: 300-1.
Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290' per
NM to **1500'**.
HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).
HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).
LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON: Rwy 13, 31, 35: Standard (or lower than standard, if authorized).
Rwy 17: 300-1 or standard (or lower than standard, if authorized) with a minimum climb of 502' per NM to **300'**.
SUGAR LAND REGL: Rwy 17, 35: Standard (or lower than standard, if authorized).
TEXAS GULF COAST REGL: Rwy 17, 35: Standard (or lower than standard, if authorized).
WEISER: Rwy 9: 200-1 or standard (or lower than standard, if authorized) with a minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard, if authorized).
WEST HOUSTON: Rwy 15, 33: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

OBSTACLE
For TAKEOFF OBSTACLE NOTES see 10-30B1.

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to VUH.	MAINTAIN 5000' or ATC assigned altitude on depicted route to HOODO.
ELLINGTON	Climb on assigned heading for RADAR vectors to VUH.	MAINTAIN 4000' or ATC assigned altitude on depicted route to HOODO.
① ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to VUH.	

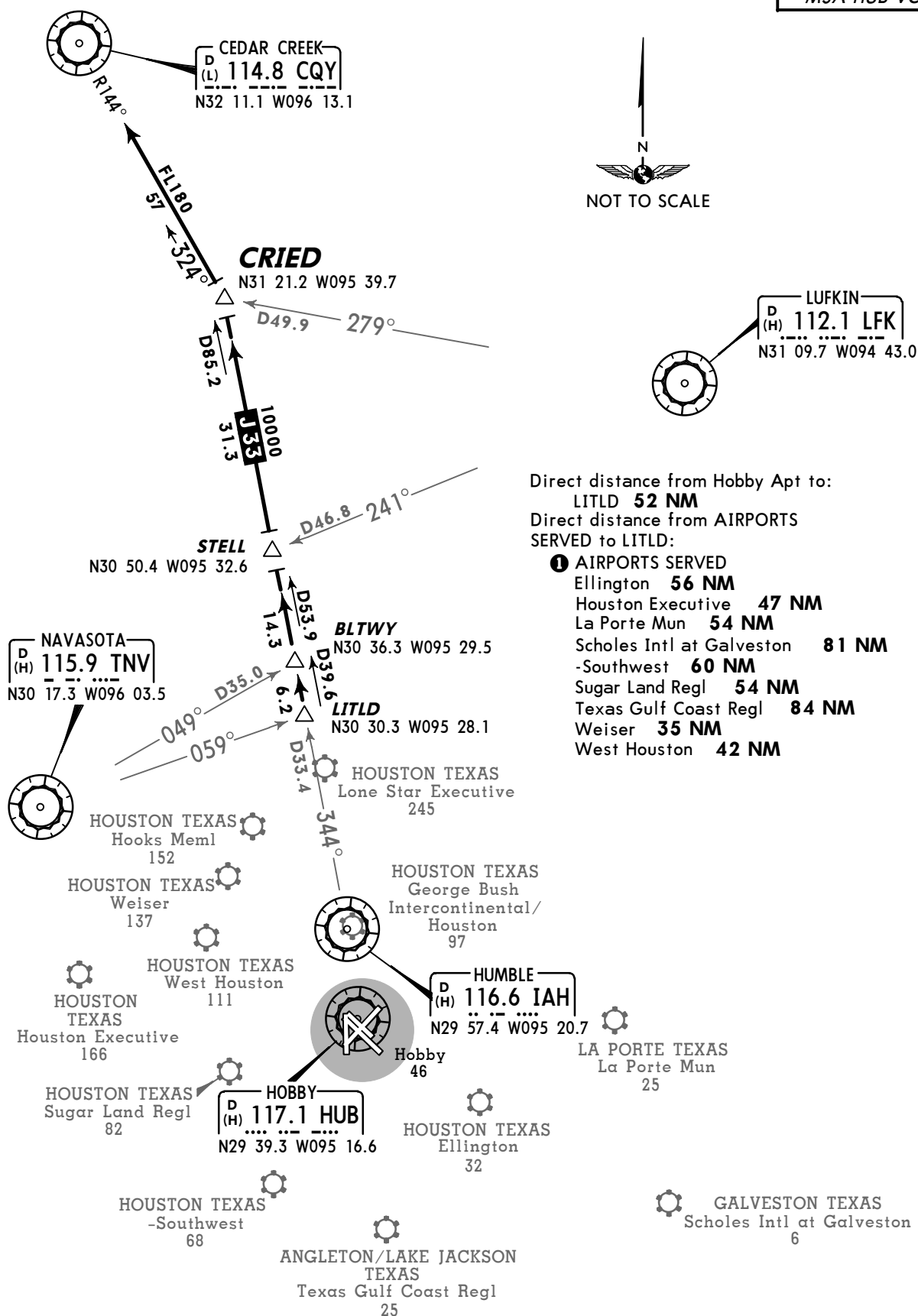
ROUTING	
Cross SBIRD at or above	1100' on depicted route to BOWFN. Then via transition. EXPECT filled altitude 10 minutes after departure.

HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. RADAR required.
2. Also serves ①

3100'

MSA HUB VOR

CRIED FOUR DEPARTURE (CRIED4.CRIED)

For Procedure Text, Takeoff Minimums
see 10-3A-1

Direct distance from Hobby Apt to:

LITLD 52 NM

Direct distance from AIRPORTS

SERVED to LITLD:

① AIRPORTS SERVED

Ellington 56 NM

Houston Executive 47 NM

La Porte Mun 54 NM

Scholes Intl at Galveston 81 NM

-Southwest 60 NM

Sugar Land Regl 54 NM

Texas Gulf Coast Regl 84 NM

Weiser 35 NM

West Houston 42 NM

CRIED FOUR DEPARTURE (CRIED4.CRIED)

For Procedure Graphic see 10-3A
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to LITLD.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to LITLD.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD.	
ROUTING		
At LITLD, via IAH R-344 to STELL, then via IAH R-344 to CRIED, then LEFT turn via CQY R-144 to CQY. EXPECT filed altitude 10 minutes after departure.		

HOUSTON
Departure (R)
132.25*Apt Elev*
See graphic

Trans level: FL180 Trans alt: 18000'

1. RADAR required.2. For aircraft destined Memphis Intl, or filed
via Q-32 or J-42.3. Also serves **1**

3100'

MSA HUB VOR

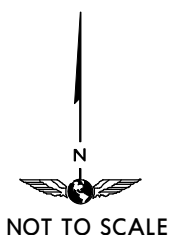
EL DORADO THREE DEPARTURE (ELD3.ELD)For Procedure Text and Takeoff Minimums
see 10-3B-1

Direct distance from Hobby Apt to:

RAECN **26 NM**

Direct distance from AIRPORTS

SERVED to RAECN:

1 AIRPORTS SERVEDEllington **29 NM**Houston Executive **38 NM**La Porte Mun **27 NM**Scholes Intl at Galveston **53 NM**-Southwest **37 NM**Sugar Land Regl **35 NM**Texas Gulf Coast Regl **59 NM**Weiser **22 NM**West Houston **27 NM**

NOT TO SCALE

EL DORADO
D (H) 115.5 ELD
N33 15.4 W092 44.6LUFKIN
D (H) 112.1 LFK
N31 09.7 W094 43.0ENJOY
N31 16.7
W094 19.8VELCO
N31 10.7
W094 24.5HOUSTON TEXAS
Lone Star Executive
245
DARTR
N30 24.2
W095 00.4HOUSTON TEXAS
Hooks Meml
152HOUSTON TEXAS
Weiser
137HOUSTON TEXAS
West Houston
111HOUSTON TEXAS
Houston Executive
166HOUSTON TEXAS
Sugar Land Regl
82HOUSTON TEXAS
-Southwest
68ANGLETON/
LAKE JACKSON TEXAS
Texas Gulf Coast Regl
25Hobby
46HOUSTON TEXAS
Ellington
32LA PORTE TEXAS
La Porte Mun
25GALVESTON TEXAS
Scholes Intl
at Galveston
6HUMBLE
D (H) 116.6 IAH
N29 57.4 W095 20.7HOUSTON TEXAS
George Bush
Intercontinental/
Houston
97HOBBY
D (H) 117.1 HUB
N29 39.3 W095 16.6DAISETTA
D (H) 116.9 DAS
N30 11.4 W094 38.7**OBSTACLE**

For TAKEOFF OBSTACLE NOTES see 10-3OB1.

EL DORADO THREE DEPARTURE (ELD3.ELD)

For Procedure Graphic see 10-3B
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

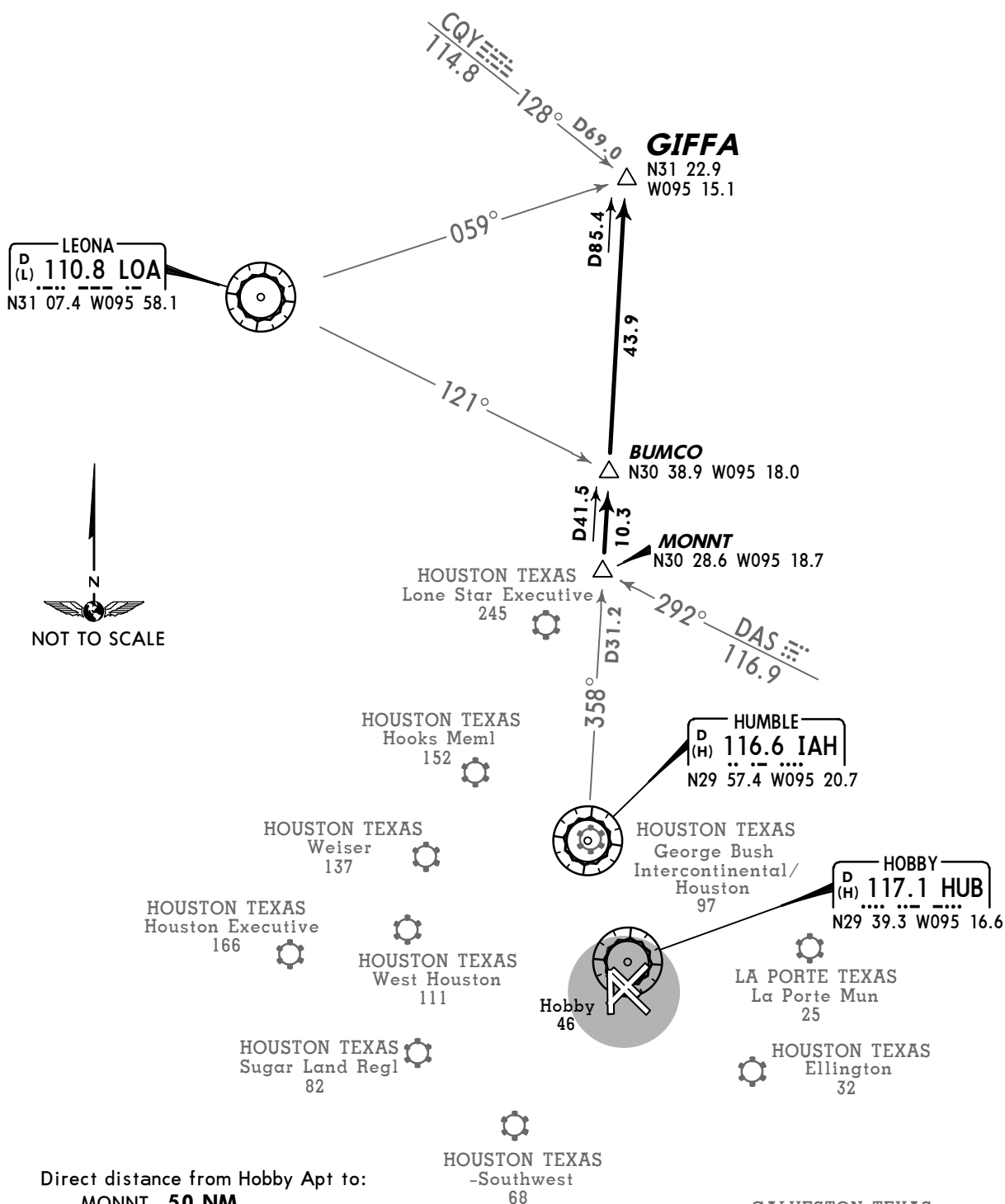
Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.	
ROUTING		
At RAECN via IAH R-028 and the ELD R-208 to ELD. EXPECT filed altitude 10 minutes after departure.		

HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. RADAR required.
2. Also serves **1**

3100'

MSA HUB VOR

GIFFA FOUR DEPARTURE (GIFFA4.GIFFA)For Procedure Text and Takeoff Minimums
see 10-3C-1Direct distance from Hobby Apt to:
MONNT 50 NMDirect distance from AIRPORTS
SERVED to MONNT:

- 1 AIRPORTS SERVED**
- Ellington **53 NM**
 - Houston Executive **51 NM**
 - La Porte Mun **50 NM**
 - Scholes Intl at Galveston **76 NM**
 - Southwest **59 NM**
 - Sugar Land Regl **54 NM**
 - Texas Gulf Coast Regl **82 NM**
 - Weiser **37 NM**
 - West Houston **44 NM**

OBSTACLEFor TAKEOFF OBSTACLE NOTES
see 10-3OB1.

GIFFA FOUR DEPARTURE (GIFFA4.GIFFA)

For Procedure Graphic see 10-3C

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to MONNT.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to MONNT.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT.	
ROUTING		
At MONNT, via IAH R-358 to GIFFA. EXPECT filed altitude 10 minutes after departure.		

HOUSTON Departure (R)
132.25Apt Elev
See
graphic

Trans level: FL180 Trans alt: 18000'

1. **RADAR required.**
2. For aircraft destined LIT, or overflying LIT or PXV.
3. Also serves **①**

3100'

MSA HUB VOR

LUFKIN SIX DEPARTURE (LFK6.LFK)

For Procedure Text and Takeoff Minimums
see 10-3F-1

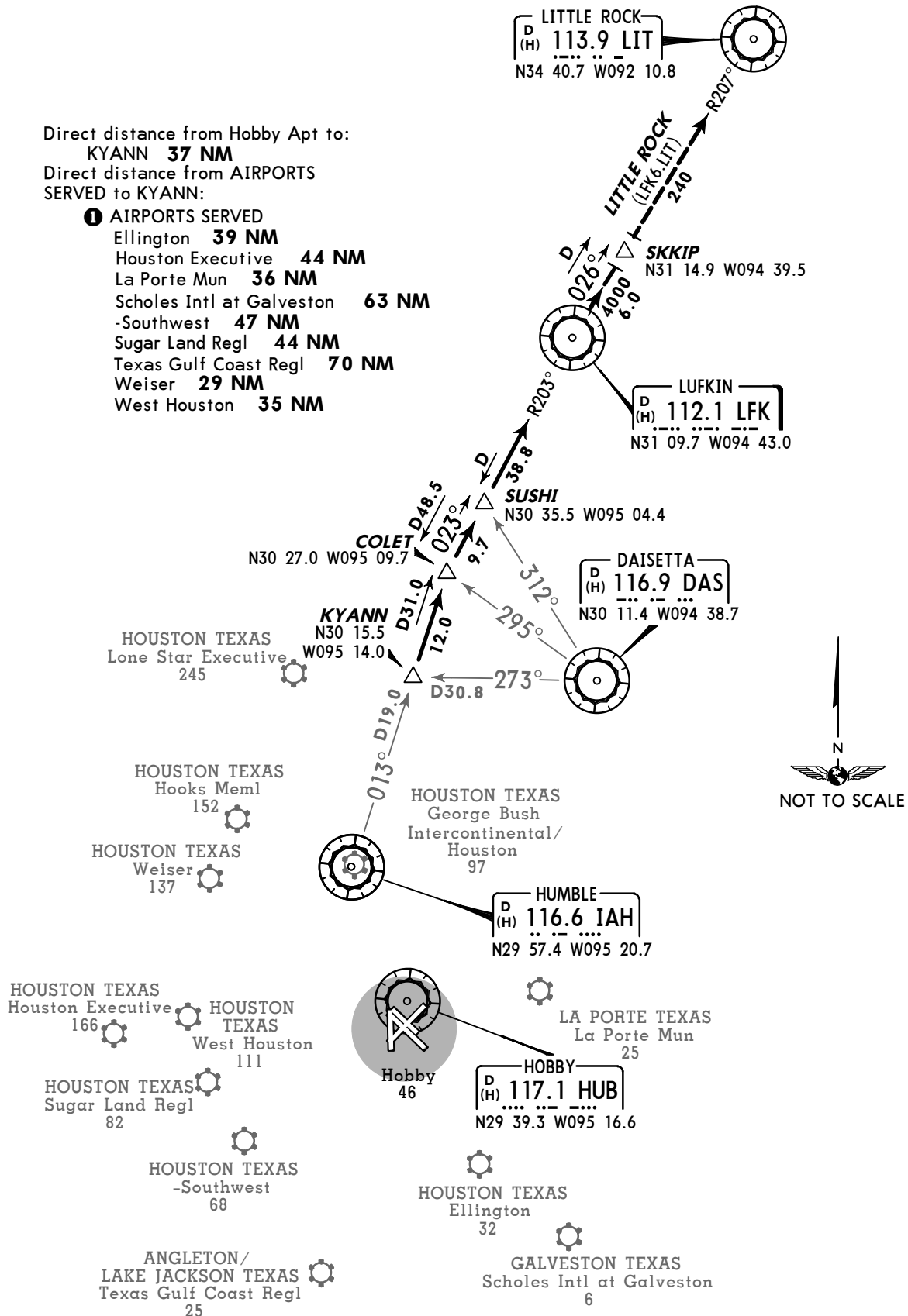
Direct distance from Hobby Apt to:

KYANN 37 NM

Direct distance from AIRPORTS
SERVED to KYANN:

① AIRPORTS SERVED

Ellington 39 NM
Houston Executive 44 NM
La Porte Mun 36 NM
Scholes Intl at Galveston 63 NM
-Southwest 47 NM
Sugar Land Regl 44 NM
Texas Gulf Coast Regl 70 NM
Weiser 29 NM
West Houston 35 NM



OBSTACLE

For TAKEOFF OBSTACLE NOTES see 10-3OB1.

LUFKIN SIX DEPARTURE (LFK6.LFK)

For Procedure Graphic see 10-3F
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to KYANN.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to KYANN.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN.	
ROUTING		
At KYANN via IAH R-013 to COLET, then RIGHT turn via LFK R-203 to LFK. EXPECT filed altitude 10 minutes after departure.		

Trans level: FL180 Trans alt: 18000'

1. **RADAR required.**
2. Also serves ①

SID

see 10-3G-1



MSA HUB VOR

3100'

Direct distance from Hobby Apt to:

SKUBA **38 NM**
Direct distance from AIRPORTS

SERVED to SKUBA:

1 AIRPORTS SERVED

Ellington 41 NM

Houston Executive

La Porte Mun 47 NM

Scholes Intl at Galveston 49 NM

-Southwest 25 NM

Sugar Land Real Estate 27 NM

Texas Gulf Coast Real Estate, Inc. 18 NM

Weiser 45 NM

West Houston 38 NM

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PALACIOS FOUR DEPARTURE (PSX4.PSX)

For Procedure Graphic see 10-3G
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwys 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to SKUBA.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to SKUBA.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA.	
ROUTING		
At SKUBA via PSX R-038 to PSX. EXPECT filed altitude 10 minutes after departure.		

[illegible]

Houston Departure (R)
127.12

Apt Elev
See graphic

Trans level: FL180 Trans alt: 18000'

1. RADAR required.
2. Also serves **(VUH4,VUH)**

HOUSTON TEXAS
Lone Star Executive
245

HOUSTON TEXAS
Hooks Memorial
152

HOUSTON TEXAS
Weiser
137

HOUSTON TEXAS
West Houston
111

HOUSTON TEXAS
Houston Executive
166

HOUSTON TEXAS
George Bush Intercontinental/Houston
97

LA PORTE TEXAS
La Porte Mun
25

HOUSTON TEXAS
Ellington
32

GALVESTON TEXAS
Scholes Intl at Galveston
6

MUSYL
N28 10.2 W094 07.8

HOBBY
D 117.1 HUB
(M)
N29 39.3 W095 16.6

Hobby
46

SUGAR LAND REG
82

HOUSTON TEXAS -Southwest
88

ANGLETON/LAKE JACKSON TEXAS
Texas Gulf Coast Regl
25

N
↑
NOT TO SCALE

Direct distance from Hobby Apt to:
VUH 31 NM
Direct distance from AIRPORTS SERVED to VUH:

AIRPORTS SERVED

Ellington 25 NM
Houston Executive 63 NM
La Porte Mun 26 NM
Scholes Intl at Galveston 0 NM
-Southwest 35 NM
Sugar Land Regl 46 NM
Texas Gulf Coast Regl 33 NM
Weiser 57 NM
West Houston 53 NM

This SID requires take-off minimums (or standard minimums, refer to airport chart):
ELLINGTON: Rwy 4, 17L/R, 22, 35L/R; Standard (or lower than standard, if authorized).
HOBBY: Rwy 4: 300-1 or standard (or lower than standard, if authorized) with a minimum climb of 270' per NM to 300'.
RWYS 12L/R, 30L/R, 35: Standard (or lower than standard, if authorized).
Rwy 17: 300-1.
Rwy 22: Standard (or lower than standard, if authorized) with a minimum climb of 290' per NM to 1500'.
HOUSTON EXECUTIVE: Rwy 18, 36: Standard (or lower than standard, if authorized).
HOUSTON-SOUTHWEST: Rwy 9, 27: Standard (or lower than standard, if authorized).
LA PORTE MUN: Rwy 5, 12, 23, 30: Standard (or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:
Rwys 13, 31, 35: Standard (or lower than standard, if authorized).
Rwy 17: 200-1 or standard (or lower than standard, if authorized) with minimum climb of 502' per NM to 300'.
SUGAR LAND REGL: Rwys 17, 35: Standard (or lower than standard, if authorized).
TEXAS GULF COAST REGL: Rwys 17, 35: Standard (or lower than standard, if authorized).
WEISER: Rwy 9: 200-1 or standard (or lower than standard, if authorized) with minimum climb of 399' per NM to 400'.
Rwy 27: Standard (or lower than standard, if authorized).
WEST HOUSTON: Rwys 15, 33: Standard (or lower than standard, if authorized).

Grnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

At VUH, via VUH R-143 to MUSYL. EXPECT filed altitude 10 minutes after departure.

SCHOL'S FOUR DEPARTURE
(VUH4,VUH)

Obstacle
For TAKEOFF OBSTACLE NOTES see 10-30B1.

Airport	Initial Climb	Altitude
Hobby	Climb on assigned heading for RADAR vectors to VUH.	Maintain 5000'
Ellington	Climb on assigned heading for RADAR vectors to VUH.	Maintain 4000'
All Other Airports	When entering controlled airspace, climb on assigned heading for RADAR vectors to VUH.	Maintain 4000'

HOUSTON Departure (R) 127.12	<i>Apt Elev</i> <i>See graphic</i>	Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP to international destinations. 3. Also serves ①

TRUAX TWO DEPARTURE (NGP2.NGP)

Direct distance from AIRPORTS

SERVED to YAWNS:

① AIRPORTS SERVED

Ellington **52 NM**
Scholes Intl at Galveston **46 NM**
Sugar Land Regl **48 NM**
Texas Gulf Coast Regl **18 NM**

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R: Standard
(or lower than standard, if authorized).

HOBBY: Rwy 4: 200-1 or standard (or lower than standard, if authorized) with a minimum climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower than standard, if authorized).

Rwy 17: 200-1 or standard (or lower than standard, if authorized) with a minimum climb of 827' per NM to **300'**.

Rwy 22: Standard (or lower than standard, if authorized) with a minimum climb of 290' per NM to **1500'**.

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than standard, if authorized).

Rwy 17: 200-1 or standard (or lower than standard, if authorized) with minimum climb of 502' per NM to **300'**.

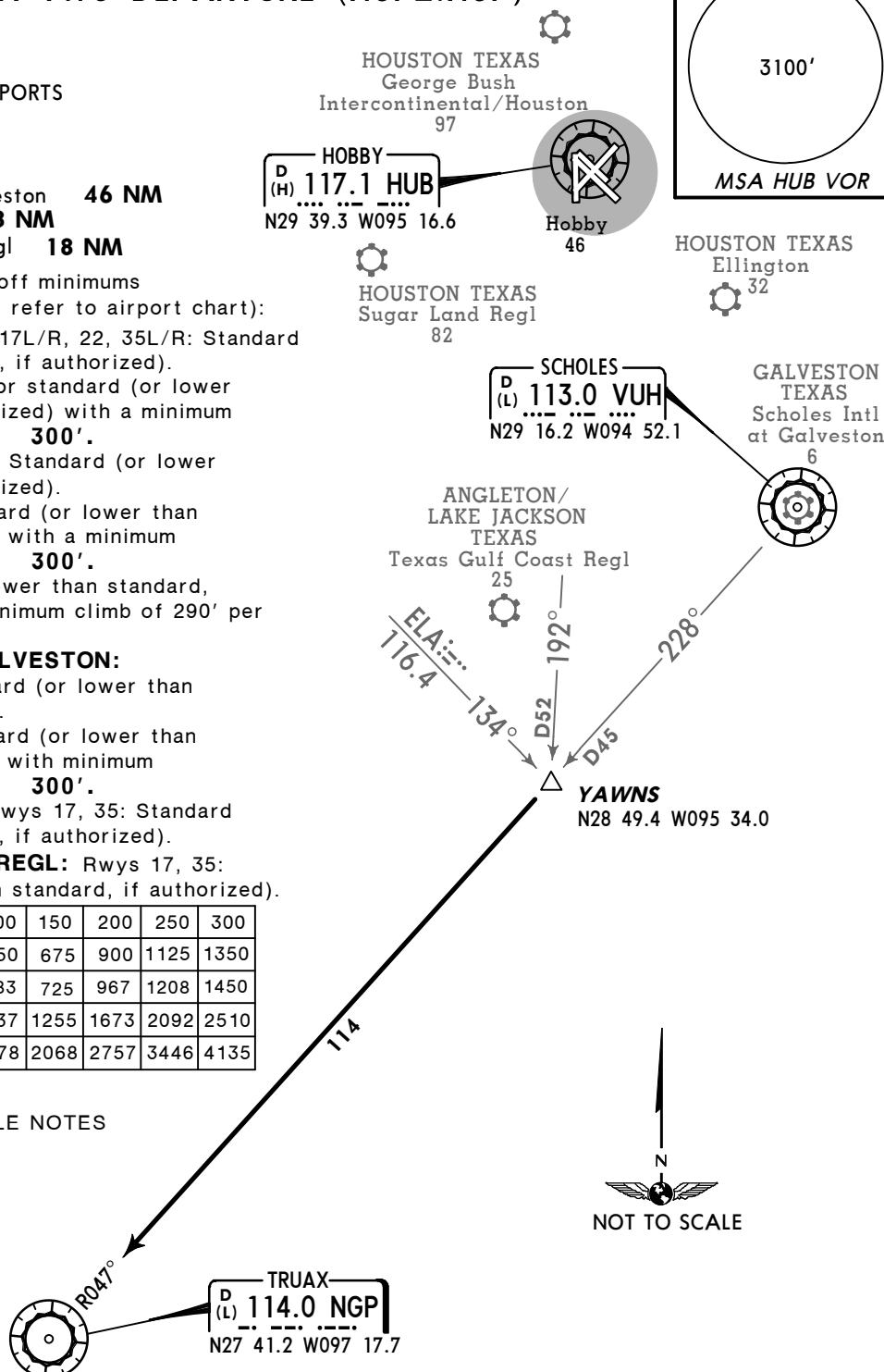
SUGAR LAND REGL: Rwys 17, 35: Standard (or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
502' per NM	628	837	1255	1673	2092	2510
827' per NM	1034	1378	2068	2757	3446	4135

OBSTACLE

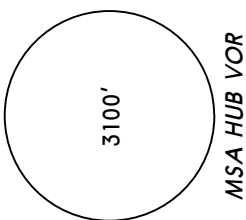
For TAKEOFF OBSTACLE NOTES
see 10-3OB1.



AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	EXPECT vectors to YAWNS. Rwy 17: Climb heading 174° to 700' before turning WESTBOUND. Rwys 30L/R: Climb heading 309° to 800' before turning WESTBOUND.	MAINTAIN 5000'
ELLINGTON	EXPECT vectors to YAWNS.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace fly assigned heading for vectors to YAWNS. SUGAR LAND REGL: Rwy 17: Climb heading 170° to 1500' before turning EASTBOUND. Rwy 35: Climb heading 350° to 1100' before turning SOUTHBOUND.	
ROUTING		
Via VUH R-228 and NGP R-047 to NGP. EXPECT filed altitude 10 minutes after departure.		

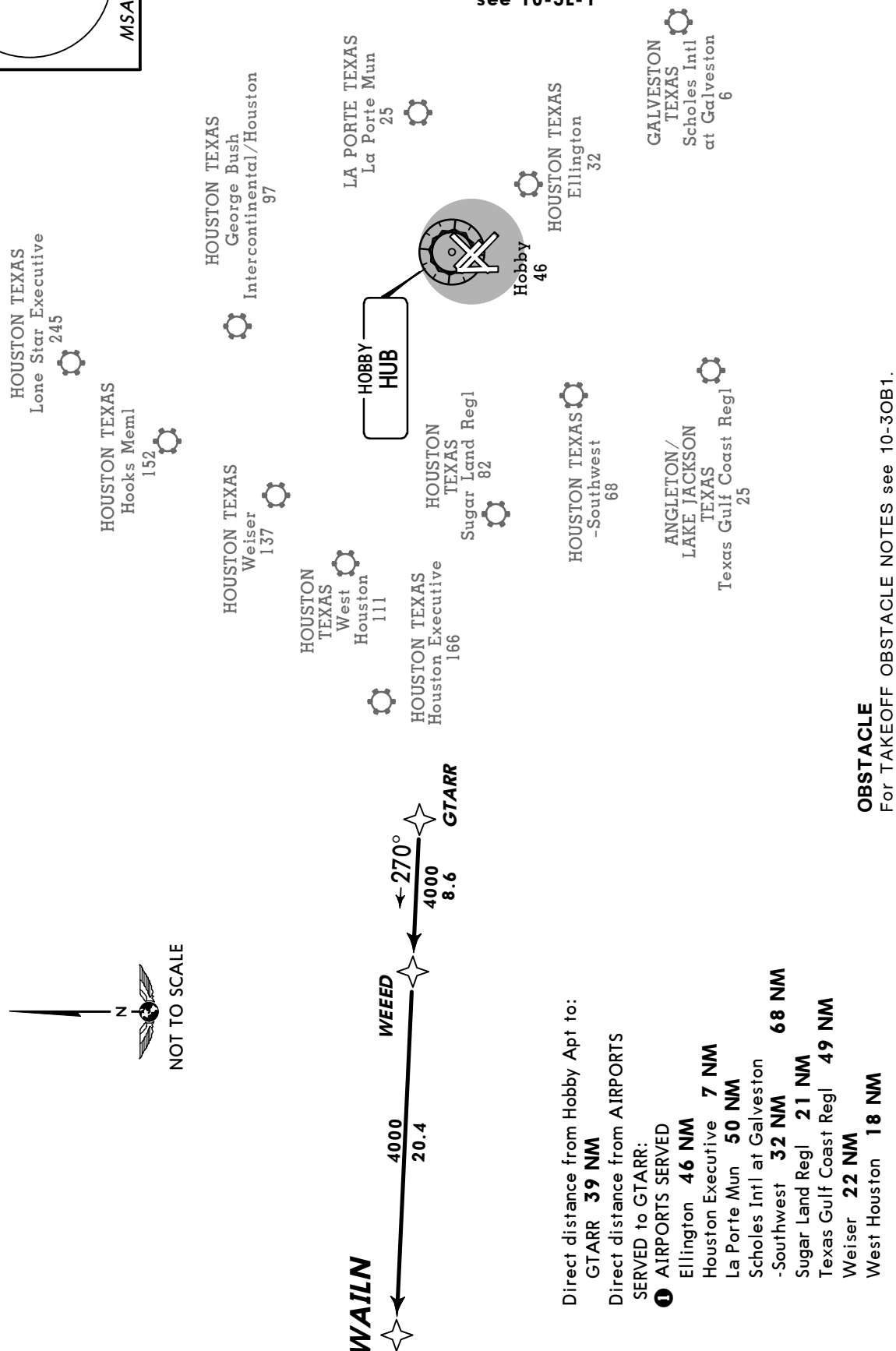
HOUSTON
Departure (R)
126.67*Apt Elev*
See graphic

Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. For advanced navigation aircraft destined Austin/San Antonio
terminal areas. Austin: Departing all Houston airports except George
Bush Intercontinental/Houston, Hooks Meml, Lone Star Executive.
San Antonio: Departing all Houston airports. 5. Also serves **1**



WAILN ONE RNAV DEPARTURE (WAILN1.WAILN)

For Procedure Text and Takeoff Minimums
see 10-3L-1



WAILN ONE RNAV DEPARTURE (WAILN1.WAILN)

For Procedure Graphic see 10-3L

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.

Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: ATC climb
gradient 213' per NM to 4000'.

Gnd speed-KT	75	100	150	200	250	300
213' per NM	266	355	533	710	888	1065
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to GTARR.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to GTARR.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to GTARR.	
ROUTING		
At GTARR, EXPECT filed altitude 10 minutes after departure on depicted route to WAILN.		

TAKEOFF OBSTACLE NOTES**ELLINGTON**

- RWY 17R:
POLE 1489' FROM DER, 817' RIGHT OF CENTERLINE, 40' AGL/74' MSL.
- RWY 22:
ANTENNA ON BUILDING 1998' FROM DER, 598' RIGHT OF CENTERLINE, 54' AGL/83' MSL. OBSTACLE LIGHT ON GLIDESLOPE 327' FROM DER, 543' LEFT OF CENTERLINE, 39' AGL/68' MSL.
- RWY 35L:
MULTIPLE TREES BEGINNING 1118' FROM DER, 679' RIGHT OF CENTERLINE, UP TO 37' AGL/77' MSL. CRANE 2352' FROM DER, 1024' LEFT OF CENTERLINE, 37' AGL/97' MSL.
- RWY 35R:
TREE 1597' FROM DER, 32' LEFT OF CENTERLINE, 33' AGL/80' MSL.

HOBBY

- RWY 4:
POLE 4403' FROM DER, 1069' RIGHT OF CENTERLINE, 121' AGL/166' MSL. LIGHT ON BUILDING 1562' FROM DER, 859' RIGHT OF CENTERLINE, 59' AGL/103' MSL. BUILDING 3990' FROM DER, 1223' RIGHT OF CENTERLINE, 139' AGL/174' MSL. LIGHT ON FLAGPOLE 4618' FROM DER, 768' RIGHT OF CENTERLINE, 117' AGL/161' MSL.
- RWY 12L:
ANTENNA ON HANGAR 1548' FROM DER, 424' LEFT OF CENTERLINE, 45' AGL/85' MSL.
- RWY 12R:
VEHICLE ON ROAD 514' FROM DER, 543' RIGHT OF CENTERLINE, 17' AGL/55' MSL. TREE 1217' FROM DER, 756' RIGHT OF CENTERLINE, 43' AGL/89' MSL. FENCE 85' FROM DER, 492' LEFT OF CENTERLINE, 4' AGL/45' MSL. VEHICLE AND ROAD 176' FROM DER, 497' LEFT OF CENTERLINE, 17' AGL/55' MSL. POLE 1011' FROM DER, 696' LEFT OF CENTERLINE, 33' AGL/73' MSL. TREE 1256' FROM DER, 783' LEFT OF CENTERLINE, 38' AGL/78' MSL.
- RWY 17:
MULTIPLE POLES BEGINNING 606' FROM DER, 393' RIGHT OF CENTERLINE, UP TO 79' AGL/124' MSL. CRANE 1795' FROM DER, 689' RIGHT OF CENTERLINE, 100' AGL/150' MSL. ANTENNA ON BUILDING 620' FROM DER, 312' LEFT OF CENTERLINE, 27' AGL/72' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 260' LEFT OF CENTERLINE, UP TO 71' AGL/116' MSL. RADAR REFLECTOR 1214' FROM DER, 258' LEFT OF CENTERLINE, 32' AGL/77' MSL.
- RWY 22:
POLE 727' FROM DER, 626' RIGHT OF CENTERLINE, 28' AGL/77' MSL. TREE 1310' FROM DER, 679' RIGHT OF CENTERLINE, 27' AGL/76' MSL. ANTENNA ON LIGHT POLE, 1805' FROM DER, 968' RIGHT OF CENTERLINE, 60' AGL/109' MSL.
- RWY 30L:
ANTENNA ON BUILDING 547' FROM DER, 274' RIGHT OF CENTERLINE, 23' AGL/69' MSL. MULTIPLE POLES BEGINNING 341' FROM DER, 501' LEFT OF CENTERLINE, UP TO 39' AGL/84' MSL. MULTIPLE TREES BEGINNING 1392' FROM DER, 466' LEFT OF CENTERLINE, UP TO 78' AGL/118' MSL.
- RWY 30R:
POLE 1096' FROM DER, 785' RIGHT OF CENTERLINE, 29' AGL/75' MSL. ANTENNA ON BUILDING 500' FROM DER, 525' LEFT OF CENTERLINE, 33' AGL/69' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 2)**HOBBY (CONTD)**

◦ RWY 35:

ANTENNA ON LIGHT POLE 738' FROM DER, 519' RIGHT OF CENTERLINE, 40' AGL/86' MSL. LIGHT POLE 1119' FROM DER, 353' RIGHT OF CENTERLINE, 31' AGL/77' MSL. ANTENNA ON BUILDING 66' FROM DER, 471' LEFT OF CENTERLINE, 33' AGL/69' MSL

HOUSTON EXECUTIVE

◦ 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

◦ 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.

LA PORTE MUN

◦ RWY 12:

TREES AND POLES BEGINNING 128' FROM DER, 42' LEFT OF CENTERLINE, UP TO 50' AGL/74' MSL. TREES AND POLES BEGINNING 131' FROM DER, 114' RIGHT OF CENTERLINE, UP TO 39' AGL/63' MSL. CHIMNEY 676' FROM DER, 412' RIGHT OF CENTERLINE, 31' AGL/55' MSL.

◦ RWY 23:

TREES BEGINNING 1320' FROM DER, 43' LEFT OF CENTERLINE, UP TO 63' AGL/87' MSL. HANGARS BEGINNING 233' FROM DER, 288' RIGHT OF CENTERLINE, UP TO 35' AGL/59' MSL. VEHICLE ON ROAD 594' FROM DER, 513' LEFT OF CENTERLINE, 15' AGL/39' MSL. TREES 1010' FROM DER, 1010' RIGHT OF CENTERLINE, UP TO 63' AGL/87' MSL.

◦ RWY 30:

TREES AND POLES BEGINNING 114' FROM DER, 67' LEFT OF CENTERLINE, UP TO 63' AGL/87' MSL. BUILDINGS 335' FROM DER, 356' LEFT OF CENTERLINE, 25' AGL/50' MSL. TREES AND POLES BEGINNING 44' FROM DER, 35' RIGHT OF CENTERLINE, UP TO 52' AGL/76' MSL.

SCHOLES INTL AT GALVESTON

◦ RWY 13:

BUSH 381' FROM DER, 533' LEFT OF CENTERLINE, 15' AGL/20' MSL. FENCE 201' FROM DER, 490' LEFT OF CENTERLINE, 6' AGL/11' MSL. TREE 343' FROM DER, 468' RIGHT OF CENTERLINE, 12' AGL/17' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 3)**SCHOLES INTL AT GALVESTON (CONTD)**

- RWY 17:
BUILDING 3057' FROM DER, 339' LEFT OF CENTERLINE, 123' AGL/130' MSL. MULTIPLE POLES BEGINNING 2034' FROM DER, 87' RIGHT OF CENTERLINE, UP TO 60' AGL/70' MSL. MULTIPLE TRANSMISSION TOWERS BEGINNING 636' FROM DER, 551' RIGHT OF CENTERLINE, UP TO 55' AGL/60' MSL. TREE 460' FROM DER, 316' RIGHT OF CENTERLINE, 22' AGL/29' MSL.
- RWY 31:
MULTIPLE CRANES BEGINNING 4341' FROM DER, 1017' LEFT OF CENTERLINE, UP TO 131' AGL/131' MSL.
- RWY 35:
TREE 730' FROM DER, 501' RIGHT OF CENTERLINE, 27' AGL/32' MSL.

SUGAR LAND REGL

- 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.
- 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.

TEXAS GULF COAST REGL

- RWY 35:
TREE 1510' FROM DER, 721' LEFT OF CENTERLINE, 48' AGL/68' MSL.

WEST HOUSTON

- RWY 15:
VEHICLES ON ROADWAY BEGINNING ABEAM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 15' AGL/124' MSL. BUILDING 177' FROM DER, 398' LEFT OF CENTERLINE, 18' AGL/126' MSL. TREES BEGINNING 178' FROM DER, 289' RIGHT OF CENTERLINE, UP TO 100' AGL/209' MSL.
- RWY 33:
BUILDING 265' FROM DER, 364' LEFT OF CENTERLINE, 35' AGL/143' MSL. TREES BEGINNING 2706' FROM DER, 700' LEFT OF CENTERLINE, UP TO 100' AGL/214' MSL. TREES BEGINNING 3159' FROM DER, 747' RIGHT OF CENTERLINE, UP TO 100' AGL/216' MSL.

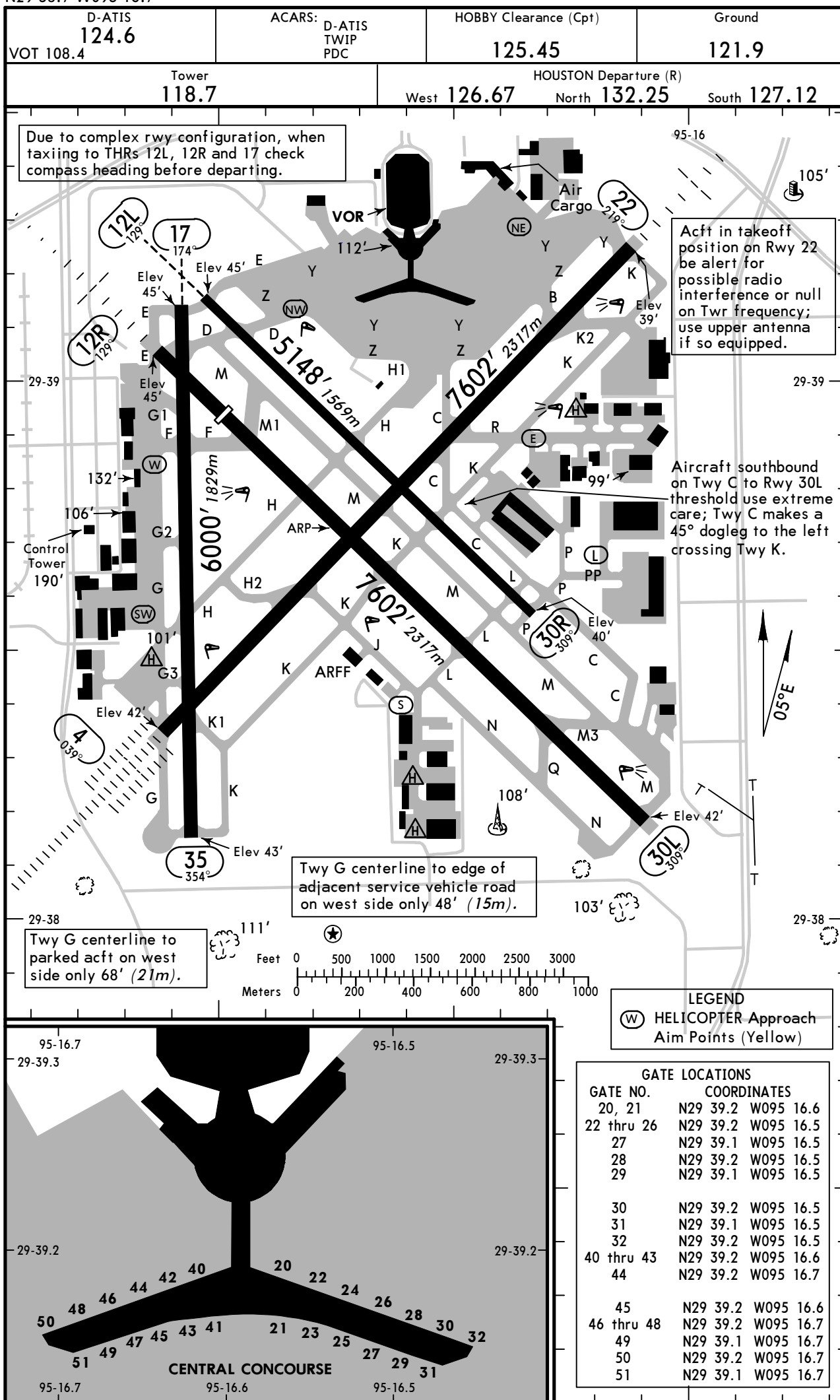
WEISER

- RWY 9:
TANK 4127' FROM DER, 1455' LEFT OF CENTERLINE, 147' AGL/282' MSL.
- RWY 27:
RAILROAD 462' FROM DER, 555' LEFT OF CENTERLINE, 23' AGL/165' MSL. VEHICLE AND ROAD 650' FROM DER, 7' LEFT OF CENTERLINE, 17' AGL/159' MSL.

KHOU/HOU
 Apt Elev **46'**
 N29 38.7 W095 16.7

JEPPESEN
 17 APR 09 **(10-9)**

HOUSTON, TEXAS
HOBBY



CHANGES: None.

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GENERAL

ASDE-X Surveillance System in use: Pilots should operate transponders with Mode C on all twys and rwys.
 Airport closed to aircraft with wingspan over 125' (38m) except 24 hours PPR. Call airport manager.
 General aviation PPR to taxi to main terminal building.
 Birds in vicinity of airport. Terminal Doppler Weather Radar.

ADDITIONAL RUNWAY INFORMATION

RWY			USABLE LENGTHS		TAKE-OFF	WIDTH
			Threshold	Landing Beyond Glide Slope		
4 22	HIRL CL ALSF-II TDZ ① PAPI-R	grooved RVR		6522' 1988m		150'
	HIRL CL MALS VASI-L	grooved RVR				46m

① Angle 3.0°.

12R 30L	HIRL CL MALSR TDZ ③ PAPI-R	grooved RVR	6568' 2002m	5532' 1686m		150'
	HIRL CL TDZ REIL ② ③ PAPI-L	grooved RVR		6303' 1921m		46m

② PAPI unusable beyond 8° left and right of course.

③ Angle 3.0°.

12L 30R	MIRL PAPI-L (angle 3.0°)	grooved				100'
	MIRL	grooved				30m
17 35	MIRL VASI-L	grooved				150'
	MIRL REIL VASI-R	grooved				46m

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

Rwy 4

With Mim climb of 270'/NM to 300'

2 operating RVRs are required All operating RVRs are controlling		Adequate Vis Ref	STD		Other
CL & HIRL	CL, or RCLM & HIRL		3 & 4 Eng	1 & 2 Eng	
TDZ RVR 5	TDZ RVR 10	RVR 16 or 1/4	RVR 24 or 1/2	RVR 50 or 1	300-1
Mid RVR 5	Mid RVR 10				
Rollout RVR 5	Rollout RVR 10				

Rwy 22

With Mim climb of 290'/NM to 1500'

2 operating RVRs are required All operating RVRs are controlling		Adequate Vis Ref	STD	
CL & HIRL	CL, or RCLM & HIRL		3 & 4 Eng	1 & 2 Eng
TDZ RVR 5	TDZ RVR 10	RVR 16 or 1/4	RVR 24 or 1/2	RVR 50 or 1
Mid RVR 5	Mid RVR 10			
Rollout RVR 5	Rollout RVR 10			

Rwys 12R, 30L

Rwys 12L, 30R, 35

Rwy 17

Both RVRs are required & controlling		Adequate Vis Ref	STD		Adequate Vis Ref	STD		300-1
CL & HIRL	CL, or RCLM & HIRL		3 & 4 Eng	1 & 2 Eng		3 & 4 Eng	1 & 2 Eng	
TDZ RVR 5	TDZ RVR 10	RVR 16 or 1/4	RVR 24 or 1/2	RVR 50 or 1	1/4	1/2	1	
Rollout RVR 5	Rollout RVR 10							

OBSTACLE DP

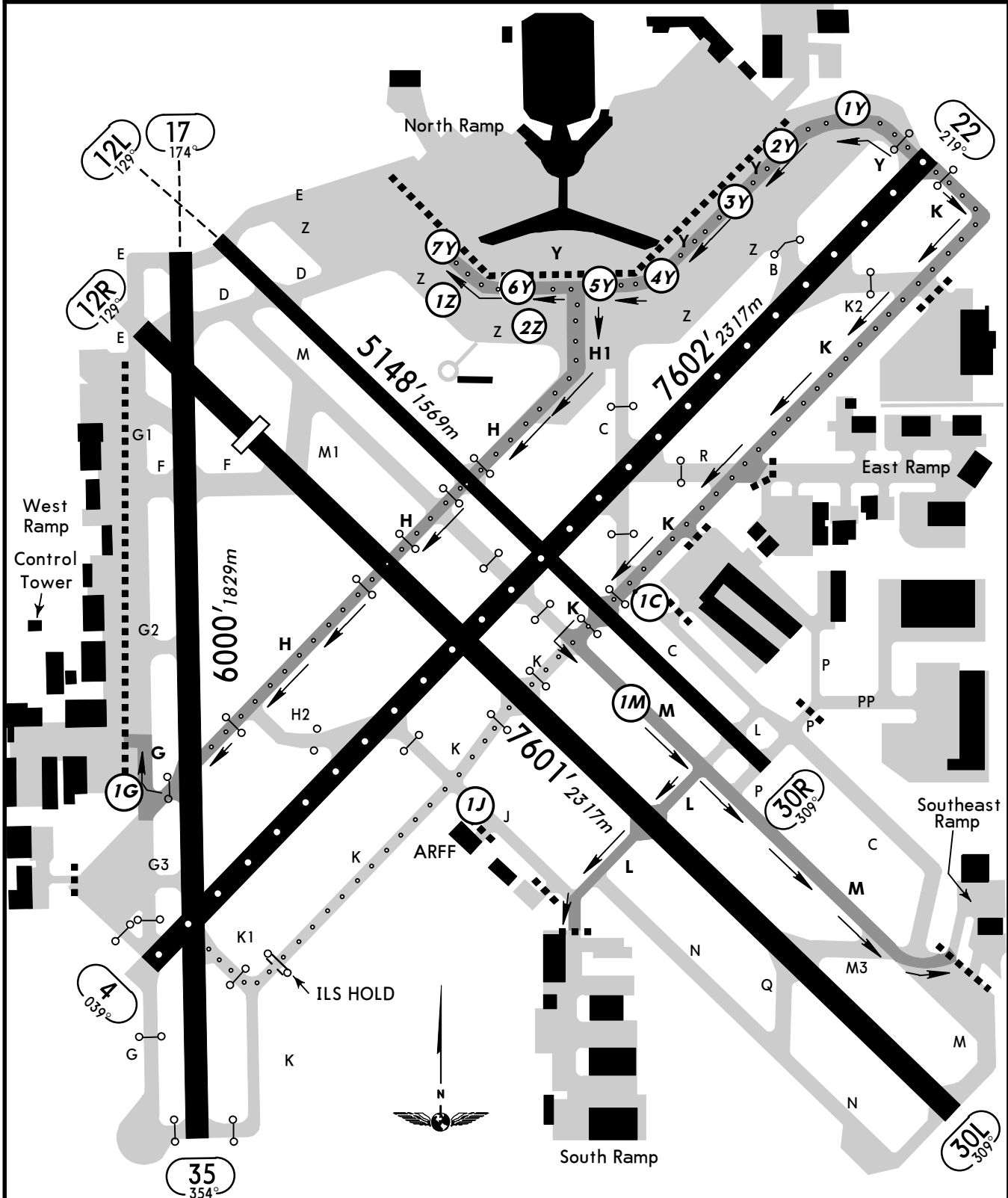
Rwy 17, climb 174° heading to 700' before turning westbound.

Rwys 30L/R, climb 309° heading to 800' before turning westbound.

FOR FILING AS ALTERNATE

ILS Rwy 4 ILS Rwy 12R ILS Rwy 30L		LOC Rwy 4 LOC Rwy 12R LOC Rwy 22 LOC Rwy 30L RNAV (GPS) Rwy 4 RNAV (GPS) Rwy 12R		RNAV (GPS) Rwy 22 RNAV (GPS) Rwy 30L VOR DME Rwy 4 VOR DME Rwy 30L VOR DME Rwy 35 VOR DME-E		RNAV (GPS) Rwy 17 RNAV (GPS) Rwy 35	
600-2		800-2		NA			
A							
B							
C							
D							

D-ATIS	ACARS:	HOUSTON Approach (R)			HOBBY Tower	Ground
124.6	D-ATIS TWIP PDC	East	South	West	118.7	121.9
VOT 108.4		120.05	134.45	124.35		



LEGEND

- ○ ○ CENTERLINE LIGHTS
- LOW VISIBILITY TAXI ROUTE
- IN-PAVEMENT GUARD LIGHTS
- ⌐ ILS HOLD w/CLEARANCE BAR

- MOVEMENT AREA BOUNDARY
- == ILS HOLD BAR
- (1M) GEOGRAPHIC POSITION MARKINGS

KHOU/HOU

JEPPESSEN

SMGCS

HOBBY

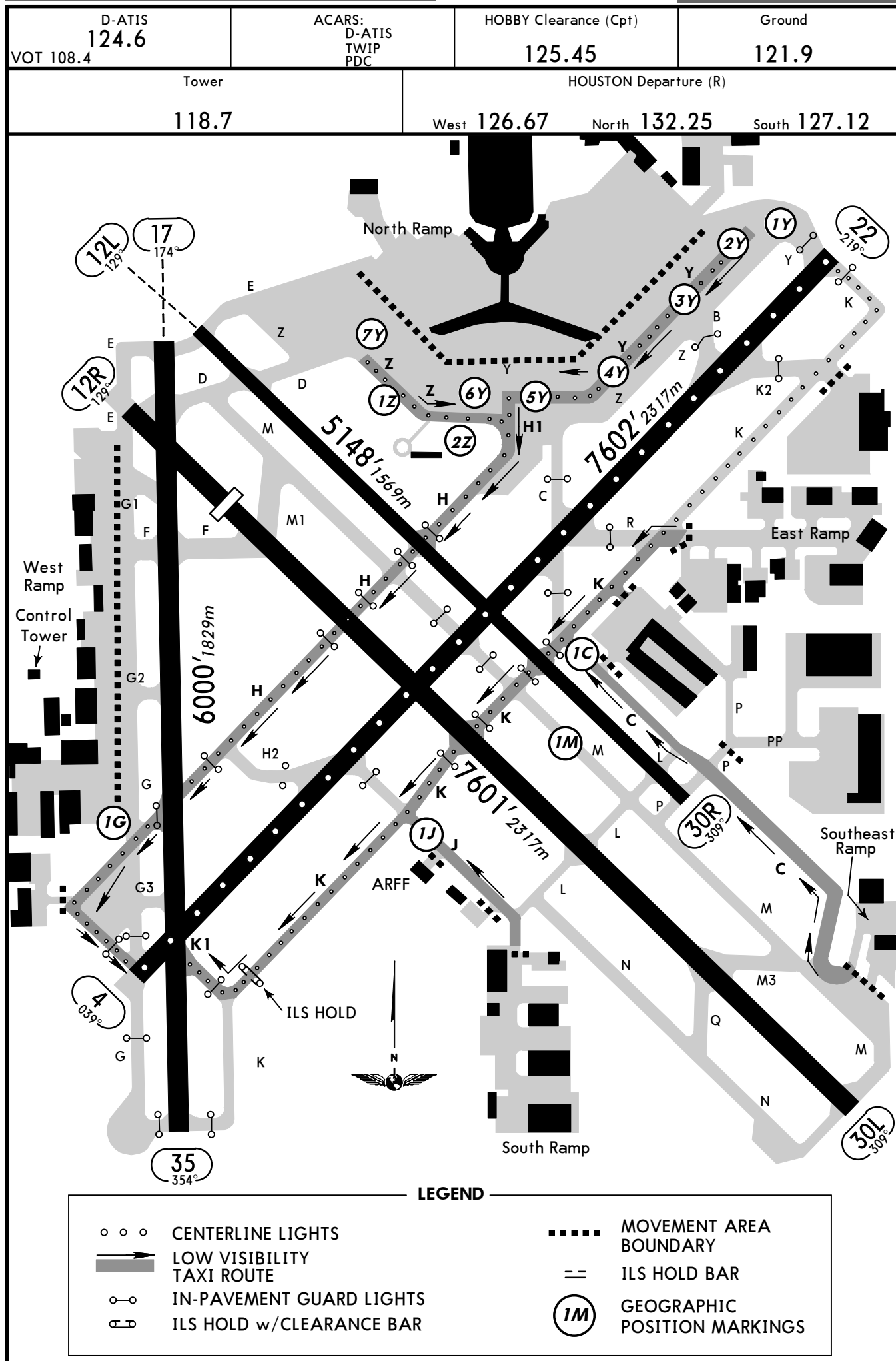
22 FEB 08 (10-9C)

HOUSTON, TEXAS

LOW VISIBILITY TAXI ROUTES

LESS THAN RVR 1200 TO 600

DEPARTURES RWY 4



CHANGES: Buildings, Rwy 30L displaced threshold removed.

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KHOU/HOU
HOBBY

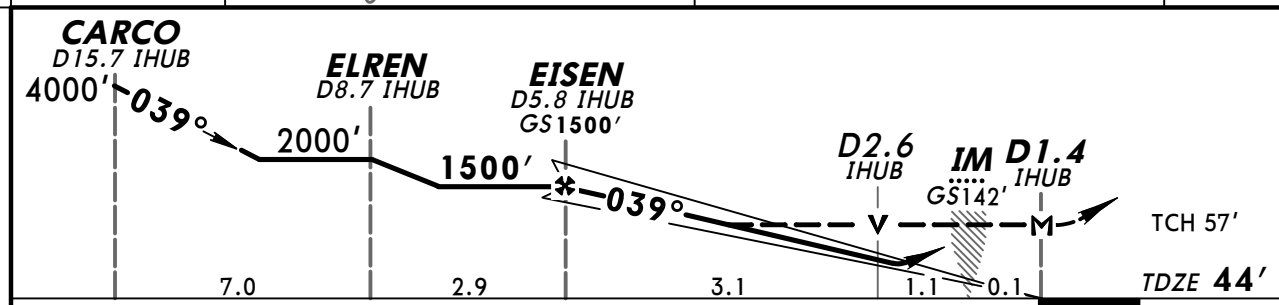
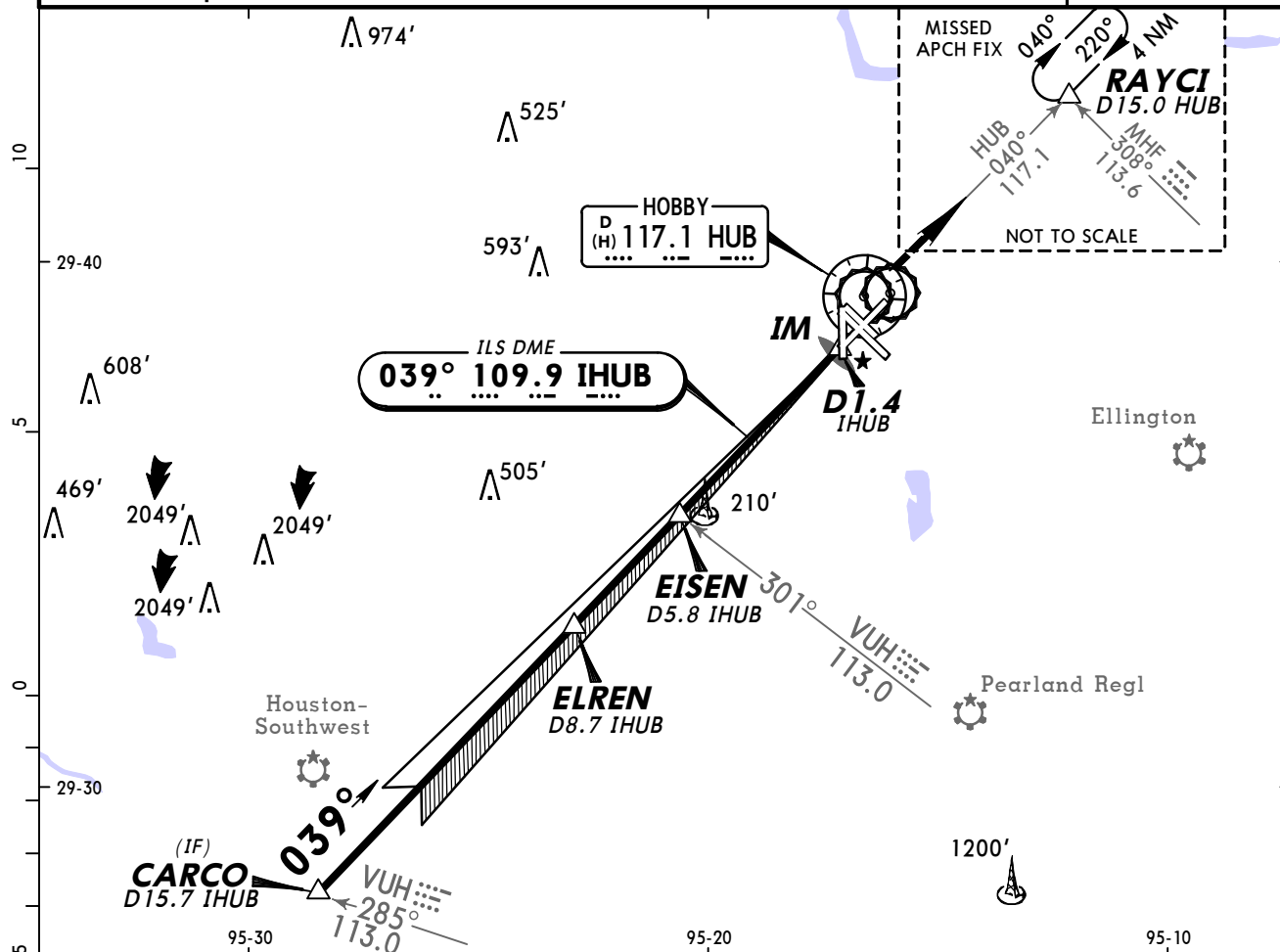
JEPPESSEN
3 APR 09 (11-1)

HOUSTON, TEXAS
ILS or LOC Rwy 4

BRIEFING STRIP

TM

D-ATIS	HOUSTON Approach (R)			HOBBY Tower	Ground
124.6	East 120.05	South 134.45	West 124.35	118.7	121.9
LOC IHUB 109.9	Final Apch Crs 039°	GS EISEN 1500' (1456')	ILS DA(H) 244' (200')	Apt Elev 46' TDZE 44'	3100' MSA HUB VOR
MISSED APCH: Climb to 2000' outbound via HUB VOR R-040 to RAYCI INT/D15.0 HUB and hold.					
Alt Set: INCHES 1. RADAR required.					
Trans level: FL 180 Trans alt: 18000'					



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II PAPI 2000' HUB via 117.1 R-040 RAYCI
GS	3.00°	377	484	538	646	861	
MAP at D1.4 IHUB or EISEN to MAP	4.3	3:41	2:52	2:35	2:09	1:51	

STRAIGHT-IN LANDING RWY4					CIRCLE-TO-LAND	
ILS DA(H) 244' (200')			LOC (GS out) MDA(H) 480' (436')		Max Kts	MDA(H)
FULL	TDZ or CL out	ALS out	ALS out		90	500' (454') - 1
A			RVR 24 or 1/2		120	
B			RVR 50 or 1		140	520' (474') - 1 1/2
C	RVR 18 or 1/2	RVR 24 or 1/2	RVR 40 or 3/4	RVR 60 or 1 1/4	165	600' (554') - 2
D			RVR 50 or 1	1 1/2		

CHANGES: Localizer minimums.

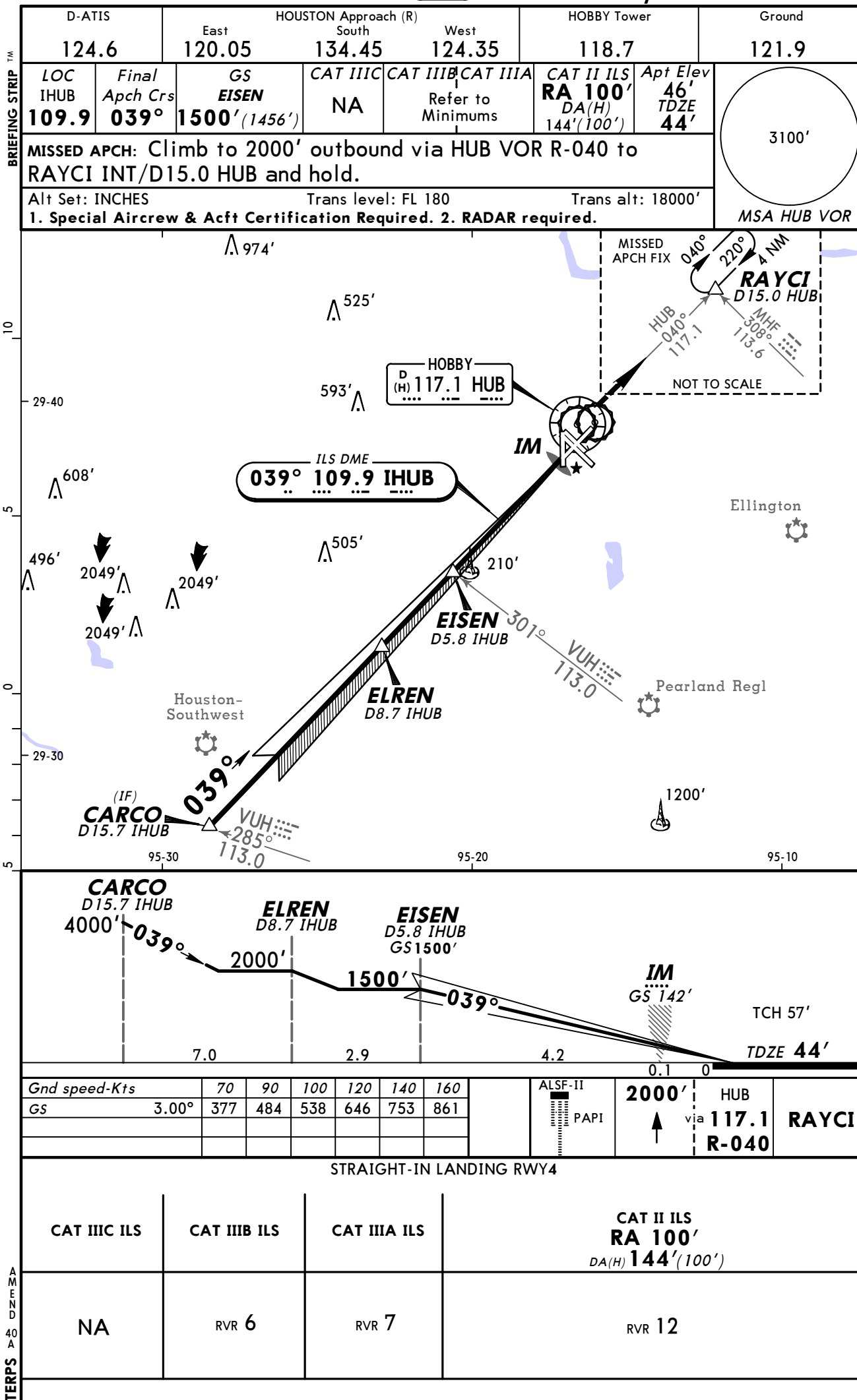
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KHOU/HOU
HOBBY

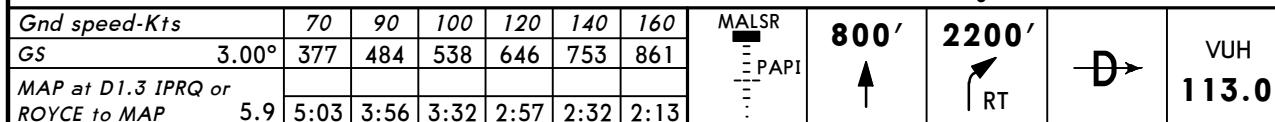
3 APR 09

11-1A

HOUSTON, TEXAS
ILS Rwy 4 CAT II & III



BRIEFING STRIP TM



STRAIGHT-IN LANDING RWY 12R										CIRCLE-TO-LAND	
ILS DA(H) 296' (250')					LOC (GS out) MDA(H) 540' (494')						
FULL TDZ or CL out RAIL or ALS out					RAIL out		ALS out		Max Kts	MDA(H)	
A	RVR 40 or $\frac{3}{4}$				RVR 40 or $\frac{3}{4}$		RVR 50 or 1		90	540' (494') - 1	
B									120		
C					RVR 40 or $\frac{3}{4}$		RVR 60 or $1\frac{1}{4}$		140	540' (494') - $1\frac{1}{2}$	
D					RVR 50 or 1		$1\frac{1}{2}$		165	600' (554') - 2	

KHOU/HOU
HOBBY

JEPPESSEN
24 JUN 11 11-3 Eff 30 Jun

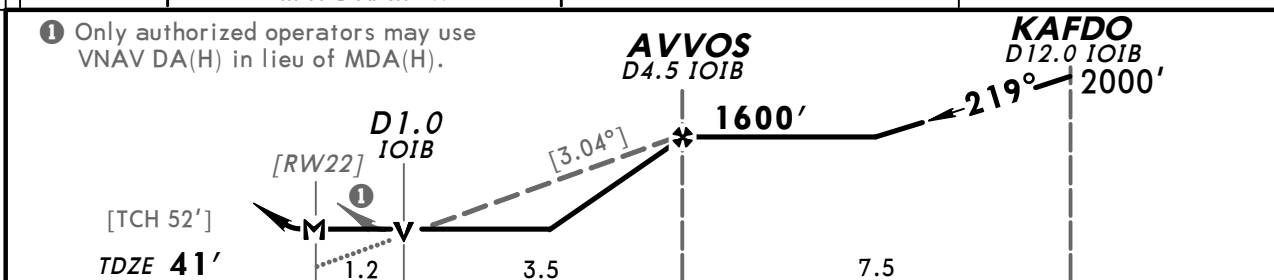
HOUSTON, TEXAS
LOC Rwy 22

BRIEFING STRIP

D-ATIS		HOUSTON Approach (R)			HOBBY Tower		Ground		
124.6		East 120.05	South 134.45	West 124.35	118.7		121.9		
LOC IOIB 109.9		Final Apch Crs 219°		Minimum Alt AVVOS 1600' (1559')		MDA(H) 460' (419')		Apt Elev 46' TDZE 41'	
MISSED APCH: Climb to 3000' outbound via HUB VOR R-221 to ACOLA INT/D16.7 HUB and hold.								3100' MSA HUB VOR	
Alt Set: INCHES				Trans level: FL 180		Trans alt: 18000'			
1. Radar required.									



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160	MALS VASI	3000' ↑	HUB via 117.1 R-221	ACOLA
Descent angle [3.04°]	376	484	538	645	753	861				
AVVOS to MAP 4.7	4:02	3:08	2:49	2:21	2:01	1:46				

STRAIGHT-IN LANDING RWY 22				CIRCLE-TO-LAND			
MDA(H) 460' (419')				MDA(H)			
ALS out				Max Kts			
A	3/4		1	90	520' (474') - 1		
B				120			
C				140	520' (474') - 1 1/2		
D	1 1/4			165	600' (554') - 2		

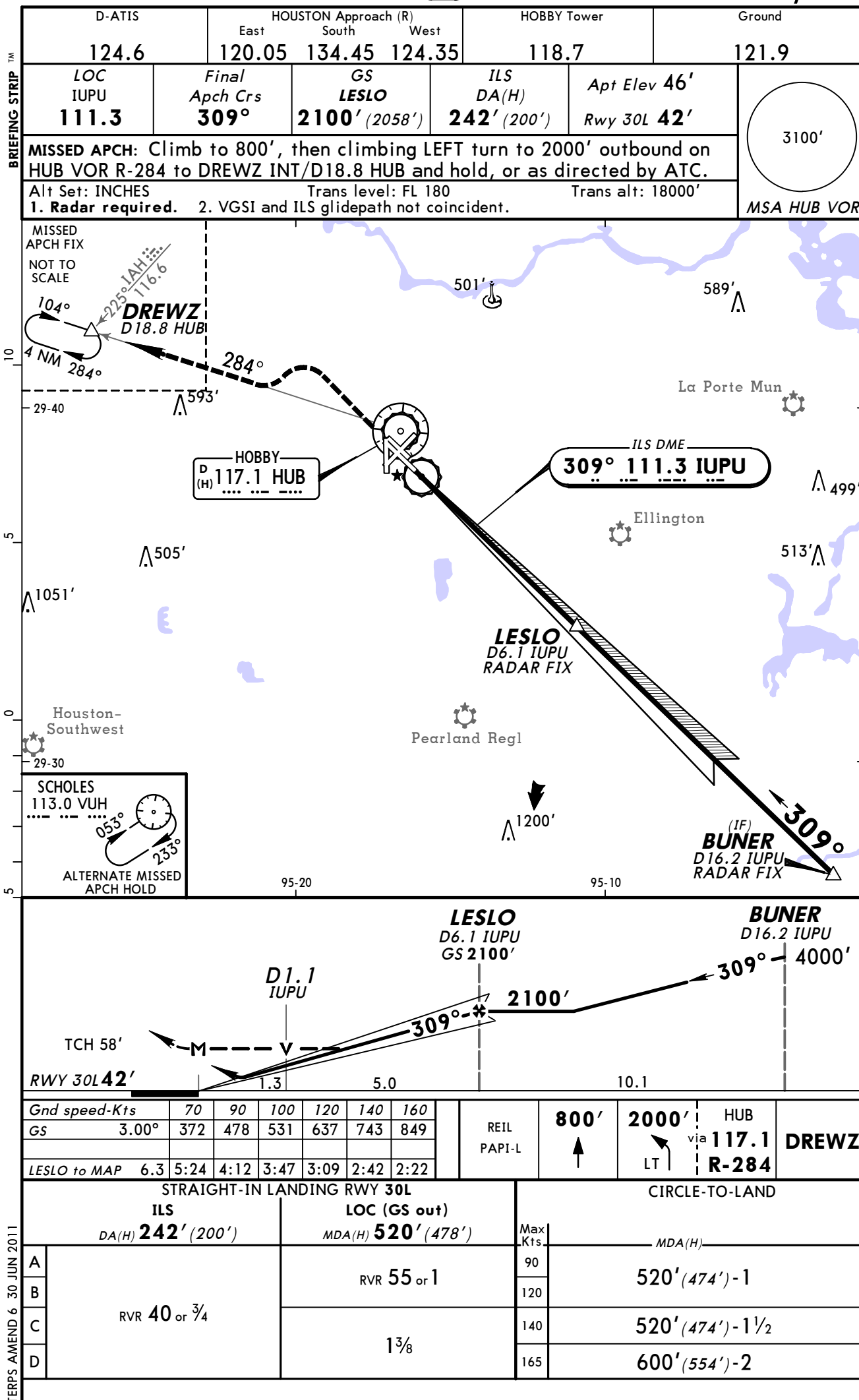
CHANGES: Charted obstructions.

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KHOU/HOU
HOBBY

JEPPESSEN
24 JUN 11 **(11-4)** **Eff 30 Jun**

HOUSTON, TEXAS
ILS or LOC Rwy 30L



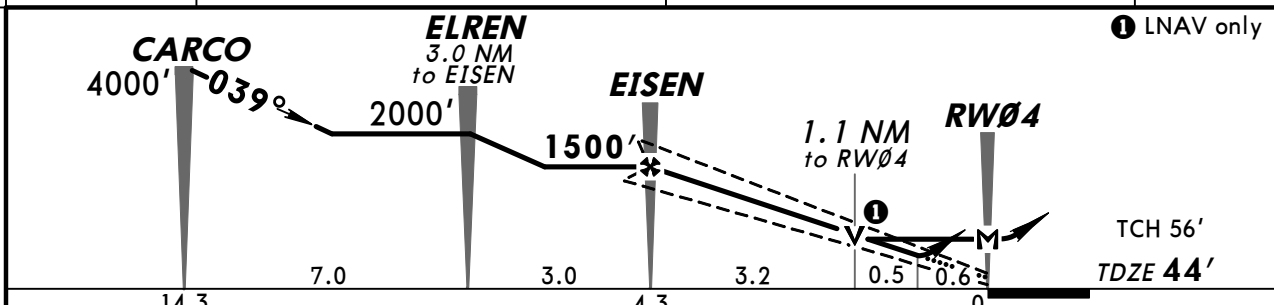
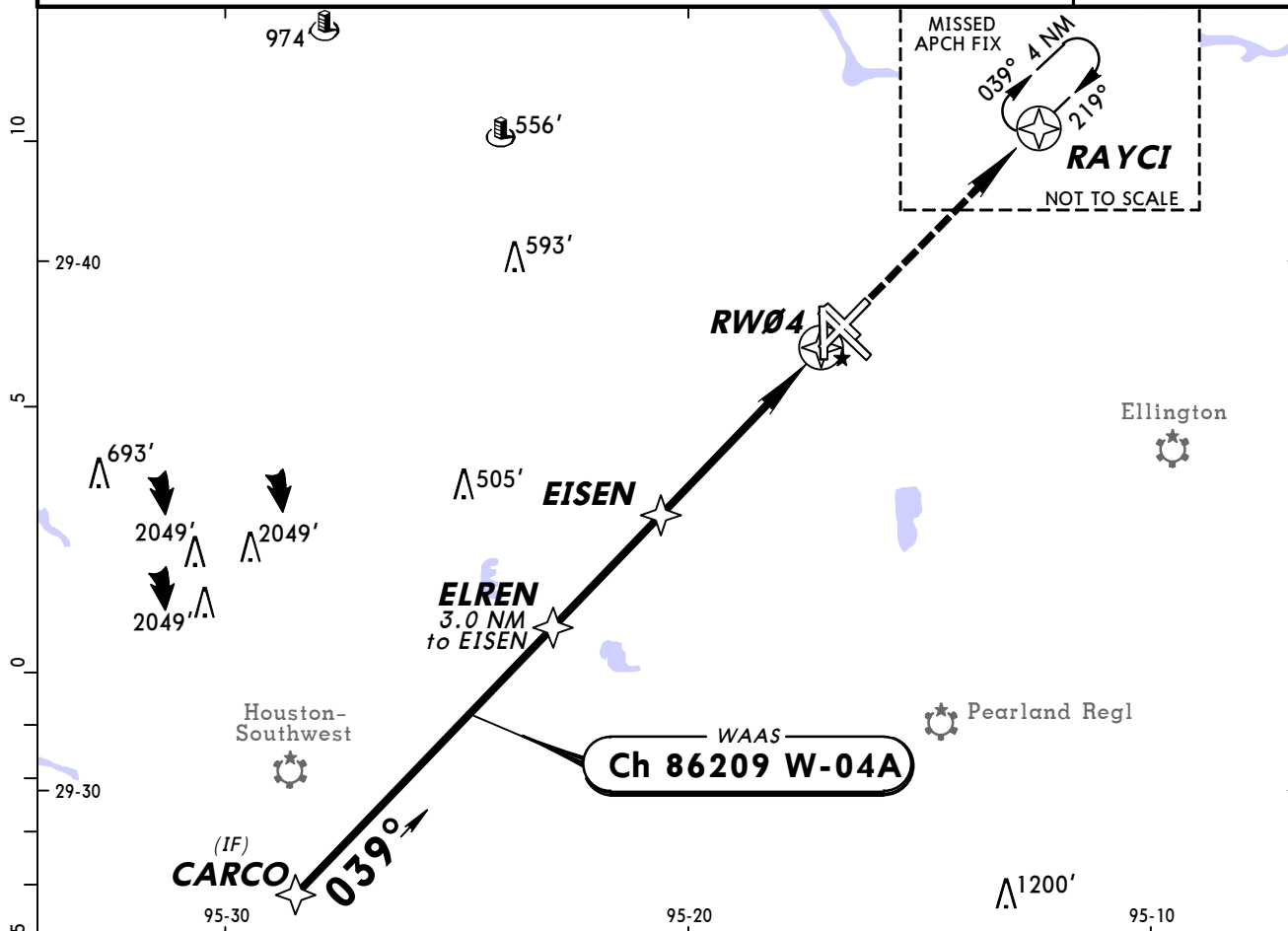
KHOU/HOU
HOBBY

JEPPESEN
24 JUN 11 (12-1) Eff 30 Jun

HOUSTON, TEXAS
RNAV (GPS) Rwy 4

BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)			HOBBY Tower	Ground
124.6	East 120.05	South 134.45	West 124.35	118.7	121.9
WAAS Ch 86209 W-04A	Final Apch Crs 039°	Minimum Alt EISEN 1500' (1456')	LPV DA(H) 300' (256')	Apt Elev 46' TDZE 44'	3100' MSA RW04
MISSED APCH: Climb to 2000' direct RAYCI and hold.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Radar required. 2. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 48°C (118°F). 3. DME/DME RNP-0.30 not authorized.					



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II PAPI 2000' ↑ D → RAYCI
Glide Path Angle	3.00°	372	478	531	637	743	
MAP at RW04							

STRAIGHT-IN LANDING RWY 4				CIRCLE-TO-LAND	
LPV DA(H) 300' (256')		LNAV/VNAV DA(H) 440' (396')		LNAV MDA(H) 460' (416')	
ALS out		ALS out		ALS out	
A				RVR 24 or 1/2	RVR 50 or 1
B				RVR 40 or 3/4	RVR 60 or 1 1/4
C	RVR 24 or 1/2	RVR 40 or 3/4	RVR 40 or 3/4	RVR 60 or 1 1/4	RVR 50 or 1
D					
				Max Kts	MDA(H)
				90	500' (454') -1 1/4
				120	520' (474') -1 1/2
				140	600' (554') -2
				165	

CHANGES: None.

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TERPS AMEND 2A 10 MAR 2011

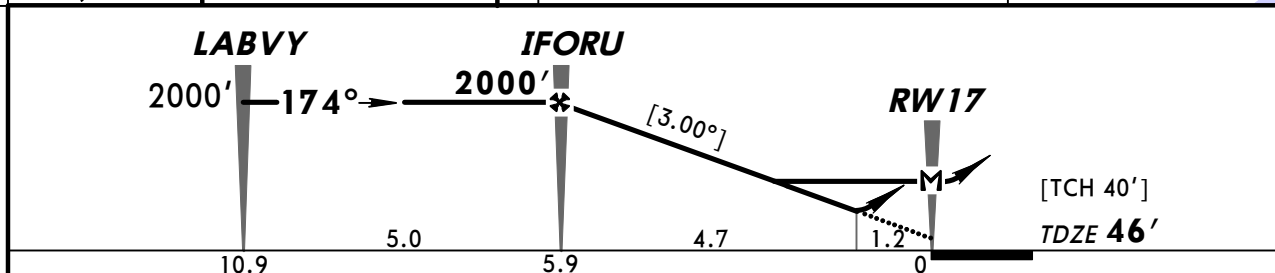
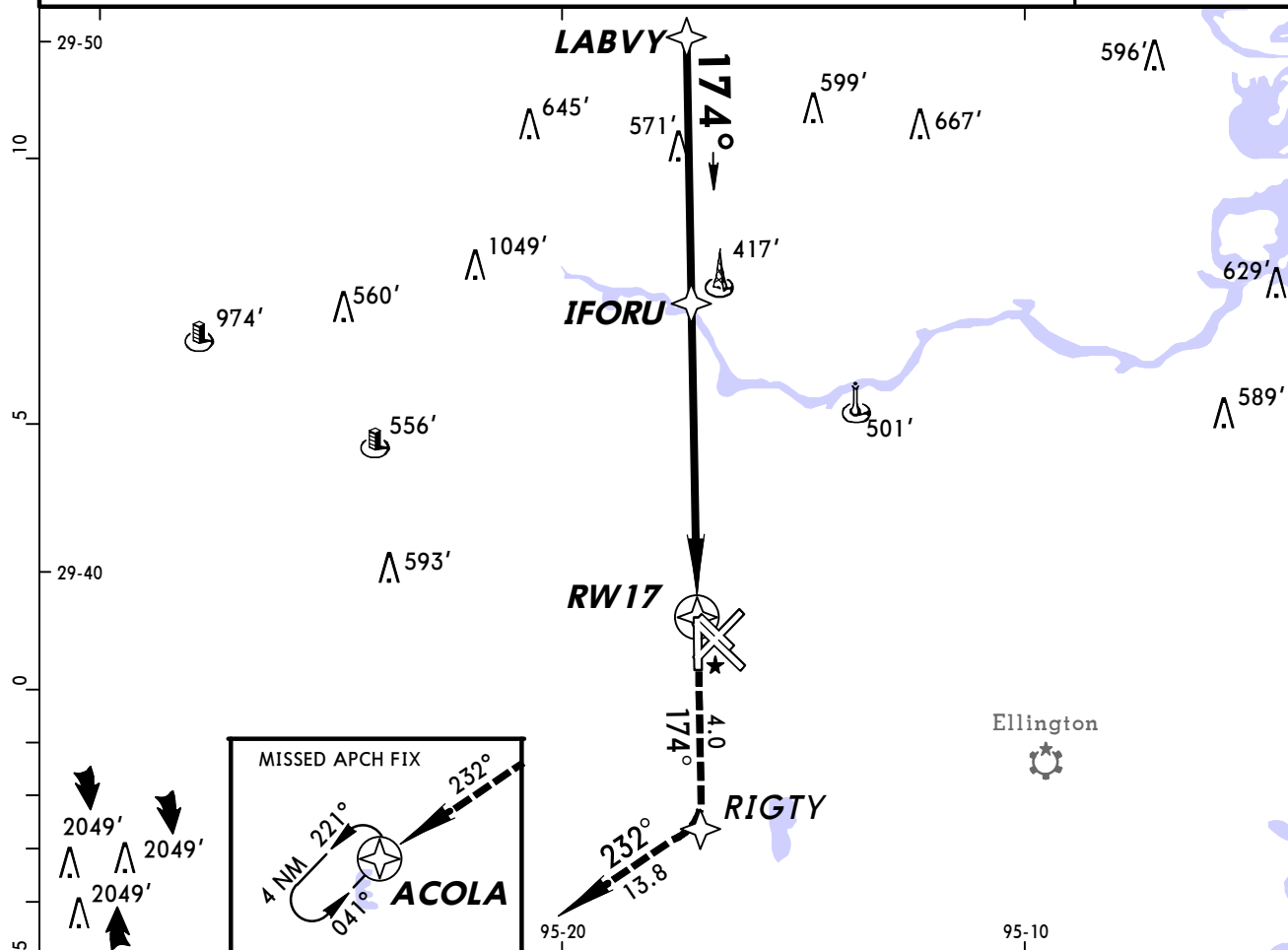
BRIEFING STRIP™

<i>Gnd speed-Kts</i>	70	90	100	120	140	160
<i>Glide Path Angle</i> 3.00°	372	478	531	637	743	849
<i>MAP at RW12R</i>						

TERPS AMEND 1A 30 JUN 2011

BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)			HOBBY Tower	Ground
124.6	East 120.05	South 134.45	West 124.35	118.7	121.9
RNAV	Final Apch Crs 174°	Minimum Alt IFORU 2000' (1954')	LNAV/VNAV DA(H) 480' (434')	Apt Elev 46' TDZE 46'	3100' MSA RW17
MISSED APCH: Climb to 3000' via 174° course to RIGTY then RIGHT turn via 232° to ACOLA and hold.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. RADAR required. 2. Baro-VNAV not authorized below -15°C (5°F). 3. GPS or RNP-0.30 required. 4. DME/DME RNP-0.30 not authorized.					



Gnd speed-Kts	70	90	100	120	140	160	VASI-L	3000' ↑ via 174° RIGTY	TDZE 46'
Descent angle [3.00°]	372	478	531	637	743	849			
MAP at RW17									

STRAIGHT-IN LANDING RWY 17				CIRCLE-TO-LAND	
LNAV/VNAV DA(H) 480' (434')		LNAV MDA(H) 580' (534')		Max Kts	MDA(H)
1½	A	1		90	580' (534') - 1½
	B			120	
	C	1½		140	600' (554') - 2
	D	1¾		165	

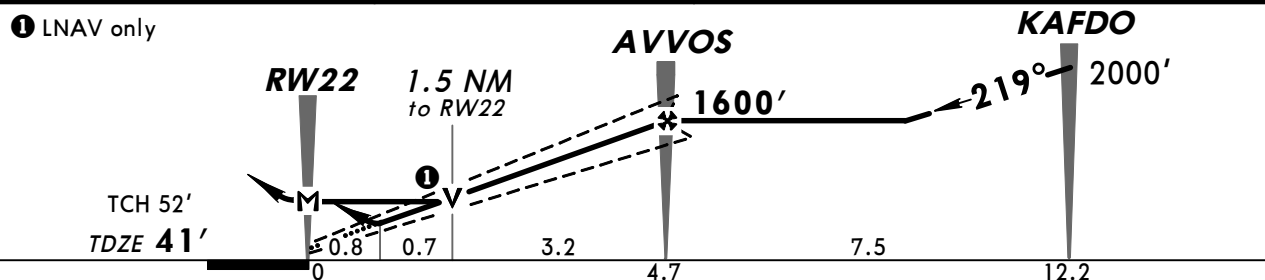
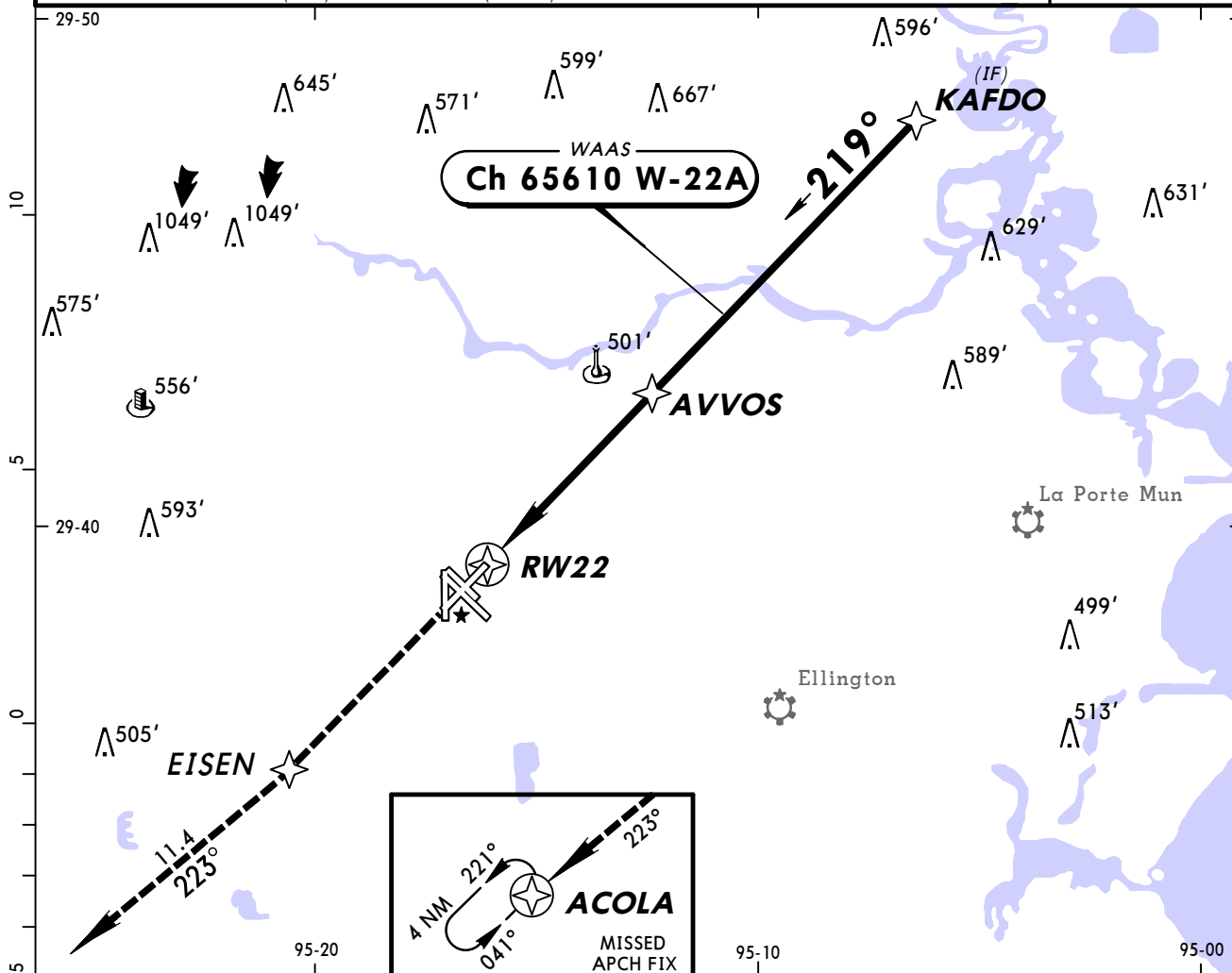
KHOU/HOU
HOBBY

JEPPESSEN
1 APR 11 (12-4)

HOUSTON, TEXAS
RNAV (GPS) Rwy 22

BRIEFING STRIP™

D-ATIS		HOUSTON Approach (R)			HOBBY Tower		Ground	
124.6		East 120.05	South 134.45	West 124.35	118.7		121.9	
WAAS Ch 65610 W-22A		Final Apch Crs 219°	Minimum Alt AVVOS 1600' (1559')	LPV (CONDITIONAL) DA(H) 360' (319')	Apt Elev 46' TDZE 41'		3100' MSA RW22	
MISSED APCH: Climb to 3000' direct EISEN and via 223° track to ACOLA and hold.								
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'								
1. RADAR required. 2. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C(5°F) or above 48°C(118°F). 3. DME/DME RNP-0.30 not authorized.								



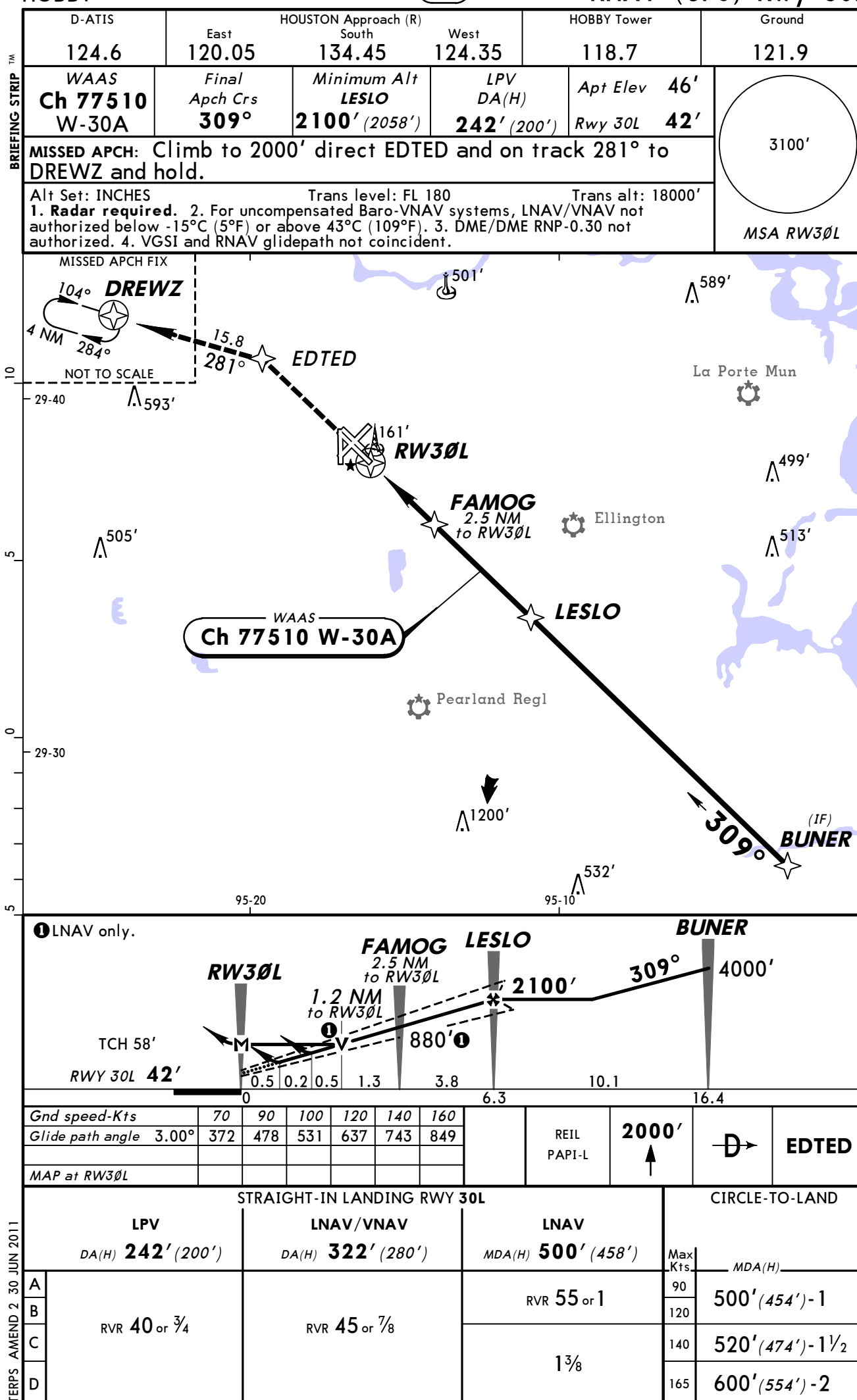
Gnd speed-Kts	70	90	100	120	140	160	MALS	3000'	EISEN
Glide path angle	3.00°	372	478	531	637	743	849	↑	→
MAP at RW22									

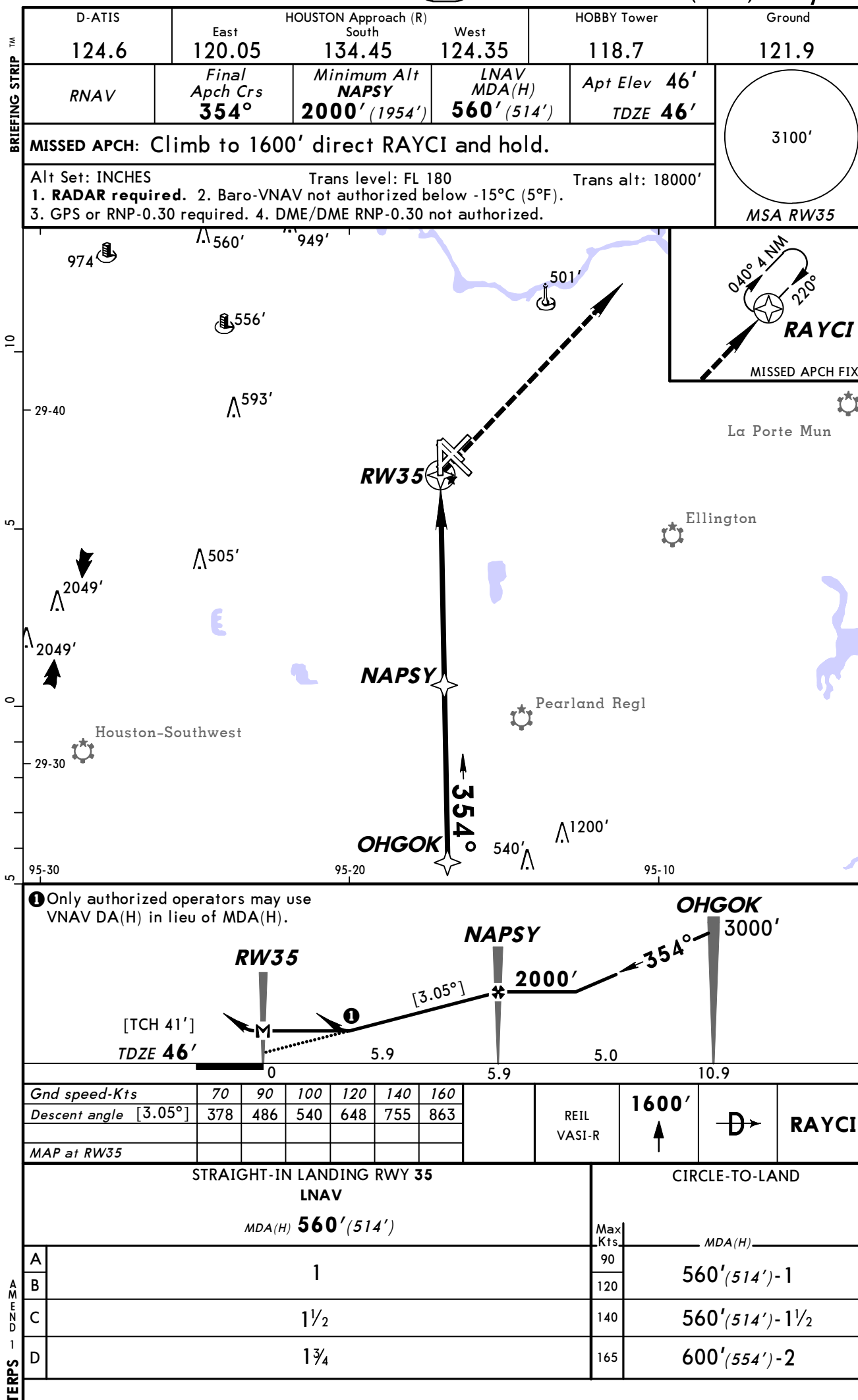
STRAIGHT-IN LANDING RWY 22				CIRCLE-TO-LAND	
LPV		LNAV/VNAV		LNAV	
DA(H) 360' (319')		DA(H) 480' (439')		MDA(H) 580' (539')	
ALS out		ALS out		ALS out	
A				3/4	1
B					
C	1	1 1/2		1 1/2	140
D				1 3/4	165
				Max Kts	MDA(H)
				90	
				120	580' (534') - 1 1/2
				140	
				165	600' (554') - 2

CHANGES: Notes.

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TERPS AMEND 2A 7 APR 2011





HOUSTON, TEXAS
VOR DME Rwy 4

BRIEFING STRIP™

TERPS
AMEND
18

STRAIGHT-IN LANDING RWY 4			CIRCLE-TO-LAND	
MDA(H) 460' (416')				
		ALS out	Max Kts.	MDA(H)
A	RVR 40 or $\frac{3}{4}$	RVR 50 or 1	90	520' (474') - 1
B			120	
C		RVR 60 or $1\frac{1}{4}$	140	520' (474') - 1½
D	RVR 50 or 1		165	600' (554') - 2

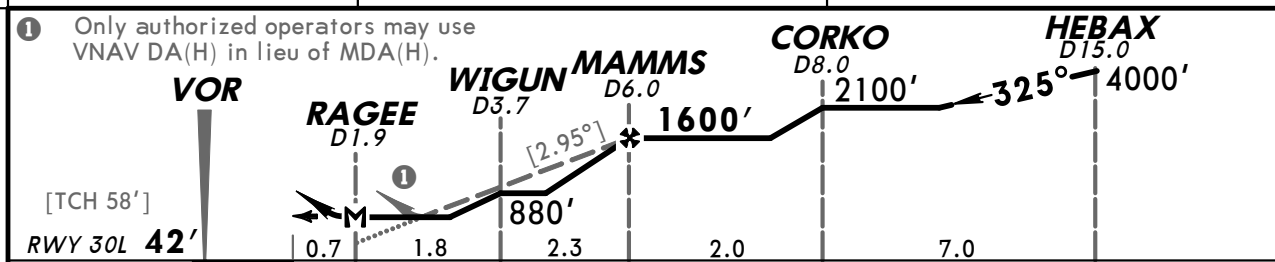
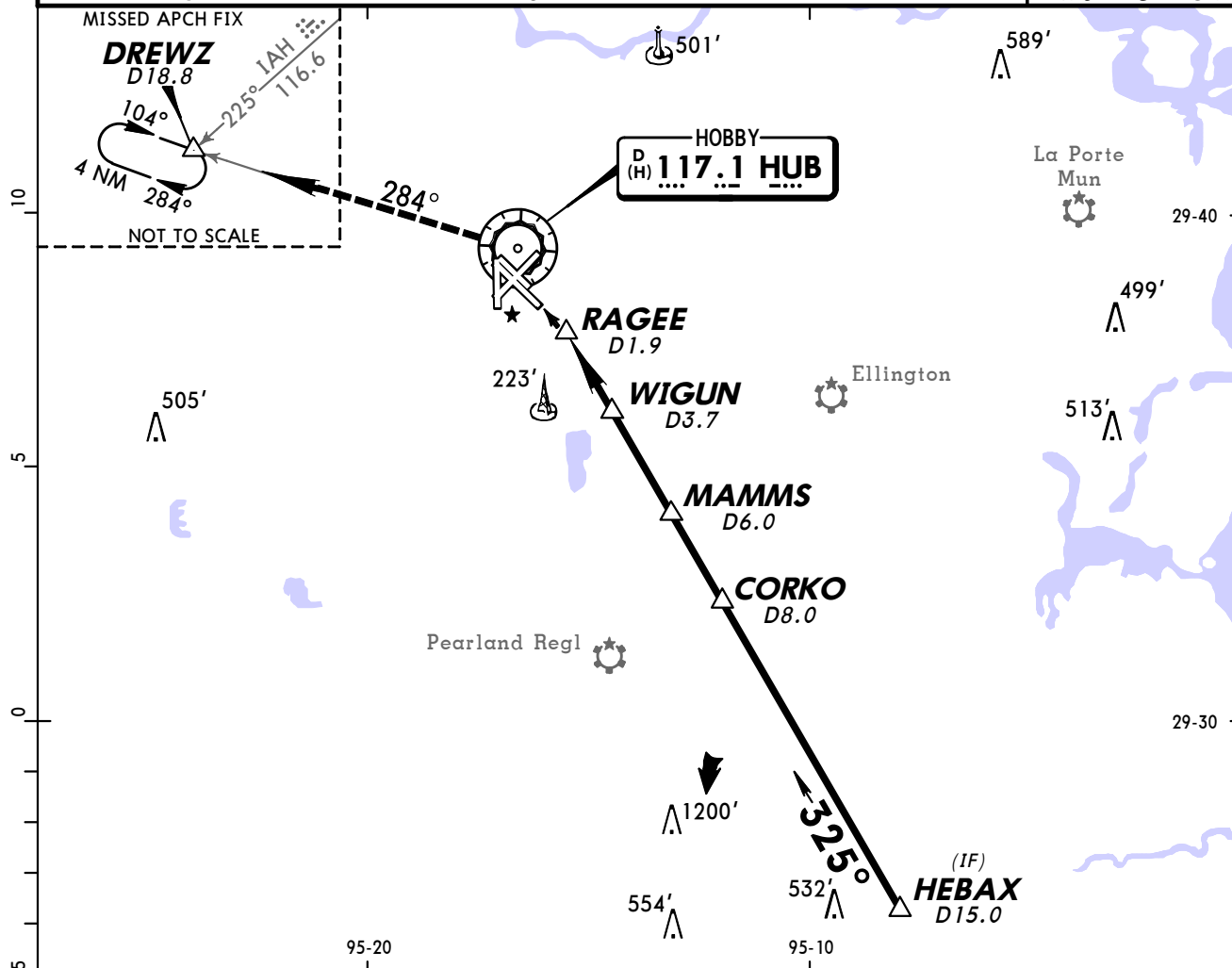
KHOU/HOU
HOBBY

24 JUN 11 (13-2) Eff 30 Jun

HOUSTON, TEXAS
VOR DME Rwy 30L

BRIEFING STRIP™

D-ATIS		HOUSTON Approach (R)			HOBBY Tower	Ground
East 124.6		South 120.05	West 134.45	124.35	118.7	121.9
VOR HUB 117.1	Final Apch Crs 325°	Minimum Alt MAMMS 1600' (1558')	MDA(H) 440' (398')	Apt Elev 46' Rwy 30L 42'	3100' MSA HUB VOR	
MISSED APCH: Climbing LEFT turn to 2000' outbound via HUB VOR R-284 direct DREWZ INT/D18.8 and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Radar required. 2. VGSI and descent angles not coincident.						



Gnd speed-Kts	70	90	100	120	140	160	REIL PAPI-L		2000' LT via HUB 117.1 R-284		DREWZ
Descent angle [2.95°]	365	470	522	626	731	835					
MAP at RAGEE											

STRAIGHT-IN LANDING RWY 30L				CIRCLE-TO-LAND			
MDA(H) 440' (398')							
A	RVR 55 or 1			Max Kts 90	MDA(H) 500' (454') - 1		
B				120			
C	RVR 60 or 1/8			140	520' (474') - 1 1/2		
D				165	600' (554') - 2		

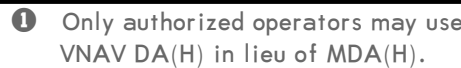
TERPS AMEND 18 30 JUN 2011

CHANGES: WIGUN added, minimums, charted obstructions.

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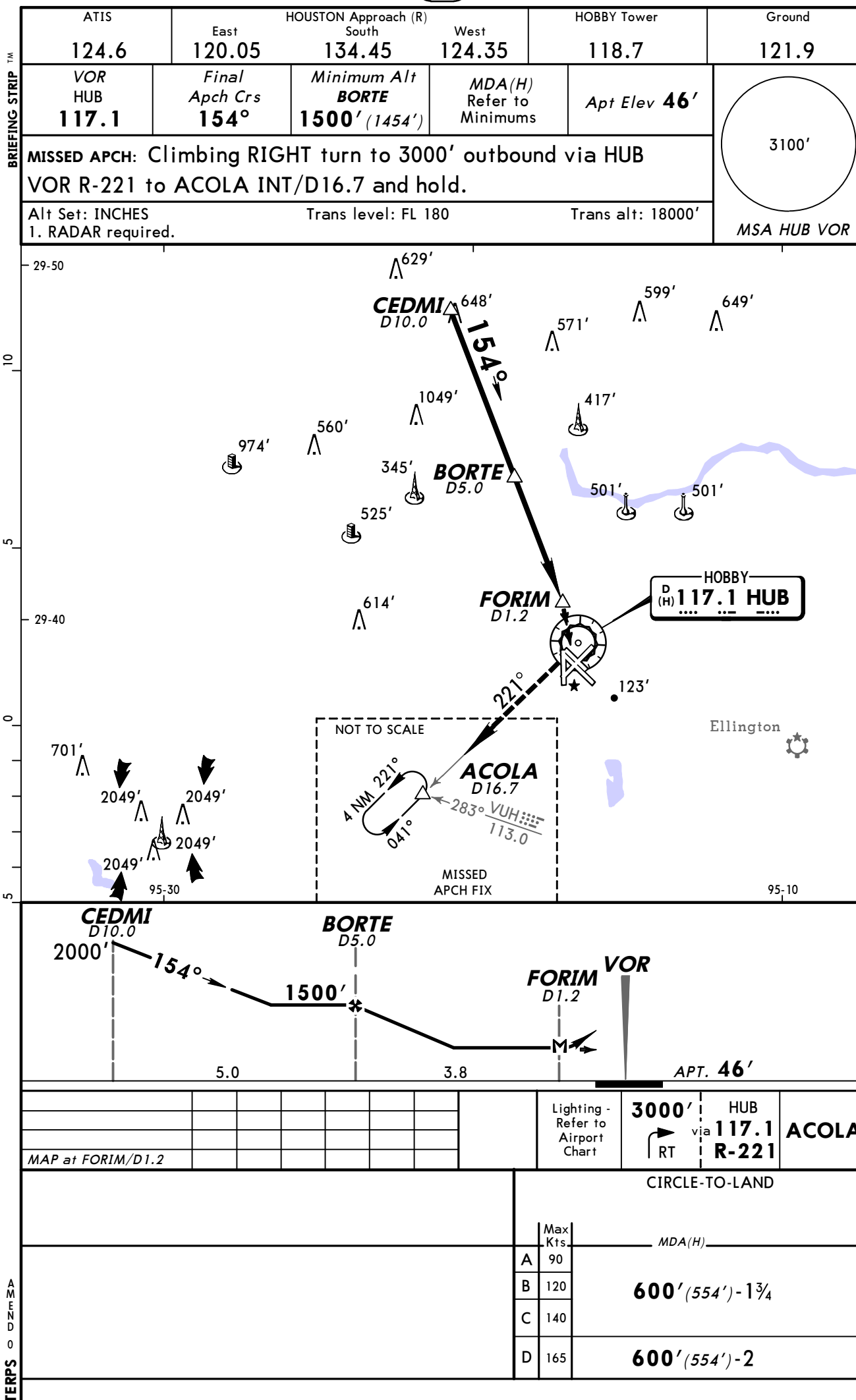
HOUSTON, TEXAS
VOR DME Rwy 35

BRIEFING STRIP™

TERPS
AMEND 3

STRAIGHT-IN LANDING RWY 35		CIRCLE-TO-LAND	
MDA(H) 560' (514')		Max Kts.	MDA(H)
A	1	90	560' (514') - 1
B		120	
C	1½	140	560' (514') - 1½
D	1¾	165	600' (554') - 2

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General Information

Location: Harlingen TX USA
IATA Code: HRL
Lat/Long: N26° 13.6' W097° 39.3'
Elevation: 36 ft

Airport Use: Public
Magnetic Variation: 4.5°E
Sectional Chart: Brownsville

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: HP Bottle
Repair Types: Major Airframe, Major Engine
Customs: Upon Prior Request
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1256 Z
Sunset: 0031 Z,

Runway Information

Runway: 13
Length x Width: 7257 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 35 ft
Lighting: Edge, REIL

Runway: 17L
Length x Width: 5949 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 34 ft
Lighting: Edge, REIL

Runway: 17R
Length x Width: 8301 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 35 ft
Lighting: Edge, ALS

Runway: 31
Length x Width: 7257 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 36 ft
Lighting: Edge

Runway: 35L
Length x Width: 8301 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 36 ft
Lighting: Edge

Runway: 35R
Length x Width: 5949 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 36 ft
Lighting: Edge
Displaced Threshold: 190 ft

Communication Information

ATIS 124.85
ASOS 124.85
Harlingen Tower 119.3 CTAF
Harlingen Ground Control 121.7
Valley Approach Control 120.7
Corpus App ARSA 120.7
Valley Departure Control 120.7
Valley Intl Unicom 122.95
San Angelo Flight Service Station 122.35 RCO

HARLINGEN, TEXAS
VALLEY INTL

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GENERAL

Birds in vicinity of airport.

Runways 35R & 17R right traffic pattern.

ADDITIONAL RUNWAY INFORMATION

RWY				USABLE LENGTHS		TAKE-OFF	WIDTH
				LANDING	BEYOND		
				Threshold	Glide Slope		
13		MIRL REIL VASI-L	grooved				150'
31		MIRL VASI-L	grooved				

17R		HIRL ① MALSR	grooved	RVR	7252'		150'
35L		HIRL VASI-L	grooved				

① Activate on 119.3 when Twr inop.

17L		② MIRL REIL					150'
35R		② MIRL		5759'			

② Not available when Twr inop.

RUNWAY INCURSION HOT SPOTS **HS1**

For information only, not to be construed as ATC instructions.

HS1

Due to unusual geometry, extreme vigilance must be exercised to comply with ATC instructions on Twy A, B, E, and M to avoid unauthorized entry onto Rwy 35L.

TAKE-OFF

All Rwys

	Adequate Vis Ref	STD
1 & 2 Eng	RVR 16 or 1/4	RVR 50 or 1
3 & 4 Eng		RVR 24 or 1/2

FOR FILING AS ALTERNATE

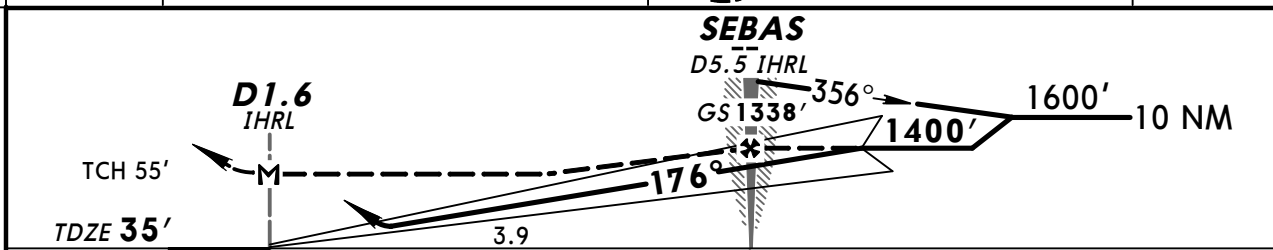
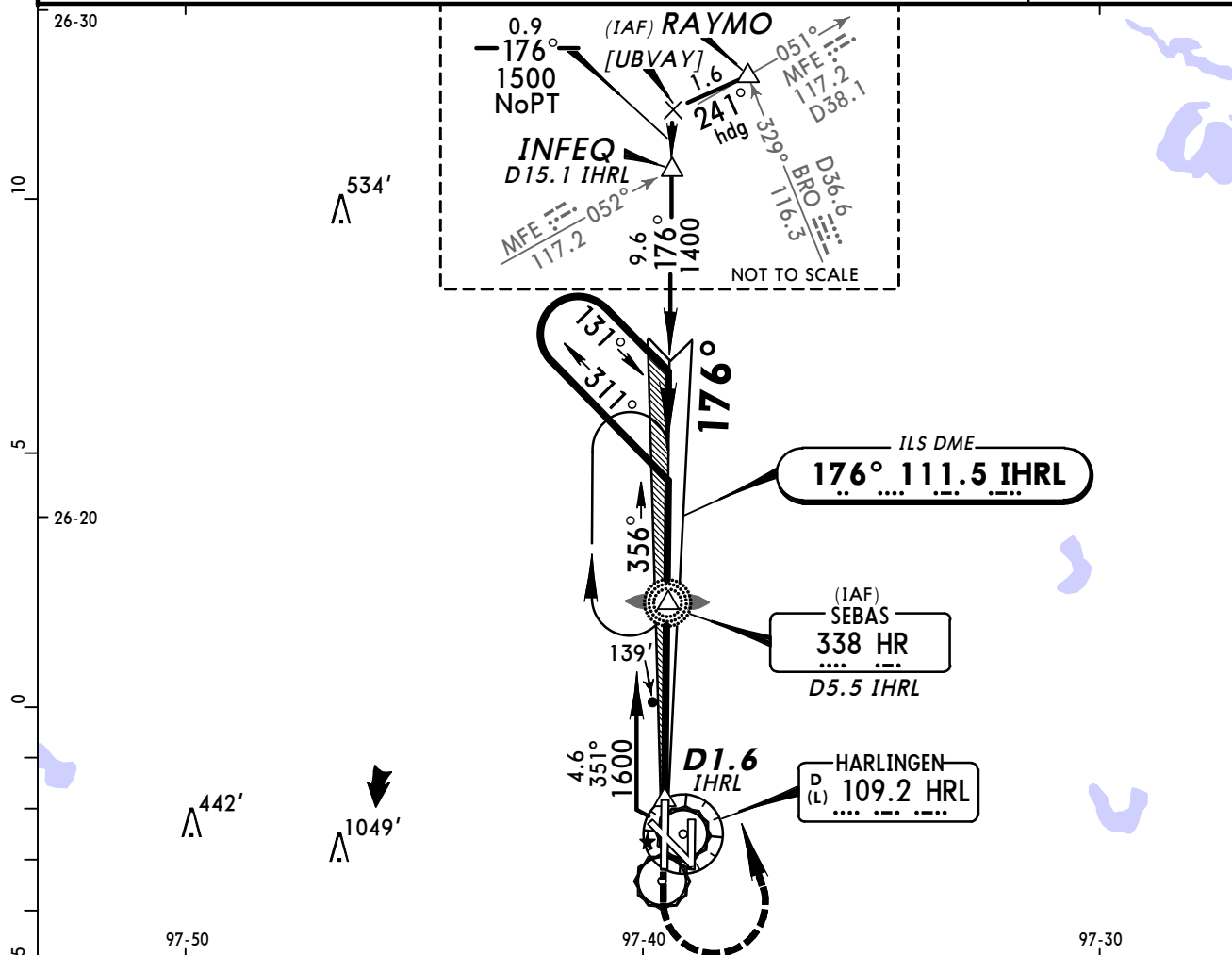
Authorized Only When Twr Operating			
ILS Rwy 17R	LOC Rwy 17R LOC DME (BACK CRS) Rwy 35L	VOR DME Rwy 17L VOR DME Rwy 17R VOR DME Rwy 35L VOR DME Y Rwy 31 VOR DME Z Rwy 31	Other
A	600-2	800-2	NA
B			
C			
D	700-2		

A
M
E
N
D
0

BRIEFING STRIP

TM

*ATIS (ASOS O/T)		VALLEY Approach (R)		*HARLINGEN Tower		*Ground	
124.85		120.7		CTAF 119.3		121.7	
LOC IHRL 111.5	Final Apch Crs 176°	GS SEBAS 1338' (1303')	ILS DA(H) 235' (200')	Apt Elev 36'		090° 1900' 2600' 360° MSA HR LOM	
MISSED APCH: Climb to 800', then climbing LEFT turn to 1600' direct HR LOM/D5.5 IHRL and hold.							
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'			
1. ADF or DME required. 2. Pilot controlled lighting 119.3.							



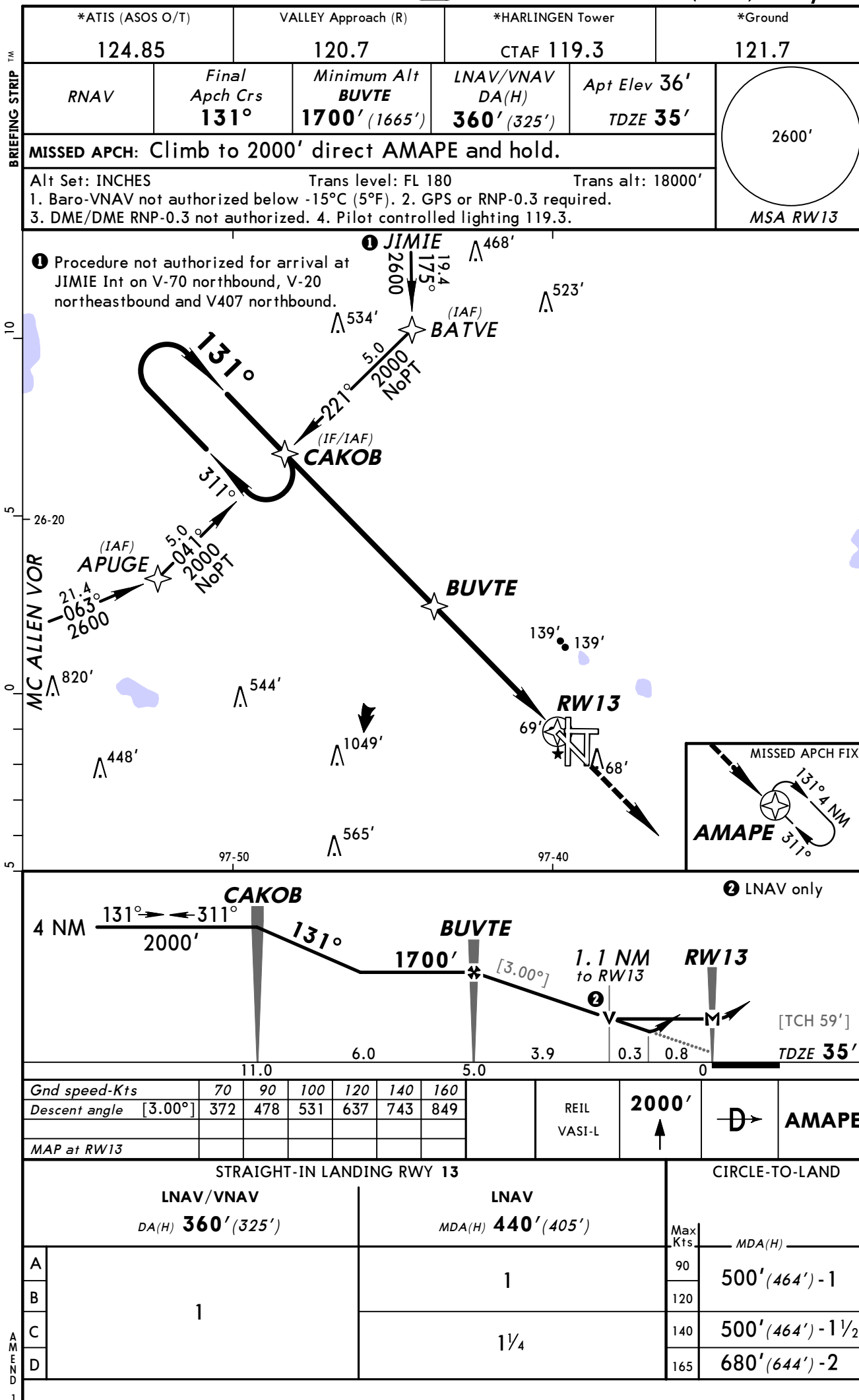
Gnd speed-Kts	70	90	100	120	140	160	MALSR		800'	1600'	HR	338
GS	3.00°	372	478	531	637	743			↑	LT		
MAP at D1.6 IHRL or SEBAS to MAP	3.9	3:21	2:36	2:20	1:57	1:40						

STRAIGHT-IN LANDING RWY 17R					CIRCLE-TO-LAND	
ILS DA(H) 235' (200')		LOC (GS out) MDA(H) 440' (405')				
FULL	RAIL or ALS out		RAIL out	ALS out	Max Kts	MDA(H)
A					90	500' (464') - 1
B		RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	120	
C	1 RVR 24 or 1/2	RVR 40 or 3/4			140	500' (464') - 1 1/2
D		RVR 40 or 3/4		RVR 60 or 1 1/4	165	680' (644') - 2

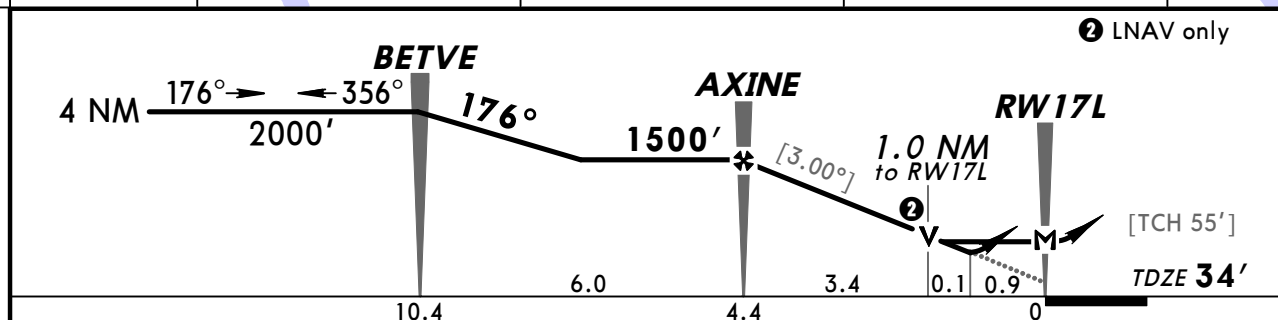
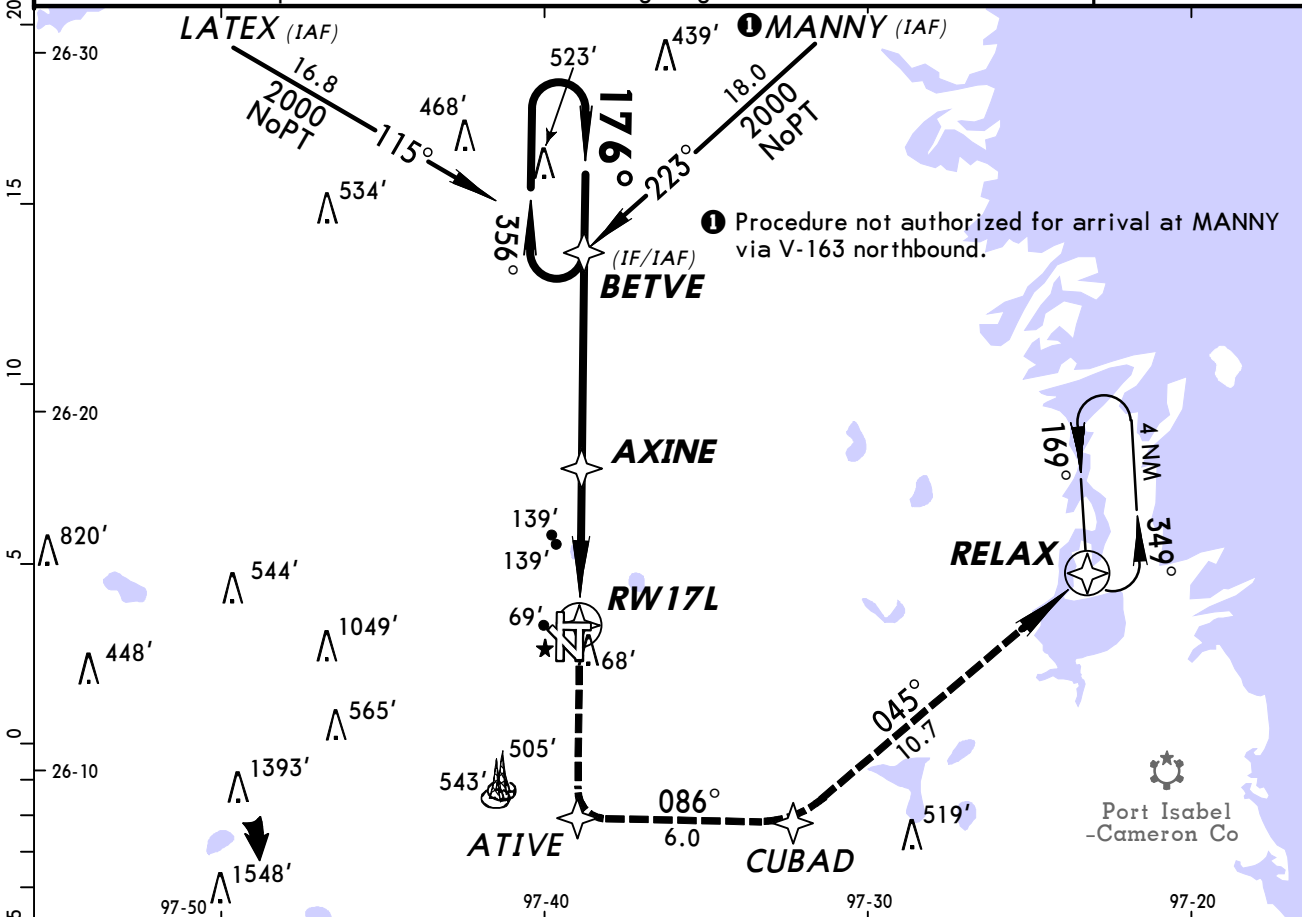
1 RVR 18 with Flight Director or Autopilot or HUD to DA.

CHANGES: TDZE, minimums.

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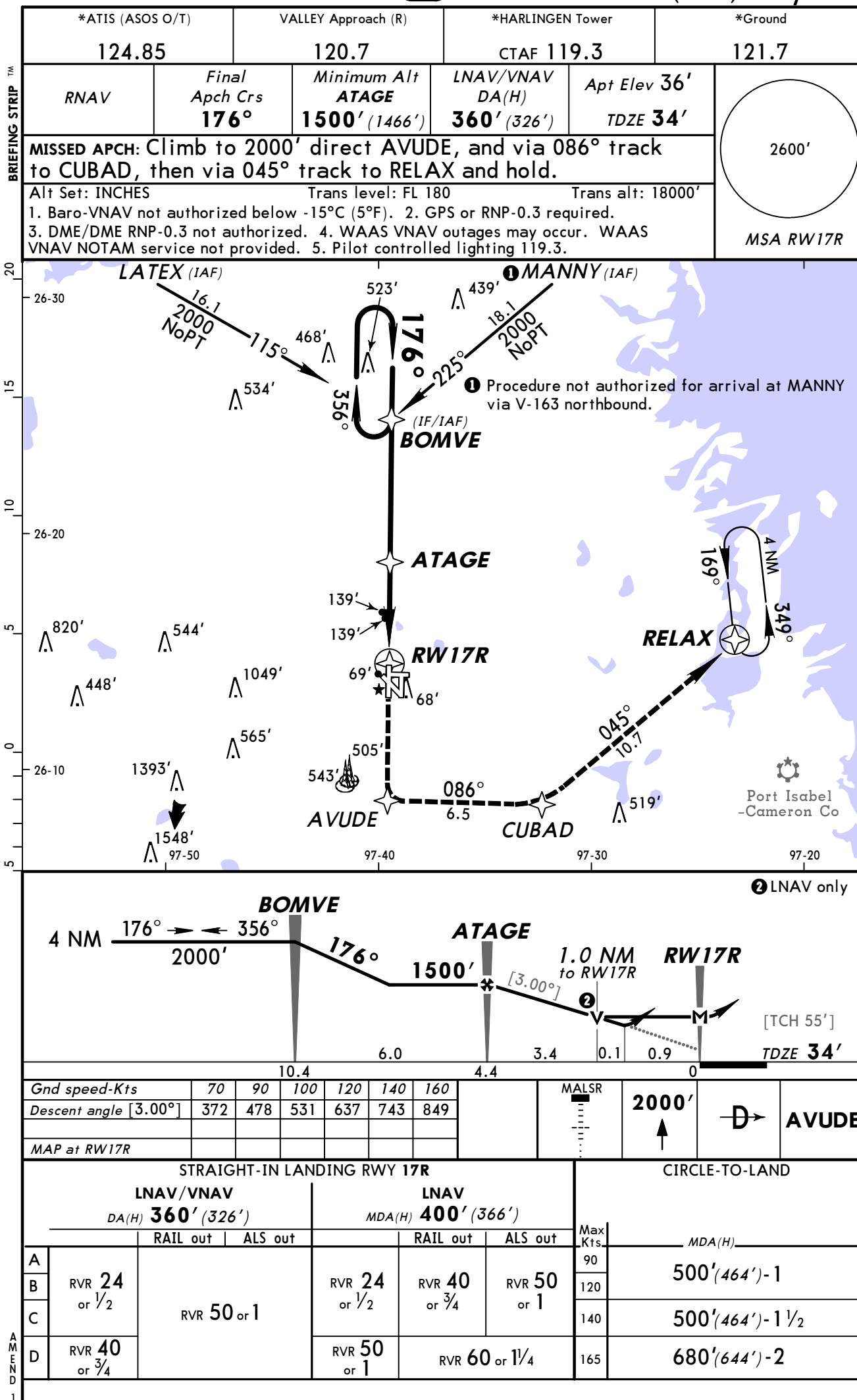
*ATIS (ASOS O/T) 124.85	VALLEY Approach (R) 120.7	*HARLINGEN Tower CTAF 119.3	*Ground 121.7
RNAV	Final Apch Crs 176°	Minimum Alt AXINE 1500' (1466')	LNAV/VNAV DA(H) (CONDITIONAL) 360' (326')
Apt Elev 36' TDZE 34'			
MISSED APCH: Climb to 2000' direct ATIVE and via 086° track to CUBAD, then via 045° track to RELAX and hold.			
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Baro-VNAV not authorized below -15°C (5°F). 2. GPS or RNP-0.3 required. 3. DME/DME RNP-0.3 not authorized. 4. WAAS VNAV outages may occur. WAAS VNAV NOTAM service not provided. 5. Pilot controlled lighting 119.3.			
2600' MSA RW17L			

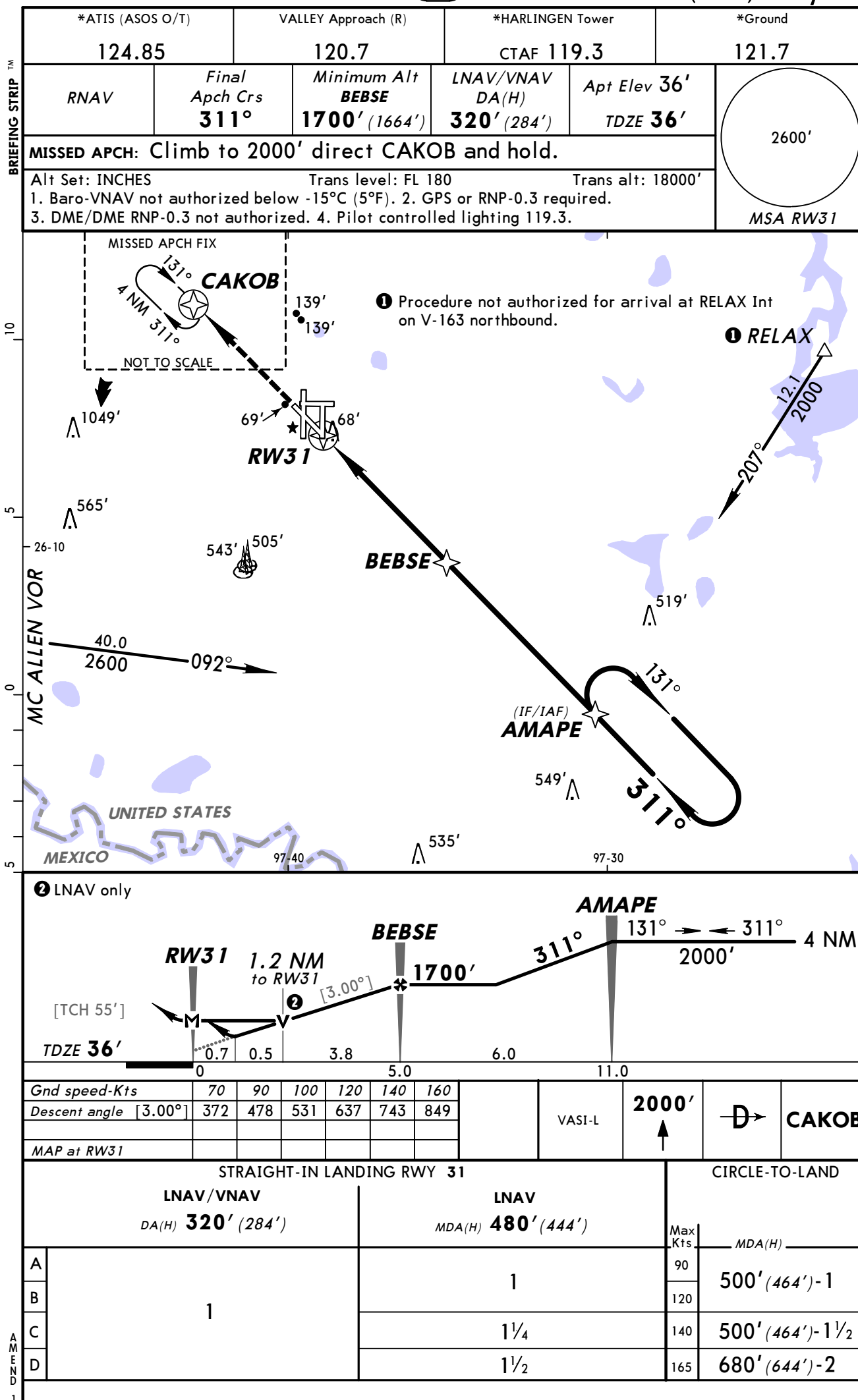


Gnd speed-Kts	70	90	100	120	140	160				
Descent angle [3.00°]	372	478	531	637	743	849				
MAP at RW17L										

① STRAIGHT-IN LANDING RWY 17L						CIRCLE-TO-LAND			
LNAV/VNAV DA(H) 360' (326')			LNAV MDA(H) 400' (366')			Max Kts	MDA(H)		
A						90	500' (464')-1		
B						120			
C	1		1			140	500' (464')-1½		
D			1¼			165	680' (644')-2		

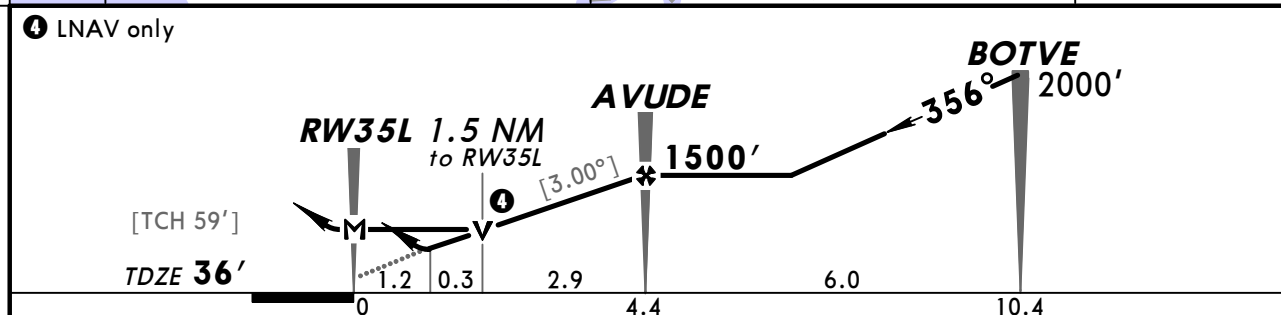
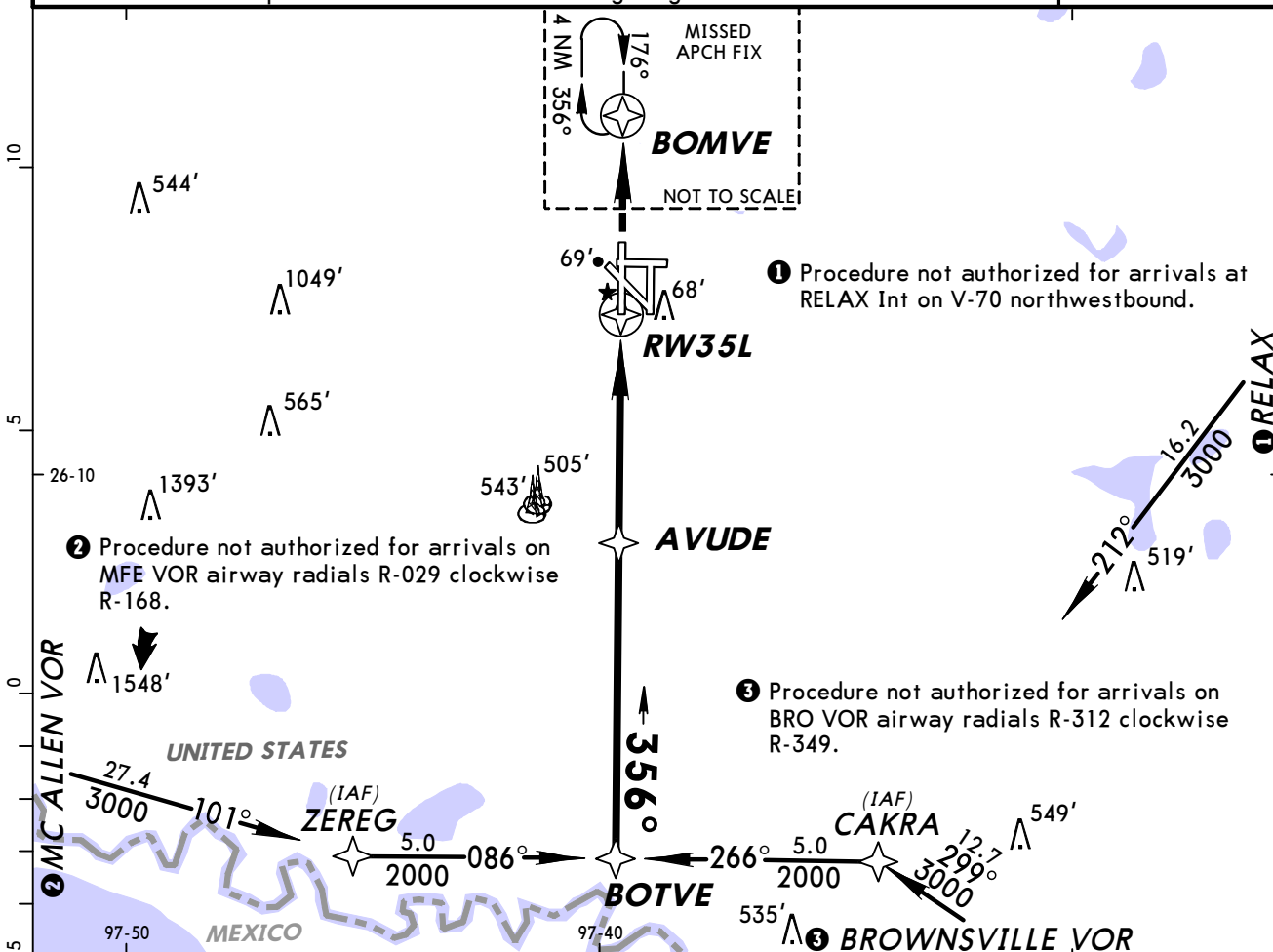
① Not authorized when control tower closed.





BRIEFING STRIP™

*ATIS (ASOS O/T)		VALLEY Approach (R)		*HARLINGEN Tower		*Ground	
124.85		120.7		CTAF 119.3		121.7	
RNAV	Final Apch Crs 356°	Minimum Alt AVUDE 1500' (1464')	LNAV/VNAV DA(H) 460' (424')	Apt Elev 36' TDZE 36'		2600' MSA RW35L	
MISSED APCH: Climb to 2000 direct BOMVE and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. Baro-VNAV not authorized below -15°C (5°F). 2. GPS or RNP-0.3 required. 3. DME/DME RNP-0.3 not authorized 4. WAAS VNAV outages may occur. WAAS VNAV NOTAM service not provided. 5. Pilot controlled lighting 119.3.							

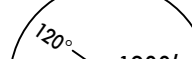


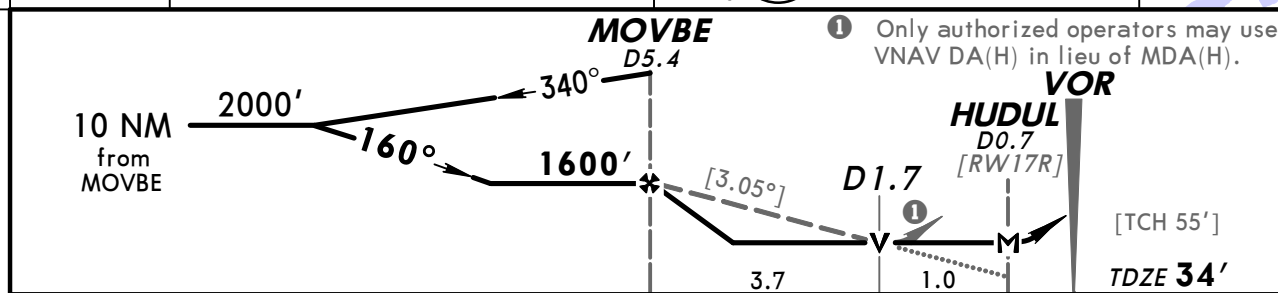
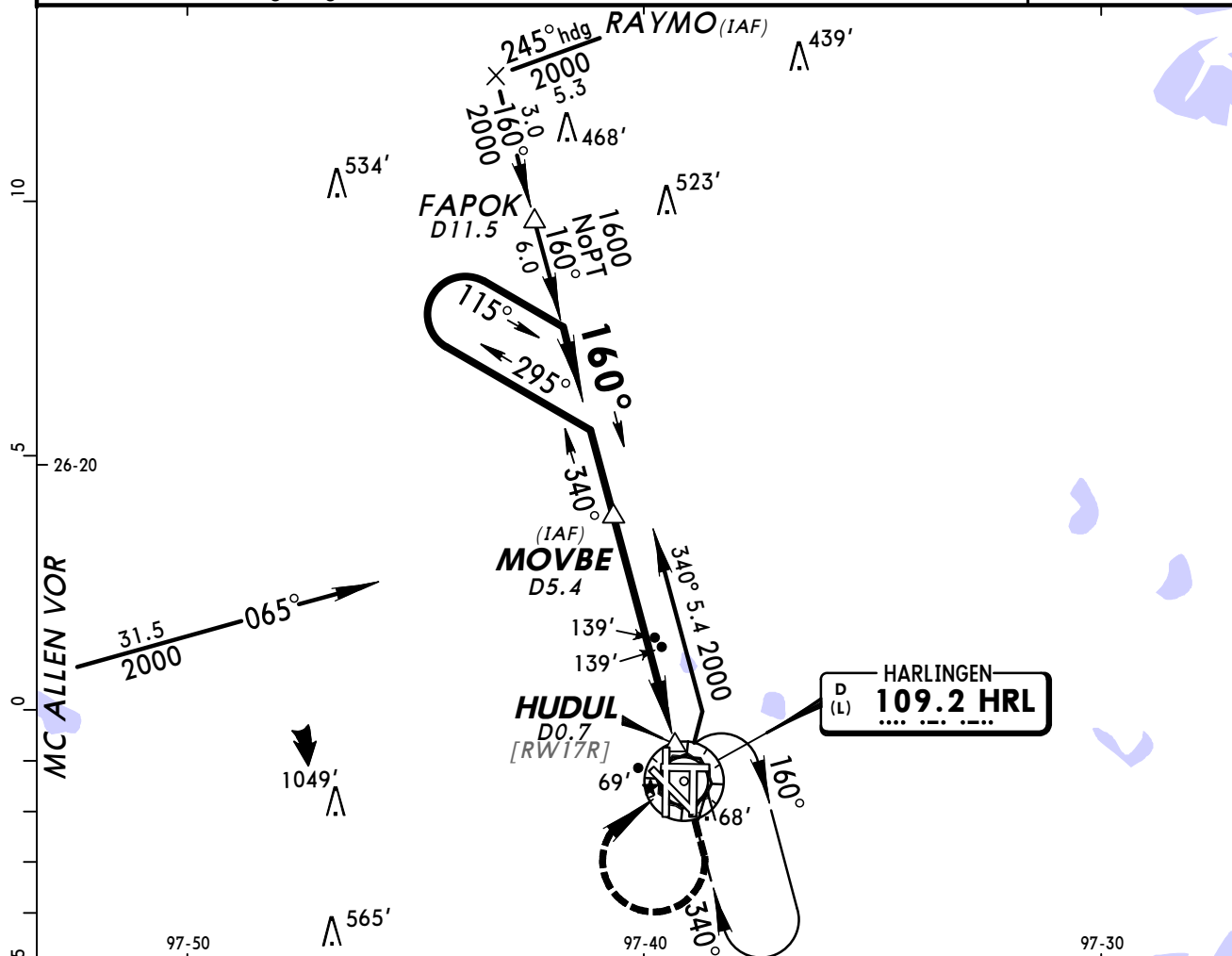
Gnd speed-Kts	70	90	100	120	140	160	VASI-L	2000'	D	BOMVE
Descent angle [3.00°]	372	478	531	637	743	849				
MAP at RW35L										

STRAIGHT-IN LANDING RWY 35L				CIRCLE-TO-LAND	
LNAV/VNAV		LNAV		Max Kts	MDA(H)
DA(H) 460' (424')		MDA(H) 580' (544')			
A	1½	1		90	580' (544')-1½
B		1		120	
C		1½		140	
D		1¾		165	

HARLINGEN, TEXAS

VOR DME Rwy 17R

*ATIS (ASOS O/T) 124.85	VALLEY Approach (R) 120.7		*HARLINGEN Tower CTAF 119.3		*Ground 121.7
VOR HRL 109.2	<i>Final Apch Crs</i> 160°	<i>Minimum Alt</i> MOVBE 1600' (1566')	<i>MDA(H)</i> 400' (366')	<i>Apt Elev</i> 36' <i>TDZE</i> 34'	 Obstacle diagram: A circle with two arrows. One arrow points to 1900' at 120°. The other arrow points to 2600' at 360°.
MISSED APCH: Climb to 800', then climbing RIGHT turn to 2000'					
direct HRL VOR and hold.					
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'	
1. Pilot controlled lighting 119.3.					MSA HRL VOR



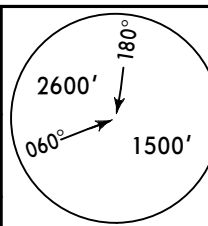
Gnd speed-Kts	70	90	100	120	140	160					HRL 109.2
Descent angle [3.05°]	378	486	540	648	755	863					
MAP at HUDUL/D0.7											

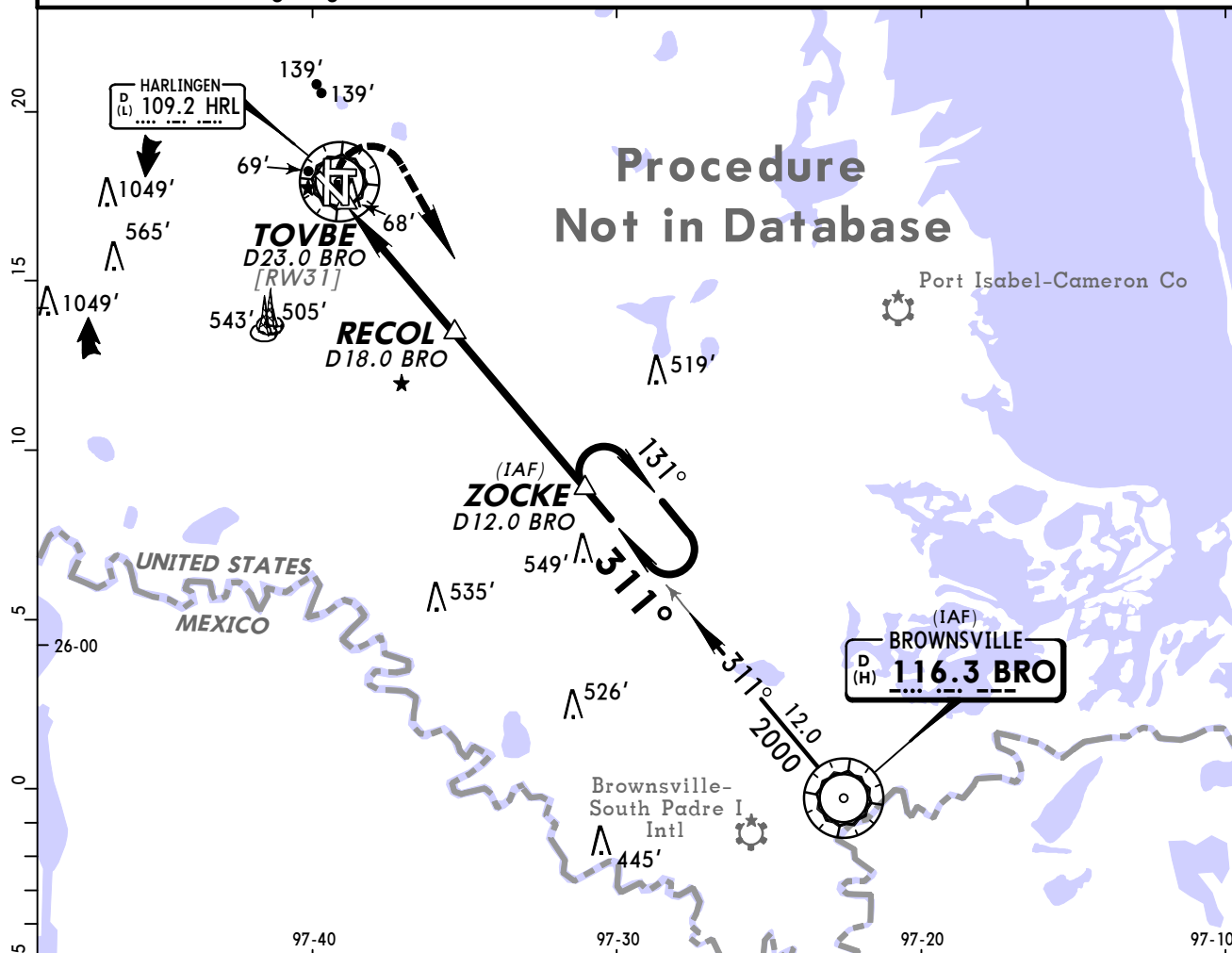
STRAIGHT-IN LANDING RWY17R				CIRCLE-TO-LAND	
MDA(H) 400' (366')					
		RAIL out	ALS out	Max Kts	MDA(H)
A				90	500' (464')-1
B	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	120	
C				140	500' (464')-1 1/2
D	RVR 50 or 1	RVR 60 or 1 1/4		165	680' (644')-2

CHANGES: New procedure.

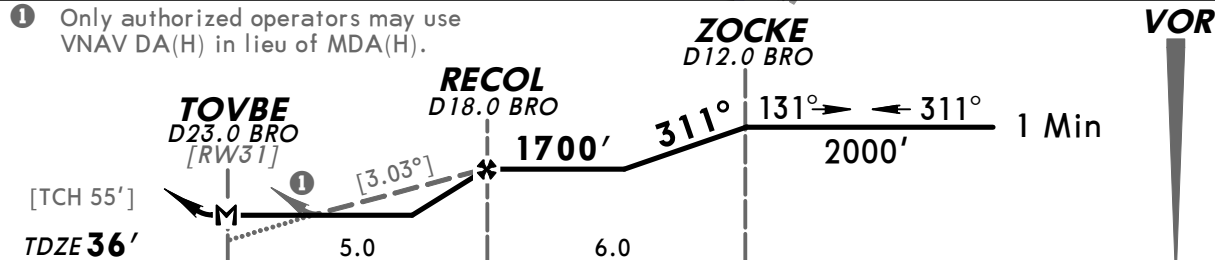
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BRIEFING STRIP™

*ATIS (ASOS O/T)		VALLEY Approach (R)		*HARLINGEN Tower		*Ground				
124.85		120.7		CTAF 119.3		121.7				
VOR BRO 116.3		Final Aptch Crs 311°		Minimum Alt RECOL 1700' (1664')		MDA(H) 620' (584')		Apt Elev 36' TDZE 36'		 MSA BRO VOR
MISSED APCH: Climbing RIGHT turn to 2000' inbound via BRO VOR R-311 to ZOCKE D12.0 BRO and hold.										
Alt Set: INCHES		Trans level: FL 180				Trans alt: 18000'				
1. Pilot controlled lighting 119.3.										



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160	VASI-L	2000' RT	BRO via 116.3 R-311	ZOCKE
Descent angle [3.03°]	375	482	536	643	750	858				
MAP at TOVBE/D23.0 BRO										

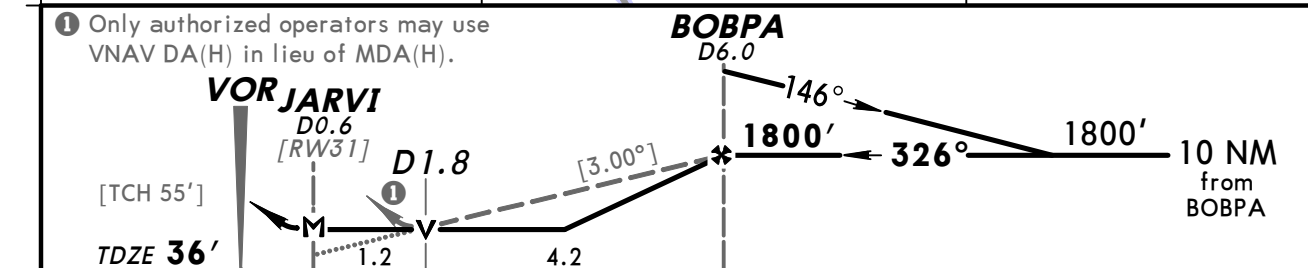
STRAIGHT-IN LANDING RWY 31

MDA(H) **620'** (584')

CIRCLE-TO-LAND

A	1	Max Kts	MDA(H)
B	1 1/4	90	620' (584') - 1
C	1 1/2	120	620' (584') - 1 1/4
D	1 3/4	140	620' (584') - 1 1/2
		165	680' (644') - 2

HARLINGEN, TEXAS
VOR DME Z Rwy 31



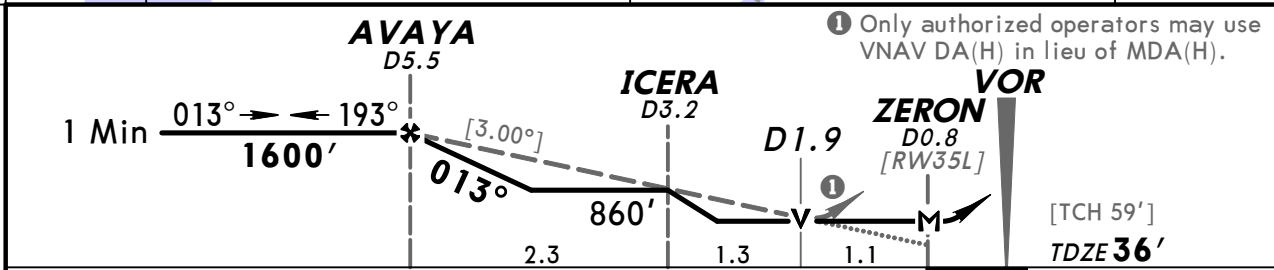
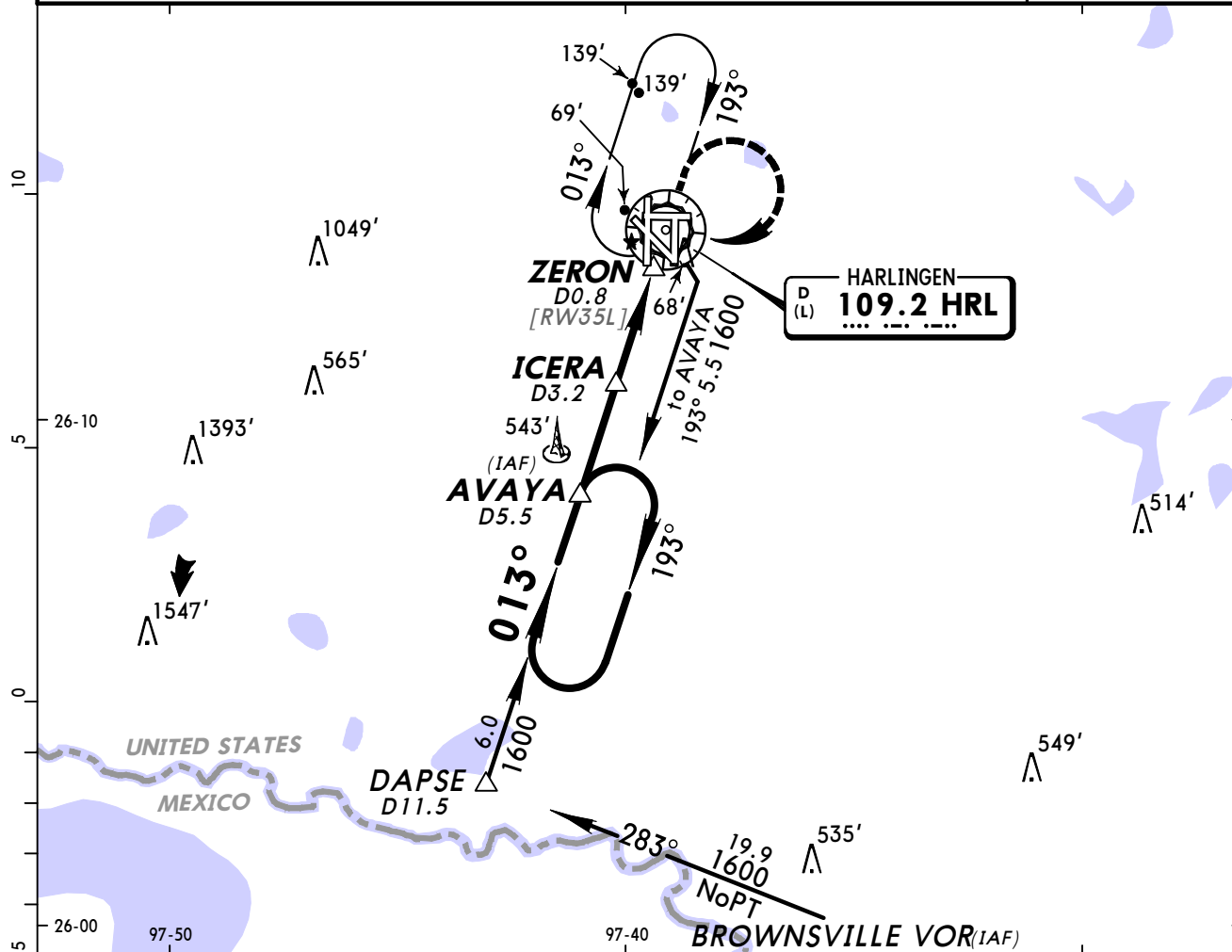
STRAIGHT-IN LANDING RWY 31		CIRCLE-TO-LAND	
MDA(H) 480' (444')		Max Kts	MDA(H)
A	1	90	500' (464')-1
B		120	
C	1 1/4	140	500' (464')-1 1/2
D		165	680' (644')-2

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TM

BRIEFING STRIP

*ATIS (ASOS O/T)		VALLEY Approach (R)		*HARLINGEN Tower		*Ground	
124.85		120.7		CTAF 119.3		121.7	
VOR HRL 109.2	Final Apch Crs 013°	Minimum Alt AVAYA 1600' (1564')	MDA(H) 440' (404')	Apt Elev 36' TDZE 36'			
MISSED APCH: Climb to 800' then climbing RIGHT turn to 1600' direct HRL VOR and hold.							
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'			
1. Pilot controlled lighting 119.3.				MSA HRL VOR			



Gnd speed-Kts	70	90	100	120	140	160	VASI-L	800'	1600'	D →	HRL 109.2
Descent angle [3.00°]	372	478	531	637	743	849					
MAP at ZERON/D0.8											

STRAIGHT-IN LANDING RWY 35L				CIRCLE-TO-LAND			
MDA(H) 440' (404')				MDA(H)			
A	1			Max Kts			
B				90	500' (464')-1		
C	1 1/4			120			
D				140	500' (464')-1 1/2		
				165	680' (644')-2		

General Information

Location: Houston TX USA

IATA Code: IAH

Lat/Long: N29° 59.1' W095° 20.5'

Elevation: 97 ft

Airport Use: Public

Magnetic Variation: 3.1 °E

Sectional Chart: Houston

Fuel Types: 100 Octane (LL), Jet A

Oxygen Types: Low Pressure

Repair Types: Major Airframe, Major Engine

Customs: Upon Prior Request

Airport Type: IFR

Landing Fee: No

Control Tower: Yes

Jet Start Unit: Yes

LLWS Alert: Yes

Beacon: Yes

Sunrise: 1250 Z

Sunset: 0019 Z,

Runway Information

Runway: 08L

Length x Width: 9000 ft x 150 ft

Surface Type: concrete

TDZ-Elev: 96 ft

Lighting: Edge, ALS, Centerline, TDZ

Runway: 08R

Length x Width: 9402 ft x 150 ft

Surface Type: concrete

TDZ-Elev: 97 ft

Lighting: Edge, ALS, Centerline, TDZ

Runway: 09

Length x Width: 10000 ft x 150 ft

Surface Type: asphalt

TDZ-Elev: 92 ft

Lighting: Edge, ALS, Centerline

Runway: 15L

Length x Width: 12001 ft x 150 ft

Surface Type: concrete

TDZ-Elev: 97 ft

Lighting: Edge, Centerline

Runway: 15R
Length x Width: 9999 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 97 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 26L
Length x Width: 9402 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 97 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 26R
Length x Width: 9000 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 97 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 27
Length x Width: 10000 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 88 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 33L
Length x Width: 9999 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 93 ft
Lighting: Edge, Centerline, TDZ

Runway: 33R
Length x Width: 12001 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 89 ft
Lighting: Edge, ALS, Centerline

Communication Information

ATIS 124.05
Houston Tower 127.3
Houston Tower 125.35
Houston Tower 120.725
Houston Tower 135.15
Houston Tower 118.175
Houston Ground Control 118.575
Houston Ground Control 121.7
Houston Ground Control 119.95 Secondary
Ramp Control Ramp/Taxi Control 131.275
Ramp Control Ramp/Taxi Control 130.825
Ramp Control Ramp/Taxi Control 121.625
Houston Clearance Delivery 128.1
Houston Approach Control 124.35
Houston Approach Control 120.05 Initial Contact
Houston App TCA 123.8 (226°-315°)

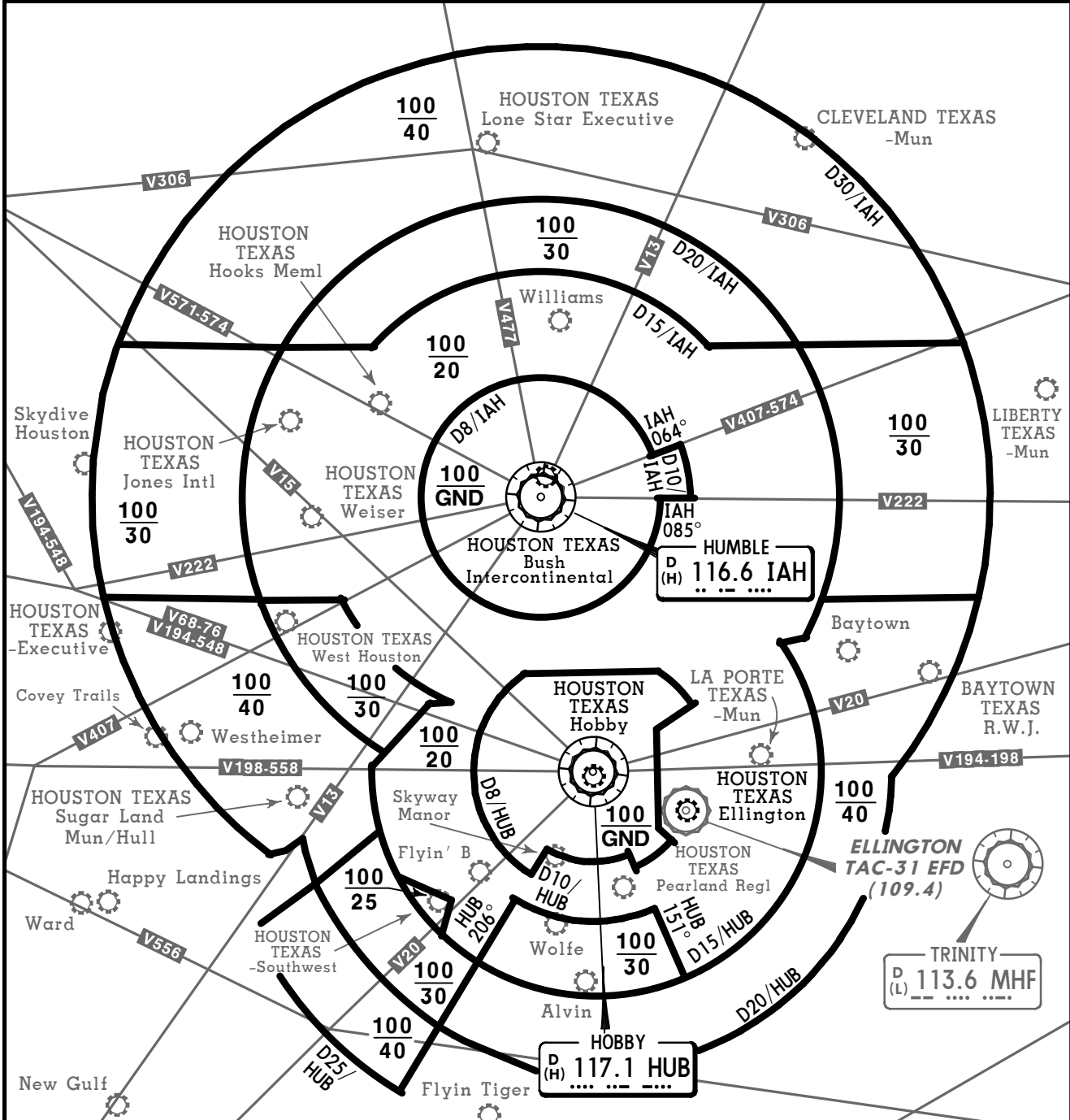
Houston App TCA 134.45 (136°-225°)
Houston App TCA 119.7 (316°-45°)
Houston App TCA 133.6 (46°-135°)
Houston Departure Control 133.6
Houston Departure Control 132.25
Houston Departure Control 127.125
Houston Departure Control 126.675
George Bush Intercontinen Unicom 122.95
Montgomery Co Flight Service Station 122.4 RCO

HOUSTON CLASS B AIRSPACE

CLASS B AIRSPACE VFR COMMUNICATIONS

N	Houston App	119.7
E	Houston App	133.6

S	Houston App	134.45
W	Houston App	123.8



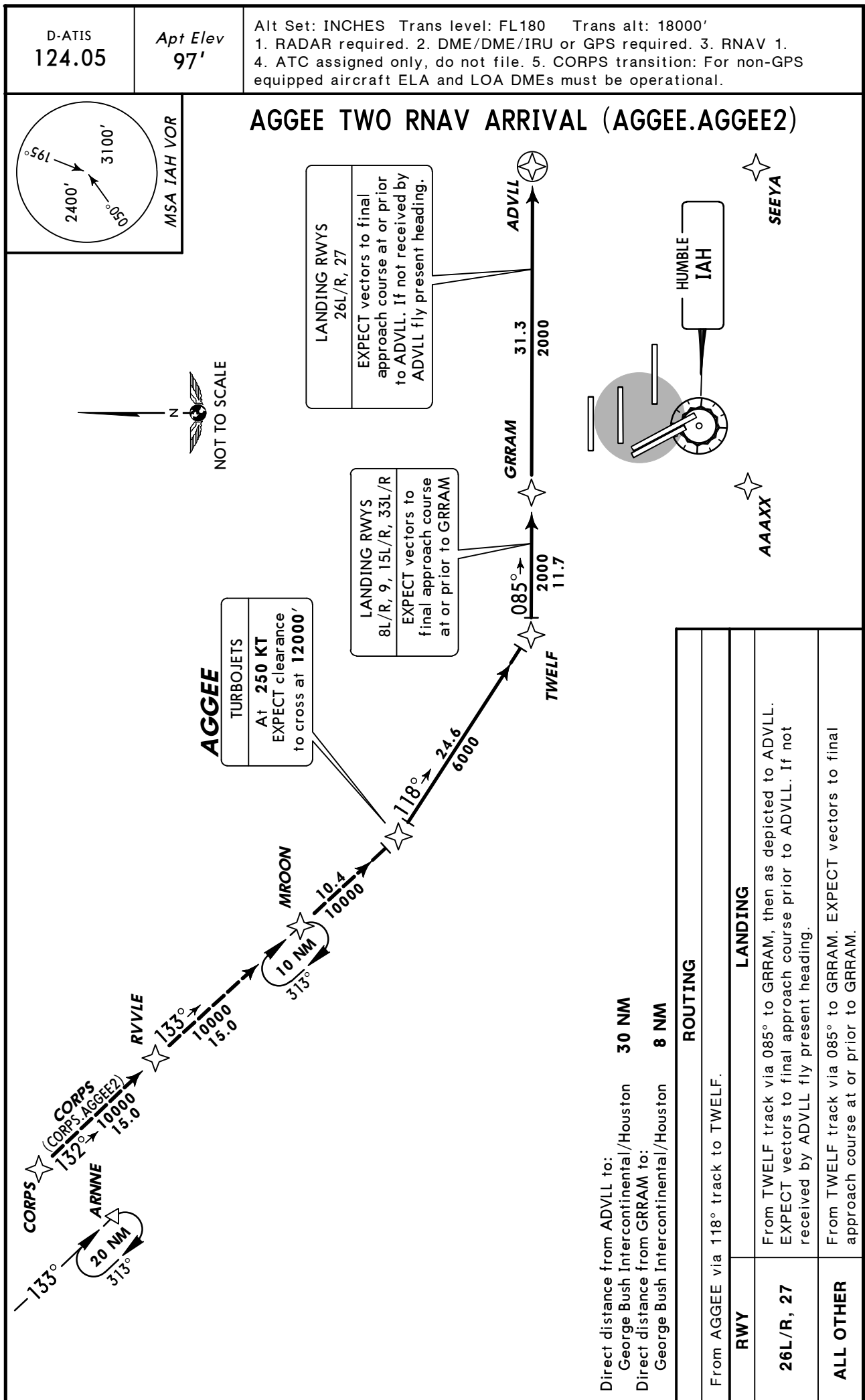
FOR OPERATING RULES AND PILOT AND EQUIPMENT REQUIREMENTS
SEE FAR 91.131, 91.117 AND 91.215

FLIGHT PROCEDURES

IFR Flights. Aircraft within Class B airspace are required to operate in accordance with current IFR procedures.

VFR Flights-

- a. Arriving aircraft should contact Houston Approach Control on the specified frequencies. Although arriving aircraft may be operating beneath the floor of Class B airspace on initial contact, communications should be established with Approach Control for sequencing and spacing purposes.
- b. Aircraft departing the primary airport are requested to advise clearance delivery prior to taxiing of their intended altitude and direction of flight to depart Class B airspace. Aircraft departing from other than Houston Intercontinental Airport whose route of flight would penetrate Class B airspace should give this information to ATC on appropriate frequencies.
- c. Aircraft desiring to transit Class B airspace must obtain an ATC clearance and will be handled on an ATC workload permitting basis.

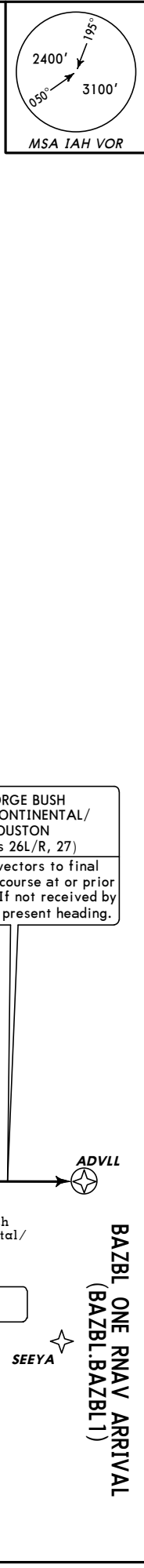


GEORGE BUSH
INTERCONTINENTAL/
HOUSTON D-ATIS
124.05

Alt Set: INCHES
Trans level: FL180
Trans alt: 18000'

1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. COLLEGE STATION and ILEXY transitions: For non-GPS equipped aircraft TNV DME
must be operational. 5. COWBOY transition: For non-GPS equipped aircraft CQY, LOA
and TNV DMEs must be operational.

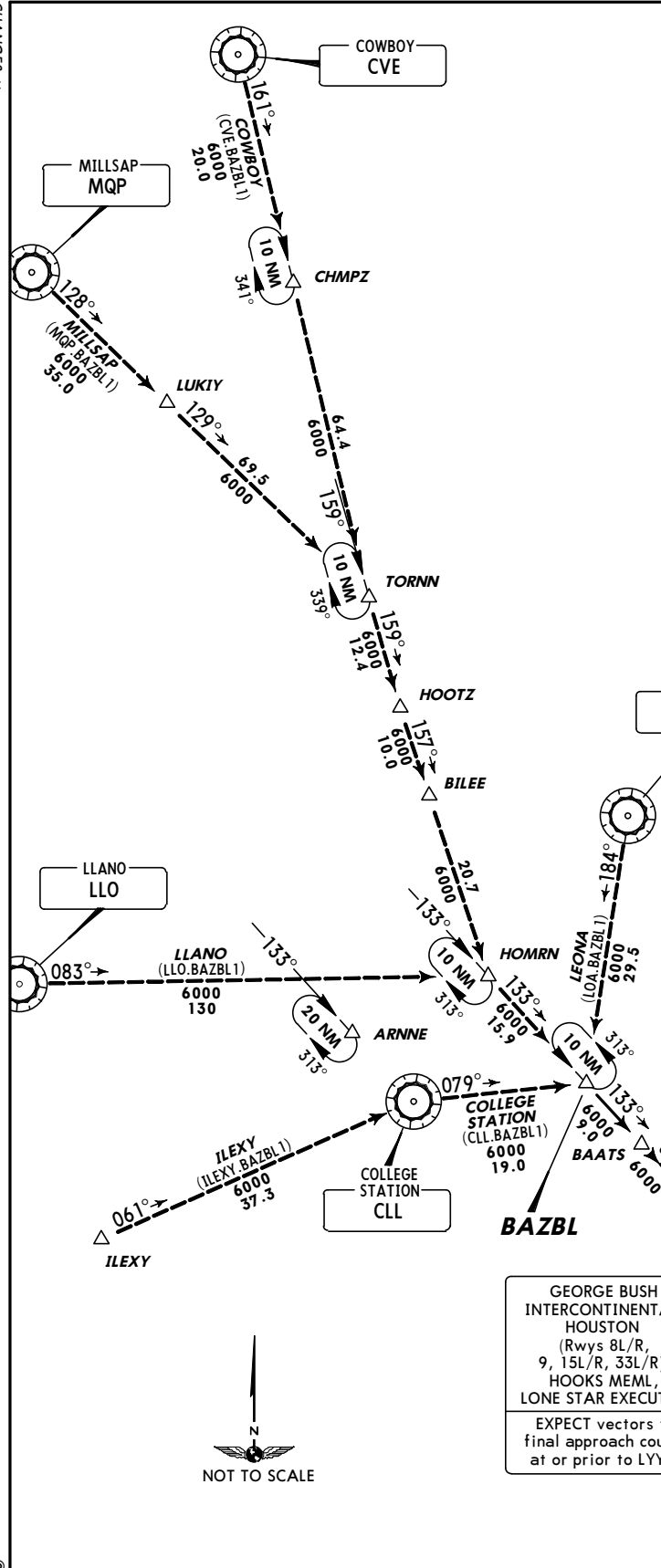
6. LEONA transition: For non-GPS equipped aircraft, CLL and TNV DMEs must be
operational. 7. LLANO transition: For non-GPS equipped aircraft CLL, CWR, LOA and
TNV DMEs must be operational. 8. MILLSAP transition: For non-GPS equipped aircraft
ACT, GNL, LOA and TNV DMEs must be operational. 9. Also Serves



Direct distance from ADVLL to:
George Bush Intercontinental/Houston 30 NM

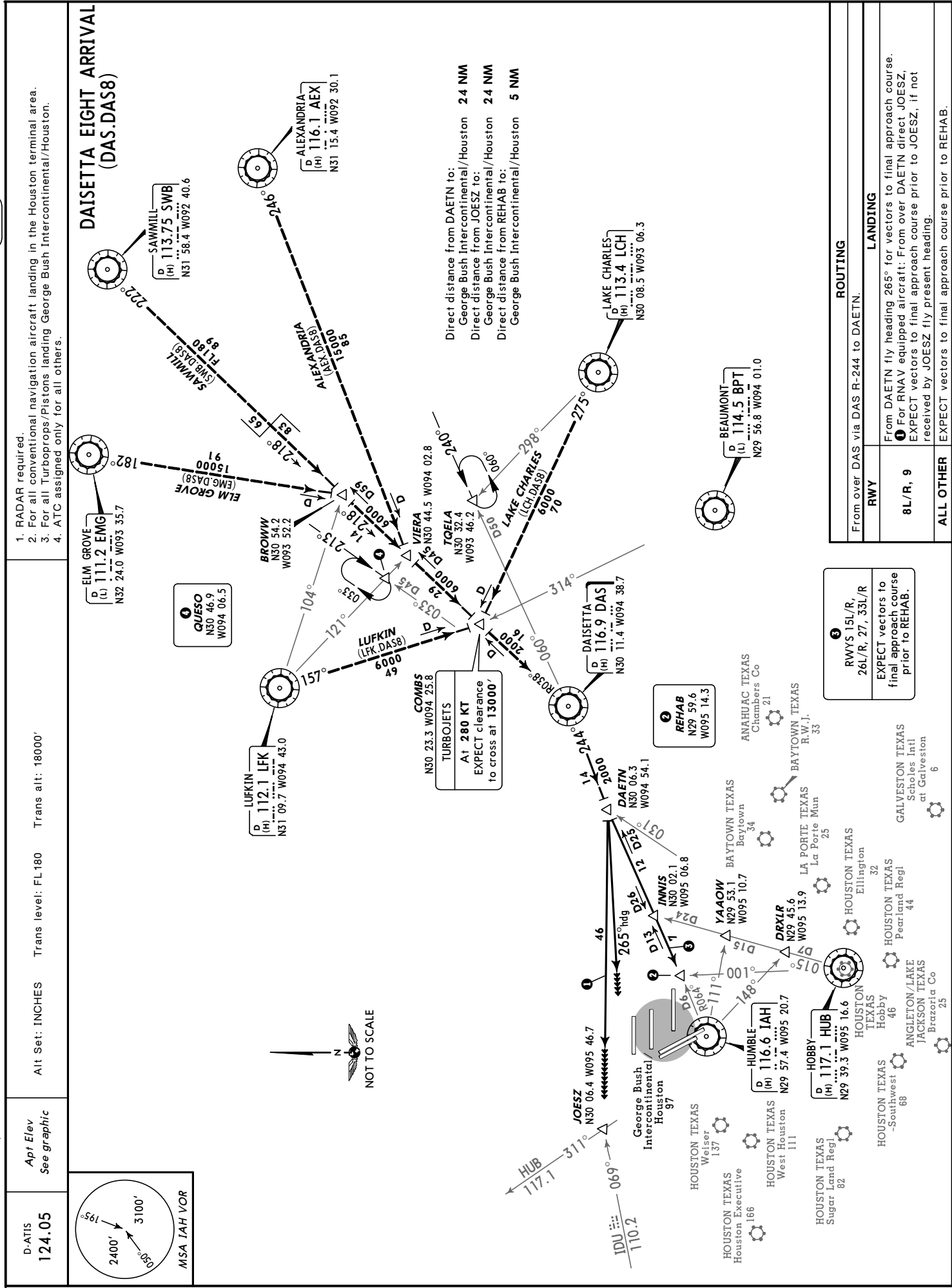
Direct distance from LYYTE to:
George Bush Intercontinental/Houston 11 NM

Direct distance from LYYTE to:
AIRPORTS SERVED
Hooks Meml 4 NM
Lone Star Executive 15 NM



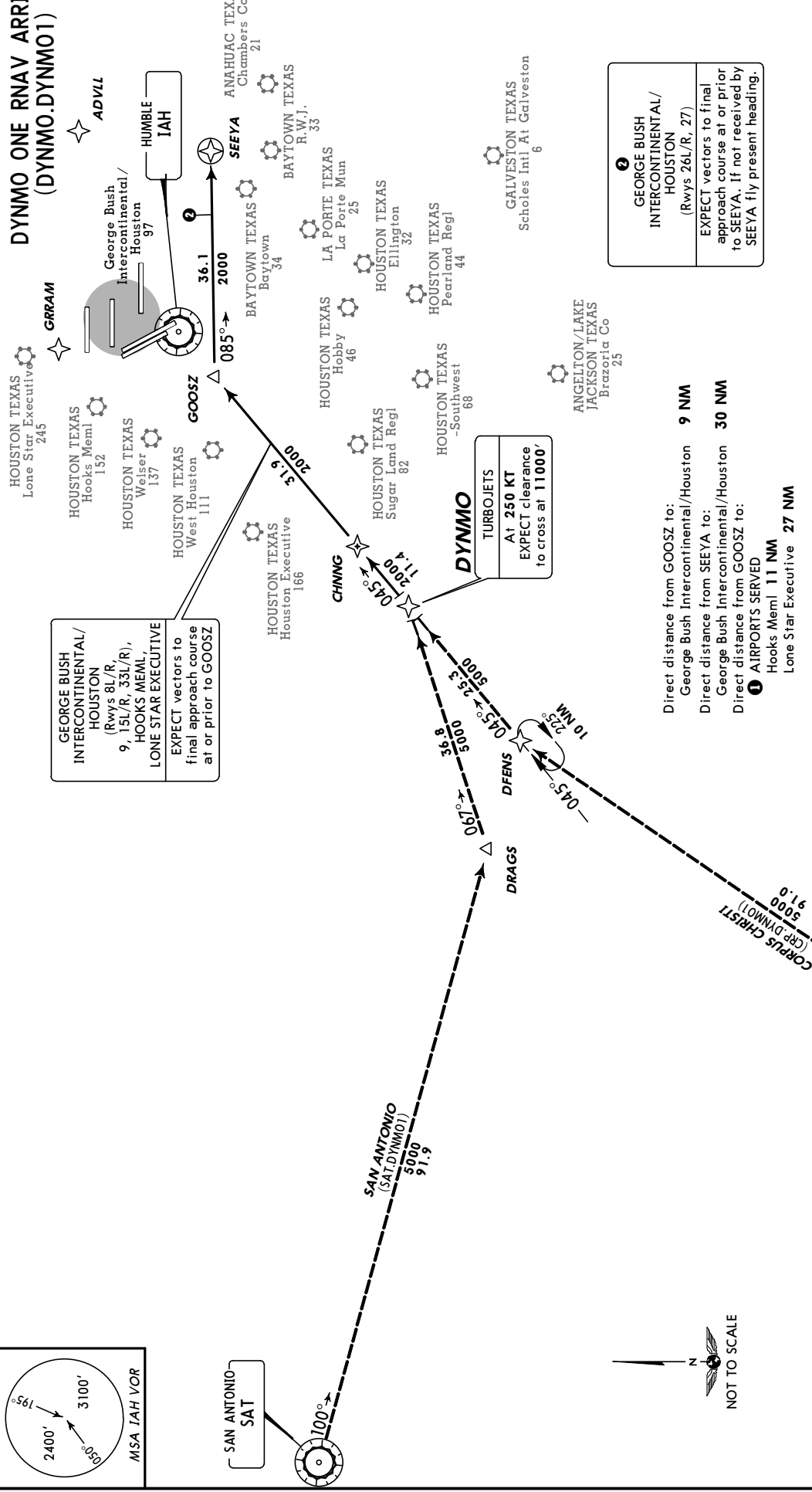
ROUTING	
From BAZBL via 133° track to BAATS. Then as depicted to RIICE.	
RWY	LANDING GEORGE BUSH INTERCONTINENTAL/HOUSTON
26L/R, 27	From RIICE via 133° track to BRKMN. Then as depicted to ADVLL. EXPECT vectors to final approach course at or prior to ADVLL. If not received by ADVLL, fly present heading.
ALL OTHER	From RIICE via 133° track to BRKMN. Then as depicted to LYYTE. EXPECT vectors to final approach course at or prior to LYYTE.
LANDING AIRPORTS SERVED	
From RIICE via 133° track to BRKMN. Then as depicted to LYYTE. EXPECT vectors to final approach course at or prior to LYYTE.	

KIAH/IAH
GEORGE BUSH
INTERCONTINENTAL/HOUSTON



Alt Set: INCHES Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. ATC assigned only, do not file.

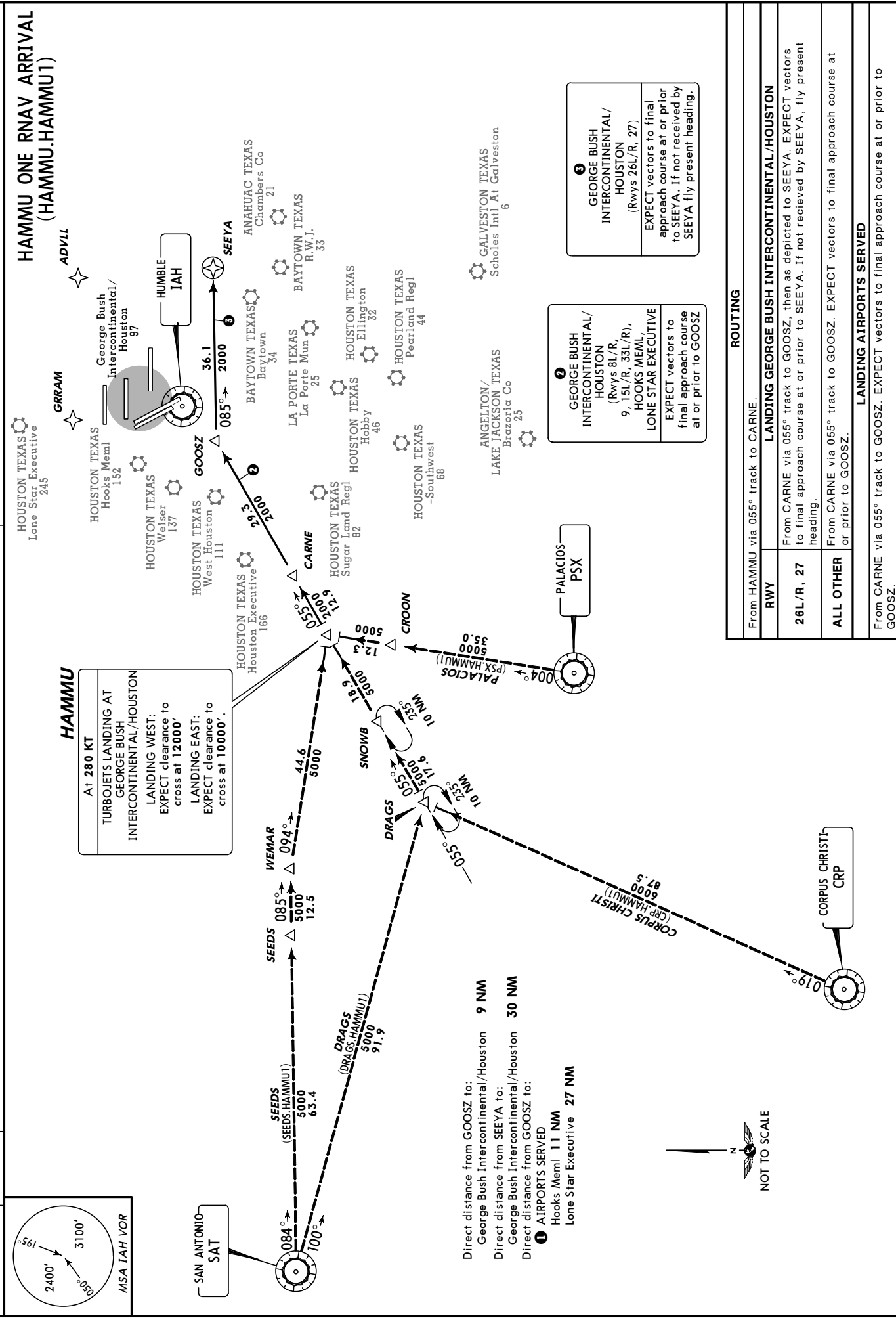
5. CORPUS CHRISTI transition: For non-GPS equipped aircraft ELA, HUB, IAH, PSX and VCT DMEs must be operational. 6. SAN ANTONIO transition: For non-GPS equipped aircraft CWK, ELA, HUB, IAH, PSX and SAT DMEs must be operational. 7. Also Serves 1

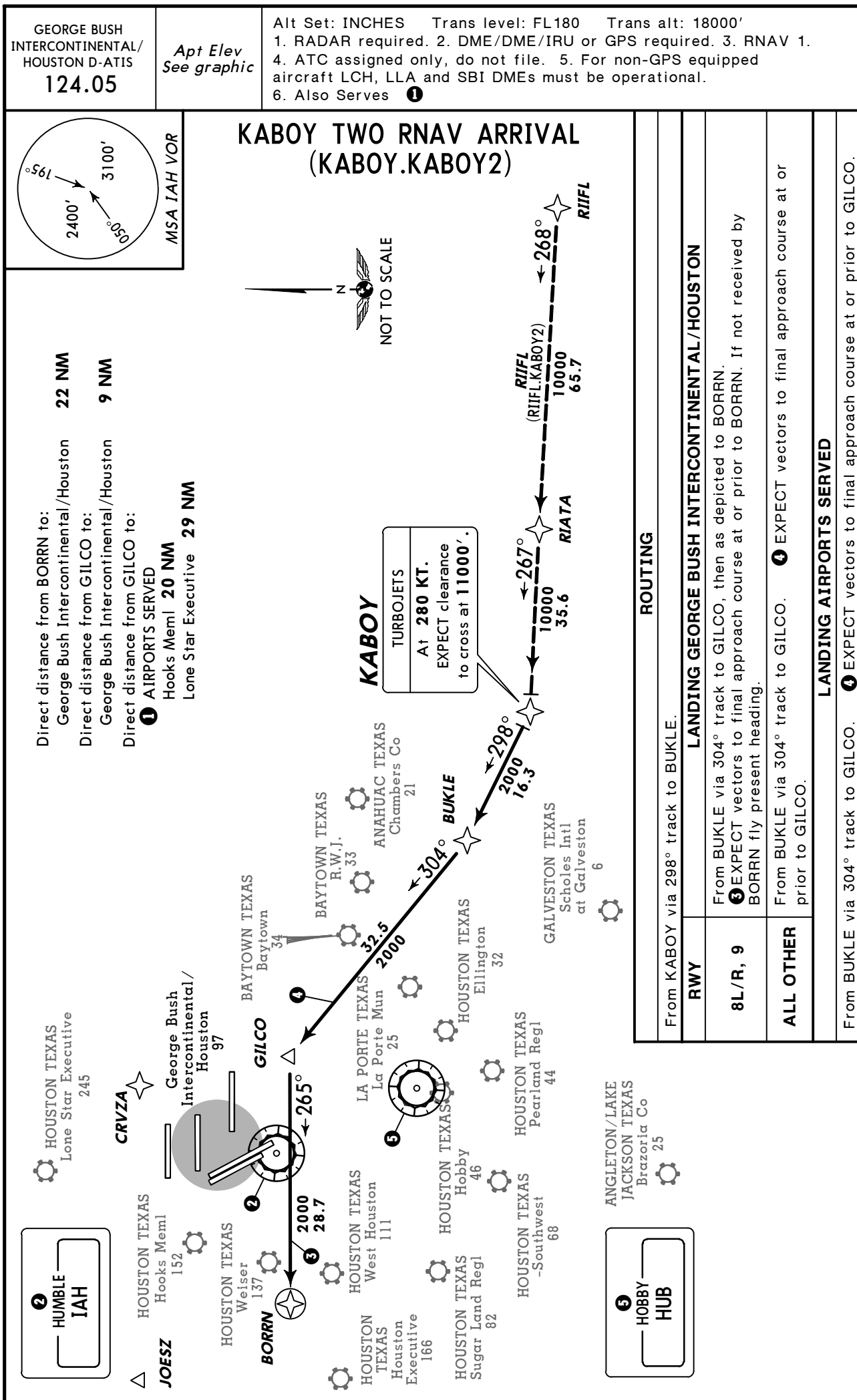


ROUTING	
From DYNMO via 045° track to CHNNG.	
RWY	LANDING GEORGE BUSH INTERCONTINENTAL/HOUSTON
26L/R, 27	From CHNNG via 045° track to GOOSZ, then as depicted to SEEYA. EXPECT vectors to final approach course at or prior to SEEYA. If not received by SEEYA, fly present heading.
ALL OTHER	From CHNNG via 045° track to GOOSZ. EXPECT vectors to final approach course at or prior to GOOSZ.
LANDING AIRPORTS SERVED	
From CHNNG via 045° track to GOOSZ. EXPECT vectors to final approach course at or prior to GOOSZ.	

[illegible]

GEORGE BUSH INTERCONTINENTAL/ HOUSTON D-ATIS 124.05	Alt Set: INCHES Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1. 4. CORPUS CHRISTI transition: For non-GPS equipped aircraft IDU, PSX and VCT DMEs must be operational. 5. DRAGS transition: For non-GPS equipped aircraft IDU, PSX, SAT, THX and VCT DMEs must be operational.	6. PALACIOS transition: For non-GPS equipped aircraft VCT DME must be operational. 7. SEEDS transition: For non-GPS equipped aircraft ELA, IDU, SAT and THX DMEs must be operational. 8. Also Serves 1





GEORGE BUSH INTERCONTINENTAL/
HOUSTON D-ATIS
124.05

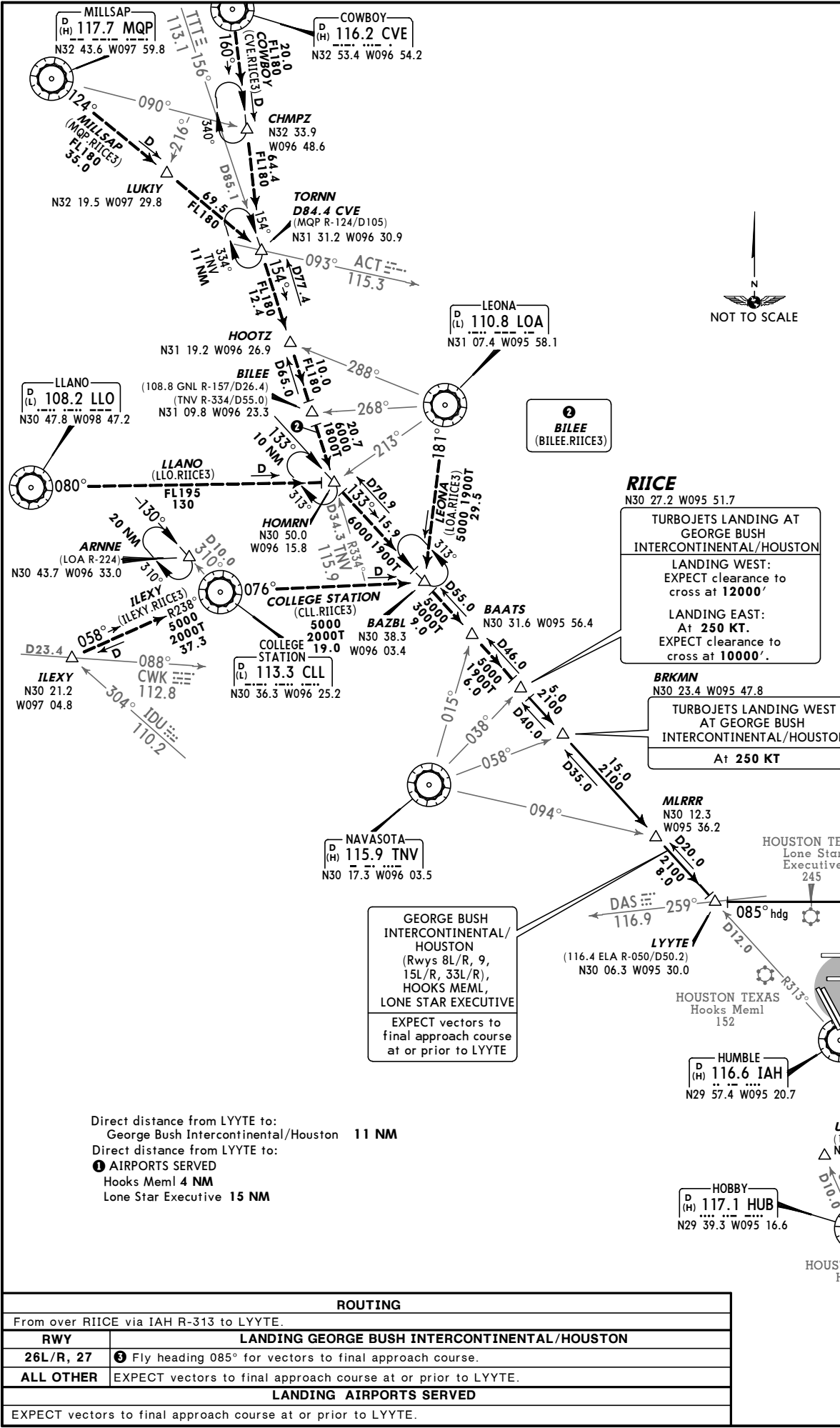
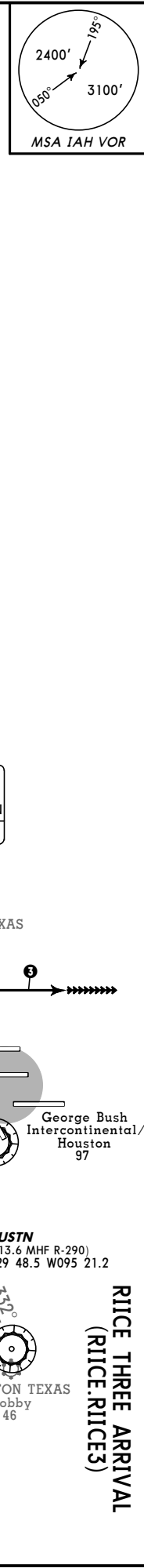
Ap't Elev
See graphic

Alt Set: INCHES

Trans level: FL 180

Trans alt: 18000'

1. For conventional navigation equipped aircraft only. 2. DME/DME/IRU or GPS equipped aircraft file via the BAZBL (RNAV) STAR. 3. ILEXY transition for Austin terminal area departures only. 4. Also Serves 1



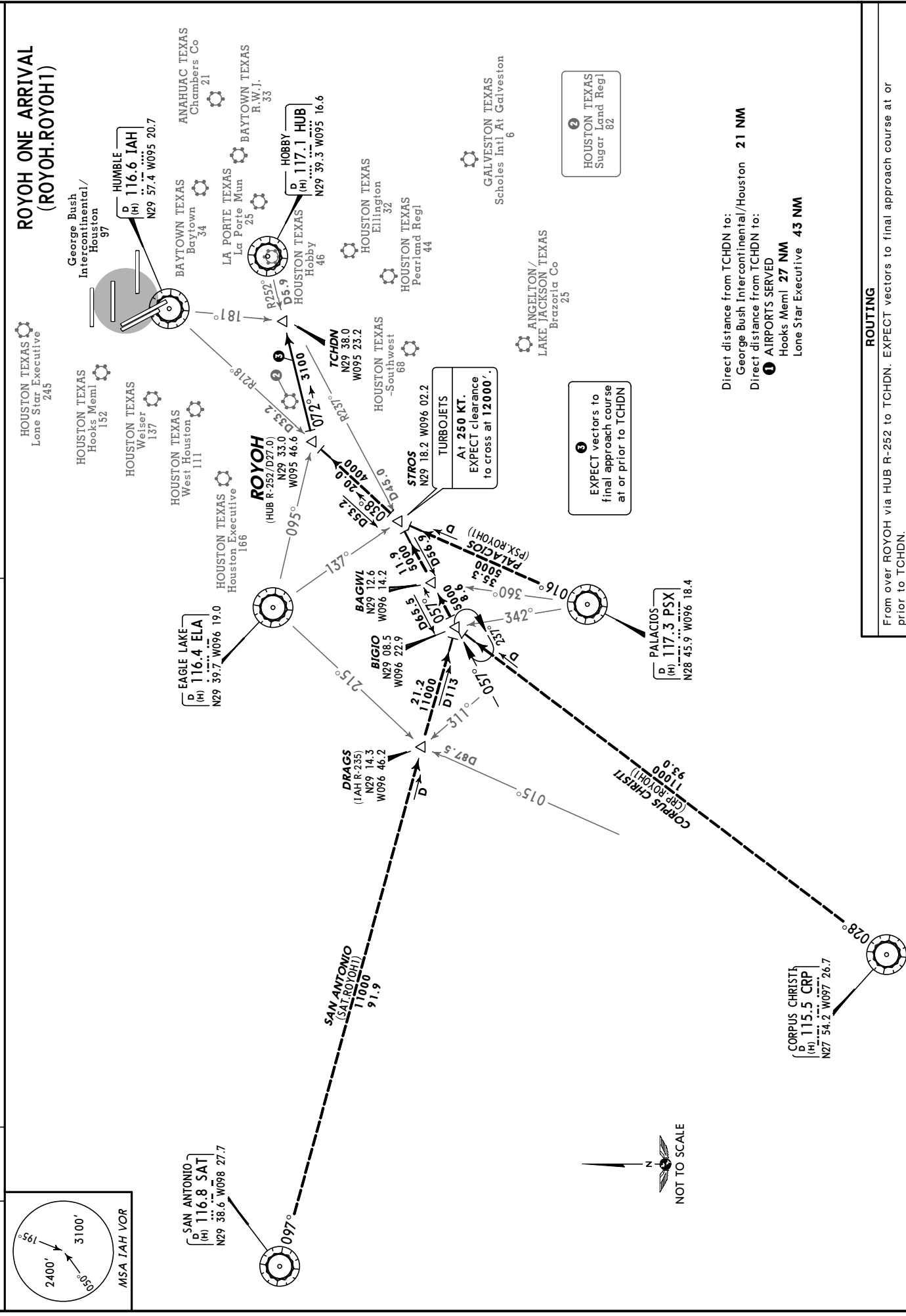
Direct distance from LYYTE to:
George Bush Intercontinental/Houston 11 NM

Direct distance from LYYTE to:
1 AIRPORTS SERVED
Hooks Meml 4 NM
Lone Star Executive 15 NM

ROUTING	
From over RIICE via IAH R-313 to LYYTE.	
RWY	LANDING GEORGE BUSH INTERCONTINENTAL/HOUSTON
26L/R, 27	1 Fly heading 085° for vectors to final approach course.
ALL OTHER	EXPECT vectors to final approach course at or prior to LYYTE.
LANDING AIRPORTS SERVED	
EXPECT vectors to final approach course at or prior to LYYTE.	

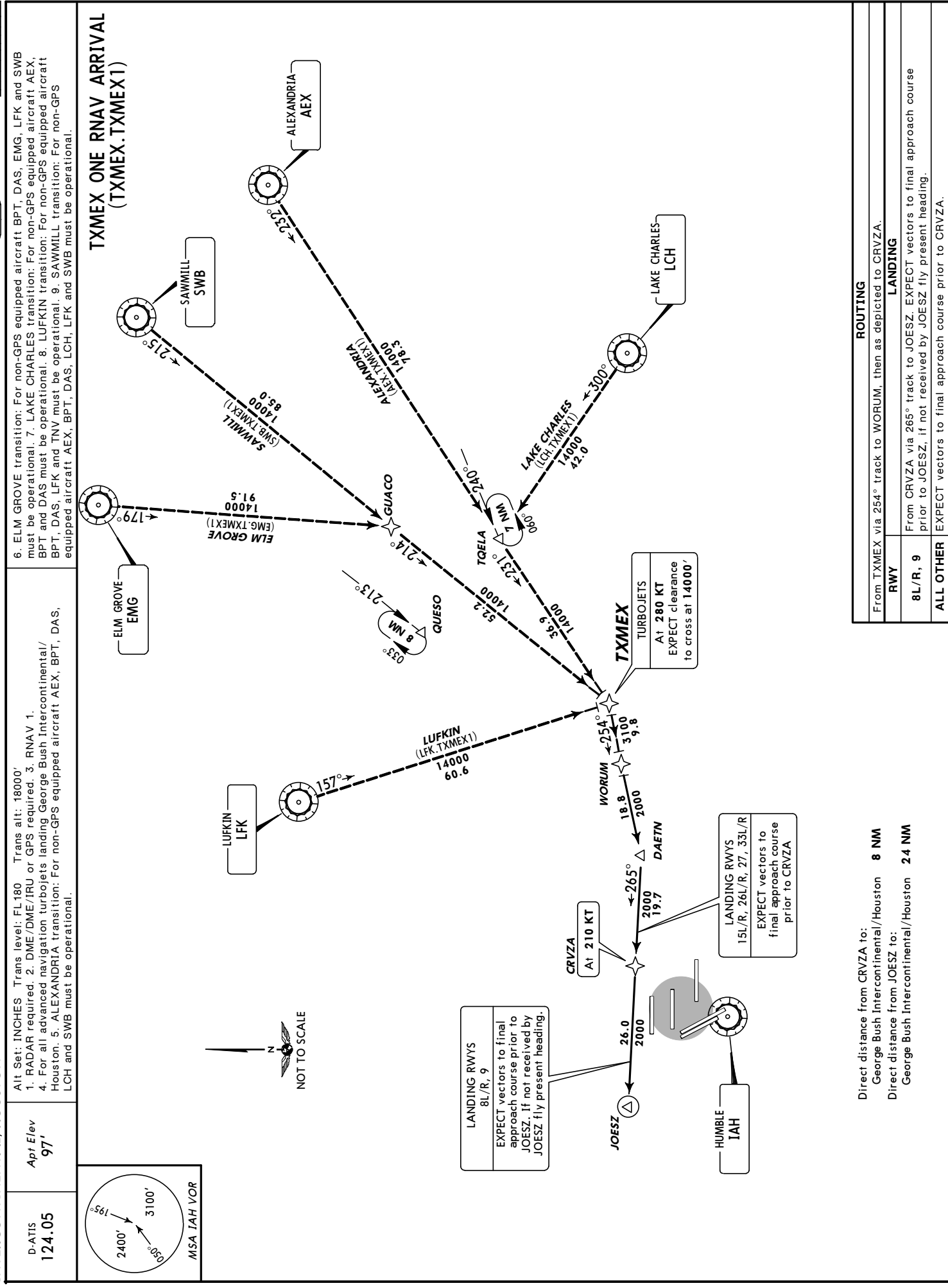
Alt Set: INCHES Trans level: FL180 Trans alt: 18000

1. For conventional navigation equipped aircraft only.
2. DME/DME/IRU or GPS equipped aircraft file via the STROS (RNAV) STAR.
3. ATC assigned only for aircraft landing George Bush Intercontinental/Houston.
4. Also Serves **1**

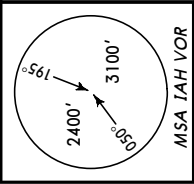


ROUTING

From over ROYOH via HUB R-252 to TCHDN. EXPECT vectors to final approach course at or prior to TCHDN.

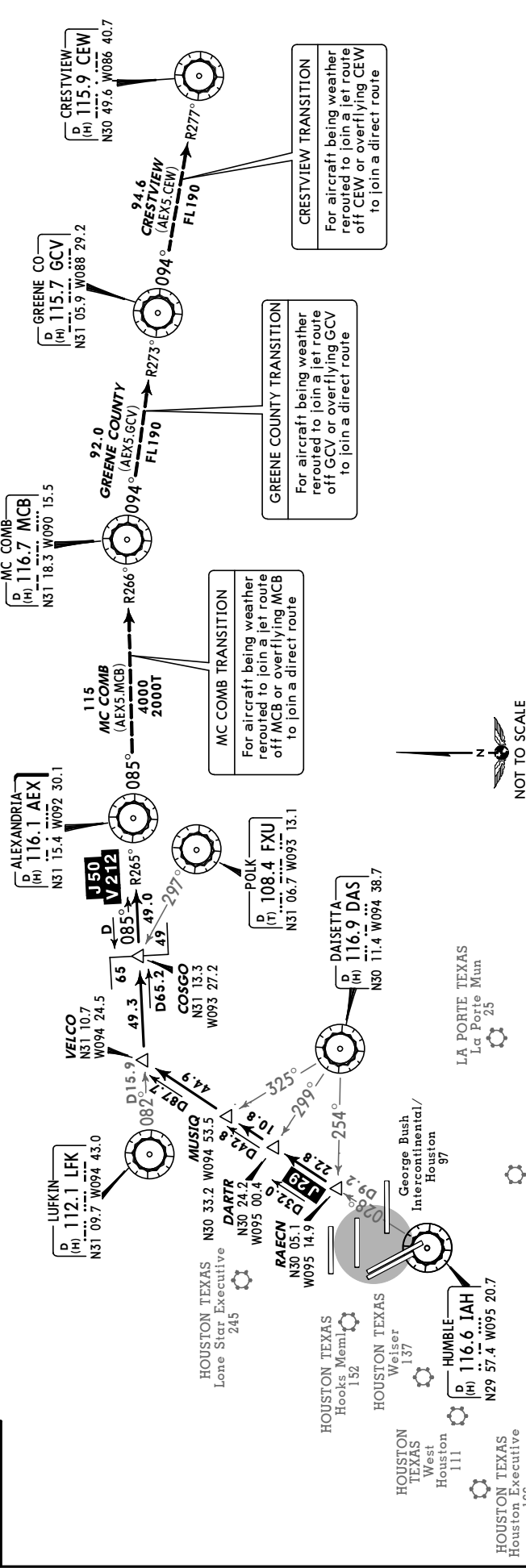


HOUSTON Departure (R)	Trans level: FL180	Trans alt: 18000'	Apt Elev See graphic
North 132.25	East 133.6	South 127.12	West 126.67



ALEXANDRIA FIVE DEPARTURE
(AEX5.AEX)

1. RADAR required.
2. CRESTVIEW, GREENE COUNTY and MC COMB Transitions are ATC assigned only, do not file.
3. Also Serves 1



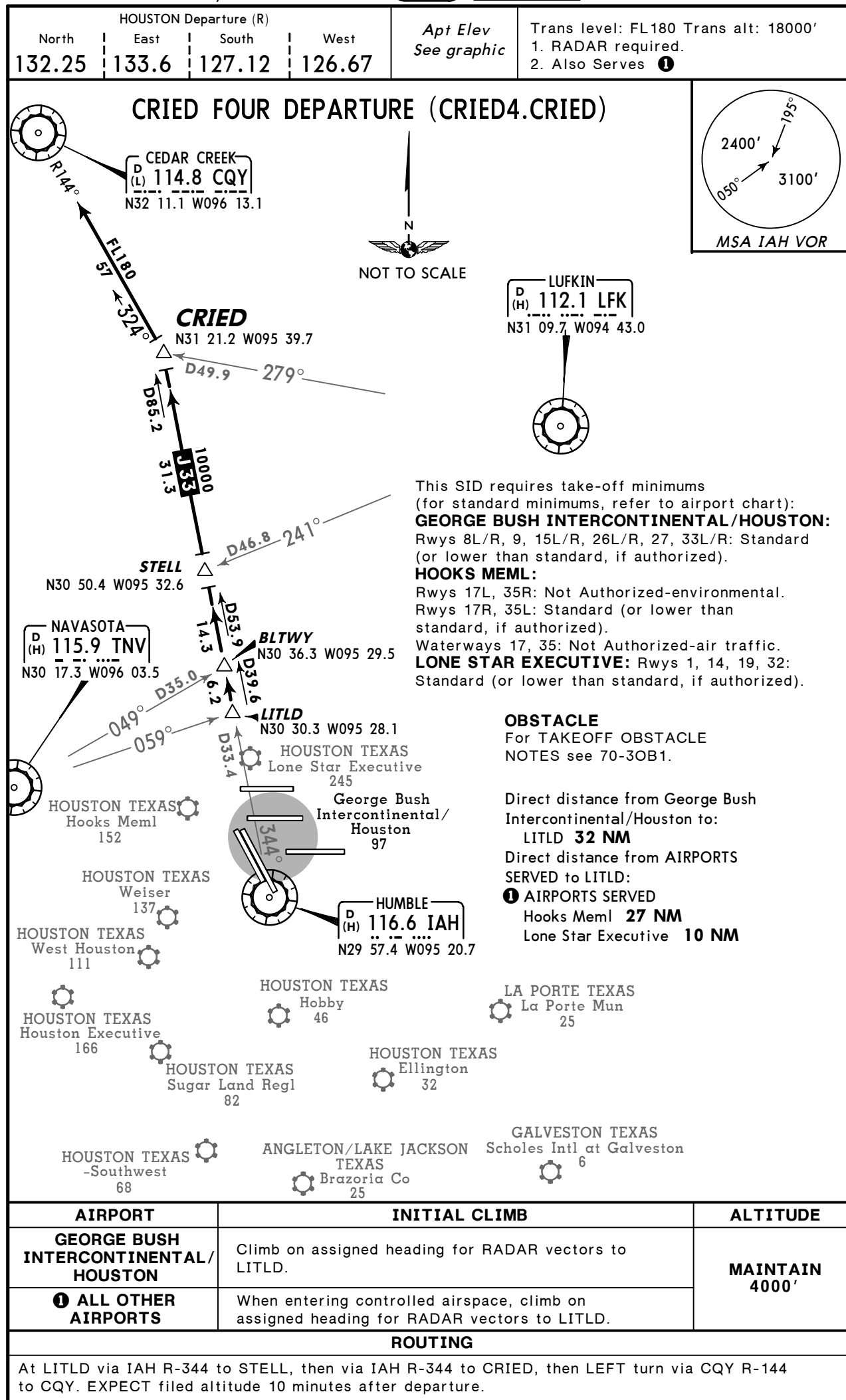
This SID requires take-off minimums (for standard minimums, refer to airport chart):
GEORGE BUSH INTERCONTINENTAL/HOUSTON: Rwy 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard (or lower than standard, if authorized).
HOOKS MEML: Rwy 17L, 35R: Not Authorized-environmental. Rwy 17R, 35L: Standard (or lower than standard, if authorized). Waterways 17, 35: Not Authorized-air traffic.
LONE STAR EXECUTIVE: Rwy 1, 14, 19, 32: Standard (or lower than standard, if authorized).

OBSTACLE

For TAKEOFF OBSTACLE NOTES see 70-30B1.

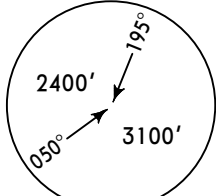
Direct distance from George Bush Intercontinental/Houston to:
RAECN 8 NM
Direct distance from AIRPORTS SERVED to RAECN:
1 AIRPORTS SERVED
Hooks Meml 16 NM
Lone Star Executive 18 NM

AIRPORT	INITIAL CLIMB	ALTITUDE
GEORGE BUSH INTERCONTINENTAL/HOUSTON	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 4000'
1 ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.	
ROUTING		
At RAECN via IAH R-028 to VELCO, then R1GHT turn via LFK R-082 and AEX R-265 to AEX. EXPECT filed altitude 10 minutes after departure.		



ROUTING

At LITLD via IAH R-344 to STELL, then via IAH R-344 to CRIED, then LEFT turn via CQY R-144 to CQY. EXPECT filed altitude 10 minutes after departure.

HOUSTON Departure (R) 132.25	<i>Apt Elev</i> <i>See graphic</i>	Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. For aircraft destined Memphis Intl, or filed via Q-32 or J-42. 3. Also Serves 1	 MSA IAH VOR

EL DORADO THREE DEPARTURE (ELD3.ELD)

This SID requires take-off minimums
(for standard minimums, refer to
airport chart):

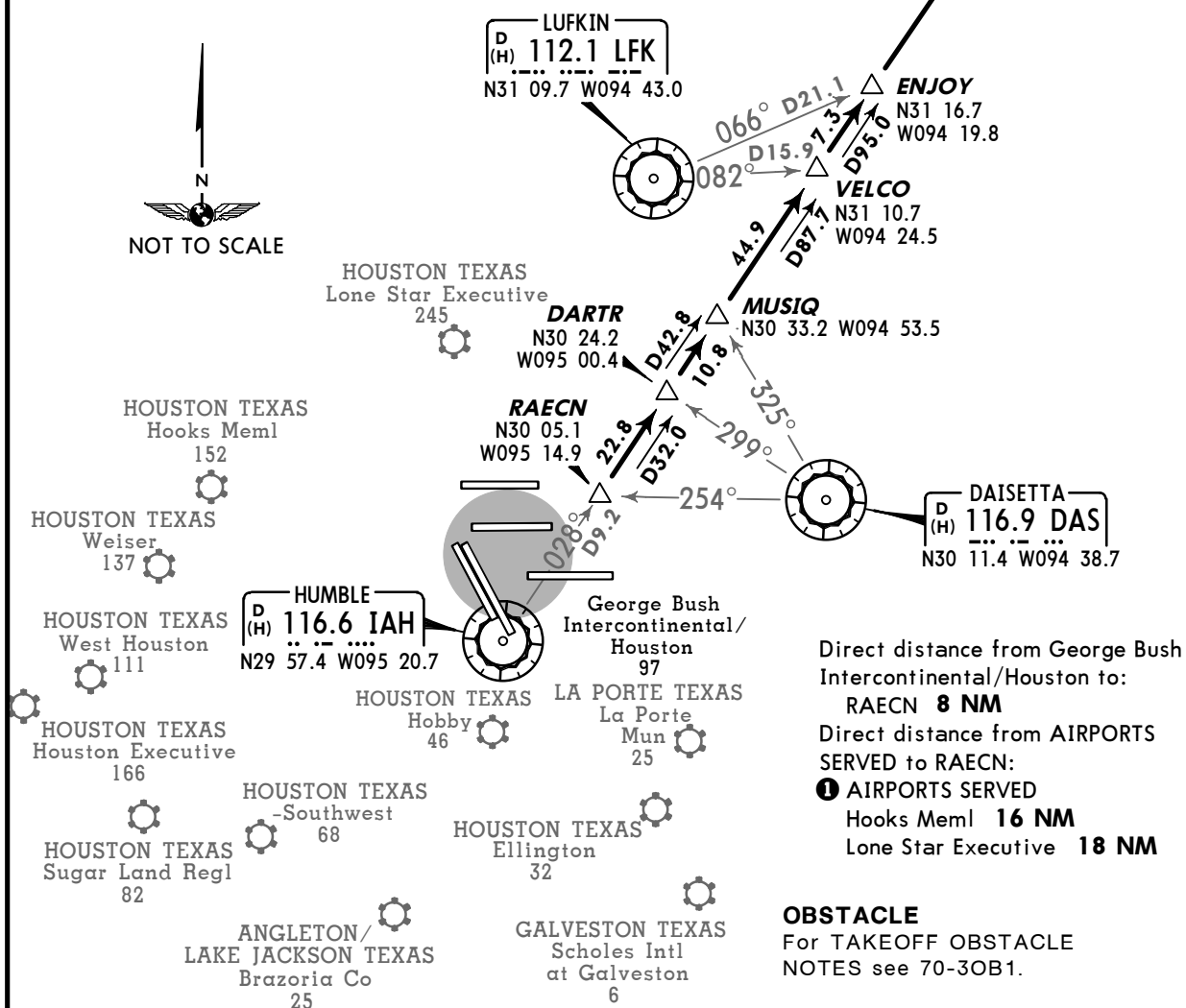
**GEORGE BUSH INTERCONTINENTAL/
HOUSTON:** Rwy 8L/R, 9, 15L/R,
26L/R, 27, 33L/R: Standard (or
lower than standard, if authorized).

HOOKS MEML: Rwy 17L, 35R:
Not Authorized-environmental.

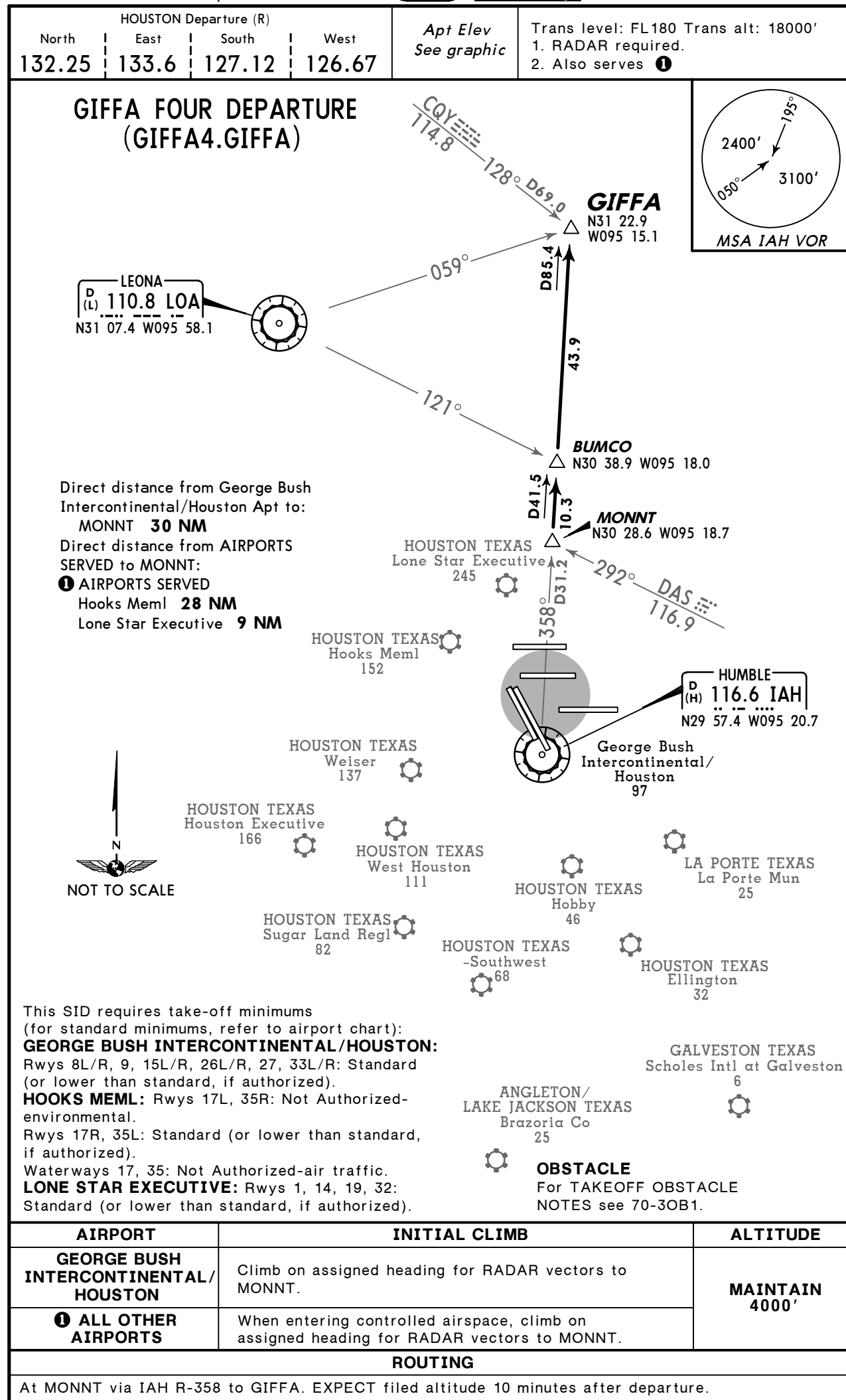
Rwy 17R, 35L: Standard (or lower
than standard, if authorized).
Waterways 17, 35: Not Authorized-
air traffic.

LONE STAR EXECUTIVE:

Rwy 1, 14, 19, 32: Standard (or
lower than standard, if authorized).



AIRPORT	INITIAL CLIMB	ALTITUDE
GEORGE BUSH INTERCONTINENTAL/ HOUSTON	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 4000'
❶ ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.	
ROUTING		
At RAECN via IAH R-028 and the ELD R-208 to ELD. EXPECT filed altitude 10 minutes after departure.		



HOUSTON Departure (R)

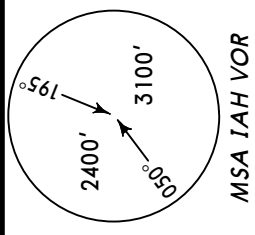
North	East	South	West
132.25	133.6	127.12	126.67

Apt Elev
See graphic

Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. RNAV 1.
3. DME/DME/IRU or GPS required.
4. For non-GPS equipped aircraft BPT, HRV, LCH, LFT, LLA and SBI DMEs must be operational. 5. Also Serves

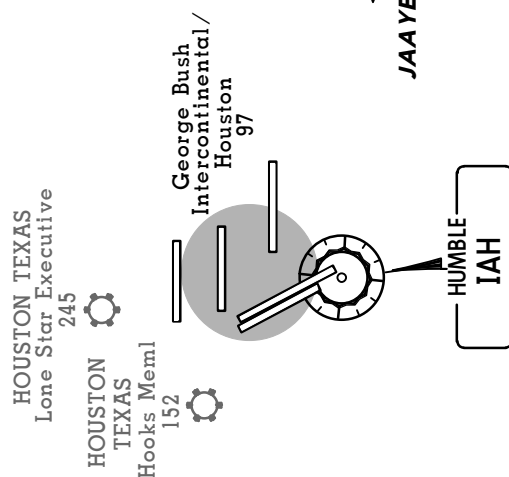
1

GUSTI TWO RNAV DEPARTURE (GUSTI2.GUSTI)



NOT TO SCALE

OBSTACLE
For TAKEOFF OBSTACLE NOTES
see 70-30B1.



This SID requires take-off minimums
(for standard minimums, refer to airport chart):

GEORGE BUSH INTERCONTINENTAL/HOUSTON:

Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard
(or lower than standard, if authorized).

HOOKS MEML: Rwys 17L, 35R: Not Authorized-environmental.

Rwys 17R, 35L: Standard (or lower than standard, if authorized).
Waterways 17, 35: Not Authorized-air traffic.

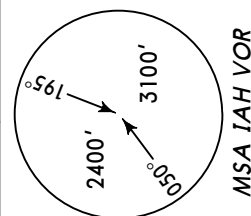
LONE STAR EXECUTIVE: Rwys 1, 14, 19, 32: Standard
(or lower than standard, if authorized).

Direct distance from George Bush
Intercontinental/Houston to:
JAAVE **54 NM**
Direct distance from AIRPORTS
SERVED to JAAVE:
1 AIRPORTS SERVED
Hooks Meml **65 NM**
Lone Star Executive **64 NM**

AIRPORT	INITIAL CLIMB	ALTITUDE
GEORGE BUSH INTERCONTINENTAL/ HOUSTON	Climb on assigned heading for RADAR vectors to JAAVE.	MAINTAIN 4000'
① ALL OTHER AIRPORTS	When entering controlled airspace, Climb on assigned heading for RADAR vectors to JAAVE.	
ROUTING		
At JAAVE via 087° track to SPINY, then via 078° track to GUSTI, then via transition. EXPECT filed altitude 10 minutes after departure.		

Trans level: FL180 Trans alt: 18000'

1. RADAR required.
2. Also Serves **①**

[illegible]

OBSTACLE
For TAKEOFF OBSTACLE NOTES see 70-30B1.

LOOKS MENIT 27 NM

AIRPORT	INITIAL CLIMB	ALTITUDE
GEORGE BUSH INTERCONTINENTAL/ HOUSTON	Climb on assigned heading for RADAR vectors to SHYNR.	MAINTAIN 4000'
① ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to SHYNR.	
ROUTING		
At SHYNR via IDU R-085 to BOCCK, then via IDU R-085 to IDU. EXPECT filed altitude 10 minutes after departure.		

This SID requires take-off minimums

(for standard minimums, refer to airport chart):

GEORGE BUSH INTERCONTINENTAL/HOUSTON:
Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard
(or lower than standard, if authorized).

HOOKS MEML: Rwys 17L, 35R: Not Authorized - environmental.

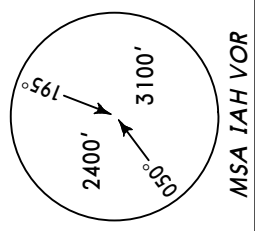
Rwys 17R, 35L: Standard (or lower than standard, if authorized).

Waterways 17, 35: Not Authorized-air traffic.

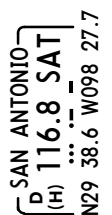
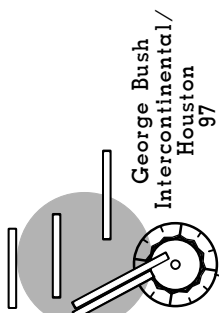
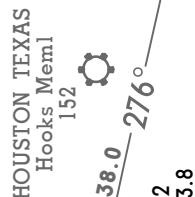
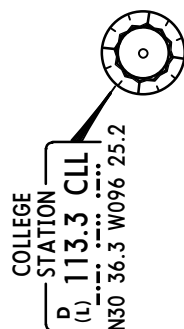
LONE STAR EXECUTIVE: Rlys 1, 14, 19, 32: Standard (or lower than standard, if authorized).

Trans level: FL180 Trans alt: 18000'

1. RADAR required.
2. For aircraft overflying JCT via J-86
filing FL240 or above.
3. Also Serves **①**

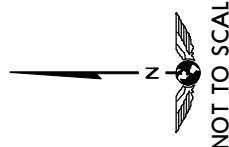


HOUSTON TEXAS
Lone Star Executive



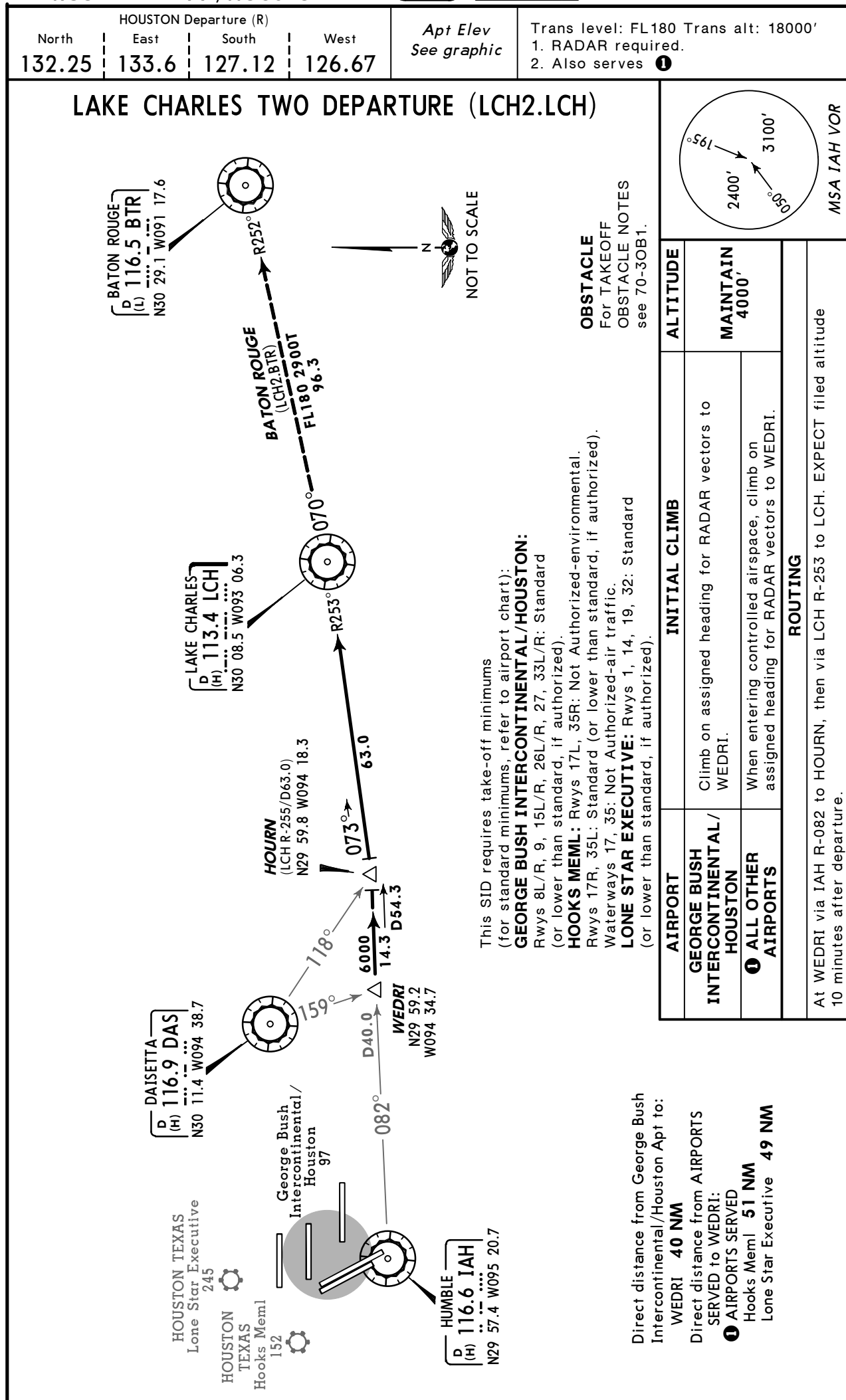
Standard (or lower than standard, if authorized).

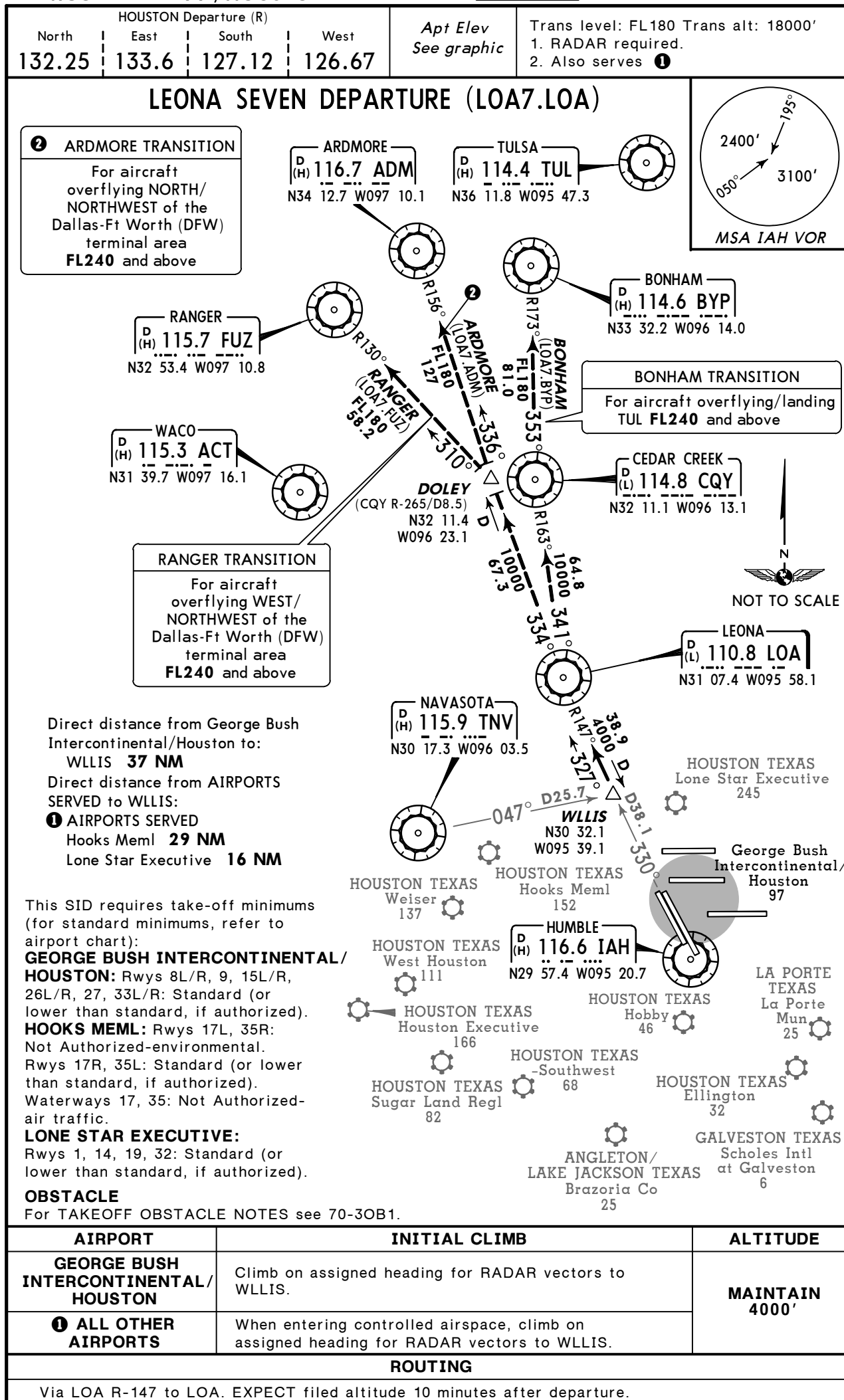
OBSTACLE
For TAKEOFF OBSTACLE
NOTES see 70-30B1.



AIRPORT	INITIAL CLIMB	ALTITUDE
GEORGE BUSH INTERCONTINENTAL/ HOUSTON	Climb on assigned heading for RADAR vectors to CUZZZ.	MAINTAIN 4000'
① ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to CUZZZ.	
ROUTING		
Via IAH R-276 and JCT R-090 to JCT. EXPECT filed altitude 10 minutes after departure.		

Lone Star Executive 38 NM





HOUSTON Departure (R)				Apt Elev See graphic	Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. For aircraft destined LIT, or overflying LIT or PXV. 3. Also serves ①
North	East	South	West		
132.25	133.6	127.12	126.67		

LUFKIN SIX DEPARTURE (LFK6.LFK)

This SID requires take-off minimums

(for standard minimums, refer to airport chart):

GEORGE BUSH INTERCONTINENTAL/HOUSTON:

Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard
(or lower than standard, if authorized).

HOOKS MEML: Rwys 17L, 35R: Not Authorized-
environmental.

Rwys 17R, 35L: Standard (or lower than
standard, if authorized).

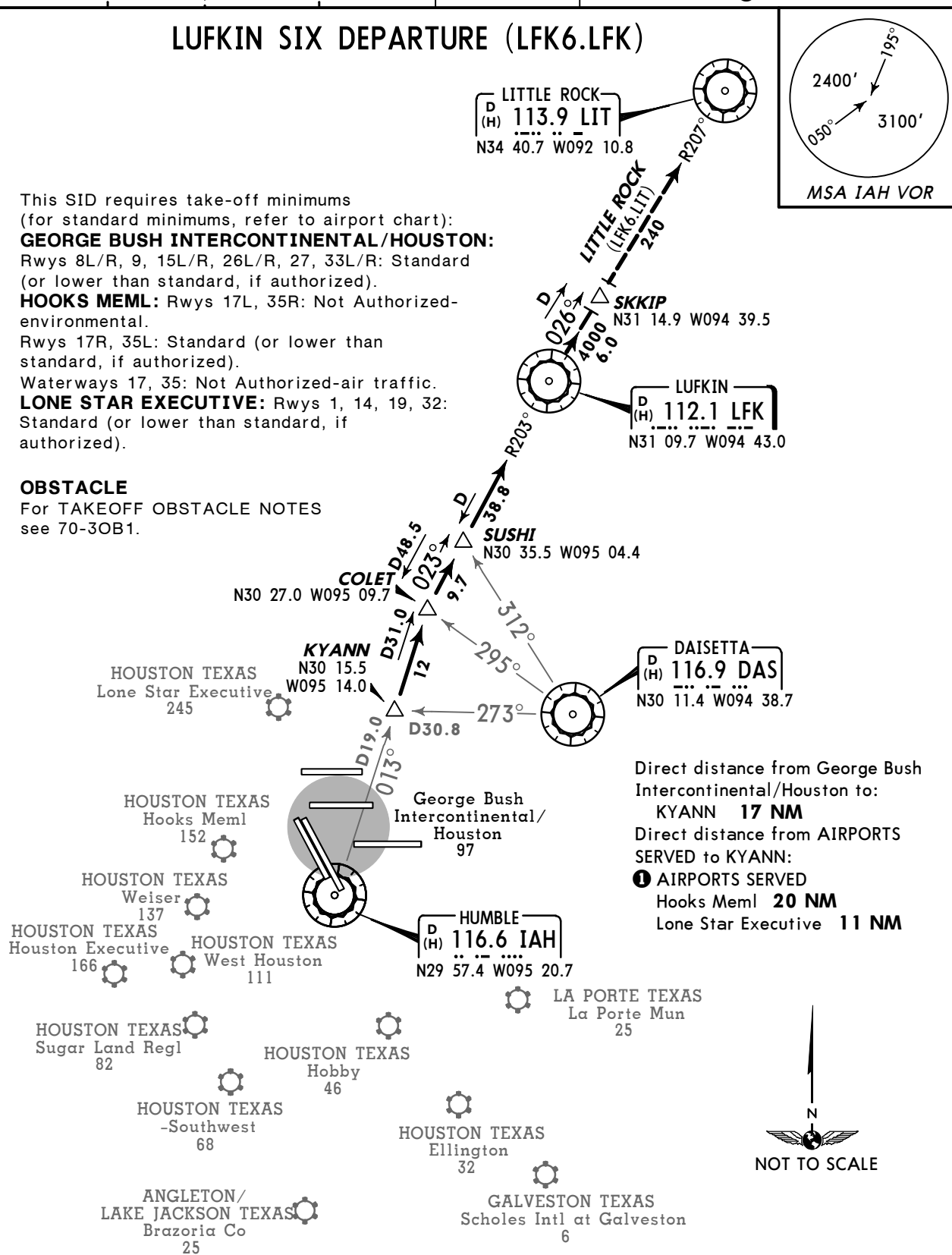
Waterways 17, 35: Not Authorized-air traffic.

LONE STAR EXECUTIVE: Rwys 1, 14, 19, 32:

Standard (or lower than standard, if
authorized).

OBSTACLE

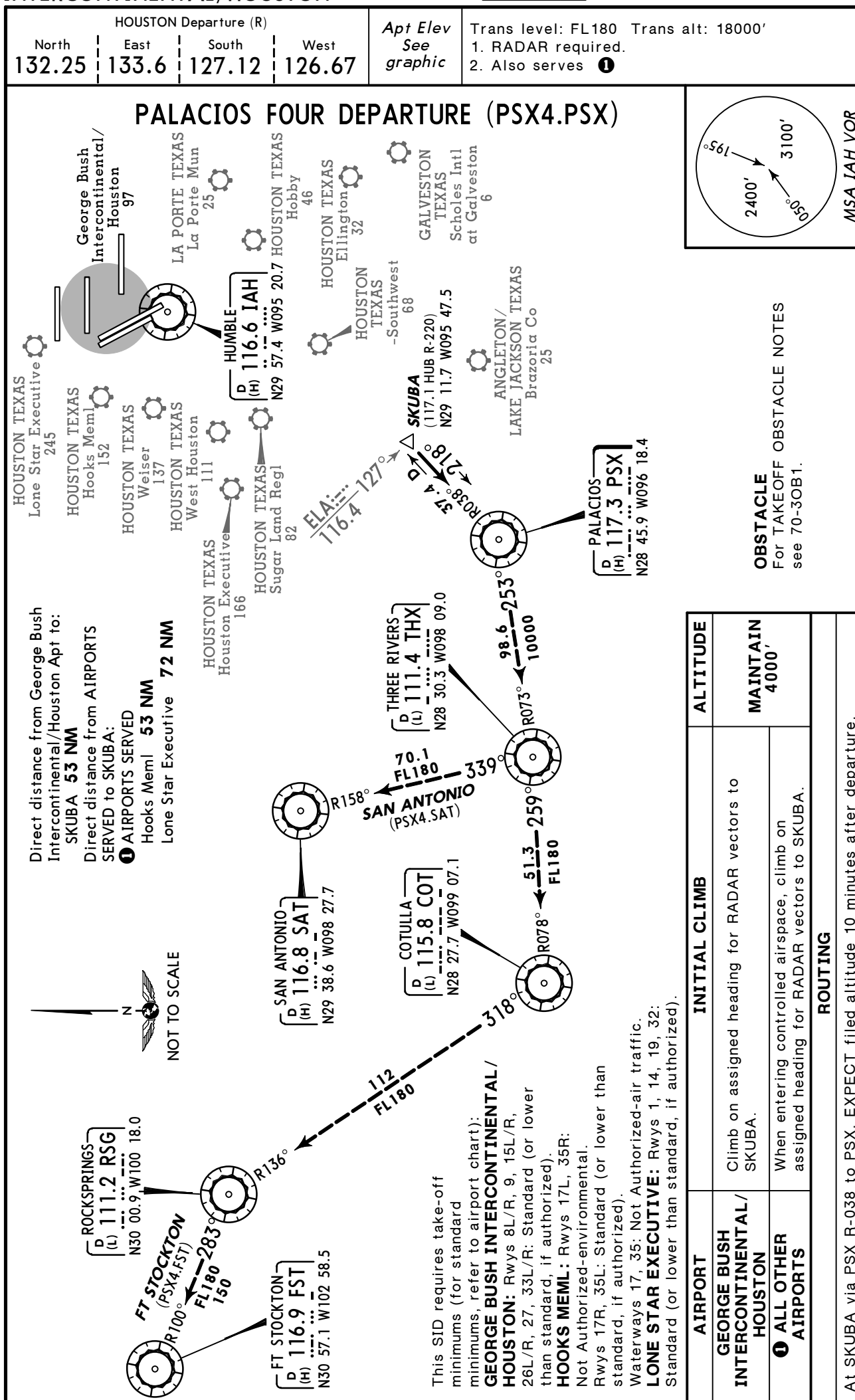
For TAKEOFF OBSTACLE NOTES
see 70-3OB1.



AIRPORT	INITIAL CLIMB	ALTITUDE
GEORGE BUSH INTERCONTINENTAL/HOUSTON	Climb on assigned heading for RADAR vectors to KYANN.	MAINTAIN 4000'
① ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN.	

ROUTING

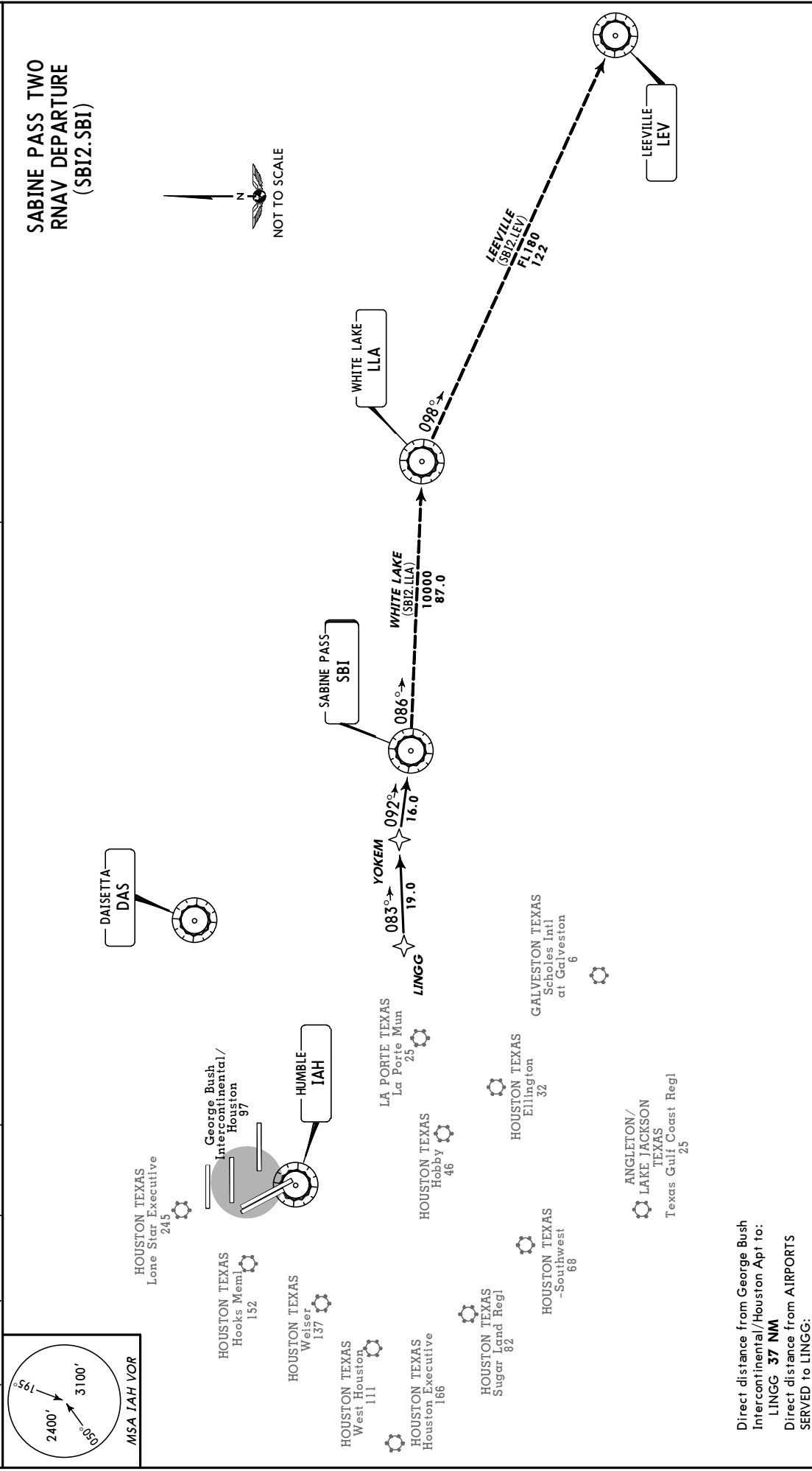
At KYANN via IAH R-013 to COLET, then RIGHT turn via LFK R-203 to LFK. EXPECT filed altitude 10 minutes after departure.



AIRPORT	INITIAL CLIMB	ALTITUDE
GEORGE BUSH INTERCONTINENTAL/HOUSTON	Climb on assigned heading for RADAR vectors to SKUBA.	MAINTAIN 4000'
1 ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA.	
ROUTING		
At SKUBA via PSX R-038 to PSX. EXPECT filed altitude 10 minutes after departure.		

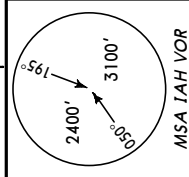
INTERCONTINENTAL/HOUSTON

HOUSTON Departure (R)		Trans level: FL180	Trans alt: 18000'
North	East/South	<i>Apt Elev</i> See graphic	3. RNAV 1. 4. For non-GPS equipped aircraft LCH DME must be operational. 5. Also serves ①
132.25	133.6	126.67	

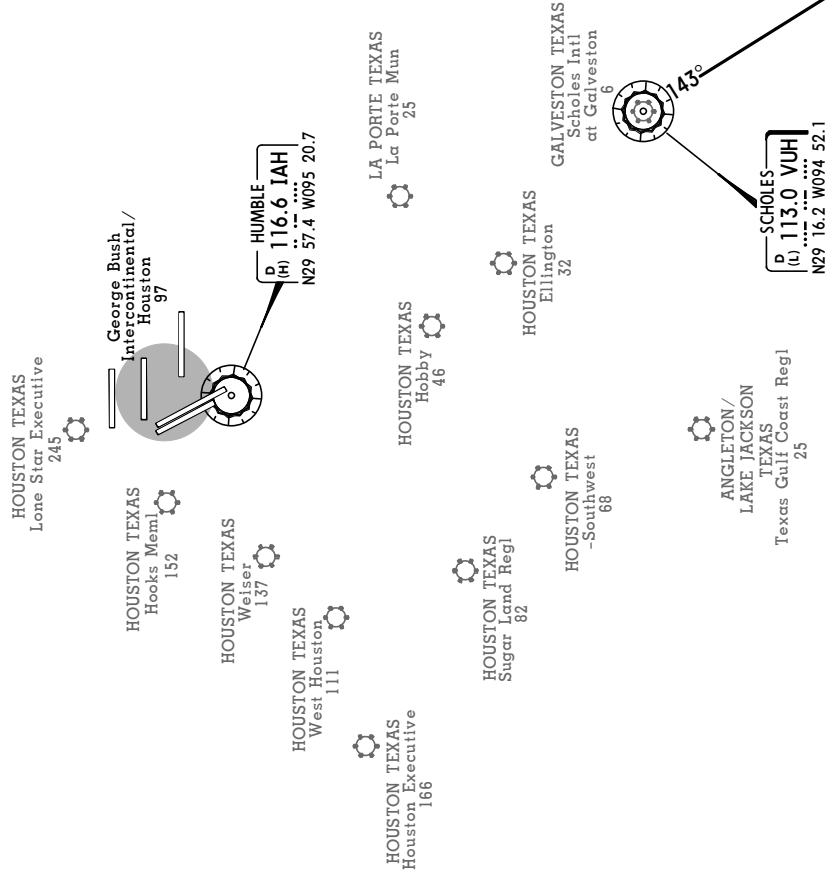
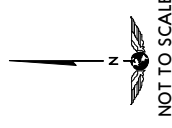


1 AIRPORTS SERVED Hooks Meml 49 NM Lone Star Executive 53 NM			OBSTACLE For TAKEOFF OBSTACLE NOTES see 70-30B1.	This SID requires take-off minimums (for standard minimums, refer to airport chart): GEORGE BUSH INTERCONTINENTAL/HOUSTON: Rwy 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard (or lower than standard, if authorized). HOOKS MEML: Rwy 17L, 35R: Not Authorized- environmental. Rwy 17R, 35L: Standard (or lower than standard, if authorized). WATERWAYS: 17, 35: Not Authorized-air traffic. LONE STAR EXECUTIVE: Rwy 1, 14, 19, 32: Standard (or lower than standard, if authorized).
AIRPORT GEORGE BUSH INTERCONTINENTAL/ HOUSTON	INITIAL CLIMB Climb on assigned heading for RADAR vectors to LINGG.	ALTITUDE MAINTAIN 4000'		
1 ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to LINGG.			
ROUTING				
At LINGG, via transition. EXPECT filed altitude 10 minutes after departure on depicted route to SBI.				

HOUSTON Departure (R)				Apt <i>Elev</i> See <i>graphic</i>	Trans level: FL180 Trans alt: 18000'	1. RADAR required. 2. Also serves 1
North	East	South	West			
132.25	133.6	127.12	126.67			



SCHOLES FOUR DEPARTURE
(VUH4.VUH)



This SID requires take-off minimums (for standard minimums, refer to airport chart):
GEORGE BUSH INTERCONTINENTAL/HOUSTON:
 Rwy's 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard
 (or lower than standard, if authorized).
HOOKS MEML: Rwy's 17L, 35R: Not Authorized-environmental.
 Rwy's 17R, 35L: Standard (or lower than standard, if authorized).
 Waterways 17, 35: Not Authorized-air traffic.
LONE STAR EXECUTIVE: Rwy's 1, 14, 19, 32: Standard (or lower than standard, if authorized).

AIRPORT	INITIAL CLIMB	ALTITUDE
GEORGE BUSH INTERCONTINENTAL/ HOUSTON	Climb on assigned heading for RADAR vectors to VUH.	MAINTAIN 4000'
① ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to VUH.	

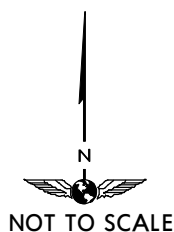
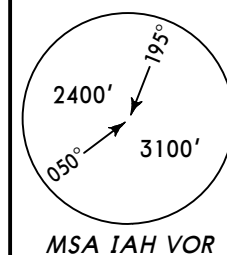
ROUTING

At VUH, via VUH R-143 to MUSYL. EXPECT filed altitude 10 minutes after departure.

OBSTACLE
For TAKEOFF OBSTACLE NOTES see 70-30B1.

HOUSTON Departure (R)				Apt Elev See graphic	Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP to international destinations.
North	East	South	West		
132.25	133.6	127.12	126.67		

TRUAX TWO DEPARTURE (NGP2.NGP)



HUMBLE
D (H) 116.6 IAH
N29 57.4 W095 20.7

George Bush
Intercontinental/
Houston
97

HOUSTON TEXAS
Sugar Land Regl
82

HOUSTON TEXAS
Hobby
46

HOUSTON TEXAS
Ellington
32

SCHOLES
D (L) 113.0 VUH
N29 16.2 W094 52.1

ANGLETON/
LAKE JACKSON TEXAS
Brazoria Co
25

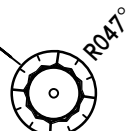
GALVESTON
TEXAS
Scholes Intl
at Galveston
6

Direct distance from George Bush
Intercontinental/Houston to:
YAWNS **70 NM**

ELA: 116.4
HUB: 117.1
D52 192°
D45

YAWNS
N28 49.4 W095 34.0

TRUAX
D (L) 114.0 NGP
N27 41.2 W097 17.7



This SID requires take-off minimums
(for standard minimums, refer to airport chart):
Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard
(or lower than standard, if authorized).

OBSTACLE
For TAKEOFF OBSTACLE NOTES see 70-30B1.

INITIAL CLIMB	ALTITUDE
EXPECT vectors to YAWNS.	MAINTAIN 4000'.
ROUTING	
Via VUH R-228 and NGP R-047 to NGP. EXPECT filed altitude 10 minutes after departure.	

TAKEOFF OBSTACLE NOTES**GEORGE BUSH INTERCONTINENTAL/HOUSTON**

◦ RWY 8L:

TREE 2866' FROM DER, 921' LEFT OF CENTERLINE, 107' AGL/201' MSL. MULTIPLE TREES BEGINNING 2750' FROM DER, 106' RIGHT OF CENTERLINE, UP TO 80' AGL/174' MSL.

◦ RWY 15L:

MULTIPLE TREES BEGINNING 2638' FROM DER, 758' RIGHT OF CENTERLINE, UP TO 76' AGL/160' MSL.

◦ RWY 15R:

TOWER 1431' FROM DER, 591' LEFT OF CENTERLINE, 48' AGL/133' MSL. ANTENNA ON GLIDESLOPE 1469' FROM DER, 621' LEFT OF CENTERLINE, 49' AGL/133' MSL.

◦ RWY 26R:

POLE 950' FROM DER, 660' RIGHT OF CENTERLINE, 40' AGL/129' MSL.

◦ RWY 33R:

TREES 2868' FROM DER, 1027' RIGHT OF CENTERLINE, 73' AGL/172' MSL.

LONE STAR EXECUTIVE

◦ RWY 1:

TREES BEGINNING 194' FROM DER, 130' RIGHT OF CENTERLINE, UP TO 100' AGL/374' MSL. TREES BEGINNING 817' FROM DER, 15' LEFT OF CENTERLINE, UP TO 100' AGL/359' MSL.

◦ RWY 14:

TREES AND OBSTRUCTION LIGHT ON DME BEGINNING 399' FROM DER, 80' RIGHT OF CENTERLINE, UP TO 100' AGL/329' MSL. TREES BEGINNING 640' FROM DER, 408' LEFT OF CENTERLINE, UP TO 100' AGL/329' MSL.

◦ RWY 19:

TREES BEGINNING 68' FROM DER, 64' RIGHT OF CENTERLINE, UP TO 100' AGL/344' MSL. TREES BEGINNING 1' FROM DER, 159' LEFT OF CENTERLINE, UP TO 100' AGL/339' MSL.

◦ RWY 32:

TREES BEGINNING 1785' FROM DER, 973' RIGHT OF CENTERLINE, UP TO 100' AGL/339' MSL. TREES AND VEHICLES ON ROAD BEGINNING 603' FROM DER, 458' LEFT OF CENTERLINE, UP TO 100' AGL/354' MSL.

HOOKS MEML

◦ RWY 17R:

MULTIPLE TREES BEGINNING 708' FROM DER, 68' LEFT OF CENTERLINE, UP TO 71' AGL/220' MSL. MULTIPLE HANGARS BEGINNING 433' FROM DER, 515' LEFT OF CENTERLINE, UP TO 37' AGL/182' MSL. DME ANTENNA 653' FROM DER, 256' LEFT OF CENTERLINE, 13' AGL/162' MSL. MULTIPLE TREES AND POLE BEGINNING 85' FROM DER, 294' RIGHT OF CENTERLINE, UP TO 45' AGL/189' MSL.

◦ RWY 35L:

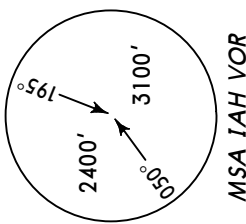
MULTIPLE TREES AND POLES BEGINNING 144' FROM DER, 32' LEFT OF CENTERLINE, UP TO 79' AGL/238' MSL. MULTIPLE HANGARS AND BUILDINGS BEGINNING 85' FROM DER, 9' LEFT OF CENTERLINE, UP TO 53' AGL/202' MSL. MULTIPLE TREES, TOWER AND POLES BEGINNING 100' FROM DER, 124' RIGHT OF CENTERLINE, UP TO 93' AGL/247' MSL. VEHICLE AND ROAD 315' FROM DER, ON CENTERLINE, 15' AGL/166' MSL. BUILDING 894' FROM DER, 231' RIGHT OF CENTERLINE, 23' AGL/173' MSL.

HOUSTON Departure (R)

North 132.25 East 133.6 South 127.12 West 126.67

Apt Elev
See graphic

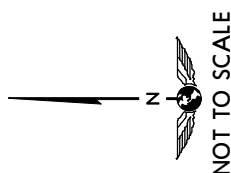
Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. RNAV 1.
3. DME/DME/IRU or GPS required.
4. For advanced navigation aircraft
destined San Antonio terminal area.
San Antonio: Departing all Houston
airports.
5. Also Serves ①



WAILN ONE RNAV DEPARTURE (WAILN1.WAILN)

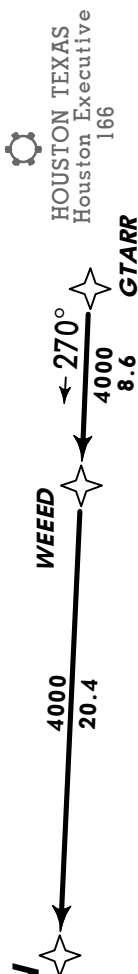
Direct distance from George Bush
Intercontinental/Houston to:
GTARR 38 NM
Direct distance from AIRPORTS
SERVED to GTARR:
① AIRPORTS SERVED
Hooks Meml 30 NM
Lone Star Executive 47 NM

OBSTACLE
For TAKEOFF OBSTACLE NOTES
see 70-30B1.



NOT TO SCALE

WAILN



This SID requires take-off minimums

(for standard minimums, refer to airport chart):

GEORGE BUSH INTERCONTINENTAL/HOUSTON:

Rwys 8L/R, 9, 15L/R, 26L/R, 27, 33L/R: Standard
(or lower than standard, if authorized).

HOOKS MEML: Rwys 17L, 35R: Not Authorized-environmental.

Rwys 17R, 35L: Standard (or lower than standard, if authorized).
Waterways 17, 35: Not Authorized-air traffic.

LONE STAR EXECUTIVE: Rwys 1, 14, 19, 32: Standard
(or lower than standard, if authorized).

AIRPORT	INITIAL CLIMB	ALTITUDE
GEORGE BUSH INTERCONTINENTAL/ HOUSTON	Climb on assigned heading for RADAR vectors to GTARR.	MAINTAIN 4000'
① ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to GTARR.	
ROUTING		
EXPECT filed altitude 10 minutes after departure on depicted route to WAILN.		

HOUSTON TEXAS
Lone Star Executive
245

HOUSTON TEXAS
Hooks Meml
152

George Bush
Intercontinental/
Houston
97

HOUSTON TEXAS
Weiser
137

HOUSTON TEXAS
West Houston
111

HOUSTON TEXAS
Houston Executive
166

LA PORTE TEXAS
La Porte Mun
25

HOUSTON TEXAS
Hobby
46

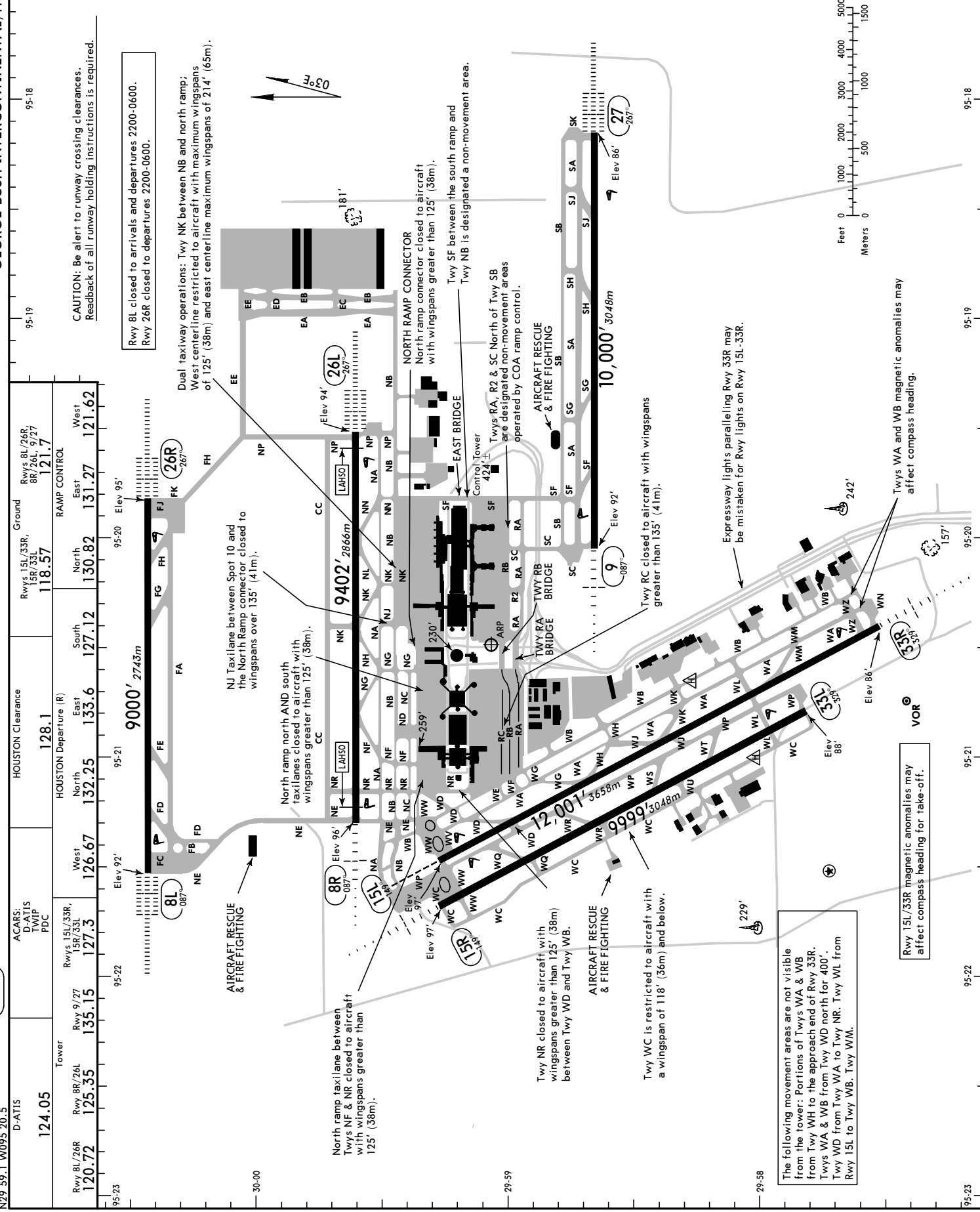
HOUSTON TEXAS
Sugar Land Regl
82

HOUSTON TEXAS
-Southwest
68

HOUSTON TEXAS
Ellington
32

GALVESTON TEXAS
Scholes Intl at
Galveston
6

ANGLETON/
LAKE JACKSON TEXAS
Brazoria Co
25



GENERAL

CAUTION: Bright lights 1 NM from threshold and 900' south of centerline Rwy 26L.

Birds in vicinity of airport.

Terminal Doppler Weather Radar.

ASDE-X surveillance system in use. Pilots should operate transponders with Mode C on all taxiways and runways.

ADDITIONAL RUNWAY INFORMATION

RWY					USABLE LENGTHS		LAHSO Distance	TAKE- OFF	WIDTH
					Threshold	Glide Slope			
8L ① 26R	HIRL CL ALSF-II TDZ	RVR				7860' 2396m			150' 46m
8R ① 26L	HIRL CL MALSR TDZ PAPI-L (angle 3.0°) RVR					8362' 2549m	Twy NP 9019' 2749m		150' 46m
	HIRL CL ALSF-II TDZ PAPI-R (angle 3.0°) RVR					8360' 2548m	Twy NE 9010' 2746m		
9 ① 27	HIRL CL MALSR PAPI-R (angle 3.0°) RVR					8935' 2723m			150' 46m
	HIRL CL ALSF-II TDZ PAPI-L (angle 3.0°) RVR					8965' 2733m			
15L ① 33R	HIRL CL PAPI-R (angle 3.0°) RVR								150' 46m
	HIRL CL MALSR RVR					10,970' 3344m			
15R ① 33L	HIRL CL MALSR TDZ PAPI-L (angle 3.0°) RVR					8874' 2705m			150' 46m
	HIRL CL TDZ PAPI-R (angle 3.0°) RVR								

① Grooved.

TAKE-OFF

All Rwys

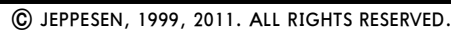
2 operating RVRs are required All operating RVRs are controlling		Adequate Vis Ref	STD	
CL & HIRL	CL, or RCLM & HIRL		3 & 4 Eng	1 & 2 Eng
TDZ RVR 5	TDZ RVR 10	RVR 16 or 1/4	RVR 24 or 1/2	RVR 50 or 1
Mid RVR 5	Mid RVR 10			
Rollout RVR 5	Rollout RVR 10			

FOR FILING AS ALTERNATE

		ILS Rwy 8L ILS Rwy 9 ILS Rwy 15R ILS Rwy 26R ILS Rwy 27 ILS Rwy 33R	ILS Rwy 26L LOC Rwy 26L	ILS Rwy 8R LOC Rwy 8R	Other
A	600-2	800-2	900-2	800-2	
B					
C		800-2½	900-2¼		
D					

CHANGES: None.

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PARKING GATE COORDINATES			
GATE	COORDINATES	GATE	COORDINATES
TERMINAL A		TERMINAL D (INTERNATIONAL)	
1	N29 59.3 W095 21.0	1	N29 59.3 W095 20.3
2	N29 59.3 W095 21.1	2 thru 4	N29 59.3 W095 20.2
7 thru 12, 14, 15	N29 59.3 W095 21.0	5, 6, 6A	N29 59.3 W095 20.1
17 thru 19, 24, 25	N29 59.1 W095 21.0	7 thru 9	N29 59.3 W095 20.0
26, 27, 29, 30	N29 59.1 W095 21.1	10 thru 12	N29 59.3 W095 19.9
TERMINAL B		TERMINAL D HARDSTANDS	
60 thru 62, 62A	N29 59.1 W095 20.7	1, 2	N29 59.4 W095 19.9
63, 63A, 64 thru 66	N29 59.1 W095 20.7	3, 4	N29 59.4 W095 20.0
68 thru 71, 71A	N29 59.1 W095 20.8	5, 6	N29 59.4 W095 20.1
72, 72A, 73 thru 75	N29 59.1 W095 20.8		
76	N29 59.2 W095 20.8		
76A, 77, 77A	N29 59.3 W095 20.8	TERMINAL E	
79, 79A	N29 59.3 W095 20.8	1, 2 A/B, 3	N29 59.1 W095 20.2
80, 81, 81A, 83	N29 59.3 W095 20.8	4 A/B	N29 59.0 W095 20.2
83A	N29 59.2 W095 20.8	5 A/B, 6, 7 A/B	N29 59.0 W095 20.1
85, 85A	N29 59.3 W095 20.6	8, 9, 10 A/B, 11	N29 59.1 W095 20.1
86, 86A, 87, 88	N29 59.3 W095 20.7	12, 14, 15 A/B, 16	N29 59.1 W095 20.0
84A thru 84H	N29 59.3 W095 20.6	17, 18 A/B	N29 59.0 W095 20.0
84J, 84K	N29 59.3 W095 20.6	19, 20 A/B	N29 59.0 W095 19.9
84L thru 84N	N29 59.3 W095 20.5	21 thru 24	N29 59.1 W095 19.9
84P, 84Q	N29 59.3 W095 20.5		
84R, 84S, 84T	N29 59.3 W095 20.4		
TERMINAL C			
14, 15	N29 59.3 W095 20.3		
16 thru 21	N29 59.4 W095 20.3		
22, 23	N29 59.3 W095 20.3		
24 thru 27	N29 59.3 W095 20.4		
29 thru 31	N29 59.1 W095 20.5		
32, 33	N29 59.1 W095 20.4		
34 thru 36	N29 59.1 W095 20.3		
37, 39, 40	N29 59.0 W095 20.3		
41 thru 43	N29 59.1 W095 20.3		
44, 45	N29 59.1 W095 20.2		

RWY 26L & 26R ARRIVAL

RWY 8L ARRIVAL

LEGEND

- CENTERLINE LIGHTS
- LOW VISIBILITY TAXI ROUTE
- TAXIWAY AND APRON
- RWY 8L ARRIVAL DIRECTIONAL LOW VISIBILITY TAXI ROUTE
- RWYS 15L/R DEPARTURE DIRECTIONAL LOW VISIBILITY TAXI ROUTE
- MOVEMENT AREA BOUNDARY
- ILS HOLD BAR

FOR OPERATIONS TO SOUTH AREAS SEE PAGE 70-9H.

**① FOR OPERATIONS TO SOUTH
AREAS SEE PAGE 70-9H.**

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KIAH/IAH

17 FEB 12

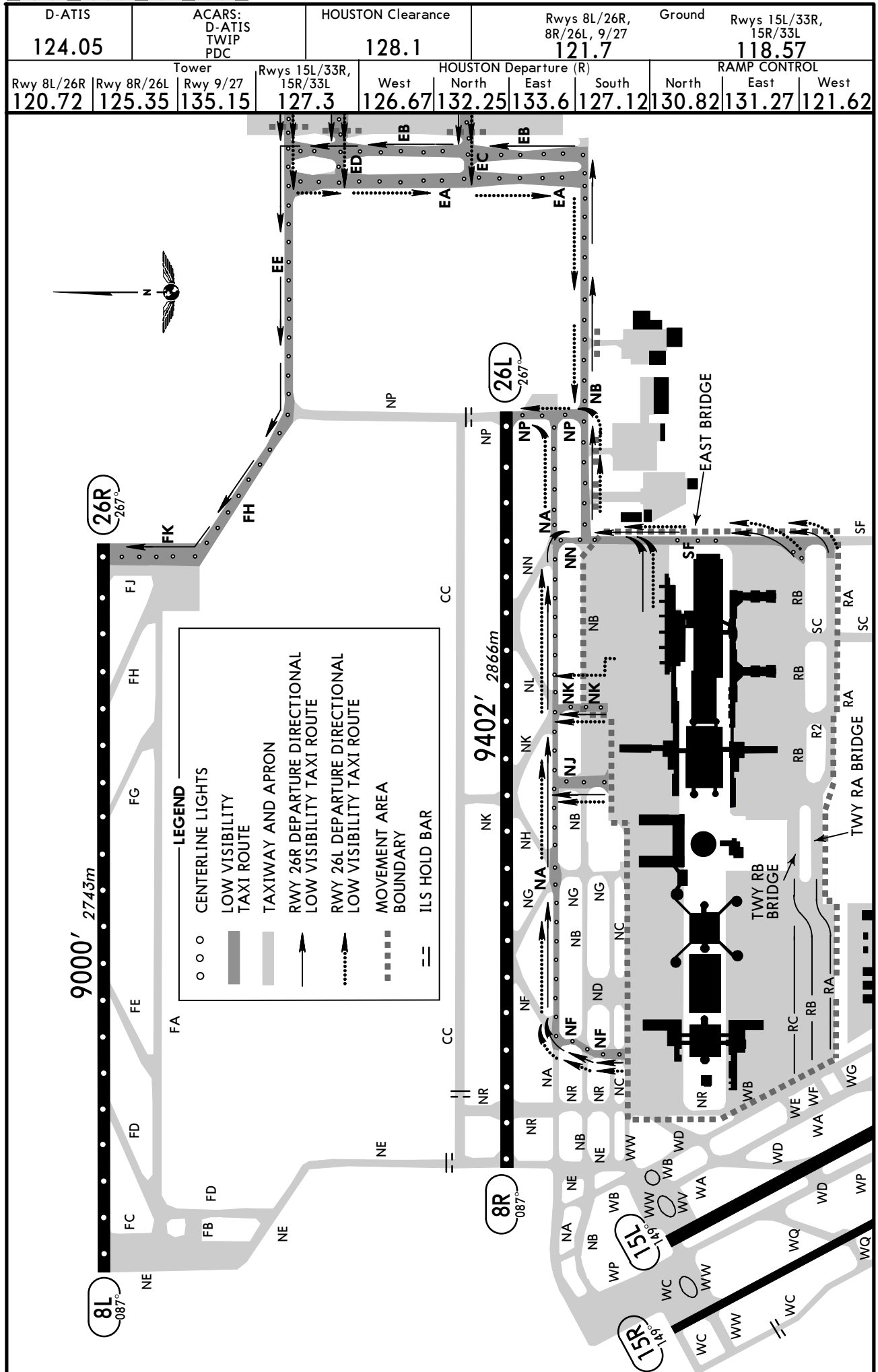
70-9G

SMGCS

GEORGE BUSH
INTERCONTINENTAL/HOUSTONHOUSTON, TEXAS
LOW VISIBILITY TAXI ROUTES

RVR 1200 TO 600

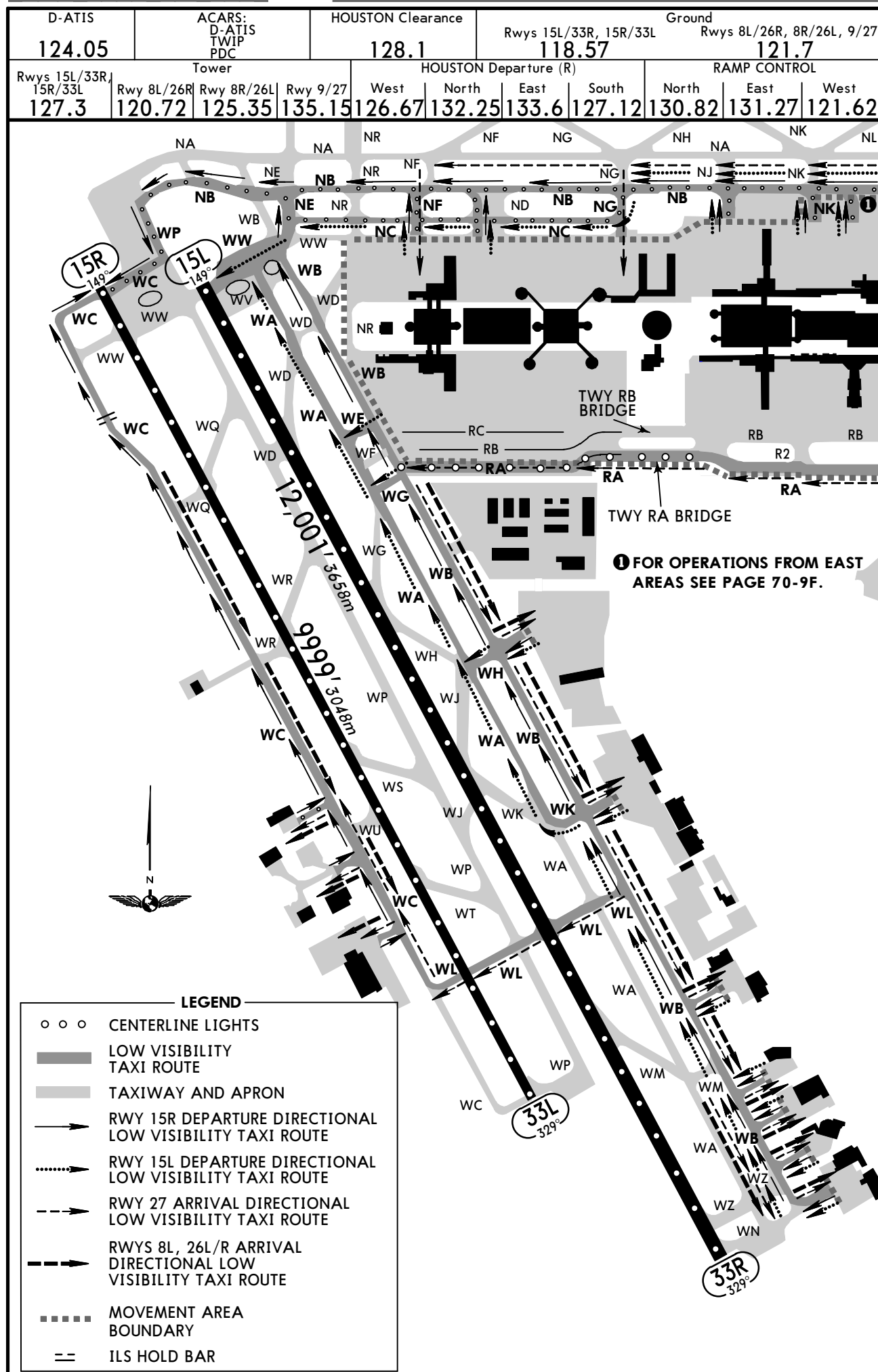
RWY 26L & 26R DEPARTURE



GEORGE BUSH
INTERCONTINENTAL/HOUSTONHOUSTON, TEXAS
LOW VISIBILITY TAXI ROUTES

RVR 1200 TO 600

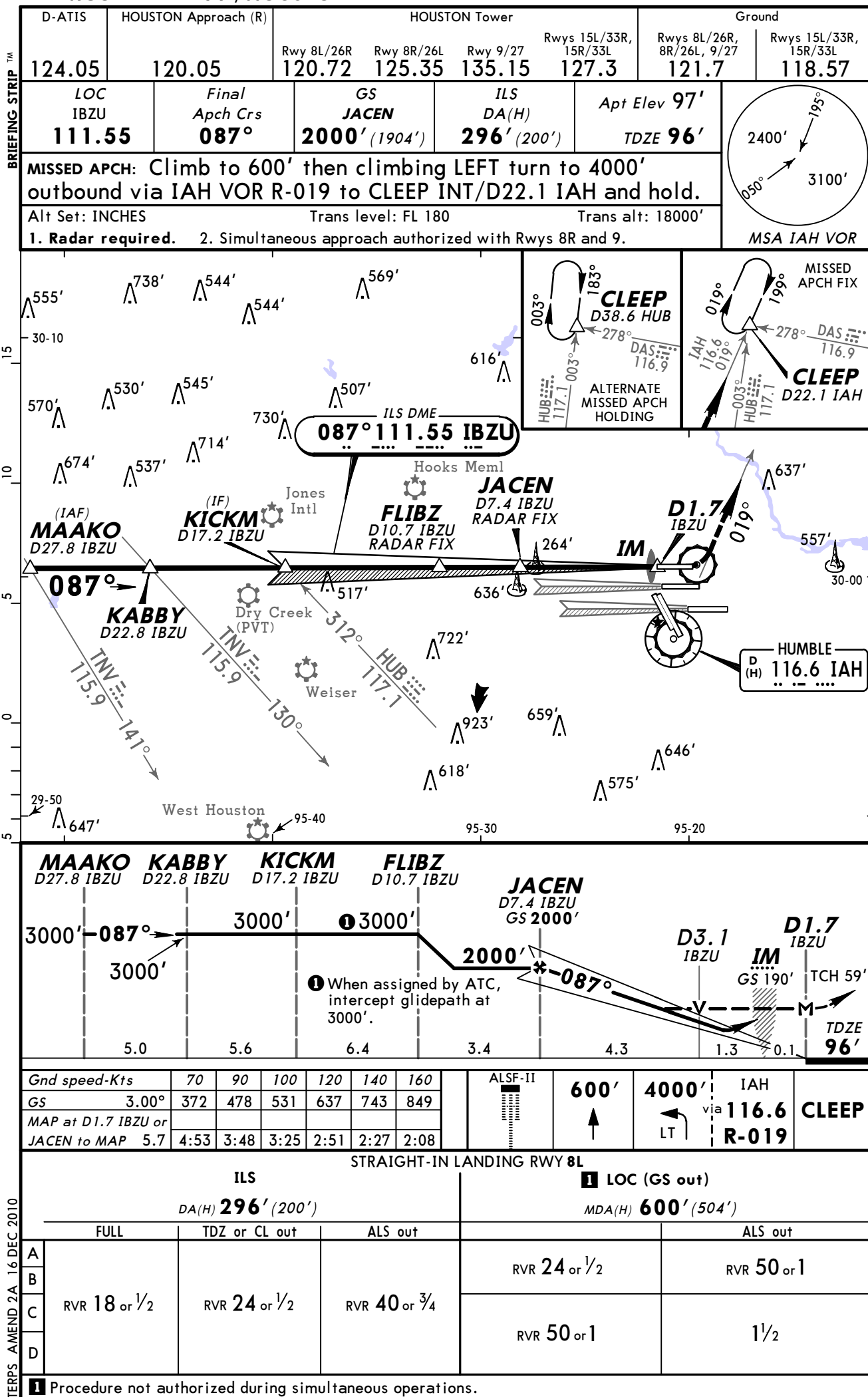
ARRIVALS AND DEPARTURES (SEE LEGEND BELOW)



KIAH/IAH GEORGE BUSH INTERCONTINENTAL/HOUSTON

17 FEB 12 (71-1)

HOUSTON, TEXAS
ILS or LOC Rwy 8L

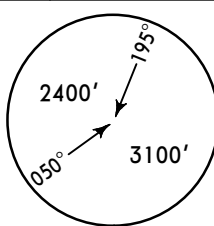


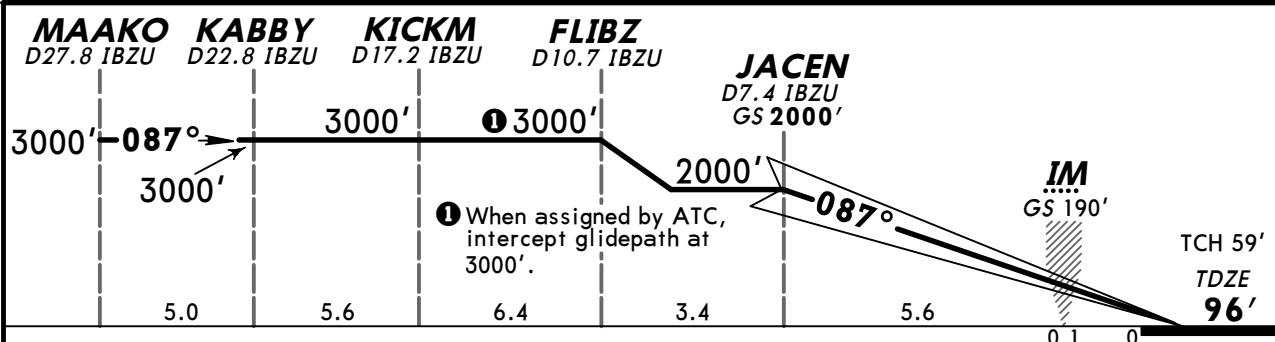
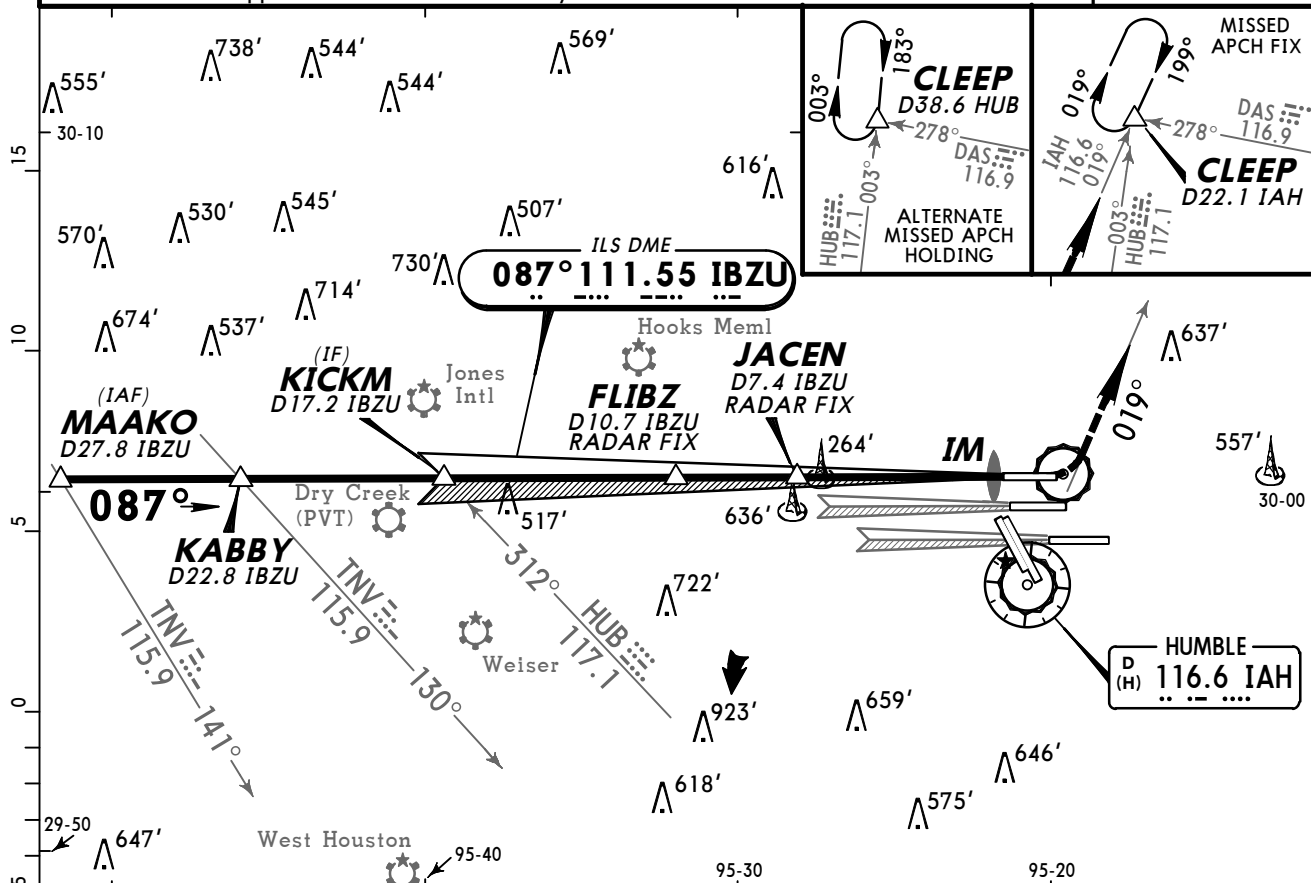
KIAH/IAH GEORGE BUSH INTERCONTINENTAL/HOUSTON

JEPPESSEN
17 FEB 12 **71-1A**

HOUSTON, TEXAS ILS Rwy 8L CAT II & III

BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)		HOUSTON Tower				Ground	
124.05	120.05		Rwy 8L/26R 120.72	Rwy 8R/26L 125.35	Rwy 9/27 135.15	Rwys 15L/33R, 15R/33L 127.3	Rwys 8L/26R, 8R/26L, 9/27 121.7	Rwys 15L/33R, 15R/33L 118.57
LOC IBZU 111.55	Final Apch Crs 087°	GS JACEN 2000' (1904')	CAT IIIC NA	CAT IIIB Refer to Minimums	CAT IIIA	CAT II ILS RA 104' DA(H) 196'(100')	Apt Elev 97' TDZE 96'	
MISSED APCH: Climb to 600' then climbing LEFT turn to 4000' outbound via IAH VOR R-019 to CLEEP INT/D22.1 IAH and hold.								
Alt Set: INCHES			Trans level: FL 180			Trans alt: 18000'		
1. Special Aircrew & Acft Certification Required. 2. Radar required.								
3. Simultaneous approach authorized with Rwys 8R and 9.								
MSA IAH VOR								



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	600'	4000'	IAH	CLEEP
GS	3.00°	372	478	531	637	743	849		↑	via 116.6 R-019	
									LT		

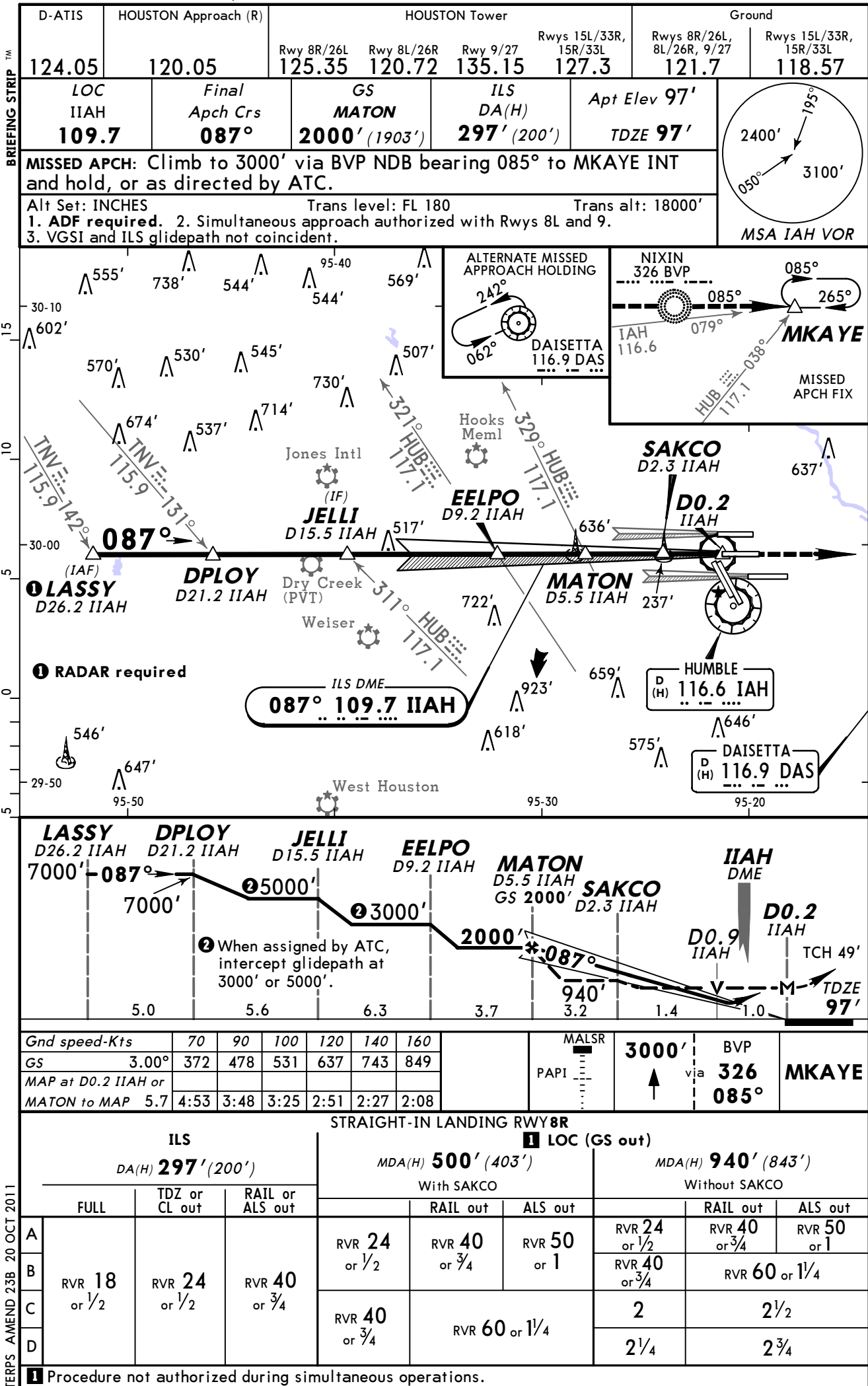
STRAIGHT-IN LANDING RWY 8L

CAT IIIC ILS	CAT IIIB ILS	CAT IIIA ILS	CAT II ILS RA 104' DA(H) 196'(100')
NA	RVR 6	RVR 7	RVR 12

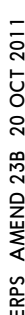
1 RVR 10 auth with specific OPSPEC, MSPEC, or LOA Approval and use of Autoland or HUD to touchdown.

CHANGES: Ground frequencies modified.

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N HOUSTON, TEXAS
ILS Rwy 8R SA CAT II

BRIEFING STRIP™

<i>Gnd speed-Kts</i>	
<i>GS</i>	3.00°

1 SA CAT II ILS
RA 93'
DA(H) 197' (100')

1 Reduced lighting. Requires specific OPSPEC, MSPEC, or LOA approval and use of AUTOLAND or HUD to touchdown.

TERPS AMEND 8A 16 DEC 2010

BRIEFING STRIP™

AMEND 1A
TERPS

AMEND 1A
TERPS

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KIAH/IAH

GEORGE BUSH

INTERCONTINENTAL/HOUSTON

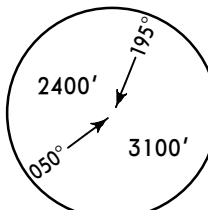
17 FEB 12

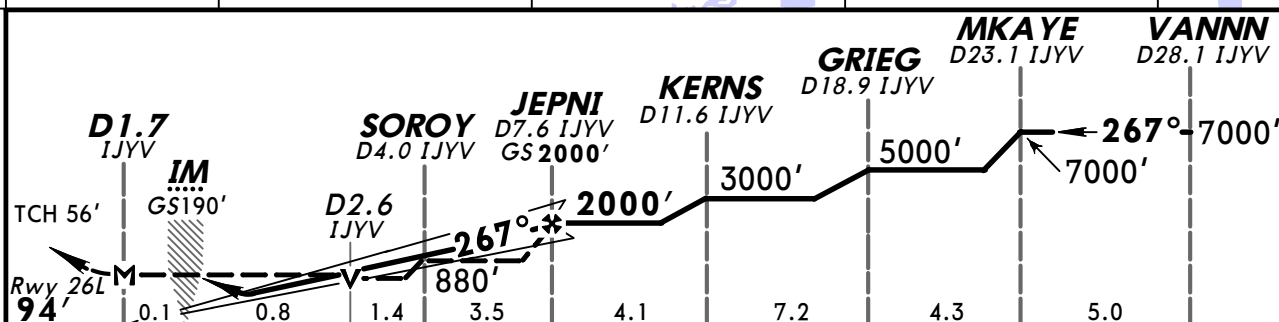
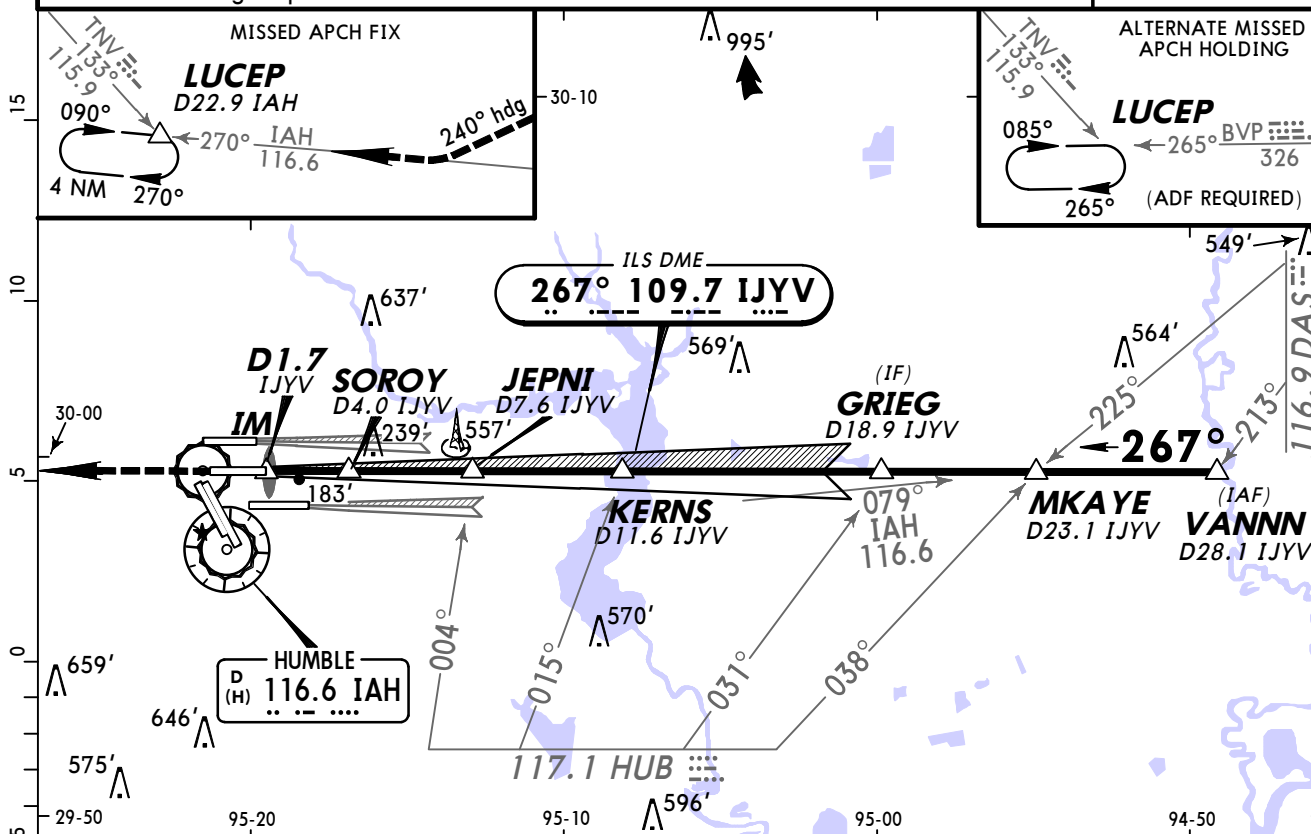
(71-5)

HOUSTON, TEXAS

ILS or LOC Rwy 26L

BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)	HOUSTON Tower				Ground	
124.05	120.05	Rwy 8R/26L 125.35	Rwy 8L/26R 120.72	Rwy 9/27 135.15	Rwys 15L/33R, 15R/33L 127.3	Rwys 8R/26L, 8L/26R, 9/27 121.7	Rwys 15L/33R, 15R/33L 118.57
LOC IJYV 109.7	Final Apch Crs 267°	GS JEPNI 2000' (1906')	ILS DA(H) 294' (200')	Apt Elev 97' Rwy 26L 94'		 MSA IAH VOR	
MISSED APCH: Climb to 3000' then LEFT turn heading 240° and outbound IAH VOR R-270 to LUCEP INT/D22.9 IAH and hold, or as directed by ATC.							
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'			
1. Radar required. 2. Simultaneous approach authorized with Rwys 26R & 27. 3. VGSI and ILS glidepath not coincident.							



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	3000'	LT	240° hdg	IAH and R-270
GS	3.00°	372	478	531	637	743	PAPI	↑	↑	↑	↑
MAP at D1.7 IJYV or JEPNI to MAP	5.8	4:58	3:52	3:29	2:54	2:29					

TERPS			STRAIGHT-IN LANDING RWY 26L				2 LOC (GS out)	
ILS			DA(H) 294' (200')		MDA(H) 440' (346')		MDA(H) 880' (786')	
			3 With SOROY				Without SOROY	
	FULL	TDZ or CL out	ALS out		ALS out		ALS out	
A								
B								
C	RVR 18 or 3/8	1 RVR 24 or 1/2	RVR 40 or 3/4		RVR 55 or 1		RVR 24 or 1/2	
D								

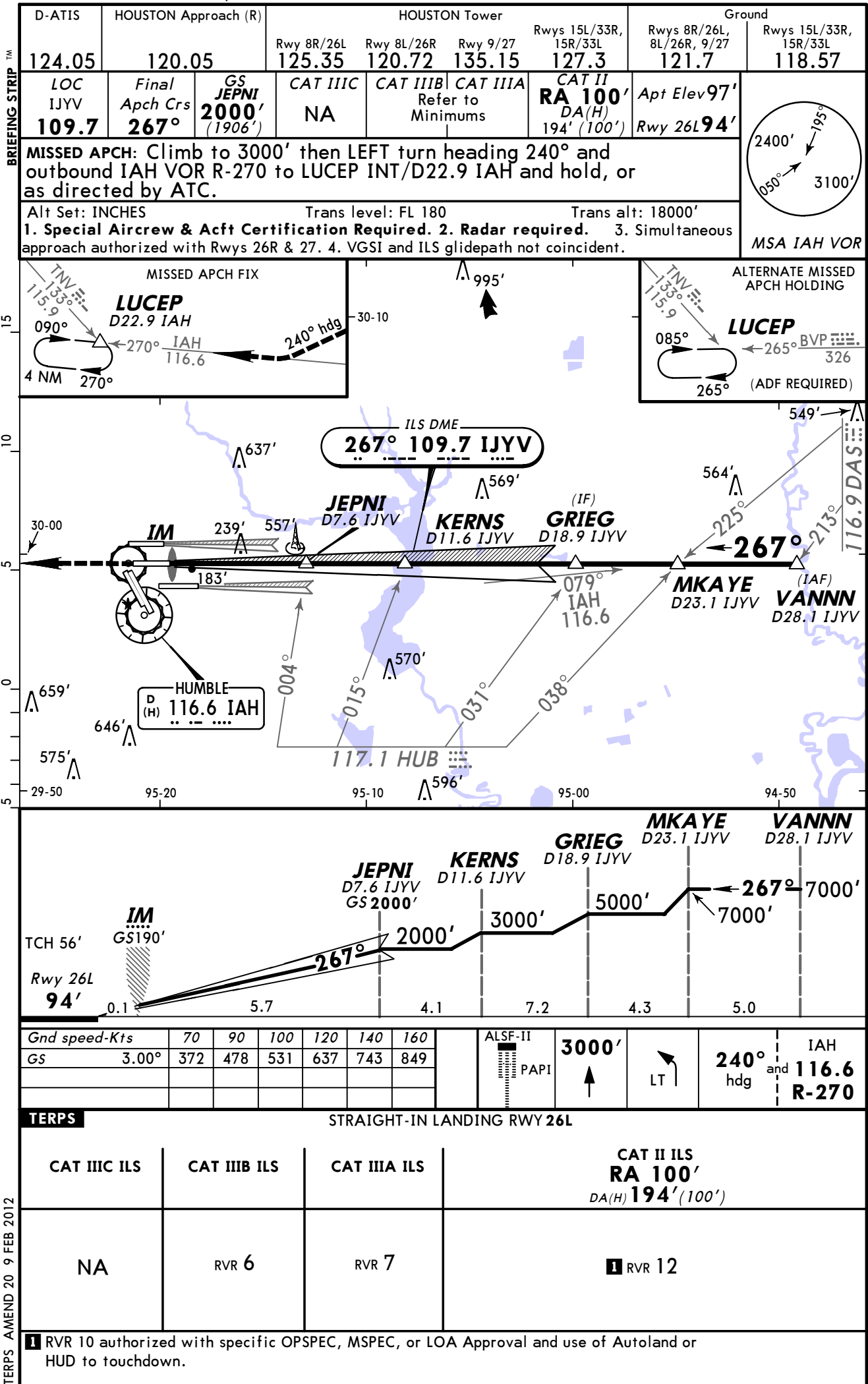
1 RVR 18 with Flight Director or Autopilot or HUD to DA. 3 DME Required.

2 Procedure not authorized during simultaneous operations.

CHANGES: Ground frequencies modified.

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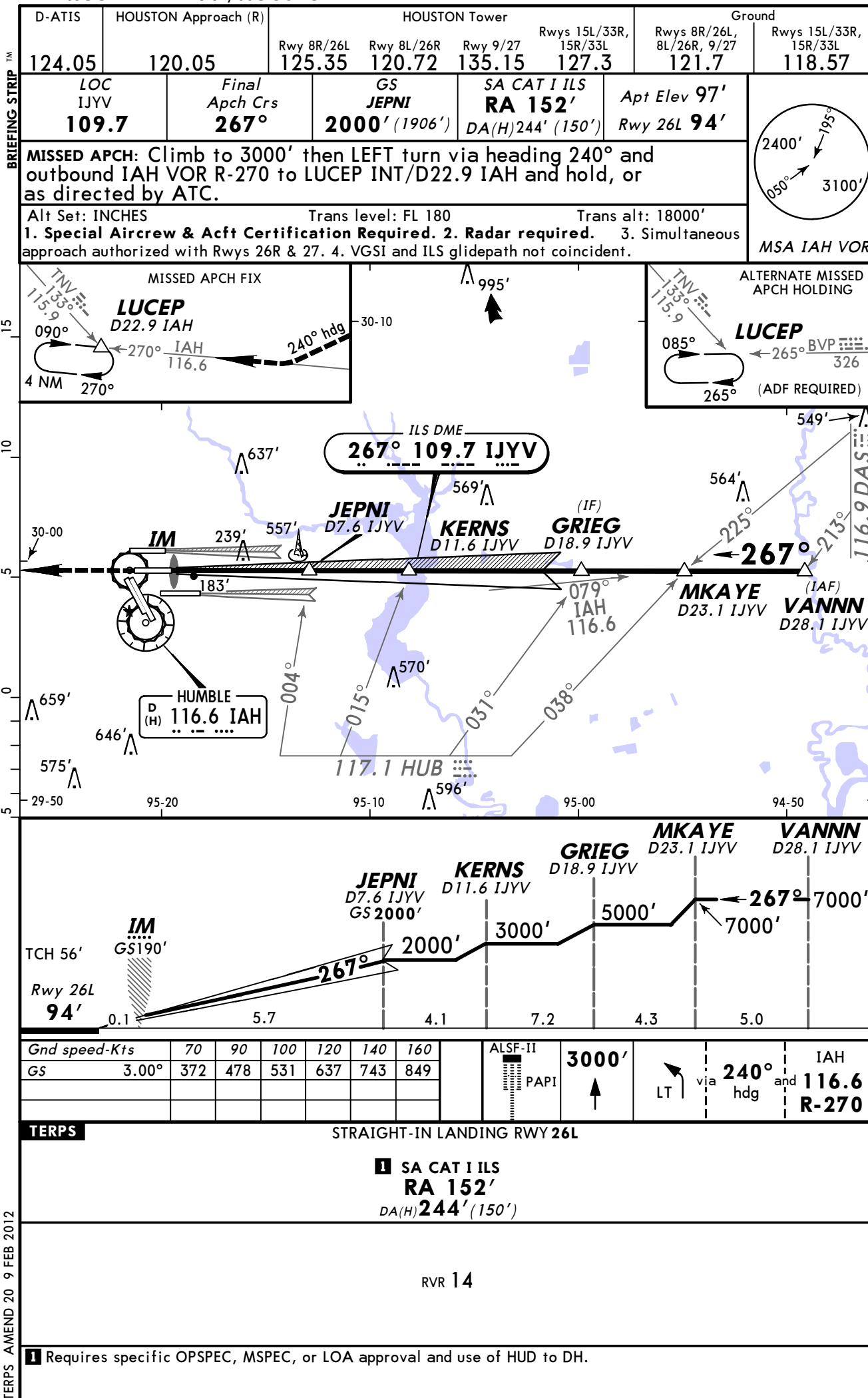
TERPS AMEND 20 9 FEB 2012



KIAH/IAH GEORGE BUSH INTERCONTINENTAL/HOUSTON

17 FEB 12 **71-5B**

HOUSTON, TEXAS
ILS Rwy 26L SA CAT I



TERPS AMEND 20 9 FEB 2012

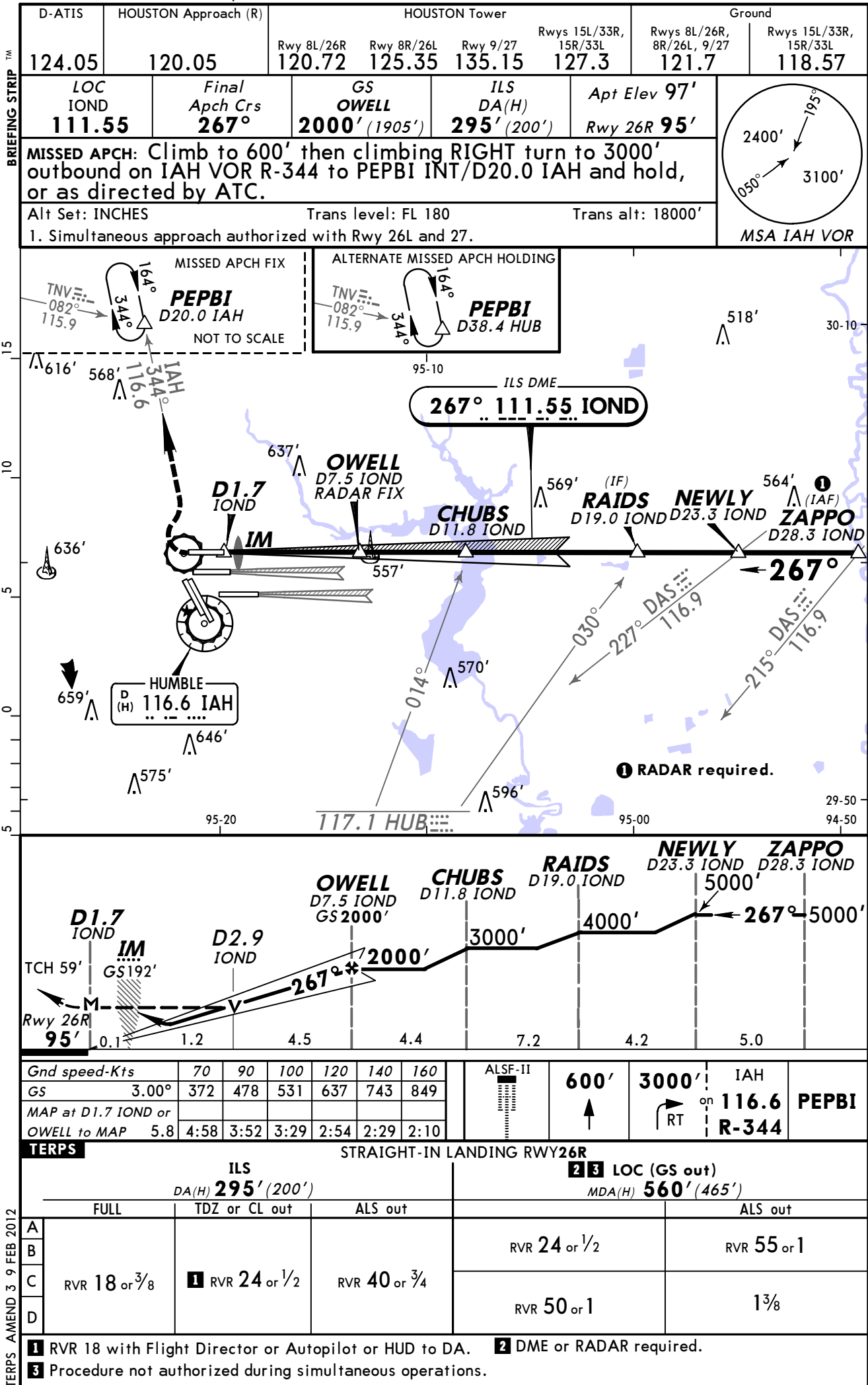
CHANGES: Ground frequencies modified.

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KIAH/IAH GEORGE BUSH INTERCONTINENTAL/HOUSTON

JEPPESSEN
17 FEB 12 **(71-6)**

HOUSTON, TEXAS
ILS or LOC Rwy 26R

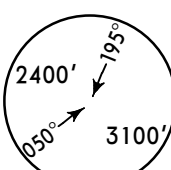


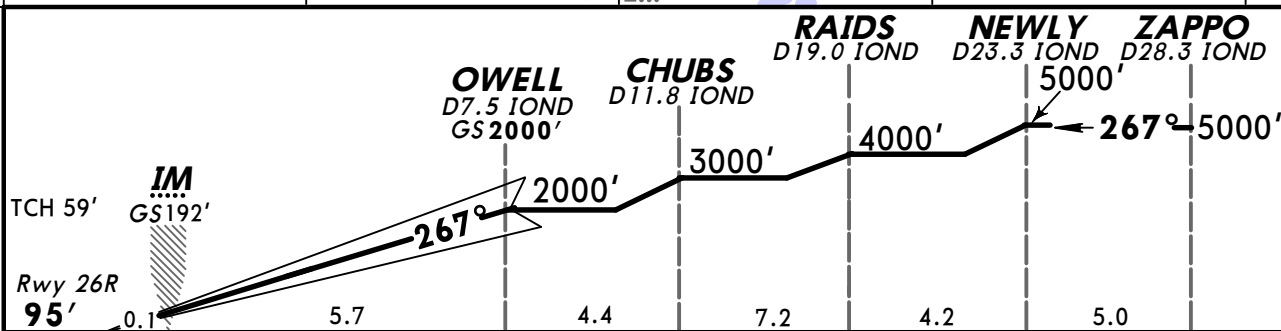
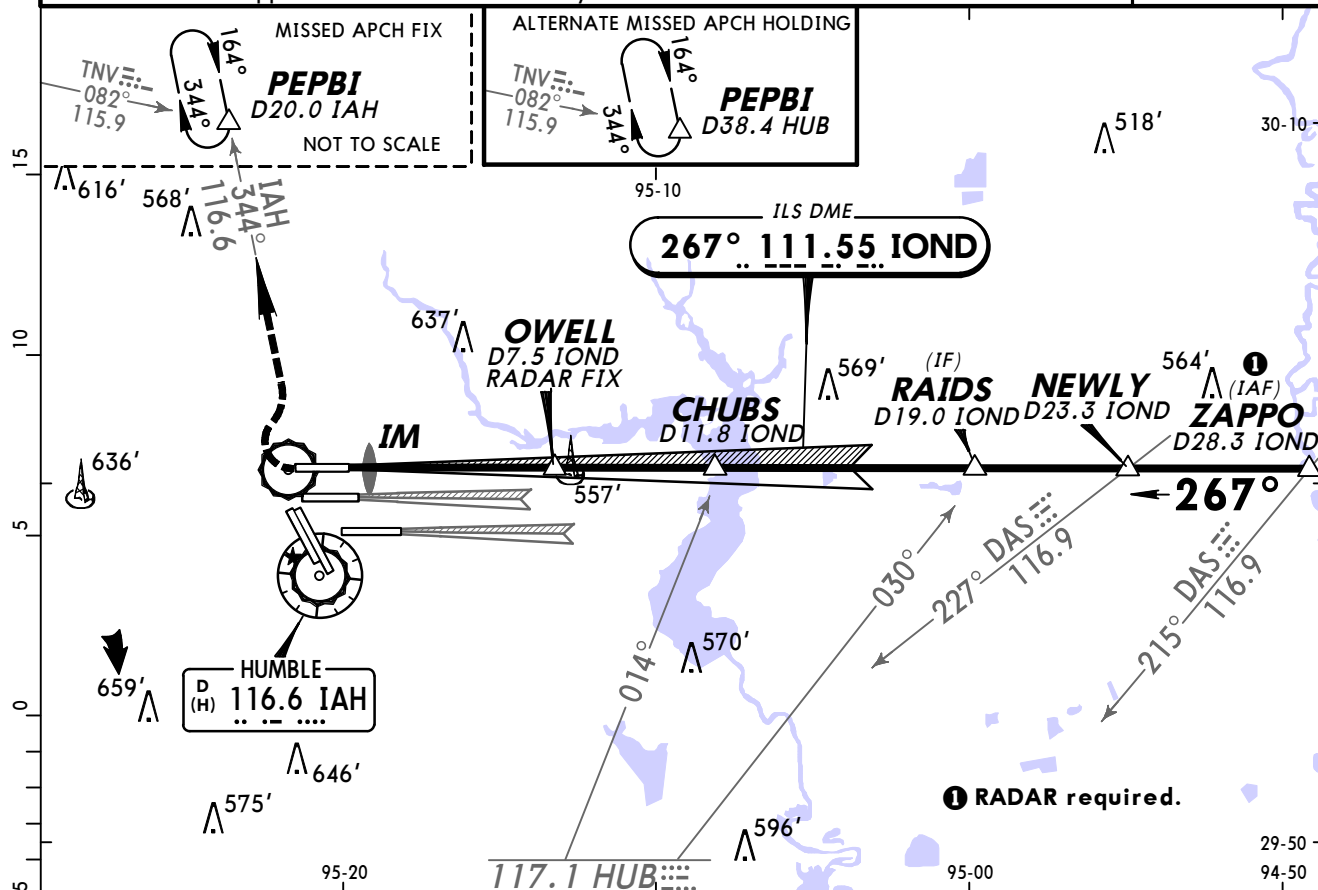
KIAH/IAH HOUSTON, TEXAS

GEORGE BUSH INTERCONTINENTAL/HOUSTON ILS Rwy 26R CAT II & III

JEPPESSEN
17 FEB 12 **71-6A**

BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)			HOUSTON Tower				Ground	
124.05	120.05			Rwy 8L/26R 120.72	Rwy 8R/26L 125.35	Rwy 9/27 135.15	Rwys 15L/33R, 15R/33L 127.3	Rwys 8L/26R, 8R/26L, 9/27 121.7	Rwys 15L/33R, 15R/33L 118.57
LOC IOND 111.55	Final Apch Crs 267°	GS OWELL 2000' (1905')	CAT IIIC NA	CAT IIIB	CAT IIIA Refer to Minimums	CAT II RA 99' DA(H) 195' (100')	Apt Elev 97' Rwy 26R 95'		
MISSED APCH: Climb to 600' then climbing RIGHT turn to 3000' outbound on IAH VOR R-344 to PEPBI INT/D20.0 IAH and hold, or as directed by ATC.									
Alt Set: INCHES									



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	600'	3000'	IAH	PEPBI
GS	3.00°	372	478	531	637	743	849			116.6	R-344

TERPS STRAIGHT-IN LANDING RWY26R			
CAT IIIC ILS	CAT IIIB ILS	CAT IIA ILS	CAT II ILS RA 99' DA(H) 195' (100')
NA	RVR 6	RVR 7	I RVR 12

I RVR 10 authorized with specific OPSPEC, MSPEC, or LOA Approval and use of Autoland or HUD to touchdown.

CHANGES: Ground frequencies modified.

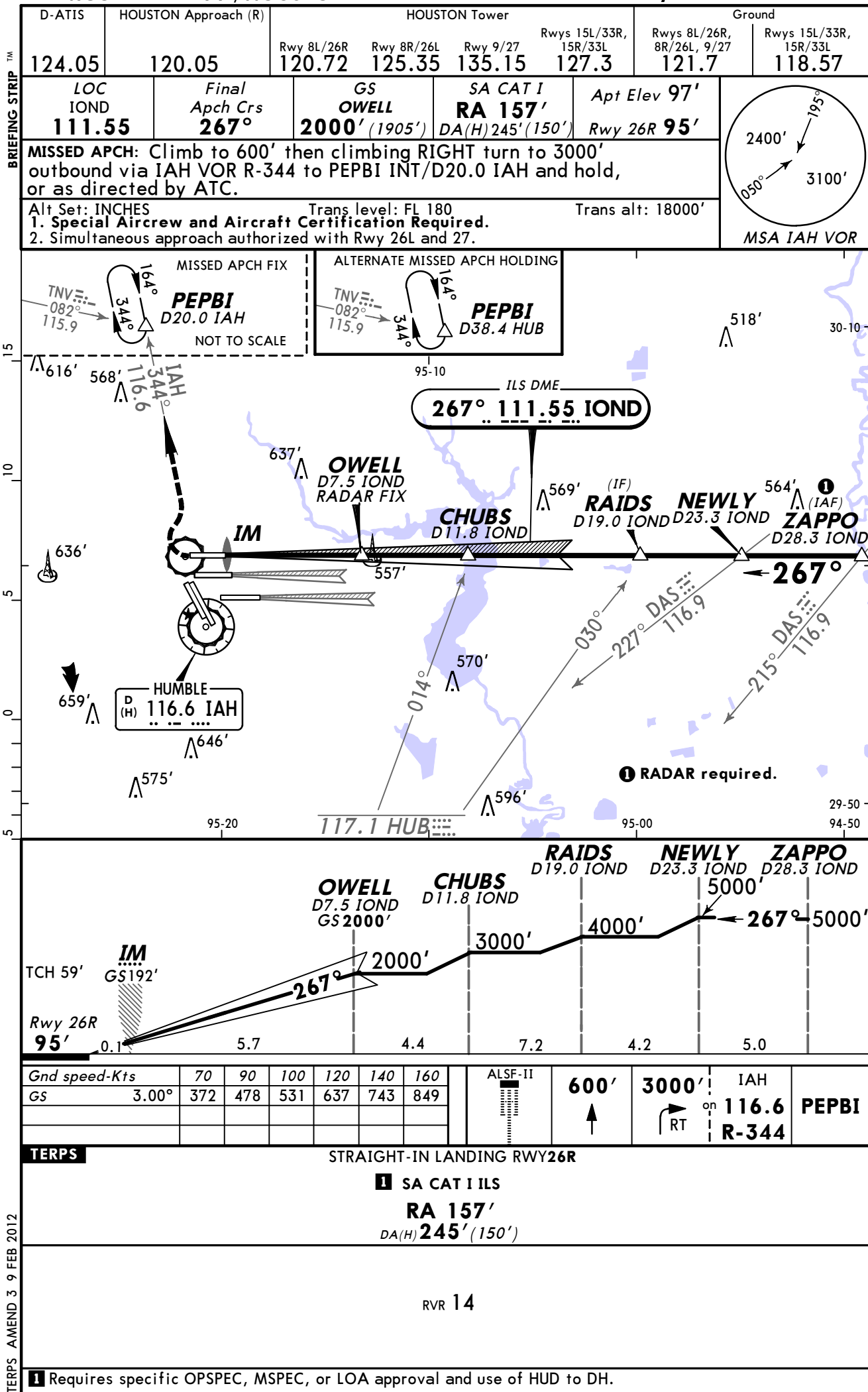
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TERPS AMEND 3 9 FEB 2012

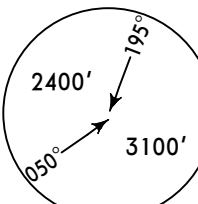
KIAH/IAH GEORGE BUSH INTERCONTINENTAL/HOUSTON

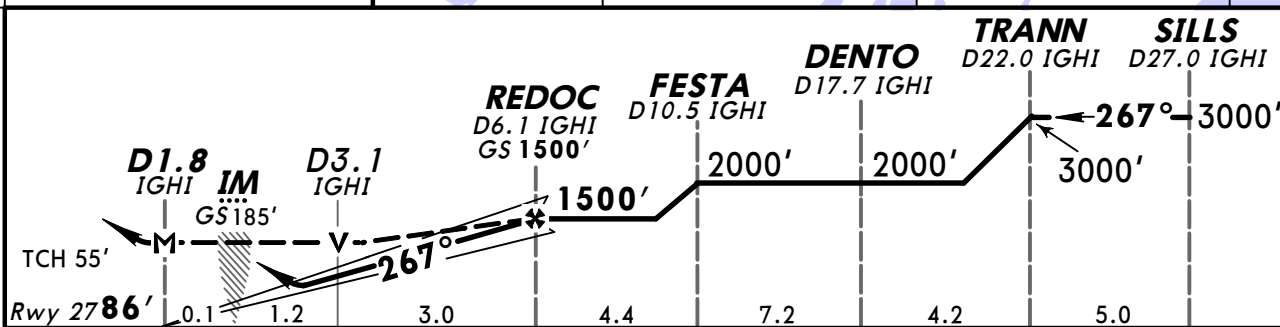
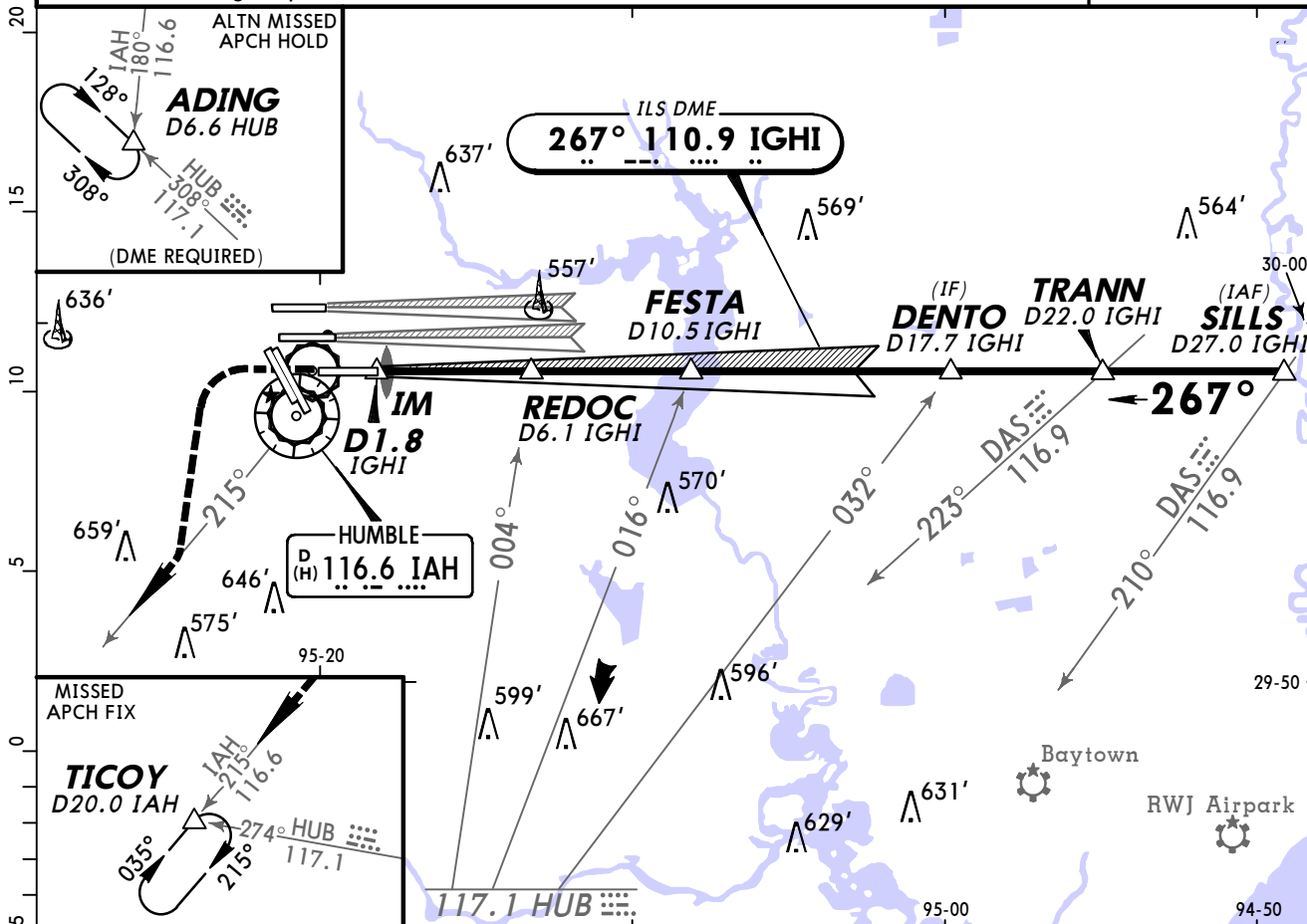
JEPPesen
17 FEB 12 **71-6B**

HOUSTON, TEXAS
ILS Rwy 26R SA CAT I



BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)	HOUSTON Tower					Ground	
Rwy 9/27 124.05	Rwy 8R/26L 120.05	Rwy 8L/26R 135.15	Rwys 15L/33R, 15R/33L 125.35	Rwys 9/27, 8L/26R, 8R/26L 120.72	Rwys 15L/33R, 15R/33L 127.3	Rwys 9/27, 8L/26R, 8R/26L 121.7	Rwys 15L/33R, 15R/33L 118.57	
LOC IGHI 110.9	Final Apch Crs 267°	GS REDOC 1500' (1414')	ILS DA(H) 286' (200')	Apt Elev 97' Rwy 27 86'		 MSA IAH VOR		
MISSED APCH: Climb to 560' then climbing LEFT turn to 3000' outbound on IAH VOR R-215 to TICOY INT/D20.0 IAH and hold, or as directed by ATC.								
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'								
1. Radar required. 2. Simultaneous approach authorized with Rwy 26L/R. 3. VGSI and ILS glidepath not coincident.								



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	560'	3000'	IAH	TICOY
GS	3.00°	372	478	531	637	743	PAPI	↑	↑	on	
MAP at D1.8 IGH or REDOC to MAP	4.3	3:41	2:52	2:35	2:09	1:51			LT	116.6	R-215

TERPS					STRAIGHT-IN LANDING RWY 27	
ILS			1 LOC (GS out)			
DA(H) 286' (200')			MDA(H) 560' (474')			
FULL	TDZ or CL out	ALS out	ALS out			
A			RVR 24 or 1/2		RVR 50 or 1	
B						
C	RVR 18 or 1/2	2 RVR 24 or 1/2	RVR 40 or 3/4			
D			RVR 50 or 1		1 3/8	

1 Procedure not authorized during simultaneous operations.
 2 RVR 18 with Flight Director or Autopilot or HUD to DA.

CHANGES: Ground frequencies modified.

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KIAH/IAH

GEORGE BUSH

INTERCONTINENTAL/HOUSTON

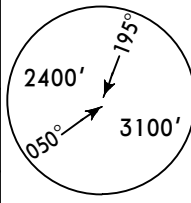
17 FEB 12

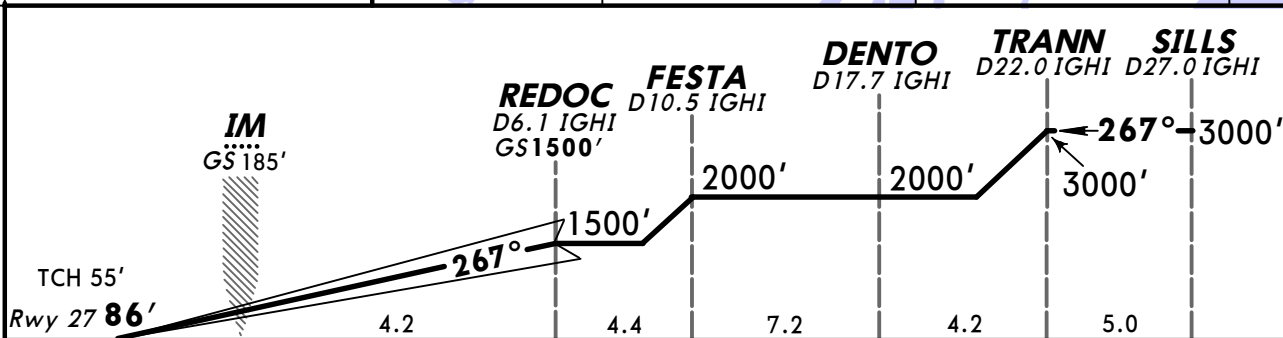
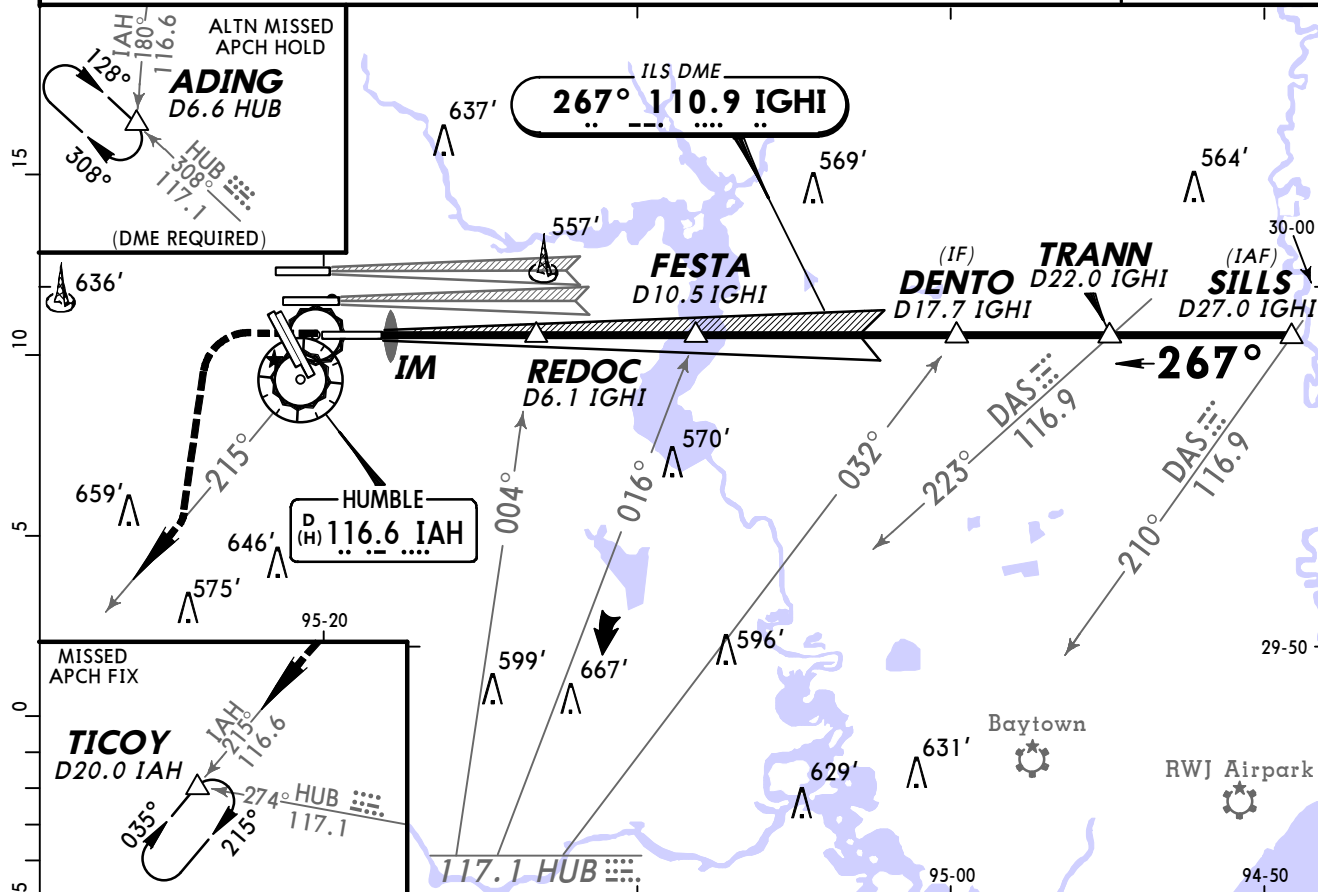
(71-7A)

JEPPesen

HOUSTON, TEXAS

ILS Rwy 27 CAT II & III

BRIEFING STRIP™	D-ATIS		HOUSTON Approach (R)		HOUSTON Tower				Ground		
					Rwy 9/27	Rwy 8R/26L	Rwy 8L/26R	Rwys 15L/33R, 15R/33L	Rwys 9/27, 8L/26R, 8R/26L	Rwys 15L/33R, 15R/33L	
	124.05		120.05		135.15		125.35		120.72		
					127.3		121.7		118.57		
LOC IGHI 110.9		Final Apch Crs 267°		GS REDOC 1500' (1414')		CAT IIIC NA		CAT IIIB Refer to Minimums		CAT IIIA RA 101' DA(H) 186' (100')	
								Apt Elev 97' Rwy 27 86'			
MISSED APCH: Climb to 560' then climbing LEFT turn to 3000' outbound on IAH VOR R-215 to TICOY INT/D20.0 IAH and hold, or as directed by ATC.											
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'											
1. Special Aircrew & Acft Certification Required. 2. Radar required. 3. Simultaneous approach authorized with Rwy 26L/R. 4. VGSI and ILS glidepath not coincident.											
MSA IAH VOR											



0		0.1											
Gnd speed-Kts	70	90	100	120	140	160	ALSF-II		560'	3000'	IAH		
GS	3.00°	372	478	531	637	743	849	PAPI	↑	←	on 116.6	TICOY	
										LT	R-215		

TERPS				STRAIGHT-IN LANDING RWY 27			
CAT IIIC ILS	CAT IIIB ILS	CAT IIIA ILS	CAT II ILS	RA 101'			
NA	RVR 6	RVR 7	DA(H) 186' (100')				
			1 RVR 12				

1 RVR 10 auth with specific OPSPEC, MSPEC, or LOA Approval and use of Autoland or HUD to touchdown.

CHANGES: Ground frequencies modified.

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TERPS AMEND 9 FEB 2012

KIAH/IAH

GEORGE BUSH

INTERCONTINENTAL/HOUSTON

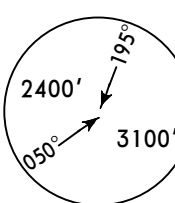
17 FEB 12

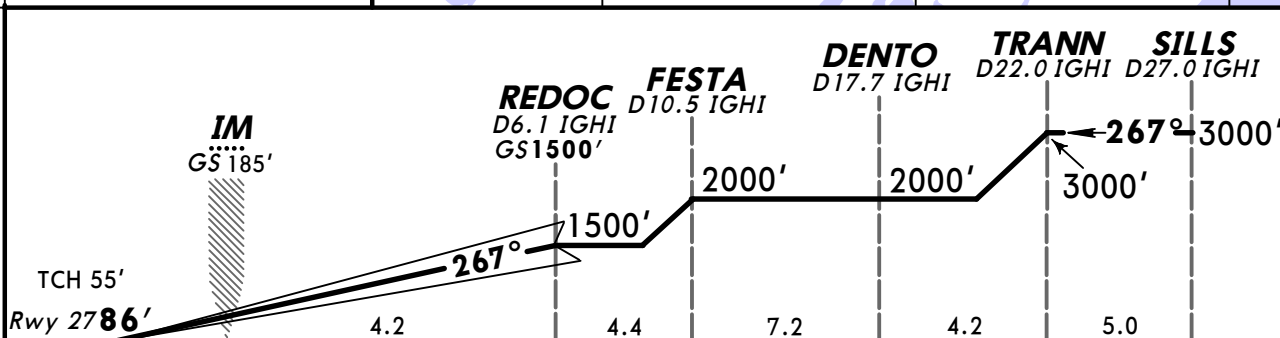
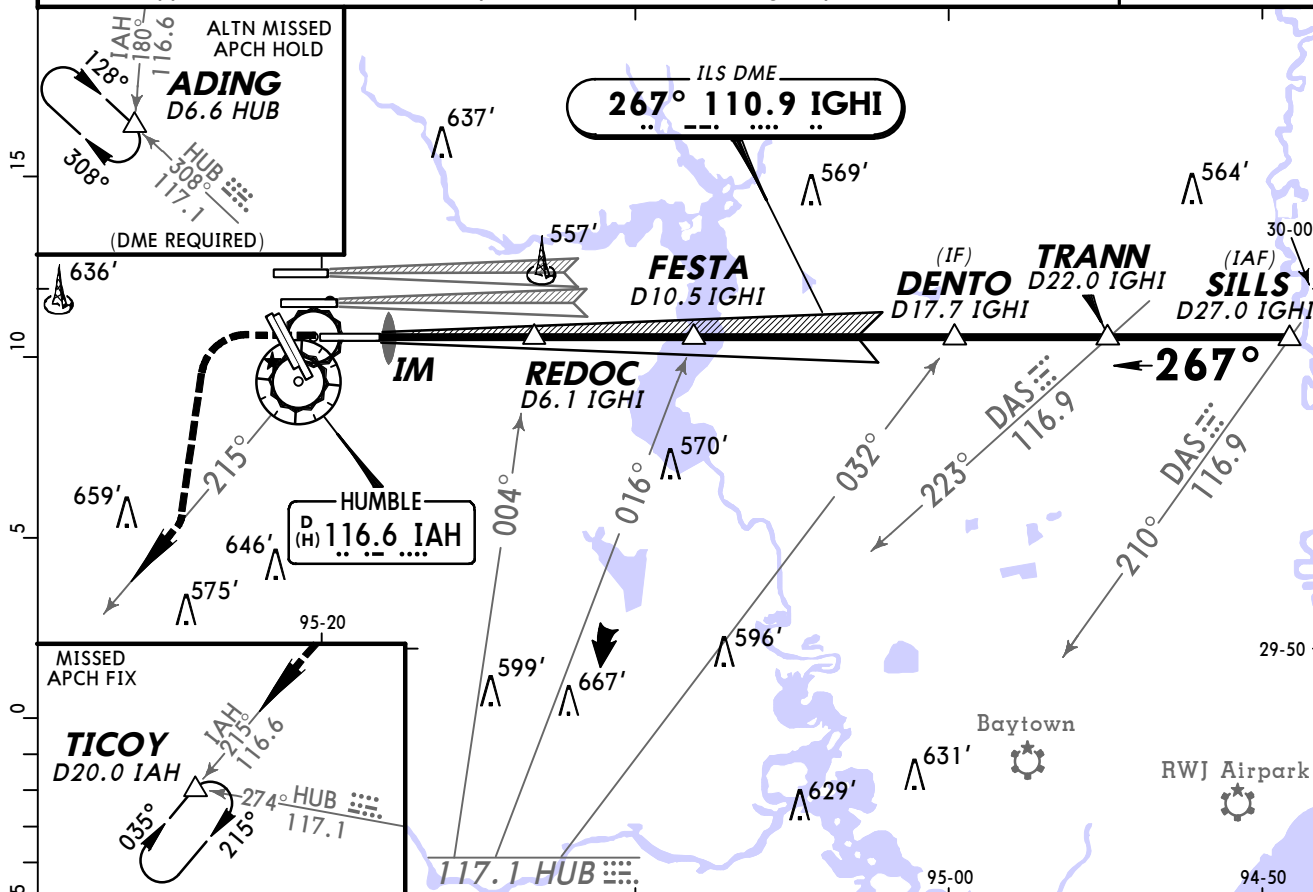
71-7B

HOUSTON, TEXAS

ILS Rwy 27 SA CAT I

BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)	HOUSTON Tower				Ground	
		Rwy 9/27	Rwy 8R/26L	Rwy 8L/26R	Rwys 15L/33R, 15R/33L	Rwys 9/27, 8L/26R, 8R/26L	Rwys 15L/33R, 15R/33L
124.05	120.05	135.15	125.35	120.72	127.3	121.7	118.57
LOC IGHI 110.9	Final Apch Crs 267°	GS REDOC 1500' (1414')	SA CAT I ILS RA 104' DA(H) 236' (150')		Apt Elev 97' Rwy 27 86'		 MSA IAH VOR
MISSED APCH: Climb to 560' then climbing LEFT turn to 3000' outbound on IAH VOR R-215 to TICOY INT/D20.0 IAH and hold, or as directed by ATC.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. Special Aircrew & Acft Certification Required. 2. Radar required. 3. Simultaneous approach authorized with Rwy 26L/R. 4. VGSI and ILS glidepath not coincident.							



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II		560'	3000'	IAH	TICOY
GS	3.00°	372	478	531	637	743	PAPI		↑	LT	on 116.6	R-215

TERPS

STRAIGHT-IN LANDING RWY 27

1 SA CAT I ILS

RA 104'

DA(H) 236' (150')

RVR 14

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

CHANGES: Ground frequencies modified.

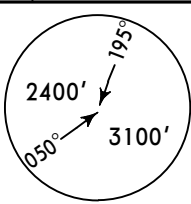
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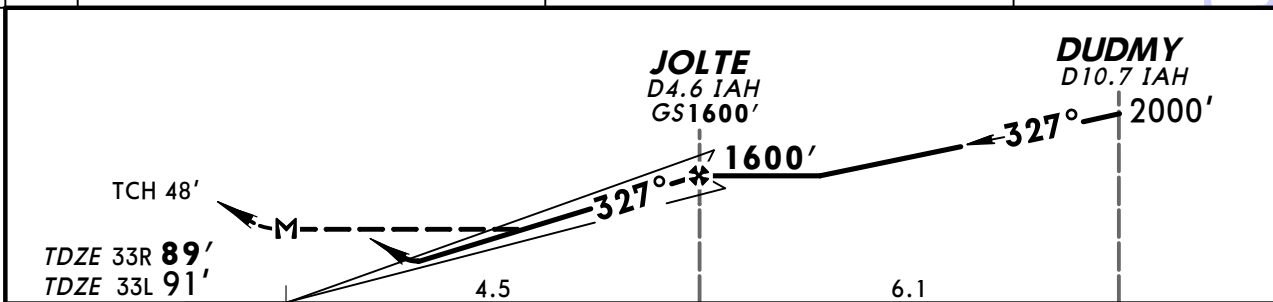
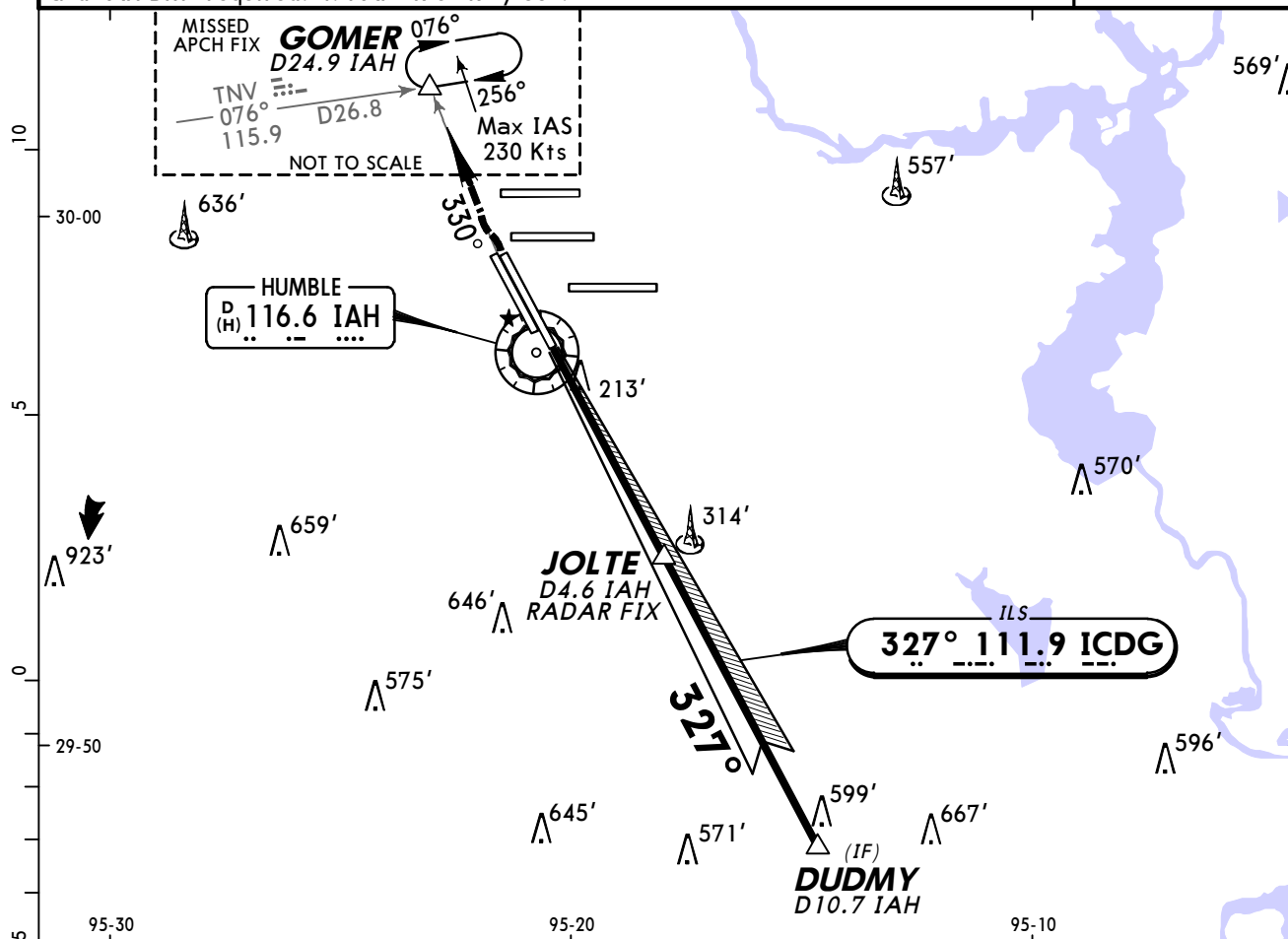
TERPS AMEND 9 9 FEB 2012

KIAH/IAH GEORGE BUSH INTERCONTINENTAL/HOUSTON

JEPPesen
17 FEB 12 (71-8)

HOUSTON, TEXAS
ILS or LOC Rwy 33R

BRIEFING STRIP™	D-ATIS	HOUSTON Approach (R)	HOUSTON Tower				Ground	
			Rwys 15L/33R, 15R/33L	Rwy 8R/26L	Rwy 8L/26R	Rwy 9/27	Rwys 15L/33R, 15R/33L	Rwys 8L/26R, 8R/26L, 9/27
	124.05	120.05	127.3	125.35	120.72	135.15	118.57	121.7
	LOC ICDG 111.9	Final Apch Crs 327°	GS JOLTE 1600' (1511')	ILS DA(H) 289' (200')	Apt Elev 97' TDZE 33R 89'		 MSA IAH VOR	
	MISSED APCH: Climb to 2000' outbound via IAH VOR R-330 to GOMER INT/D24.9 IAH and hold.							
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'				
1. Radar required. 2. DME from IAH VOR. 3. Simultaneous reception of ICDG LOC and IAH DME required. 4. PAPI-R on Rwy 33L.								



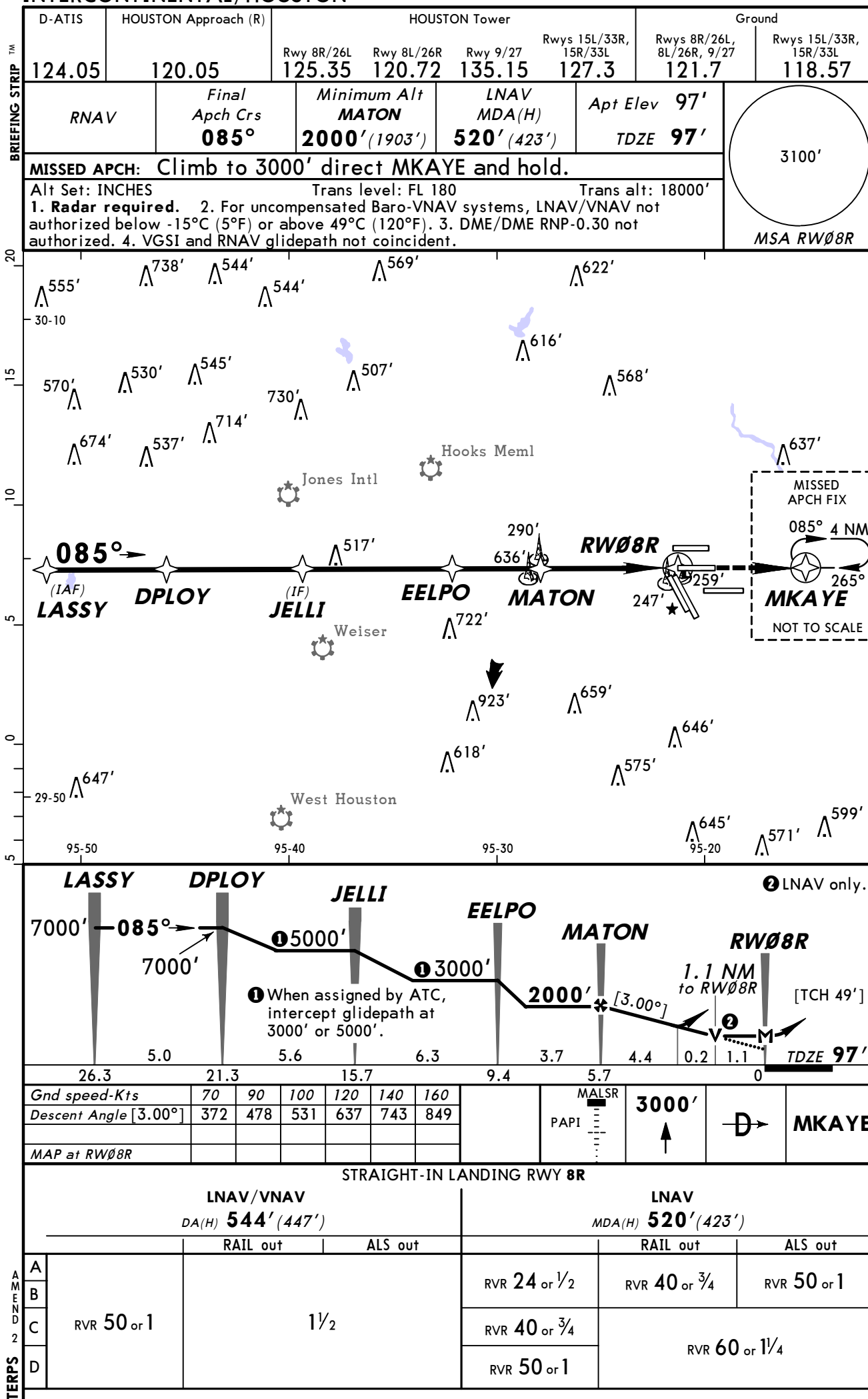
Gnd speed-Kts	70	90	100	120	140	160	MALS	2000'	IAH	GOMER
GS	3.00°	372	478	531	637	743	849		via 116.6	
JOLTE to MAP	4.5	3:51	3:00	2:42	2:15	1:56	1:41		R-330	

STRAIGHT-IN LANDING RWY 33R					SIDESTEP LANDING RWY 33L	CIRCLE-TO-LAND
1 ILS DA(H) 289' (200')		2 LOC (GS out) MDA(H) 540' (451')			540' (449')	
FULL	RAIL or ALS out	RAIL out	ALS out			
A		RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	RVR 50 or 1	A
B						B
C	RVR 24 or 1/2	RVR 40 or 3/4	RVR 40 or 3/4	RVR 60 or 1/4	1 1/2	C
D			RVR 50 or 1	1 1/2	2	D

1 RVR 18 with Flight Director or Autopilot or HUD to DA. 2 Radar or DME required.

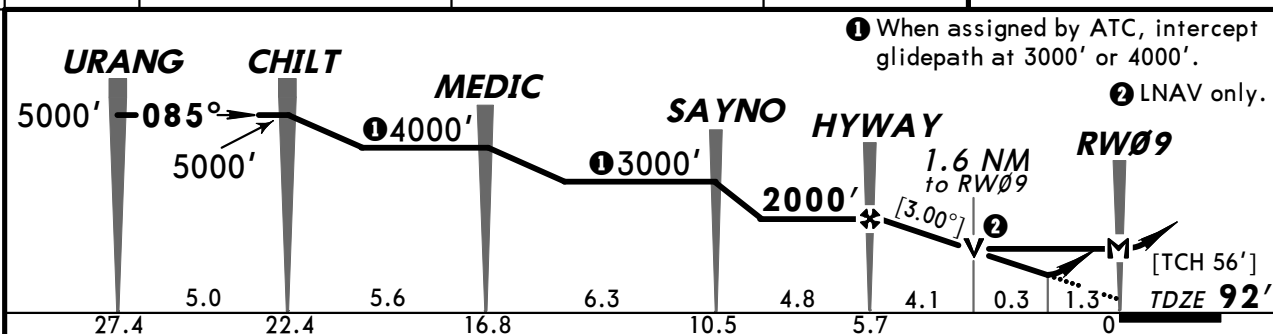
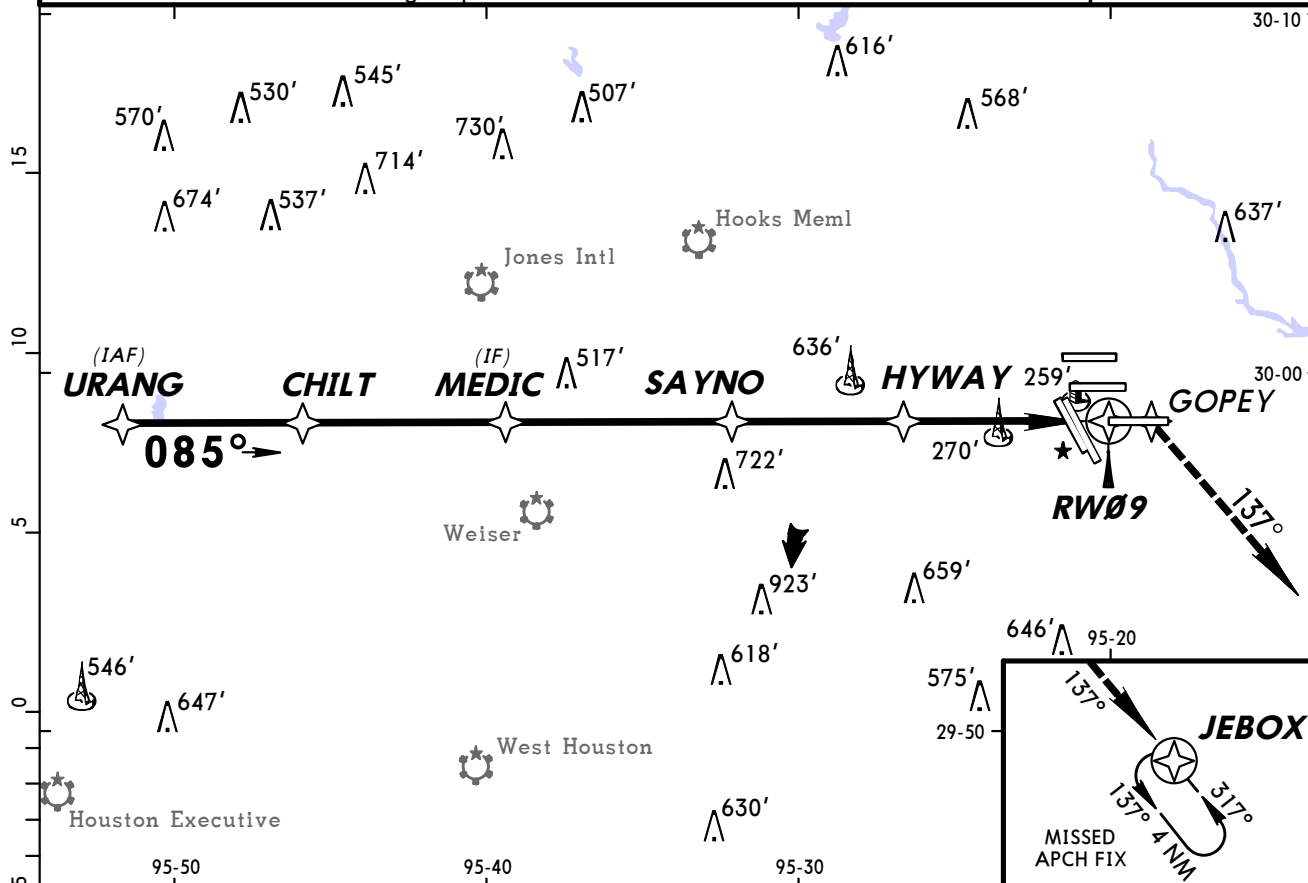
CHANGES: Ground frequencies modified.

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BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)	HOUSTON Tower				Ground	
		Rwy 9/27	Rwy 8R/26L	Rwy 8L/26R	Rwys 15L/33R, 15R/33L	Rwys 9/27, 8L/26R, 8R/26L	Rwys 15L/33R, 15R/33L
124.05	120.05	135.15	125.35	120.72	127.3	121.7	118.57
RNAV	Final Apch Crs 085°	Minimum Alt HYWAY 2000' (1908')	LNAV/VNAV DA(H) 547' (455')	Apt Elev 97' TDZE 92'		3100' MSA RW09	
MISSED APCH: Climb to 3000' direct GOPEY and via 137° track to JEBOX and hold.							
Alt Set: INCHES							



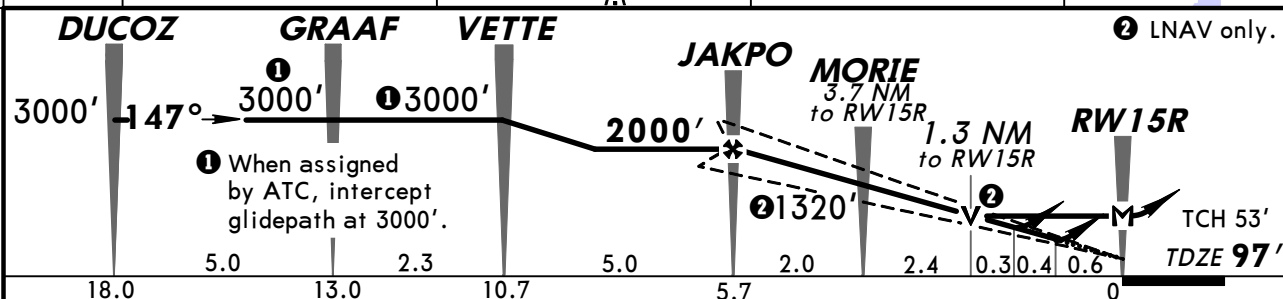
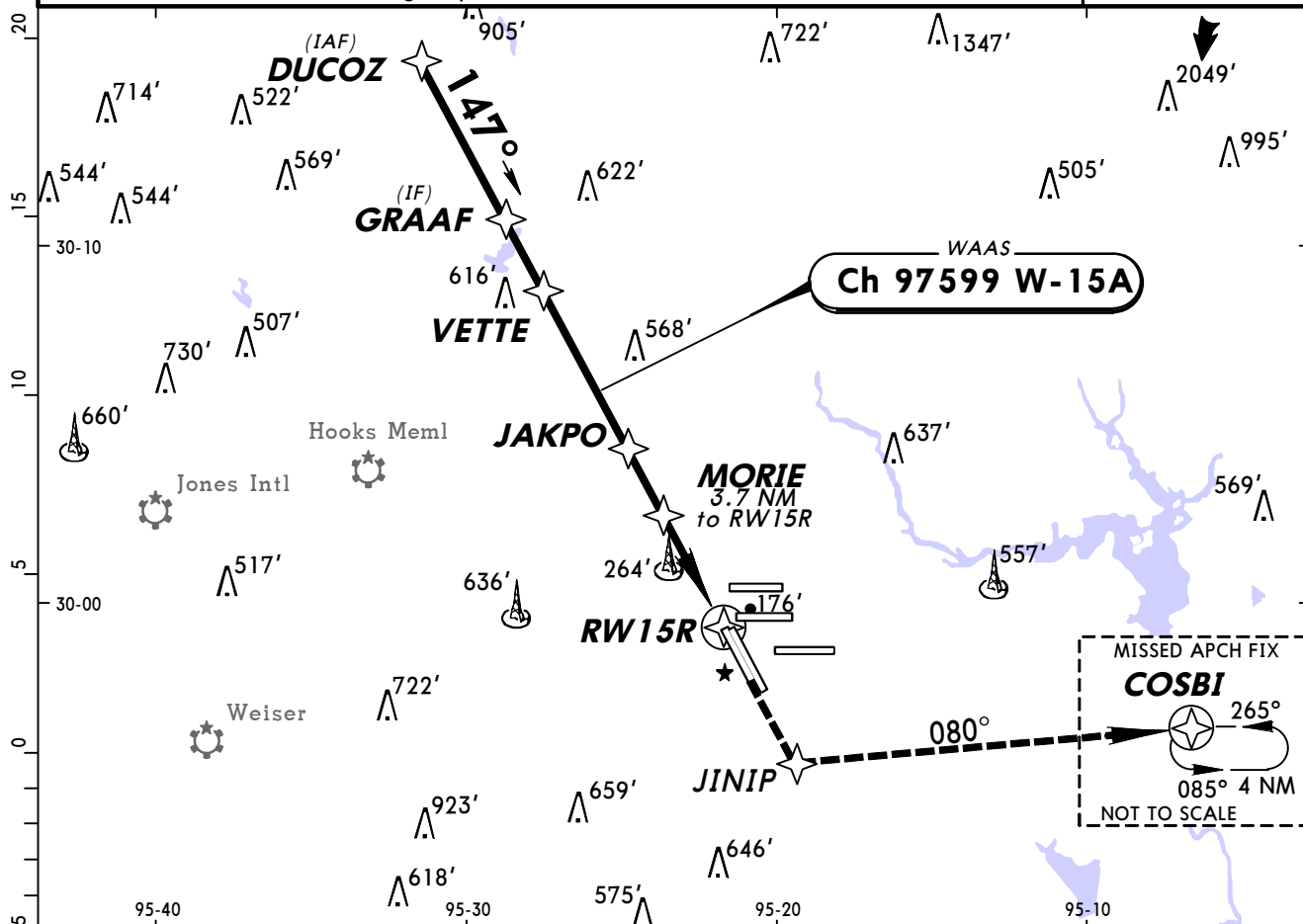
Gnd speed-Kts	70	90	100	120	140	160	MALSR	3000'	PAPI	GOPEY
Descent Angle [3.00°]	372	478	531	637	743	849				
MAP at RW09										

STRAIGHT-IN LANDING RWY 9

LNAV/VNAV			LNAV		
DA(H) 547' (455')			MDA(H) 680' (588')		
RAIL out		ALS out	RAIL out		ALS out
A			RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1
B					
C	RVR 50 or 1	1 1/2	RVR 50 or 1	1 1/2	
D			RVR 60 or 1 1/4	1 3/4	

BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)	HOUSTON Tower				Ground	
		Rwys 15R/33L, 15L/33R	Rwy 8L/26R	Rwy 8R/26L	Rwy 9/27	Rwys 15R/33L, 15L/33R	Rwys 8L/26R, 8R/26L, 9/27
124.05	120.05	127.3	120.72	125.35	135.15	118.57	121.7
WAAS Ch 97599 W-15A		Final Apch Crs 147°	Minimum Alt JAKPO 2000' (1903')	LPV DA(H) 347' (250')	Apt Elev 97' TDZE 97'		3100' MSA RW15R
MISSED APCH: Climb to 2000' direct JINIP and LEFT turn via 080° track to COSBI and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Radar required. 2. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 49°C (120°F). 3. DME/DME RNP-0.30 not authorized. 4. VGSI and RNAV glidepath not coincident.							



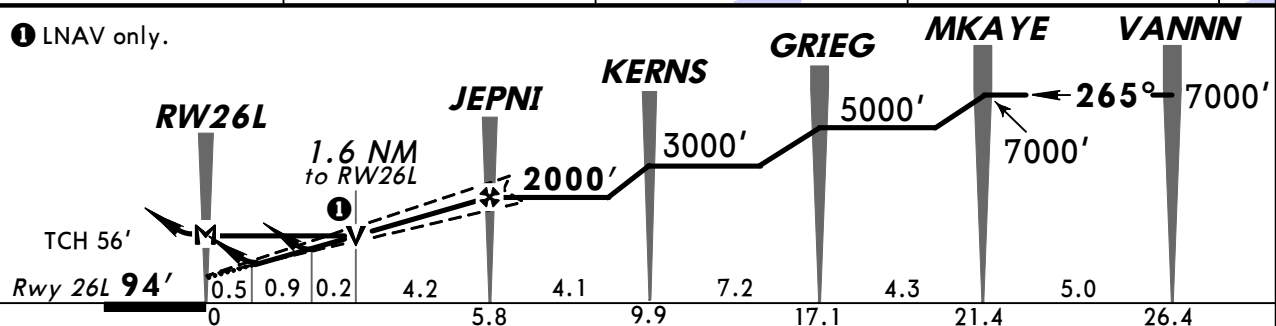
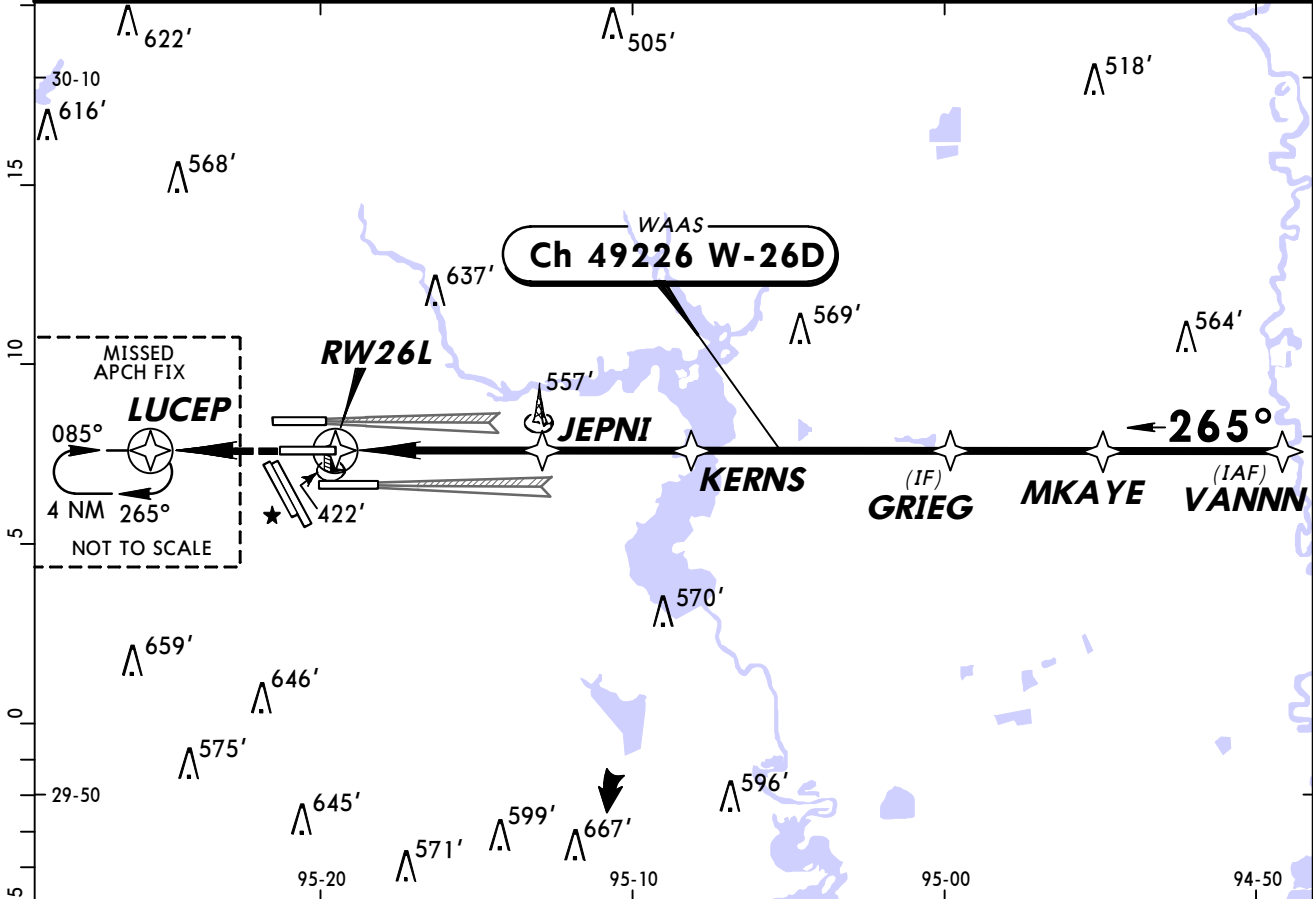
Gnd speed-Kts	70	90	100	120	140	160	MALSR		PAPI		2000'	→	JINIP
Glide Path Angle 3.00°	372	478	531	637	743	849							
MAP at RW15R													

LPV			STRAIGHT-IN LANDING RWY 15R			LNAV		
DA(H) 347' (250')			LNAV/VNAV			MDA(H) 580' (483')		
RAIL out			RAIL out			RAIL out		
ALS out			ALS out			ALS out		
A						RVR 24	RVR 40	RVR 50
B						or 1/2	or 3/4	or 1
C	RVR 24	RVR 40 or 3/4	RVR 40	RVR 60 or 1/4		RVR 40	RVR 60 or 1/4	
D	or 1/2		or 3/4			or 3/4		
						RVR 50	1 1/2	
						or 1		

BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)	HOUSTON Tower				Ground	
124.05	120.05	Rwy 8R/26L 125.35	Rwy 8L/26R 120.72	Rwy 9/27 135.15	Rwys 15L/33R, 15R/33L 127.3	Rwys 8R/26L, 8L/26R, 9/27 121.7	Rwys 15L/33R, 15R/33L 118.57
WAAS Ch 49226 W-26D	Final Apch Crs 265°	Minimum Alt JEPNI 2000' (1906')	LPV DA(H) 294' (200')	Apt Elev 97' Rwy 26L 94'	3100' MSA RW26L		
MISSED APCH: Climb to 3000' direct LUCEP and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Radar required. 2. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -2°C (29°F) or above 39°C (101°F). 3. DME/DME RNP-0.30 not authorized. 4. VGSI and RNAV glidepath not coincident. 5. Simultaneous approach authorized with Rwy 26R and Rwy 27. 6. Use of flight director or autopilot providing RNAV track guidance required during simultaneous operations.							

20



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	3000'	→	LUCEP
Glide Path Angle	3.00°	372	478	531	637	743	849	PAPI		
MAP at RW26L										

TERPS		STRAIGHT-IN LANDING RWY 26L		1 LNAV	
LPV		LNAV/VNAV		1 LNAV	
DA(H) 294' (200')		DA(H) 583' (489')		MDA(H) 680' (586')	
ALS out		ALS out		ALS out	
A				RVR 24 or 1/2	RVR 55 or 1
B	RVR 24 or 1/2	RVR 40 or 3/4	RVR 60 or 1 1/8	1 5/8	
C				1 1/4	1 3/4
D					

1 Procedure not authorized during simultaneous operations.

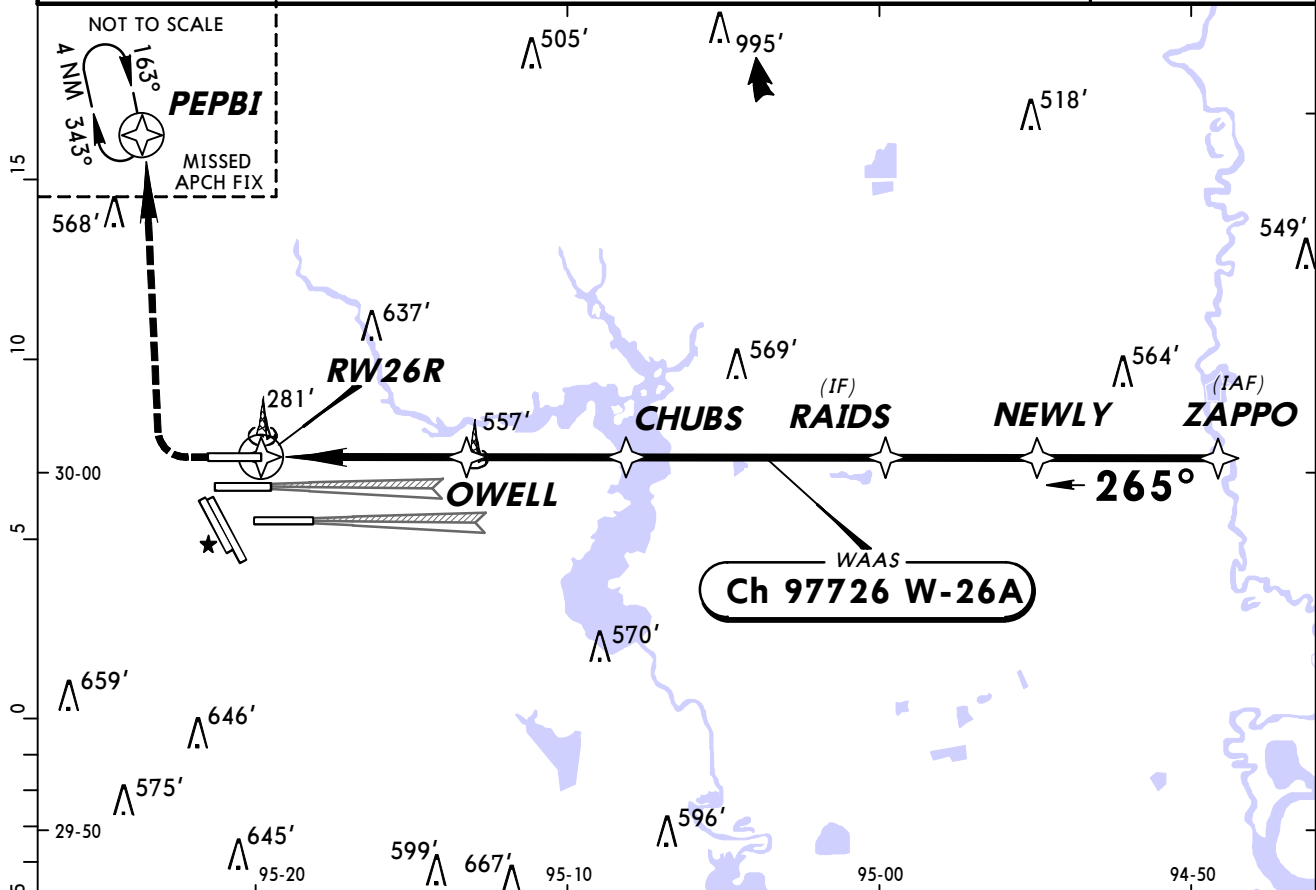
KIAH/IAH GEORGE BUSH INTERCONTINENTAL/HOUSTON

JEPPESSEN
17 FEB 12 **(72-6)**

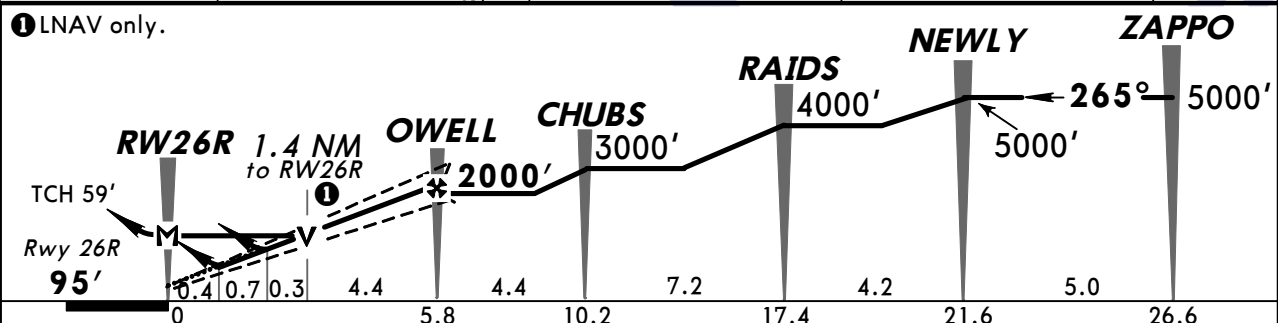
HOUSTON, TEXAS
RNAV (GPS) Z Rwy 26R

BRIEFING STRIP

D-ATIS	HOUSTON Approach (R)		HOUSTON Tower				Ground	
			Rwy 8L/26R	Rwy 8R/26L	Rwy 9/27	Rwys 15L/33R, 15R/33L	Rwys 8L/26R, 8R/26L, 9/27	Rwys 15L/33R, 15R/33L
124.05	120.05		120.72	125.35	135.15	127.3	121.7	118.57
WAAS Ch 97726 W-26A		Final Apch Crs 265°	Minimum Alt OWELL 2000' (1905')	LPV DA(H) 295' (200')	Apt Elev 97' Rwy 26R 95'		3100' MSA RW26R	
MISSED APCH: Climb to 600' then climbing RIGHT turn to 3000' direct PEPBI and hold.								
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Radar required. 2. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -2°C (29°F) or above 39°C (101°F). 3. DME/DME RNP-0.30 not authorized. 4. Simultaneous approach authorized with Rwy 26L and Rwy 27. 5. Use of flight director or autopilot providing RNAV track guidance required during simultaneous operations.								



1 LNAV only.



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	600'	3000'	PEPBI
Glide Path Angle	3.00°	372	478	531	637	743	849			
MAP at RW26R										

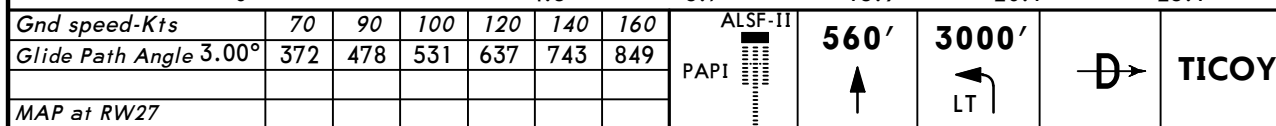
TERPS		STRAIGHT-IN LANDING RWY 26R					
LPV			LNAV/VNAV		1 LNAV		
DA(H) 295' (200')			DA(H) 492' (397')		MDA(H) 600' (505')		
ALS out			ALS out		ALS out		
A	RVR 24 or 1/2	RVR 40 or 3/4	RVR 45 or 7/8	1 1/4	RVR 24 or 1/2	RVR 55 or 1	
B					RVR 55 or 1		
C					RVR 55 or 1	1 3/8	
D							

1 Procedure not authorized during simultaneous operations.

CHANGES: Ground frequencies modified.

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TERPS AMEND 3 9 FEB 2012

BRIEFING STRIP™

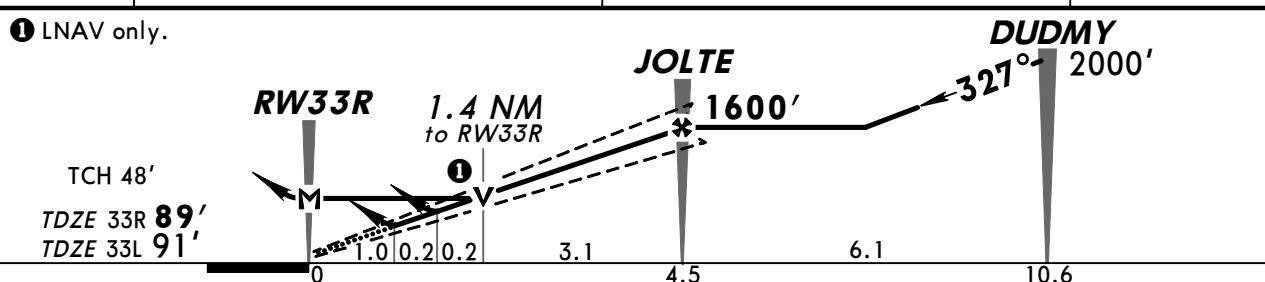
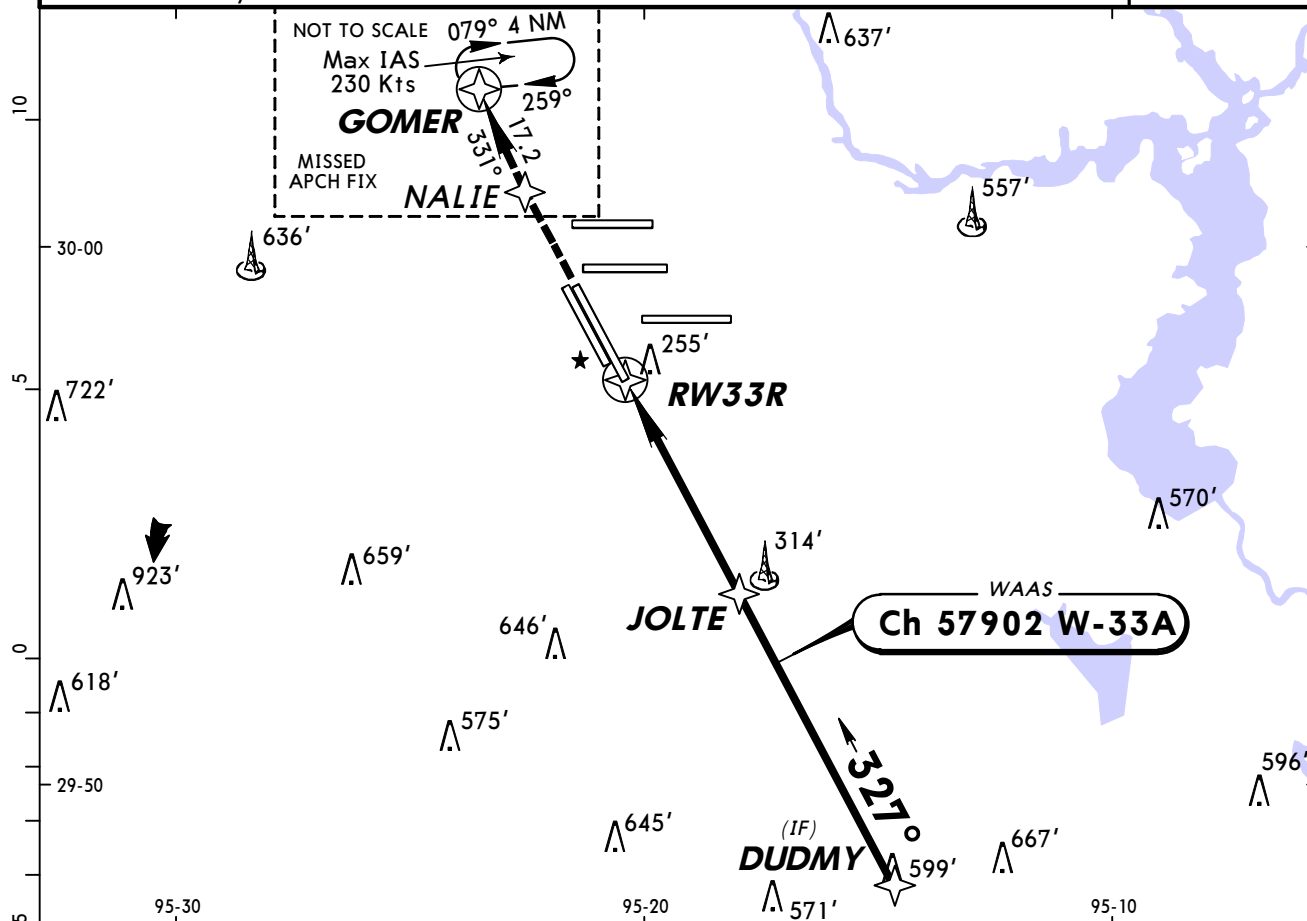
TERPS		STRAIGHT-IN LANDING RWY 27					
		LPV DA(H) 286' (200')		LNAV/VNAV DA(H) 473' (387')		1 LNAV MDA(H) 560' (474')	
		ALS out		ALS out		ALS out	
A						RVR 24 or 1½	RVR 50 or 1
B							
C	RVR 24 or 1½	RVR 40 or ¾	RVR 40 or ¾	1¼		RVR 50 or 1	1⅜
D							

CHANGES: Ground frequencies modified.

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BRIEFING STRIP™

D-ATIS	HOUSTON Approach (R)	HOUSTON Tower				Ground	
		Rwys 15L/33R, 15R/33L	Rwy 8R/26L	Rwy 8L/26R	Rwy 9/27	Rwys 15L/33R, 15R/33L	Rwys 8L/26R, 8R/26L, 9/27
124.05	120.05	127.3	125.35	120.72	135.15	118.57	121.7
WAAS Ch 57902 W-33A	Final Apch Crs 327°	Minimum Alt JOLTE 1600' (1511')	LPV DA(H) 451' (362')	Apt Elev 97' TDZE 33R 89'		3100' MSA RW33R	
MISSED APCH: Climb to 2000' direct NALIE and via 331° track to GOMER and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Radar required. 2. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 48°C (119°F). 3. DME/DME RNP-0.30 not authorized. 4. WAAS VNAV outages may occur daily. WAAS VNAV NOTAM service not provided. 5. PAPI-R on Rwy 33L.							



Gnd speed-Kts	70	90	100	120	140	160	MALSR		2000'	→	NALIE
Glide Path Angle	3.00°	372	478	531	637	743	849				
MAP at RW33R											

STRAIGHT-IN LANDING RWY 33R						SIDESTEP LANDING RWY 33L	CIRCLE-TO-LAND
LPV		LNAV/VNAV		LNAV		MDA(H)	
DA(H) 451' (362')		DA(H) 520' (431')		MDA(H) 580' (491')		580' (489')	
RAIL or ALS out		RAIL or ALS out		RAIL out ALS out			
A				RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	A
B	RVR 40 or 3/4	RVR 60 or 1 1/4	RVR 50 or 1	1 1/2			B
C				RVR 40 or 3/4	RVR 60 or 1 1/4	1 1/2	C
D				RVR 50 or 1	1 1/2	2	D

General Information

Location: Big Spring TX USA
IATA Code:
Lat/Long: N32° 12.8' W101° 31.3'
Elevation: 2573 ft

Airport Use: Public
Magnetic Variation: 6.5°E
Sectional Chart: Dallas Ft Worth

Fuel Types: 100 Octane (LL), Jet A
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: No
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes

Sunrise: 1316 Z
Sunset: 0042 Z,

Runway Information

Runway: 06
Length x Width: 4601 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 2547 ft
Lighting: Edge, Pilot controlled

Runway: 17
Length x Width: 8802 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 2562 ft
Lighting: Edge, ALS, Pilot controlled
Stopway: 1002 ft

Runway: 24
Length x Width: 4601 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 2573 ft
Lighting: Edge, Pilot controlled

Runway: 35
Length x Width: 8802 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 2563 ft
Lighting: Edge, Pilot controlled
Stopway: 1007 ft

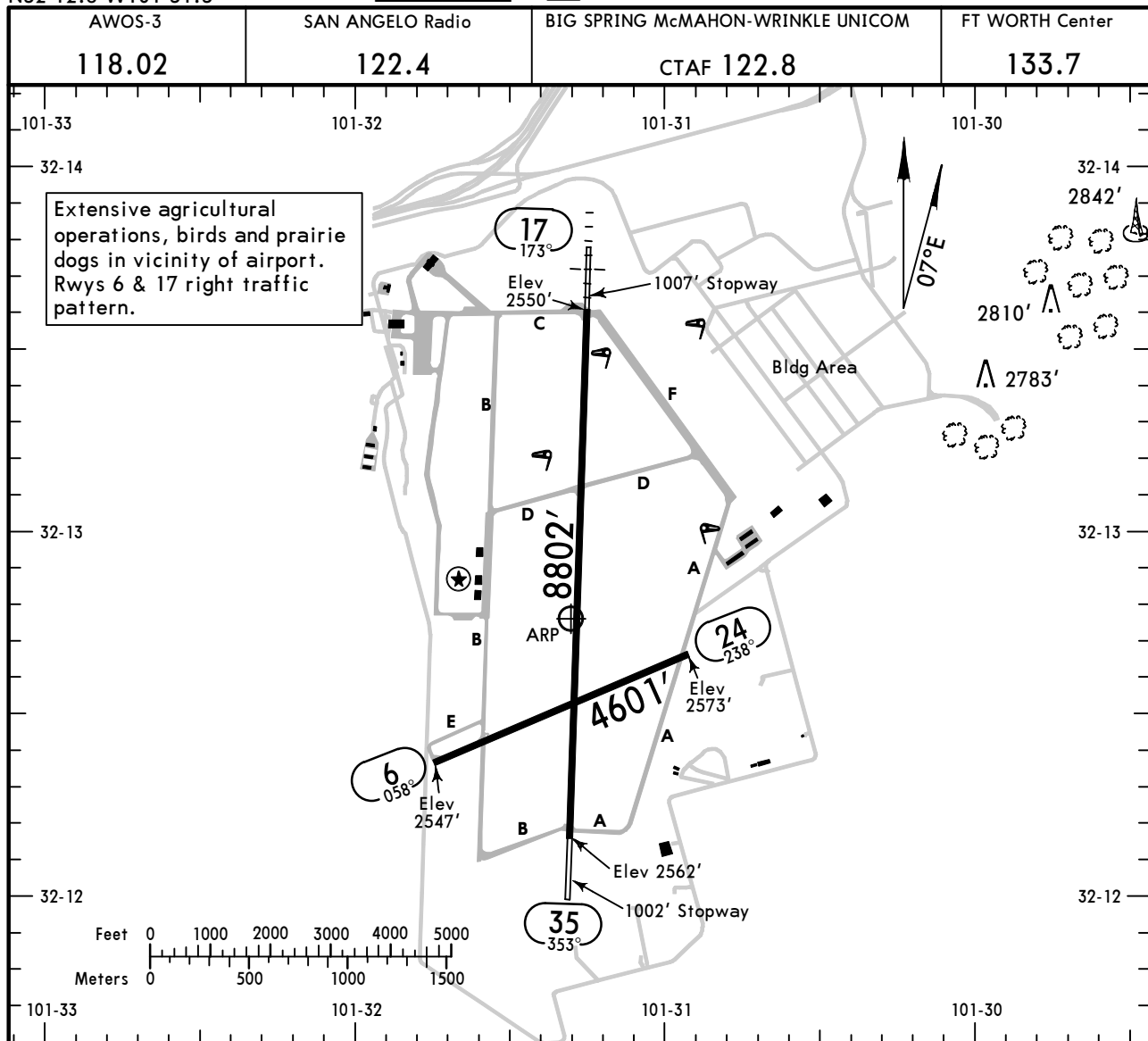
Communication Information

AWOS 118.025
Big Spring MC Mahon-Wrink Unicom 122.8 CTAF PCL
San Angelo Flight Service Station 122.4 RCO
FT Worth Center 133.7 Remote Communications Air-Ground

KBPG
Apt Elev **2573'**
N32 12.8 W101 31.3

JEPPesen
23 JUL 10
Eff 29 Jul (10-9)

BIG SPRING, TEXAS
BIG SPRING McMAHON-WRINKLE



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
6	① MIRL ② PLASI-L				75'
24	① MIRL ② PLASI-L (angle 3.55°)				
17	① MIRL ② SSALS ② PAPI-L (angle 3.0°)				100'
35	① MIRL ② PAPI-L (angle 3.0°)				

- ① Increase intensity on 122.8.
- ② Activate on 122.8.

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

FOR FILING AS ALTERNATE

		Rwys 17, 24, 35		Rwy 6				
		Adequate Vis Ref	STD	With Mim climb of 391' /NM to 3100'		Other	Authorized Only When Local Weather Available	
				Adequate Vis Ref	STD			
1 & 2 Eng	1/4	1	1/4	1	400-1 1/2	A	800-2	
3 & 4 Eng		1/2		1/2		B		
						C		
						D		

OBSTACLE DP: Rwy 6, Climb heading 060° to 3100'
before turning right. Rwy 17, Climb heading 175°
to 3100' before turning right.

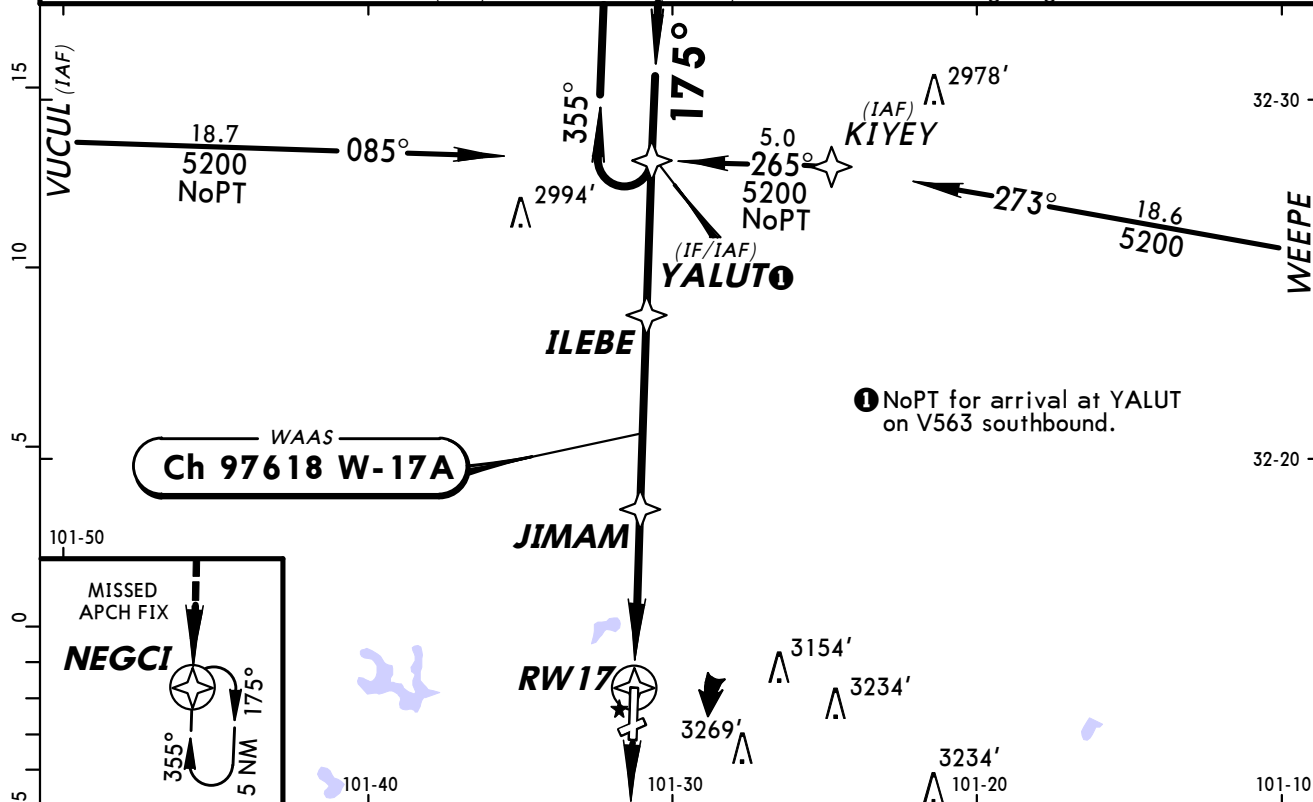
AWOS-3 118.02	FT WORTH Center 133.7	SAN ANGELO Radio 122.4	BIG SPRING McMAHON-WRINKLE UNICOM CTAF 122.8		
WAAS Ch 97618 W-17A	Final Apch Crs 175°	Minimum Alt JIMAM 4200' (1638')	LPV DA(H) (CONDITIONAL) 2812' (250')	Apt Elev 2573' TDZE 2562'	4700'
MISSED APCH: Climb to 4600' direct NEGCI and hold.					MSA RW17

Alt Set: INCHES

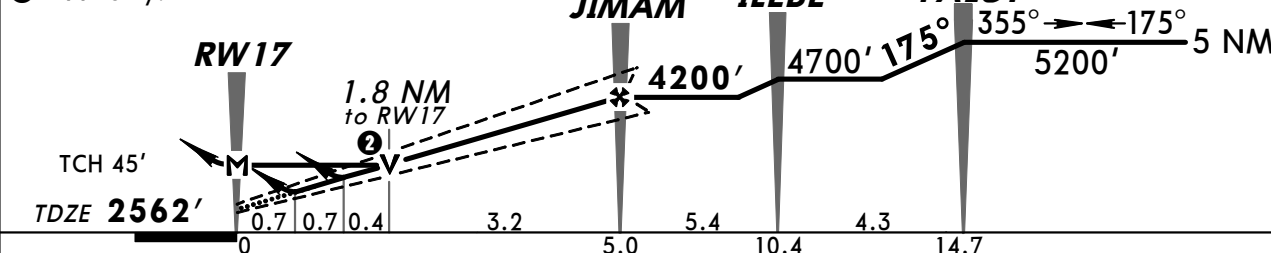
Trans level: FL 180

Trans alt: 18000'

1. Use local altimeter setting; if not received, use Midland Intl altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. Baro-VNAV not authorized when using Midland Intl altimeter setting. 4. VDP not authorized with Midland Intl altimeter setting. 5. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -20°C (4°F) or above 43°C (109°F). 6. Pilot controlled lighting 122.8.



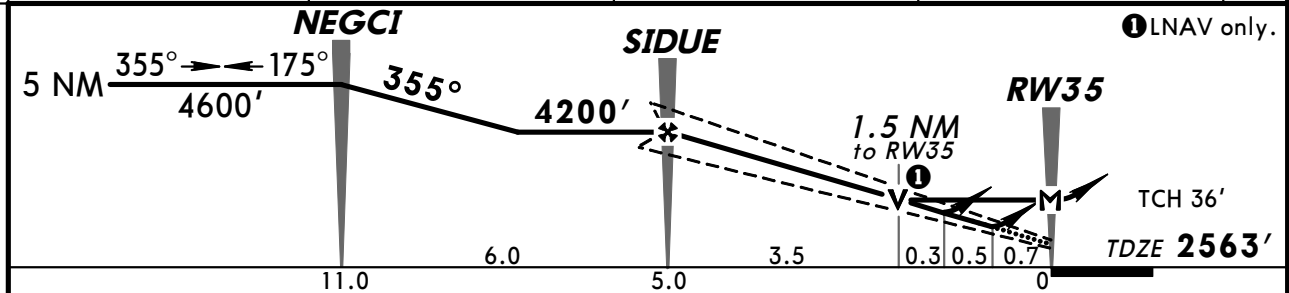
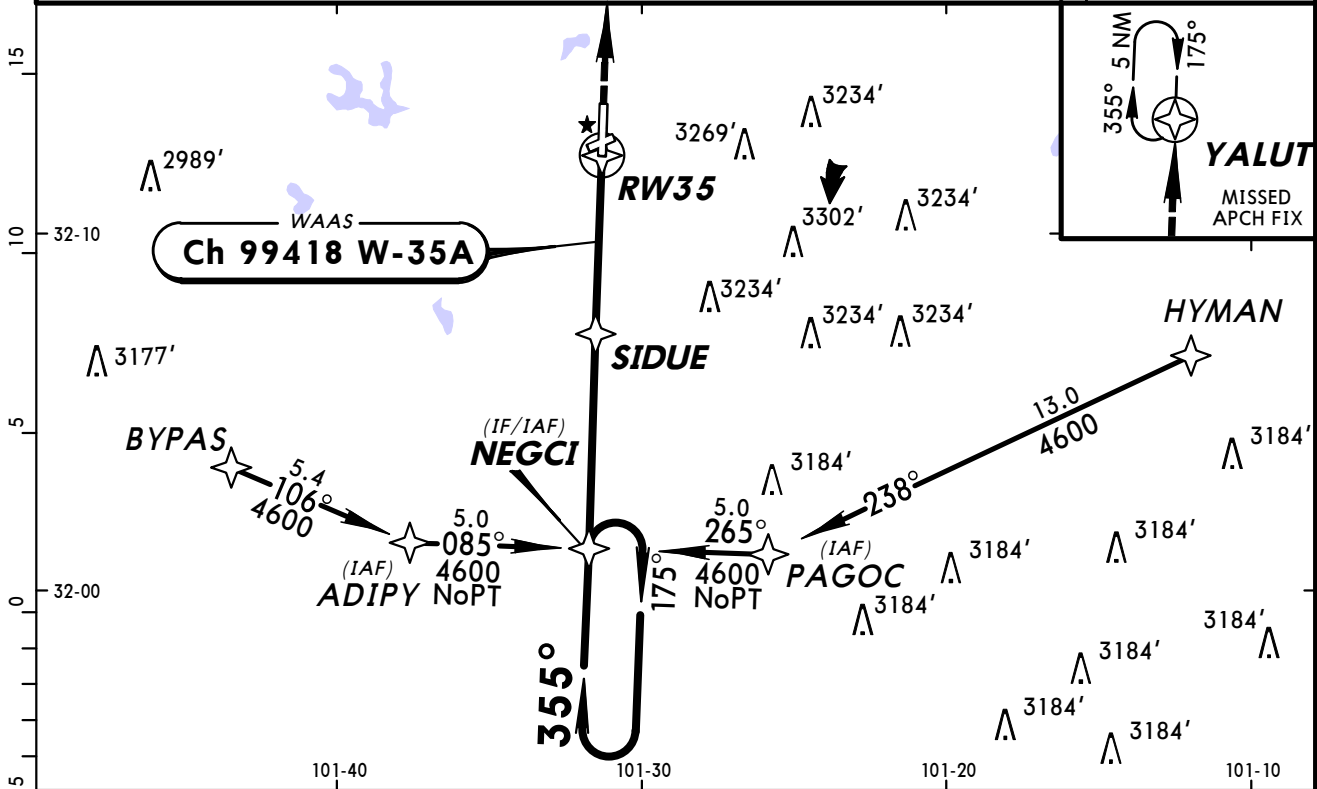
② LNAV only.



Gnd speed-Kts	70	90	100	120	140	160	SSALS	4600'	NEGCI
Glide Path Angle	3.00°	372	478	531	637	743	PAPI	↑	
MAP at RW17									

STRAIGHT-IN LANDING RWY 17 With Local Altimeter Setting							CIRCLE-TO-LAND Not Authorized East of Rwy 17-35.	
LPV DA(H) 2812' (250')		LNAV/VNAV DA(H) 3040' (478')		LNAV MDA(H) 3160' (598')		With Local Altimeter Setting MDA(H)		
ALS out		ALS out		ALS out		Max Kts.		
A	1		1¾		¾	1	90	3160' (587')-1
B					1½	140	3160' (587')-1½	
C					1¾	165	3160' (587')-2	
D								
With Midland Intl Altimeter Setting							With Midland Intl Altimeter Setting	
LPV DA(H) 2942' (380')		LNAV/VNAV DA(H) 3170' (608')		LNAV MDA(H) 3300' (738')		MDA(H)		
ALS out		ALS out		ALS out		Max Kts.		
A	1½		2¼		¾	1	90	3300' (727')-1
B					2	140	3300' (727')-2	
C					2¼	165	3300' (727')-2½	
D								

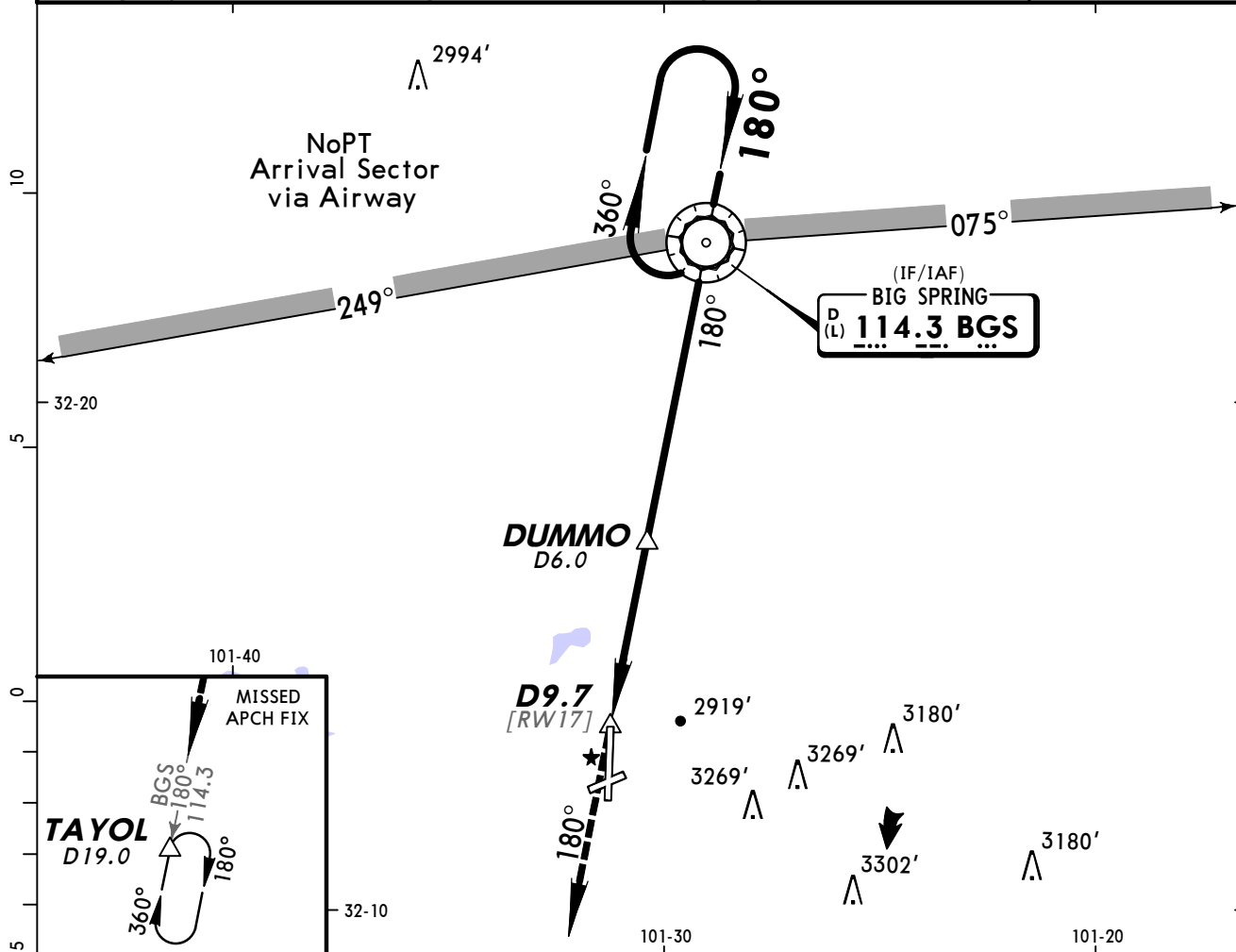
AWOS-3 118.02		FT WORTH Center 133.7		SAN ANGELO Radio 122.4		BIG SPRING McMAHON-WRINKLE UNICOM CTAF 122.8				
WAAS Ch 99418 W-35A		Final Apch Crs 355°		Minimum Alt SIDUE 4200' (1637')		LPV DA(H) (CONDITIONAL) 2813' (250')		Apt Elev 2573' TDZE 2563'		4700' MSA RW35
MISSED APCH: Climb to 5200' direct YALUT and hold.										
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Midland Intl altimeter setting. 2. Baro-VNAV not authorized when using Midland Intl altimeter setting. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -20°C (-4°F) or above 43°C (109°F). 4. DME/DME RNP-0.30 not authorized. 5. VDP not authorized with Midland Intl altimeter setting. 6. Pilot controlled lighting 122.8.										



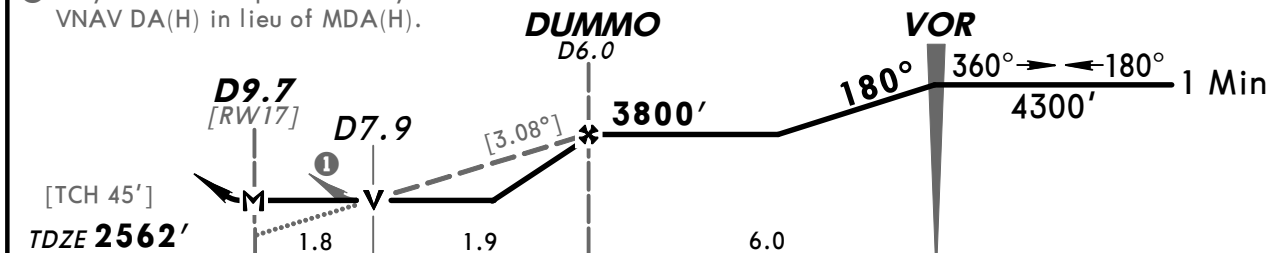
Gnd speed-Kts	70	90	100	120	140	160					
Glide Path Angle	3.00°	372	478	531	637	743	849				
MAP at RW35											

STRAIGHT-IN LANDING RWY 35							CIRCLE-TO-LAND Not Authorized East of Rwy 17-35.	
LPV <i>DA(H)</i> 2813' (250')		With Local Altimeter Setting LNAV/VNAV <i>DA(H)</i> 2979' (416')		LNAV <i>MDA(H)</i> 3060' (497')		Max Kts	With Local Altimeter Setting <i>MDA(H)</i>	
A	1	1½	1	90	3060' (487') - 1			
B				120				
C				140				
D				165				
LPV <i>DA(H)</i> 2943' (380')		With Midland Intl Altimeter Setting LNAV/VNAV <i>DA(H)</i> 3109' (546')		LNAV <i>MDA(H)</i> 3200' (637')		Max Kts	With Midland Intl Altimeter Setting <i>MDA(H)</i>	
A	1¼	2	1	90	3200' (627') - 1			
B				120				
C				140				
D				165				

AWOS-3 118.02		FT WORTH Center 133.7		SAN ANGELO Radio 122.4		BIG SPRING McMAHON-WRINKLE UNICOM CTAF 122.8				
VOR BGS 114.3		Final Apch Crs 180°		Minimum Alt DUMMO 3800'(1238')		MDA(H) (CONDITIONAL) 3180'(618')		Apt Elev 2573' TDZE 2562'		4700' MSA BGS VOR
MISSED APCH: Climb to 6000' outbound via BGS VOR R-180 to TAYOL/D19.0 and hold. Continue climb-in-hold to 6000'.										
Alt Set: INCHES										



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



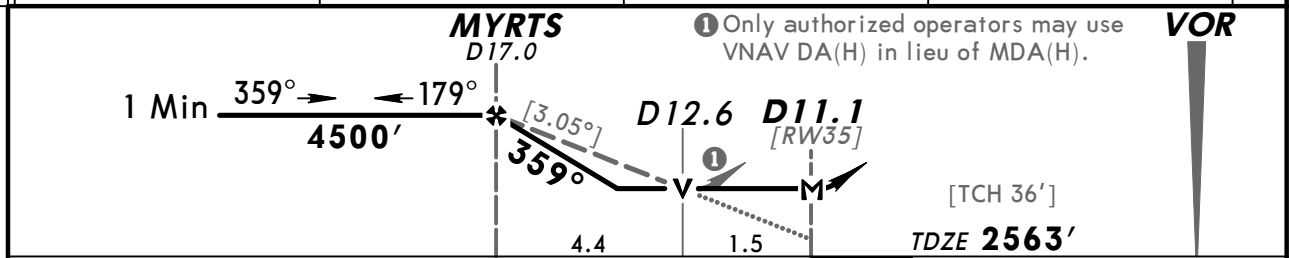
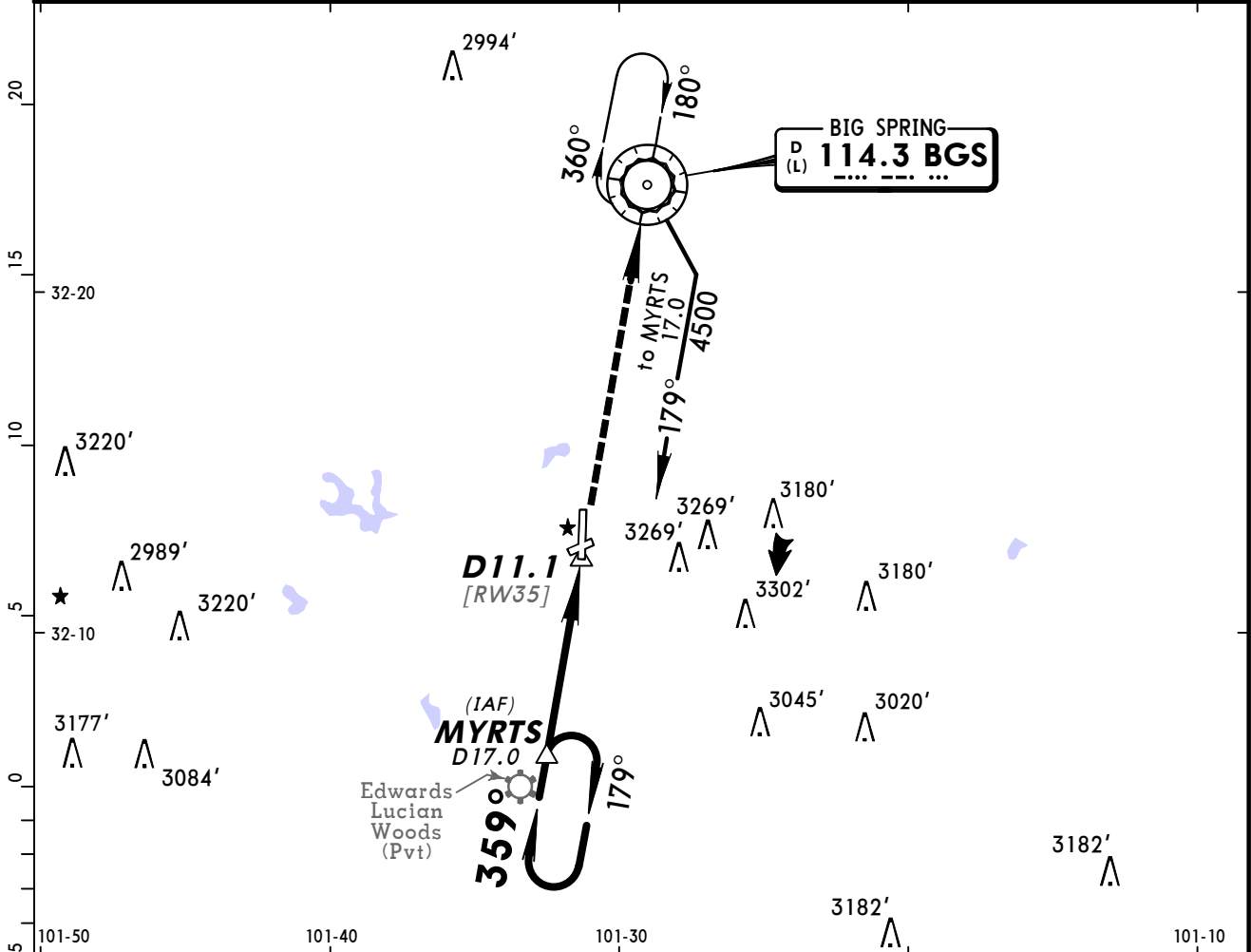
Gnd speed-Kts	70	90	100	120	140	160	SSALS PAPI 6000' via BGS 114.3 R-180 TAYOL
Descent angle [3.08°]	381	490	545	654	763	872	
MAP at D9.7							

STRAIGHT-IN LANDING RWY 17					CIRCLE-TO-LAND		
MDA(H) 3180' (618')			MDA(H) 3320' (758')		Not Authorized East of Rwy 17-35.		
With Local Altimeter Setting			With Midland Intl Altimeter Setting		Max Kts	With Local Altimeter Setting	With Midland Intl Altimeter Setting
	ALS out			ALS out		MDA(H)	MDA(H)
A	3/4	1	3/4	1	90	3180' (607') - 1	3320' (747') - 1
B			1 1/4		120		3320' (747') - 1 1/4
C	1 3/4		2 1/4		140	3180' (607') - 1 3/4	3320' (747') - 2 1/4
D	2		2 1/2		165	3180' (607') - 2	3320' (747') - 2 1/2

CHANGES: Procedure.

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AWOS-3		FT WORTH Center		SAN ANGELO Radio		BIG SPRING McMAHON-WRINKLE UNICOM	
118.02		133.7		122.4		CTAF 122.8	
VOR BGS 114.3	Final Apch Crs 359°	Minimum Alt MYRTS 4500' (1937')	MDA(H) (CONDITIONAL) 3080' (517')	Apt Elev 2573' TDZE 2563'	4700' MSA BGS VOR		
MISSED APCH: Climb to 4500' direct to BGS VOR and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Midland Intl altimeter setting. 2. VDP not authorized when using Midland Intl altimeter setting. 3. When VGSI inop, circling Rwy 6 not authorized at night. 4. Pilot controlled lighting 122.8.							



Gnd speed-Kts	70	90	100	120	140	160	PAPI-L	4500'	D➔	BGS 114.3
Descent angle [3.05°]	378	486	540	648	755	863				
MAP at D11.1										

STRAIGHT-IN LANDING RWY 35				CIRCLE-TO-LAND			
MDA(H) 3080' (517')		MDA(H) 3220' (657')		Not Authorized East of Rwy 17-35.		With Local Altimeter Setting	
With Local Altimeter Setting		With Midland Intl Altimeter Setting		With Local Altimeter Setting		With Midland Intl Altimeter Setting	
				Max Kts	MDA(H)	MDA(H)	MDA(H)
A	1	1		90	3080' (507') - 1	3220' (647') - 1	
B	1	1		120	3080' (507') - 1	3220' (647') - 1	
C	1½	1¾		140	3080' (507') - 1½	3220' (647') - 1¾	
D	1¾	2		165	3140' (567') - 2	3280' (707') - 2¼	

General Information

Location: Denton TX USA

IATA Code:

Lat/Long: N33° 12.1' W097° 11.9'

Elevation: 642 ft

Airport Use: Public

Magnetic Variation: 4.1 °E

Sectional Chart: Dallas Ft Worth

Fuel Types: 100 Octane (LL), Jet A

Repair Types: Major Airframe, Major Engine

Customs: No

Airport Type: IFR

Landing Fee: No

Control Tower: Yes

Jet Start Unit: Yes

LLWS Alert: No

Beacon: Yes

Pattern Altitude: 800 ft AGL

Sunrise: 1300 Z

Sunset: 0024 Z,

Runway Information

Runway: 18

Length x Width: 7002 ft x 150 ft

Surface Type: asphalt

TDZ-Elev: 642 ft

Lighting: Edge, ALS

Runway: 36

Length x Width: 7002 ft x 150 ft

Surface Type: asphalt

TDZ-Elev: 642 ft

Lighting: Edge

Displaced Threshold: 100 ft

Communication Information

ASOS 119.325

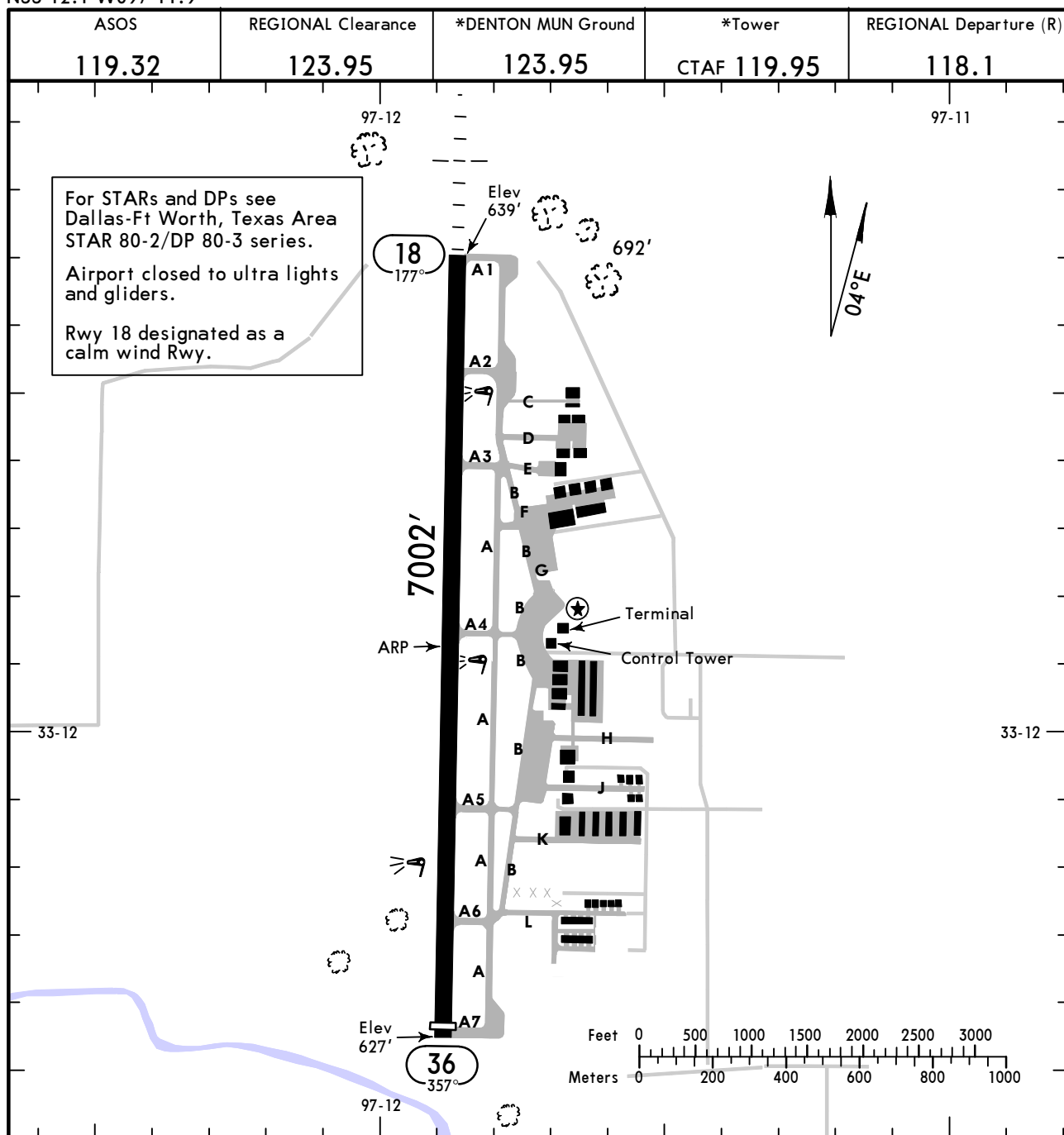
Denton Tower 119.95 CTAF

Denton Ground Control 123.95

Denton Clearance Delivery 123.95

Regional Approach Control 118.1

Regional Departure Control 118.1

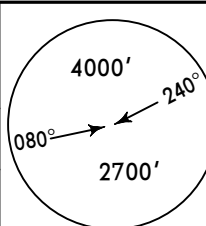


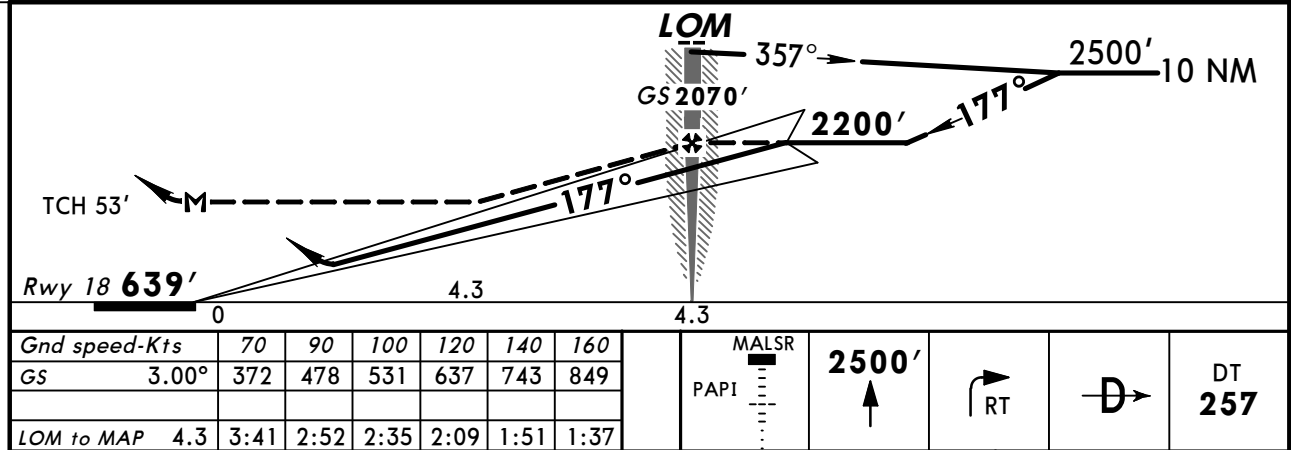
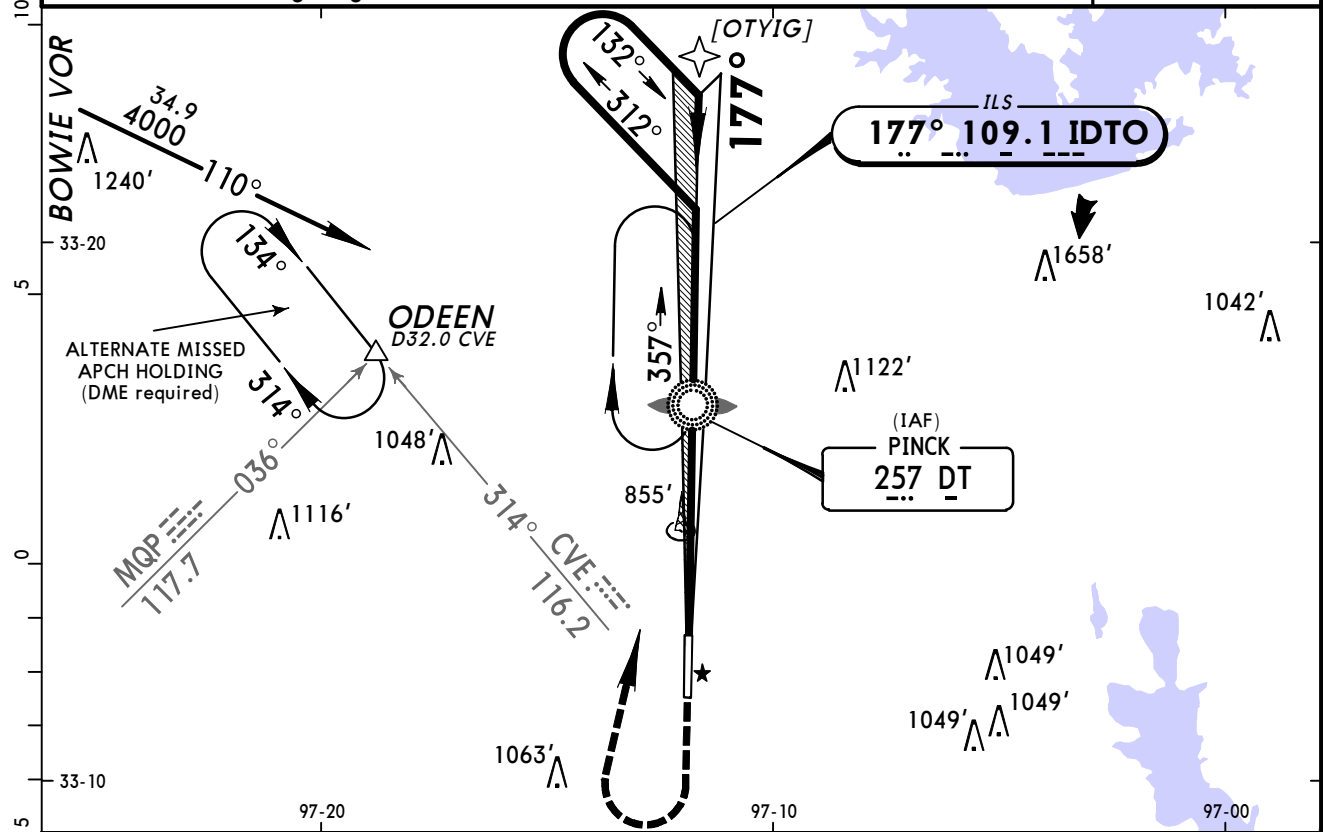
ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			WIDTH
		— LANDING BEYOND —	Threshold	Glide Slope	
18	MIRL ① MALSR PAPI-L (angle 3.0°)	②	6502'	5490'	150'
36	MIRL PAPI-L (angle 3.0°)	③	6502'		

- ① Activate on 119.95.
② Last 500' not available for landing distance computations.
③ Last 400' not available for landing distance computations.

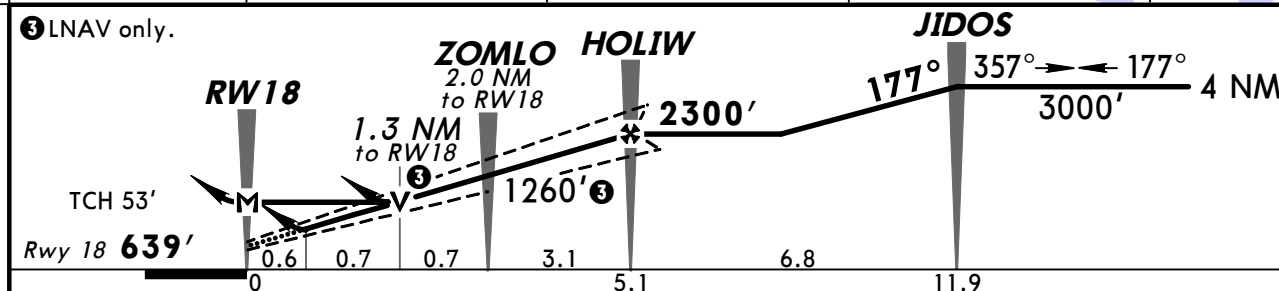
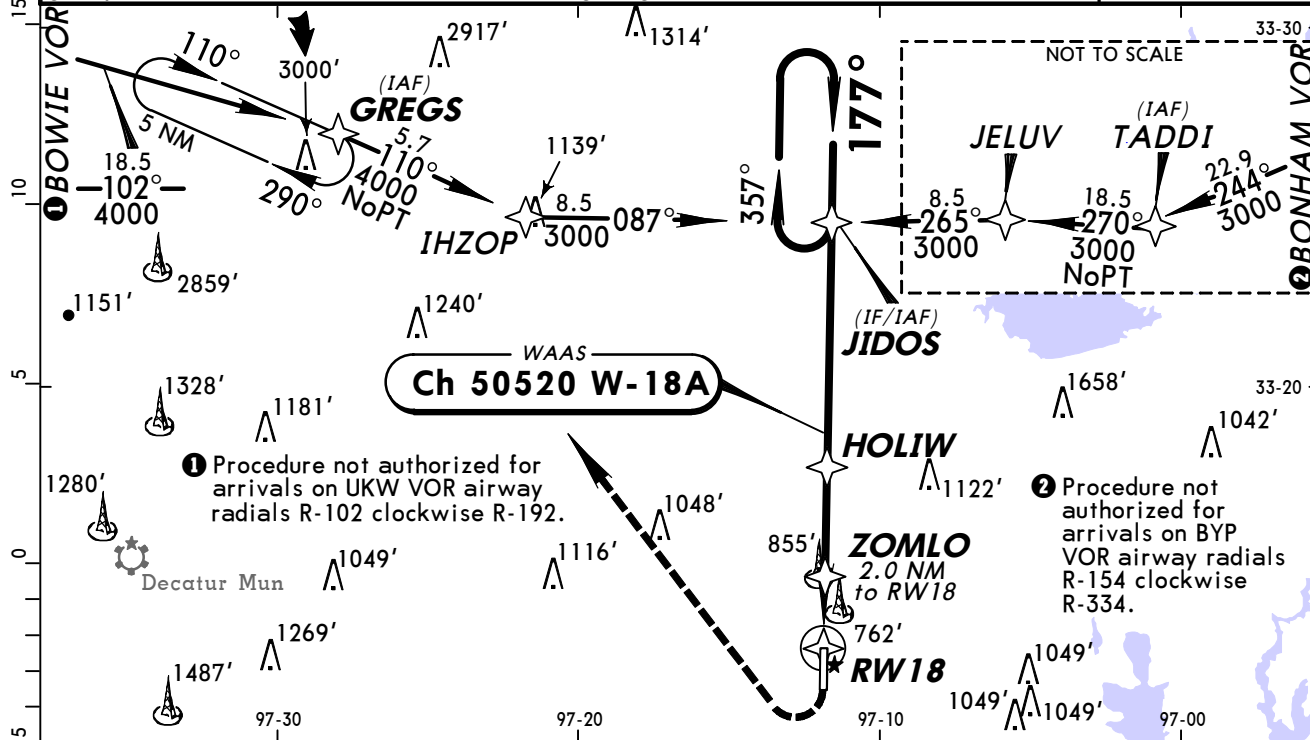
TAKE-OFF			FOR FILING AS ALTERNATE	
All Rwys			Authorized Only When Local Weather Available	
Adequate Vis Ref		STD	RNAV (GPS) Rwy 18	Other
			RNAV (GPS) Rwy 36	
1 & 2 Eng	1/4	1	800-2	NA
3 & 4 Eng		1/2		

ASOS 119.32		REGIONAL Approach (R) 118.1		*DENTON MUN Tower CTAF 119.95		*Ground 123.95	
LOC IDTO 109.1	Final Apch Crs 177°	GS LOM 2070' (1431')	ILS DA(H) (CONDITIONAL) 839' (200')	Apt Elev 642' Rwy 18 639'			
MISSED APCH: Climb to 2500' then RIGHT turn direct DT LOM and hold, or as directed by ATC.							
Alt Set: INCHES							



TERPS STRAIGHT-IN LANDING RWY 18 With Local Altimeter Setting					CIRCLE-TO-LAND With Local Altimeter Setting	
ILS DA(H) 839' (200')		LOC (GS out) MDA(H) 1120' (481')			Max Kts	
FULL		RAIL or ALS out			MDA(H)	
A			1/2	3/4	1	1160' (518') - 1
B	1/2	3/4				1160' (518') - 1 1/2
C			1	1 1/8	1 3/8	1260' (618') - 2
D						
With Ft Worth Alliance Altimeter Setting					With Ft Worth Alliance Altimeter Setting	
ILS DA(H) 883' (244')		LOC (GS out) MDA(H) 1180' (541')			Max Kts	
FULL		RAIL or ALS out			MDA(H)	
A			1/2	3/4	1	1220' (578') - 1
B	1/2	3/4				1220' (578') - 1 1/2
C			1 1/4	1 3/8	1 5/8	1320' (678') - 2 1/4
D						

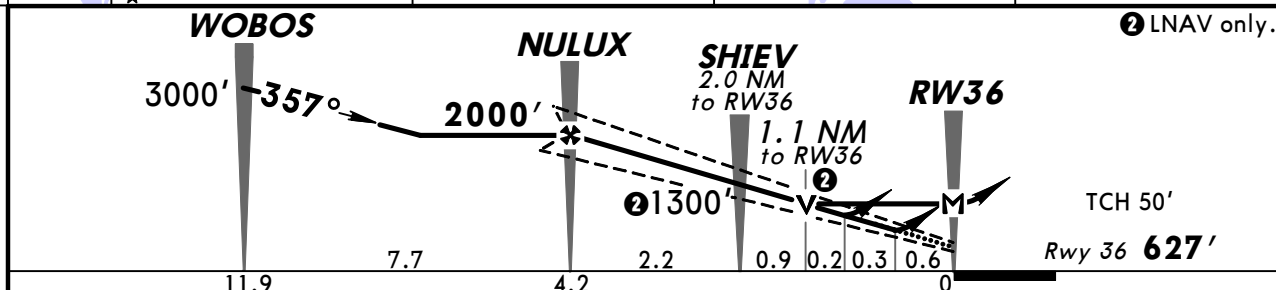
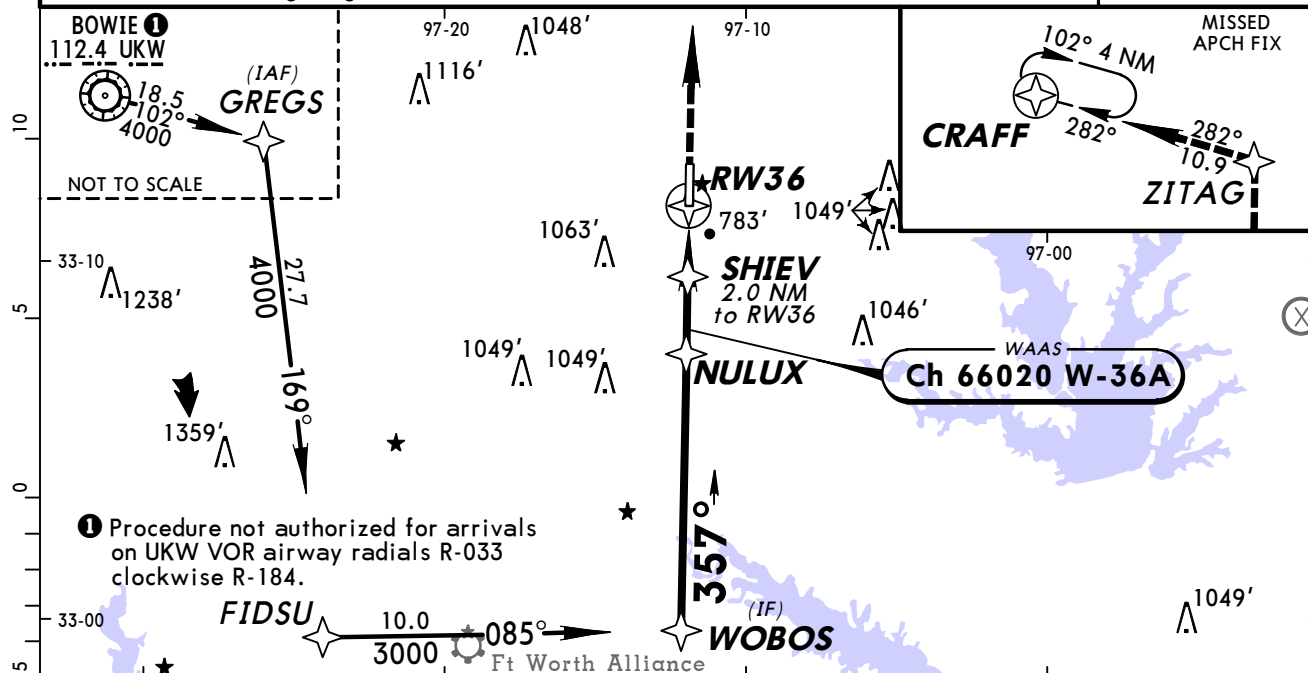
ASOS 119.32		REGIONAL Approach (R) 118.1		*DENTON MUN Tower CTAF 119.95		*Ground 123.95	
WAAS Ch 50520 W-18A	Final Apch Crs 177°	Minimum Alt HOLIW 2300' (1661')	LPV DA(H) (CONDITIONAL) 889' (250')	Apt Elev 642' Rwy 18 639'		4000' MSA RW18	
MISSED APCH: Climb to 1900' then climbing RIGHT turn to 4000' direct GREGS and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Ft. Worth Alliance altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 39°C (104°F). 4. Baro-VNAV and VDP not authorized when using Ft. Worth Alliance altimeter setting. 5. VGSI and RNAV glidepath not coincident. 6. Pilot controlled lighting 119.95.							



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	1900'	4000'	D RT	GREGS
Glide Path Angle 3.00°	372	478	531	637	743	849		↑	↗ RT		
MAP at RW18											

TERPS									STRAIGHT-IN LANDING RWY 18									CIRCLE-TO-LAND					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 889' (250')									DA(H) 1102' (463')									MDA(H) 1120' (481')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	1/8	1 1/2	1/2	3/4	1	90	1160' (518') - 1														
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout			ALSout			RAILout			ALSout			MDA(H)					
A	1/2	3/4	7/8	1 1/4	1 5/8	1/2	3/4	1	90	1220' (578') - 1													
B																							
C																							
D																							
With Ft Worth Alliance Altimeter Setting									With Ft Worth Alliance Altimeter Setting									With Local Altimeter Setting					
LPV									LNAV/VNAV									LNAV			Not Authorized at Night to Rwy 36		
DA(H) 933' (294')									DA(H) 1146' (507')									MDA(H) 1180' (541')			With Local Altimeter Setting		
RAILout			ALSout			RAILout																	

ASOS 119.32	REGIONAL Approach (R) 118.1	*DENTON MUN Tower CTAF 119.95	*Ground 123.95
WAAS Ch 66020 W-36A	Final Apch Crs 357°	Minimum Alt NULUX 2000' (1373')	LPV DA(H) (CONDITIONAL) 877' (250')
Apt Elev 642' Rwy 36 627'			
MISSED APCH: Climb to 4000' direct ZITAG and on track 282° to CRAFT and hold.			
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Ft. Worth Alliance altimeter setting. 2. Baro-VNAV and VDP not authorized when using Ft. Worth Alliance altimeter setting. 3. DME/DME RNP-0.30 not authorized. 4. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 40°C (104°F). 5. Pilot controlled lighting 119.95.			



Gnd speed-Kts	70	90	100	120	140	160				
Glide Path Angle 3.00°	372	478	531	637	743	849				
MAP at RWY 36										

TERPS				STRAIGHT-IN LANDING RWY 36 With Local Altimeter Setting				CIRCLE-TO-LAND With Local Altimeter Setting			
LPV DA(H) 877' (250')		LNAV/VNAV DA(H) 964' (337')		LNAV MDA(H) 1040' (413')		Max Kts MDA(H)					
A	3/4	1 1/8	1		90	1120' (478') - 1					
B			1 1/8		120	1140' (498') - 1					
C					140	1140' (498') - 1 1/2					
D					165	1260' (618') - 2					
With Ft. Worth Alliance Altimeter Setting								With Ft. Worth Alliance Altimeter Setting			
LPV DA(H) 921' (294')		LNAV/VNAV DA(H) 1008' (381')		LNAV MDA(H) 1100' (473')		Max Kts MDA(H)					
A	1	1 1/4	1		90	1180' (538') - 1					
B			1 3/8		120	1200' (558') - 1					
C					140	1200' (558') - 1 1/2					
D					165	1320' (678') - 2 1/4					

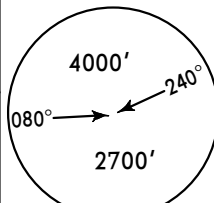
KD TO
DENTON MUN

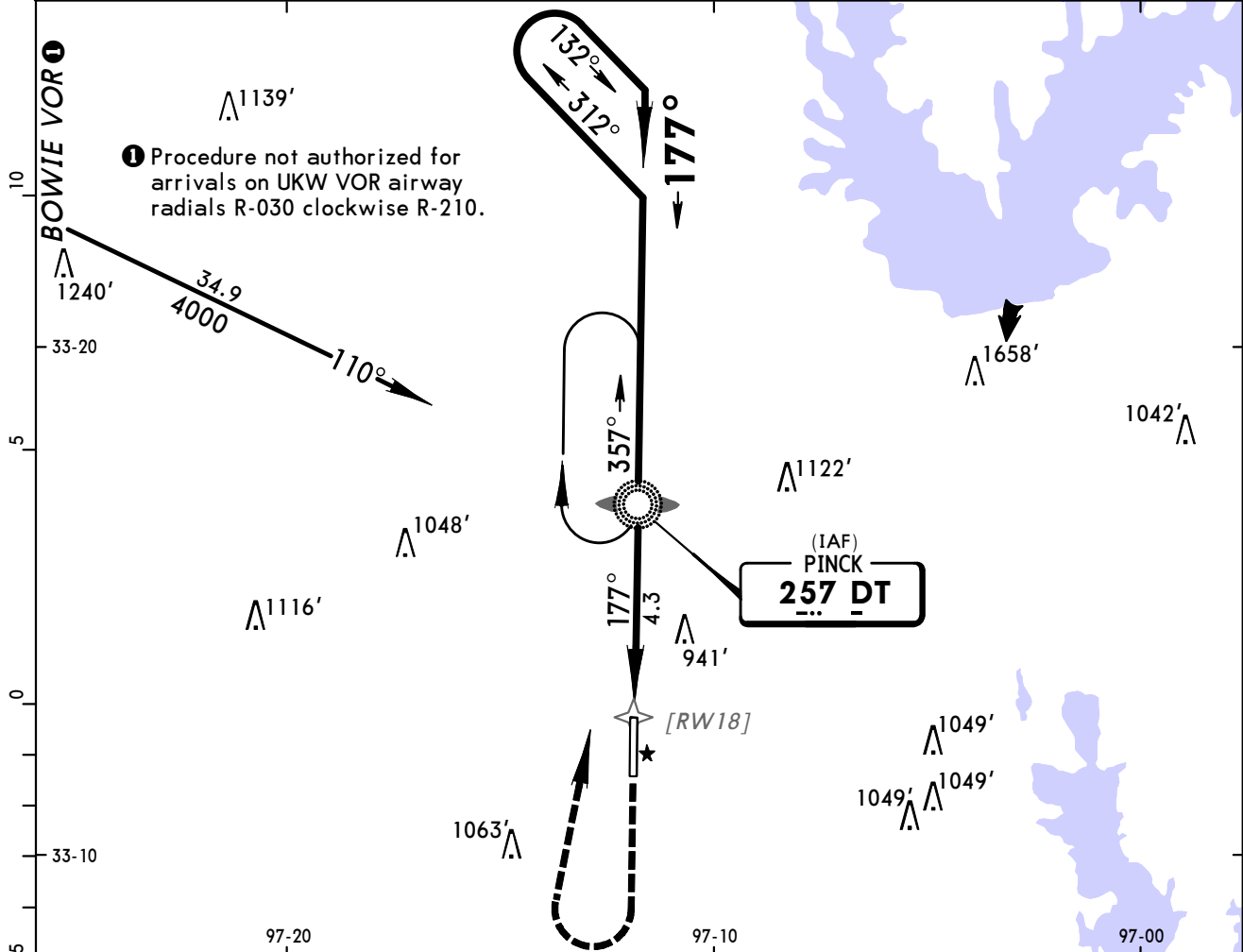
16 SEP 11

(16-1)

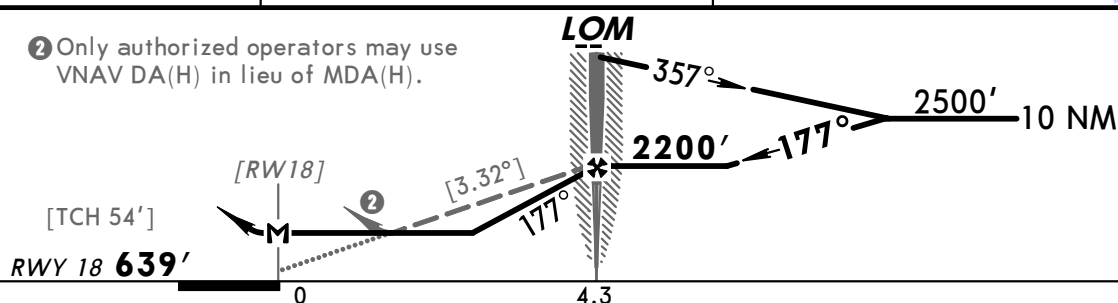
DENTON, TEXAS
NDB Rwy 18

BRIEFING STRIP™

ASOS 119.32		REGIONAL Approach (R) 118.1		*DENTON MUN Tower CTAF 119.95		*Ground 123.95	
LOM DT 257	Final Apch Crs 177°	Minimum Alt LOM 2200' (1561')	MDA(H) (CONDITIONAL) 1260' (621')	Apt Elev 642' Rwy 18 639'			
MISSED APCH: Climb to 2500' then RIGHT turn direct DT LOM and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. Use local altimeter setting; if not received, use Ft Worth Alliance altimeter setting.							
2. VGSI and descent angles not coincident. 3. Pilot controlled lighting 119.95.							



② Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	2500'	RT	DT 257
Descent angle [3.32°]	411	529	587	705	822	940				
LOM to MAP	4.3	3:41	2:52	2:35	2:09	1:51	1:37			

STRAIGHT-IN LANDING RWY 18

CIRCLE-TO-LAND

MDA(H) 1260' (621')		MDA(H) 1320' (681')		With Local Altimeter Setting		With Ft Worth Alliance Altimeter Setting	
With Local Altimeter Setting		With Ft Worth Alliance Altimeter Setting		RAIL out		ALS out	
A	3/4	1	3/4	1	Max Kts	MDA(H)	MDA(H)
B	3/4	1	3/4	1	90	1260' (618') - 1	1320' (678') - 1
C	1 3/8	1 1/2	1 3/4	1 5/8	140	1260' (618') - 1 3/4	1320' (678') - 2
D	1 3/8	1 1/2	1 3/4	1 5/8	165	1260' (618') - 2	1320' (678') - 2 1/4

CHANGES: Lighting.

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TERPS AMEND 7 10 MAR 2011

AREA STAR SERVES ONLY: 1

REGIONAL Approach (R)
125.95 125.2
Apt Elev
See graphic

Alt Set: INCHES Trans level: FL180 Trans alt: 18000'

DODGE THREE ARRIVAL
(DODJE.DODJE3)

- 1 AIRPORTS SERVED
- ARLINGTON MUN KGKY
- DALLAS EXECUTIVE KRBD
- DENTON MUN KDTO
- FT WORTH ALLIANCE KAFW
- FT WORTH MEACHAM INTL KFTW
- FT WORTH NAS JRB KNFW
- FT WORTH SPINKS KFWs
- GRAND PRAIRIE MUN KGPM
- LANCASTER KLNC

DENTON TEXAS
Denton Mun
642

FT WORTH TEXAS
Ft Worth Alliance
722

GRAND PRAIRIE TEXAS
Grand Prairie Mun
589

RANGER
(H) 115.7 FUZ
N32 53.4 W097 10.8

FT WORTH TEXAS
Ft Worth Meacham Intl
710

FT WORTH TEXAS
NAS JRB
650

ARLINGTON TEXAS
Arlington Mun
628

LANCASTER TEXAS
Lancaster
501

MIDLOTHIAN TEXAS
TSA Gliderport

ADAMS
N32 27.2 W096 44.9

CABBY
N32 20.3 W096 38.1

EXPECT RADAR vectors
to final approach course

WACO
(ACT.DODJE3)
N31 36.7 W097 16.1

THING
N32 05.8 W096 24.0

NAVYS
(NAVYS.DODJE3)
N31 23.3 W096 18.8

CENTEX
(CWX.DODJE3)
N30 22.7 W097 31.8

LEONA
(LOA.DODJE3)
N31 07.4 W095 58.1

NAVARS
(NAVARS.DODJE3)
N31 48.6 W096 07.4

ALLMO
N31 56.4 W096 14.9

WEIRS
N31 30.9 W095 48.6

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

NOBBL
N31 44.9 W093 49.2

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

GREGG CO.
(GGG.DODJE3)
N32 25.1 W094 45.2

FRANKSTON
(FZT)
N32 04.5 W095 31.8

When directed
by ATC

DODJE
N32 17.1 W096 35.0

TURBOJETS
Cross at and
MAINTAIN 250 KT.
TURBOJETS LANDING NORTH
EXPECT TO CROSS AT 12000'.

TURBOJETS
Cross at and
MAINTAIN 250 KT.
TURBOJETS LANDING AT
ARLINGTON MUN,
DALLAS EXECUTIVE,
GRAND PRAIRIE MUN
EXPECT TO CROSS AT 8000'.

CEDAR CREEK
(CQY.DODJE3)
N32 11.1 W096 13.1

QUITMAN
(UM.DODJE3)
N32 52.8 W095 22.0

CAPTI
N32 59.5 W095 39.5

GREGG COUNTY
(GGG.DODJE3)
N32 25.1 W094 45.2

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

NOBBL
N31 44.9 W093 49.2

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

WEIRS
N31 30.9 W095 48.6

ALLMO
N31 56.4 W096 14.9

NAVYS
(NAVYS.DODJE3)
N31 23.3 W096 18.8

CENTEX
(CWX.DODJE3)
N30 22.7 W097 31.8

LEONA
(LOA.DODJE3)
N31 07.4 W095 58.1

NAVARS
(NAVARS.DODJE3)
N31 48.6 W096 07.4

ACT
N31 56.4 W096 14.9

WEIRS
N31 30.9 W095 48.6

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

NOBBL
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N32 31.0 W092 02.2

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

NOBBL
N31 44.9 W093 49.2

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

WEIRS
N31 30.9 W095 48.6

ALLMO
N31 56.4 W096 14.9

NAVYS
(NAVYS.DODJE3)
N31 23.3 W096 18.8

CENTEX
(CWX.DODJE3)
N30 22.7 W097 31.8

LEONA
(LOA.DODJE3)
N31 07.4 W095 58.1

NAVARS
(NAVARS.DODJE3)
N31 48.6 W096 07.4

ACT
N31 56.4 W096 14.9

WEIRS
N31 30.9 W095 48.6

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

NOBBL
N31 44.9 W093 49.2

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

GREGG CO.
(GGG.DODJE3)
N32 25.1 W094 45.2

FRANKSTON
(FZT)
N32 04.5 W095 31.8

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

NOBBL
N31 44.9 W093 49.2

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(HERRI.DODJE3)
N31 56.6 W095 01.5

WEIRS
N31 30.9 W095 48.6

ALLMO
N31 56.4 W096 14.9

NAVYS
(NAVYS.DODJE3)
N31 23.3 W096 18.8

CENTEX
(CWX.DODJE3)
N30 22.7 W097 31.8

LEONA
(LOA.DODJE3)
N31 07.4 W095 58.1

NAVARS
(NAVARS.DODJE3)
N31 48.6 W096 07.4

ACT
N31 56.4 W096 14.9

WEIRS
N31 30.9 W095 48.6

HERRI
(HERRI.DODJE3)
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NOBBL
N31 44.9 W093 49.2

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

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(JAN.DODJE3)
N32 30.5 W090 10.1

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

GREGG CO.
(GGG.DODJE3)
N32 25.1 W094 45.2

FRANKSTON
(FZT)
N32 04.5 W095 31.8

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

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N32 30.5 W090 10.1

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WEIRS
N31 30.9 W095 48.6

ALLMO
N31 56.4 W096 14.9

NAVYS
(NAVYS.DODJE3)
N31 23.3 W096 18.8

CENTEX
(CWX.DODJE3)
N30 22.7 W097 31.8

LEONA
(LOA.DODJE3)
N31 07.4 W095 58.1

NAVARS
(NAVARS.DODJE3)
N31 48.6 W096 07.4

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(JAN.DODJE3)
N32 30.5 W090 10.1

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

GREGG CO.
(GGG.DODJE3)
N32 25.1 W094 45.2

FRANKSTON
(FZT)
N32 04.5 W095 31.8

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

NOBBL
N31 44.9 W093 49.2

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

WEIRS
N31 30.9 W095 48.6

ALLMO
N31 56.4 W096 14.9

NAVYS
(NAVYS.DODJE3)
N31 23.3 W096 18.8

CENTEX
(CWX.DODJE3)
N30 22.7 W097 31.8

LEONA
(LOA.DODJE3)
N31 07.4 W095 58.1

NAVARS
(NAVARS.DODJE3)
N31 48.6 W096 07.4

ACT
N31 56.4 W096 14.9

WEIRS
N31 30.9 W095 48.6

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N31 56.6 W095 01.5

NOBBL
N31 44.9 W093 49.2

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(AEX.DODJE3)
N31 15.4 W092 30.1

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

GREGG CO.
(GGG.DODJE3)
N32 25.1 W094 45.2

FRANKSTON
(FZT)
N32 04.5 W095 31.8

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

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NOBBL
N31 44.9 W093 49.2

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

WEIRS
N31 30.9 W095 48.6

ALLMO
N31 56.4 W096 14.9

NAVYS
(NAVYS.DODJE3)
N31 23.3 W096 18.8

CENTEX
(CWX.DODJE3)
N30 22.7 W097 31.8

LEONA
(LOA.DODJE3)
N31 07.4 W095 58.1

NAVARS
(NAVARS.DODJE3)
N31 48.6 W096 07.4

ACT
N31 56.4 W096 14.9

WEIRS
N31 30.9 W095 48.6

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

NOBBL
N31 44.9 W093 49.2

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

GREGG CO.
(GGG.DODJE3)
N32 25.1 W094 45.2

FRANKSTON
(FZT)
N32 04.5 W095 31.8

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

NOBBL
N31 44.9 W093 49.2

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

WEIRS
N31 30.9 W095 48.6

ALLMO
N31 56.4 W096 14.9

NAVYS
(NAVYS.DODJE3)
N31 23.3 W096 18.8

CENTEX
(CWX.DODJE3)
N30 22.7 W097 31.8

LEONA
(LOA.DODJE3)
N31 07.4 W095 58.1

NAVARS
(NAVARS.DODJE3)
N31 48.6 W096 07.4

ACT
N31 56.4 W096 14.9

WEIRS
N31 30.9 W095 48.6

HERRI
(HERRI.DODJE3)
N31 56.6 W095 01.5

NOBBL
N31 44.9 W093 49.2

ALEXANDRIA
(AEX.DODJE3)
N31 15.4 W092 30.1

JACKSON
(JAN.DODJE3)
N32 30.5 W090 10.1

MONROE
(MLU.DODJE3)
N32 31.0 W092 02.2

ELM GROVE
(EMG.DODJE3)
N32 24.0 W093 35.7

GREGG CO.
(GGG.DODJE3)
N32 25.1 W094 45.2

FRANKSTON
(FZT)
N32 04.5 W095 31.8

ELM GROVE
(EMG.DODJE3)
N32 24.0 W

AREA SID SERVES ONLY: ●

- 1. For jets requesting 17000' and below.
- 2. GRAND PRAIRIE MUN DME required.

Trans level: FL180 Trans alt: 18000'

Apt Elev
See graphic

This SID requires take-off minimums (for standard minimums, refer to airport chart):

DALLAS ADDISON: Rwy 15: 400-2 or standard (or lower than standard, if authorized) with minimum climb of 234' per NM to 1100'.
Rwy 33: Standard (or lower than standard, if authorized).

FT WORTH SPINKS: Rwys 17L/35R: Not Authorized.
Rwys 17R/35L: Standard (or lower than standard, if authorized).

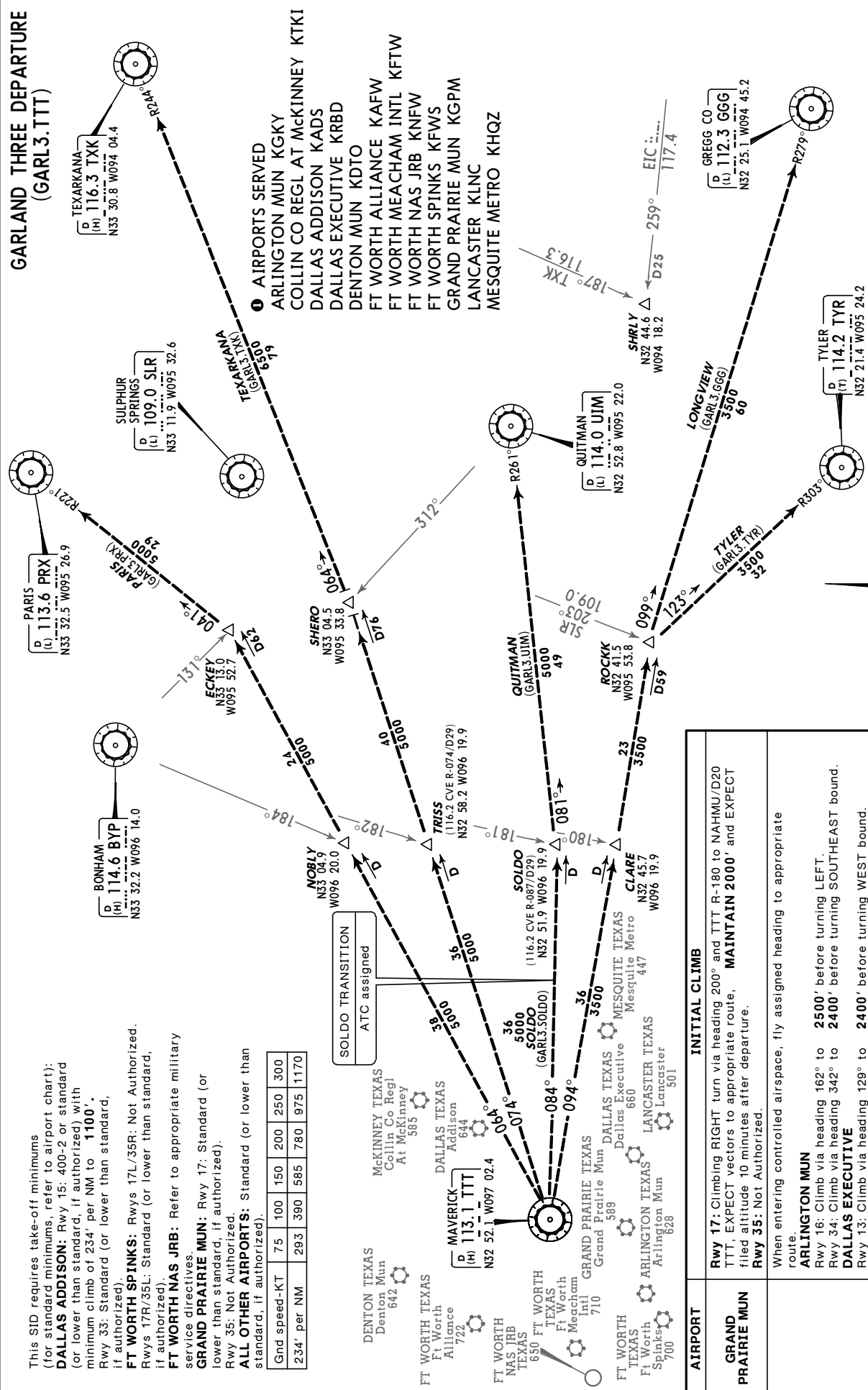
FT WORTH NAS JRB: Refer to appropriate military service directives.

GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized).

Rwy 35: Not Authorized.

ALL OTHER AIRPORTS: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
234' per NM	293	390	585	780	975	1170



AIRPORT	INITIAL CLIMB
GRAND PRAIRIE MUN	Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/D20 TTT, EXPECT vectors to appropriate route, MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure. Rwy 35: Not Authorized.
ALL OTHER AIRPORTS	When entering controlled airspace, fly assigned heading to appropriate route. ARLINGTON MUN Rwy 16: Climb via heading 162° to 2500' before turning LEFT. Rwy 34: Climb via heading 342° to 2400' before turning SOUTHEAST bound. DALLAS EXECUTIVE Rwy 13: Climb via heading 129° to 2400' before turning WEST bound. Rwy 17: Climb via heading 174° to 2400' before turning WEST bound. FT WORTH MEACHAM INTL Rwy 9: Climb via heading 092° to 2000' before proceeding on course. Rwys 16, 17: Climb via heading 164° to 2000' before proceeding on course. FT WORTH SPINKS Rwys 17L, 35R: Not Authorized. Rwy 17R: Climb via heading 173° to 1200' before turning RIGHT. MESQUITE METRO Rwy 17: Climb via heading 175° to 1000' before turning LEFT.

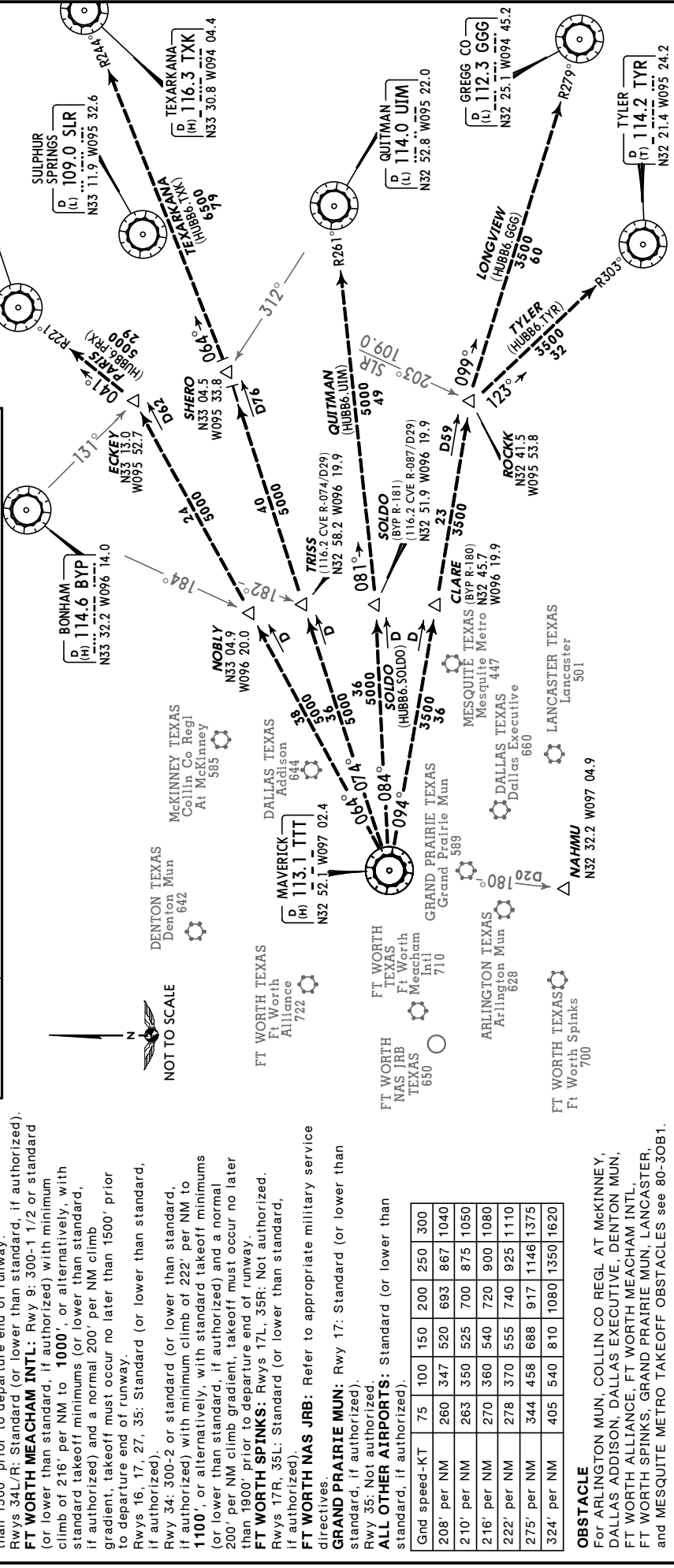
CHANGES: Location name, departure text, formations, procedure renumbered.

OBSTACLE
For DALLAS ADDISON, FT WORTH MEACHAM INTL, and MESQUITE METRO TAKEOFF OBSTACLES see 80-30B1.

AREA SID SERVES ONLY: 0

Apt Elev See graphic	Trans level: FL180	Trans alt: 1800'	AIRPORT	INITIAL CLIMB
			GRAND PRAIRIE MUN	Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/D20 TTT. EXPECT RADAR vectors to appropriate route. MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure. Rwy 35: Not authorized.
				When entering controlled airspace fly assigned heading and altitude to appropriate route.

This SID requires take-off minimums (for standard minimums refer to airport chart): DALLAS ADDISON: Rwy 15: 400-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 324' per NM to 1100' . Rwy 33: Standard (or lower than standard, if authorized). DALLAS EXECUTIVE: Rwy 13, 31, 35: Standard (or lower than standard, if authorized). Rwy 17: 400-2 3/4 or standard (or lower than standard, if authorized). FT WORTH ALLIANCE: Rwy 16L: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 208' per NM to 1100' , or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to departure end of runway. Rwy 16R: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 210' per NM to 1100' , or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to departure end of runway. Rwy 34L/R: Standard (or lower than standard, if authorized). FT WORTH MEACHAM INTL: Rwy 9: 300-1 1/2 or standard (or lower than standard, if authorized) with minimum climb of 216' per NM to 1000' , or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to departure end of runway. Rwys 16, 17, 27, 35: Standard (or lower than standard, if authorized). Rwy 34: 300-2 or standard (or lower than standard, if authorized) with minimum climb of 222' per NM to 1100' , or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1900' prior to departure end of runway. FT WORTH SPINKS: Rwy 17L, 35R: Not authorized. Rwys 17R, 35L: Standard (or lower than standard, if authorized). FT WORTH NAS JRB: Refer to appropriate military service directives. GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized). Rwy 35: Not authorized. ALL OTHER AIRPORTS: Standard (or lower than standard, if authorized).	GRAND PRAIRIE MUN ALL OTHER AIRPORTS	HUBBARD SIX DEPARTURE (HUBB6.TTT) 1 AIRPORTS SERVED ARLINGTON MUN KGKY COLLIN CO REGL AT MCKINNEY KTKI DALLAS ADDISON KADS DALLAS EXECUTIVE KRBD DENTON MUN KDTO FT WORTH ALLIANCE KAFW FT WORTH MEACHAM INTL KFTW FT WORTH NAS JRB KNFW FT WORTH SPINKS KFWS GRAND PRAIRIE MUN KGPM LANCASTER KINC MESQUITE METRO KHQZ



GRAND PRAIRIE MUN DME required.

Trans level: FL180 Trans alt: 18000'

INITIAL CLIMB

GRAND PRAIRIE MUN
Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/D20 TTT. EXPECT RADAR vectors to appropriate route, MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure.
Rwy 35: Not authorized.

When entering controlled airspace, fly assigned heading and altitude. EXPECT vector to appropriate route.

ARLINGTON MUN
Rwy 16: Climb via heading 162° to 2500' before turning LEFT.
Rwy 34: Climb via heading 342° to 1400' before turning SOUTHEAST bound.

DALLAS EXECUTIVE
Rwy 13: Climb via heading 129° to 2400' before turning WEST bound.
Rwy 17: Climb via heading 174° to 2400' before turning WEST bound.
Rwy 31: Climb via heading 309° to 1600' before turning SOUTH bound.
Rwy 35: Climb via heading 354° to 1600' before turning SOUTH bound.

FT WORTH ALLIANCE
Rwy 16R: Climb heading 163° before turning RIGHT.
FT WORTH MEACHAM INTL
Rwy 6: Climb via heading 092° to 1800' before turning SOUTH bound.
Rwys 16, 17: Climb via heading 164° to 1800' before proceeding on course.

FT WORTH SPINKS
Rwy 17R: Climb via heading 173° to 1200' before turning RIGHT.

This SID requires take-off minimums (for standard minimums refer to airport chart):

DALLAS ADDISON: Rwy 15: 400-2 or standard (or lower than standard, if authorized) with minimum climb of 234' per NM to 1100'.

FT WORTH ALLIANCE: Rwy 16L: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 208' per NM to 1100', or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to departure end of runway.

Rwy 16R: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 210' per NM to 1100', or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to departure end of runway.

Rwys 34L/R: Standard (or lower than standard, if authorized).

FT WORTH SPINKS: Rwys 17L/35R: Not authorized. Rwys 17R/35L: Standard (or lower than standard, if authorized).

FT WORTH NAS JRB: Refer to appropriate military service directives.

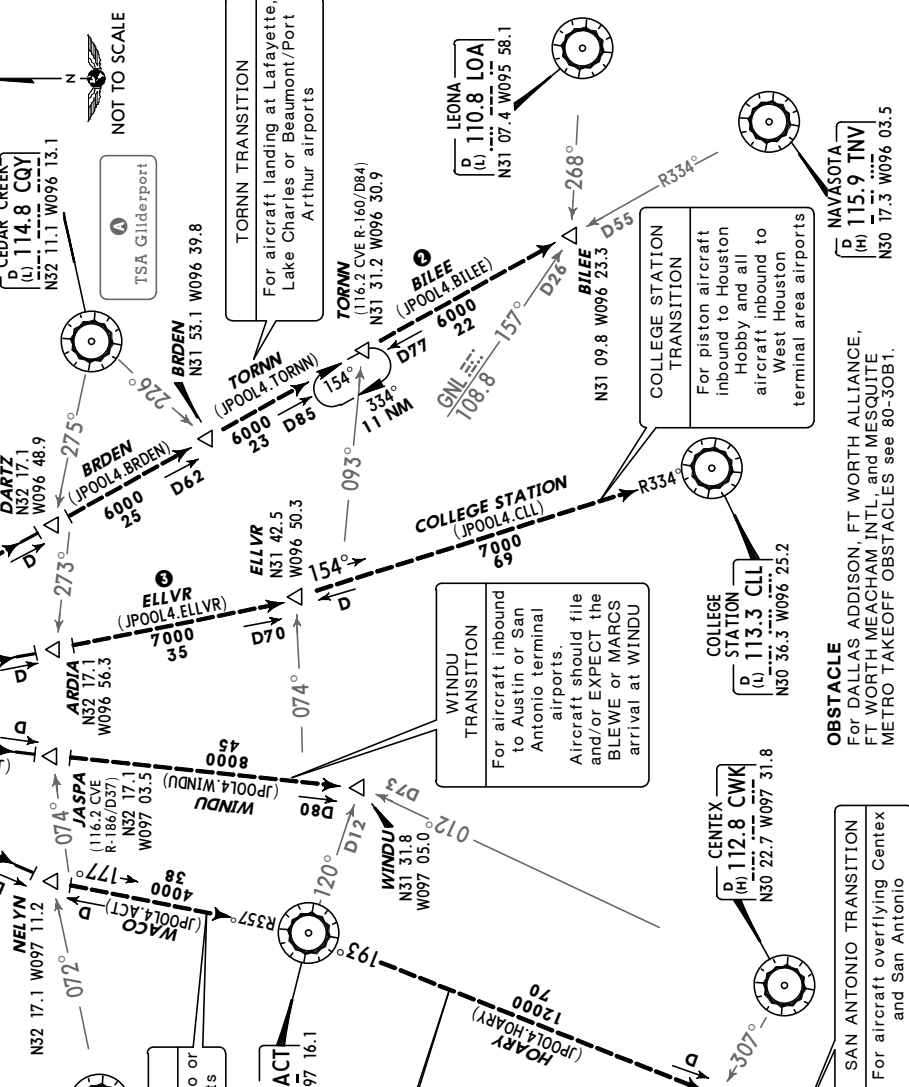
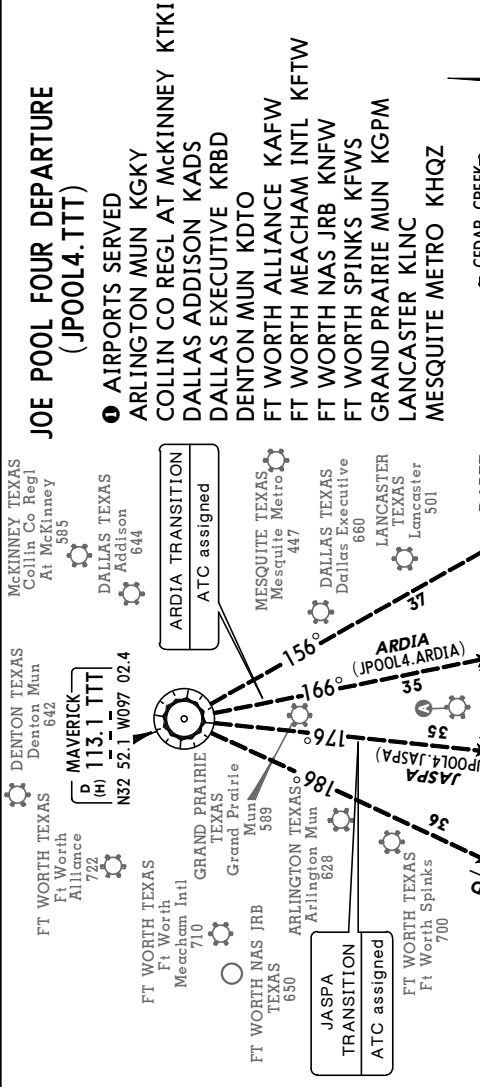
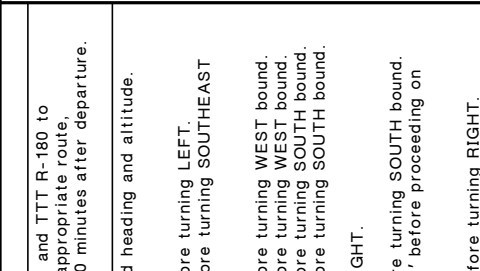
GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized).

Rwy 35: Not authorized.

ALL OTHER AIRPORTS: Standard (or lower than standard, if authorized).

Grnd speed-KT	75	100	150	200	250	300
208' per NM	260	347	520	693	867	1040
210' per NM	263	350	525	700	875	1050
234' per NM	293	390	585	780	975	1170

BILEE TRANSITION	
For aircraft overflying BILEE, then via the appropriate STAR to George Bush Intercontinental or East Houston terminal area airports, or via J-87 to overfly TNV	



AREA SID SERVES ONLY: 1

AIRPORT	Aprt Elev See graphic	Trans level: FL180 Trans alt: 18000'		INITIAL CLIMB

GRAND PRAIRIE MUN	Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/D20 TTT. EXPECT RADAR vectors to appropriate route. MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure. Rwy 35: Not authorized.	When entering controlled airspace fly assigned heading and altitude to appropriate route.
	ARLINGTON MUN Rwy 16: Climb heading 162° to 2500' before turning LEFT. Rwy 34: Climb heading 342° to 1400' before turning SOUTHEAST bound. DALLAS EXECUTIVE Rwy 13: Climb heading 129° to 2600' before turning WEST bound. Rwy 17: Climb heading 174° to 2600' before turning WEST bound. Rwy 31: Climb heading 309° to 1600' before turning SOUTH bound. Rwy 35: Climb heading 354° to 1600' before turning SOUTH bound.	
ALL OTHER AIRPORTS	FT WORTH ALLIANCE Rwy 16R: Climb heading 163° to 1200' before turning RIGHT. FT WORTH MEACHAM INTL Rwy 9: Climb heading 092° to 2000' before proceeding on course. Rwys 16, 17: Climb heading 164° to 2000' before proceeding on course.	
	FT WORTH SPINKS Rwy 17R: Climb heading 173° to 1200' before turning RIGHT. LANCASTER Rwy 31: Climb heading 314° to 1900' before turning LEFT. MESQUITE METRO Rwy 17: Climb heading 175° to 900' before turning LEFT.	

This SID requires take-off minimums (for standard minimums, refer to airport chart):

ARLINGTON MUN: Rwys 16, 34: Standard (or lower than standard, if authorized).

COLLIN CO REGL AT MCKINNEY: Rwys 17, 35: Standard (or lower than standard, if authorized).

DALLAS ADDISON: Rwy 15: 400-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 324' per NM to 1100'.

Rwy 33: Standard (or lower than standard, if authorized).

DALLAS EXECUTIVE: Rwys 13, 31, 35: Standard (or lower than standard, if authorized).

Rwy 17: 400-2 3/4 or standard (or lower than standard, if authorized) with minimum climb of 275' per NM to 1200'.

DENTON MUN: Rwys 17, 35: Standard (or lower than standard, if authorized).

FT WORTH ALLIANCE: Rwy 16L: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 208' per NM to 1100', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1400' prior to departure end of runway.

Rwy 16R: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 210' per NM to 1100', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1500' prior to departure end of runway.

Rwys 34L/R: Standard (or lower than standard, if authorized).

FT WORTH MEACHAM INTL: Rwy 9: 300-1 1/2 or standard (or lower than standard, if authorized) with minimum climb of 216' per NM to 1000', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1500' prior to departure end of runway.

Rwys 16, 17, 27, 35: Standard (or lower than standard, if authorized).

Rwy 34: 300-2 or standard (or lower than standard, if authorized) with minimum climb of 222' per NM to 1100', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1900' prior to departure end of runway.

FT WORTH NAS JRB: Refer to appropriate military service directives.

FT WORTH SPINKS: Rwys 17L, 35R: Not authorized - environmental.

Rwys 17R, 35L: Standard (or lower than standard, if authorized).

GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized).

Rwy 35: Not authorized - environmental.

LANCASTER: Rwy 13: Standard (or lower than standard, if authorized).

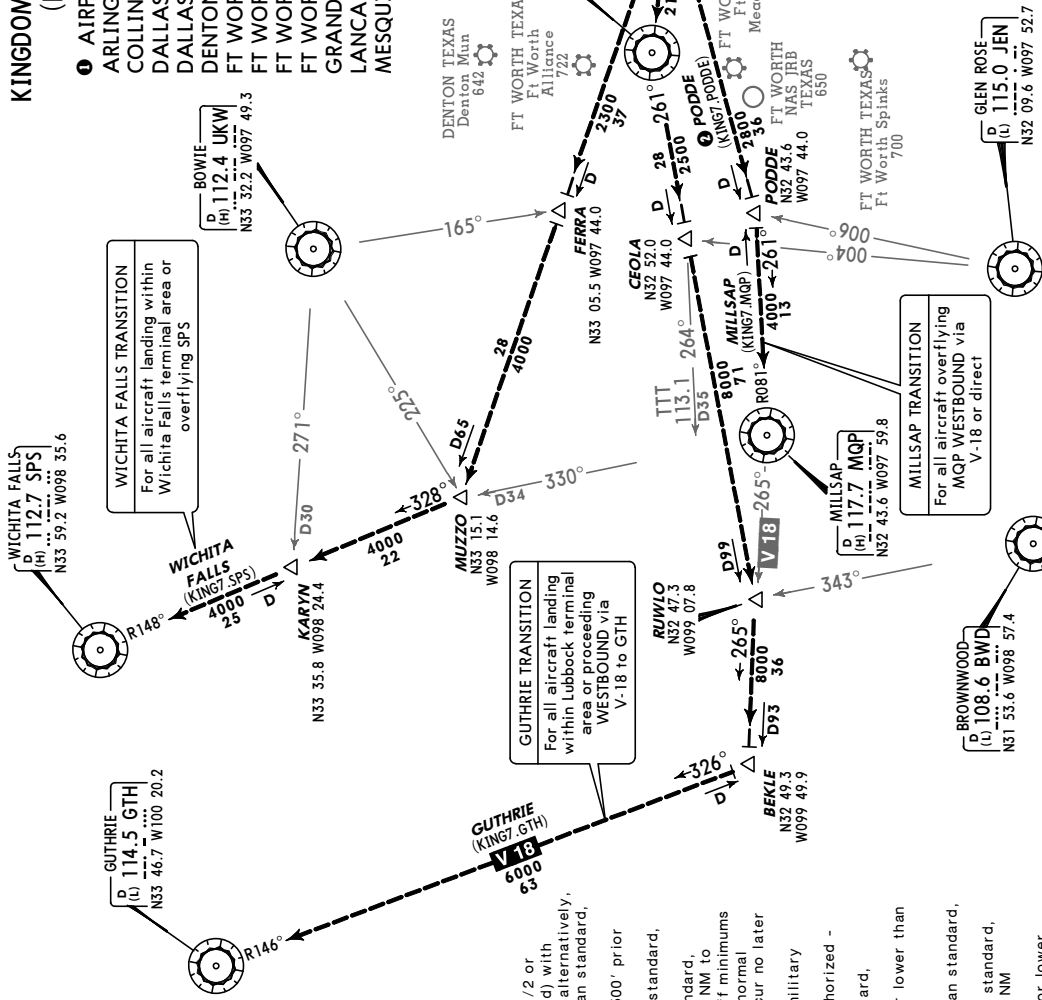
Rwy 21: 200-1 1/2 or standard (or lower than standard, if authorized) with minimum climb of 222' per NM to 800'.

MESQUITE METRO: Rwys 17, 35: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
208' per NM	260	347	520	693	867	1040
210' per NM	263	350	525	700	875	1050
216' per NM	270	360	540	720	900	1080
222' per NM	278	370	555	740	925	1110
275' per NM	344	458	688	917	1146	1375
324' per NM	405	540	810	1080	1350	1620

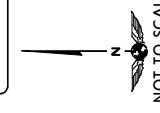
KINGDOM SEVEN DEPARTURE (KING7.TTT)

- 1 AIRPORTS SERVED
- ARLINGTON MUN KGKY
 - COLLIN CO REGL AT MCKINNEY KTKI
 - DALLAS ADDISON KADS
 - DALLAS EXECUTIVE KRBD
 - DENTON MUN KDTO
 - FT WORTH ALLIANCE KAFW
 - FT WORTH MEACHAM INTL KFTW
 - FT WORTH NAS JRB KNFW
 - FT WORTH SPINKS KFWs
 - GRAND PRAIRIE MUN KGPM
 - LANCASTER KINC
 - MESQUITE METRO KHQZ



OBSTACLE
For ARLINGTON MUN, COLLIN CO REGL AT MCKINNEY, DALLAS ADDISON, DALLAS EXECUTIVE, DENTON MUN, FT WORTH ALLIANCE, FT WORTH MEACHAM INTL, FT WORTH SPINKS, GRAND PRAIRIE MUN, LANCASTER, and MESQUITE METRO TAKEOFF OBSTACLE NOTES see 80-30B1.

PODDE TRANSITION
ATC assigned



AREA SID SERVES ONLY: ①

GRAND PRAIRIE MUN DME required.

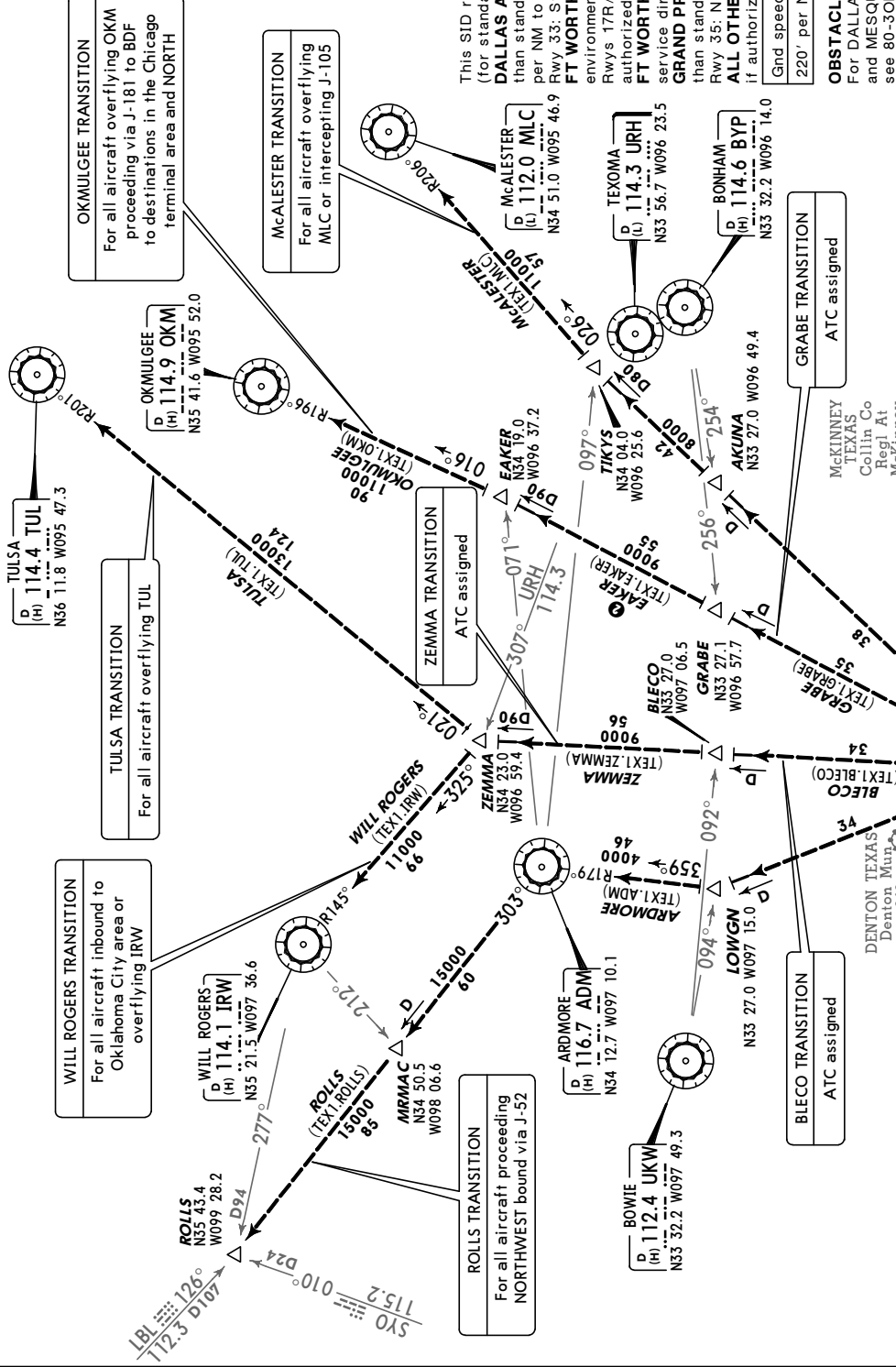
Trans level: FL 180 Trans alt: 18000'

Apt Elev
See graphic

TEXOMA ONE DEPARTURE
(TEX1.FUZ)

① AIRPORTS SERVED

ARLINGTON MUN KGKY
COLLIN CO REGL AT MCKINNEY KTKI
DALLAS ADDISON KADS
DALLAS EXECUTIVE KRBD
DENTON MUN KOTO
FT WORTH ALLIANCE KAFW
FT WORTH MEACHAM INTL KFTW
FT WORTH NAS JRB KNFW
FT WORTH SPINKS KFWS
GRAND PRAIRIE MUN KGPM
LANCASTER KLNC
MESQUITE METRO KHQZ



This SID requires take-off minimums
(for standard minimums, refer to airport chart):
DALLAS ADDISON: Rwy 15: 400-2 or standard (or lower
than standard, if authorized) with minimum climb of 220'
per NM to 1100'.
Rwy 33: Standard (or lower than standard, if authorized).
FT WORTH SPINKS: Rwys 17L/35R: Not authorized -
environmental.
Rwys 17R/35L: Standard (or lower than standard, if
authorized).
FT WORTH NAS JRB: Refer to appropriate military
service directives.
GRAND PRAIRIE MUN: Rwy 17: Standard (or lower
than standard, if authorized).
Rwy 35: Not authorized - airspace actions.
ALL OTHER AIRPORTS: Standard (or lower than standard,
if authorized).

Gnd speed-KT	75	100	150	200	250	300
220' per NM	275	367	550	733	917	1100

OBSTACLE
For DALLAS ADDISON, FT WORTH MEACHAM INTL,
and MESQUITE METRO TAKEOFF OBSTACLE NOTES
see 80-30B1.

②
EAKER TRANSITION
For aircraft inbound to the
Tulsa terminal area

INITIAL CLIMB

Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/
D20 TTT. EXPECT RADAR vectors to appropriate route, **MAINTAIN 2000'**
and EXPECT filed altitude 10 minutes after departure.
Rwy 35: Not authorized.

When entering controlled airspace fly assigned heading and altitude to
appropriate route.

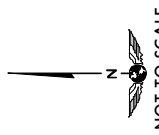
DALLAS EXECUTIVE
Rwy 13: Climb via 129° heading to **2400'** before turning WEST bound.
Rwy 17: Climb via 174° heading to **2400'** before turning WEST bound.
Rwy 31: Climb via 309° heading to **1600'** before turning SOUTH bound.
Rwy 35: Climb via 354° heading to **1600'** before turning SOUTH bound.

FT WORTH MEACHAM INTL

Rwy 9: Climb via 091° heading to **2000'** before proceeding on course.
Rwys 16, 17: Climb via 164° heading to **2000'** before proceeding on course.

FT WORTH SPINKS
Rwy 17R: Climb via 173° heading to **1200'** before turning RIGHT.

MESQUITE METRO
Rwy 17: Climb via 175° heading to **1000'** before turning LEFT.



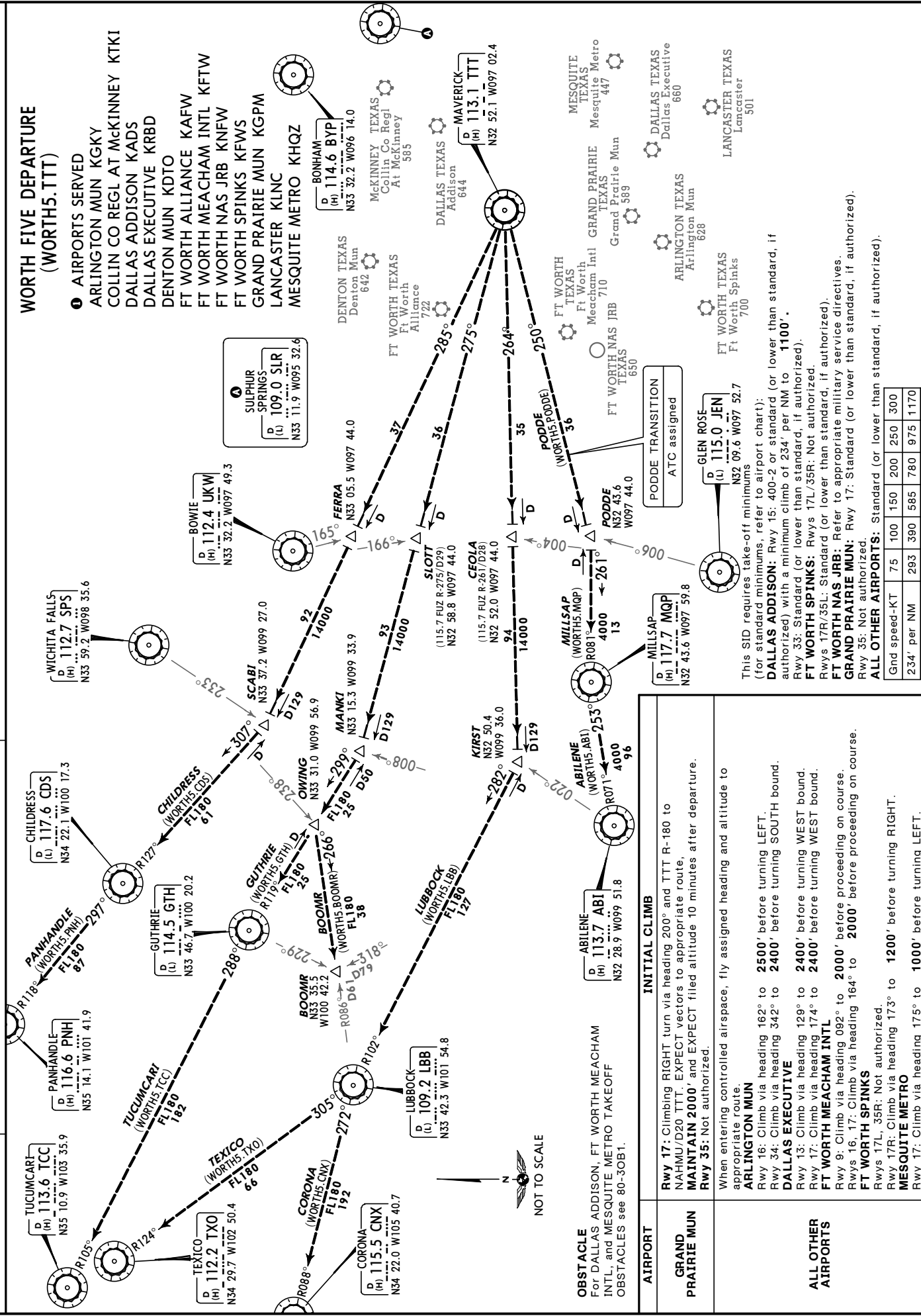
AREA SID SERVES ONLY: 1

GRAND PRAIRIE MUN DME required.

WORTH FIVE DEPARTURE
(WORTH5.TTT)

1 AIRPORTS SERVED

- ARLINGTON MUN KGKY
- COLLIN CO REGL AT MCKINNEY KTKI
- DALLAS ADDISON KADS
- DALLAS EXECUTIVE KRBD
- DENTON MUN KDTO
- FT WORTH ALLIANCE KAFW
- FT WORTH MEACHAM INTL KFTW
- FT WORTH NAS JRB KNFW
- FT WORTH SPINKS KFWs
- GRAND PRAIRIE MUN KGPM
- LANCASTER KLNC
- MESQUITE METRO KHQZ



CHANGES: Location name, departure text, SLOTT formation.

TAKEOFF OBSTACLE NOTES**ADDISON:**

◦ RWY 15:

BUILDING 2.1 NM FROM DER, ON CENTERLINE, 360' AGL/974' MSL. MULTIPLE BLDGS BEGINNING 258' TO 1.8 NM FROM DER, 21' TO 1307' ON OR LEFT OF CENTERLINE, UP TO 152' AGL/787' MSL; MULTIPLE BLDGS, RAILROAD, ROAD BEGINNING 268' TO 1.9 NM FROM DER, 5' TO 995' RIGHT OF CENTERLINE, UP TO 311' AGL/955' MSL.

◦ RWY 33:

MULTIPLE POLES AND BLDGS BEGINNING 46' TO 3124' FROM DER, 186' TO 801' RIGHT OF CENTERLINE, UP TO 84' AGL/720' MSL; MULTIPLE POLES AND BLDGS BEGINNING 640' TO 2690' FROM DER, 21' TO 647' LEFT OF CENTERLINE, UP TO 65' AGL/709' MSL.

FT WORTH MEACHAM INTL:

◦ RWY 34:

BILLBOARD 692' FROM DER, 686' RIGHT OF CENTERLINE, 37' AGL/739' MSL.

◦ RWY 35:

TREE 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL, TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 36' AGL/699' MSL.

MESQUITE METRO:

◦ RWY 17:

TOWER 2.0 NM FROM DER, 1.8 NM LEFT OF CENTERLINE, 456' AGL/944' MSL.

HUBBARD DEPARTURE:**ADDISON:**

◦ RWY 15:

MULTIPLE BLDGS BEGINNING 1085' FROM DER, 21' LEFT OF CENTERLINE, UP TO 321' AGL/945' MSL. BLDG WITH ANTENNA 1.9 NM FROM DER, 968' RIGHT OF CENTERLINE, 345' AGL/975' MSL. POLE 666' FROM DER, 640' LEFT OF CENTERLINE, 60' AGL/681' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 115' LEFT OF CENTERLINE, UP TO 40' AGL/675' MSL. ROAD, RAILROAD BEGINNING 268' FROM DER, 5' RIGHT OF CENTERLINE, UP TO 23' AGL/655' MSL.

◦ RWY 33:

MULTIPLE POLES AND TREES BEGINNING 640' FROM DER, 21' LEFT OF CENTERLINE, UP TO 60' AGL/709' MSL. MULTIPLE BLDGS BEGINNING 1225' FROM DER, 147' LEFT OF CENTERLINE, UP TO 37' AGL/697' MSL. MULTIPLE BLDGS BEGINNING 45' FROM DER, 458' RIGHT OF CENTERLINE, UP TO 57' AGL/696' MSL. MULTIPLE POLES BEGINNING 922' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 60' AGL/720' MSL.

ARLINGTON MUN:

◦ RWY 16:

MULTIPLE REILS BEGINNING 77' FROM DER, 127' RIGHT OF CENTERLINE, 7' AGL/601' MSL. MULTIPLE REILS BEGINNING 74' FROM DER, 126' LEFT OF CENTERLINE, 7' AGL/603' MSL. TREE 590' FROM DER, 480' RIGHT OF CENTERLINE, 16' AGL/614' MSL.

◦ RWY 34:

TREE 1083' FROM DER, 710' RIGHT OF CENTERLINE, 35' AGL/670' MSL. TREE 705' FROM DER, 403' LEFT OF CENTERLINE, 38' AGL/654' MSL. TREE 231' FROM DER, 464' LEFT OF CENTERLINE, 35' AGL/642' MSL. MULTIPLE TREES BEGINNING 1093' FROM DER, 415' RIGHT OF CENTERLINE, UP TO 39' AGL/663' MSL.

TAKEOFF OBSTACLE NOTES (CONTD)**HUBBARD DEPARTURE (CONT):****COLLIN CO REGL AT MC KINNEY:**

- RWY 17:
BUSH 29' FROM DER, 499' RIGHT OF CENTERLINE, 5' AGL/591' MSL. OBSTACLE LIGHT ON DME 400' FROM DER, 266' RIGHT OF CENTERLINE, 16' AGL/602' MSL. TREES 784' FROM DER, 574' RIGHT OF CENTERLINE, 39' AGL/625' MSL.
- RWY 35:
TREES 1060' FROM DER, 634' RIGHT OF CENTERLINE, 65' AGL/605' MSL. MULTIPLE TREES BEGINNING 1532' FROM DER, 632' LEFT OF CENTERLINE, UP TO 79' AGL/626' MSL.

DALLAS EXECUTIVE:

- RWY 13:
OBSTACLE LIGHT ON BLAST FENCE 109' FROM DER, 347' LEFT OF CENTERLINE, 6' AGL/658' MSL.
- RWY 17:
TREE 468' FROM DER, 454' LEFT OF CENTERLINE, 35' AGL/699' MSL. TREE 113' FROM DER, 516' RIGHT OF CENTERLINE, 30' AGL/679' MSL. TREE 871' FROM DER, 405' LEFT OF CENTERLINE, 35' AGL/685' MSL. TREE 651' FROM DER, 303' RIGHT OF CENTERLINE, 35' AGL/699' MSL.
- RWY 31:
TREE 481' FROM DER, 552' RIGHT OF CENTERLINE, 30' AGL/677' MSL. TREE 2978' FROM DER, 802' LEFT OF CENTERLINE, 46' AGL/732' MSL.
- RWY 35:
TREE 534' FROM DER, 302' LEFT OF CENTERLINE, 34' AGL/671' MSL. TREE 745' FROM DER, 371' LEFT OF CENTERLINE, 35' AGL/672' MSL. TREE 972' FROM DER, 405' RIGHT OF CENTERLINE, 35' AGL/675' MSL.

DENTON MUN:

- RWY 17:
MULTIPLE TREES BEGINNING 190' FROM DER, 178' RIGHT OF CENTERLINE, UP TO 66' AGL/665' MSL. BUILDING 371' FROM DER, 261' LEFT OF CENTERLINE, 14' AGL/643' MSL.
- RWY 35:
TREE 1242' FROM DER, 806' RIGHT OF CENTERLINE, 63' AGL/692' MSL.

FT WORTH ALLIANCE:

- RWY 16L:
LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.
- RWY 16R:
FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.
- RWY 34L:
FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.
- RWY 34R:
ANTENNA 218' FROM DER, 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 1)**HUBBARD DEPARTURE (CONT):****FT WORTH MEACHAM INTL:**

◦ RWY 9:

WINDSOCK 293' FROM DER, 354' LEFT OF CENTERLINE, 51' AGL/721' MSL. SIGN ON BLDG 481' FROM DER, 407' RIGHT OF CENTERLINE, 39' AGL/702' MSL. SIGN 2448' FROM DER, 540' LEFT OF CENTERLINE, 75' AGL/742' MSL. GRAIN ELEVATORS BEGINNING 7085' FROM DER, 2191' LEFT OF CENTERLINE, UP TO 229' AGL/877' MSL.

◦ RWY 17:

BUSH 13' FROM DER, 160' RIGHT OF CENTERLINE, 21' AGL/674' MSL. ANTENNA 953' FROM DER, 394' LEFT OF CENTERLINE, 72' AGL/722' MSL. HANGAR 1380' FROM DER, 744' LEFT OF CENTERLINE, 43' AGL/703' MSL.

◦ RWY 27:

TREE 239' FROM DER, 492' LEFT OF CENTERLINE, 35' AGL/685' MSL.

◦ RWY 34:

MULTIPLE TREES 974' FROM DER, 682' RIGHT OF CENTERLINE, UP TO 47' AGL/746' MSL. GRAIN ELEVATOR 1.52 NM FROM DER, 2775' RIGHT OF CENTERLINE, 254' AGL/969' MSL.

◦ RWY 35:

TREE 1' FROM DER, 248' LEFT OF CENTERLINE, 40' AGL/690' MSL. TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 45' AGL/699' MSL. BUSH 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL. OBSTACLE LIGHT ON DAM 1359' FROM DER, 1' RIGHT OF CENTERLINE, 46' AGL/706' MSL.

FT WORTH SPINKS:

◦ RWY 17R:

TREE 4909' FROM DER, 1556' LEFT OF CENTERLINE, 60' AGL/830' MSL.

GRAND PRAIRIE MUN:

◦ RWY 17:

ANTENNA 190' FROM DER, 456' RIGHT OF CENTERLINE, 26' AGL/615' MSL. ROAD, MULTIPLE POLES AND SIGNS BEGINNING 570' FROM DER, 410' RIGHT OF CENTERLINE, UP TO 31' AGL/620' MSL. TREE 1506' FROM DER, 517' RIGHT OF CENTERLINE, 37' AGL/617' MSL.

LANCASTER:

◦ RWY 31:

MULTIPLE TREES BEGINNING 1133' FROM DER, 479' LEFT OF CENTERLINE, UP TO 40' AGL/541' MSL. TREES 886' FROM DER, 637' RIGHT OF CENTERLINE, 35' AGL/536' MSL. MULTIPLE POLES BEGINNING 5613' FROM DER, 1171' RIGHT OF CENTERLINE, UP TO 101' AGL/661' MSL.

MESQUITE METRO:

◦ RWY 17:

MULTIPLE TREES, SIGN AND FENCES BEGINNING 10' FROM DER, 362' LEFT OF CENTERLINE, UP TO 35' AGL/478' MSL.

◦ RWY 35:

HANGAR 53' FROM DER, 497' LEFT OF CENTERLINE, 23' AGL/470' MSL. MULTIPLE TREES AND POLES BEGINNING 999' FROM DER, 708' LEFT OF CENTERLINE, UP TO 44' AGL/483' MSL. BUSH 45' FROM DER, 466' RIGHT OF CENTERLINE, 10' AGL/457' MSL. POLE 814' FROM DER, 288' RIGHT OF CENTERLINE, 27' AGL/467' MSL. CONSTRUCTION EQUIPMENT 892' FROM DER, 628' RIGHT OF CENTERLINE, 59' AGL/489' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 2)**JOE POOL DEPARTURE:****ADDISON:**

◦ RWY 15:

BUILDING 2.1 NM FROM DER, ON CENTERLINE, 360' AGL/974' MSL. MULTIPLE BLDGS BEGINNING 258' TO 1.8 NM FROM DER, 21' TO 1307' ON OR LEFT OF CENTERLINE, UP TO 152' AGL/787' MSL. MULTIPLE BLDGS, RAILROAD, ROAD BEGINNING 268' TO 1.9 NM FROM DER, 5' TO 995' RIGHT OF CENTERLINE, UP TO 311' AGL/955' MSL.

◦ RWY 33:

MULTIPLE POLES AND BLDGS BEGINNING 46' TO 3124' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 84' AGL/720' MSL. MULTIPLE POLES AND BLDGS BEGINNING 640' TO 2690' FROM DER, 21' TO 647' LEFT OF CENTERLINE, UP TO 65' AGL/709' MSL.

FT WORTH ALLIANCE:

◦ RWY 16L:

LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.

◦ RWY 16R:

FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.

◦ RWY 34L:

FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.

◦ RWY 34R:

ANTENNA 218' FROM DER 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

FT WORTH MEACHAM INTL:

◦ RWY 34:

BILLBOARD 692' FROM DER, 686' RIGHT OF CENTERLINE, 37' AGL/739' MSL.

◦ RWY 35:

TREE 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL, TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 36' AGL/699' MSL.

MESQUITE METRO:

◦ RWY 17:

TOWER 2.0 NM FROM DER, 1.8 NM LEFT OF CENTERLINE, 456' AGL/944' MSL.

KINGDOM DEPARTURE:**ADDISON:**

◦ RWY 15:

MULTIPLE BLDGS BEGINNING 1085' FROM DER, 21' LEFT OF CENTERLINE, UP TO 321' AGL/956' MSL. BLDG WITH ANTENNA 1.9 NM FROM DER, 968' RIGHT OF CENTERLINE, 345' AGL/975' MSL. POLE 666' FROM DER, 640' LEFT OF CENTERLINE, 60' AGL/681' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 115' LEFT OF CENTERLINE, UP TO 40' AGL/675' MSL. ROAD, RAILROAD BEGINNING 268' FROM DER, 5' RIGHT OF CENTERLINE, UP TO 23' AGL/655' MSL.

◦ RWY 33:

MULTIPLE POLES AND TREES BEGINNING 640' FROM DER, 21' LEFT OF CENTERLINE, UP TO 60' AGL/709' MSL. MULTIPLE BLDGS BEGINNING 1225' FROM DER, 147' LEFT OF CENTERLINE, UP TO 37' AGL/697' MSL. MULTIPLE BLDGS BEGINNING 45' FROM DER, 458' RIGHT OF CENTERLINE, UP TO 57' AGL/696' MSL. MULTIPLE POLES BEGINNING 922' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 60' AGL/720' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 3)**KINGDOM DEPARTURE (CONT):****ARLINGTON MUN:**

◦ RWY 16:

MULTIPLE REILS BEGINNING 77' FROM DER, 127' RIGHT OF CENTERLINE, 7' AGL/601' MSL. MULTIPLE REILS BEGINNING 74' FROM DER, 126' LEFT OF CENTERLINE, 7' AGL/603' MSL. TREE 590' FROM DER, 480' RIGHT OF CENTERLINE, 16' AGL/614' MSL.

◦ RWY 34:

TREE 1083' FROM DER, 710' RIGHT OF CENTERLINE, 35' AGL/670' MSL. TREE 705' FROM DER, 403' LEFT OF CENTERLINE, 38' AGL/654' MSL. TREE 231' FROM DER, 464' LEFT OF CENTERLINE, 35' AGL/642' MSL. MULTIPLE TREES BEGINNING 1093' FROM DER, 415' RIGHT OF CENTERLINE, UP TO 39' AGL/663' MSL.

COLLIN CO REGL AT MC KINNEY:

◦ RWY 17:

BUSH 29' FROM DER, 499' RIGHT OF CENTERLINE, 5' AGL/591' MSL. OBSTACLE LIGHT ON DME 400' FROM DER, 266' RIGHT OF CENTERLINE, 16' AGL/602' MSL. TREES 784' FROM DER, 574' RIGHT OF CENTERLINE, 39' AGL/625' MSL.

◦ RWY 35:

TREES 1060' FROM DER, 634' RIGHT OF CENTERLINE, 65' AGL/605' MSL. MULTIPLE TREES BEGINNING 1532' FROM DER, 632' LEFT OF CENTERLINE, UP TO 79' AGL/626' MSL.

DALLAS EXECUTIVE:

◦ RWY 13:

OBSTACLE LIGHT ON BLAST FENCE 109' FROM DER, 347' LEFT OF CENTERLINE, 6' AGL/658' MSL.

◦ RWY 17:

TREE 468' FROM DER, 454' LEFT OF CENTERLINE, 35' AGL/699' MSL. TREE 113' FROM DER, 516' RIGHT OF CENTERLINE, 30' AGL/679' MSL. TREE 871' FROM DER, 405' LEFT OF CENTERLINE, 35' AGL/685' MSL. TREE 651' FROM DER, 303' RIGHT OF CENTERLINE, 35' AGL/699' MSL.

◦ RWY 31:

TREE 481' FROM DER, 552' RIGHT OF CENTERLINE, 30' AGL/677' MSL. TREE 2978' FROM DER, 802' LEFT OF CENTERLINE, 46' AGL/732' MSL.

◦ RWY 35:

TREE 534' FROM DER, 302' LEFT OF CENTERLINE, 34' AGL/671' MSL. TREE 745' FROM DER, 371' LEFT OF CENTERLINE, 35' AGL/672' MSL. TREE 972' FROM DER, 405' RIGHT OF CENTERLINE, 35' AGL/675' MSL.

DENTON MUN:

◦ RWY 17:

MULTIPLE TREES BEGINNING 190' FROM DER, 178' RIGHT OF CENTERLINE, UP TO 66' AGL/665' MSL. BUILDING 371' FROM DER, 261' LEFT OF CENTERLINE, 14' AGL/643' MSL.

◦ RWY 35:

TREE 1242' FROM DER, 806' RIGHT OF CENTERLINE, 63' AGL/692' MSL.

FT WORTH ALLIANCE:

◦ RWY 16L:

LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.

◦ RWY 16R:

FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 4)**KINGDOM DEPARTURE (CONT):**

- RWY 34L:
FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.
- RWY 34R:
ANTENNA 218' FROM DER, 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

FT WORTH MEACHAM INTL:

- RWY 9:
WINDSOCK 293' FROM DER, 354' LEFT OF CENTERLINE, 51' AGL/721' MSL. SIGN ON BLDG 481' FROM DER, 407' RIGHT OF CENTERLINE, 39' AGL/702' MSL. SIGN 2448' FROM DER, 540' LEFT OF CENTERLINE, 75' AGL/742' MSL. GRAIN ELEVATORS BEGINNING 1.2 NM FROM DER, 2191' LEFT OF CENTERLINE, UP TO 229' AGL/877' MSL.
- RWY 17:
BUSH 13' FROM DER, 160' RIGHT OF CENTERLINE, 21' AGL/674' MSL. ANTENNA 953' FROM DER, 394' LEFT OF CENTERLINE, 72' AGL/722' MSL. HANGAR 1380' FROM DER, 744' LEFT OF CENTERLINE, 43' AGL/703' MSL.
- RWY 27:
TREE 239' FROM DER, 492' LEFT OF CENTERLINE, 35' AGL/685' MSL.
- RWY 34:
MULTIPLE TREES 974' FROM DER, 682' RIGHT OF CENTERLINE, UP TO 47' AGL/746' MSL. GRAIN ELEVATOR 1.52 NM FROM DER, 2775' RIGHT OF CENTERLINE, 254' AGL/969' MSL.
- RWY 35:
TREE 1' FROM DER, 248' LEFT OF CENTERLINE, 40' AGL/690' MSL. TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 45' AGL/699' MSL. BUSH 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL. OBSTACLE LIGHT ON DAM 1359' FROM DER, 1' RIGHT OF CENTERLINE, 46' AGL/706' MSL.

FT WORTH SPINKS:

- RWY 17R:
TREE 4909' FROM DER, 1556' LEFT OF CENTERLINE, 60' AGL/830' MSL.

GRAND PRAIRIE MUN:

- RWY 17:
ANTENNA 190' FROM DER, 456' RIGHT OF CENTERLINE, 26' AGL/615' MSL. ROAD, MULTIPLE POLES AND SIGNS BEGINNING 570' FROM DER, 410' RIGHT OF CENTERLINE, UP TO 31' AGL/620' MSL. TREE 1506' FROM DER, 517' RIGHT OF CENTERLINE, 37' AGL/617' MSL.

LANCASTER:

- RWY 31:
MULTIPLE TREES BEGINNING 1133' FROM DER, 479' LEFT OF CENTERLINE, UP TO 40' AGL/541' MSL. TREES 886' FROM DER, 637' RIGHT OF CENTERLINE, 35' AGL/536' MSL. MULTIPLE POLES BEGINNING 5613' FROM DER, 1171' RIGHT OF CENTERLINE, UP TO 101' AGL/661' MSL.

MESQUITE METRO:

- RWY 17:
MULTIPLE TREES, SIGN AND FENCES BEGINNING 10' FROM DER, 362' LEFT OF CENTERLINE, UP TO 35' AGL/478' MSL.
- RWY 35:
HANGAR 53' FROM DER, 497' LEFT OF CENTERLINE, 23' AGL/470' MSL. MULTIPLE TREES AND POLES BEGINNING 999' FROM DER, 708' LEFT OF CENTERLINE, UP TO 44' AGL/483' MSL. BUSH 45' FROM DER, 466' RIGHT OF CENTERLINE, 10' AGL/457' MSL. POLE 814' FROM DER, 288' RIGHT OF CENTERLINE, 27' AGL/467' MSL. CONSTRUCTION EQUIPMENT 892' FROM DER, 628' RIGHT OF CENTERLINE, 59' AGL/489' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 5)**WYLIE DEPARTURE:****ADDISON:**

◦ RWY 15:

MULTIPLE BLDGS BEGINNING 1085' FROM DER, 21' LEFT OF CENTERLINE, UP TO 321' AGL/945' MSL. BLDG WITH ANTENNA 1.9 NM FROM DER, 968' RIGHT OF CENTERLINE, 345' AGL/975' MSL. POLE 666' FROM DER, 640' LEFT OF CENTERLINE, 60' AGL/681' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 115' LEFT OF CENTERLINE, UP TO 40' AGL/675' MSL. ROAD, RAILROAD BEGINNING 268' FROM DER, 495' RIGHT OF CENTERLINE UP TO 21' AGL/655' MSL.

◦ RWY 33:

MULTIPLE POLES AND TREES BEGINNING 640' FROM DER, 21' LEFT OF CENTERLINE, UP TO 60' AGL/709' MSL. MULTIPLE BLDGS BEGINNING 1225' FROM DER, 147' LEFT OF CENTERLINE, UP TO 37' AGL/607' MSL. MULTIPLE BLDGS BEGINNING 45' FROM DER, 458' RIGHT OF CENTERLINE, UP TO 57' AGL/696' MSL. MULTIPLE POLES BEGINNING 922' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 60' AGL/720' MSL.

ARLINGTON MUN:

◦ RWY 16:

MULTIPLE REILS BEGINNING 77' FROM DER, 127' RIGHT OF CENTERLINE, 7' AGL/601' MSL. MULTIPLE REILS BEGINNING 74' FROM DER, 126' LEFT OF CENTERLINE, 7' AGL/603' MSL. TREE 590' FROM DER, 480' RIGHT OF CENTERLINE, 16' AGL/614' MSL.

◦ RWY 34:

TREE 1083' FROM DER, 710' RIGHT OF CENTERLINE, 35' AGL/670' MSL. TREE 705' FROM DER, 403' LEFT OF CENTERLINE, 38' AGL/654' MSL. TREE 231' FROM DER, 464' LEFT OF CENTERLINE, 35' AGL/642' MSL. MULTIPLE TREES 1093' FROM DER, 415' TO 576' RIGHT OF CENTERLINE, UP TO 39' AGL/663' MSL.

◦ TOWER FARM 7.2 NM SOUTHEAST OF AIRPORT UP TO 2549' MSL.

DALLAS EXECUTIVE:

◦ RWY 13:

OBSTACLE LIGHT ON BLAST FENCE 109' FROM DER, 347' LEFT OF CENTERLINE, 6' AGL/658' MSL.

◦ RWY 17:

TREE 468' FROM DER, 454' LEFT OF CENTERLINE, 35' AGL/699' MSL. TREE 113' FROM DER, 516' RIGHT OF CENTERLINE, 30' AGL/679' MSL. TREE 871' FROM DER, 405' LEFT OF CENTERLINE, 35' AGL/685' MSL. TREE 651' FROM DER, 303' RIGHT OF CENTERLINE, 35' AGL/699' MSL.

◦ RWY 31:

TREE 481' FROM DER, 552' RIGHT OF CENTERLINE, 30' AGL/677' MSL, TREE 2978' FROM DER, 802' LEFT OF CENTERLINE, 46' AGL/732' MSL.

◦ RWY 35:

TREE 534' FROM DER, 302' LEFT OF CENTERLINE, 34' AGL/671' MSL. TREE 745' FROM DER, 371' LEFT OF CENTERLINE, 35' AGL/672' MSL. TREE 972' FROM DER, 405' RIGHT OF CENTERLINE, 35' AGL/675' MSL.

FT WORTH ALLIANCE:

◦ RWY 16L:

LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.

◦ RWY 16R:

FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.

◦ RWY 34L:

FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 6)**WYLIE DEPARTURE (CONT):**

- RWY 34R:

ANTENNA 218' FROM DER, 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

FT WORTH MEACHAM INTL:

- RWY 9:

WINDSOCK 293' FROM DER, 354' LEFT OF CENTERLINE, 51' AGL/721' MSL. SIGN ON BUILDING 481' FROM DER, 407' RIGHT OF CENTERLINE, 39' AGL/702' MSL. SIGN 2448' FROM DER, 540' LEFT OF CENTERLINE, 75' AGL/742' MSL. GRAIN ELEVATORS BEGINNING 7085' FROM DER, 2191' LEFT OF CENTERLINE, UP 229' AGL/877' MSL.

- RWY 16:

TOWER 5.8 NM SOUTHEAST FROM DER, 1113' AGL/1743' MSL, BLDG 3.5 NM SOUTHEAST FROM DER, 590' AGL/1196' MSL.

- RWY 17:

BUSH 13' FROM DER, 160' RIGHT OF CENTERLINE, 21' AGL/674' MSL. ANTENNA 953' FROM DER, 394' LEFT OF CENTERLINE, 72' AGL/722' MSL. HANGAR 1380' FROM DER, 744' LEFT OF CENTERLINE, 43' AGL/703' MSL.

- RWY 27:

TREE 239' FROM DER, 492' LEFT OF CENTERLINE, 35' AGL/685' MSL.

- RWY 34:

MULTIPLE TREES 974' FROM DER, 682' RIGHT OF CENTERLINE, UP TO 47' AGL/746' MSL.

- RWY 35:

TREE 1' FROM DER, 248' LEFT OF CENTERLINE, 40' AGL/690' MSL. TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 45' AGL/699' MSL. BUSH 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL. OBSTACLE LIGHT ON DAM 1359' FROM DER, 1' RIGHT OF CENTERLINE, 46' AGL/706' MSL.

General Information

Location: Lancaster TX USA

IATA Code:

Lat/Long: N32° 34.7' W096° 43.1'

Elevation: 501 ft

Airport Use: Public

Magnetic Variation: 3.9°E

Sectional Chart: Dallas Ft Worth

Fuel Types: 100 Octane (LL), Jet A

Repair Types: Major Airframe, Major Engine

Customs: No

Airport Type: IFR

Landing Fee: No

Control Tower: No

Jet Start Unit: No

LLWS Alert: No

Beacon: Yes

Sunrise: 1257 Z

Sunset: 0022 Z,

Runway Information

Runway: 13

Length x Width: 6502 ft x 100 ft

Surface Type: asphalt

TDZ-Elev: 501 ft

Lighting: Edge

Runway: 31

Length x Width: 6502 ft x 100 ft

Surface Type: asphalt

TDZ-Elev: 487 ft

Lighting: Edge, REIL

Communication Information

AWOS 118.975

Lancaster Regl Unicom 122.7 CTAF

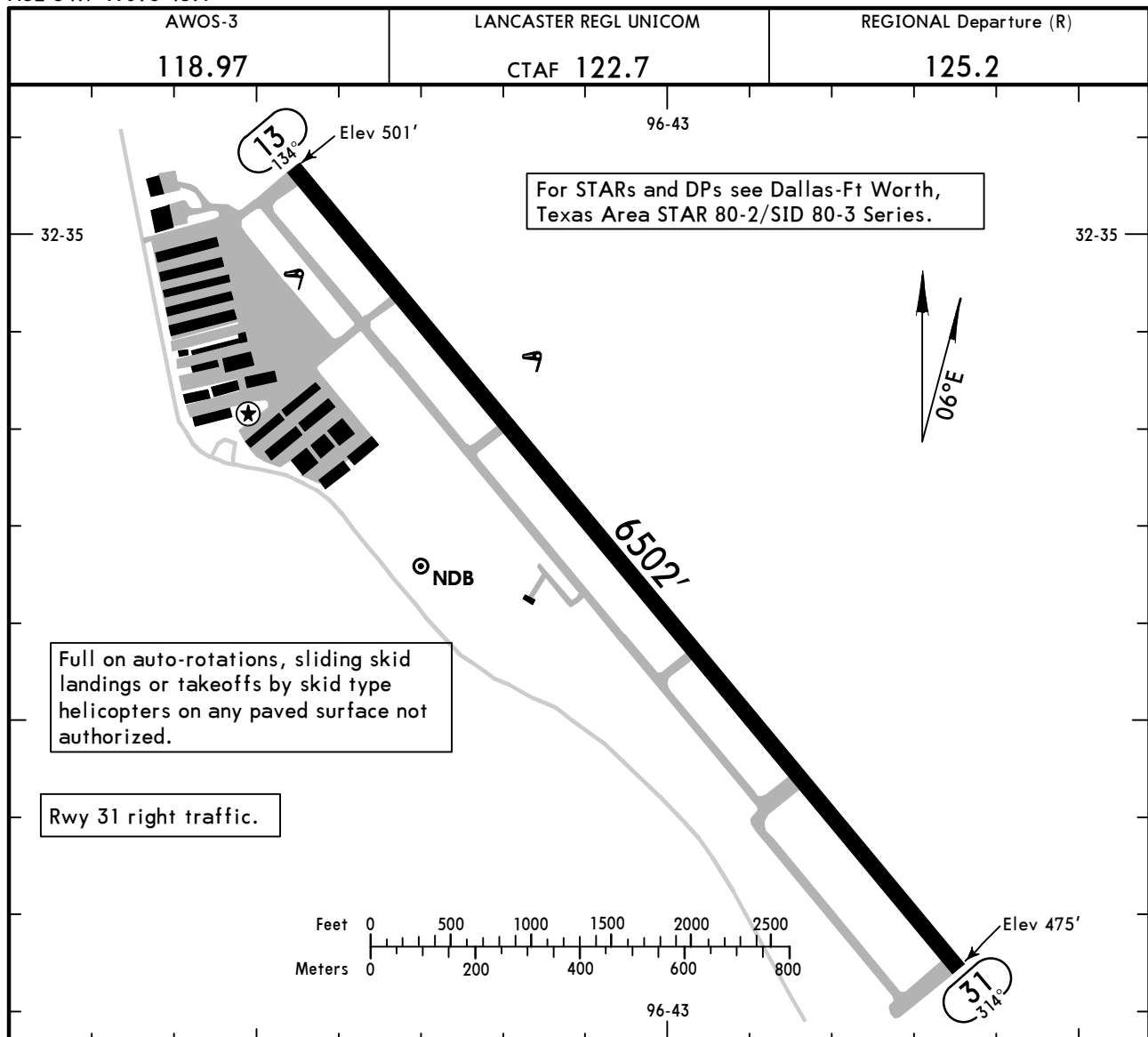
Regional Approach Control 125.2

Regional Departure Control 125.2

KLNC
Apt Elev **501'**
N32 34.7 W096 43.1

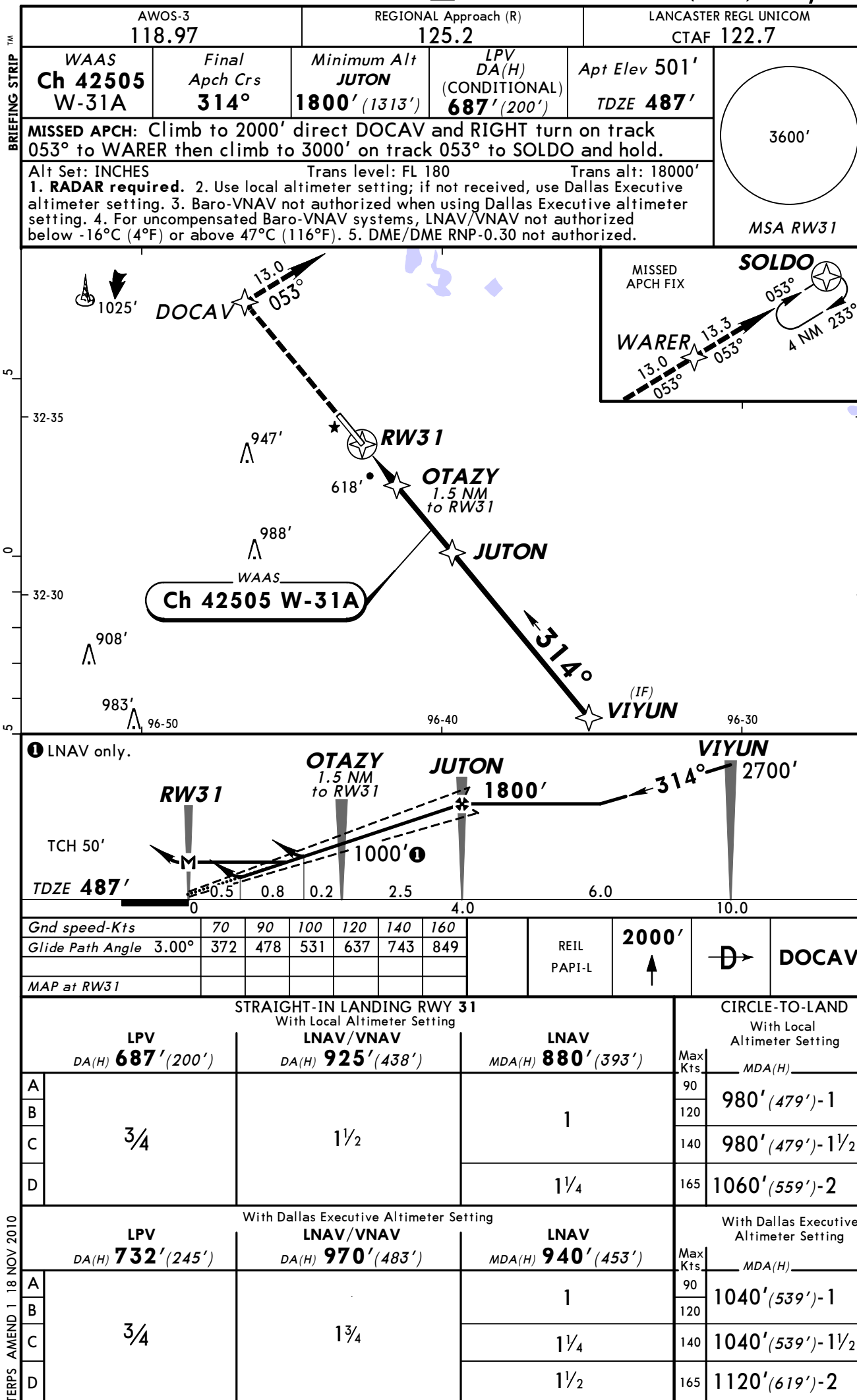
JEPPESEN
11 NOV 11 **(12-1)** Eff 17 Nov

LANCASTER, TEXAS
LANCASTER REGL



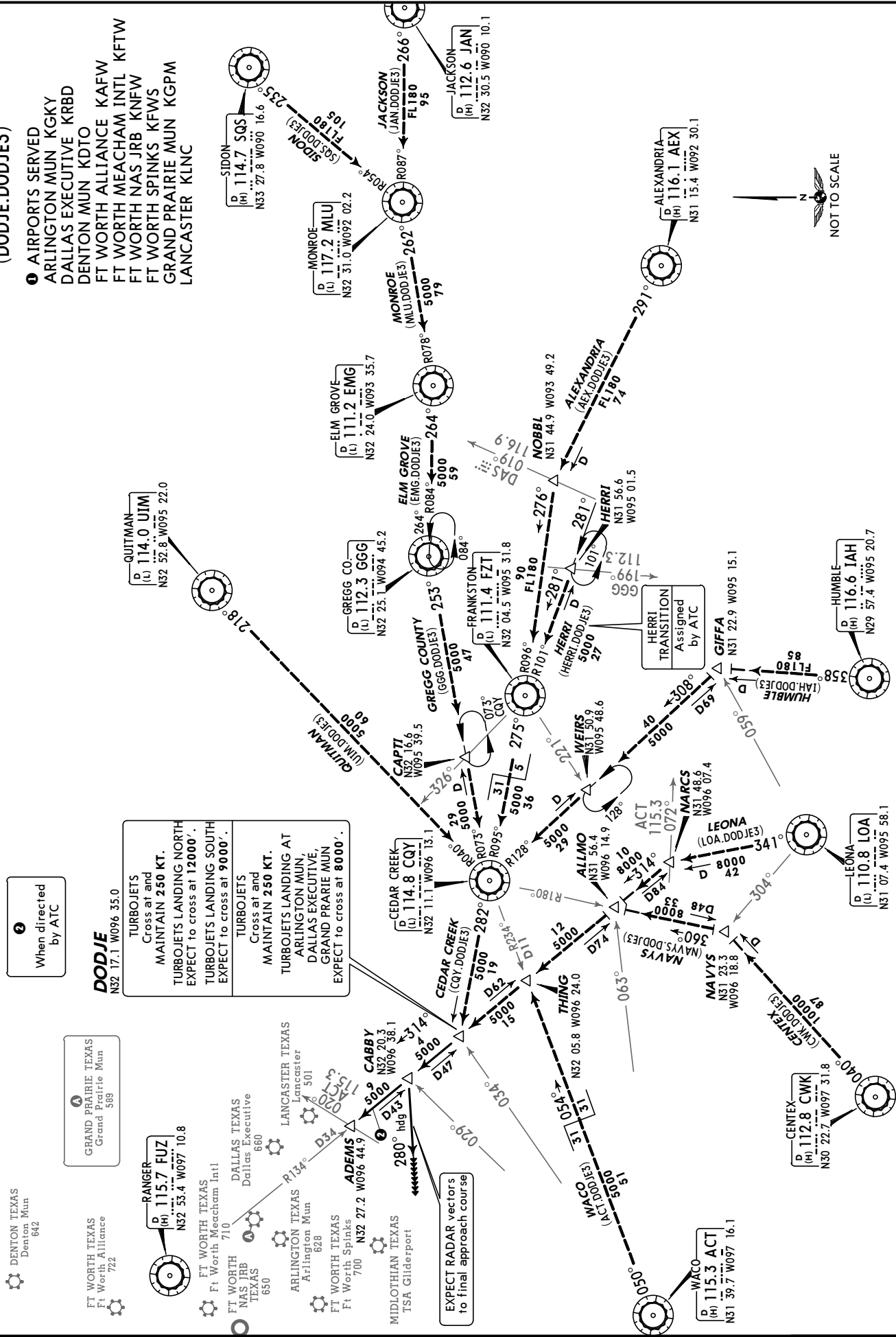
ADDITIONAL RUNWAY INFORMATION					
RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Landing Beyond Glide Slope		
13	MIRL PAPI-L (angle 3.00°)				100'
31	MIRL REIL PAPI-L (angle 3.00°)				

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE						FOR FILING AS ALTERNATE			
Rwy 13		Rwy 31				Authorized Only When Local Weather Available		RNAV (GPS) Rwy 31	Other
Adequate Vis Ref	STD	1 With Min climb of 221' /NM to 800'		Other					
		Adequate Vis Ref	STD						
1 & 2 Eng	1/4	1	1/4	1	200-1 1/2	A	800-2	NA	
3 & 4 Eng		1/2		1/2		B			
					C				
					D				
1 Alternatively, with standard take-off minimums and a normal 200' /NM climb gradient, take-off must occur no later than 1600' prior to departure end of runway.									
OBSTACLE DP: Rwy 31, climb via heading 314° to 1800' before turning left.									



**DODJE THREE ARRIVAL
(DODJE.DODJE3)**

- 1 AIRPORTS SERVED
ARLINGTON MUN KGKY
DALLAS EXECUTIVE KRBDD
DENTON MUN KDTO
FT WORTH ALLIANCE KAF
FT WORTH MEACHAM INT
FT WORTH NAS JRB KNF
FT WORTH SPINKS KFWSS
GRAND PRAIRIE MUN KGC
LANCASTER KLNC



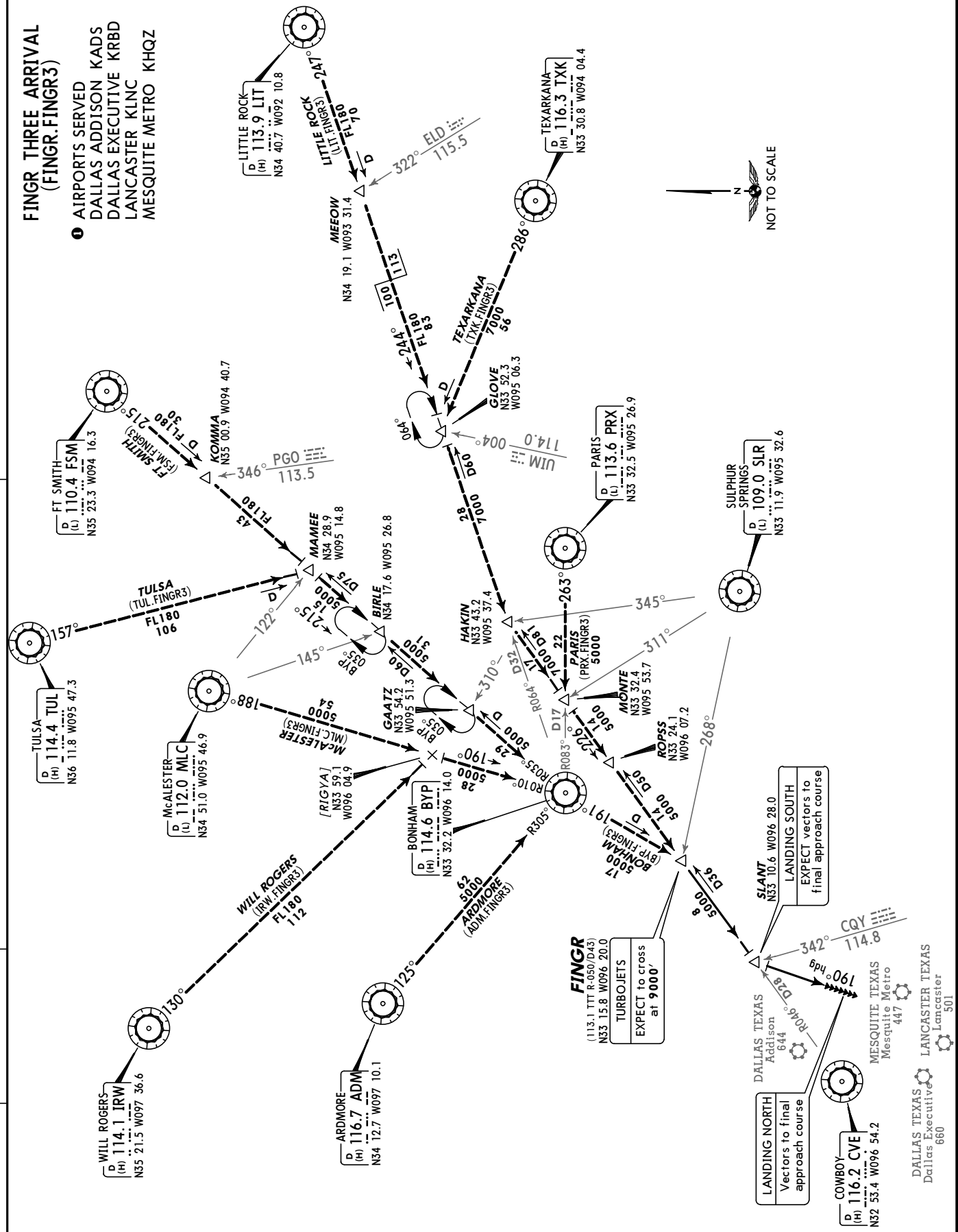
AREA STAR SERVES ONLY: 1

REGIONAL Approach (R) 125.02 125.27	Apt Elev See graphic	Alt Set: INCHES	Trans level: FL180	Trans alt: 18000'

Aircraft landing Addition prepare to be reassigned the JONEZ STAR by ATC in lieu of this STAR.

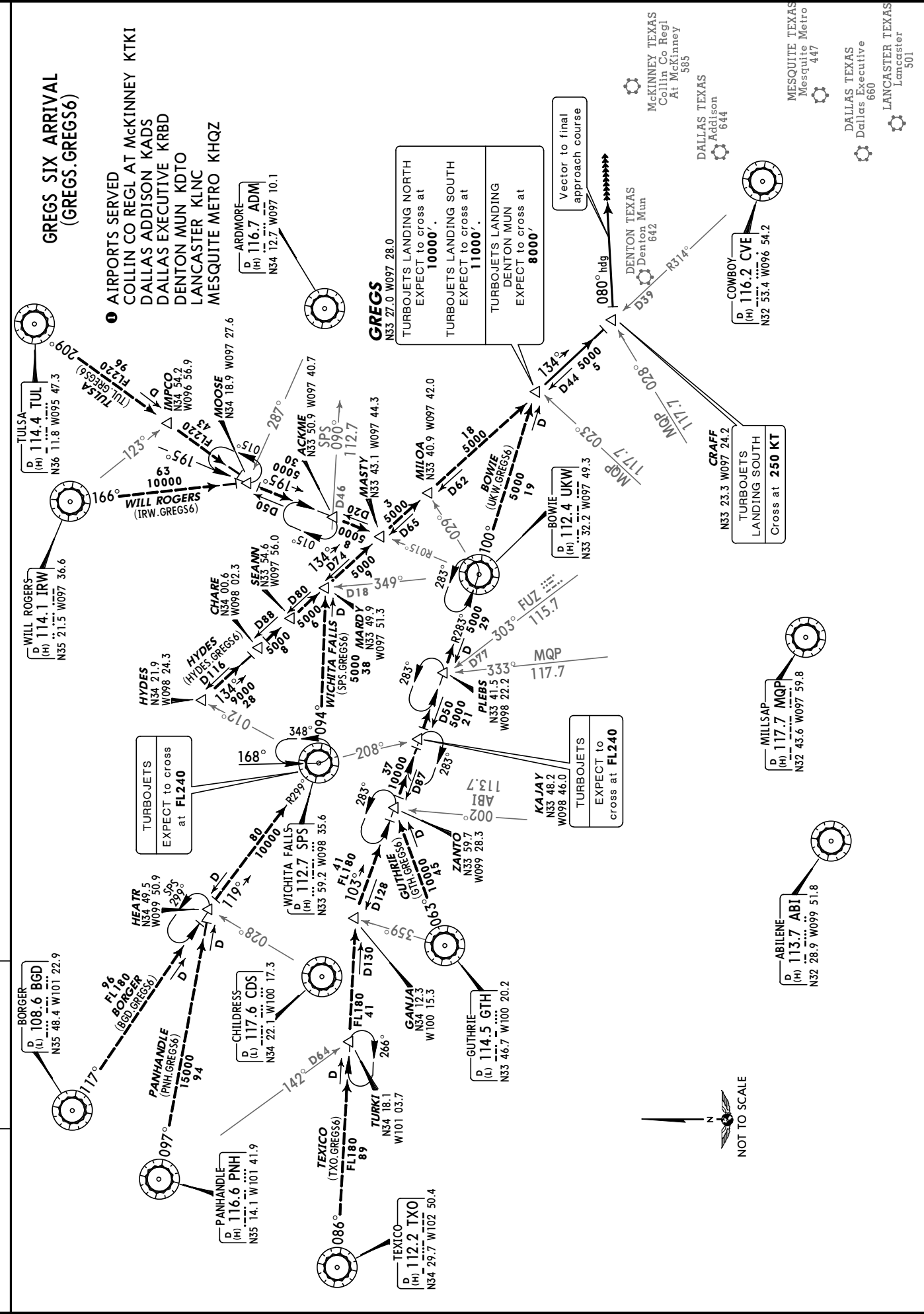
FINGR THREE ARRIVAL (FINGR.FINGR3)

1 AIRPORTS SERVED
DALLAS ADDISON KADS
DALLAS EXECUTIVE KRBD
LANCASTER KLNC
MESQUITE METRO KHQZ



AREA STAR SERVES ONLY: 1

REGIONAL Approach (R) 119.05 118.1	Apt Elev See graphic	Alt Set: INCHES	Trans level: FL180	Trans alt: 18000'



AREA SID SERVES ONLY: ●

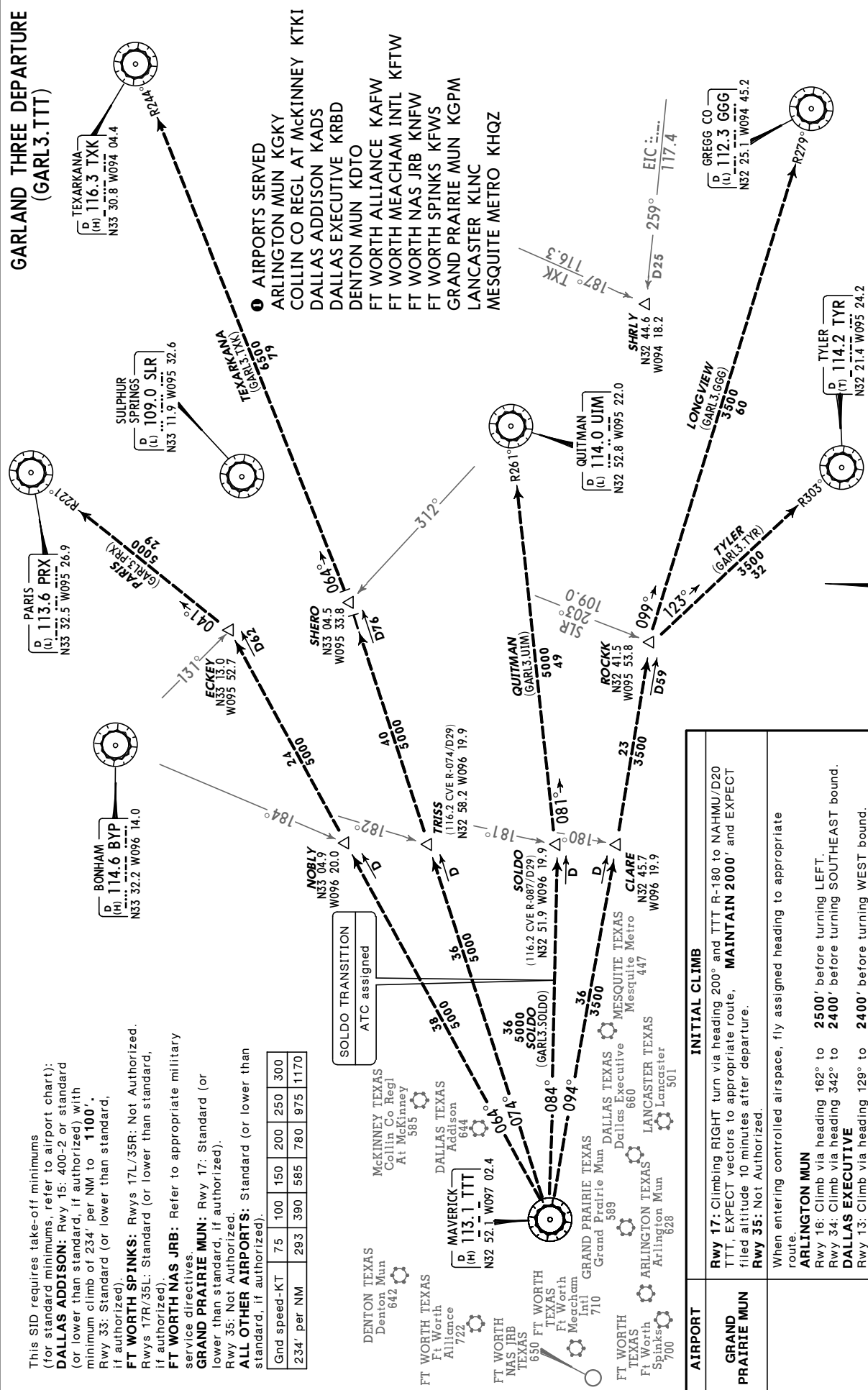
- 1. For jets requesting 17000' and below.
- 2. GRAND PRAIRIE MUN DME required.

Trans level: FL180 Trans alt: 18000'

Apt Elev
See graphic

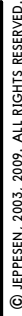
This SID requires take-off minimums (for standard minimums, refer to airport chart):
DALLAS ADDISON: Rwy 15: 400-2 or standard (or lower than standard, if authorized) with minimum climb of 234' per NM to 1100'.
Rwy 33: Standard (or lower than standard, if authorized).
FT WORTH SPINKS: Rwys 17L/35R: Not Authorized.
Rwys 17R/35L: Standard (or lower than standard, if authorized).
FT WORTH NAS JRB: Refer to appropriate military service directives.
GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized).
Rwy 35: Not Authorized.
ALL OTHER AIRPORTS: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
234' per NM	293	390	585	780	975	1170



AIRPORT	INITIAL CLIMB
GRAND PRAIRIE MUN	Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/D20 TTT, EXPECT vectors to appropriate route, MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure. Rwy 35: Not Authorized.
ALL OTHER AIRPORTS	When entering controlled airspace, fly assigned heading to appropriate route. ARLINGTON MUN Rwy 16: Climb via heading 162° to 2500' before turning LEFT. Rwy 34: Climb via heading 342° to 2400' before turning SOUTHEAST bound. DALLAS EXECUTIVE Rwy 13: Climb via heading 129° to 2400' before turning WEST bound. Rwy 17: Climb via heading 174° to 2400' before turning WEST bound. FT WORTH MEACHAM INTL Rwy 9: Climb via heading 092° to 2000' before proceeding on course. Rwys 16, 17: Climb via heading 164° to 2000' before proceeding on course. FT WORTH SPINKS Rwys 17L, 35R: Not Authorized. Rwy 17R: Climb via heading 173° to 1200' before turning RIGHT. MESQUITE METRO Rwy 17: Climb via heading 175° to 1000' before turning LEFT.

CHANGES: Location name, departure text, formations, procedure renumbered.



Trans level: FL180 Trans alt: 18000'

INITIAL CLIMB

GRAND PRAIRIE MUN
Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/D20 TTT. EXPECT RADAR vectors to appropriate route, MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure.
Rwy 35: Not authorized.

When entering controlled airspace, fly assigned heading and altitude. EXPECT vector to appropriate route.

ARLINGTON MUN
Rwy 16: Climb via heading 162° to 2500' before turning LEFT.
Rwy 34: Climb via heading 342° to 1400' before turning SOUTHEAST bound.

DALLAS EXECUTIVE
Rwy 13: Climb via heading 129° to 2400' before turning WEST bound.
Rwy 17: Climb via heading 174° to 2400' before turning WEST bound.
Rwy 31: Climb via heading 309° to 1600' before turning SOUTH bound.
Rwy 35: Climb via heading 354° to 1600' before turning SOUTH bound.
FT WORTH ALLIANCE
Rwy 16R: Climb heading 163° before turning RIGHT.
FT WORTH MEACHAM INTL
Rwy 6: Climb via heading 092° to 1800' before turning SOUTH bound.
Rwys 16, 17: Climb via heading 164° to 1800' before proceeding on course.

FT WORTH SPINKS
Rwy 17R: Climb via heading 173° to 1200' before turning RIGHT.

This SID requires take-off minimums (for standard minimums refer to airport chart):

DALLAS ADDISON: Rwy 15: 400-2 or standard (or lower than standard, if authorized) with minimum climb of 234' per NM to 1100'.

FT WORTH ALLIANCE: Rwy 16L: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 208' per NM to 1100', or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to departure end of runway.

Rwy 16R: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 210' per NM to 1100', or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to departure end of runway.

Rwys 34L/R: Standard (or lower than standard, if authorized).

FT WORTH SPINKS: Rwys 17L/35R: Not authorized. Rwys 17R/35L: Standard (or lower than standard, if authorized).

FT WORTH NAS JRB: Refer to appropriate military service directives.

GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized).

Rwy 35: Not authorized.

ALL OTHER AIRPORTS: Standard (or lower than standard, if authorized).

Grnd speed-KT	75	100	150	200	250	300
208' per NM	260	347	520	693	867	1040
210' per NM	263	350	525	700	875	1050
234' per NM	293	390	585	780	975	1170

BILEE TRANSITION

For aircraft overflying BILEE, then via the appropriate STAR to George Bush Intercontinental or East Houston terminal area airports, or via J-87 to overfly TNV

McKINNEY TEXAS
Collin Co Regl
At McKinney
585

DALLAS TEXAS
Addison
644

ARDIA TRANSITION
ATC assigned

MESQUITE TEXAS
Mesquite Metro
447

DALLAS TEXAS
Dallas Executive
660

LANCASTER TEXAS
Lancaster
501

FT WORTH TEXAS
Ft Worth Alliance
722

GRAND PRAIRIE TEXAS
Grand Prairie
589

ARLINGTON TEXAS
Arlington Mun
628

FT WORTH TEXAS
Ft Worth Spinks
700

JASPA TRANSITION
ATC assigned

FT WORTH TEXAS
Ft Worth Meacham Intl
710

MAVERICK
(H) 113.1 TTT
N32 52.1 W097 02.4

ARDIA (JP004.ARDIA)
N32 17.1 W097 56.3

JASPA (JP004.JASPA)
N32 17.1 W097 03.5

WACO TRANSITION
For aircraft inbound to Waco or Gray terminal area airports

WACO (H) 115.3 ACT
N31 39.7 W097 16.1

HOARY TRANSITION
For E/F suffixed aircraft

ELLVR TRANSITION
For turboprop and turbojet aircraft inbound to Houston Hobby and turbojet aircraft inbound to Ellington, Scholes Intl at Galveston, and Brazoria Co

WINDU TRANSITION
For aircraft inbound to Austin or San Antonio terminal airports. Aircraft should file and/or EXPECT the BLEWE or MARCS arrival at WINDU

COLLEGE STATION TRANSITION
For piston aircraft inbound to Houston Hobby and all aircraft inbound to West Houston terminal area airports

COLLEGE STATION (JP004.CLL)
N30 36.3 W096 25.2

CENTEX
(H) 112.8 CWK
N30 22.7 W097 31.8

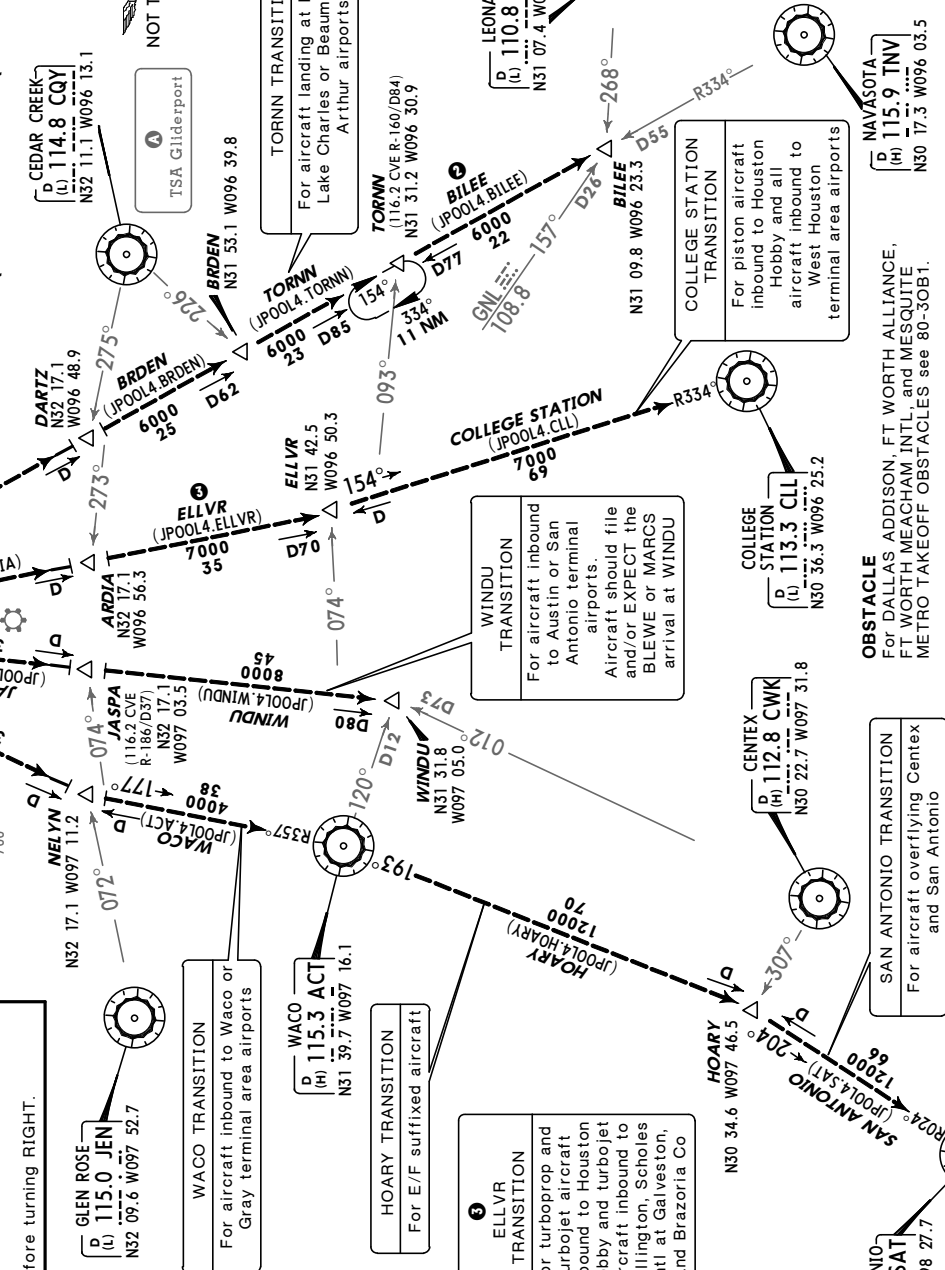
SAN ANTONIO TRANSITION
For aircraft overflying Centex and San Antonio

SAN ANTONIO (H) 116.8 SAT
N29 38.6 W098 27.7

OBSTACLE
For DALLAS ADDISON, FT WORTH ALLIANCE, FT WORTH MEACHAM INTL, and MESQUITE METRO TAKEOFF OBSTACLES see 80-30B1.

JOE POOL FOUR DEPARTURE
(JP004.TTT)

- 1 AIRPORTS SERVED
- ARLINGTON MUN KGKY
- COLLIN CO REG AT MCKINNEY KTKI
- DALLAS ADDISON KADS
- DALLAS EXECUTIVE KRBD
- DENTON MUN KDTQ
- FT WORTH ALLIANCE KAFW
- FT WORTH MEACHAM INTL KFTW
- FT WORTH NAS JRB KNFW
- FT WORTH SPINKS KFWs
- GRAND PRAIRIE MUN KGPM
- LANCASTER KLNC
- MESQUITE METRO KHQZ



AREA SID SERVES ONLY: 1

APRT Elev See graphic	Trans level: FL180 Trans alt: 18000'	INITIAL CLIMB
GRAND PRAIRIE MUN		Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/D20 TTT. EXPECT RADAR vectors to appropriate route. MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure. Rwy 35: Not authorized.
ALL OTHER AIRPORTS		When entering controlled airspace fly assigned heading and altitude to appropriate route. ARLINGTON MUN Rwy 16: Climb heading 162° to 2500' before turning LEFT. Rwy 34: Climb heading 342° to 1400' before turning SOUTHEAST bound. DALLAS EXECUTIVE Rwy 13: Climb heading 129° to 2600' before turning WEST bound. Rwy 17: Climb heading 174° to 2600' before turning WEST bound. Rwy 31: Climb heading 309° to 1600' before turning SOUTH bound. Rwy 35: Climb heading 354° to 1600' before turning SOUTH bound. FT WORTH ALLIANCE Rwy 16R: Climb heading 163° to 1200' before turning RIGHT. Rwy 17: Climb heading 163° to 1200' before turning RIGHT. FT WORTH MEACHAM INTL Rwy 9: Climb heading 092° to 2000' before proceeding on course. Rwy 16, 17: Climb heading 164° to 2000' before proceeding on course. FT WORTH SPINKS Rwy 17R: Climb heading 173° to 1200' before turning RIGHT. LANCASTER Rwy 31: Climb heading 314° to 1900' before turning LEFT. MESQUITE METRO Rwy 17: Climb heading 175° to 900' before turning LEFT.

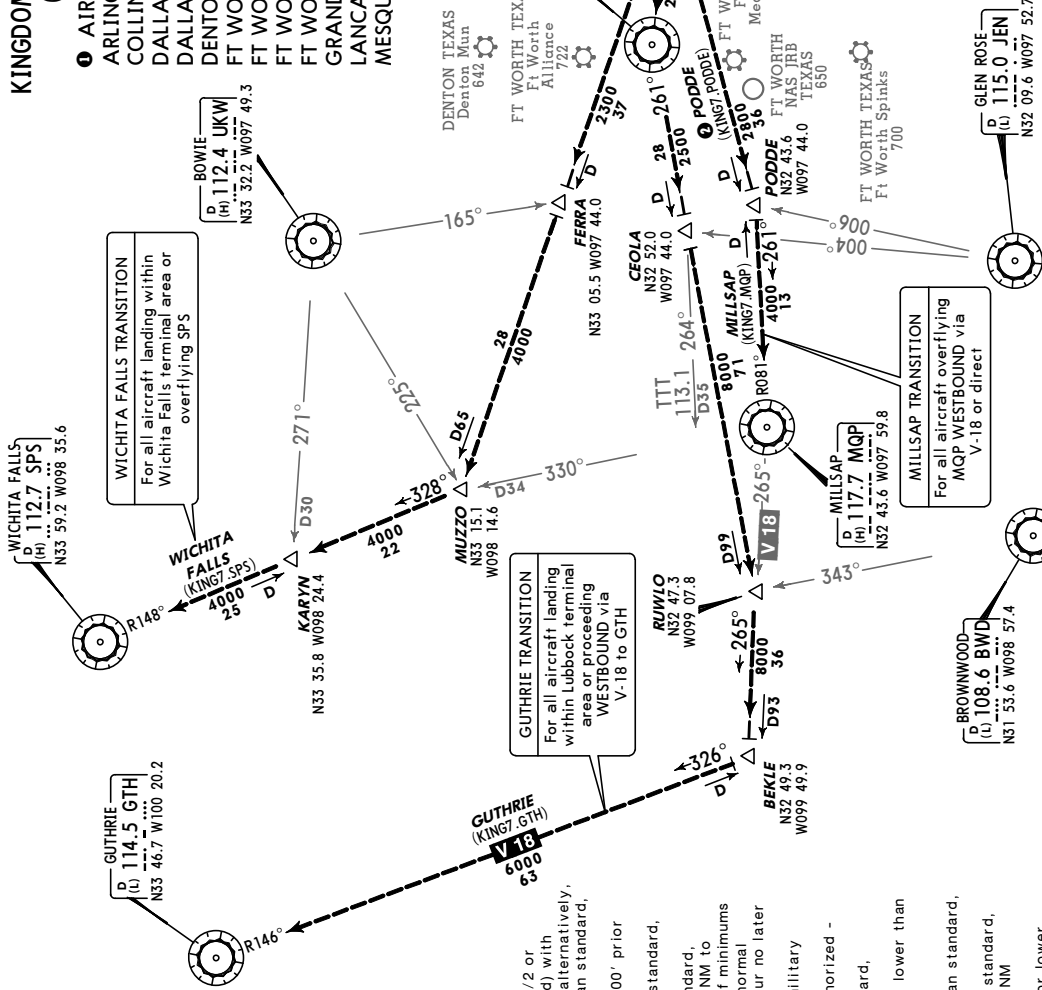
This SID requires take-off minimums (for standard minimums, refer to airport chart):
ARLINGTON MUN: Rwy 16, 34: Standard (or lower than standard, if authorized).
COLLIN CO REGL AT MCKINNEY: Rwy 17, 35: Standard (or lower than standard, if authorized).
DALLAS ADDISON: Rwy 15: 400-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 324' per NM to 1100'.
Rwy 33: Standard (or lower than standard, if authorized).
DALLAS EXECUTIVE: Rwy 13, 31, 35: Standard (or lower than standard, if authorized).
Rwy 17: 400-2 3/4 or standard (or lower than standard, if authorized) with minimum climb of 275' per NM to 1200'.
DENTON MUN: Rwy 17, 35: Standard (or lower than standard, if authorized).
FT WORTH ALLIANCE: Rwy 16L: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 208' per NM to 1100', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1400' prior to departure end of runway.
Rwy 16R: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 210' per NM to 1100', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1500' prior to departure end of runway.
Rwy 34L/R: Standard (or lower than standard, if authorized).

FT WORTH MEACHAM INTL: Rwy 9: 300-1 1/2 or standard (or lower than standard, if authorized) with minimum climb of 216' per NM to 1000', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1500' prior to departure end of runway.
Rwy 16, 17, 27, 35: Standard (or lower than standard, if authorized).
Rwy 34: 300-2 or standard (or lower than standard, if authorized) with minimum climb of 222' per NM to 1100', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1900' prior to departure end of runway.
FT WORTH NAS JRB: Refer to appropriate military service directives.
FT WORTH SPINKS: Rwy 17L, 35R: Not authorized - environmental.
Rwy 17R, 35L: Standard (or lower than standard, if authorized).
GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized).
Rwy 35: Not authorized - environmental.
LANCASTER: Rwy 13: Standard (or lower than standard, if authorized).
Rwy 21: 200-1 1/2 or standard (or lower than standard, if authorized) with minimum climb of 222' per NM to 800'.
MESQUITE METRO: Rwy 17, 35: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
208' per NM	260	347	520	693	867	1040
210' per NM	263	350	525	700	875	1050
216' per NM	270	360	540	720	900	1080
222' per NM	278	370	555	740	925	1110
275' per NM	344	458	688	917	1146	1375
324' per NM	405	540	810	1080	1350	1620

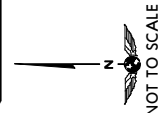
KINGDOM SEVEN DEPARTURE (KING7.TTT)

- 1 AIRPORTS SERVED
- ARLINGTON MUN KGKY
 - COLLIN CO REGL AT MCKINNEY KTKI
 - DALLAS ADDISON KADS
 - DALLAS EXECUTIVE KRBD
 - DENTON MUN KDTO
 - FT WORTH ALLIANCE KAFW
 - FT WORTH MEACHAM INTL KFTW
 - FT WORTH NAS JRB KNFW
 - FT WORTH SPINKS KFWs
 - GRAND PRAIRIE MUN KGPM
 - LANCASTER KINC
 - MESQUITE METRO KHQZ



OBSTACLE
For ARLINGTON MUN, COLLIN CO REGL AT MCKINNEY, DALLAS ADDISON, DALLAS EXECUTIVE, DENTON MUN, FT WORTH ALLIANCE, FT WORTH MEACHAM INTL, FT WORTH SPINKS, GRAND PRAIRIE MUN, LANCASTER, and MESQUITE METRO TAKEOFF OBSTACLE NOTES see 80-30B1.

PODDE TRANSITION
ATC assigned



AREA SID SERVES ONLY: ①

GRAND PRAIRIE MUN DME required.

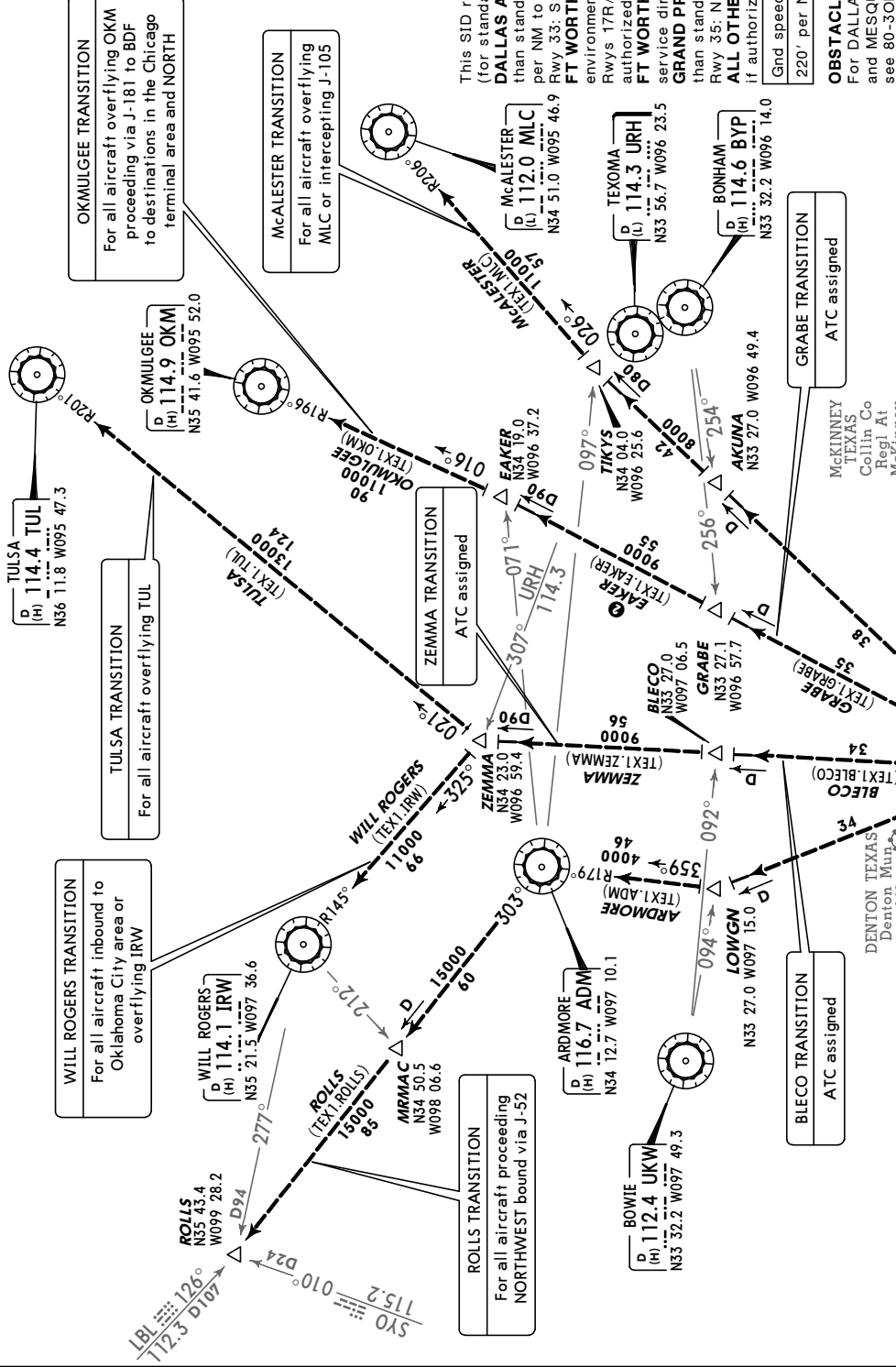
Trans level: FL 180 Trans alt: 18000'

Apt Elev
See graphic

TEXOMA ONE DEPARTURE
(TEX1.FUZ)

① AIRPORTS SERVED

ARLINGTON MUN KGKY
COLLIN CO REGL AT MCKINNEY KTKI
DALLAS ADDISON KADS
DALLAS EXECUTIVE KRBD
DENTON MUN KOTO
FT WORTH ALLIANCE KAFW
FT WORTH MEACHAM INTL KFTW
FT WORTH NAS JRB KNFW
FT WORTH SPINKS KFWS
GRAND PRAIRIE MUN KGPM
LANCASTER KLNC
MESQUITE METRO KHQZ



This SID requires take-off minimums
(for standard minimums, refer to airport chart):
DALLAS ADDISON: Rwy 15: 400-2 or standard (or lower
than standard, if authorized) with minimum climb of 220'
per NM to 1100'.
Rwy 33: Standard (or lower than standard, if authorized).
FT WORTH SPINKS: Rwys 17L/35R: Not authorized -
environmental.
Rwys 17R/35L: Standard (or lower than standard, if
authorized).
FT WORTH NAS JRB: Refer to appropriate military
service directives.
GRAND PRAIRIE MUN: Rwy 17: Standard (or lower
than standard, if authorized).
Rwy 35: Not authorized - airspace actions.
ALL OTHER AIRPORTS: Standard (or lower than standard,
if authorized).

Gnd speed-KT	75	100	150	200	250	300
220' per NM	275	367	550	733	917	1100

OBSTACLE
For DALLAS ADDISON, FT WORTH MEACHAM INTL,
and MESQUITE METRO TAKEOFF OBSTACLE NOTES
see 80-30B1.

②
EAKER TRANSITION
For aircraft inbound to the
Tulsa terminal area

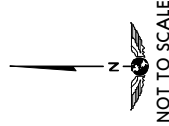
INITIAL CLIMB

Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/
D20 TTT. EXPECT RADAR vectors to appropriate route, **MAINTAIN 2000'**
and EXPECT filed altitude 10 minutes after departure.
Rwy 35: Not authorized.

When entering controlled airspace fly assigned heading and altitude to
appropriate route.

DALLAS EXECUTIVE
Rwy 13: Climb via 129° heading to **2400'** before turning WEST bound.
Rwy 17: Climb via 174° heading to **2400'** before turning WEST bound.
Rwy 31: Climb via 309° heading to **1600'** before turning SOUTH bound.
Rwy 35: Climb via 354° heading to **1600'** before turning SOUTH bound.
FT WORTH MEACHAM INTL
Rwy 9: Climb via 091° heading to **2000'** before proceeding on course.
Rwys 16, 17: Climb via 164° heading to **2000'** before proceeding on course.

FT WORTH SPINKS
Rwy 17R: Climb via 173° heading to **1200'** before turning RIGHT.
MESQUITE METRO
Rwy 17: Climb via 175° heading to **1000'** before turning LEFT.



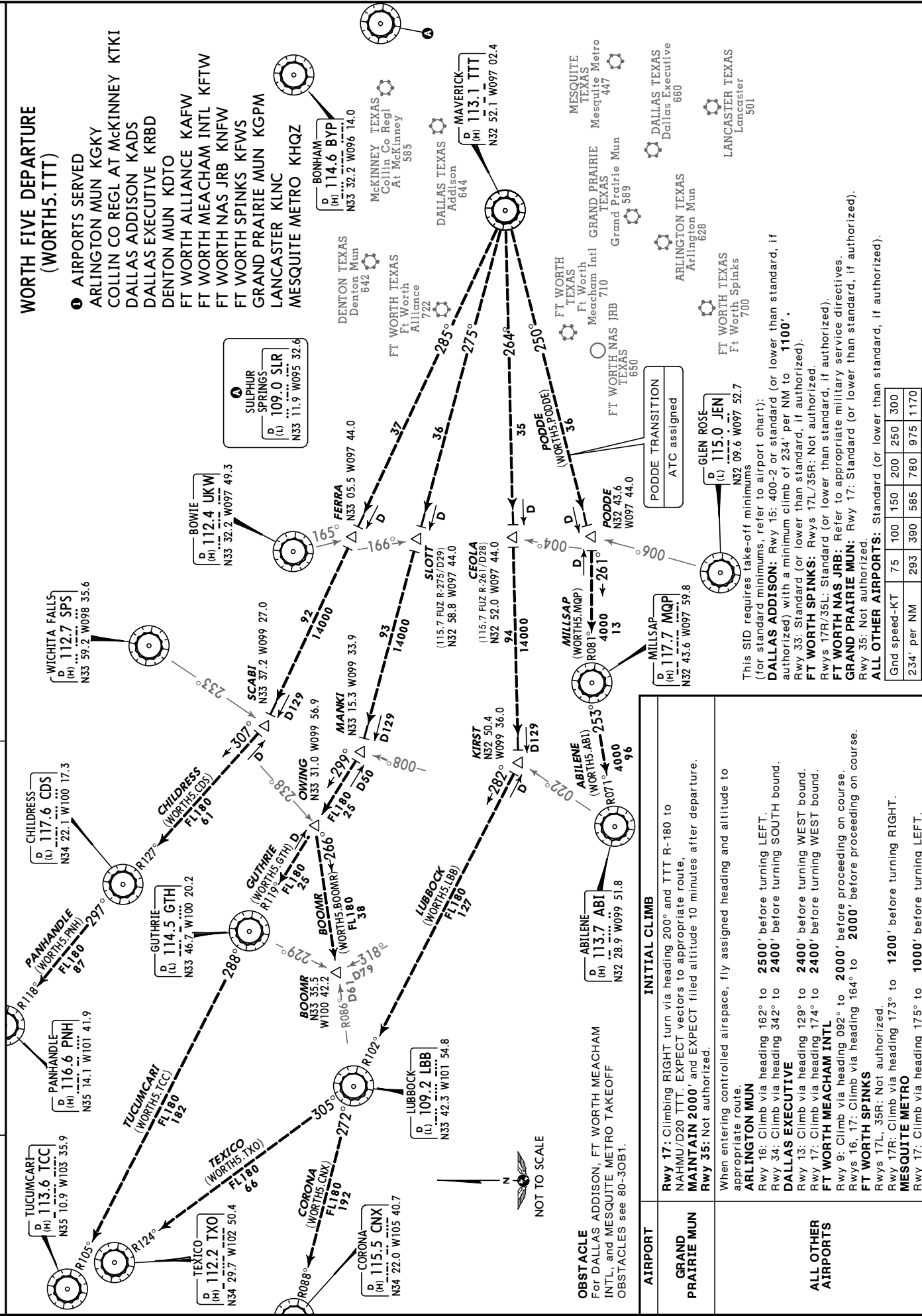
AREA SID SERVES ONLY: 1

GRAND PRAIRIE MUN DME required.

WORTH FIVE DEPARTURE
(WORTH5.TTT)

1 AIRPORTS SERVED

- ARLINGTON MUN KGKY
- COLLIN CO REGL AT MCKINNEY KTKI
- DALLAS ADDISON KADS
- DALLAS EXECUTIVE KRBD
- DENTON MUN KDTO
- FT WORTH ALLIANCE KAFW
- FT WORTH MEACHAM INTL KFTW
- FT WORTH NAS JRB KNFW
- FT WORTH SPINKS KFWs
- GRAND PRAIRIE MUN KGPM
- LANCASTER KLNC
- MESQUITE METRO KHQZ



TAKEOFF OBSTACLE NOTES**ADDISON:**

◦ RWY 15:

BUILDING 2.1 NM FROM DER, ON CENTERLINE, 360' AGL/974' MSL. MULTIPLE BLDGS BEGINNING 258' TO 1.8 NM FROM DER, 21' TO 1307' ON OR LEFT OF CENTERLINE, UP TO 152' AGL/787' MSL; MULTIPLE BLDGS, RAILROAD, ROAD BEGINNING 268' TO 1.9 NM FROM DER, 5' TO 995' RIGHT OF CENTERLINE, UP TO 311' AGL/955' MSL.

◦ RWY 33:

MULTIPLE POLES AND BLDGS BEGINNING 46' TO 3124' FROM DER, 186' TO 801' RIGHT OF CENTERLINE, UP TO 84' AGL/720' MSL; MULTIPLE POLES AND BLDGS BEGINNING 640' TO 2690' FROM DER, 21' TO 647' LEFT OF CENTERLINE, UP TO 65' AGL/709' MSL.

FT WORTH MEACHAM INTL:

◦ RWY 34:

BILLBOARD 692' FROM DER, 686' RIGHT OF CENTERLINE, 37' AGL/739' MSL.

◦ RWY 35:

TREE 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL, TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 36' AGL/699' MSL.

MESQUITE METRO:

◦ RWY 17:

TOWER 2.0 NM FROM DER, 1.8 NM LEFT OF CENTERLINE, 456' AGL/944' MSL.

HUBBARD DEPARTURE:**ADDISON:**

◦ RWY 15:

MULTIPLE BLDGS BEGINNING 1085' FROM DER, 21' LEFT OF CENTERLINE, UP TO 321' AGL/945' MSL. BLDG WITH ANTENNA 1.9 NM FROM DER, 968' RIGHT OF CENTERLINE, 345' AGL/975' MSL. POLE 666' FROM DER, 640' LEFT OF CENTERLINE, 60' AGL/681' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 115' LEFT OF CENTERLINE, UP TO 40' AGL/675' MSL. ROAD, RAILROAD BEGINNING 268' FROM DER, 5' RIGHT OF CENTERLINE, UP TO 23' AGL/655' MSL.

◦ RWY 33:

MULTIPLE POLES AND TREES BEGINNING 640' FROM DER, 21' LEFT OF CENTERLINE, UP TO 60' AGL/709' MSL. MULTIPLE BLDGS BEGINNING 1225' FROM DER, 147' LEFT OF CENTERLINE, UP TO 37' AGL/697' MSL. MULTIPLE BLDGS BEGINNING 45' FROM DER, 458' RIGHT OF CENTERLINE, UP TO 57' AGL/696' MSL. MULTIPLE POLES BEGINNING 922' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 60' AGL/720' MSL.

ARLINGTON MUN:

◦ RWY 16:

MULTIPLE REILS BEGINNING 77' FROM DER, 127' RIGHT OF CENTERLINE, 7' AGL/601' MSL. MULTIPLE REILS BEGINNING 74' FROM DER, 126' LEFT OF CENTERLINE, 7' AGL/603' MSL. TREE 590' FROM DER, 480' RIGHT OF CENTERLINE, 16' AGL/614' MSL.

◦ RWY 34:

TREE 1083' FROM DER, 710' RIGHT OF CENTERLINE, 35' AGL/670' MSL. TREE 705' FROM DER, 403' LEFT OF CENTERLINE, 38' AGL/654' MSL. TREE 231' FROM DER, 464' LEFT OF CENTERLINE, 35' AGL/642' MSL. MULTIPLE TREES BEGINNING 1093' FROM DER, 415' RIGHT OF CENTERLINE, UP TO 39' AGL/663' MSL.

TAKEOFF OBSTACLE NOTES (CONTD)**HUBBARD DEPARTURE (CONT):****COLLIN CO REGL AT MC KINNEY:**

- RWY 17:
BUSH 29' FROM DER, 499' RIGHT OF CENTERLINE, 5' AGL/591' MSL. OBSTACLE LIGHT ON DME 400' FROM DER, 266' RIGHT OF CENTERLINE, 16' AGL/602' MSL. TREES 784' FROM DER, 574' RIGHT OF CENTERLINE, 39' AGL/625' MSL.
- RWY 35:
TREES 1060' FROM DER, 634' RIGHT OF CENTERLINE, 65' AGL/605' MSL. MULTIPLE TREES BEGINNING 1532' FROM DER, 632' LEFT OF CENTERLINE, UP TO 79' AGL/626' MSL.

DALLAS EXECUTIVE:

- RWY 13:
OBSTACLE LIGHT ON BLAST FENCE 109' FROM DER, 347' LEFT OF CENTERLINE, 6' AGL/658' MSL.
- RWY 17:
TREE 468' FROM DER, 454' LEFT OF CENTERLINE, 35' AGL/699' MSL. TREE 113' FROM DER, 516' RIGHT OF CENTERLINE, 30' AGL/679' MSL. TREE 871' FROM DER, 405' LEFT OF CENTERLINE, 35' AGL/685' MSL. TREE 651' FROM DER, 303' RIGHT OF CENTERLINE, 35' AGL/699' MSL.
- RWY 31:
TREE 481' FROM DER, 552' RIGHT OF CENTERLINE, 30' AGL/677' MSL. TREE 2978' FROM DER, 802' LEFT OF CENTERLINE, 46' AGL/732' MSL.
- RWY 35:
TREE 534' FROM DER, 302' LEFT OF CENTERLINE, 34' AGL/671' MSL. TREE 745' FROM DER, 371' LEFT OF CENTERLINE, 35' AGL/672' MSL. TREE 972' FROM DER, 405' RIGHT OF CENTERLINE, 35' AGL/675' MSL.

DENTON MUN:

- RWY 17:
MULTIPLE TREES BEGINNING 190' FROM DER, 178' RIGHT OF CENTERLINE, UP TO 66' AGL/665' MSL. BUILDING 371' FROM DER, 261' LEFT OF CENTERLINE, 14' AGL/643' MSL.
- RWY 35:
TREE 1242' FROM DER, 806' RIGHT OF CENTERLINE, 63' AGL/692' MSL.

FT WORTH ALLIANCE:

- RWY 16L:
LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.
- RWY 16R:
FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.
- RWY 34L:
FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.
- RWY 34R:
ANTENNA 218' FROM DER, 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 1)**HUBBARD DEPARTURE (CONT):****FT WORTH MEACHAM INTL:**

- RWY 9:
WINDSOCK 293' FROM DER, 354' LEFT OF CENTERLINE, 51' AGL/721' MSL. SIGN ON BLDG 481' FROM DER, 407' RIGHT OF CENTERLINE, 39' AGL/702' MSL. SIGN 2448' FROM DER, 540' LEFT OF CENTERLINE, 75' AGL/742' MSL. GRAIN ELEVATORS BEGINNING 7085' FROM DER, 2191' LEFT OF CENTERLINE, UP TO 229' AGL/877' MSL.
- RWY 17:
BUSH 13' FROM DER, 160' RIGHT OF CENTERLINE, 21' AGL/674' MSL. ANTENNA 953' FROM DER, 394' LEFT OF CENTERLINE, 72' AGL/722' MSL. HANGAR 1380' FROM DER, 744' LEFT OF CENTERLINE, 43' AGL/703' MSL.
- RWY 27:
TREE 239' FROM DER, 492' LEFT OF CENTERLINE, 35' AGL/685' MSL.
- RWY 34:
MULTIPLE TREES 974' FROM DER, 682' RIGHT OF CENTERLINE, UP TO 47' AGL/746' MSL. GRAIN ELEVATOR 1.52 NM FROM DER, 2775' RIGHT OF CENTERLINE, 254' AGL/969' MSL.
- RWY 35:
TREE 1' FROM DER, 248' LEFT OF CENTERLINE, 40' AGL/690' MSL. TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 45' AGL/699' MSL. BUSH 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL. OBSTACLE LIGHT ON DAM 1359' FROM DER, 1' RIGHT OF CENTERLINE, 46' AGL/706' MSL.

FT WORTH SPINKS:

- RWY 17R:
TREE 4909' FROM DER, 1556' LEFT OF CENTERLINE, 60' AGL/830' MSL.

GRAND PRAIRIE MUN:

- RWY 17:
ANTENNA 190' FROM DER, 456' RIGHT OF CENTERLINE, 26' AGL/615' MSL. ROAD, MULTIPLE POLES AND SIGNS BEGINNING 570' FROM DER, 410' RIGHT OF CENTERLINE, UP TO 31' AGL/620' MSL. TREE 1506' FROM DER, 517' RIGHT OF CENTERLINE, 37' AGL/617' MSL.

LANCASTER:

- RWY 31:
MULTIPLE TREES BEGINNING 1133' FROM DER, 479' LEFT OF CENTERLINE, UP TO 40' AGL/541' MSL. TREES 886' FROM DER, 637' RIGHT OF CENTERLINE, 35' AGL/536' MSL. MULTIPLE POLES BEGINNING 5613' FROM DER, 1171' RIGHT OF CENTERLINE, UP TO 101' AGL/661' MSL.

MESQUITE METRO:

- RWY 17:
MULTIPLE TREES, SIGN AND FENCES BEGINNING 10' FROM DER, 362' LEFT OF CENTERLINE, UP TO 35' AGL/478' MSL.
- RWY 35:
HANGAR 53' FROM DER, 497' LEFT OF CENTERLINE, 23' AGL/470' MSL. MULTIPLE TREES AND POLES BEGINNING 999' FROM DER, 708' LEFT OF CENTERLINE, UP TO 44' AGL/483' MSL. BUSH 45' FROM DER, 466' RIGHT OF CENTERLINE, 10' AGL/457' MSL. POLE 814' FROM DER, 288' RIGHT OF CENTERLINE, 27' AGL/467' MSL. CONSTRUCTION EQUIPMENT 892' FROM DER, 628' RIGHT OF CENTERLINE, 59' AGL/489' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 2)**JOE POOL DEPARTURE:****ADDISON:**

◦ RWY 15:

BUILDING 2.1 NM FROM DER, ON CENTERLINE, 360' AGL/974' MSL. MULTIPLE BLDGS BEGINNING 258' TO 1.8 NM FROM DER, 21' TO 1307' ON OR LEFT OF CENTERLINE, UP TO 152' AGL/787' MSL. MULTIPLE BLDGS, RAILROAD, ROAD BEGINNING 268' TO 1.9 NM FROM DER, 5' TO 995' RIGHT OF CENTERLINE, UP TO 311' AGL/955' MSL.

◦ RWY 33:

MULTIPLE POLES AND BLDGS BEGINNING 46' TO 3124' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 84' AGL/720' MSL. MULTIPLE POLES AND BLDGS BEGINNING 640' TO 2690' FROM DER, 21' TO 647' LEFT OF CENTERLINE, UP TO 65' AGL/709' MSL.

FT WORTH ALLIANCE:

◦ RWY 16L:

LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.

◦ RWY 16R:

FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.

◦ RWY 34L:

FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.

◦ RWY 34R:

ANTENNA 218' FROM DER 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

FT WORTH MEACHAM INTL:

◦ RWY 34:

BILLBOARD 692' FROM DER, 686' RIGHT OF CENTERLINE, 37' AGL/739' MSL.

◦ RWY 35:

TREE 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL, TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 36' AGL/699' MSL.

MESQUITE METRO:

◦ RWY 17:

TOWER 2.0 NM FROM DER, 1.8 NM LEFT OF CENTERLINE, 456' AGL/944' MSL.

KINGDOM DEPARTURE:**ADDISON:**

◦ RWY 15:

MULTIPLE BLDGS BEGINNING 1085' FROM DER, 21' LEFT OF CENTERLINE, UP TO 321' AGL/956' MSL. BLDG WITH ANTENNA 1.9 NM FROM DER, 968' RIGHT OF CENTERLINE, 345' AGL/975' MSL. POLE 666' FROM DER, 640' LEFT OF CENTERLINE, 60' AGL/681' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 115' LEFT OF CENTERLINE, UP TO 40' AGL/675' MSL. ROAD, RAILROAD BEGINNING 268' FROM DER, 5' RIGHT OF CENTERLINE, UP TO 23' AGL/655' MSL.

◦ RWY 33:

MULTIPLE POLES AND TREES BEGINNING 640' FROM DER, 21' LEFT OF CENTERLINE, UP TO 60' AGL/709' MSL. MULTIPLE BLDGS BEGINNING 1225' FROM DER, 147' LEFT OF CENTERLINE, UP TO 37' AGL/697' MSL. MULTIPLE BLDGS BEGINNING 45' FROM DER, 458' RIGHT OF CENTERLINE, UP TO 57' AGL/696' MSL. MULTIPLE POLES BEGINNING 922' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 60' AGL/720' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 3)**KINGDOM DEPARTURE (CONT):****ARLINGTON MUN:**

◦ RWY 16:

MULTIPLE REILS BEGINNING 77' FROM DER, 127' RIGHT OF CENTERLINE, 7' AGL/601' MSL. MULTIPLE REILS BEGINNING 74' FROM DER, 126' LEFT OF CENTERLINE, 7' AGL/603' MSL. TREE 590' FROM DER, 480' RIGHT OF CENTERLINE, 16' AGL/614' MSL.

◦ RWY 34:

TREE 1083' FROM DER, 710' RIGHT OF CENTERLINE, 35' AGL/670' MSL. TREE 705' FROM DER, 403' LEFT OF CENTERLINE, 38' AGL/654' MSL. TREE 231' FROM DER, 464' LEFT OF CENTERLINE, 35' AGL/642' MSL. MULTIPLE TREES BEGINNING 1093' FROM DER, 415' RIGHT OF CENTERLINE, UP TO 39' AGL/663' MSL.

COLLIN CO REGL AT MC KINNEY:

◦ RWY 17:

BUSH 29' FROM DER, 499' RIGHT OF CENTERLINE, 5' AGL/591' MSL. OBSTACLE LIGHT ON DME 400' FROM DER, 266' RIGHT OF CENTERLINE, 16' AGL/602' MSL. TREES 784' FROM DER, 574' RIGHT OF CENTERLINE, 39' AGL/625' MSL.

◦ RWY 35:

TREES 1060' FROM DER, 634' RIGHT OF CENTERLINE, 65' AGL/605' MSL. MULTIPLE TREES BEGINNING 1532' FROM DER, 632' LEFT OF CENTERLINE, UP TO 79' AGL/626' MSL.

DALLAS EXECUTIVE:

◦ RWY 13:

OBSTACLE LIGHT ON BLAST FENCE 109' FROM DER, 347' LEFT OF CENTERLINE, 6' AGL/658' MSL.

◦ RWY 17:

TREE 468' FROM DER, 454' LEFT OF CENTERLINE, 35' AGL/699' MSL. TREE 113' FROM DER, 516' RIGHT OF CENTERLINE, 30' AGL/679' MSL. TREE 871' FROM DER, 405' LEFT OF CENTERLINE, 35' AGL/685' MSL. TREE 651' FROM DER, 303' RIGHT OF CENTERLINE, 35' AGL/699' MSL.

◦ RWY 31:

TREE 481' FROM DER, 552' RIGHT OF CENTERLINE, 30' AGL/677' MSL. TREE 2978' FROM DER, 802' LEFT OF CENTERLINE, 46' AGL/732' MSL.

◦ RWY 35:

TREE 534' FROM DER, 302' LEFT OF CENTERLINE, 34' AGL/671' MSL. TREE 745' FROM DER, 371' LEFT OF CENTERLINE, 35' AGL/672' MSL. TREE 972' FROM DER, 405' RIGHT OF CENTERLINE, 35' AGL/675' MSL.

DENTON MUN:

◦ RWY 17:

MULTIPLE TREES BEGINNING 190' FROM DER, 178' RIGHT OF CENTERLINE, UP TO 66' AGL/665' MSL. BUILDING 371' FROM DER, 261' LEFT OF CENTERLINE, 14' AGL/643' MSL.

◦ RWY 35:

TREE 1242' FROM DER, 806' RIGHT OF CENTERLINE, 63' AGL/692' MSL.

FT WORTH ALLIANCE:

◦ RWY 16L:

LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.

◦ RWY 16R:

FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 4)**KINGDOM DEPARTURE (CONT):**

- RWY 34L:
FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.
- RWY 34R:
ANTENNA 218' FROM DER, 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

FT WORTH MEACHAM INTL:

- RWY 9:
WINDSOCK 293' FROM DER, 354' LEFT OF CENTERLINE, 51' AGL/721' MSL. SIGN ON BLDG 481' FROM DER, 407' RIGHT OF CENTERLINE, 39' AGL/702' MSL. SIGN 2448' FROM DER, 540' LEFT OF CENTERLINE, 75' AGL/742' MSL. GRAIN ELEVATORS BEGINNING 1.2 NM FROM DER, 2191' LEFT OF CENTERLINE, UP TO 229' AGL/877' MSL.
- RWY 17:
BUSH 13' FROM DER, 160' RIGHT OF CENTERLINE, 21' AGL/674' MSL. ANTENNA 953' FROM DER, 394' LEFT OF CENTERLINE, 72' AGL/722' MSL. HANGAR 1380' FROM DER, 744' LEFT OF CENTERLINE, 43' AGL/703' MSL.
- RWY 27:
TREE 239' FROM DER, 492' LEFT OF CENTERLINE, 35' AGL/685' MSL.
- RWY 34:
MULTIPLE TREES 974' FROM DER, 682' RIGHT OF CENTERLINE, UP TO 47' AGL/746' MSL. GRAIN ELEVATOR 1.52 NM FROM DER, 2775' RIGHT OF CENTERLINE, 254' AGL/969' MSL.
- RWY 35:
TREE 1' FROM DER, 248' LEFT OF CENTERLINE, 40' AGL/690' MSL. TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 45' AGL/699' MSL. BUSH 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL. OBSTACLE LIGHT ON DAM 1359' FROM DER, 1' RIGHT OF CENTERLINE, 46' AGL/706' MSL.

FT WORTH SPINKS:

- RWY 17R:
TREE 4909' FROM DER, 1556' LEFT OF CENTERLINE, 60' AGL/830' MSL.

GRAND PRAIRIE MUN:

- RWY 17:
ANTENNA 190' FROM DER, 456' RIGHT OF CENTERLINE, 26' AGL/615' MSL. ROAD, MULTIPLE POLES AND SIGNS BEGINNING 570' FROM DER, 410' RIGHT OF CENTERLINE, UP TO 31' AGL/620' MSL. TREE 1506' FROM DER, 517' RIGHT OF CENTERLINE, 37' AGL/617' MSL.

LANCASTER:

- RWY 31:
MULTIPLE TREES BEGINNING 1133' FROM DER, 479' LEFT OF CENTERLINE, UP TO 40' AGL/541' MSL. TREES 886' FROM DER, 637' RIGHT OF CENTERLINE, 35' AGL/536' MSL. MULTIPLE POLES BEGINNING 5613' FROM DER, 1171' RIGHT OF CENTERLINE, UP TO 101' AGL/661' MSL.

MESQUITE METRO:

- RWY 17:
MULTIPLE TREES, SIGN AND FENCES BEGINNING 10' FROM DER, 362' LEFT OF CENTERLINE, UP TO 35' AGL/478' MSL.
- RWY 35:
HANGAR 53' FROM DER, 497' LEFT OF CENTERLINE, 23' AGL/470' MSL. MULTIPLE TREES AND POLES BEGINNING 999' FROM DER, 708' LEFT OF CENTERLINE, UP TO 44' AGL/483' MSL. BUSH 45' FROM DER, 466' RIGHT OF CENTERLINE, 10' AGL/457' MSL. POLE 814' FROM DER, 288' RIGHT OF CENTERLINE, 27' AGL/467' MSL. CONSTRUCTION EQUIPMENT 892' FROM DER, 628' RIGHT OF CENTERLINE, 59' AGL/489' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 5)**WYLIE DEPARTURE:****ADDISON:**

◦ RWY 15:

MULTIPLE BLDGS BEGINNING 1085' FROM DER, 21' LEFT OF CENTERLINE, UP TO 321' AGL/945' MSL. BLDG WITH ANTENNA 1.9 NM FROM DER, 968' RIGHT OF CENTERLINE, 345' AGL/975' MSL. POLE 666' FROM DER, 640' LEFT OF CENTERLINE, 60' AGL/681' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 115' LEFT OF CENTERLINE, UP TO 40' AGL/675' MSL. ROAD, RAILROAD BEGINNING 268' FROM DER, 495' RIGHT OF CENTERLINE UP TO 21' AGL/655' MSL.

◦ RWY 33:

MULTIPLE POLES AND TREES BEGINNING 640' FROM DER, 21' LEFT OF CENTERLINE, UP TO 60' AGL/709' MSL. MULTIPLE BLDGS BEGINNING 1225' FROM DER, 147' LEFT OF CENTERLINE, UP TO 37' AGL/607' MSL. MULTIPLE BLDGS BEGINNING 45' FROM DER, 458' RIGHT OF CENTERLINE, UP TO 57' AGL/696' MSL. MULTIPLE POLES BEGINNING 922' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 60' AGL/720' MSL.

ARLINGTON MUN:

◦ RWY 16:

MULTIPLE REILS BEGINNING 77' FROM DER, 127' RIGHT OF CENTERLINE, 7' AGL/601' MSL. MULTIPLE REILS BEGINNING 74' FROM DER, 126' LEFT OF CENTERLINE, 7' AGL/603' MSL. TREE 590' FROM DER, 480' RIGHT OF CENTERLINE, 16' AGL/614' MSL.

◦ RWY 34:

TREE 1083' FROM DER, 710' RIGHT OF CENTERLINE, 35' AGL/670' MSL. TREE 705' FROM DER, 403' LEFT OF CENTERLINE, 38' AGL/654' MSL. TREE 231' FROM DER, 464' LEFT OF CENTERLINE, 35' AGL/642' MSL. MULTIPLE TREES 1093' FROM DER, 415' TO 576' RIGHT OF CENTERLINE, UP TO 39' AGL/663' MSL.

◦ TOWER FARM 7.2 NM SOUTHEAST OF AIRPORT UP TO 2549' MSL.

DALLAS EXECUTIVE:

◦ RWY 13:

OBSTACLE LIGHT ON BLAST FENCE 109' FROM DER, 347' LEFT OF CENTERLINE, 6' AGL/658' MSL.

◦ RWY 17:

TREE 468' FROM DER, 454' LEFT OF CENTERLINE, 35' AGL/699' MSL. TREE 113' FROM DER, 516' RIGHT OF CENTERLINE, 30' AGL/679' MSL. TREE 871' FROM DER, 405' LEFT OF CENTERLINE, 35' AGL/685' MSL. TREE 651' FROM DER, 303' RIGHT OF CENTERLINE, 35' AGL/699' MSL.

◦ RWY 31:

TREE 481' FROM DER, 552' RIGHT OF CENTERLINE, 30' AGL/677' MSL, TREE 2978' FROM DER, 802' LEFT OF CENTERLINE, 46' AGL/732' MSL.

◦ RWY 35:

TREE 534' FROM DER, 302' LEFT OF CENTERLINE, 34' AGL/671' MSL. TREE 745' FROM DER, 371' LEFT OF CENTERLINE, 35' AGL/672' MSL. TREE 972' FROM DER, 405' RIGHT OF CENTERLINE, 35' AGL/675' MSL.

FT WORTH ALLIANCE:

◦ RWY 16L:

LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.

◦ RWY 16R:

FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.

◦ RWY 34L:

FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 6)**WYLIE DEPARTURE (CONT):**

- RWY 34R:

ANTENNA 218' FROM DER, 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

FT WORTH MEACHAM INTL:

- RWY 9:

WINDSOCK 293' FROM DER, 354' LEFT OF CENTERLINE, 51' AGL/721' MSL. SIGN ON BUILDING 481' FROM DER, 407' RIGHT OF CENTERLINE, 39' AGL/702' MSL. SIGN 2448' FROM DER, 540' LEFT OF CENTERLINE, 75' AGL/742' MSL. GRAIN ELEVATORS BEGINNING 7085' FROM DER, 2191' LEFT OF CENTERLINE, UP 229' AGL/877' MSL.

- RWY 16:

TOWER 5.8 NM SOUTHEAST FROM DER, 1113' AGL/1743' MSL, BLDG 3.5 NM SOUTHEAST FROM DER, 590' AGL/1196' MSL.

- RWY 17:

BUSH 13' FROM DER, 160' RIGHT OF CENTERLINE, 21' AGL/674' MSL. ANTENNA 953' FROM DER, 394' LEFT OF CENTERLINE, 72' AGL/722' MSL. HANGAR 1380' FROM DER, 744' LEFT OF CENTERLINE, 43' AGL/703' MSL.

- RWY 27:

TREE 239' FROM DER, 492' LEFT OF CENTERLINE, 35' AGL/685' MSL.

- RWY 34:

MULTIPLE TREES 974' FROM DER, 682' RIGHT OF CENTERLINE, UP TO 47' AGL/746' MSL.

- RWY 35:

TREE 1' FROM DER, 248' LEFT OF CENTERLINE, 40' AGL/690' MSL. TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 45' AGL/699' MSL. BUSH 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL. OBSTACLE LIGHT ON DAM 1359' FROM DER, 1' RIGHT OF CENTERLINE, 46' AGL/706' MSL.

General Information

Location: Orange Grove TX USA
IATA Code:
Lat/Long: N27° 54.0' W098° 03.0'
Elevation: 257 ft

Airport Use: Military
Magnetic Variation: 4.7°E
Sectional Chart: Brownsville

Customs: No
Airport Type: VFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: No

Sunrise: 1259 Z
Sunset: 0031 Z,

Runway Information

Runway: 01
Length x Width: 8003 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 239 ft

Runway: 13
Length x Width: 8001 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 257 ft

Runway: 19
Length x Width: 8003 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 243 ft

Runway: 31
Length x Width: 8001 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 230 ft

Communication Information

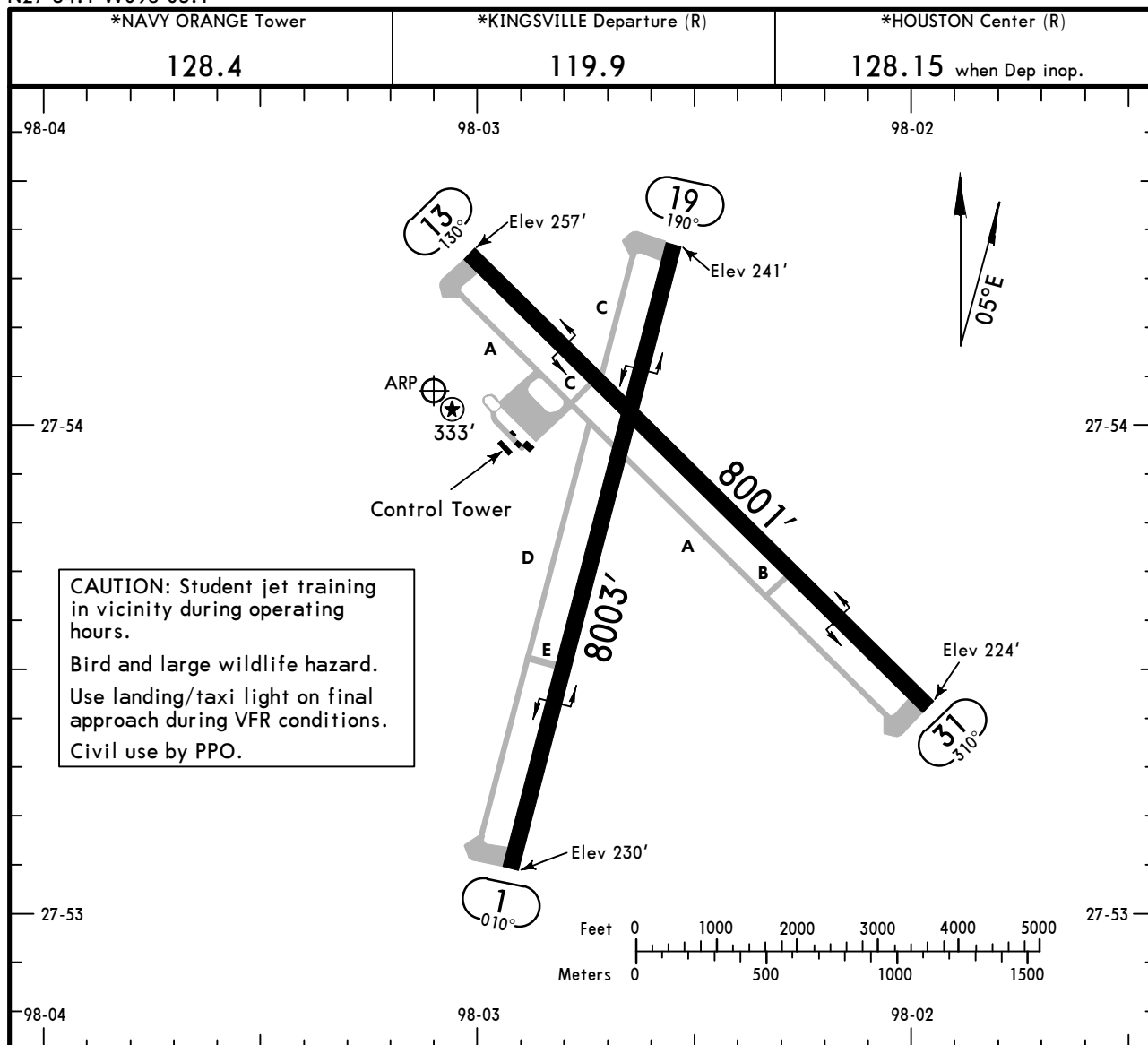
Navy Orange Tower 119.35
Kingsville Approach Control 119.9
Kingsville Departure Control 119.9

Orange Grove Radar 128.4
Houston Center 128.15 Remote Communications Air-Ground

KNOG
 Apt Elev **257'**
 N27 54.1 W098 03.1

JEPPESEN
 2 SEP 11 **(31-1)**

ORANGE GROVE NALF
 ORANGE GROVE, TEXAS



ADDITIONAL RUNWAY INFORMATION					
RWY			USABLE LENGTHS		WIDTH
			LANDING BEYOND Threshold	TAKE-OFF	
1	19	MIRL			200'
13	31	MIRL			200'

TAKE-OFF			
All Rwys			
Adequate Vis Ref		STD	
1 & 2 Eng	1/4	1	
3 & 4 Eng		1/2	

CHANGES: Taxiway E reopened.

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General Information

Location: Port Isabel TX USA
IATA Code:
Lat/Long: N26° 10.0' W097° 20.8'
Elevation: 19 ft

Airport Use: Public
Magnetic Variation: 4.3°E
Sectional Chart: Brownsville

Fuel Types: 100 Octane (LL), Jet A
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: No
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes
Pattern Altitude: 800 ft AGL

Sunrise: 1255 Z
Sunset: 0029 Z,

Runway Information

Runway: 03
Length x Width: 5000 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 14 ft

Runway: 08
Length x Width: 5317 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 17 ft

Runway: 13
Length x Width: 8001 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 18 ft
Lighting: Edge, REIL

Runway: 17
Length x Width: 4200 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 13 ft

Runway: 21
Length x Width: 5000 ft x 150 ft
Surface Type: asphalt

TDZ-Elev: 15 ft

Runway: 26

Length x Width: 5317 ft x 150 ft

Surface Type: concrete

TDZ-Elev: 18 ft

Runway: 31

Length x Width: 8001 ft x 200 ft

Surface Type: asphalt

TDZ-Elev: 19 ft

Lighting: Edge, REIL

Runway: 35

Length x Width: 4200 ft x 150 ft

Surface Type: concrete

TDZ-Elev: 18 ft

Communication Information

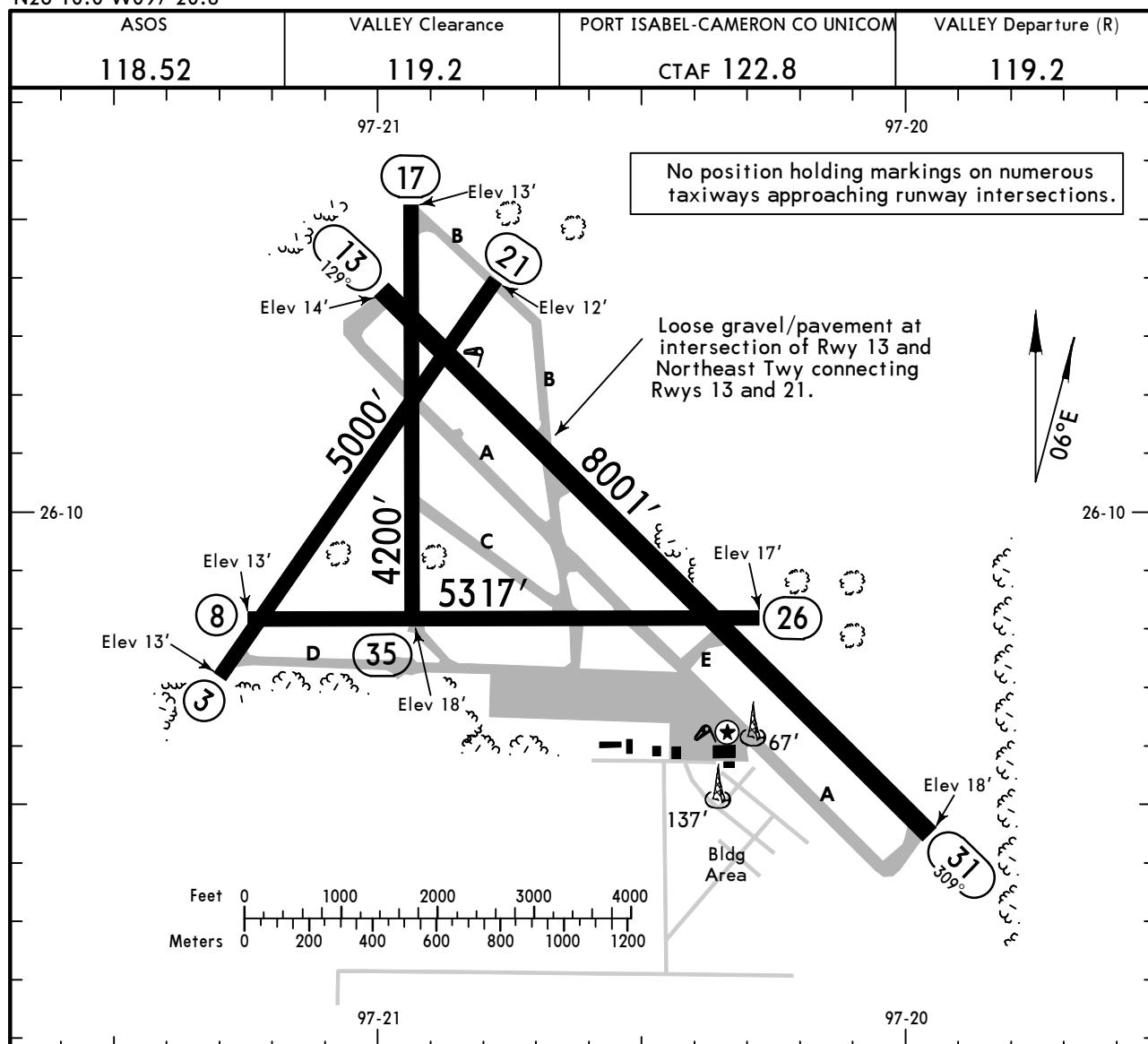
ASOS 118.525

Port Isabel-Cameron Co Unicom 122.8 CTAF

Valley Clearance Delivery 119.2

Valley Approach Control 119.5

Valley Departure Control 119.5

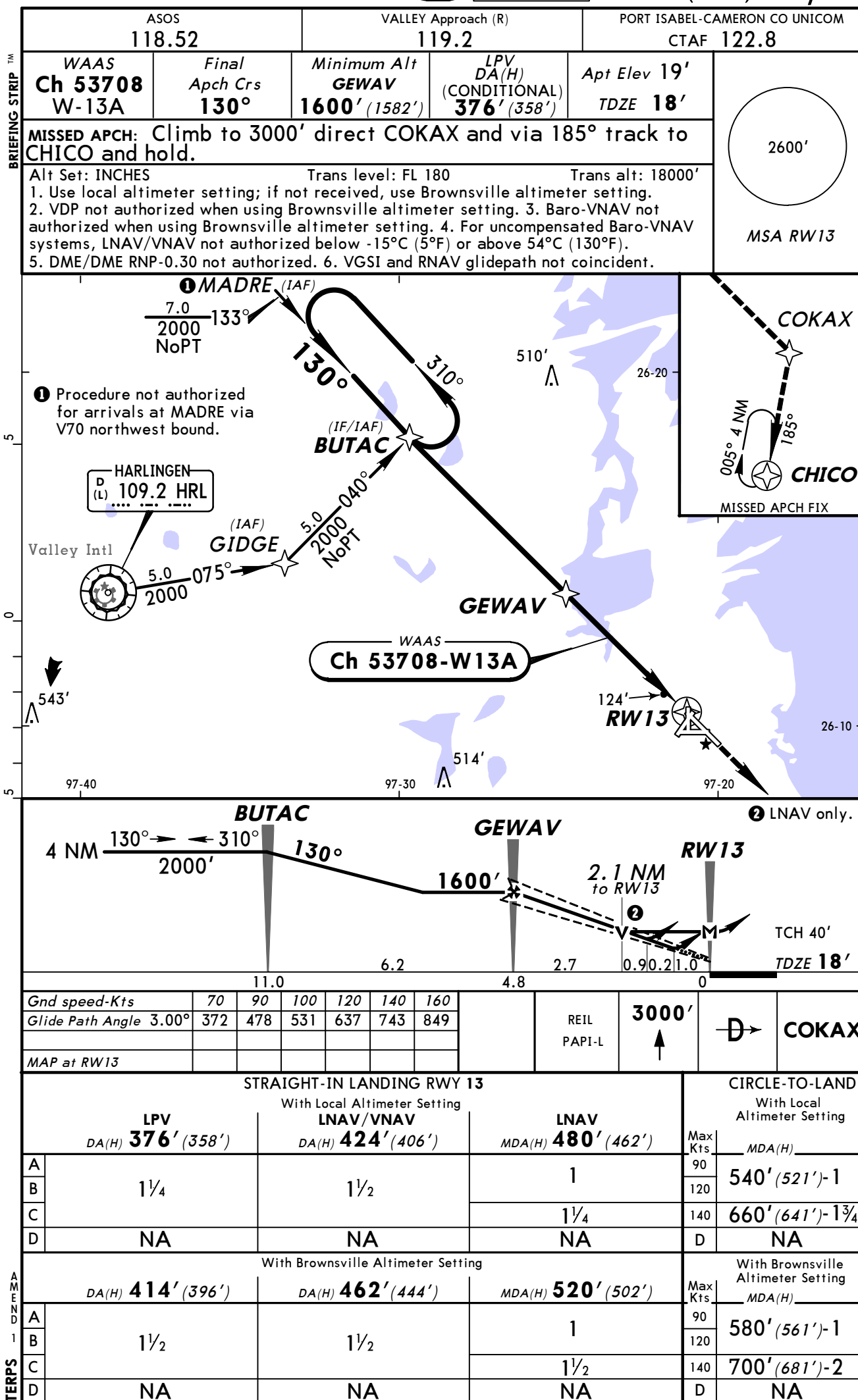


ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			TAKE-OFF	WIDTH
		LANDING BEYOND				
		Threshold	Glide Slope			
3						150'
21						
8						150'
26						
13	MIRL REIL PAPI-L (angle 2.0)					200'
31	MIRL REIL PAPI-L (angle 3.0)					
17						150'
35						

TAKE-OFF

	Rwys 3,8,13,21,26,31,35					FOR FILING AS ALTERNATE		
	Rwy 17					Authorized Only When Local Weather Available	Other	
	Adequate Vis Ref	STD	With Min climb of 253'/NM to 500'	Adequate Vis Ref	STD			
1 & 2 Eng	1/4	1	1/4	1	400-2	A	800-2	NA
3 & 4 Eng		1/2		1/2		B		
						C		
						D		



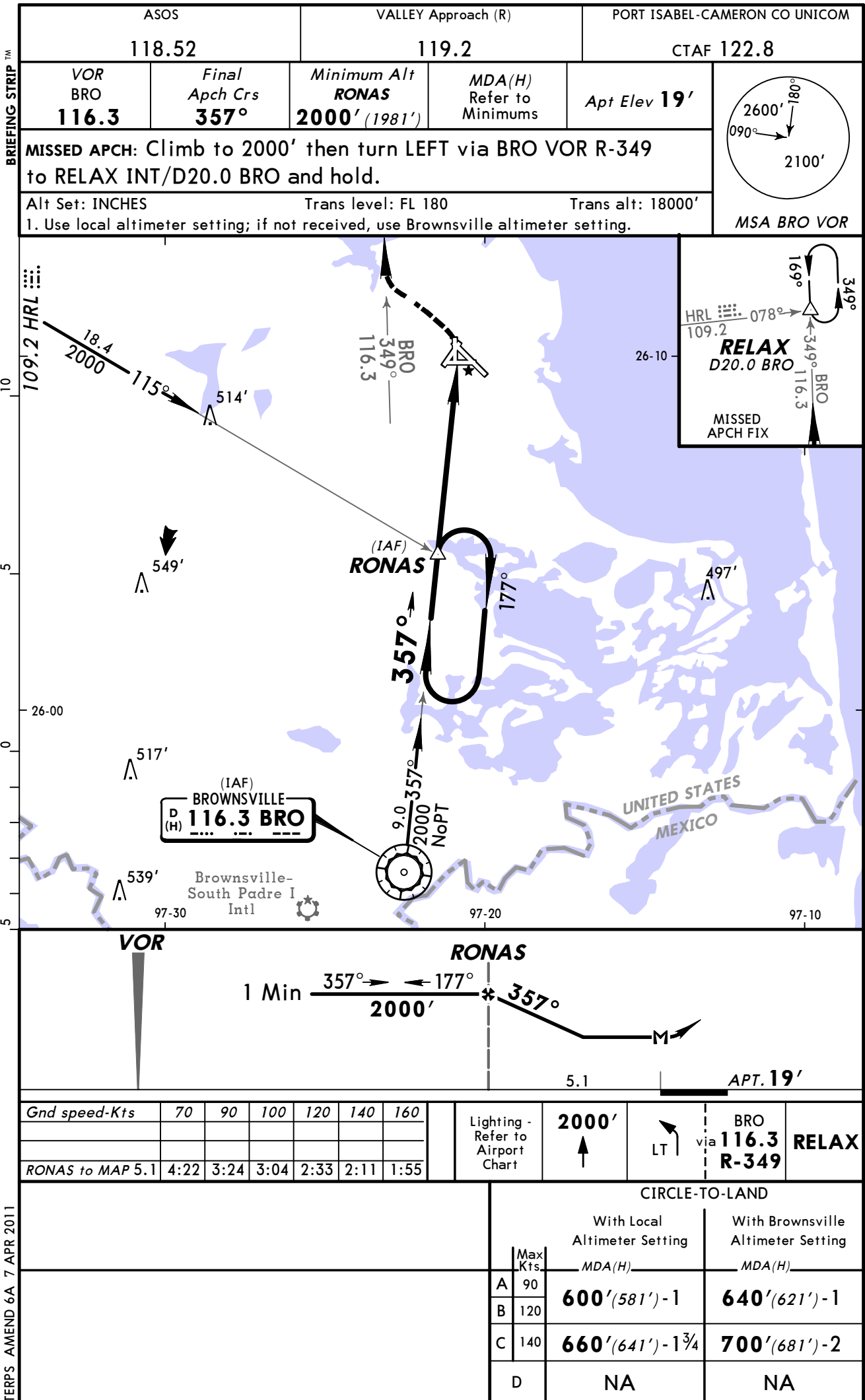
KPIL
-CAMERON CO

1 APR 11

13-1

CAT A, B & C

PORT ISABEL, TEXAS
VOR-A



CHANGES: Notes, minimums.

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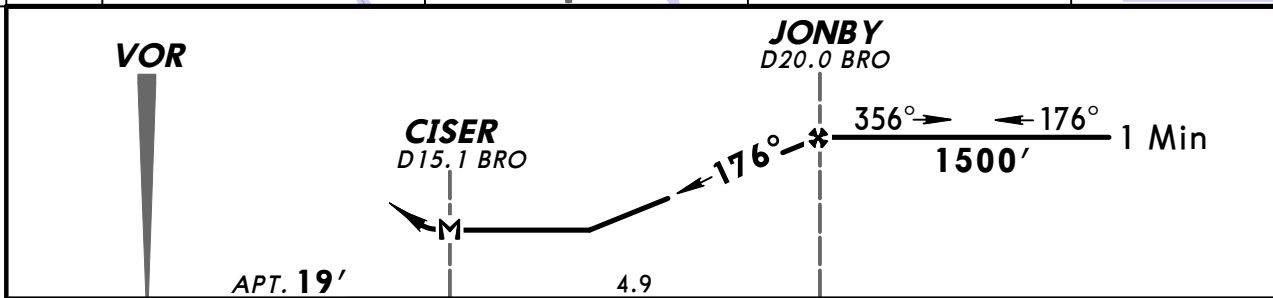
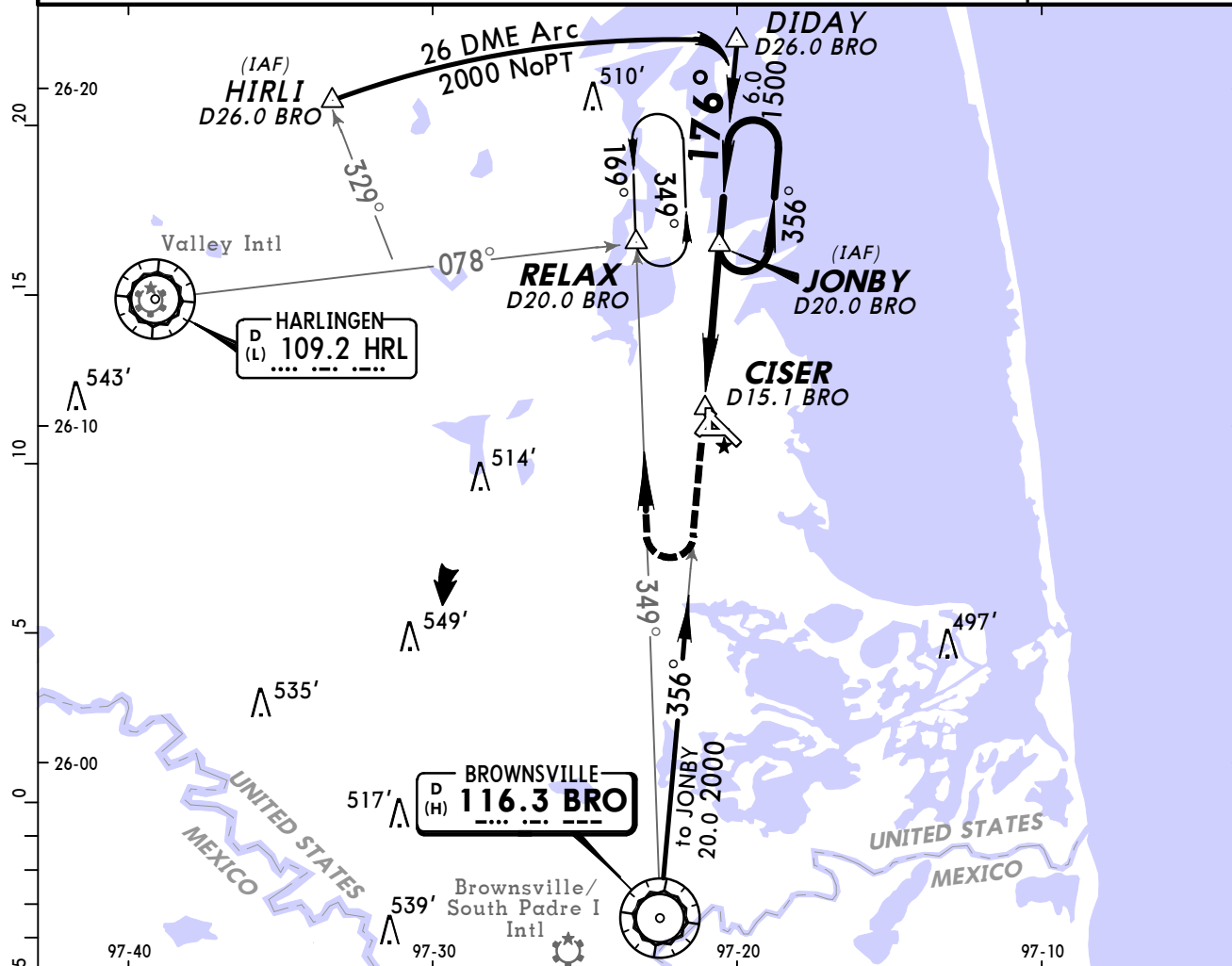
TERPS AMEND 6A 7 APR 2011

KPIL
-CAMERON CO

JEPPesen
1 APR 11 **13-2** **CAT A, B & C**

PORT ISABEL, TEXAS
VOR DME-B

ASOS 118.52		VALLEY Approach (R) 119.2		PORT ISABEL-CAMERON CO UNICOM CTAF 122.8	
VOR BRO 116.3	Final Apch Crs 176°	Minimum Alt JONBY 1500' (1481')	MDA(H) Refer to Minimums	Apt Elev 19'	
MISSED APCH: Climb to 2000' then RIGHT turn outbound via BRO VOR R-349 to RELAX INT/D20.0 BRO and hold.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Brownsville altimeter setting.					MSA BRO VOR



					Lighting - Refer to Airport Chart	2000' ↑	RT	BRO via 116.3 R-349	RELAX
MAP at CISER									

		CIRCLE-TO-LAND		
		With Local Altimeter Setting	With Brownsville Altimeter Setting	
		Max Kts. MDA(H)	MDA(H)	
	A	90	540' (521') - 1	580' (561') - 1
	B	120		
	C	140	660' (641') - 1 ³ / ₄	700' (681') - 2
	D		NA	NA

CHANGES: Notes, minimums.

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General Information

Location: Dallas TX USA

IATA Code:

Lat/Long: N33° 10.7' W096° 35.4'

Elevation: 585 ft

Airport Use: Public

Magnetic Variation: 3.8°E

Sectional Chart: Dallas Ft Worth

Fuel Types: 100 Octane (LL), Jet A

Oxygen Types: HP Bottle

Repair Types: Major Airframe, Major Engine

Customs: No

Airport Type: IFR

Landing Fee: No

Control Tower: Yes

Jet Start Unit: Yes

LLWS Alert: No

Beacon: Yes

Sunrise: 1257 Z

Sunset: 0021 Z,

Runway Information

Runway: 17

Length x Width: 7001 ft x 100 ft

Surface Type: concrete

TDZ-Elev: 575 ft

Lighting: Edge, ALS, Pilot controlled

Runway: 35

Length x Width: 7001 ft x 100 ft

Surface Type: concrete

TDZ-Elev: 585 ft

Lighting: Edge, Pilot controlled

Communication Information

ASOS 119.925

MC Kinney Tower 118.825 CTAF PCL

MC Kinney Ground Control 121.875

Dallas FT Worth Clearance Delivery 121.35

Regional Approach Control 124.3

Regional Departure Control 124.3

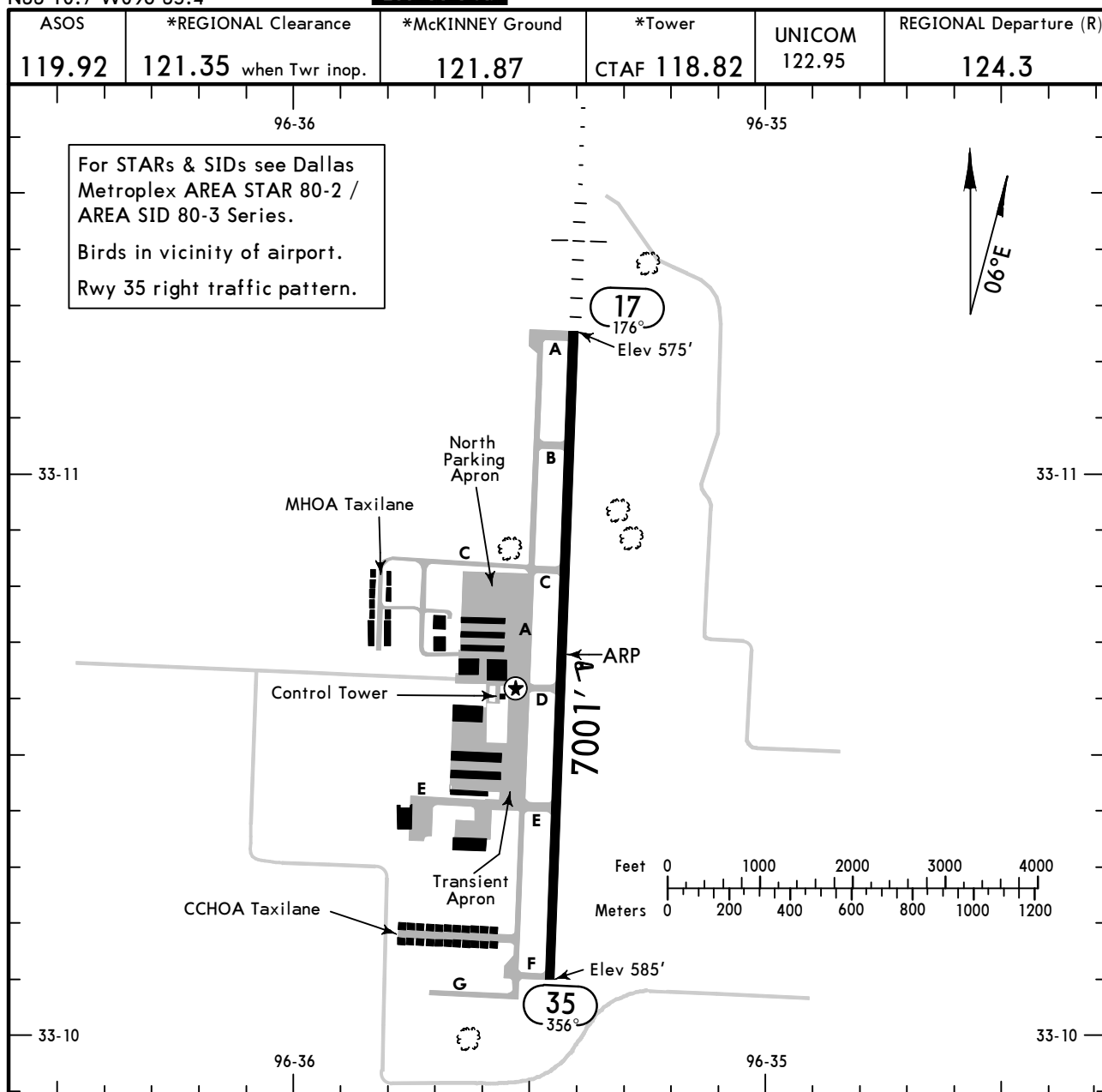
MC Kinney Unicom 122.95

KT KI

Apt Elev **585'**
N33 10.7 W096 35.4

JEPPESEN
5 FEB 10
Eff 11 Feb **(41-1)**

DALLAS, TEXAS
COLLIN CO REGL AT MCKINNEY



ADDITIONAL RUNWAY INFORMATION

RWY	USABLE LENGTHS			TAKE-OFF	WIDTH
	LANDING BEYOND		Threshold		
17	① MIRL	① MALSR	① PAPI-L (angle 3.0°)		
35	① MIRL	① VASI-L			100'

① Activate on 118.82 when Twr inop.

TAKE-OFF			FOR FILING AS ALTERNATE			
All Rwys			Authorized Only When Local Weather Available And When Twr Operating	Authorized Only When Local Weather Available		
Adequate Vis Ref	STD		LOC Rwy 17	RNAV (GPS) Rwy 17 RNAV (GPS) Rwy 35	VOR DME-A	Other
1 & 2 Eng	1/4	1	A	800-2	800-2	800-2
3 & 4 Eng		1/2	B			800-2 1/4
			C			800-2 1/2
			D			NA

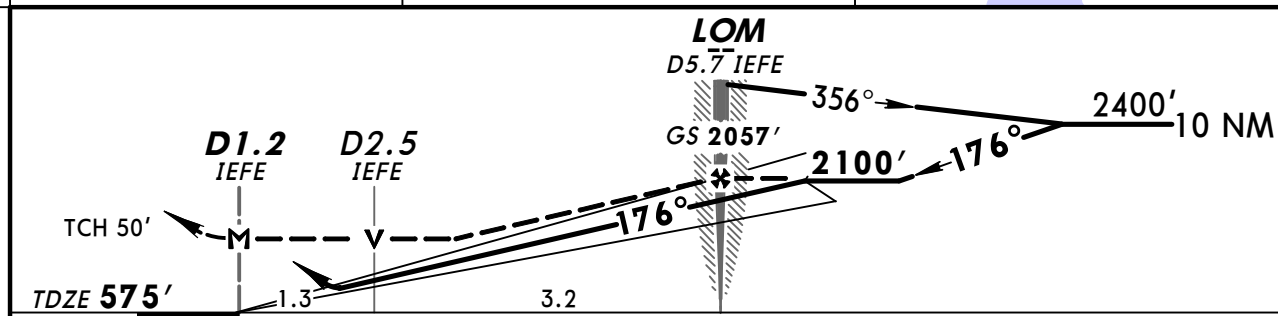
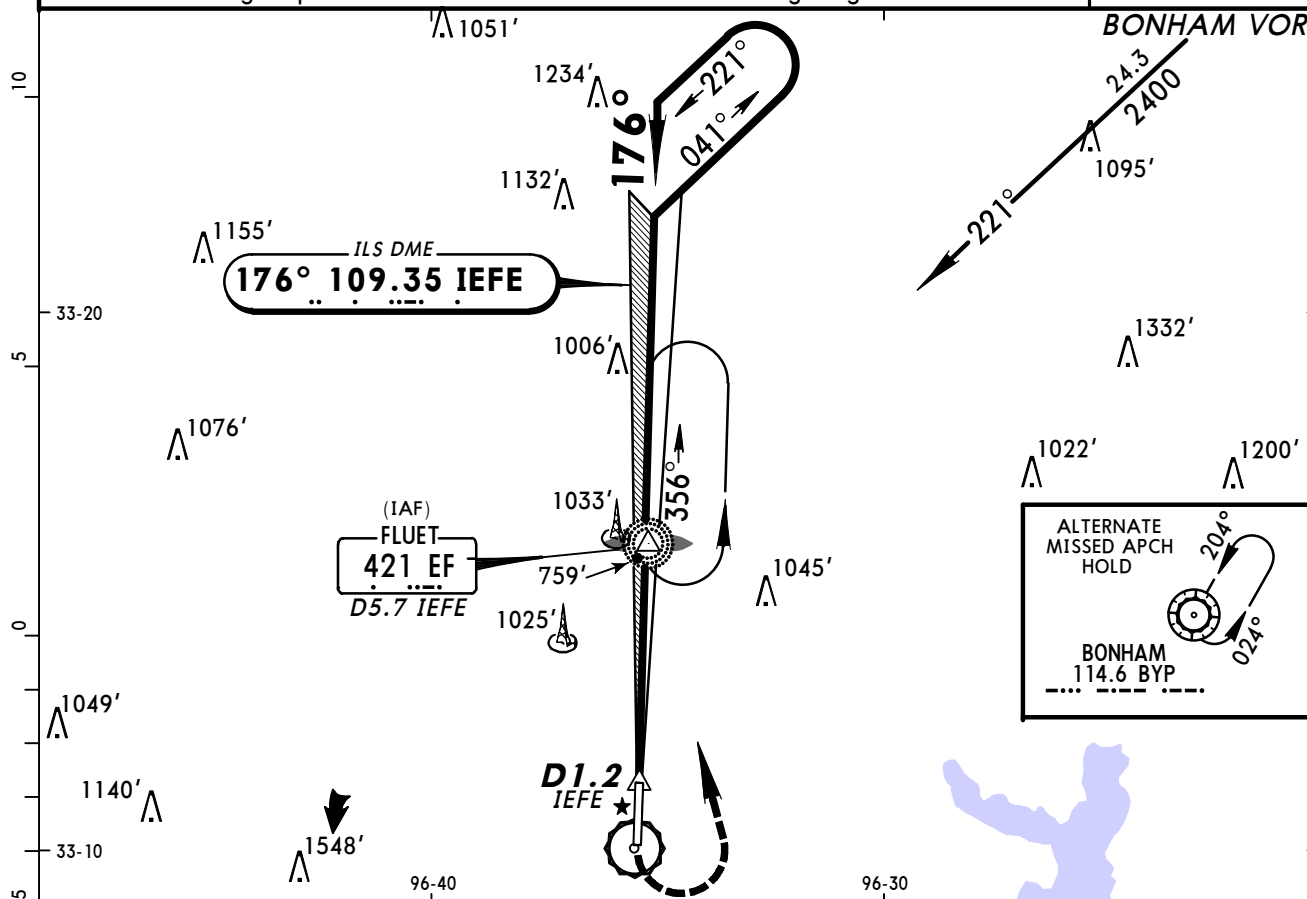
CHANGES: Alternate minimums.

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AMEND 1

BRIEFING STRIP™

ASOS 119.92		REGIONAL Approach (R) 124.3		*McKINNEY Tower CTAF 118.82		*Ground 121.87				
LOC IEFE 109.35		Final Apch Crs 176°		GS FLUET 2057' (1482')		ILS DA(H) (CONDITIONAL) 775' (200')		Apt Elev 585' TDZE 575'		3800' MSA EF LOM
MISSED APCH: Climb to 1500' then climbing LEFT turn to 2400' direct EF LOM and hold.										
Alt Set: INCHES										



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	1500'	2400'	→	EF 421
GS	3.00°	377	484	538	646	753		↑	LT		
MAP at D1.2 IEFE or LOM to MAP	4.4	3:46	2:56	2:38	2:12	1:53	1:39				

STRAIGHT-IN LANDING RWY 17											CIRCLE-TO-LAND			
ILS					LOC (GS out)						With Local Altimeter Setting		With Dallas Love Altimeter Setting	
DA(H) 775' (200') With Local Altimeter Setting		DA(H) 844' (269') With Dallas Love Altimeter Setting		MDA(H) 1020' (445') With Local Altimeter Setting			MDA(H) 1100' (525') With Dallas Love Altimeter Setting							
FULL	RAIL or ALS out	FULL	RAIL or ALS out		RAIL out	ALS out		RAIL out	ALS out	Max Kts.				
A	1/2	3/4	1/2	1	1/2	3/4	1	1/2	3/4	1	90	1120'(535')-1	1200'(615')-1	
B														120
C					3/4	1 1/4	1	1 1/2	140	1120'(535')-1 1/2	1200'(615')-1 3/4			
D					1	1 1/2	1 1/4	1 3/4	165	1200'(615')-2	1280'(695')-2 1/4			

TERPS AMEND 3 17 DEC 2009

ASOS
119.92

REGIONAL Approach (R)
124.3

*McKINNEY Tower
CTAF 118.82

*Ground
121.87

WAAS
Ch 87102
W-17A

Final
Apch Crs
176°

Minimum Alt
IKOTY
2300' (1725')

LPV
DA(H)
(CONDITIONAL)
775' (200')

Apt Elev 585'
TDZE 575'

MISSED APCH: Climb to 3000' direct ONEME and hold.

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

1. RADAR required.

2. Use local altimeter setting; if not received, use Dallas Love altimeter setting.

3. DME/DME RNP-0.30 not authorized.

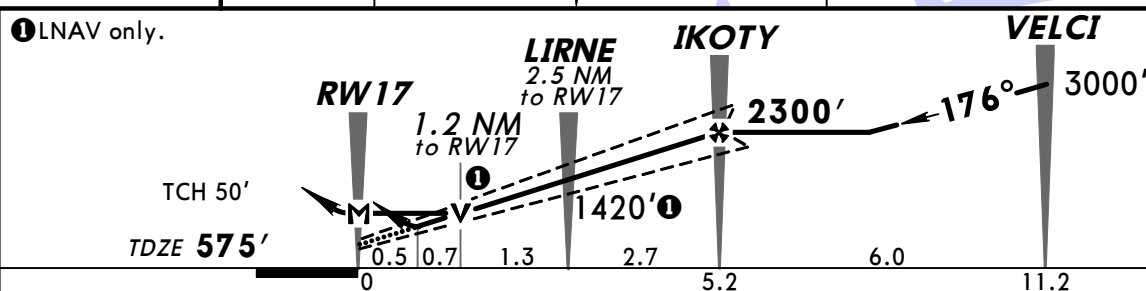
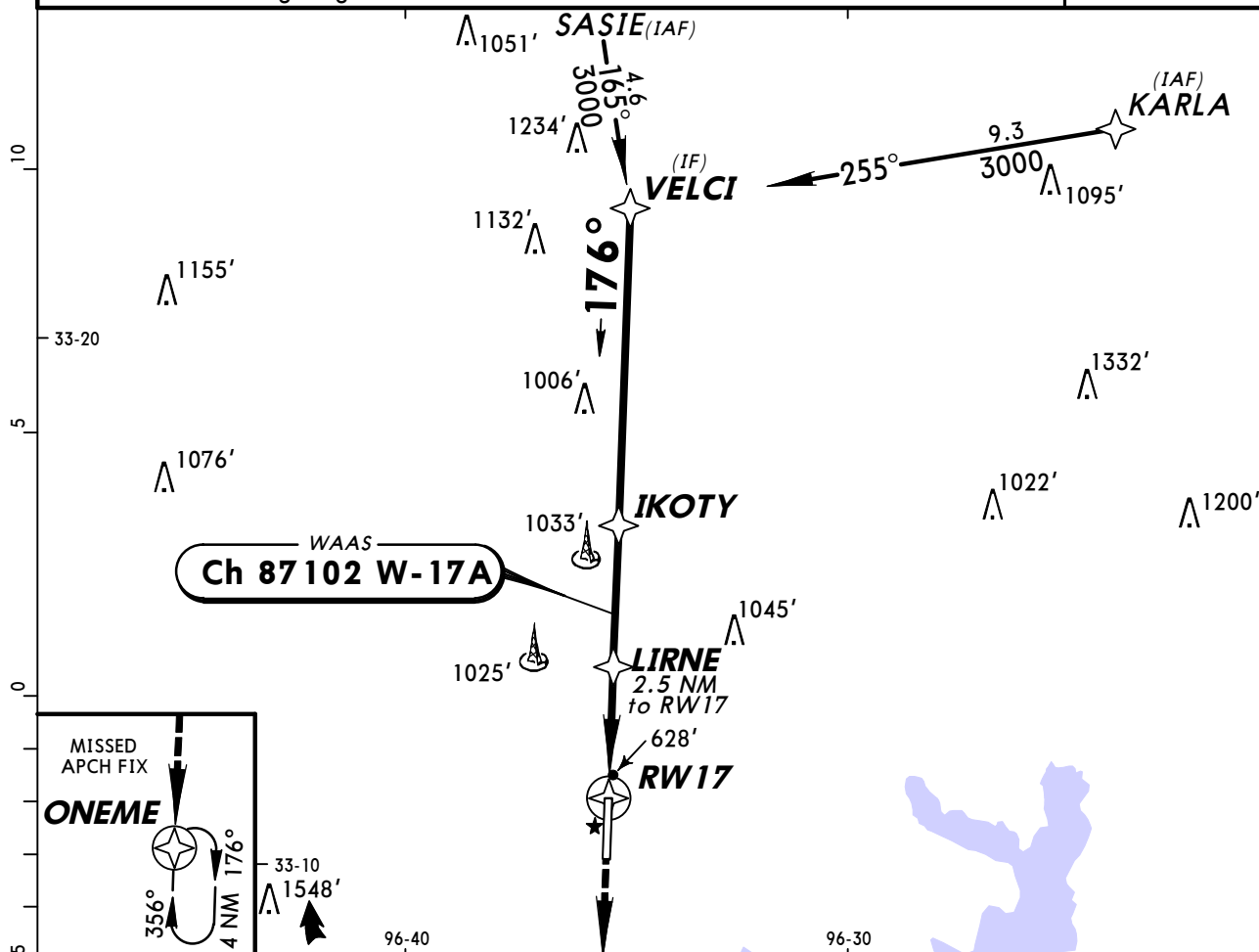
4. VDP not authorized when using Dallas Love altimeter setting.

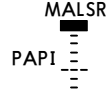
5. VGSI and RNAV glidepath not coincident.

6. Pilot controlled lighting 118.82.

3800'

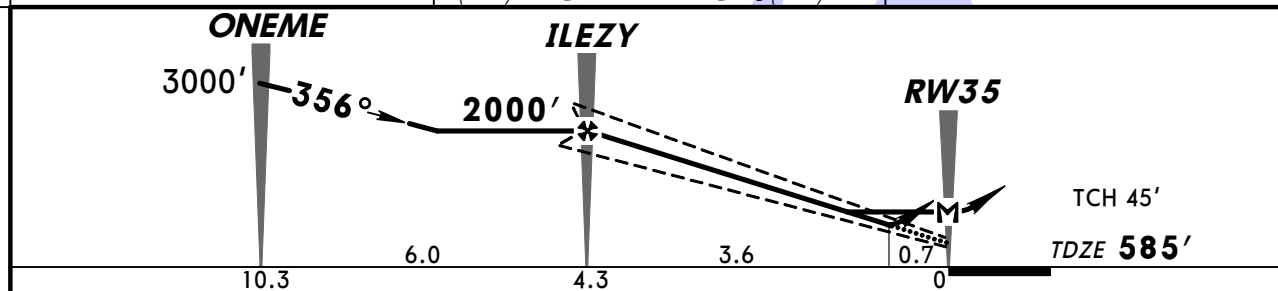
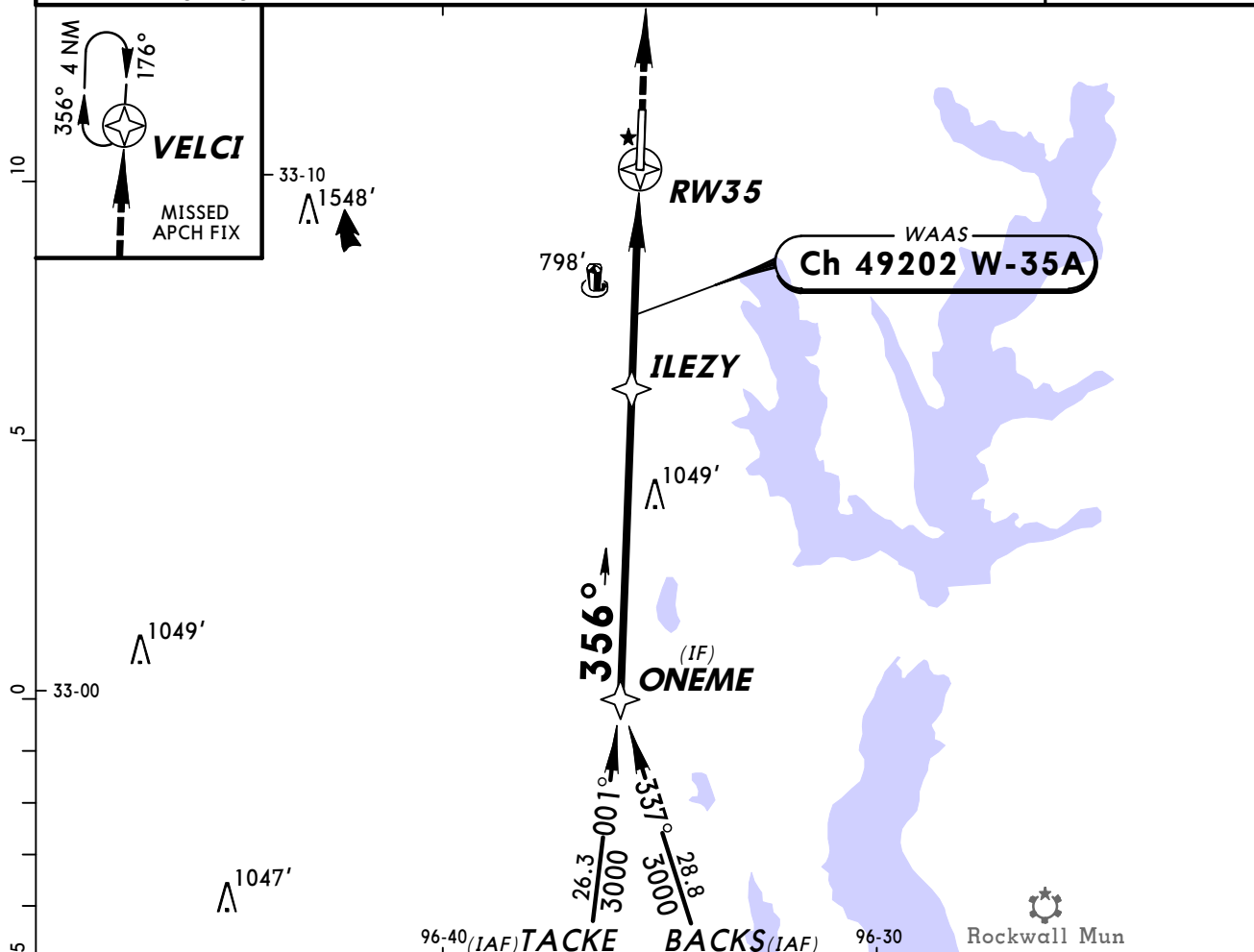
MSA RW17



Gnd speed-Kts	70	90	100	120	140	160		3000'		ONEME
Glide Path Angle	3.00°	372	478	531	637	743				
MAP at RW17										

STRAIGHT-IN LANDING RWY 17										CIRCLE-TO-LAND				
LPV					LNAV					With Local Altimeter Setting		With Dallas Love Altimeter Setting		
DA(H) 775' (200')		DA(H) 844' (269')		MDA(H) 1000' (425')		MDA(H) 1080' (505')								
With Local Altimeter Setting		With Dallas Love Altimeter Setting		With Local Altimeter Setting		With Dallas Love Altimeter Setting								
RAIL or ALS out		RAIL or ALS out		RAIL out		ALS out		RAIL out		ALS out		Max Kts	MDA(H)	
A	1/2	3/4	1/2	1	1/2	3/4	1	1/2	3/4	1	90		1120'(535')-1	1200'(615')-1
B					3/4	1 1/4		1	1 1/2	120	1120'(535')-1 1/2	1200'(615')-1 3/4		
C					1					140	1200'(615')-2	1280'(695')-2 1/4		
D										165				

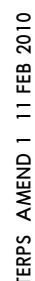
ASOS 119.92		REGIONAL Approach (R) 124.3		*McKINNEY Tower CTAF 118.82		*Ground 121.87	
WAAS Ch 49202 W-35A	Final Apch Crs 356°	Minimum Alt ILEZY 2000' (1415')	LPV DA(H) (CONDITIONAL) 867' (282')	Apt Elev 585' TDZE 585'		3800' MSA RW35	
MISSED APCH: Climb to 3000' direct VELCI and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. Radar required. 2. Use local altimeter setting; if not received, use Dallas Love altimeter setting. 3. DME/DME RNP-0.30 not authorized. 4. Visibility reduction by helicopters not authorized. 5. VGSI and RNAV glidepath not coincident. 6. Pilot controlled lighting 118.82.							



Gnd speed-Kts	70	90	100	120	140	160				
Glide Path Angle 3.00°	372	478	531	637	743	849				
MAP at RW35										

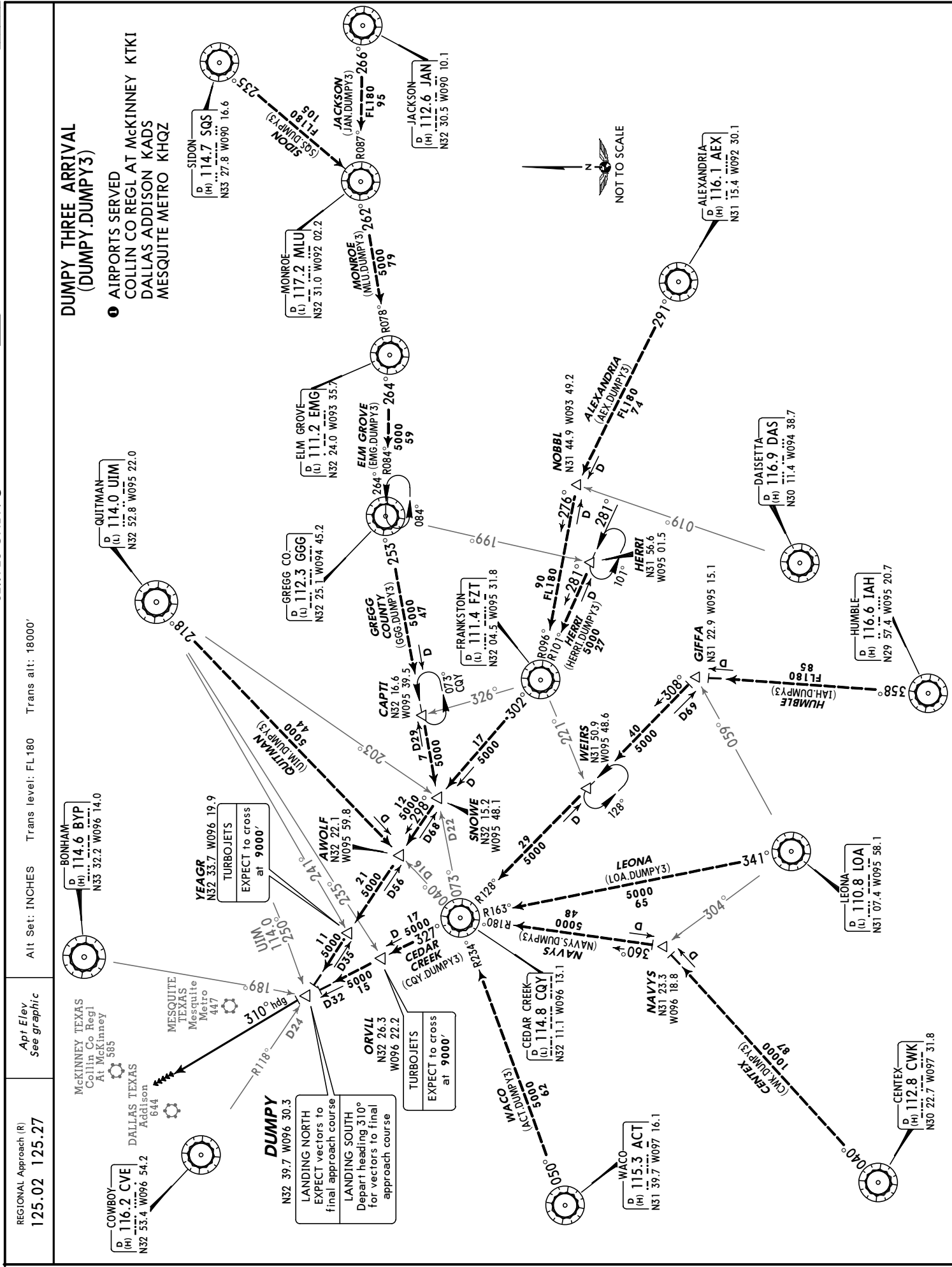
STRAIGHT-IN LANDING RWY 35				CIRCLE-TO-LAND			
LPV		LNAV		With Local Altimeter Setting		With Dallas Love Altimeter Setting	
DA(H)	DA(H)	MDA(H)	MDA(H)	MDA(H)	MDA(H)	MDA(H)	MDA(H)
867' (282')	936' (351')	1060' (475')	1140' (555')				
With Local Altimeter Setting	With Dallas Love Altimeter Setting	With Local Altimeter Setting	With Dallas Love Altimeter Setting				
A				Max Kts			
B				90	1120' (535')-1	1200' (615')-1	
C	1	1 1/4	1 1/2	120	1120' (535')-1 1/2	1200' (615')-1 3/4	
D		1 1/2	1 3/4	140	1200' (615')-2	1280' (695')-2 1/4	

BRIEFING STRIP™



MAP at WILOM

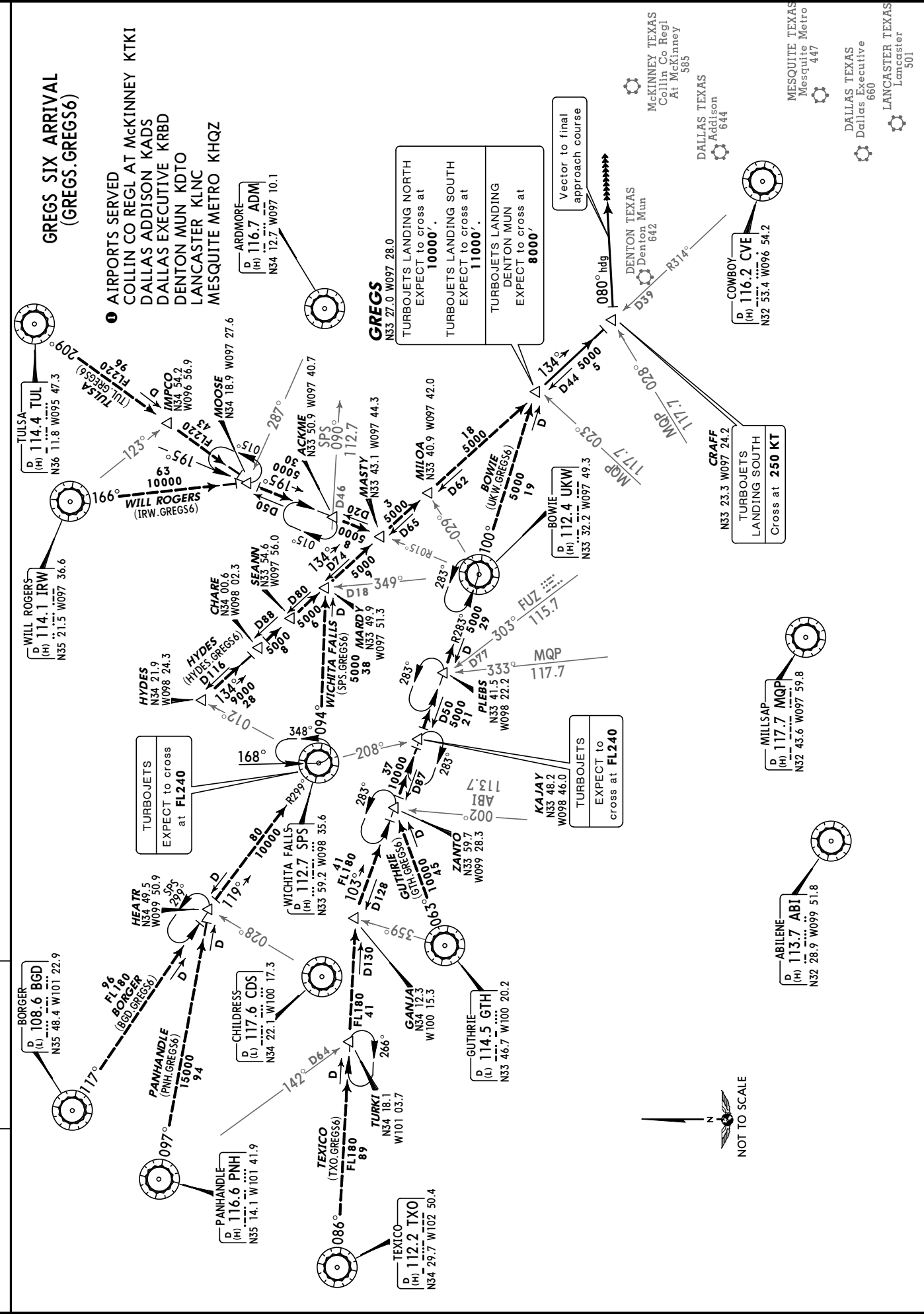
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CHANGES: Procedure renumbered, revised, location name.

AREA STAR SERVES ONLY: 1

REGIONAL Approach (R) 119.05 118.1	Apt Elev See graphic	Alt Set: INCHES	Trans level: FL180	Trans alt: 18000'



AREA SID SERVES ONLY: ●

- 1. For jets requesting 17000' and below.
- 2. GRAND PRAIRIE MUN DME required.

Trans level: FL180 Trans alt: 18000'

Apt Elev
See graphic

This SID requires take-off minimums (for standard minimums, refer to airport chart):

DALLAS ADDISON: Rwy 15: 400-2 or standard (or lower than standard, if authorized) with minimum climb of 234' per NM to 1100'.
Rwy 33: Standard (or lower than standard, if authorized).

FT WORTH SPINKS: Rwys 17L/35R: Not Authorized.
Rwys 17R/35L: Standard (or lower than standard, if authorized).

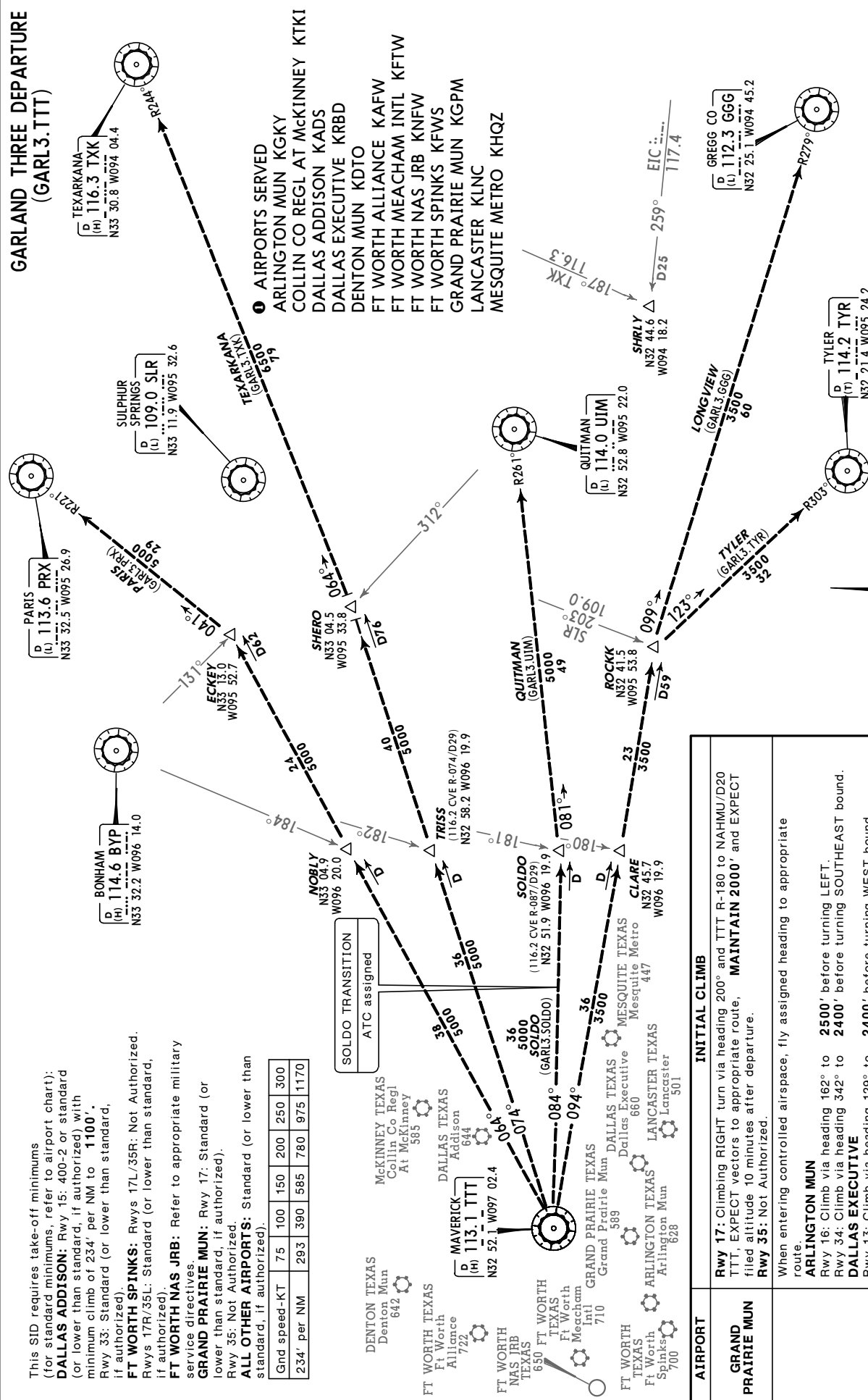
FT WORTH NAS JRB: Refer to appropriate military service directives.

GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized).

Rwy 35: Not Authorized.

ALL OTHER AIRPORTS: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
234' per NM	293	390	585	780	975	1170



AIRPORT	INITIAL CLIMB
GRAND PRAIRIE MUN	Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/D20 TTT, EXPECT vectors to appropriate route, MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure. Rwy 35: Not Authorized.
ALL OTHER AIRPORTS	When entering controlled airspace, fly assigned heading to appropriate route. ARLINGTON MUN Rwy 16: Climb via heading 162° to 2500' before turning LEFT. Rwy 34: Climb via heading 342° to 2400' before turning SOUTHEAST bound. DALLAS EXECUTIVE Rwy 13: Climb via heading 129° to 2400' before turning WEST bound. Rwy 17: Climb via heading 174° to 2400' before turning WEST bound. FT WORTH MEACHAM INTL Rwy 9: Climb via heading 092° to 2000' before proceeding on course. Rwys 16, 17: Climb via heading 164° to 2000' before proceeding on course. FT WORTH SPINKS Rwys 17L, 35R: Not Authorized. Rwy 17R: Climb via heading 173° to 1200' before turning RIGHT. MESQUITE METRO Rwy 17: Climb via heading 175° to 1000' before turning LEFT.

CHANGES: Location name, departure text, formations, procedure renumbered.

GRAND PRAIRIE MUN DME required.

Trans level: FL180 Trans alt: 18000'

INITIAL CLIMB

GRAND PRAIRIE MUN
Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHNU/D20 TTT. EXPECT RADAR vectors to appropriate route, MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure.
Rwy 35: Not authorized.

When entering controlled airspace, fly assigned heading and altitude. EXPECT vector to appropriate route.

ARLINGTON MUN
Rwy 16: Climb via heading 162° to 2500' before turning LEFT.
Rwy 34: Climb via heading 342° to 1400' before turning SOUTHEAST bound.

DALLAS EXECUTIVE
Rwy 13: Climb via heading 129° to 2400' before turning WEST bound.
Rwy 17: Climb via heading 174° to 2400' before turning WEST bound.
Rwy 31: Climb via heading 309° to 1600' before turning SOUTH bound.
Rwy 35: Climb via heading 354° to 1600' before turning SOUTH bound.

FT WORTH ALLIANCE
Rwy 16R: Climb heading 163° before turning RIGHT.
FT WORTH MEACHAM INTL
Rwy 6: Climb via heading 092° to 1800' before turning SOUTH bound.
Rwys 16, 17: Climb via heading 164° to 1800' before proceeding on course.

FT WORTH SPINKS
Rwy 17R: Climb via heading 173° to 1200' before turning RIGHT.

This SID requires take-off minimums (for standard minimums refer to airport chart):

DALLAS ADDISON: Rwy 15: 400-2 or standard (or lower than standard, if authorized) with minimum climb of 234' per NM to 1100'.

FT WORTH ALLIANCE: Rwy 16L: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 208' per NM to 1100', or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to departure end of runway.

Rwy 16R: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 210' per NM to 1100', or alternatively, with standard takeoff minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to departure end of runway.

Rwys 34L/R: Standard (or lower than standard, if authorized).

FT WORTH SPINKS: Rwys 17L/35R: Not authorized. Rwys 17R/35L: Standard (or lower than standard, if authorized).

FT WORTH NAS JRB: Refer to appropriate military service directives.

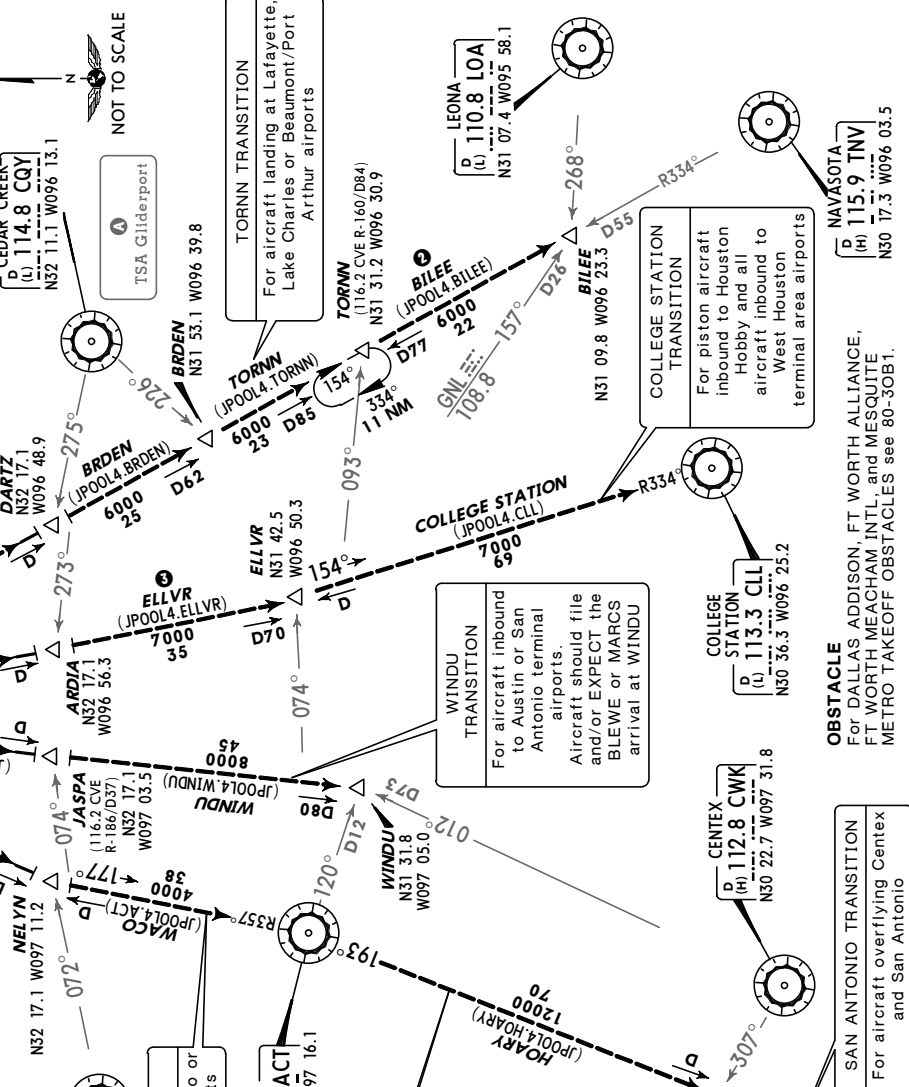
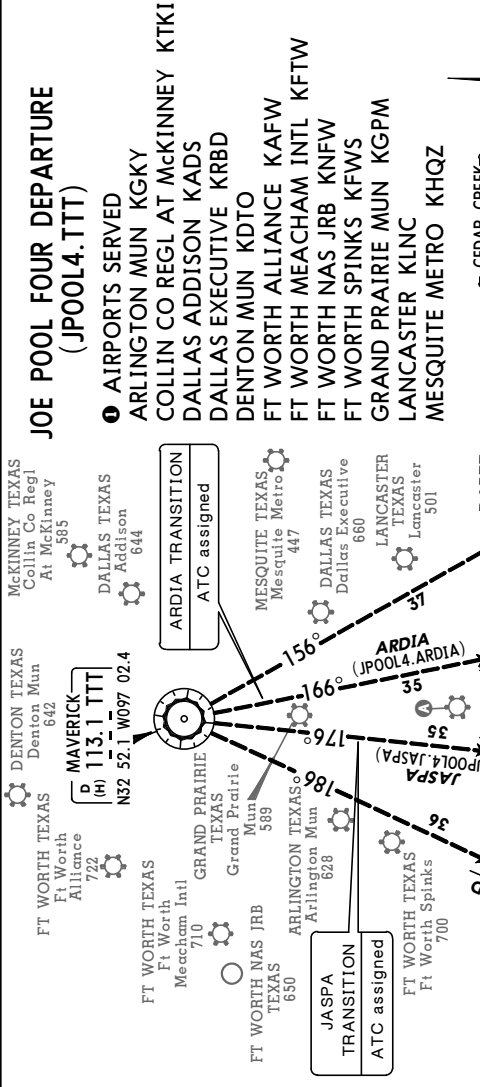
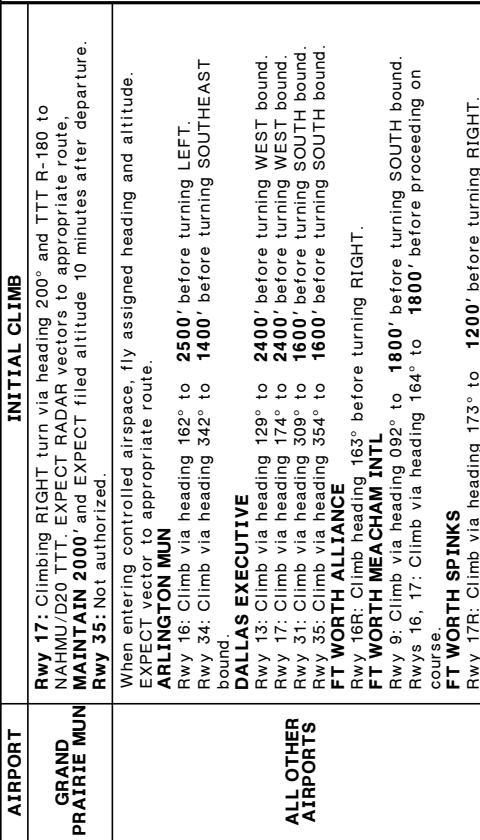
GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized).

Rwy 35: Not authorized.

ALL OTHER AIRPORTS: Standard (or lower than standard, if authorized).

Grnd speed-KT	75	100	150	200	250	300
208' per NM	260	347	520	693	867	1040
210' per NM	263	350	525	700	875	1050
234' per NM	293	390	585	780	975	1170

BILEE TRANSITION
For aircraft overflying BILEE, then via the appropriate STAR to George Bush Intercontinental or East Houston terminal area airports, or via J-87 to overfly TNV



AREA SID SERVES ONLY: ①

1. For all aircraft requesting 17000' and below.
2. GRAND PRAIRIE MUN DME required.

APRT Elev See graphic	Trans level: FL180 Trans alt: 18000'	INITIAL CLIMB
GRAND PRAIRIE MUN		Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/D20 TTT. EXPECT RADAR vectors to appropriate route. MAINTAIN 2000' and EXPECT filed altitude 10 minutes after departure. Rwy 35: Not authorized. When entering controlled airspace fly assigned heading and altitude to appropriate route. ARLINGTON MUN Rwy 16: Climb heading 162° to 2500' before turning LEFT. Rwy 34: Climb heading 342° to 1400' before turning SOUTHEAST bound. DALLAS EXECUTIVE Rwy 13: Climb heading 129° to 2600' before turning WEST bound. Rwy 17: Climb heading 174° to 2600' before turning WEST bound. Rwy 31: Climb heading 309° to 1600' before turning SOUTH bound. Rwy 35: Climb heading 354° to 1600' before turning SOUTH bound. FT WORTH ALLIANCE Rwy 16R: Climb heading 163° to 1200' before turning RIGHT. Rwy 17: Climb heading 173° to 1200' before turning RIGHT. Rwy 17R: Climb heading 173° to 1200' before turning RIGHT. FT WORTH MEACHAM INTL Rwy 9: Climb heading 092° to 2000' before proceeding on course. Rwy 16, 17: Climb heading 164° to 2000' before proceeding on course. FT WORTH SPINKS Rwy 17R: Climb heading 173° to 1200' before turning RIGHT. LANCASTER Rwy 31: Climb heading 314° to 1900' before turning LEFT. MESQUITE METRO Rwy 17: Climb heading 175° to 900' before turning LEFT.

This SID requires take-off minimums (for standard minimums, refer to airport chart):

ARLINGTON MUN: Rwy 16, 34: Standard (or lower than standard, if authorized).

COLLIN CO REGL AT MCKINNEY: Rwy 17, 35: Standard (or lower than standard, if authorized).

DALLAS ADDISON: Rwy 15: 400-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 324' per NM to 1100'.

DALLAS EXECUTIVE: Rwy 13, 31, 35: Standard (or lower than standard, if authorized).

DENTON MUN: Rwy 17, 35: Standard (or lower than standard, if authorized).

FT WORTH ALLIANCE: Rwy 16L: 300-2 1/4 or standard (or lower than standard, if authorized) with minimum climb of 208' per NM to 1100', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1400' prior to departure end of runway.

FT WORTH MEACHAM INTL: Rwy 9: 300-1 1/2 or standard (or lower than standard, if authorized) with minimum climb of 216' per NM to 1000', or alternatively, with standard take-off minimums (or lower than standard, if authorized) and a normal 200' per NM climb gradient, take-off must occur no later than 1500' prior to departure end of runway.

FT WORTH NAS JRB: Refer to appropriate military service directives.

FT WORTH SPINKS: Rwy 17L, 35R: Not authorized - environmental.

GRAND PRAIRIE MUN: Rwy 17: Standard (or lower than standard, if authorized).

LANCASTER: Rwy 13: Standard (or lower than standard, if authorized).

MESQUITE METRO: Rwy 17, 35: Standard (or lower than standard, if authorized).

MILLSAP: Rwy 13: Standard (or lower than standard, if authorized).

WICHITA FALLS: Rwy 13: Standard (or lower than standard, if authorized).

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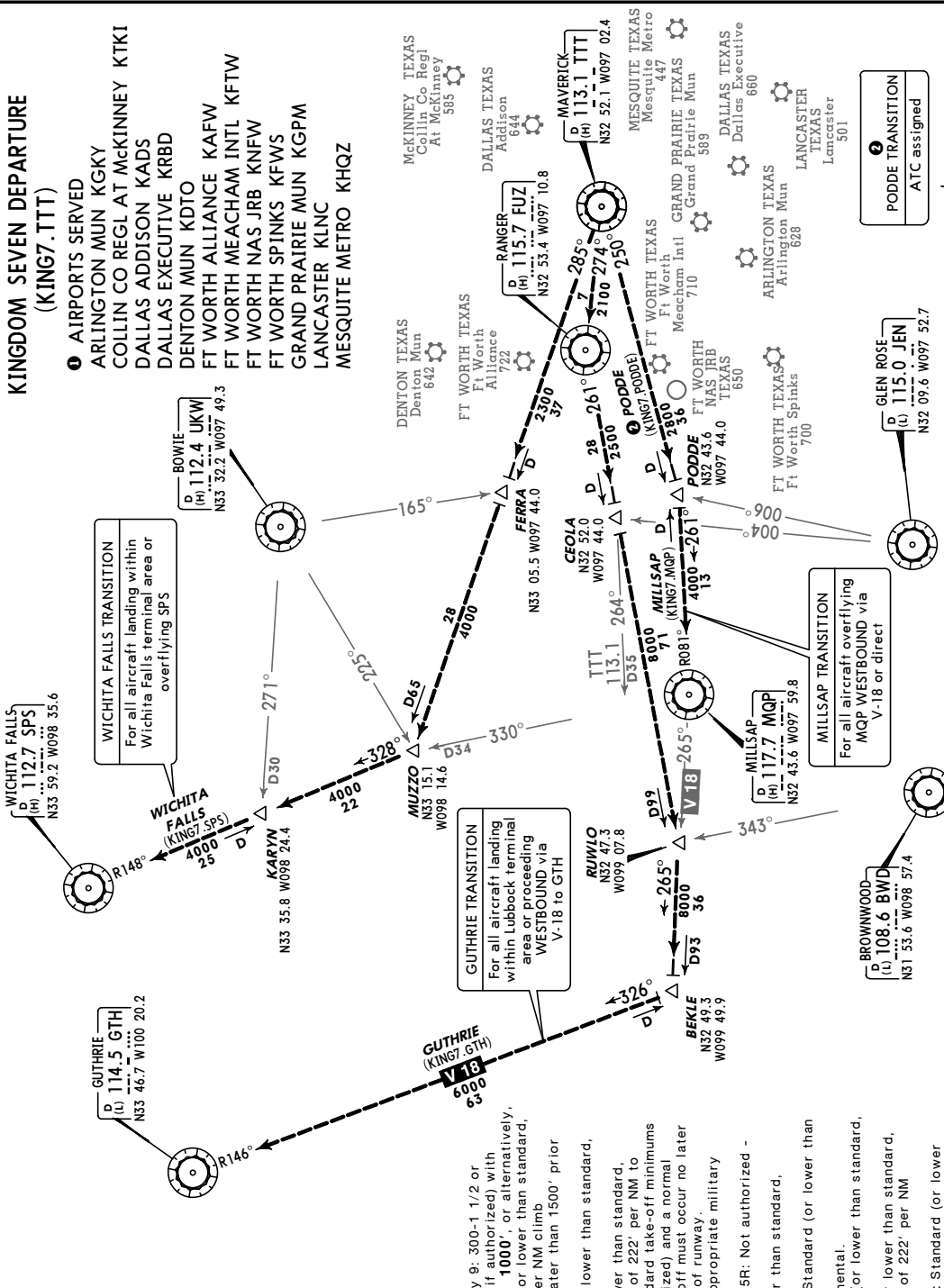
WICHITA FALLS: Rwy 13: Standard (or lower than standard, if authorized).

WICHITA FALLS: Rwy 13: Standard (or lower than standard, if authorized).

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WICHITA FALLS: Rwy 13: Standard (or lower than standard, if authorized).

WICHITA FALLS: Rwy 13: Standard (or lower than standard, if authorized).



Gnd speed-KT	75	100	150	200	250	300
208' per NM	260	347	520	693	867	1040
210' per NM	263	350	525	700	875	1050
216' per NM	270	360	540	720	900	1080
222' per NM	278	370	555	740	925	1110
275' per NM	344	458	688	917	1146	1375
324' per NM	405	540	810	1080	1350	1620

OBSTACLE
For ARLINGTON MUN, COLLIN CO REGL AT MCKINNEY, DALLAS ADDISON, DALLAS EXECUTIVE, DENTON MUN, FT WORTH ALLIANCE, FT WORTH MEACHAM INTL, FT WORTH SPINKS, GRAND PRAIRIE MUN, LANCASTER, and MESQUITE METRO TAKEOFF OBSTACLE NOTES see 80-30B1.

AREA SID SERVES ONLY: ①

GRAND PRAIRIE MUN DME required.

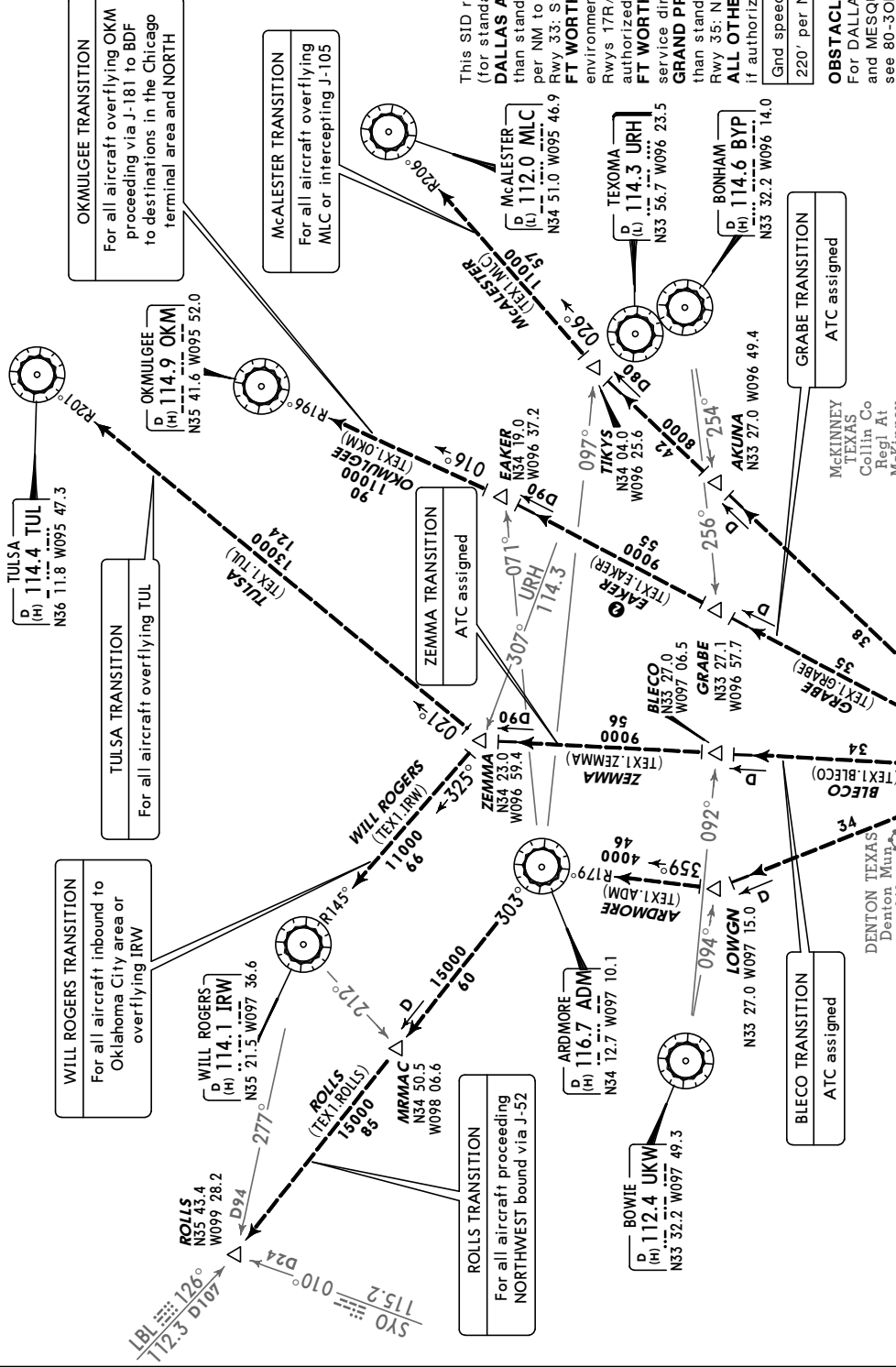
Trans level: FL 180 Trans alt: 18000'

Apt Elev
See graphic

TEXOMA ONE DEPARTURE
(TEX1.FUZ)

① AIRPORTS SERVED

ARLINGTON MUN KGKY
COLLIN CO REGL AT MCKINNEY KTKI
DALLAS ADDISON KADS
DALLAS EXECUTIVE KRBD
DENTON MUN KOTO
FT WORTH ALLIANCE KAFW
FT WORTH MEACHAM INTL KFTW
FT WORTH NAS JRB KNFW
FT WORTH SPINKS KFWS
GRAND PRAIRIE MUN KGPM
LANCASTER KLNC
MESQUITE METRO KHQZ



This SID requires take-off minimums
(for standard minimums, refer to airport chart):
DALLAS ADDISON: Rwy 15: 400-2 or standard (or lower
than standard, if authorized) with minimum climb of 220'
per NM to 1100'.
Rwy 33: Standard (or lower than standard, if authorized).
FT WORTH SPINKS: Rwys 17L/35R: Not authorized -
environmental.
Rwys 17R/35L: Standard (or lower than standard, if
authorized).
FT WORTH NAS JRB: Refer to appropriate military
service directives.
GRAND PRAIRIE MUN: Rwy 17: Standard (or lower
than standard, if authorized).
Rwy 35: Not authorized - airspace actions.
ALL OTHER AIRPORTS: Standard (or lower than standard,
if authorized).

Gnd speed-KT	75	100	150	200	250	300
220' per NM	275	367	550	733	917	1100

OBSTACLE
For DALLAS ADDISON, FT WORTH MEACHAM INTL,
and MESQUITE METRO TAKEOFF OBSTACLE NOTES
see 80-30B1.

②
EAKER TRANSITION
For aircraft inbound to the
Tulsa terminal area

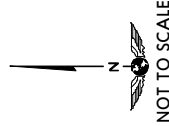
INITIAL CLIMB

Rwy 17: Climbing RIGHT turn via heading 200° and TTT R-180 to NAHMU/
D20 TTT. EXPECT RADAR vectors to appropriate route, **MAINTAIN 2000'**
and EXPECT filed altitude 10 minutes after departure.
Rwy 35: Not authorized.

When entering controlled airspace fly assigned heading and altitude to
appropriate route.

DALLAS EXECUTIVE
Rwy 13: Climb via 129° heading to **2400'** before turning WEST bound.
Rwy 17: Climb via 174° heading to **2400'** before turning WEST bound.
Rwy 31: Climb via 309° heading to **1600'** before turning SOUTH bound.
Rwy 35: Climb via 354° heading to **1600'** before turning SOUTH bound.
FT WORTH MEACHAM INTL
Rwy 9: Climb via 091° heading to **2000'** before proceeding on course.
Rwys 16, 17: Climb via 164° heading to **2000'** before proceeding on course.

FT WORTH SPINKS
Rwy 17R: Climb via 173° heading to **1200'** before turning RIGHT.
MESQUITE METRO
Rwy 17: Climb via 175° heading to **1000'** before turning LEFT.



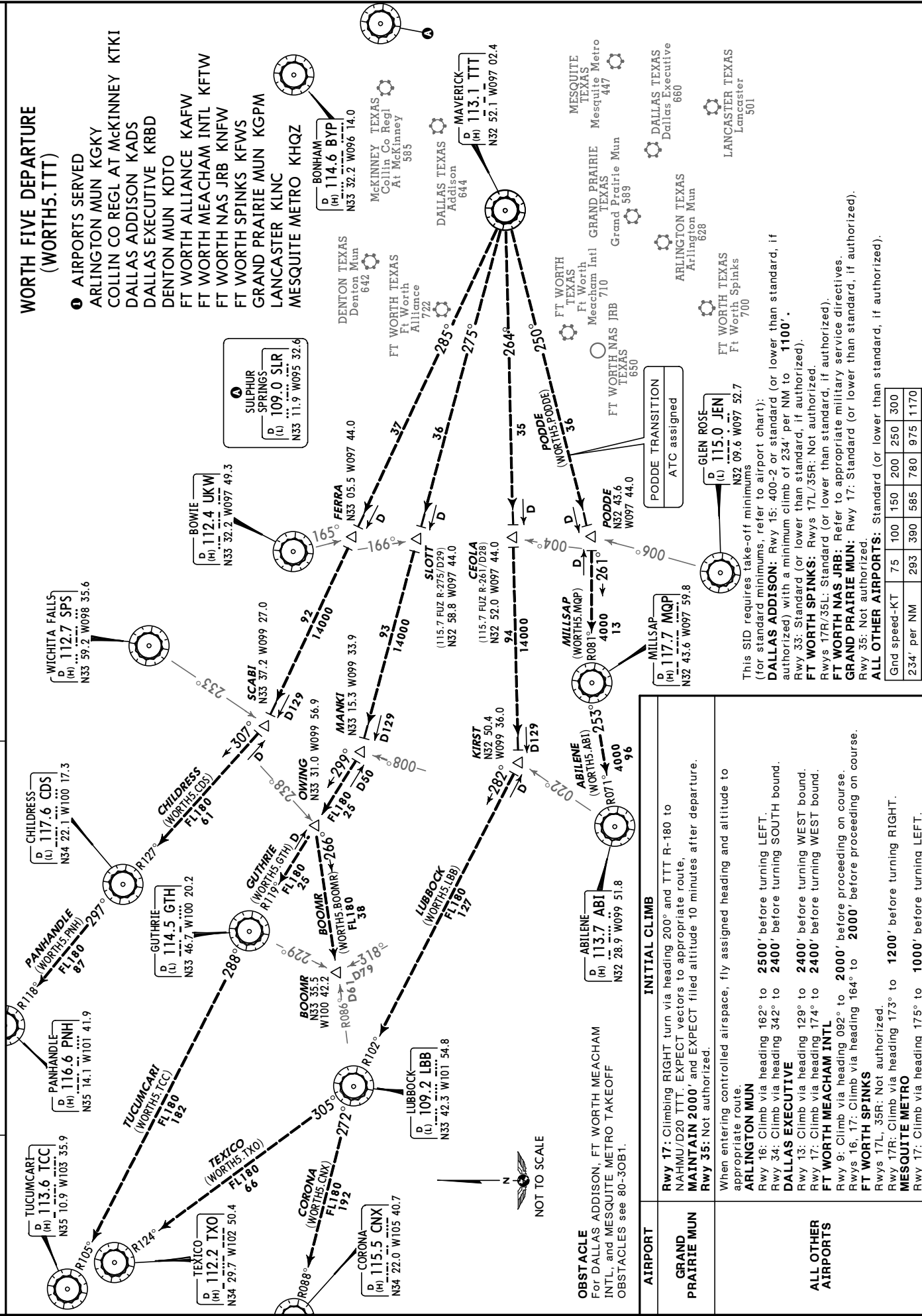
AREA SID SERVES ONLY: 1

GRAND PRAIRIE MUN DME required.

WORTH FIVE DEPARTURE
(WORTH5.TTT)

1 AIRPORTS SERVED

- ARLINGTON MUN KGKY
- COLLIN CO REGL AT MCKINNEY KTKI
- DALLAS ADDISON KADS
- DALLAS EXECUTIVE KRBD
- DENTON MUN KDTO
- FT WORTH ALLIANCE KAFW
- FT WORTH MEACHAM INTL KFTW
- FT WORTH NAS JRB KNFW
- FT WORTH SPINKS KFWs
- GRAND PRAIRIE MUN KGPM
- LANCASTER KLNC
- MESQUITE METRO KHQZ



TAKEOFF OBSTACLE NOTES**ADDISON:**

◦ RWY 15:

BUILDING 2.1 NM FROM DER, ON CENTERLINE, 360' AGL/974' MSL. MULTIPLE BLDGS BEGINNING 258' TO 1.8 NM FROM DER, 21' TO 1307' ON OR LEFT OF CENTERLINE, UP TO 152' AGL/787' MSL; MULTIPLE BLDGS, RAILROAD, ROAD BEGINNING 268' TO 1.9 NM FROM DER, 5' TO 995' RIGHT OF CENTERLINE, UP TO 311' AGL/955' MSL.

◦ RWY 33:

MULTIPLE POLES AND BLDGS BEGINNING 46' TO 3124' FROM DER, 186' TO 801' RIGHT OF CENTERLINE, UP TO 84' AGL/720' MSL; MULTIPLE POLES AND BLDGS BEGINNING 640' TO 2690' FROM DER, 21' TO 647' LEFT OF CENTERLINE, UP TO 65' AGL/709' MSL.

FT WORTH MEACHAM INTL:

◦ RWY 34:

BILLBOARD 692' FROM DER, 686' RIGHT OF CENTERLINE, 37' AGL/739' MSL.

◦ RWY 35:

TREE 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL, TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 36' AGL/699' MSL.

MESQUITE METRO:

◦ RWY 17:

TOWER 2.0 NM FROM DER, 1.8 NM LEFT OF CENTERLINE, 456' AGL/944' MSL.

HUBBARD DEPARTURE:**ADDISON:**

◦ RWY 15:

MULTIPLE BLDGS BEGINNING 1085' FROM DER, 21' LEFT OF CENTERLINE, UP TO 321' AGL/945' MSL. BLDG WITH ANTENNA 1.9 NM FROM DER, 968' RIGHT OF CENTERLINE, 345' AGL/975' MSL. POLE 666' FROM DER, 640' LEFT OF CENTERLINE, 60' AGL/681' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 115' LEFT OF CENTERLINE, UP TO 40' AGL/675' MSL. ROAD, RAILROAD BEGINNING 268' FROM DER, 5' RIGHT OF CENTERLINE, UP TO 23' AGL/655' MSL.

◦ RWY 33:

MULTIPLE POLES AND TREES BEGINNING 640' FROM DER, 21' LEFT OF CENTERLINE, UP TO 60' AGL/709' MSL. MULTIPLE BLDGS BEGINNING 1225' FROM DER, 147' LEFT OF CENTERLINE, UP TO 37' AGL/697' MSL. MULTIPLE BLDGS BEGINNING 45' FROM DER, 458' RIGHT OF CENTERLINE, UP TO 57' AGL/696' MSL. MULTIPLE POLES BEGINNING 922' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 60' AGL/720' MSL.

ARLINGTON MUN:

◦ RWY 16:

MULTIPLE REILS BEGINNING 77' FROM DER, 127' RIGHT OF CENTERLINE, 7' AGL/601' MSL. MULTIPLE REILS BEGINNING 74' FROM DER, 126' LEFT OF CENTERLINE, 7' AGL/603' MSL. TREE 590' FROM DER, 480' RIGHT OF CENTERLINE, 16' AGL/614' MSL.

◦ RWY 34:

TREE 1083' FROM DER, 710' RIGHT OF CENTERLINE, 35' AGL/670' MSL. TREE 705' FROM DER, 403' LEFT OF CENTERLINE, 38' AGL/654' MSL. TREE 231' FROM DER, 464' LEFT OF CENTERLINE, 35' AGL/642' MSL. MULTIPLE TREES BEGINNING 1093' FROM DER, 415' RIGHT OF CENTERLINE, UP TO 39' AGL/663' MSL.

TAKEOFF OBSTACLE NOTES (CONTD)**HUBBARD DEPARTURE (CONT):****COLLIN CO REGL AT MC KINNEY:**

- RWY 17:
BUSH 29' FROM DER, 499' RIGHT OF CENTERLINE, 5' AGL/591' MSL. OBSTACLE LIGHT ON DME 400' FROM DER, 266' RIGHT OF CENTERLINE, 16' AGL/602' MSL. TREES 784' FROM DER, 574' RIGHT OF CENTERLINE, 39' AGL/625' MSL.
- RWY 35:
TREES 1060' FROM DER, 634' RIGHT OF CENTERLINE, 65' AGL/605' MSL. MULTIPLE TREES BEGINNING 1532' FROM DER, 632' LEFT OF CENTERLINE, UP TO 79' AGL/626' MSL.

DALLAS EXECUTIVE:

- RWY 13:
OBSTACLE LIGHT ON BLAST FENCE 109' FROM DER, 347' LEFT OF CENTERLINE, 6' AGL/658' MSL.
- RWY 17:
TREE 468' FROM DER, 454' LEFT OF CENTERLINE, 35' AGL/699' MSL. TREE 113' FROM DER, 516' RIGHT OF CENTERLINE, 30' AGL/679' MSL. TREE 871' FROM DER, 405' LEFT OF CENTERLINE, 35' AGL/685' MSL. TREE 651' FROM DER, 303' RIGHT OF CENTERLINE, 35' AGL/699' MSL.
- RWY 31:
TREE 481' FROM DER, 552' RIGHT OF CENTERLINE, 30' AGL/677' MSL. TREE 2978' FROM DER, 802' LEFT OF CENTERLINE, 46' AGL/732' MSL.
- RWY 35:
TREE 534' FROM DER, 302' LEFT OF CENTERLINE, 34' AGL/671' MSL. TREE 745' FROM DER, 371' LEFT OF CENTERLINE, 35' AGL/672' MSL. TREE 972' FROM DER, 405' RIGHT OF CENTERLINE, 35' AGL/675' MSL.

DENTON MUN:

- RWY 17:
MULTIPLE TREES BEGINNING 190' FROM DER, 178' RIGHT OF CENTERLINE, UP TO 66' AGL/665' MSL. BUILDING 371' FROM DER, 261' LEFT OF CENTERLINE, 14' AGL/643' MSL.
- RWY 35:
TREE 1242' FROM DER, 806' RIGHT OF CENTERLINE, 63' AGL/692' MSL.

FT WORTH ALLIANCE:

- RWY 16L:
LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.
- RWY 16R:
FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.
- RWY 34L:
FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.
- RWY 34R:
ANTENNA 218' FROM DER, 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 1)**HUBBARD DEPARTURE (CONT):****FT WORTH MEACHAM INTL:**

- RWY 9:
WINDSOCK 293' FROM DER, 354' LEFT OF CENTERLINE, 51' AGL/721' MSL. SIGN ON BLDG 481' FROM DER, 407' RIGHT OF CENTERLINE, 39' AGL/702' MSL. SIGN 2448' FROM DER, 540' LEFT OF CENTERLINE, 75' AGL/742' MSL. GRAIN ELEVATORS BEGINNING 7085' FROM DER, 2191' LEFT OF CENTERLINE, UP TO 229' AGL/877' MSL.
- RWY 17:
BUSH 13' FROM DER, 160' RIGHT OF CENTERLINE, 21' AGL/674' MSL. ANTENNA 953' FROM DER, 394' LEFT OF CENTERLINE, 72' AGL/722' MSL. HANGAR 1380' FROM DER, 744' LEFT OF CENTERLINE, 43' AGL/703' MSL.
- RWY 27:
TREE 239' FROM DER, 492' LEFT OF CENTERLINE, 35' AGL/685' MSL.
- RWY 34:
MULTIPLE TREES 974' FROM DER, 682' RIGHT OF CENTERLINE, UP TO 47' AGL/746' MSL. GRAIN ELEVATOR 1.52 NM FROM DER, 2775' RIGHT OF CENTERLINE, 254' AGL/969' MSL.
- RWY 35:
TREE 1' FROM DER, 248' LEFT OF CENTERLINE, 40' AGL/690' MSL. TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 45' AGL/699' MSL. BUSH 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL. OBSTACLE LIGHT ON DAM 1359' FROM DER, 1' RIGHT OF CENTERLINE, 46' AGL/706' MSL.

FT WORTH SPINKS:

- RWY 17R:
TREE 4909' FROM DER, 1556' LEFT OF CENTERLINE, 60' AGL/830' MSL.

GRAND PRAIRIE MUN:

- RWY 17:
ANTENNA 190' FROM DER, 456' RIGHT OF CENTERLINE, 26' AGL/615' MSL. ROAD, MULTIPLE POLES AND SIGNS BEGINNING 570' FROM DER, 410' RIGHT OF CENTERLINE, UP TO 31' AGL/620' MSL. TREE 1506' FROM DER, 517' RIGHT OF CENTERLINE, 37' AGL/617' MSL.

LANCASTER:

- RWY 31:
MULTIPLE TREES BEGINNING 1133' FROM DER, 479' LEFT OF CENTERLINE, UP TO 40' AGL/541' MSL. TREES 886' FROM DER, 637' RIGHT OF CENTERLINE, 35' AGL/536' MSL. MULTIPLE POLES BEGINNING 5613' FROM DER, 1171' RIGHT OF CENTERLINE, UP TO 101' AGL/661' MSL.

MESQUITE METRO:

- RWY 17:
MULTIPLE TREES, SIGN AND FENCES BEGINNING 10' FROM DER, 362' LEFT OF CENTERLINE, UP TO 35' AGL/478' MSL.
- RWY 35:
HANGAR 53' FROM DER, 497' LEFT OF CENTERLINE, 23' AGL/470' MSL. MULTIPLE TREES AND POLES BEGINNING 999' FROM DER, 708' LEFT OF CENTERLINE, UP TO 44' AGL/483' MSL. BUSH 45' FROM DER, 466' RIGHT OF CENTERLINE, 10' AGL/457' MSL. POLE 814' FROM DER, 288' RIGHT OF CENTERLINE, 27' AGL/467' MSL. CONSTRUCTION EQUIPMENT 892' FROM DER, 628' RIGHT OF CENTERLINE, 59' AGL/489' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 2)**JOE POOL DEPARTURE:****ADDISON:**

◦ RWY 15:

BUILDING 2.1 NM FROM DER, ON CENTERLINE, 360' AGL/974' MSL. MULTIPLE BLDGS BEGINNING 258' TO 1.8 NM FROM DER, 21' TO 1307' ON OR LEFT OF CENTERLINE, UP TO 152' AGL/787' MSL. MULTIPLE BLDGS, RAILROAD, ROAD BEGINNING 268' TO 1.9 NM FROM DER, 5' TO 995' RIGHT OF CENTERLINE, UP TO 311' AGL/955' MSL.

◦ RWY 33:

MULTIPLE POLES AND BLDGS BEGINNING 46' TO 3124' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 84' AGL/720' MSL. MULTIPLE POLES AND BLDGS BEGINNING 640' TO 2690' FROM DER, 21' TO 647' LEFT OF CENTERLINE, UP TO 65' AGL/709' MSL.

FT WORTH ALLIANCE:

◦ RWY 16L:

LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.

◦ RWY 16R:

FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.

◦ RWY 34L:

FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.

◦ RWY 34R:

ANTENNA 218' FROM DER 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

FT WORTH MEACHAM INTL:

◦ RWY 34:

BILLBOARD 692' FROM DER, 686' RIGHT OF CENTERLINE, 37' AGL/739' MSL.

◦ RWY 35:

TREE 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL, TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 36' AGL/699' MSL.

MESQUITE METRO:

◦ RWY 17:

TOWER 2.0 NM FROM DER, 1.8 NM LEFT OF CENTERLINE, 456' AGL/944' MSL.

KINGDOM DEPARTURE:**ADDISON:**

◦ RWY 15:

MULTIPLE BLDGS BEGINNING 1085' FROM DER, 21' LEFT OF CENTERLINE, UP TO 321' AGL/956' MSL. BLDG WITH ANTENNA 1.9 NM FROM DER, 968' RIGHT OF CENTERLINE, 345' AGL/975' MSL. POLE 666' FROM DER, 640' LEFT OF CENTERLINE, 60' AGL/681' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 115' LEFT OF CENTERLINE, UP TO 40' AGL/675' MSL. ROAD, RAILROAD BEGINNING 268' FROM DER, 5' RIGHT OF CENTERLINE, UP TO 23' AGL/655' MSL.

◦ RWY 33:

MULTIPLE POLES AND TREES BEGINNING 640' FROM DER, 21' LEFT OF CENTERLINE, UP TO 60' AGL/709' MSL. MULTIPLE BLDGS BEGINNING 1225' FROM DER, 147' LEFT OF CENTERLINE, UP TO 37' AGL/697' MSL. MULTIPLE BLDGS BEGINNING 45' FROM DER, 458' RIGHT OF CENTERLINE, UP TO 57' AGL/696' MSL. MULTIPLE POLES BEGINNING 922' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 60' AGL/720' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 3)**KINGDOM DEPARTURE (CONT):****ARLINGTON MUN:**

◦ RWY 16:

MULTIPLE REILS BEGINNING 77' FROM DER, 127' RIGHT OF CENTERLINE, 7' AGL/601' MSL. MULTIPLE REILS BEGINNING 74' FROM DER, 126' LEFT OF CENTERLINE, 7' AGL/603' MSL. TREE 590' FROM DER, 480' RIGHT OF CENTERLINE, 16' AGL/614' MSL.

◦ RWY 34:

TREE 1083' FROM DER, 710' RIGHT OF CENTERLINE, 35' AGL/670' MSL. TREE 705' FROM DER, 403' LEFT OF CENTERLINE, 38' AGL/654' MSL. TREE 231' FROM DER, 464' LEFT OF CENTERLINE, 35' AGL/642' MSL. MULTIPLE TREES BEGINNING 1093' FROM DER, 415' RIGHT OF CENTERLINE, UP TO 39' AGL/663' MSL.

COLLIN CO REGL AT MC KINNEY:

◦ RWY 17:

BUSH 29' FROM DER, 499' RIGHT OF CENTERLINE, 5' AGL/591' MSL. OBSTACLE LIGHT ON DME 400' FROM DER, 266' RIGHT OF CENTERLINE, 16' AGL/602' MSL. TREES 784' FROM DER, 574' RIGHT OF CENTERLINE, 39' AGL/625' MSL.

◦ RWY 35:

TREES 1060' FROM DER, 634' RIGHT OF CENTERLINE, 65' AGL/605' MSL. MULTIPLE TREES BEGINNING 1532' FROM DER, 632' LEFT OF CENTERLINE, UP TO 79' AGL/626' MSL.

DALLAS EXECUTIVE:

◦ RWY 13:

OBSTACLE LIGHT ON BLAST FENCE 109' FROM DER, 347' LEFT OF CENTERLINE, 6' AGL/658' MSL.

◦ RWY 17:

TREE 468' FROM DER, 454' LEFT OF CENTERLINE, 35' AGL/699' MSL. TREE 113' FROM DER, 516' RIGHT OF CENTERLINE, 30' AGL/679' MSL. TREE 871' FROM DER, 405' LEFT OF CENTERLINE, 35' AGL/685' MSL. TREE 651' FROM DER, 303' RIGHT OF CENTERLINE, 35' AGL/699' MSL.

◦ RWY 31:

TREE 481' FROM DER, 552' RIGHT OF CENTERLINE, 30' AGL/677' MSL. TREE 2978' FROM DER, 802' LEFT OF CENTERLINE, 46' AGL/732' MSL.

◦ RWY 35:

TREE 534' FROM DER, 302' LEFT OF CENTERLINE, 34' AGL/671' MSL. TREE 745' FROM DER, 371' LEFT OF CENTERLINE, 35' AGL/672' MSL. TREE 972' FROM DER, 405' RIGHT OF CENTERLINE, 35' AGL/675' MSL.

DENTON MUN:

◦ RWY 17:

MULTIPLE TREES BEGINNING 190' FROM DER, 178' RIGHT OF CENTERLINE, UP TO 66' AGL/665' MSL. BUILDING 371' FROM DER, 261' LEFT OF CENTERLINE, 14' AGL/643' MSL.

◦ RWY 35:

TREE 1242' FROM DER, 806' RIGHT OF CENTERLINE, 63' AGL/692' MSL.

FT WORTH ALLIANCE:

◦ RWY 16L:

LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.

◦ RWY 16R:

FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 4)**KINGDOM DEPARTURE (CONT):**

- RWY 34L:
FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.
- RWY 34R:
ANTENNA 218' FROM DER, 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

FT WORTH MEACHAM INTL:

- RWY 9:
WINDSOCK 293' FROM DER, 354' LEFT OF CENTERLINE, 51' AGL/721' MSL. SIGN ON BLDG 481' FROM DER, 407' RIGHT OF CENTERLINE, 39' AGL/702' MSL. SIGN 2448' FROM DER, 540' LEFT OF CENTERLINE, 75' AGL/742' MSL. GRAIN ELEVATORS BEGINNING 1.2 NM FROM DER, 2191' LEFT OF CENTERLINE, UP TO 229' AGL/877' MSL.
- RWY 17:
BUSH 13' FROM DER, 160' RIGHT OF CENTERLINE, 21' AGL/674' MSL. ANTENNA 953' FROM DER, 394' LEFT OF CENTERLINE, 72' AGL/722' MSL. HANGAR 1380' FROM DER, 744' LEFT OF CENTERLINE, 43' AGL/703' MSL.
- RWY 27:
TREE 239' FROM DER, 492' LEFT OF CENTERLINE, 35' AGL/685' MSL.
- RWY 34:
MULTIPLE TREES 974' FROM DER, 682' RIGHT OF CENTERLINE, UP TO 47' AGL/746' MSL. GRAIN ELEVATOR 1.52 NM FROM DER, 2775' RIGHT OF CENTERLINE, 254' AGL/969' MSL.
- RWY 35:
TREE 1' FROM DER, 248' LEFT OF CENTERLINE, 40' AGL/690' MSL. TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 45' AGL/699' MSL. BUSH 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL. OBSTACLE LIGHT ON DAM 1359' FROM DER, 1' RIGHT OF CENTERLINE, 46' AGL/706' MSL.

FT WORTH SPINKS:

- RWY 17R:
TREE 4909' FROM DER, 1556' LEFT OF CENTERLINE, 60' AGL/830' MSL.

GRAND PRAIRIE MUN:

- RWY 17:
ANTENNA 190' FROM DER, 456' RIGHT OF CENTERLINE, 26' AGL/615' MSL. ROAD, MULTIPLE POLES AND SIGNS BEGINNING 570' FROM DER, 410' RIGHT OF CENTERLINE, UP TO 31' AGL/620' MSL. TREE 1506' FROM DER, 517' RIGHT OF CENTERLINE, 37' AGL/617' MSL.

LANCASTER:

- RWY 31:
MULTIPLE TREES BEGINNING 1133' FROM DER, 479' LEFT OF CENTERLINE, UP TO 40' AGL/541' MSL. TREES 886' FROM DER, 637' RIGHT OF CENTERLINE, 35' AGL/536' MSL. MULTIPLE POLES BEGINNING 5613' FROM DER, 1171' RIGHT OF CENTERLINE, UP TO 101' AGL/661' MSL.

MESQUITE METRO:

- RWY 17:
MULTIPLE TREES, SIGN AND FENCES BEGINNING 10' FROM DER, 362' LEFT OF CENTERLINE, UP TO 35' AGL/478' MSL.
- RWY 35:
HANGAR 53' FROM DER, 497' LEFT OF CENTERLINE, 23' AGL/470' MSL. MULTIPLE TREES AND POLES BEGINNING 999' FROM DER, 708' LEFT OF CENTERLINE, UP TO 44' AGL/483' MSL. BUSH 45' FROM DER, 466' RIGHT OF CENTERLINE, 10' AGL/457' MSL. POLE 814' FROM DER, 288' RIGHT OF CENTERLINE, 27' AGL/467' MSL. CONSTRUCTION EQUIPMENT 892' FROM DER, 628' RIGHT OF CENTERLINE, 59' AGL/489' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 5)**WYLIE DEPARTURE:****ADDISON:**

◦ RWY 15:

MULTIPLE BLDGS BEGINNING 1085' FROM DER, 21' LEFT OF CENTERLINE, UP TO 321' AGL/945' MSL. BLDG WITH ANTENNA 1.9 NM FROM DER, 968' RIGHT OF CENTERLINE, 345' AGL/975' MSL. POLE 666' FROM DER, 640' LEFT OF CENTERLINE, 60' AGL/681' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 115' LEFT OF CENTERLINE, UP TO 40' AGL/675' MSL. ROAD, RAILROAD BEGINNING 268' FROM DER, 495' RIGHT OF CENTERLINE UP TO 21' AGL/655' MSL.

◦ RWY 33:

MULTIPLE POLES AND TREES BEGINNING 640' FROM DER, 21' LEFT OF CENTERLINE, UP TO 60' AGL/709' MSL. MULTIPLE BLDGS BEGINNING 1225' FROM DER, 147' LEFT OF CENTERLINE, UP TO 37' AGL/607' MSL. MULTIPLE BLDGS BEGINNING 45' FROM DER, 458' RIGHT OF CENTERLINE, UP TO 57' AGL/696' MSL. MULTIPLE POLES BEGINNING 922' FROM DER, 186' RIGHT OF CENTERLINE, UP TO 60' AGL/720' MSL.

ARLINGTON MUN:

◦ RWY 16:

MULTIPLE REILS BEGINNING 77' FROM DER, 127' RIGHT OF CENTERLINE, 7' AGL/601' MSL. MULTIPLE REILS BEGINNING 74' FROM DER, 126' LEFT OF CENTERLINE, 7' AGL/603' MSL. TREE 590' FROM DER, 480' RIGHT OF CENTERLINE, 16' AGL/614' MSL.

◦ RWY 34:

TREE 1083' FROM DER, 710' RIGHT OF CENTERLINE, 35' AGL/670' MSL. TREE 705' FROM DER, 403' LEFT OF CENTERLINE, 38' AGL/654' MSL. TREE 231' FROM DER, 464' LEFT OF CENTERLINE, 35' AGL/642' MSL. MULTIPLE TREES 1093' FROM DER, 415' TO 576' RIGHT OF CENTERLINE, UP TO 39' AGL/663' MSL.

◦ TOWER FARM 7.2 NM SOUTHEAST OF AIRPORT UP TO 2549' MSL.

DALLAS EXECUTIVE:

◦ RWY 13:

OBSTACLE LIGHT ON BLAST FENCE 109' FROM DER, 347' LEFT OF CENTERLINE, 6' AGL/658' MSL.

◦ RWY 17:

TREE 468' FROM DER, 454' LEFT OF CENTERLINE, 35' AGL/699' MSL. TREE 113' FROM DER, 516' RIGHT OF CENTERLINE, 30' AGL/679' MSL. TREE 871' FROM DER, 405' LEFT OF CENTERLINE, 35' AGL/685' MSL. TREE 651' FROM DER, 303' RIGHT OF CENTERLINE, 35' AGL/699' MSL.

◦ RWY 31:

TREE 481' FROM DER, 552' RIGHT OF CENTERLINE, 30' AGL/677' MSL, TREE 2978' FROM DER, 802' LEFT OF CENTERLINE, 46' AGL/732' MSL.

◦ RWY 35:

TREE 534' FROM DER, 302' LEFT OF CENTERLINE, 34' AGL/671' MSL. TREE 745' FROM DER, 371' LEFT OF CENTERLINE, 35' AGL/672' MSL. TREE 972' FROM DER, 405' RIGHT OF CENTERLINE, 35' AGL/675' MSL.

FT WORTH ALLIANCE:

◦ RWY 16L:

LIGHT POLE 1285' FROM DER, 689' LEFT OF CENTERLINE, 48' AGL/697' MSL. WATER TOWER 1.8 NM FROM DER, 3122' RIGHT OF CENTERLINE, 148' AGL/954' MSL.

◦ RWY 16R:

FENCE 4' FROM DER, 250' RIGHT OF CENTERLINE, 12' AGL/669' MSL. WATER TOWER 1.8 NM FROM DER, 2521' RIGHT OF CENTERLINE, 148' AGL/954' MSL. TOWER 1.5 NM SOUTH OF DER, 4138' RIGHT OF CENTERLINE, 203' AGL/1002' MSL.

◦ RWY 34L:

FENCE 8' FROM DER, 250' LEFT OF CENTERLINE, 6' AGL/719' MSL. RAILROAD 421' FROM DER, 409' LEFT OF CENTERLINE, 23' AGL/738' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 6)**WYLIE DEPARTURE (CONT):**

- RWY 34R:

ANTENNA 218' FROM DER, 146' LEFT OF CENTERLINE, 28' AGL/728' MSL.

FT WORTH MEACHAM INTL:

- RWY 9:

WINDSOCK 293' FROM DER, 354' LEFT OF CENTERLINE, 51' AGL/721' MSL. SIGN ON BUILDING 481' FROM DER, 407' RIGHT OF CENTERLINE, 39' AGL/702' MSL. SIGN 2448' FROM DER, 540' LEFT OF CENTERLINE, 75' AGL/742' MSL. GRAIN ELEVATORS BEGINNING 7085' FROM DER, 2191' LEFT OF CENTERLINE, UP 229' AGL/877' MSL.

- RWY 16:

TOWER 5.8 NM SOUTHEAST FROM DER, 1113' AGL/1743' MSL, BLDG 3.5 NM SOUTHEAST FROM DER, 590' AGL/1196' MSL.

- RWY 17:

BUSH 13' FROM DER, 160' RIGHT OF CENTERLINE, 21' AGL/674' MSL. ANTENNA 953' FROM DER, 394' LEFT OF CENTERLINE, 72' AGL/722' MSL. HANGAR 1380' FROM DER, 744' LEFT OF CENTERLINE, 43' AGL/703' MSL.

- RWY 27:

TREE 239' FROM DER, 492' LEFT OF CENTERLINE, 35' AGL/685' MSL.

- RWY 34:

MULTIPLE TREES 974' FROM DER, 682' RIGHT OF CENTERLINE, UP TO 47' AGL/746' MSL.

- RWY 35:

TREE 1' FROM DER, 248' LEFT OF CENTERLINE, 40' AGL/690' MSL. TREE 567' FROM DER, 225' RIGHT OF CENTERLINE, 45' AGL/699' MSL. BUSH 55' FROM DER, 143' LEFT OF CENTERLINE, 21' AGL/681' MSL. OBSTACLE LIGHT ON DAM 1359' FROM DER, 1' RIGHT OF CENTERLINE, 46' AGL/706' MSL.

General Information

Location: Houston TX USA

IATA Code:

Lat/Long: N29° 48.3' W095° 53.9'

Elevation: 166 ft

Airport Use: Public

Magnetic Variation: 3.4 °E

Sectional Chart: Houston

Fuel Types: 100 Octane (LL), Jet A

Customs: No

Airport Type: IFR

Landing Fee: No

Control Tower: No

Jet Start Unit: No

LLWS Alert: No

Beacon: Yes

Sunrise: 1252 Z

Sunset: 0021 Z,

Runway Information

Runway: 18

Length x Width: 6610 ft x 100 ft

Surface Type: asphalt

TDZ-Elev: 166 ft

Lighting: Edge, REIL, Pilot controlled

Runway: 36

Length x Width: 6610 ft x 100 ft

Surface Type: asphalt

TDZ-Elev: 164 ft

Lighting: Edge, REIL, Pilot controlled

Communication Information

AWOS 119.525

Houston Executive Unicom 122.975 CTAF PCL

Houston Approach Control 123.8

Houston Departure Control 123.8

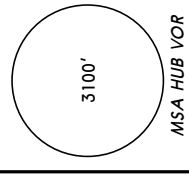
Iah Clearance Delivery AN GCO 121.725

HOBBY D-ATIS
124.6

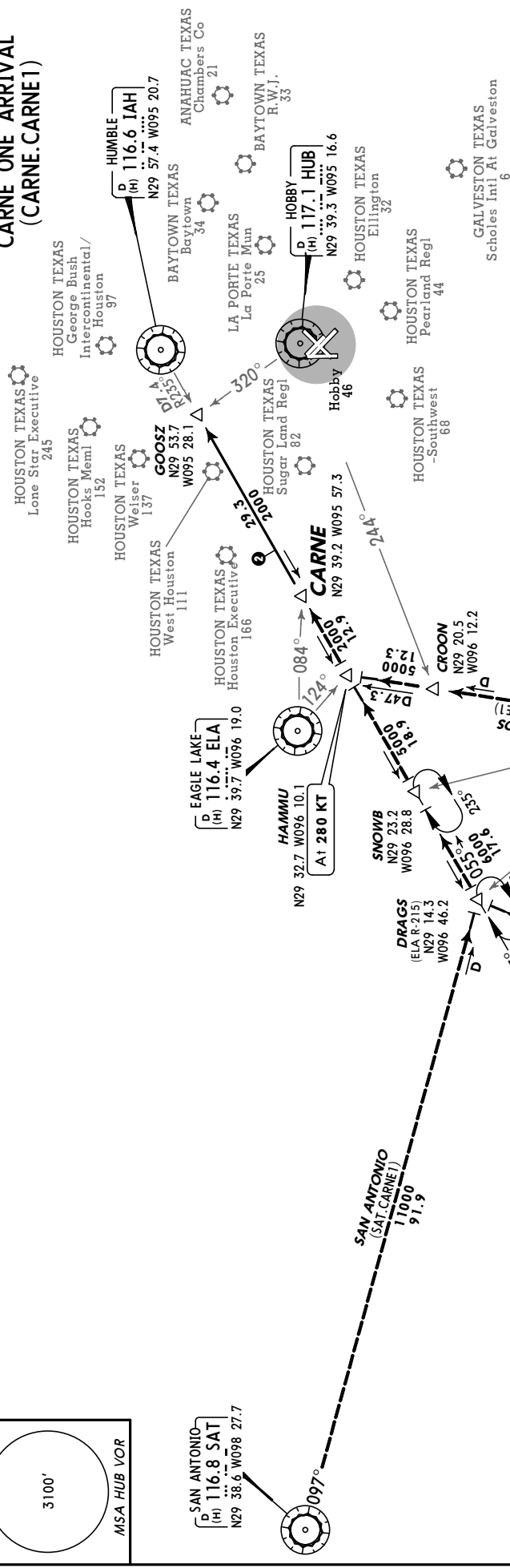
Ap'l Elev
See graphic

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

1. For conventional navigation equipped aircraft only.
2. DME/DME/IRU or GPS equipped aircraft file via the HAMMU (RNAV) STAR.
3. Also Serves 1



CARNE ONE ARRIVAL
(CARNE.CARNE1)



2
EXPECT vectors to
final approach course
at or prior to GOOSZ

Direct distance from GOOSZ to:
Hobby Apt 18 NM

Direct distance from GOOSZ to:
1 AIRPORTS SERVED

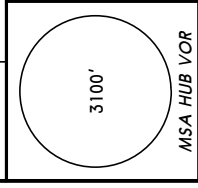
- Baytown 28 NM
- Brazoria Co 47 NM
- Chambers Co 43 NM
- Ellington 24 NM
- Houston Executive 23 NM
- La Porte Mun 25 NM
- Pearland Regl 25 NM
- R.W.J. 33 NM
- Scholes Intl at Galveston 49 NM
- Southwest 23 NM
- Sugar Land Regl 19 NM
- Weiser 9 NM
- West Houston 12 NM

ROUTING

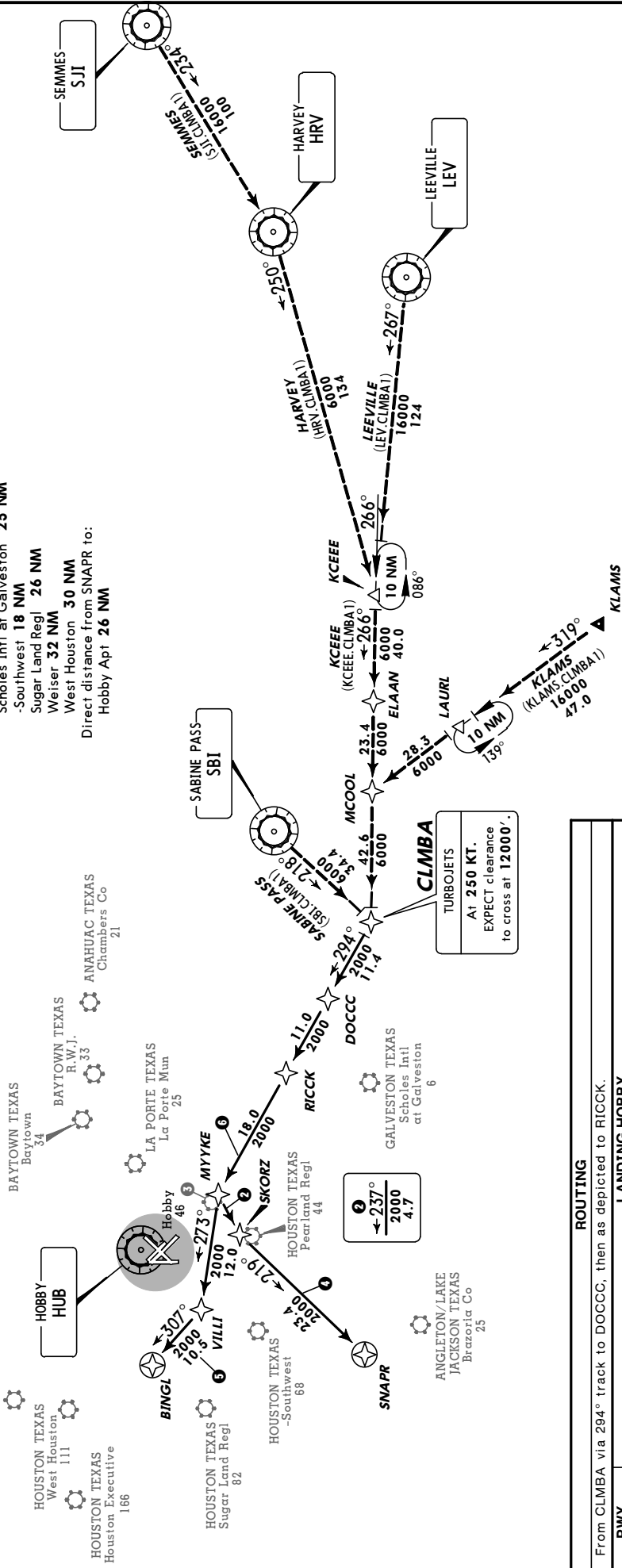
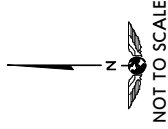
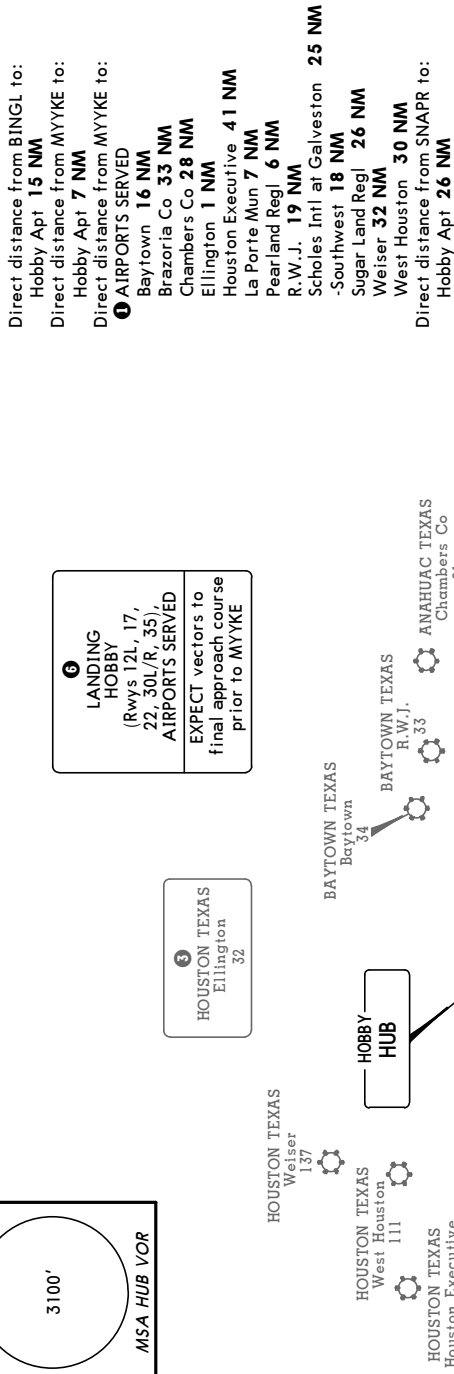
From CARNE via IAH R-235 to GOOSZ. EXPECT vectors to final approach course at or prior to GOOSZ.

Alt Set: INCHES Trans level: FL180 Trans alt: 18000'
1. RADAR required: 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. HARVEY transition: For non-GPS equipped aircraft DAS, HRV,
LCH, LEV, LLA and RQR must be operational.

5. KUEMS transition: For non-GPS equipped aircraft DAS, LCH and LLA must be operational.
6. KLAMS transition: For non-GPS equipped aircraft DAS, LCH, MHF and VUH must be operational.
7. LEEVILLE transition: For non-GPS equipped aircraft DAS, LCH and LLA must be operational.
8. SEWMES transition: For non-GPS equipped aircraft DAS, HRV, LCH, LEV, LLA and RQR must be operational.
9. Also Serves **1**



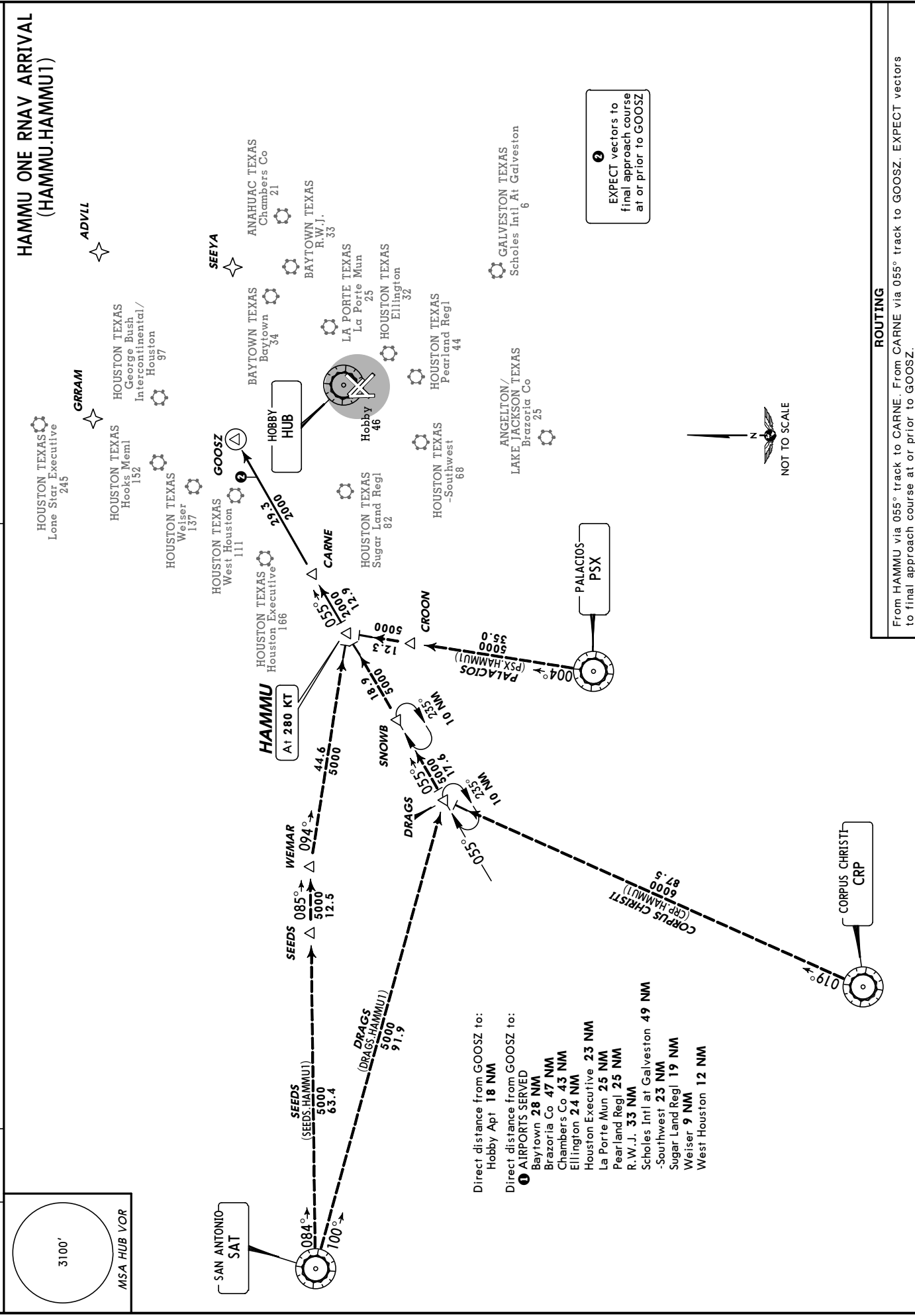
**COLUMBIA ONE RNAV ARRIVAL
(CLMBA.CLMBAT)**



ROUTING	
From CLMBA via 294° track to DOCCC, then as depicted to RICKC.	
RWY	LANDING HOBBY
4	From RICKC via 294° track to MYYKE, then as depicted to SNAPR. ④ EXPECT vectors to final approach course prior to SNAPR, if not received by SNAPR fly present heading.
12R	From RICKC via 294° track to MYYKE, then as depicted to BINGL. ⑤ EXPECT vectors to final approach course prior to BINGL, if not received by BINGL fly present heading.
ALL OTHER	From RICKC via 294° track to MYYKE. EXPECT vectors to final approach course prior to MYYKE..
LANDING AIRPORTS SERVED	
From RICKC via 294° track to MYYKE. EXPECT vectors to final approach course prior to MYYKE.	

CHANGES: Procedure reindexed, airports served (LISSE Arrival cancelled).

HOBBY D-ATIS 124.6	<i>Apt Elev</i> <i>See graphic</i>	Alt Set: INCHES Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1. 4. CORPUS CHRISTI transition: For non-GPS equipped aircraft IDU, PSX and VCT DMEs must be operational. 5. DRAGS transition: For non-GPS equipped aircraft IDU, PSX, SAT, THX and VCT DMEs must be operational.	6. PALACIOS transition: For non-GPS equipped aircraft VCT DME must be operational. 7. SEEDS transition: For non-GPS equipped aircraft ELA, IDU, SAT and THX DMEs must be operational. 8. Also Serves 1



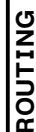
Alt Set: INCHES Trans level: FL180 Trans alt: 18000'

1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. ATC assigned only, do not file. 5. For non-GPS equipped aircraft
LCH, LLA and SBI DMEs must be operational. 6. Also Serves

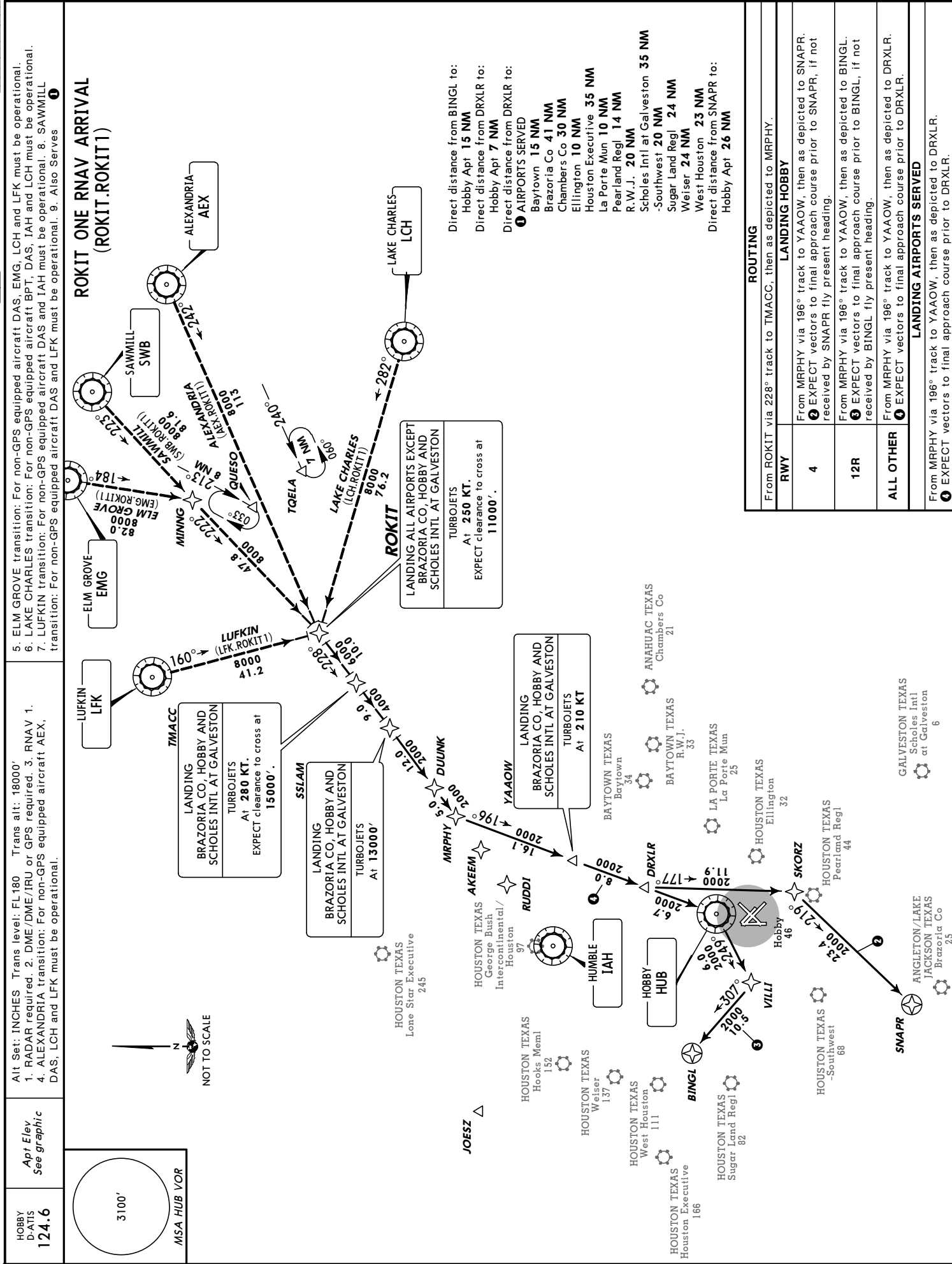


KABOY

TURBOJETS
At **280 KT.**
EXPECT clearance
to cross at **11000'.**



From KABOY via 298° track to BUKLE, then via 277° track to HUB.
EXPECT vectors to final approach course at or prior to HUB.



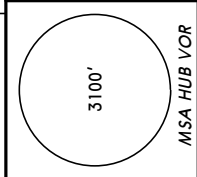
CHANGES: Procedure reapproved airports served

Alt Set: INCHES Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. CORPUS CHRISTI transition: For non-GPS equipped aircraft COT, CRP, PSX and VCT DMEs must be operational.

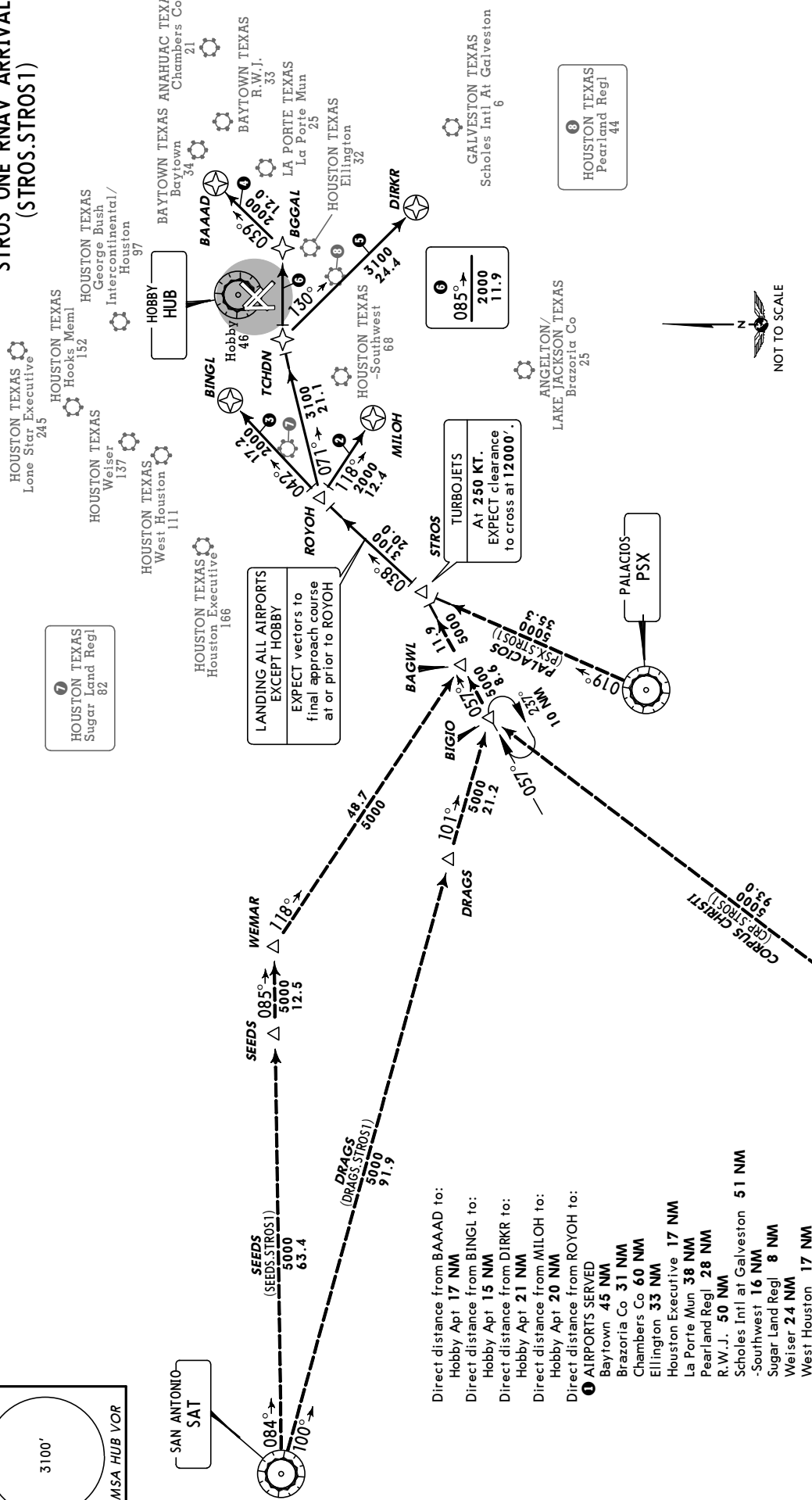
Alt Set: INCHES Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. DME/DME/IRU or GPS required. 3.
4. CORPUS CHRISTI transition: For non-GPS equipped aircraft must be operational.

6. PALACIOS transitional. 7. SEEDS transitional. SAT DMEs must be c

5. DRAGS transition: For non-GPS equipped aircraft, CWK, PSX and SAT DME must be operational. 6. PALACIOS transition: For non-GPS equipped aircraft ELA, PSX and SAT DME must be operational. 7. SEEDS transition: For non-GPS equipped aircraft CWK, ELA, PSX and SAT DMEs must be operational. 8. Also Serves 1



STROS ONE RNAV ARRIVAL
(STROS.STROS1)



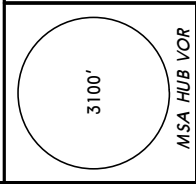
ROUTING	
	From STROS via 038° track to ROYOH.
RWY	LANDING HOBBY
4	From ROYOH via 118° track to MILOH. 2 EXPECT vectors to final approach course at or prior to MILOH. If not received by MILOH, 5 PRESENT heading.
12R	From ROYOH via 042° track to BINGL. 3 EXPECT vectors to final approach course at or prior to BINGL. If not received by BINGL, fly present heading.
22	From ROYOH via 071° track to TCHDN, then as depicted to BAAAD. 4 EXPECT vectors to final approach course at or prior to BAAAD. If not received by BAAAD, fly present heading.
30L	From ROYOH via 071° track to TCHDN, then as depicted to DIRKR. 5 EXPECT vectors to final approach course at or prior to DIRKR. If not received by DIRKR, fly present heading.

HOUSTON Departure (R)
132.25

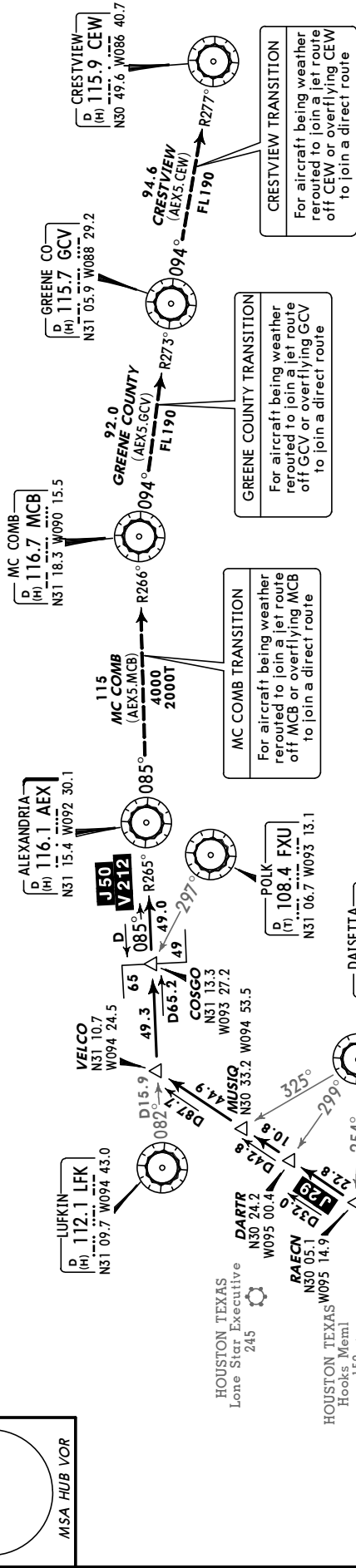
Apt Elev
See graphic

Trans level: FL180 Trans alt: 18000'

1. **RADAR required.**
2. CRESTVIEW, GREENE COUNTY and MC COMB Transitions are ATC assigned only, do not file.
3. Also serves **1**



ALEXANDRIA FIVE DEPARTURE
(AEX5.AEX)



OBSTACLE
For TAKEOFF OBSTACLE NOTES
see 10-30B1.

This SID requires take-off minimums
(for standard minimums, refer to airport chart):
ELLINGTON: Rwy 4, 17L/R, 22, 35L/R: Standard
(or lower than standard, if authorized).
HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.
Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).
Rwy 17: 300-1.
Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290' per
NM to **1500'**.
HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).
HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).
LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

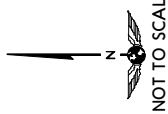
SCHOLES INTL at GALVESTON:
Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).
Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.
SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).
TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).
WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).
WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

Direct distance from Hobby Apt to:
RAECN **26 NM**
Direct distance from AIRPORTS
SERVED to RAECN:
1 AIRPORTS SERVED
Ellington **29 NM**
Houston Executive **38 NM**
La Porte Mun **27 NM**
Scholes Intl at Galveston **53 NM**
-Southwest **37 NM**
Sugar Land Regl **35 NM**
Texas Gulf Coast Regl **59 NM**
Weiser **22 NM**
West Houston **27 NM**

AIRPORT		INITIAL CLIMB		ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to RAECN.			MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to RAECN.			MAINTAIN 4000'
1 ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.			

ROUTING
At RAECN, via IAH R-028 to VELCO, then RIGHT turn via LFK R-082 and AEX R-265 to AEX.
EXPECT filed altitude 10 minutes after departure.

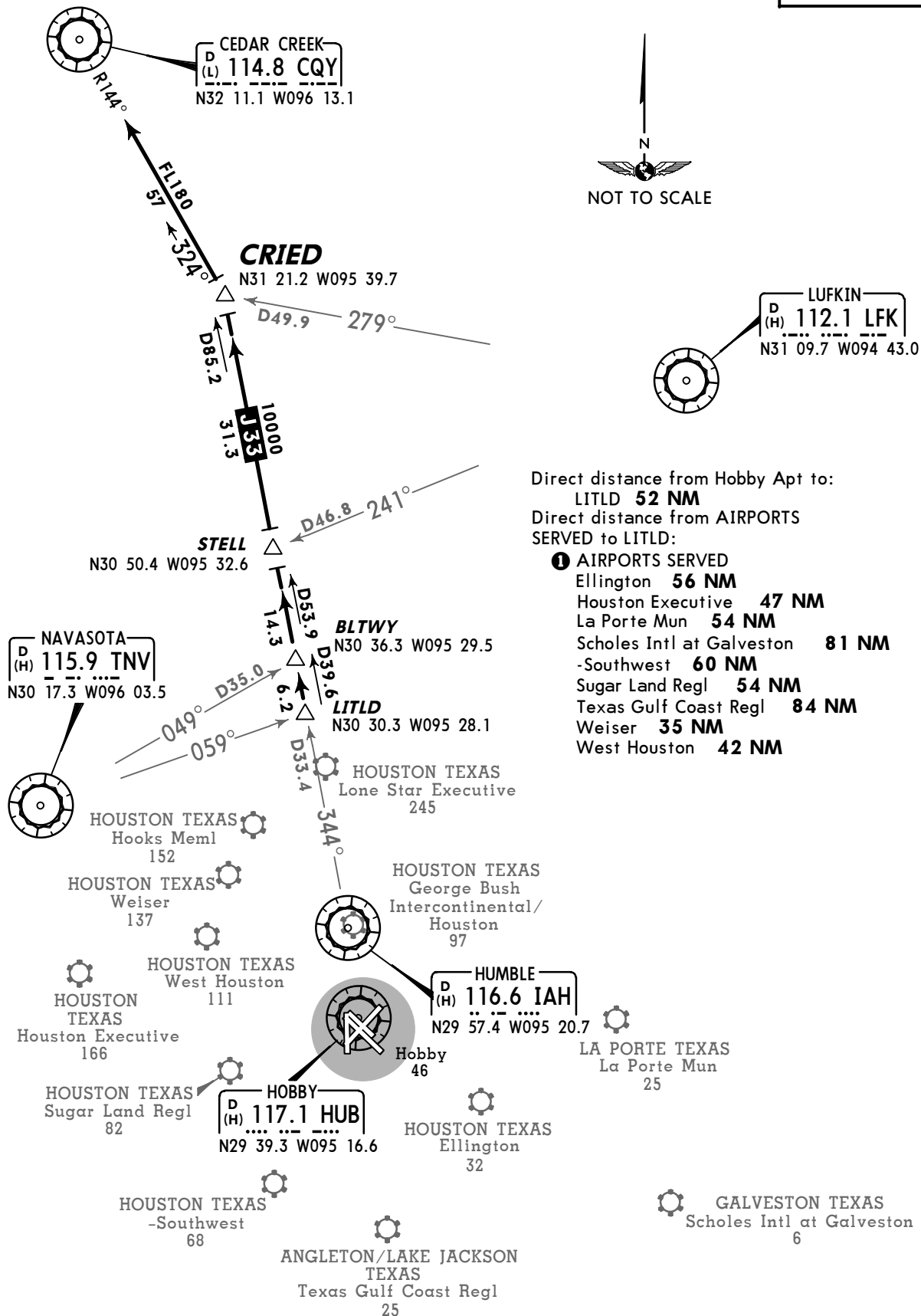


HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. RADAR required.
2. Also serves ①

3100'

MSA HUB VOR

CRIED FOUR DEPARTURE (CRIED4.CRIED)

For Procedure Text, Takeoff Minimums
see 10-3A-1

CRIED FOUR DEPARTURE (CRIED4.CRIED)

For Procedure Graphic see 10-3A

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to LITLD.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to LITLD.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD.	
ROUTING		
At LITLD, via IAH R-344 to STELL, then via IAH R-344 to CRIED, then LEFT turn via CQY R-144 to CQY. EXPECT filed altitude 10 minutes after departure.		

HOUSTON
Departure (R)
132.25*Apt Elev*
See graphic

Trans level: FL180 Trans alt: 18000'

1. RADAR required.2. For aircraft destined Memphis Intl, or filed
via Q-32 or J-42.3. Also serves **1**

3100'

MSA HUB VOR

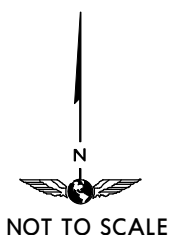
EL DORADO THREE DEPARTURE (ELD3.ELD)For Procedure Text and Takeoff Minimums
see 10-3B-1

Direct distance from Hobby Apt to:

RAECN **26 NM**

Direct distance from AIRPORTS

SERVED to RAECN:

1 AIRPORTS SERVEDEllington **29 NM**Houston Executive **38 NM**La Porte Mun **27 NM**Scholes Intl at Galveston **53 NM**-Southwest **37 NM**Sugar Land Regl **35 NM**Texas Gulf Coast Regl **59 NM**Weiser **22 NM**West Houston **27 NM**

NOT TO SCALE

EL DORADO
D (H) 115.5 ELD
N33 15.4 W092 44.6LUFKIN
D (H) 112.1 LFK
N31 09.7 W094 43.0ENJOY
N31 16.7
W094 19.8VELCO
N31 10.7
W094 24.5HOUSTON TEXAS
Lone Star Executive
245
DARTR
N30 24.2
W095 00.4HOUSTON TEXAS
Hooks Meml
152HOUSTON TEXAS
Weiser
137HOUSTON TEXAS
West Houston
111HOUSTON TEXAS
Houston Executive
166HOUSTON TEXAS
Sugar Land Regl
82HOUSTON TEXAS
-Southwest
68ANGLETON/
LAKE JACKSON TEXAS
Texas Gulf Coast Regl
25Hobby
46HOUSTON TEXAS
Ellington
32LA PORTE TEXAS
La Porte Mun
25GALVESTON TEXAS
Scholes Intl
at Galveston
6HUMBLE
D (H) 116.6 IAH
N29 57.4 W095 20.7HOUSTON TEXAS
George Bush
Intercontinental/
Houston
97HOBBY
D (H) 117.1 HUB
N29 39.3 W095 16.6DAISETTA
D (H) 116.9 DAS
N30 11.4 W094 38.7**OBSTACLE**

For TAKEOFF OBSTACLE NOTES see 10-3OB1.

EL DORADO THREE DEPARTURE (ELD3.ELD)

For Procedure Graphic see 10-3B
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

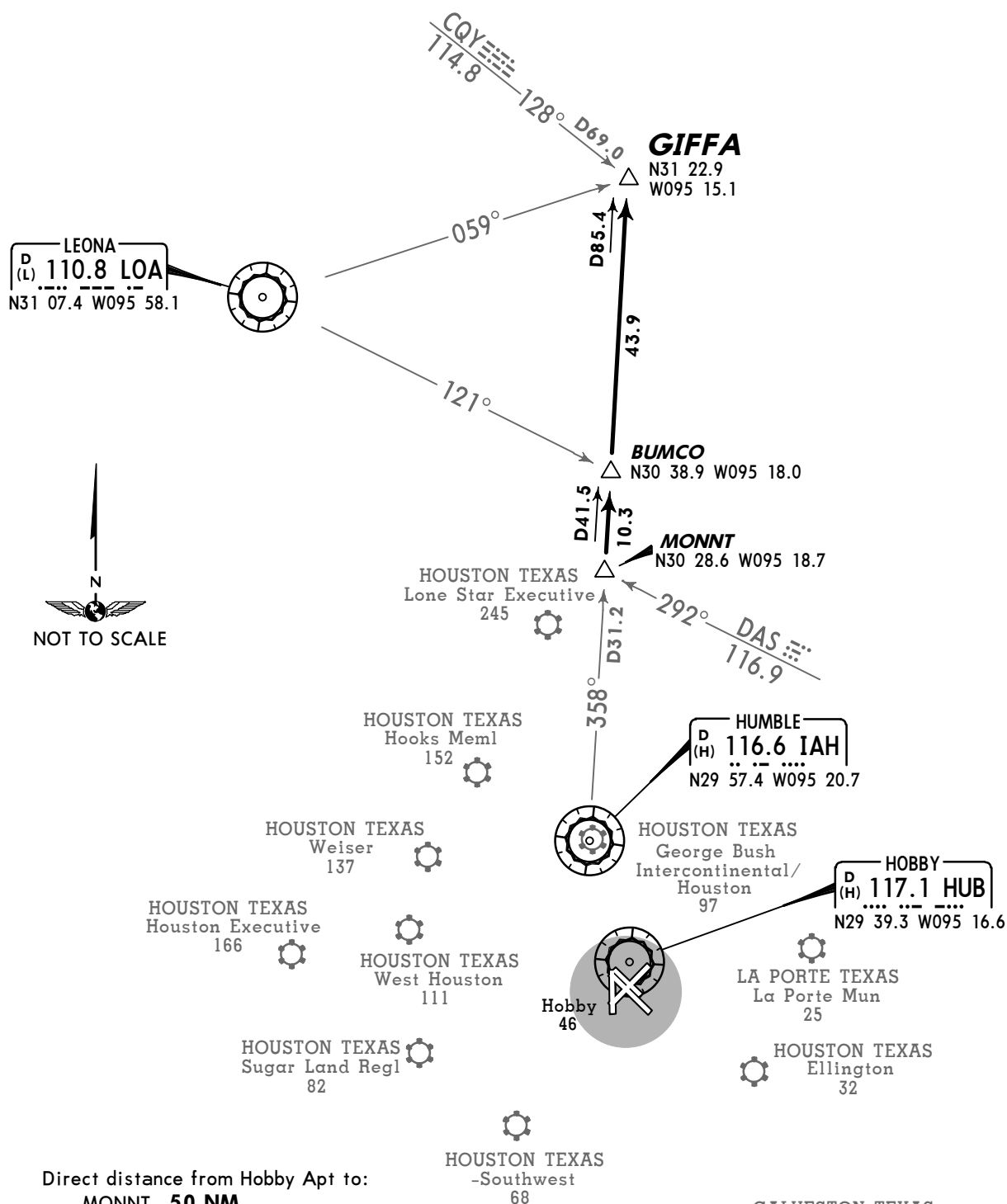
Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.	
ROUTING		
At RAECN via IAH R-028 and the ELD R-208 to ELD. EXPECT filed altitude 10 minutes after departure.		

HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. RADAR required.
2. Also serves **1**

3100'

MSA HUB VOR

GIFFA FOUR DEPARTURE (GIFFA4.GIFFA)For Procedure Text and Takeoff Minimums
see 10-3C-1Direct distance from Hobby Apt to:
MONNT 50 NMDirect distance from AIRPORTS
SERVED to MONNT:

- 1 AIRPORTS SERVED**
- Ellington **53 NM**
 - Houston Executive **51 NM**
 - La Porte Mun **50 NM**
 - Scholes Intl at Galveston **76 NM**
 - Southwest **59 NM**
 - Sugar Land Regl **54 NM**
 - Texas Gulf Coast Regl **82 NM**
 - Weiser **37 NM**
 - West Houston **44 NM**

OBSTACLEFor TAKEOFF OBSTACLE NOTES
see 10-3OB1.

GIFFA FOUR DEPARTURE (GIFFA4.GIFFA)

For Procedure Graphic see 10-3C

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

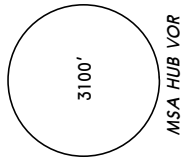
AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to MONNT.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to MONNT.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT.	
ROUTING		
At MONNT, via IAH R-358 to GIFFA. EXPECT filed altitude 10 minutes after departure.		

HOUSTON
Departure (R)
132.25

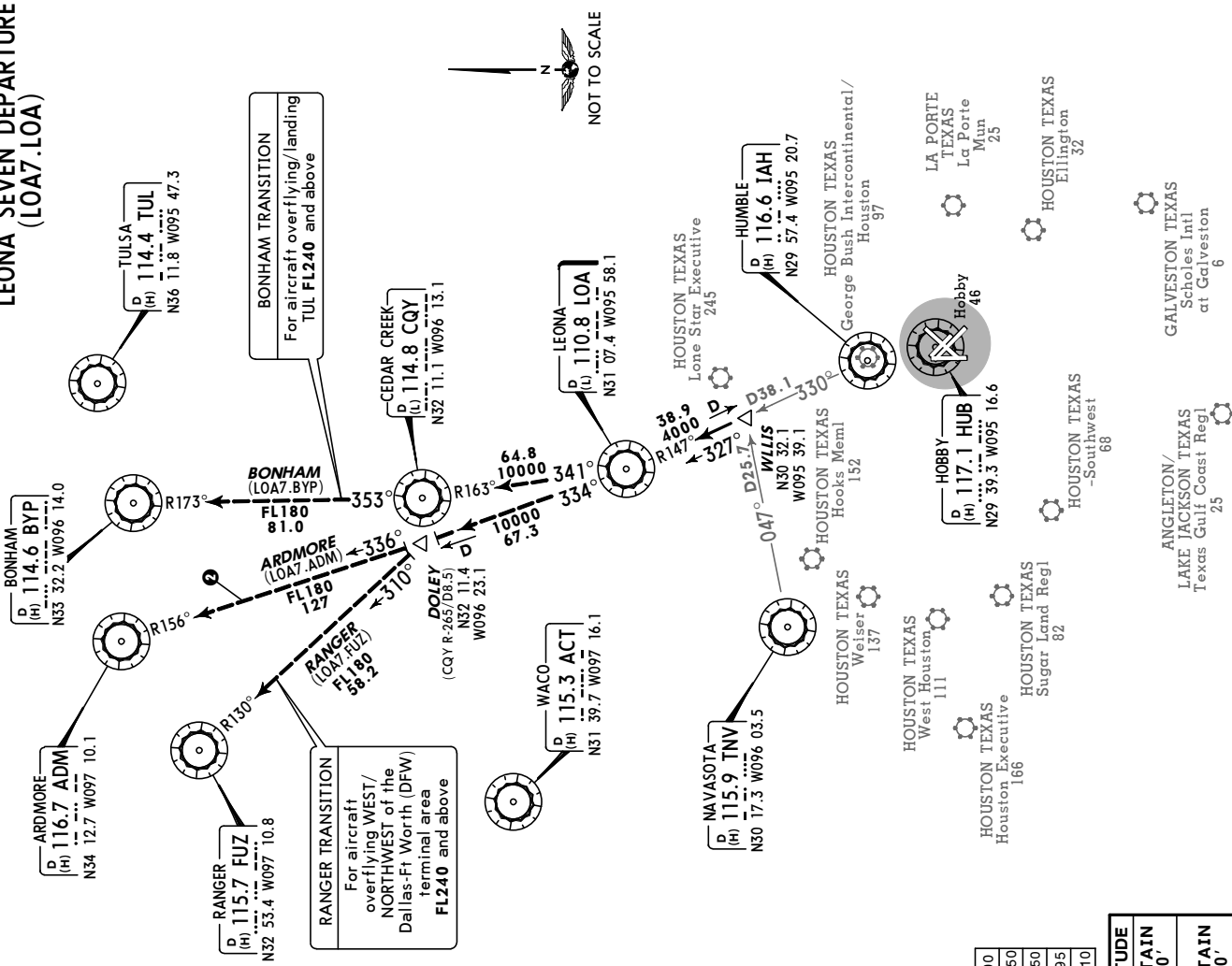
Apt Elev
See graphic

Trans level: FL180 Trans alt: 18000'

1. **RADAR** required.
2. Also serves **1**



LEONA SEVEN DEPARTURE
(LOA7.LOA)



This SID requires take-off minimums (for standard minimums, refer to airport chart):
ELLINGTON: Rwy 4, 17L/R, 22, 35L/R: Standard (or lower than standard, if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower than standard, if authorized) with a minimum climb of 270' per NM to **300'**.
Rwys 12L/R, 30L/R, 35: Standard (or lower than standard, if authorized).

Rwy 17: 300-1.
Rwy 22: Standard (or lower than standard, if authorized) with a minimum climb of 290 per NM to 1500'.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard (or lower than standard, if authorized)

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard (or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard (or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than standard, if authorized).

Rwy 17: 200-1 or standard (or lower than standard, if authorized) with minimum
Weiser **36 NM**
Texas Gulf Coast Regl **86 NM**

standard, it authorized) with minimum
climb of 500' per NM to 300'

SUGAR LAND REGL: Rwy's 17, 35: Standard (or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or

lower than standard, if authorized) with minimum climb of 399' per NM to **400'**.

Rwy 27: Standard (or lower than standard, if authorized).

WEST HOUSTON: Rwy 15, 33: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

INITIAL CUMR

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to WILLIS.	MAINTAIN 5000'.
ELLINGTON	Climb on assigned heading for RADAR vectors to WILLIS.	MAINTAIN 4000'.
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to WILLIS.	

ROUTING

At WLLIS, via LOA R-147 to LOA. EXPECT filed altitude 10 minutes after departure.

HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. **RADAR required.**
2. For aircraft destined LIT, or overflying
LIT or PXV.
3. Also serves ①

3100'

MSA HUB VOR

LUFKIN SIX DEPARTURE (LFK6.LFK)

For Procedure Text and Takeoff Minimums
see 10-3F-1

Direct distance from Hobby Apt to:

KYANN 37 NM

Direct distance from AIRPORTS
SERVED to KYANN:

① AIRPORTS SERVED

Ellington 39 NM

Houston Executive 44 NM

La Porte Mun 36 NM

Scholes Intl at Galveston 63 NM

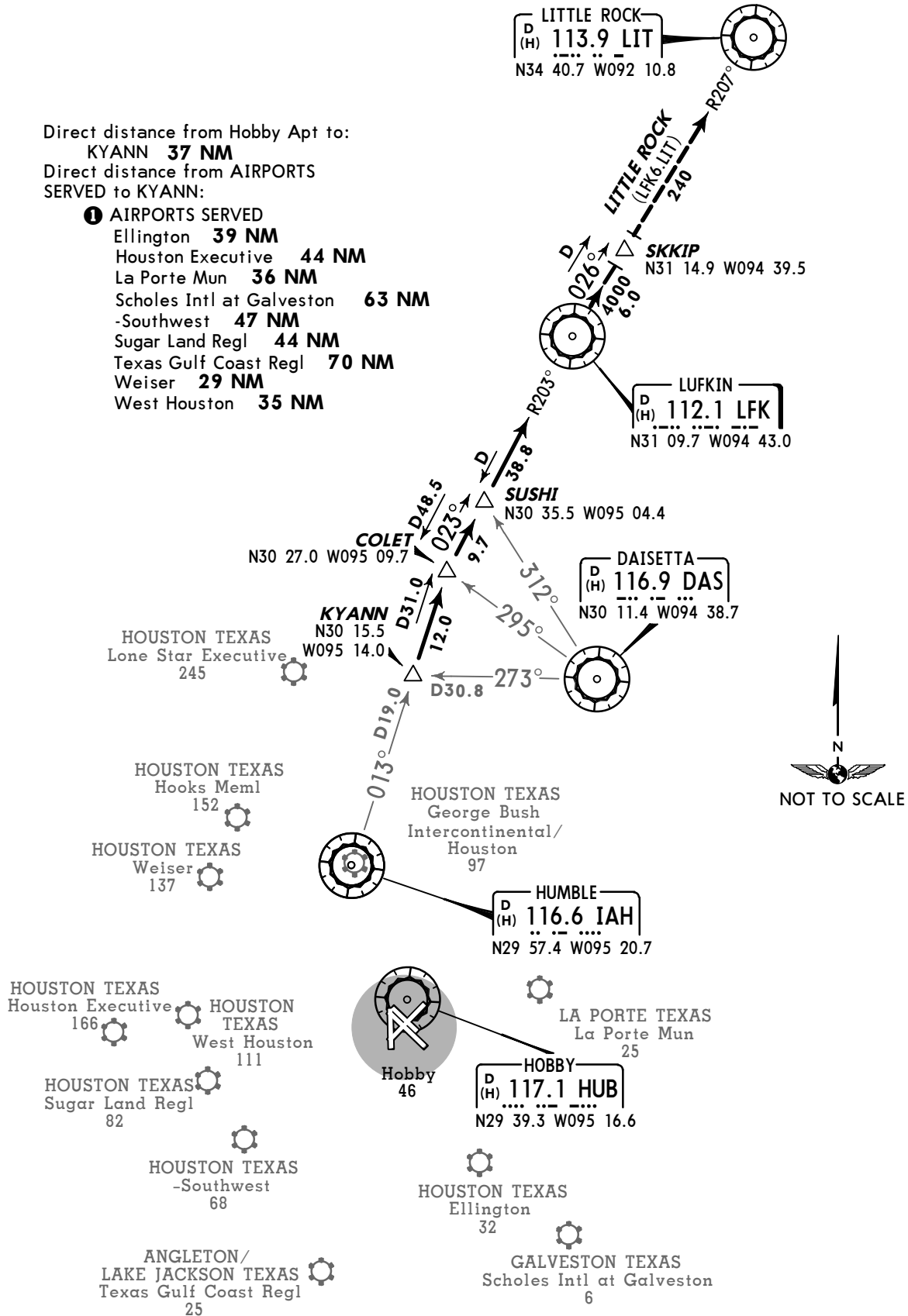
-Southwest 47 NM

Sugar Land Regl 44 NM

Texas Gulf Coast Regl 70 NM

Weiser 29 NM

West Houston 35 NM



OBSTACLE

For TAKEOFF OBSTACLE NOTES see 10-3OB1.

LUFKIN SIX DEPARTURE (LFK6.LFK)

For Procedure Graphic see 10-3F
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to KYANN.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to KYANN.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN.	
ROUTING		
At KYANN via IAH R-013 to COLET, then RIGHT turn via LFK R-203 to LFK. EXPECT filed altitude 10 minutes after departure.		

Trans level: FL180 Trans alt: 18000'

1. **RADAR required.**
2. Also serves ①

SID

see 10-3G-1



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PALACIOS FOUR DEPARTURE (PSX4.PSX)

For Procedure Graphic see 10-3G
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwys 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to SKUBA.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to SKUBA.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA.	
ROUTING		
At SKUBA via PSX R-038 to PSX. EXPECT filed altitude 10 minutes after departure.		

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[illegible]

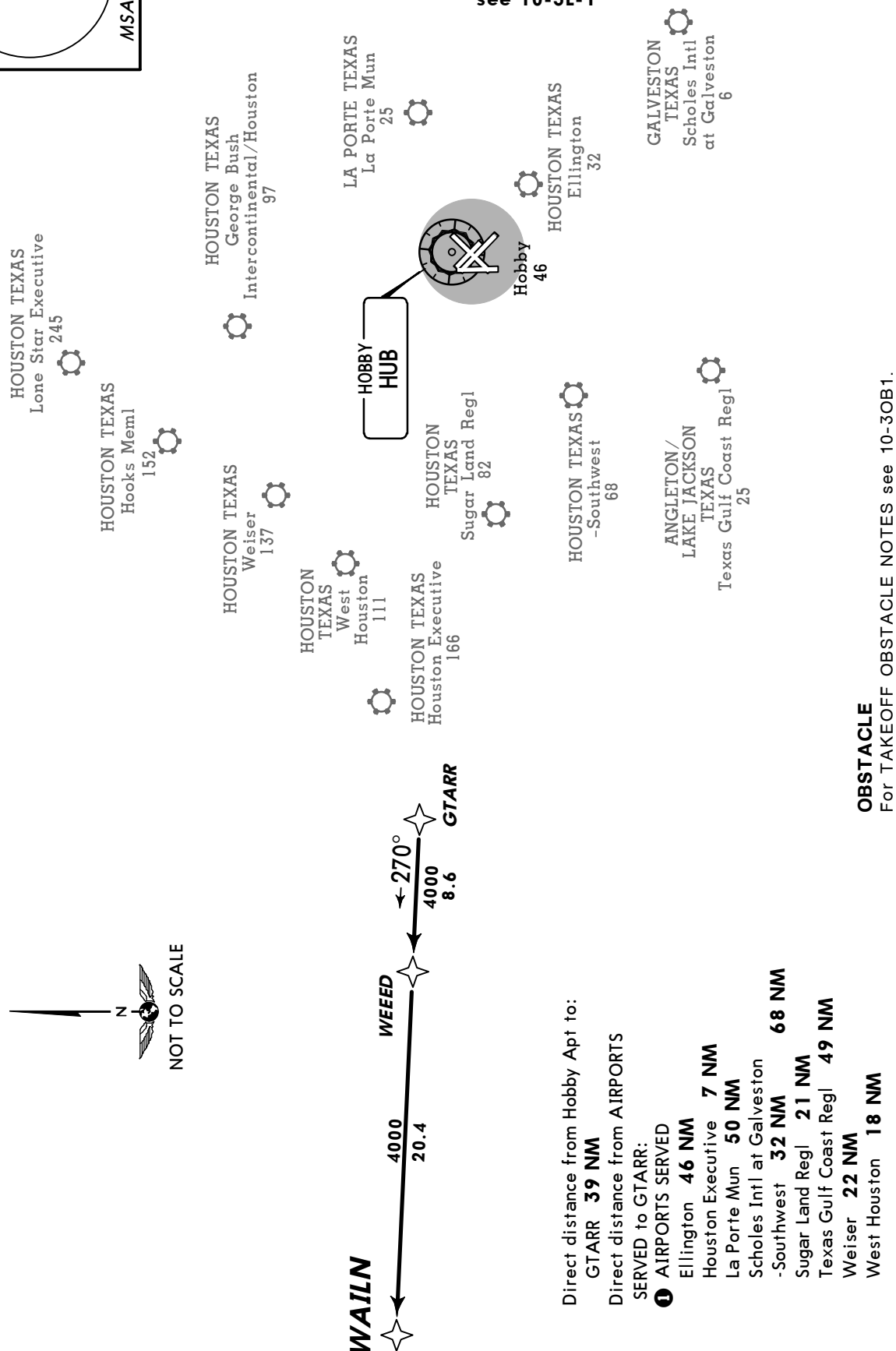
Trans level: FL180 Trans alt: 18000'

1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.

4. For advanced navigation aircraft destined Austin/San Antonio terminal areas. Austin: Departing all Houston airports except George Bush Intercontinental/Houston, Hooks Meml, Lone Star Executive. San Antonio: Departing all Houston airports. 5. Also serves



**For Procedure Text and Takeoff Minimums
see 10-3L-1**



OBSTACLE
For TAKEOFF OBSTACLE NOTES see 10-30B1.

WAILN ONE RNAV DEPARTURE (WAILN1.WAILN)

For Procedure Graphic see 10-3L

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.

Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: ATC climb
gradient 213' per NM to 4000'.

Gnd speed-KT	75	100	150	200	250	300
213' per NM	266	355	533	710	888	1065
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to GTARR.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to GTARR.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to GTARR.	
ROUTING		
At GTARR, EXPECT filed altitude 10 minutes after departure on depicted route to WAILN.		

TAKEOFF OBSTACLE NOTES**ELLINGTON**

- RWY 17R:
POLE 1489' FROM DER, 817' RIGHT OF CENTERLINE, 40' AGL/74' MSL.
- RWY 22:
ANTENNA ON BUILDING 1998' FROM DER, 598' RIGHT OF CENTERLINE, 54' AGL/83' MSL. OBSTACLE LIGHT ON GLIDESLOPE 327' FROM DER, 543' LEFT OF CENTERLINE, 39' AGL/68' MSL.
- RWY 35L:
MULTIPLE TREES BEGINNING 1118' FROM DER, 679' RIGHT OF CENTERLINE, UP TO 37' AGL/77' MSL. CRANE 2352' FROM DER, 1024' LEFT OF CENTERLINE, 37' AGL/97' MSL.
- RWY 35R:
TREE 1597' FROM DER, 32' LEFT OF CENTERLINE, 33' AGL/80' MSL.

HOBBY

- RWY 4:
POLE 4403' FROM DER, 1069' RIGHT OF CENTERLINE, 121' AGL/166' MSL. LIGHT ON BUILDING 1562' FROM DER, 859' RIGHT OF CENTERLINE, 59' AGL/103' MSL. BUILDING 3990' FROM DER, 1223' RIGHT OF CENTERLINE, 139' AGL/174' MSL. LIGHT ON FLAGPOLE 4618' FROM DER, 768' RIGHT OF CENTERLINE, 117' AGL/161' MSL.
- RWY 12L:
ANTENNA ON HANGAR 1548' FROM DER, 424' LEFT OF CENTERLINE, 45' AGL/85' MSL.
- RWY 12R:
VEHICLE ON ROAD 514' FROM DER, 543' RIGHT OF CENTERLINE, 17' AGL/55' MSL. TREE 1217' FROM DER, 756' RIGHT OF CENTERLINE, 43' AGL/89' MSL. FENCE 85' FROM DER, 492' LEFT OF CENTERLINE, 4' AGL/45' MSL. VEHICLE AND ROAD 176' FROM DER, 497' LEFT OF CENTERLINE, 17' AGL/55' MSL. POLE 1011' FROM DER, 696' LEFT OF CENTERLINE, 33' AGL/73' MSL. TREE 1256' FROM DER, 783' LEFT OF CENTERLINE, 38' AGL/78' MSL.
- RWY 17:
MULTIPLE POLES BEGINNING 606' FROM DER, 393' RIGHT OF CENTERLINE, UP TO 79' AGL/124' MSL. CRANE 1795' FROM DER, 689' RIGHT OF CENTERLINE, 100' AGL/150' MSL. ANTENNA ON BUILDING 620' FROM DER, 312' LEFT OF CENTERLINE, 27' AGL/72' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 260' LEFT OF CENTERLINE, UP TO 71' AGL/116' MSL. RADAR REFLECTOR 1214' FROM DER, 258' LEFT OF CENTERLINE, 32' AGL/77' MSL.
- RWY 22:
POLE 727' FROM DER, 626' RIGHT OF CENTERLINE, 28' AGL/77' MSL. TREE 1310' FROM DER, 679' RIGHT OF CENTERLINE, 27' AGL/76' MSL. ANTENNA ON LIGHT POLE, 1805' FROM DER, 968' RIGHT OF CENTERLINE, 60' AGL/109' MSL.
- RWY 30L:
ANTENNA ON BUILDING 547' FROM DER, 274' RIGHT OF CENTERLINE, 23' AGL/69' MSL. MULTIPLE POLES BEGINNING 341' FROM DER, 501' LEFT OF CENTERLINE, UP TO 39' AGL/84' MSL. MULTIPLE TREES BEGINNING 1392' FROM DER, 466' LEFT OF CENTERLINE, UP TO 78' AGL/118' MSL.
- RWY 30R:
POLE 1096' FROM DER, 785' RIGHT OF CENTERLINE, 29' AGL/75' MSL. ANTENNA ON BUILDING 500' FROM DER, 525' LEFT OF CENTERLINE, 33' AGL/69' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 2)**HOBBY (CONTD)**

◦ RWY 35:

ANTENNA ON LIGHT POLE 738' FROM DER, 519' RIGHT OF CENTERLINE, 40' AGL/86' MSL. LIGHT POLE 1119' FROM DER, 353' RIGHT OF CENTERLINE, 31' AGL/77' MSL. ANTENNA ON BUILDING 66' FROM DER, 471' LEFT OF CENTERLINE, 33' AGL/69' MSL

HOUSTON EXECUTIVE

◦ 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

◦ 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.

LA PORTE MUN

◦ RWY 12:

TREES AND POLES BEGINNING 128' FROM DER, 42' LEFT OF CENTERLINE, UP TO 50' AGL/74' MSL. TREES AND POLES BEGINNING 131' FROM DER, 114' RIGHT OF CENTERLINE, UP TO 39' AGL/63' MSL. CHIMNEY 676' FROM DER, 412' RIGHT OF CENTERLINE, 31' AGL/55' MSL.

◦ RWY 23:

TREES BEGINNING 1320' FROM DER, 43' LEFT OF CENTERLINE, UP TO 63' AGL/87' MSL. HANGARS BEGINNING 233' FROM DER, 288' RIGHT OF CENTERLINE, UP TO 35' AGL/59' MSL. VEHICLE ON ROAD 594' FROM DER, 513' LEFT OF CENTERLINE, 15' AGL/39' MSL. TREES 1010' FROM DER, 1010' RIGHT OF CENTERLINE, UP TO 63' AGL/87' MSL.

◦ RWY 30:

TREES AND POLES BEGINNING 114' FROM DER, 67' LEFT OF CENTERLINE, UP TO 63' AGL/87' MSL. BUILDINGS 335' FROM DER, 356' LEFT OF CENTERLINE, 25' AGL/50' MSL. TREES AND POLES BEGINNING 44' FROM DER, 35' RIGHT OF CENTERLINE, UP TO 52' AGL/76' MSL.

SCHOLES INTL AT GALVESTON

◦ RWY 13:

BUSH 381' FROM DER, 533' LEFT OF CENTERLINE, 15' AGL/20' MSL. FENCE 201' FROM DER, 490' LEFT OF CENTERLINE, 6' AGL/11' MSL. TREE 343' FROM DER, 468' RIGHT OF CENTERLINE, 12' AGL/17' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 3)**SCHOLES INTL AT GALVESTON (CONTD)**

- RWY 17:
BUILDING 3057' FROM DER, 339' LEFT OF CENTERLINE, 123' AGL/130' MSL. MULTIPLE POLES BEGINNING 2034' FROM DER, 87' RIGHT OF CENTERLINE, UP TO 60' AGL/70' MSL. MULTIPLE TRANSMISSION TOWERS BEGINNING 636' FROM DER, 551' RIGHT OF CENTERLINE, UP TO 55' AGL/60' MSL. TREE 460' FROM DER, 316' RIGHT OF CENTERLINE, 22' AGL/29' MSL.
- RWY 31:
MULTIPLE CRANES BEGINNING 4341' FROM DER, 1017' LEFT OF CENTERLINE, UP TO 131' AGL/131' MSL.
- RWY 35:
TREE 730' FROM DER, 501' RIGHT OF CENTERLINE, 27' AGL/32' MSL.

SUGAR LAND REGL

- 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.
- 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.

TEXAS GULF COAST REGL

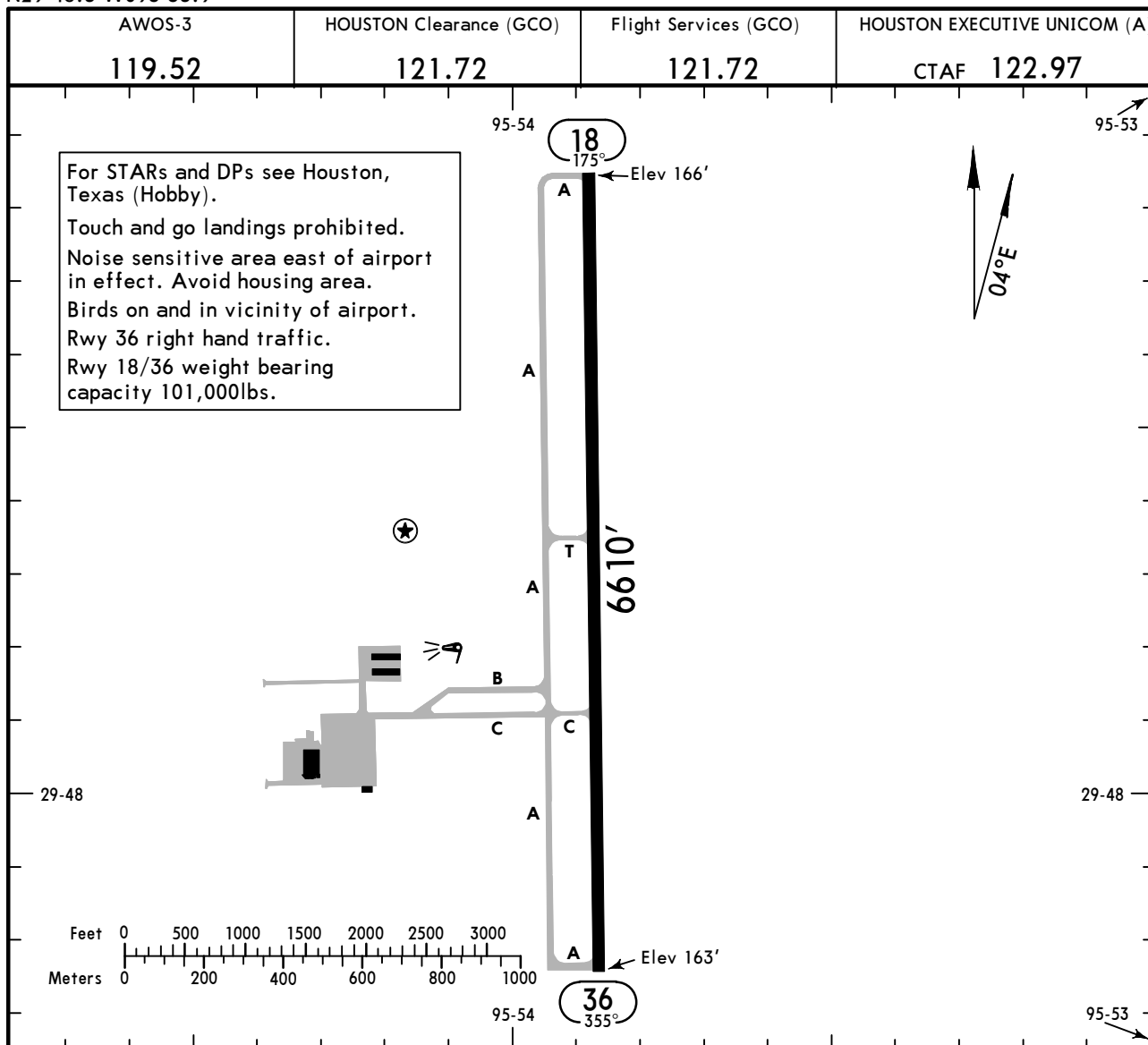
- RWY 35:
TREE 1510' FROM DER, 721' LEFT OF CENTERLINE, 48' AGL/68' MSL.

WEST HOUSTON

- RWY 15:
VEHICLES ON ROADWAY BEGINNING ABEAM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 15' AGL/124' MSL. BUILDING 177' FROM DER, 398' LEFT OF CENTERLINE, 18' AGL/126' MSL. TREES BEGINNING 178' FROM DER, 289' RIGHT OF CENTERLINE, UP TO 100' AGL/209' MSL.
- RWY 33:
BUILDING 265' FROM DER, 364' LEFT OF CENTERLINE, 35' AGL/143' MSL. TREES BEGINNING 2706' FROM DER, 700' LEFT OF CENTERLINE, UP TO 100' AGL/214' MSL. TREES BEGINNING 3159' FROM DER, 747' RIGHT OF CENTERLINE, UP TO 100' AGL/216' MSL.

WEISER

- RWY 9:
TANK 4127' FROM DER, 1455' LEFT OF CENTERLINE, 147' AGL/282' MSL.
- RWY 27:
RAILROAD 462' FROM DER, 555' LEFT OF CENTERLINE, 23' AGL/165' MSL. VEHICLE AND ROAD 650' FROM DER, 7' LEFT OF CENTERLINE, 17' AGL/159' MSL.



ADDITIONAL RUNWAY INFORMATION					
RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Landing Beyond Glide Slope		
18 36	① MIRL ① REIL PAPI-L (angle 3.0°)				100'

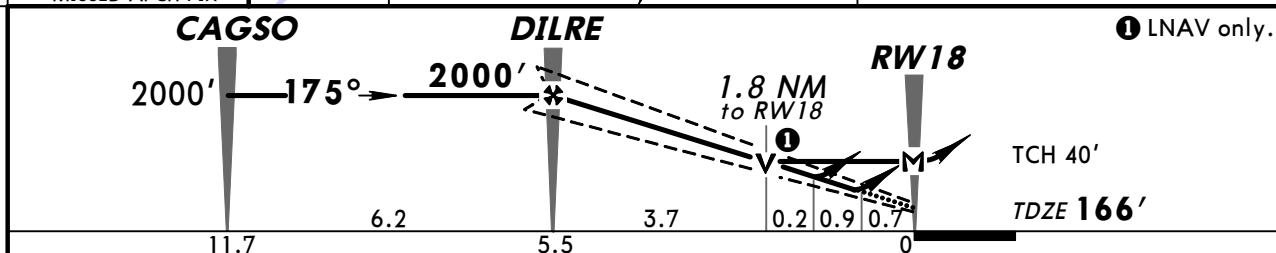
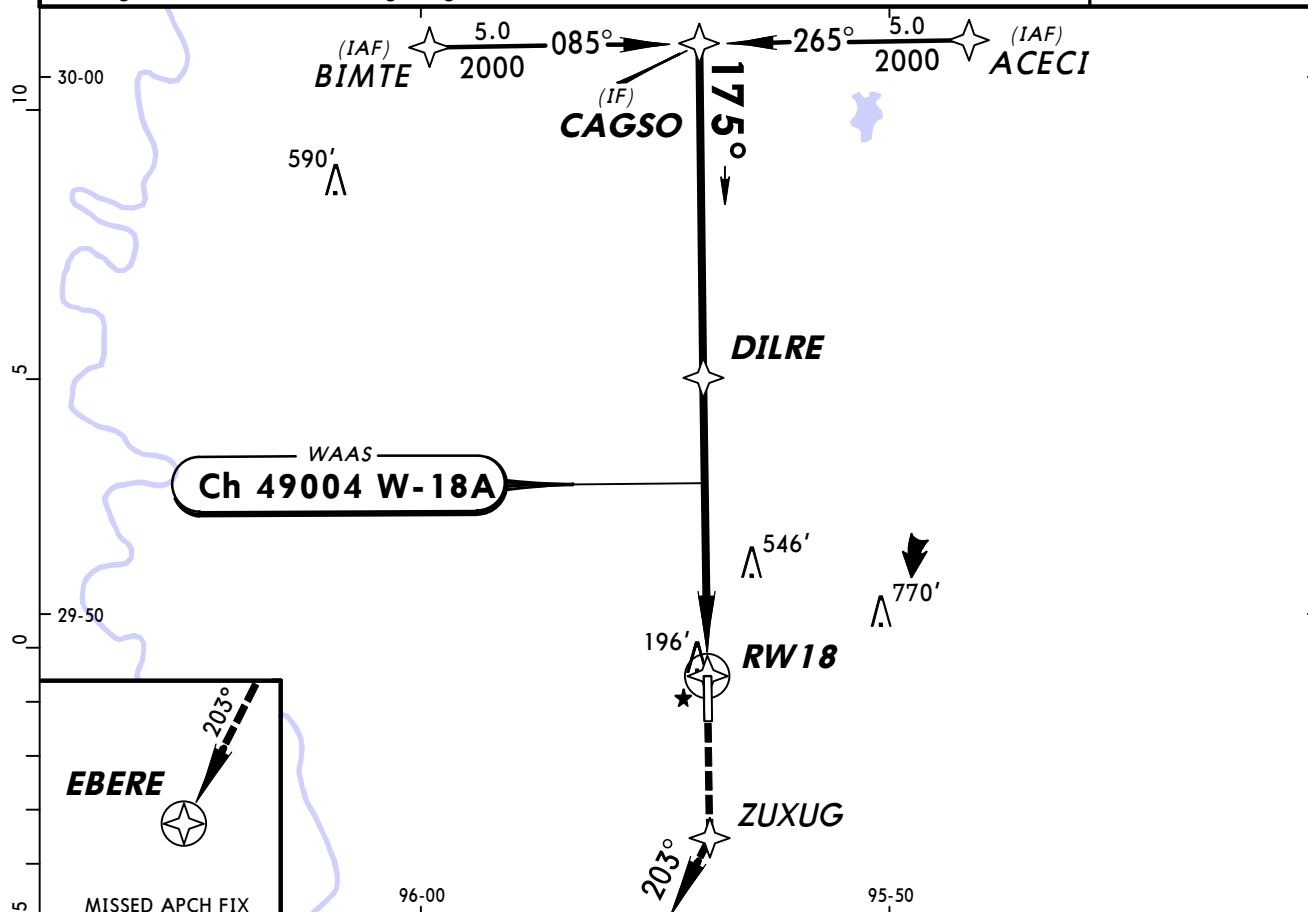
① Activate on 122.97

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE				FOR FILING AS ALTERNATE	
All Rwys					
Adequate Vis Ref		STD			
1 & 2 Eng	1/4	1	A	NA	
3 & 4 Eng		1/2	B		
			C		
	D				

OBSTACLE DP: Rwy 36, climb heading 355° to 700' before turning east.

BRIEFING STRIP™

AWOS-3 119.52			HOUSTON EXECUTIVE UNICOM (A) CTAF 122.97		
WAAS Ch 49004 W-18A	Final Apch Crs 175°	Minimum Alt DILRE 2000' (1834')	LPV DA(H) (CONDITIONAL) 418' (252')	Apt Elev 166' TDZE 166'	3100' MSA RW18
MISSED APCH: Climb to 2000' direct ZUXUG and via 203° track to EBERE and hold.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'					
1. Use local altimeter setting; if not received, use Hooks Meml altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 48°C (118°F). 4. Baro-VNAV not authorized when using Hooks Meml altimeter setting. 5. Visibility reduction by helicopters not authorized. 6. VDP not authorized when using Hooks Meml altimeter setting. 7. Pilot controlled lighting 122.97.					



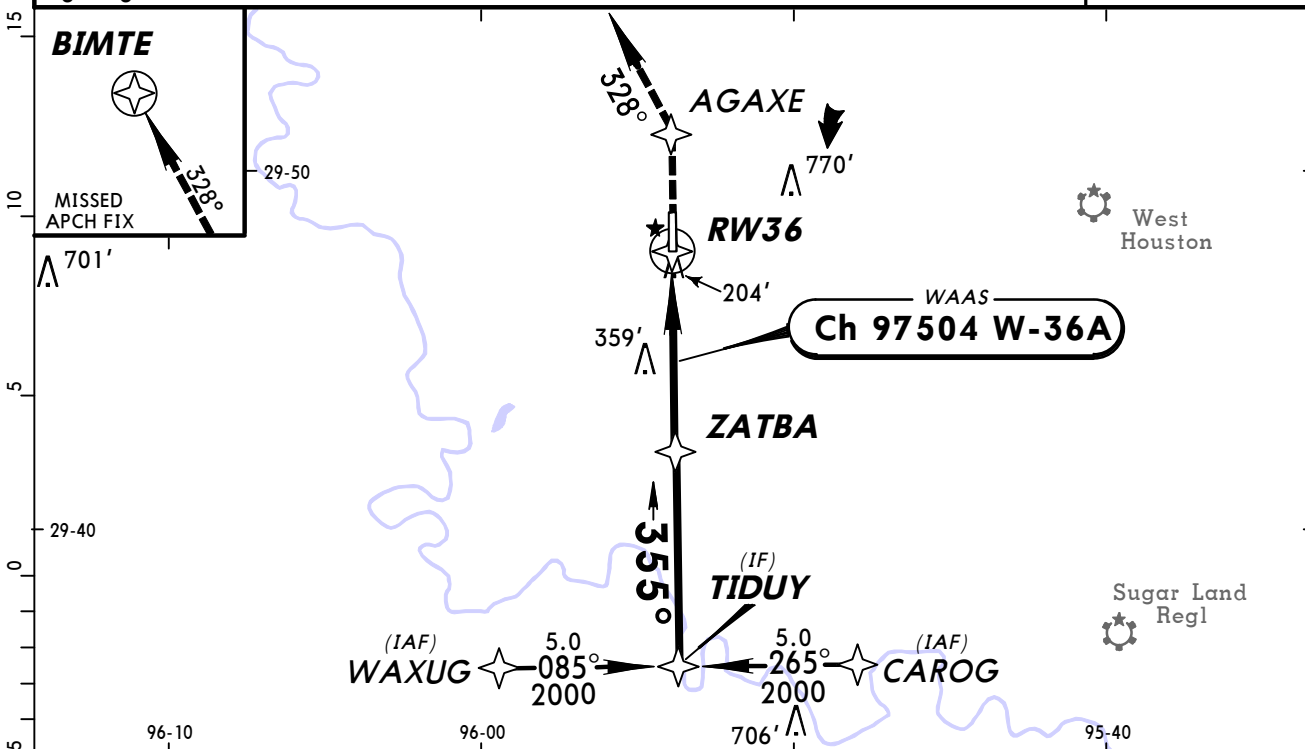
Gnd speed-Kts	70	90	100	120	140	160	REIL		2000'	D → ZUXUG
Glide Path Angle	3.00°	372	478	531	637	743	PAPI-L		↑	
MAP at RW18										

STRAIGHT-IN LANDING RWY 18				CIRCLE-TO-LAND			
1 LPV DA(H) 418' (252')		2 LNAV/VNAV DA(H) 708' (542')		3 LNAV MDA(H) 780' (614')		With Local Altimeter Setting MDA(H)	With Hooks Meml Altimeter Setting MDA(H)
A	1	2		1	90	820' (654') - 1	880' (714') - 1
						820' (654') - 1 3/4	880' (714') - 1 3/4
						820' (654') - 1 3/4	880' (714') - 1 3/4
						820' (654') - 1 3/4	880' (714') - 1 3/4
B	1	2		1 3/4	120	820' (654') - 1 3/4	880' (714') - 1 3/4
						820' (654') - 1 3/4	880' (714') - 1 3/4
						820' (654') - 1 3/4	880' (714') - 1 3/4
						820' (654') - 1 3/4	880' (714') - 1 3/4
C	1	2		2	140	820' (654') - 2 1/4	880' (714') - 2 1/4
						820' (654') - 2 1/4	880' (714') - 2 1/4
						820' (654') - 2 1/4	880' (714') - 2 1/4
						820' (654') - 2 1/4	880' (714') - 2 1/4
D	1	2		2	165	820' (654') - 2 1/4	880' (714') - 2 1/4
						820' (654') - 2 1/4	880' (714') - 2 1/4
						820' (654') - 2 1/4	880' (714') - 2 1/4
						820' (654') - 2 1/4	880' (714') - 2 1/4

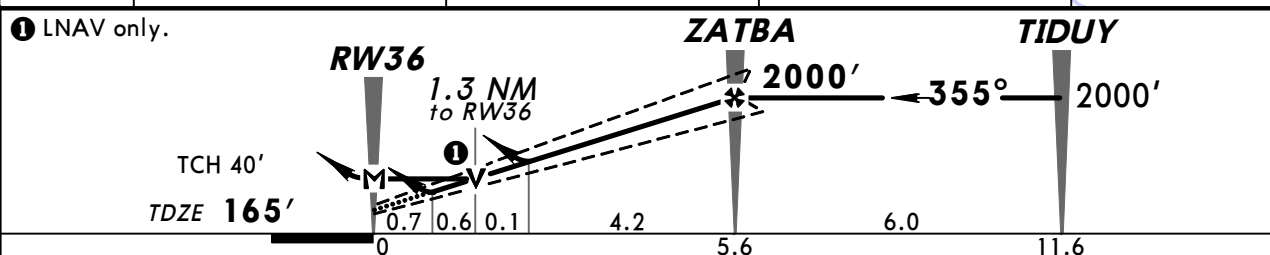
1 DA(H) 475' (309') with Hooks Meml altimeter setting.
 2 DA(H) 950' (784') with Hooks Meml altimeter setting.
 3 MDA(H) 840' (674') with Hooks Meml altimeter setting.

BRIEFING STRIP™

AWOS-3 119.52				HOUSTON EXECUTIVE UNICOM (A) CTAF 122.97	
WAAS Ch 97504 W-36A	Final Apch Crs 355°	Minimum Alt ZATBA 2000' (1835')	LPV DA(H) (CONDITIONAL) 415' (250')	Apt Elev 166' TDZE 165'	3100' MSA RW36
MISSED APCH: Climb to 2000' direct AGAXE and via 328° track to BIMTE and hold.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. RADAR required. 2. Use local altimeter setting; if not received, use Hooks Meml altimeter setting. 3. DME/DME RNP-0.30 not authorized. 4. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 48°C (118°F). 5. Baro-VNAV not authorized when using Hooks Meml altimeter setting. 6. VDP not authorized when using Hooks Meml altimeter setting. 7. Pilot controlled lighting 122.97.					



① LNAV only.



Gnd speed-Kts	70	90	100	120	140	160		REIL	2000'	→	AGAXE
Glide Path Angle 3.00°	372	478	531	637	743	849		PAPI-L	↑		
MAP at RW36											

STRAIGHT-IN LANDING RWY 36					CIRCLE-TO-LAND	
With Local Altimeter Setting					With Local Altimeter Setting	
LPV		LNAV/VNAV		LNAV		
DA(H) 415' (250')		DA(H) 662' (497')		MDA(H) 620' (455')		
A	1	1¾	1	Max Kts	MDA(H)	
B				90	820' (654')-1	
C				120	820' (654')-1¾	
D				140		
			1½	165	860' (694')-2¼	
With Hooks Meml Altimeter Setting					With Hooks Meml Altimeter Setting	
LPV		LNAV/VNAV		LNAV		
DA(H) 472' (307')		DA(H) 719' (554')		MDA(H) 680' (515')		
A	1	2	1	Max Kts	MDA(H)	
B				90	880' (714')-1	
C				120	880' (714')-2	
D				140		
			1¾	165	920' (754')-2½	

General Information

Location: Lubbock TX USA
IATA Code: LBB
Lat/Long: N33° 39.8' W101° 49.4'
Elevation: 3282 ft

Airport Use: Public
Magnetic Variation: 6.7°E
Sectional Chart: Dallas Ft Worth

Fuel Types: 100 Octane (LL), Jet A, Jet A-1
Oxygen Types: High Pressure, Low Pressure, HP Bottle, LP Bottle
Repair Types: Major Airframe, Major Engine
Customs: ADCUS
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1318 Z
Sunset: 0042 Z,

Runway Information

Runway: 08
Length x Width: 8001 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 3257 ft
Lighting: Edge, REIL
Displaced Threshold: 200 ft

Runway: 17L
Length x Width: 2891 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 3262 ft

Runway: 17R
Length x Width: 11500 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 3282 ft
Lighting: Edge, ALS

Runway: 26
Length x Width: 8001 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 3256 ft
Lighting: Edge, ALS

Runway: 35L
Length x Width: 11500 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 3254 ft
Lighting: Edge, ALS

Runway: 35R
Length x Width: 2891 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 3262 ft

Communication Information

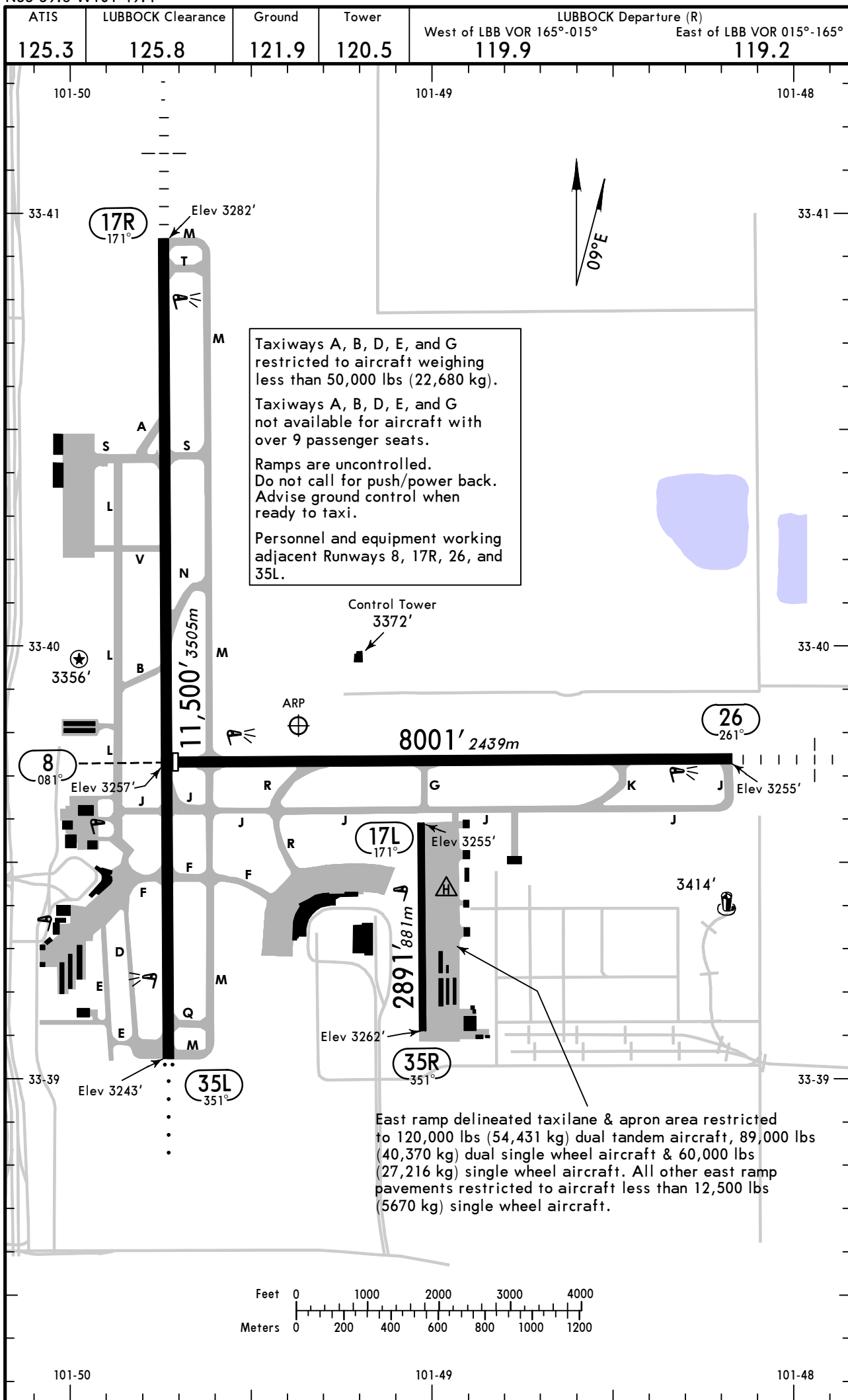
ATIS 125.3
Lubbock Tower 120.5
Lubbock Ground Control 121.9
Lubbock Clearance Delivery 125.8
Lubbock Approach Control 119.9 Arrival Service
Lubbock Approach Control 119.2 Initial Contact
Lubbock App ARSA 119.9
Lubbock App ARSA 119.2
Lubbock Departure Control 119.9 Departure Service
Lubbock Departure Control 119.2 Departure Service
Lubbock Departure Control 124.45 Departure Service Secondary
Lubbock Preston Smith Int Unicom 122.95
FT Worth Flight Service Station 122.55 RCO

KLBB/LBB
Apt Elev **3282'**
N33 39.8 W101 49.4

8 JUL 11

(10-9)

LUBBOCK, TEXAS
LUBBOCK SMITH INTL



GENERAL

Weather System Processor.
 Birds in vicinity of airport.

ADDITIONAL RUNWAY INFORMATION

			USABLE LENGTHS		TAKE-OFF	WIDTH
RWY			Threshold	Glide Slope		
8	HIRL REIL VASI-L	grooved	7801' 2378m			150' 46m
26	HIRL MALSR VASI-L	grooved RVR		7001' 2134m		

17R	HIRL MALSR PAPI-R (angle 3.00°)	grooved RVR		10,413' 3174m		150' 46m
35L	HIRL ODALS VASI-L	grooved				

17L						75' 23m
① 35R						

① Available only for general aviation aircraft
 12,500 lbs (5,670 kg) or less. Not available
 for aircraft with over 9 passenger seats.

TAKE-OFF

All Rwy's

	Adequate Vis Ref	STD
1 & 2 Eng	RVR 16 or 1/4	RVR 50 or 1
3 & 4 Eng		RVR 24 or 1/2

FOR FILING AS ALTERNATE

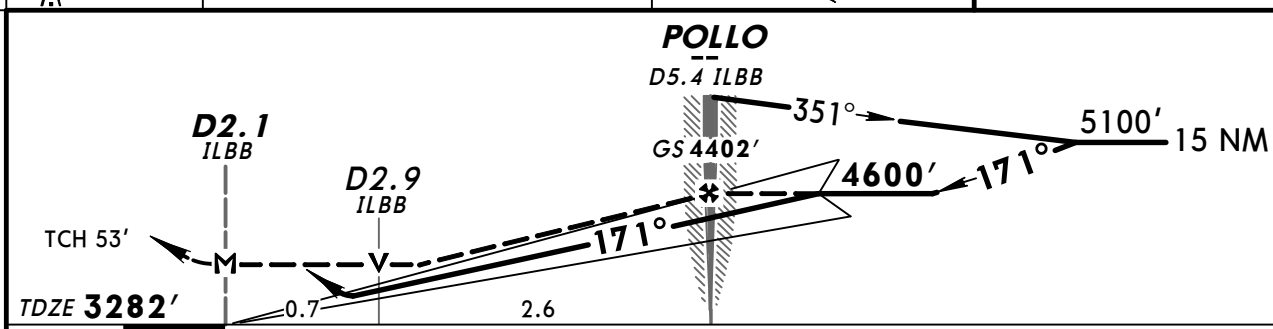
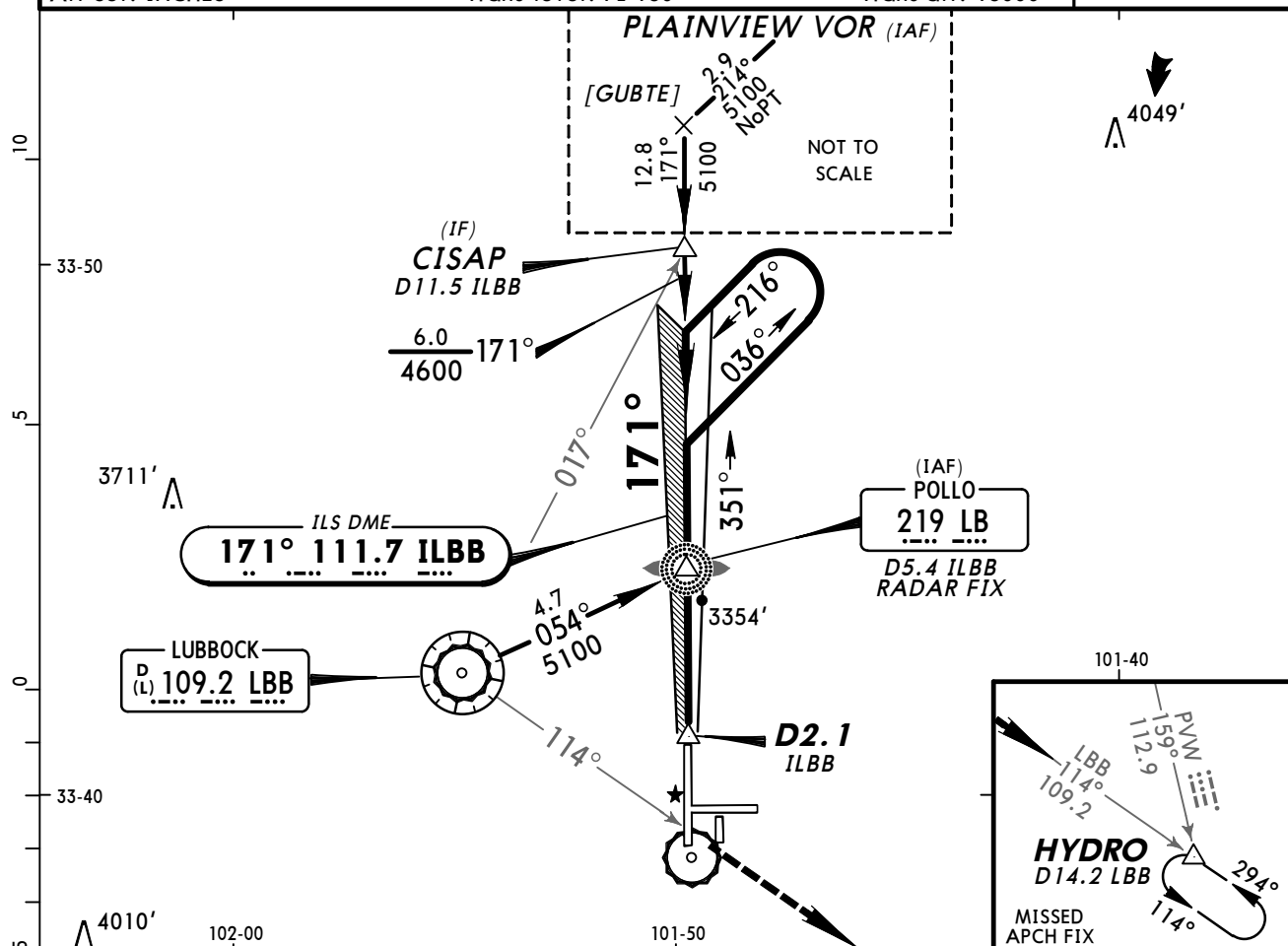
	ILS Rwy 17R ILS Rwy 26	LOC Rwy 17R LOC Rwy 26 LOC BC Rwy 26 RNAV (GPS) Rwy 8 RNAV (GPS) Y Rwy 17R RNAV (GPS) Rwy 26	RNAV (GPS) Y Rwy 35L RNAV (RNP) Z Rwy 17R RNAV (RNP) Z Rwy 35L VOR DME Rwy 26 VOR-A
A	600-2	800-2	
B			
C			
D			

CHANGES: Rwy 17R lighting.

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BRIEFING STRIP TM

ATIS 125.3		LUBBOCK Approach (R) 119.2		LUBBOCK Tower 120.5		Ground 121.9
LOC ILBB 111.7	Final Apch Crs 171°	GS POLLO 4402' (1120')	ILS DA(H) 3482' (200')	Apt Elev 3282' TDZE 3282'		5300' MSA LB LOM
MISSED APCH: Climb to 3700', then climbing LEFT turn to 6000' via LBB VOR R-114 outbound to HYDRO INT/D14.2 LBB and hold, continue climb-in-hold to 6000'.						
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'		



Gnd speed-Kts	70	90	100	120	140	160	MALSR	3700'	6000'	LBB	
GS	3.00°	372	478	531	637	743	PAPI	↑	LT	109.2	HYDRO
MAP at D2.1 ILBB or POLLO to MAP	3.3	2:50	2:12	1:59	1:39	1:25	1:14			R-114	

STRAIGHT-IN LANDING RWY 17R						CIRCLE-TO-LAND	
ILS			LOC (GS out)			Max Kts	MDA(H)
DA(H) 3482' (200')			MDA(H) 3620' (338')				
FULL	RAIL or ALS out		RAIL out	ALS out			
A						90	3720' (438') - 1
B						120	3740' (458') - 1
C	1 RVR 24 or 1/2	RVR 40 or 3/4	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	140	3740' (458') - 1 1/2
D			RVR 40 or 3/4	RVR 50 or 1		165	3840' (558') - 2

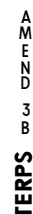
1 RVR 18 with Flight Director or Autopilot or HUD to DA.

CHANGES: Lighting.

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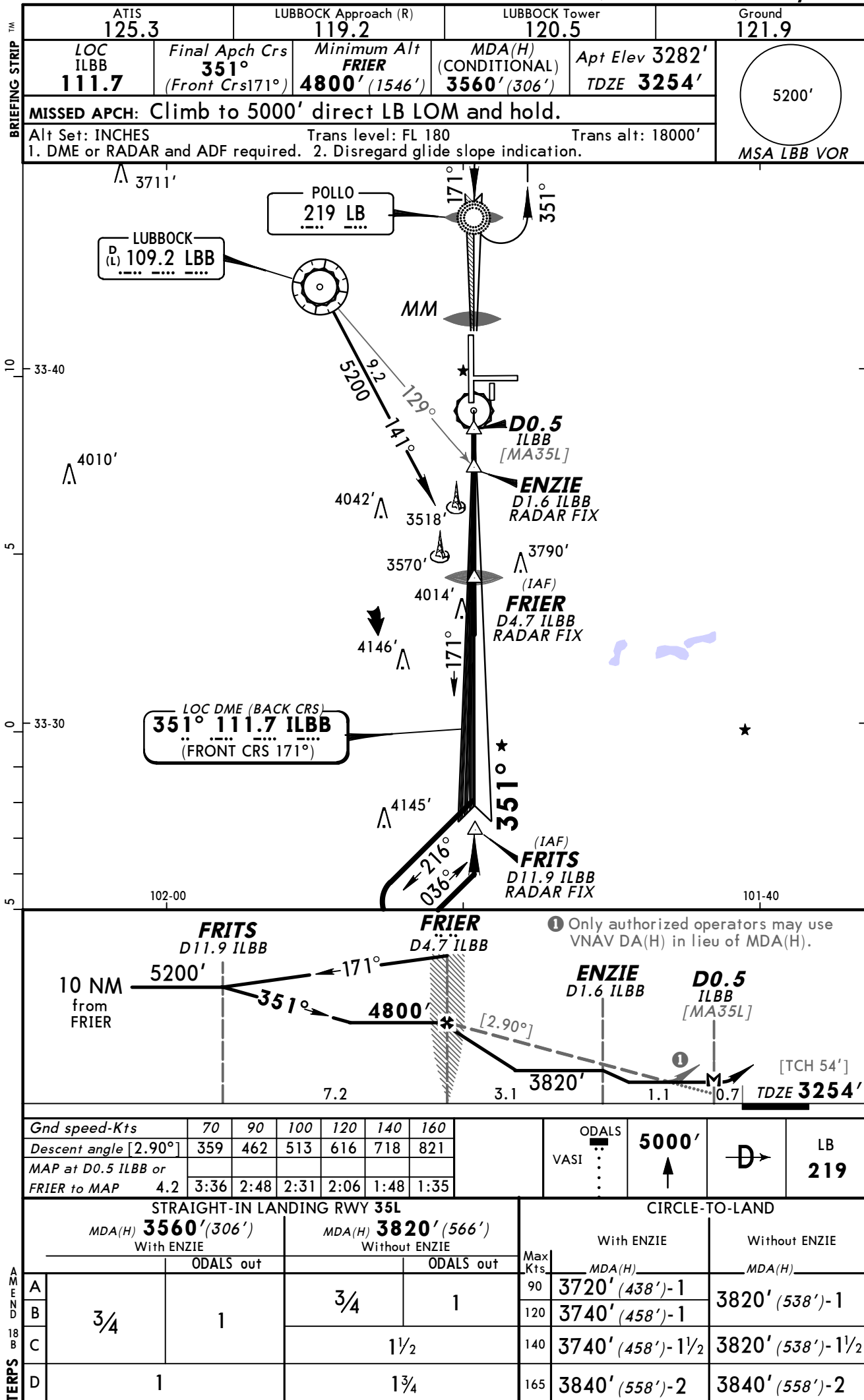
LUBBOCK, TEXAS
ILS or LOC Rwy 26

BRIEFING STRIP TM

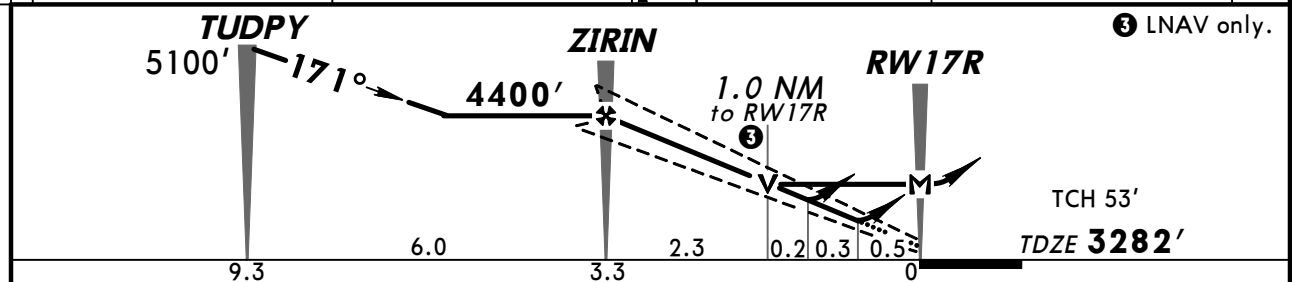
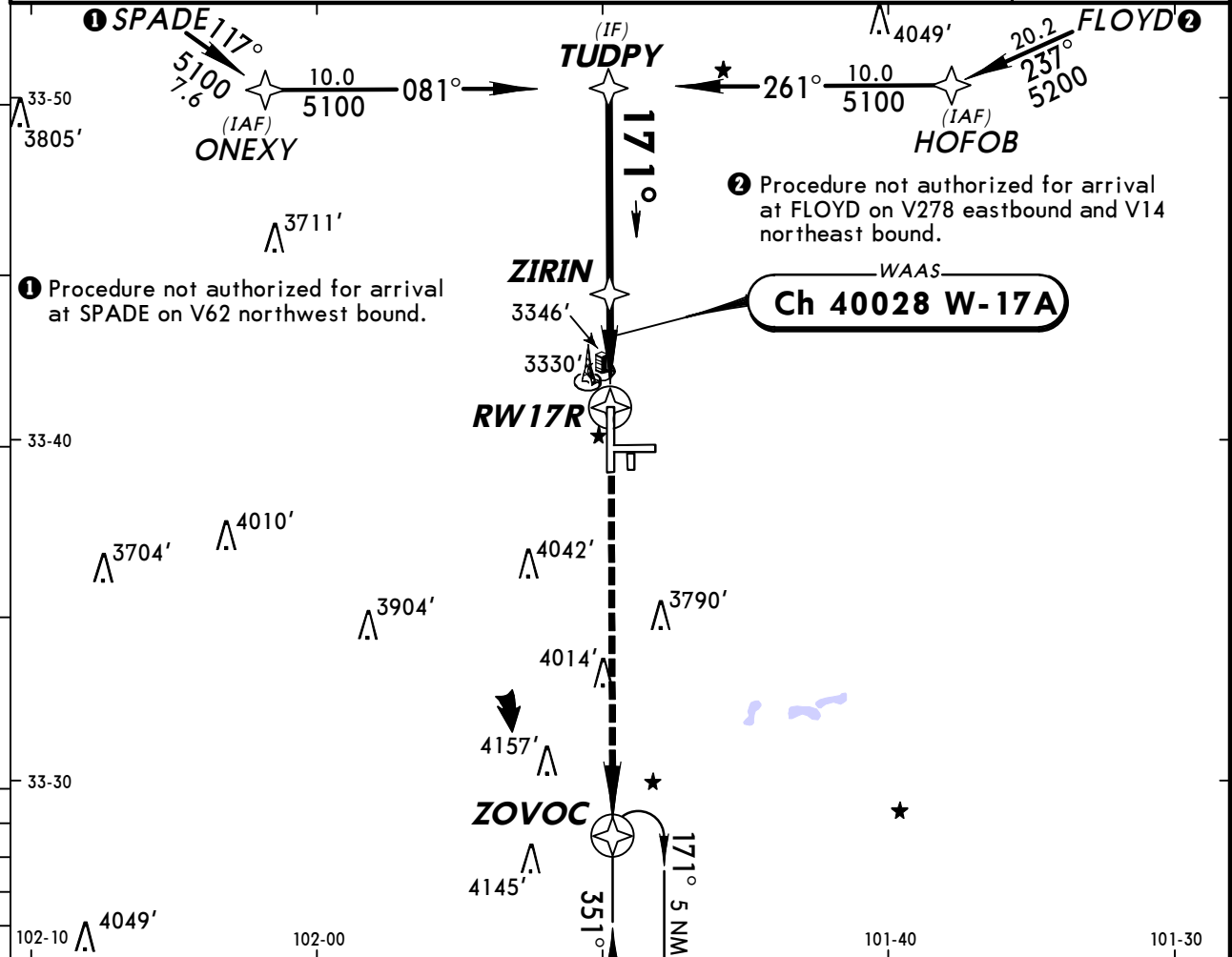


STRAIGHT-IN LANDING RWY26						CIRCLE-TO-LAND	
ILS DA(H) 3456' (200')			LOC (GS out) MDA(H) 3560' (304')				
FULL		RAIL or ALS out		RAIL out	ALS out	Max Kts	MDA(H)
A	1 RVR 24 or 1/2	RAIL 40 or 3/4	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	90	3720' (438')-1
B						120	3740' (458')-1
C						140	3740' (458')-1/2
D					RVR 40 or 3/4	RVR 50 or 1	

CHANGES: None.



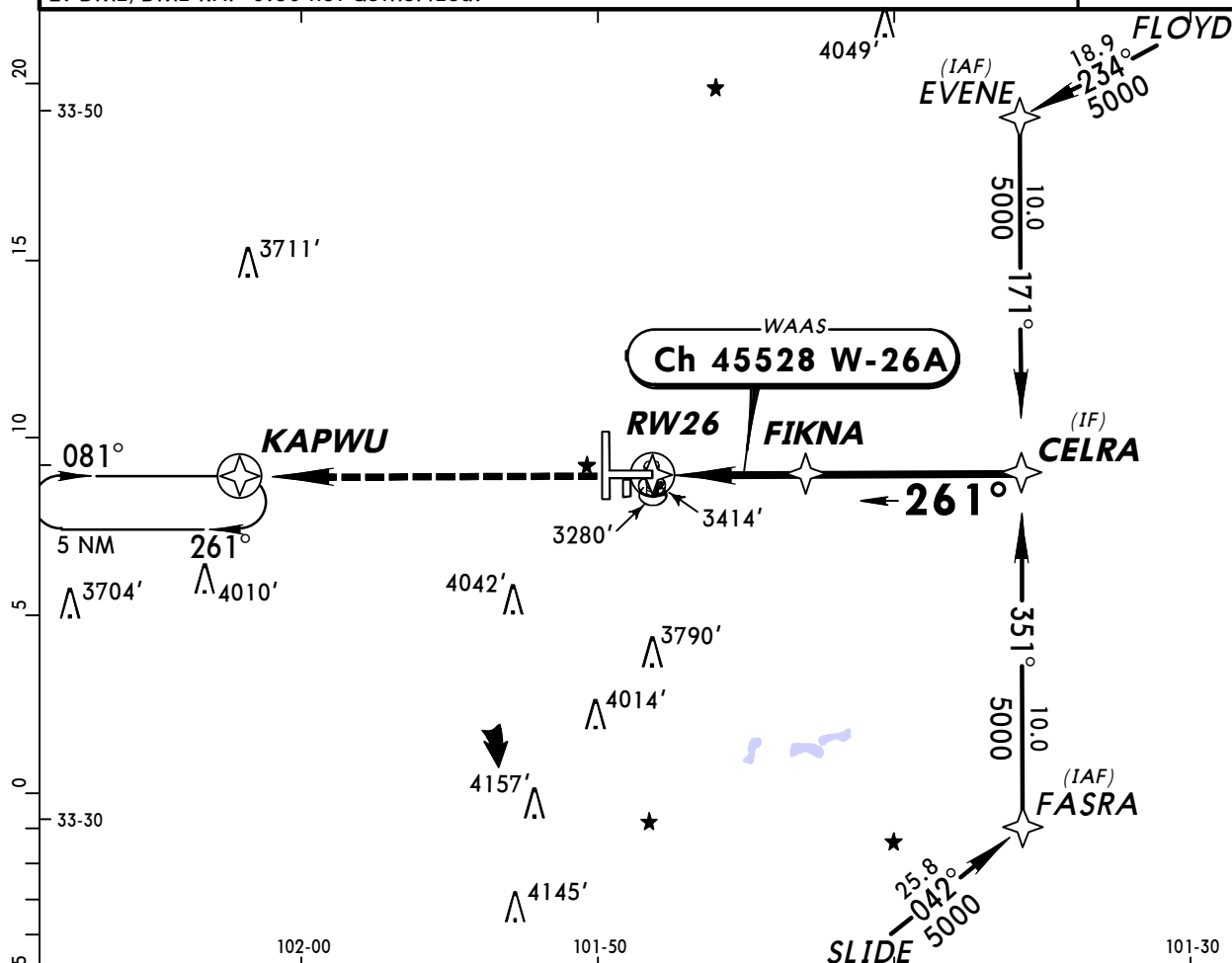
ATIS 125.3		LUBBOCK Approach (R) 119.2		LUBBOCK Tower 120.5		Ground 121.9	
WAAS Ch 40028 W-17A	Final Apch Crs 171°	Minimum Alt ZIRIN 4400'(1118')	LPV DA(H) 3482'(200')	Apt Elev 3282' TDZE 3282'		5300' MSA RW17R	
MISSED APCH: Climb to 5400' direct ZOVOC and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -21°C (-5°F) or above 41°C (105°F). 2. DME/DME RNP-0.30 not authorized.							



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI 5400' ↑ D→ ZOVOC	
Glide Path Angle 3.00°	372	478	531	637	743	849		
MAP at RW17R								

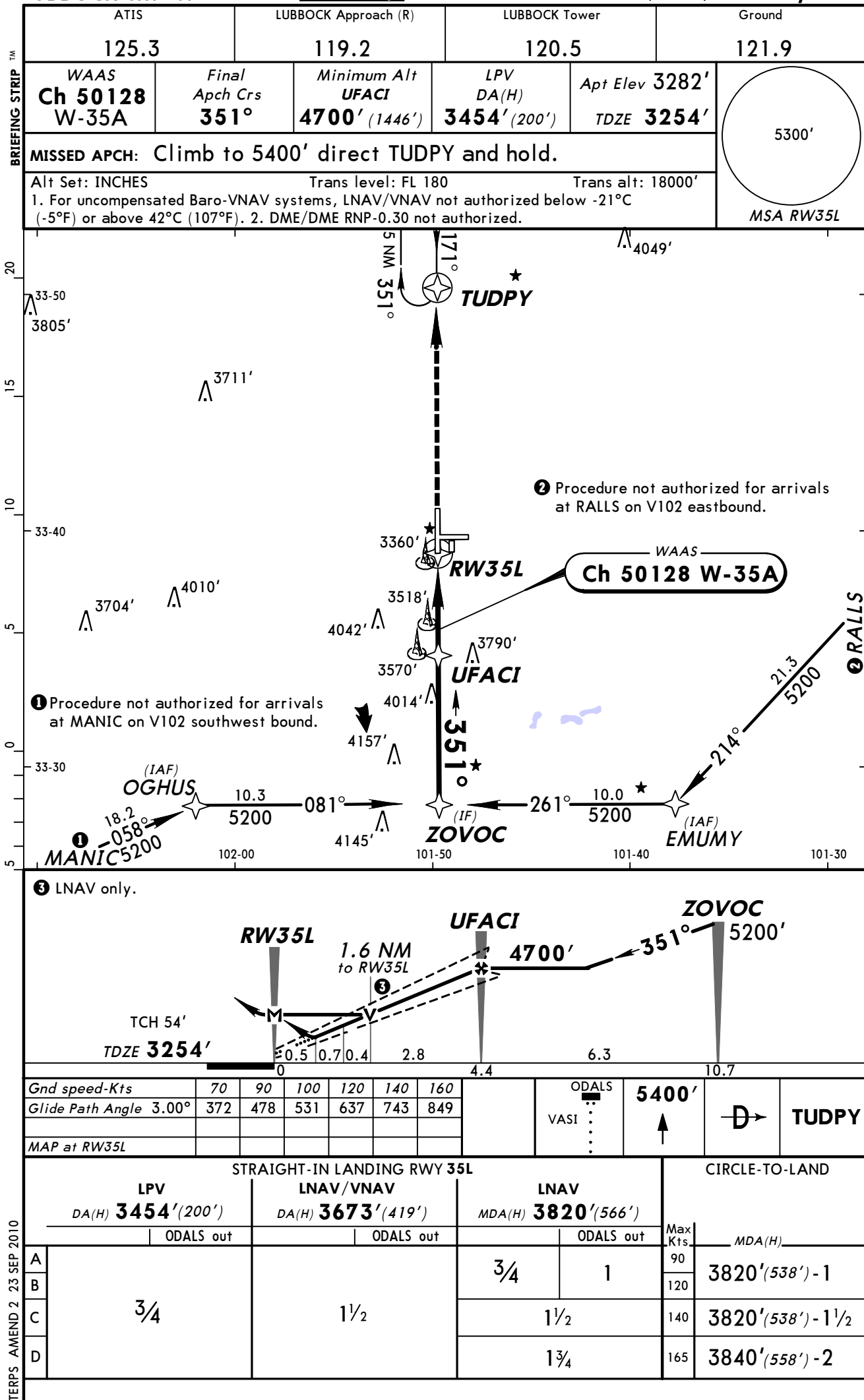
STRAIGHT-IN LANDING RWY 17R										CIRCLE-TO-LAND	
LPV			LNAV/VNAV			LNAV			Max Kts	MDA(H)	
DA(H) 3482'(200')			DA(H) 3591'(309')			MDA(H) 3600'(318')					
		RAIL or ALS out		RAIL out	ALS out		RAIL out	ALS out			
A	RVR 24 or 1/2	RVR 40 or 3/4	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	90	3720'(438') - 1	
B									120	3740'(458') - 1	
C									140	3740'(458') - 1 1/2	
D				RVR 40 or 3/4	RVR 50 or 1		RVR 50 or 1			165	3840'(558') - 2

BRIEFING STRIP TM



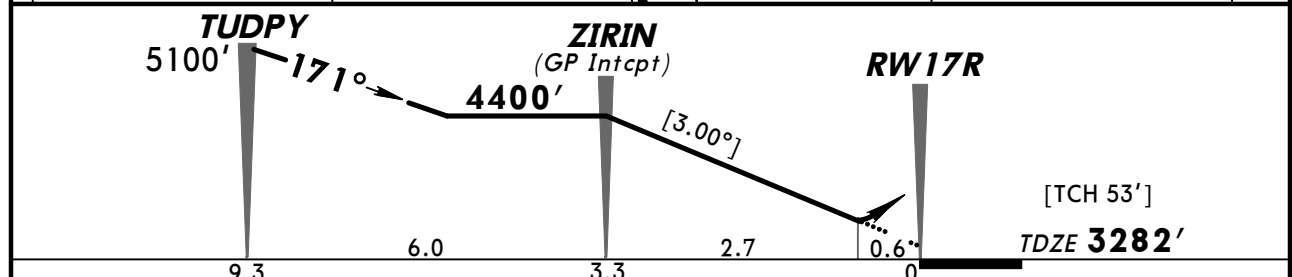
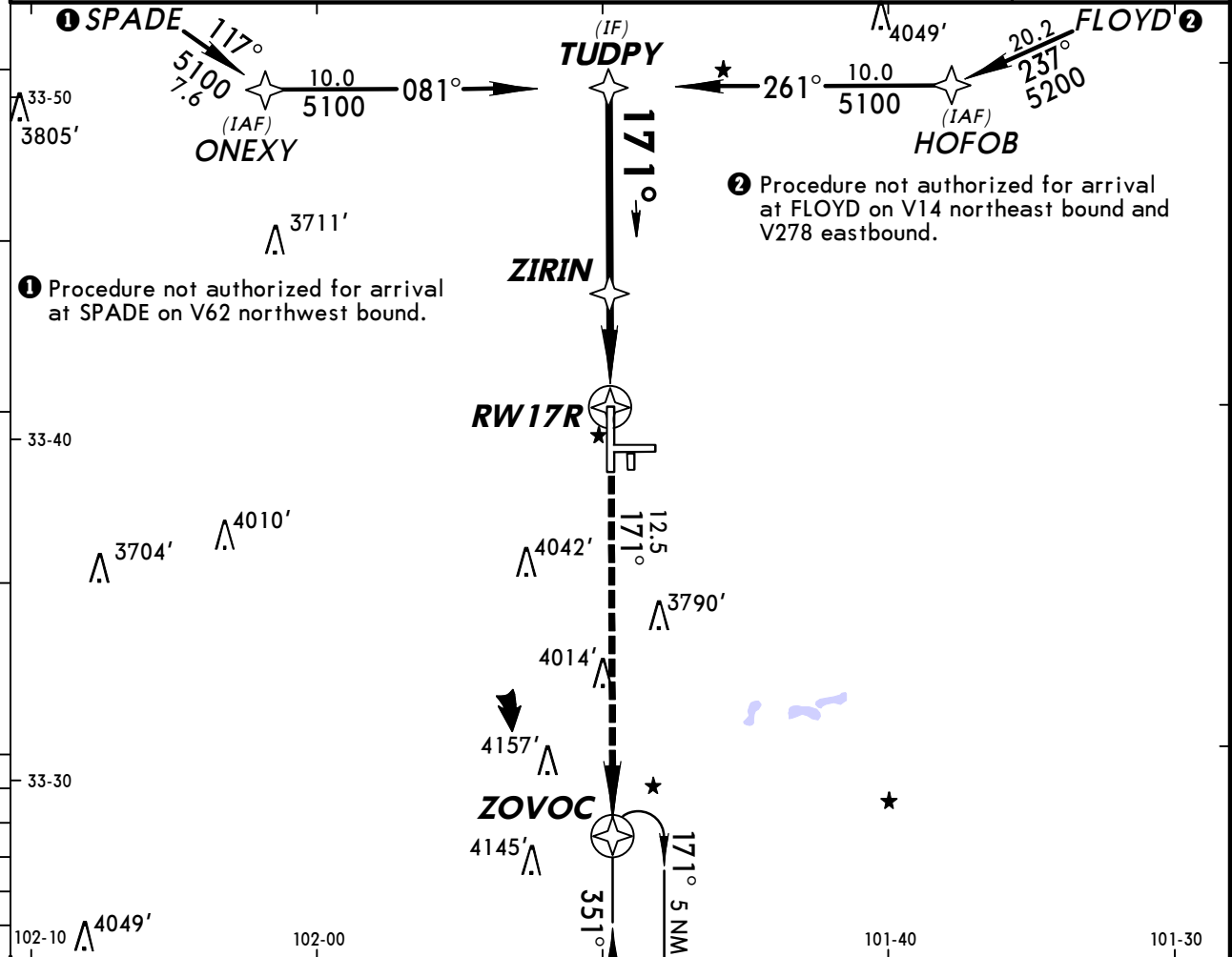
TERPS
1
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TERPS AMEND 2 23 SEP 2010

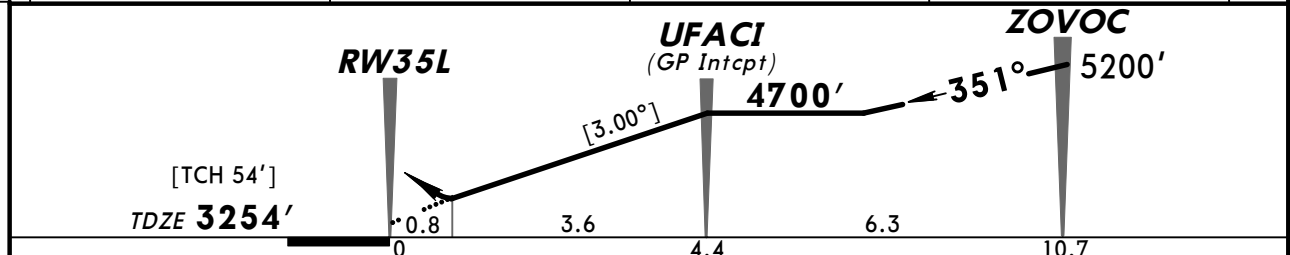
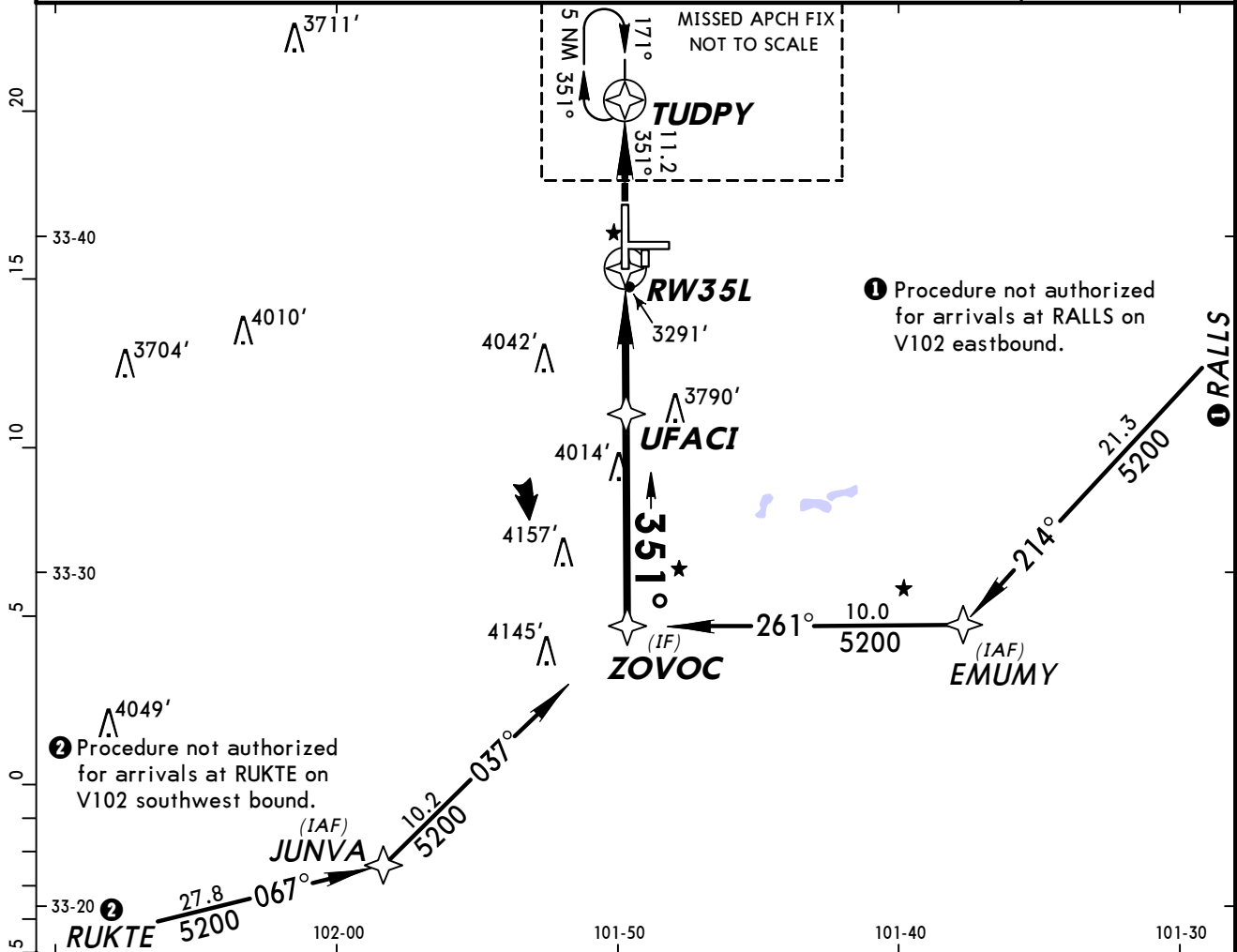
ATIS 125.3		LUBBOCK Approach (R) 119.2		LUBBOCK Tower 120.5		Ground 121.9
RNAV	Final Apch Crs 171°	Minimum Alt ZIRIN 4400' (1118')	RNP 0.16 DA(H) 3538' (256')	Apt Elev 3282' TDZE 3282'	5400' MSA RW17R	
MISSED APCH: Climb to 5400' on track 171° to ZOVOC and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. AUTHORIZATION REQUIRED. 2. GPS required. 3. For uncompensated Baro-VNAV systems, procedure not authorized below -12°C (10°F) or above 41°C (106°F).						



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI 5400' on 171° ZOVOC	
Descent angle [3.00°]	372	478	531	637	743	849		
MAP at DA								

STRAIGHT-IN LANDING RWY 17R			
RNP 0.16 DA(H) 3538' (256')		RNP 0.30 DA(H) 3589' (307')	
RAIL or ALS out		RAIL or ALS out	
A			
B			
C	RVR 24 or 1/2	RVR 40 or 3/4	RVR 24 or 1/2
D			RVR 50 or 1

ATIS 125.3	LUBBOCK Approach (R) 119.2	LUBBOCK Tower 120.5	Ground 121.9
RNAV	Final Apch Crs 351°	Minimum Alt UFACI 4700' (1446')	RNP 0.18 DA(H) 3557' (303')
		Apt Elev 3282'	TDZE 3254'
MISSED APCH: Climb to 5400' on track 351° to TUDPY and hold.			
Alt Set: INCHES		Trans level: FL 180	Trans alt: 18000'
1. AUTHORIZATION REQUIRED. 2. GPS required. 3. For uncompensated Baro-VNAV systems, procedure not authorized below -12°C (10°F) or above 42°C (108°F).			
MSA RW35L			



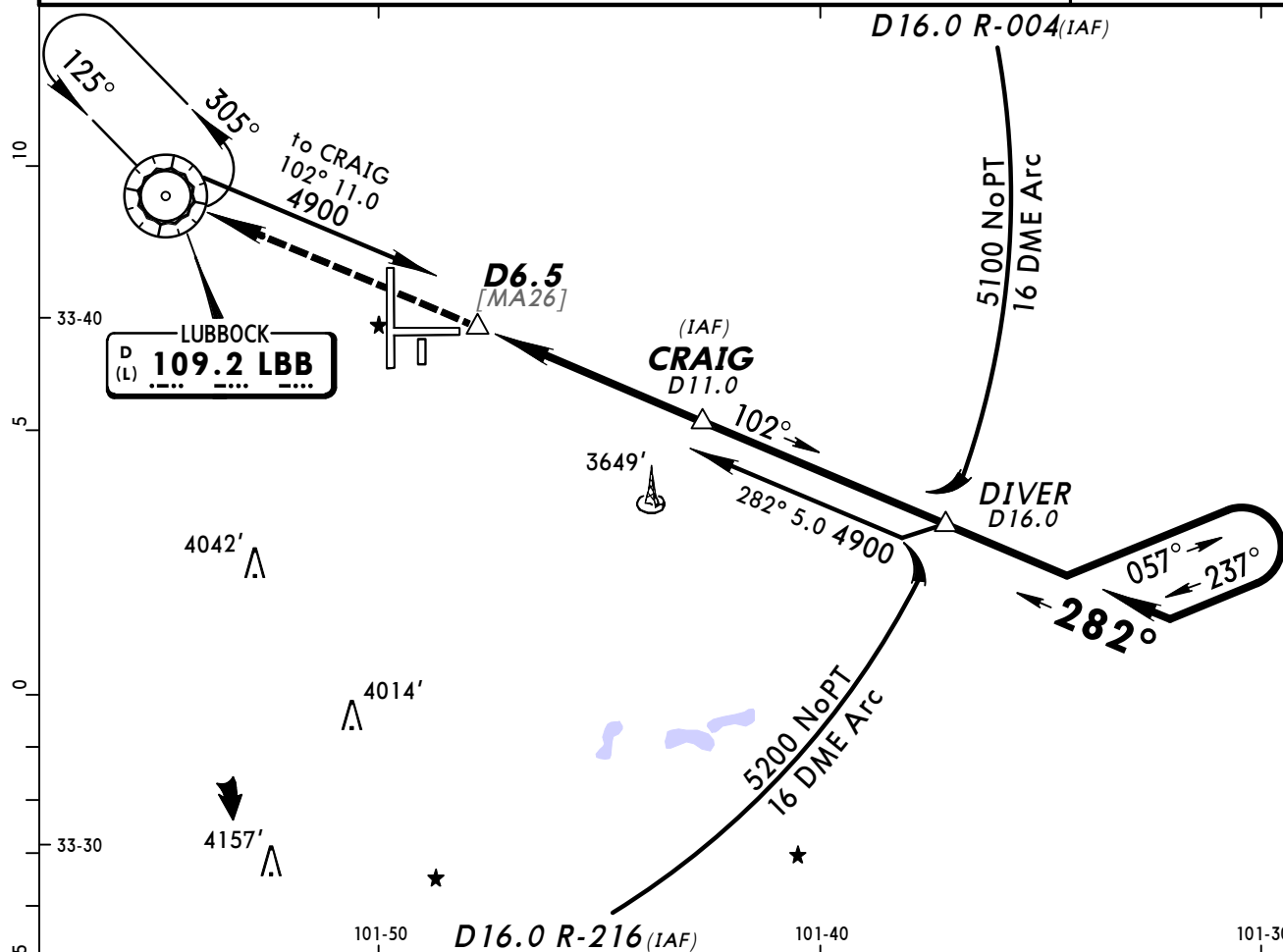
Gnd speed-Kts	70	90	100	120	140	160	ODALS	5400'	on 351°	TUDPY
Descent angle [3.00°]	372	478	531	637	743	849	VASI			
MAP at DA										

1 RNP 0.18		STRAIGHT-IN LANDING RWY 35L		RNP 0.30		RNP 0.30	
DA(H) 3557' (303')		Missed approach requires a minimum climb of 425'/NM to 5400'.		DA(H) 3572' (318')		DA(H) 3610' (356')	
ODALS out		ODALS out		ODALS out		ODALS out	
A							
B	3/4	1	3/4	1			
C						1 1/4	
D	1		1				

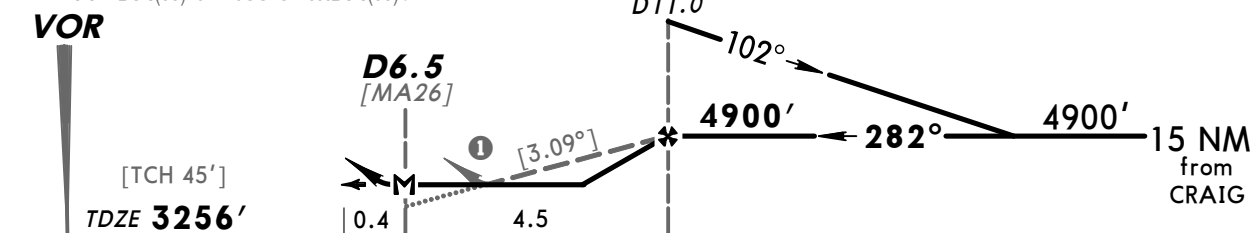
1 Authorized only when VGSI is operable.

BRIEFING STRIP TM

ATIS 125.3		LUBBOCK Approach (R) 119.2		LUBBOCK Tower 120.5		Ground 121.9
VOR LBB 109.2	Final Apch Crs 282°	Minimum Alt CRAIG 4900' (1644')	MDA(H) 3680' (424')	Apt Elev 3282' TDZE 3256'		5200' MSA LBB VOR
MISSED APCH: Climb to 5000' direct LBB VOR and hold.						
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'		



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).

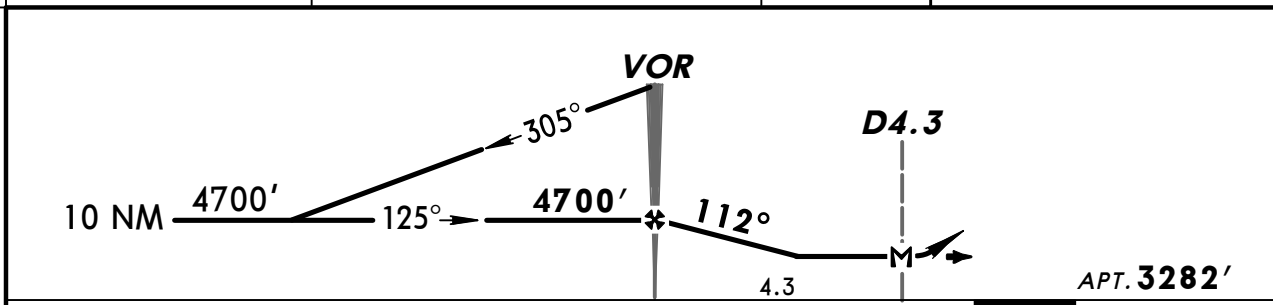
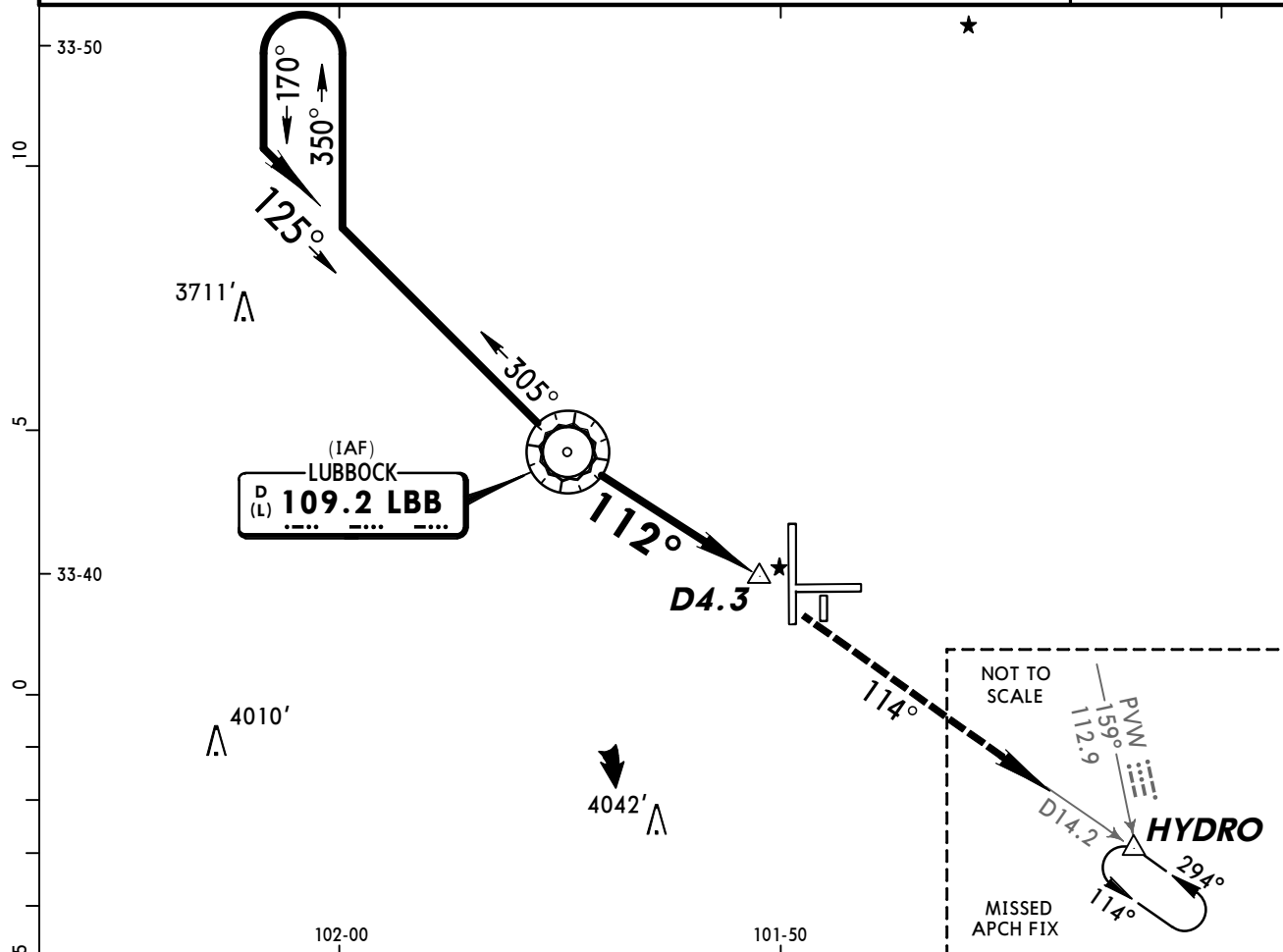


Gnd speed-Kts	70	90	100	120	140	160	MALSR VASI	5000'	D	LBB 109.2
Descent angle [3.09°]	383	492	547	656	765	875				
MAP at D6.5										

STRAIGHT-IN LANDING RWY 26				CIRCLE-TO-LAND	
MDA(H) 3680' (424')					
		RAIL out	ALS out	Max Kts.	MDA(H)
A	RVR 50 or 1			90	3720' (438') - 1
B				120	3740' (458') - 1
C	RVR 60 or 1 1/4			140	3740' (458') - 1 1/2
D				165	3840' (558') - 2

BRIEFING STRIP

ATIS 125.3		LUBBOCK Approach (R) 119.2		LUBBOCK Tower 120.5		Ground 121.9	
VOR LBB 109.2	Final Apch Crs 112°	Minimum Alt VOR 4700' (1418')	MDA(H) Refer to Minimums	Apt Elev 3282'		5200' MSA LBB VOR	
MISSED APCH: Climb to 5200' outbound via LBB VOR R-114 to HYDRO INT and hold.							
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'			



Gnd speed-Kts	70	90	100	120	140	160	Lighting - Refer to Airport Chart	5200'	LBB	HYDRO
MAP at D4.3 or VOR to MAP 4.3	3:41	2:52	2:35	2:09	1:51	1:37		↑	via 109.2 R-114	

		CIRCLE-TO-LAND	
		Max Kts	MDA(H)
		A 90	3720' (438') - 1
		B 120	3740' (458') - 1
		C 140	3740' (458') - 1 1/2
		D 165	3840' (558') - 2

General Information

Location: Angleton/Lake Jackson TX USA

IATA Code: LJN

Lat/Long: N29° 06.5' W095° 27.7'

Elevation: 25 ft

Airport Use: Public

Magnetic Variation: 3.2°E

Sectional Chart: Houston

Fuel Types: 100 Octane (LL), Jet A

Oxygen Types: LP Bottle

Repair Types: Minor Airframe, Major Engine

Customs: No

Airport Type: IFR

Landing Fee: No

Control Tower: No

Jet Start Unit: No

LLWS Alert: No

Beacon: Yes

Sunrise: 1250 Z

Sunset: 0020 Z,

Runway Information

Runway: 17

Length x Width: 7000 ft x 100 ft

Surface Type: concrete

TDZ-Elev: 25 ft

Lighting: Edge, ALS, Pilot controlled

Runway: 35

Length x Width: 7000 ft x 100 ft

Surface Type: concrete

TDZ-Elev: 25 ft

Lighting: Edge, Pilot controlled

Communication Information

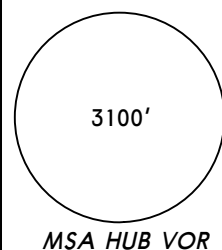
ASOS 119.925

Texas Gulf Coast Regl Unicom 123.0 CTAF PCL

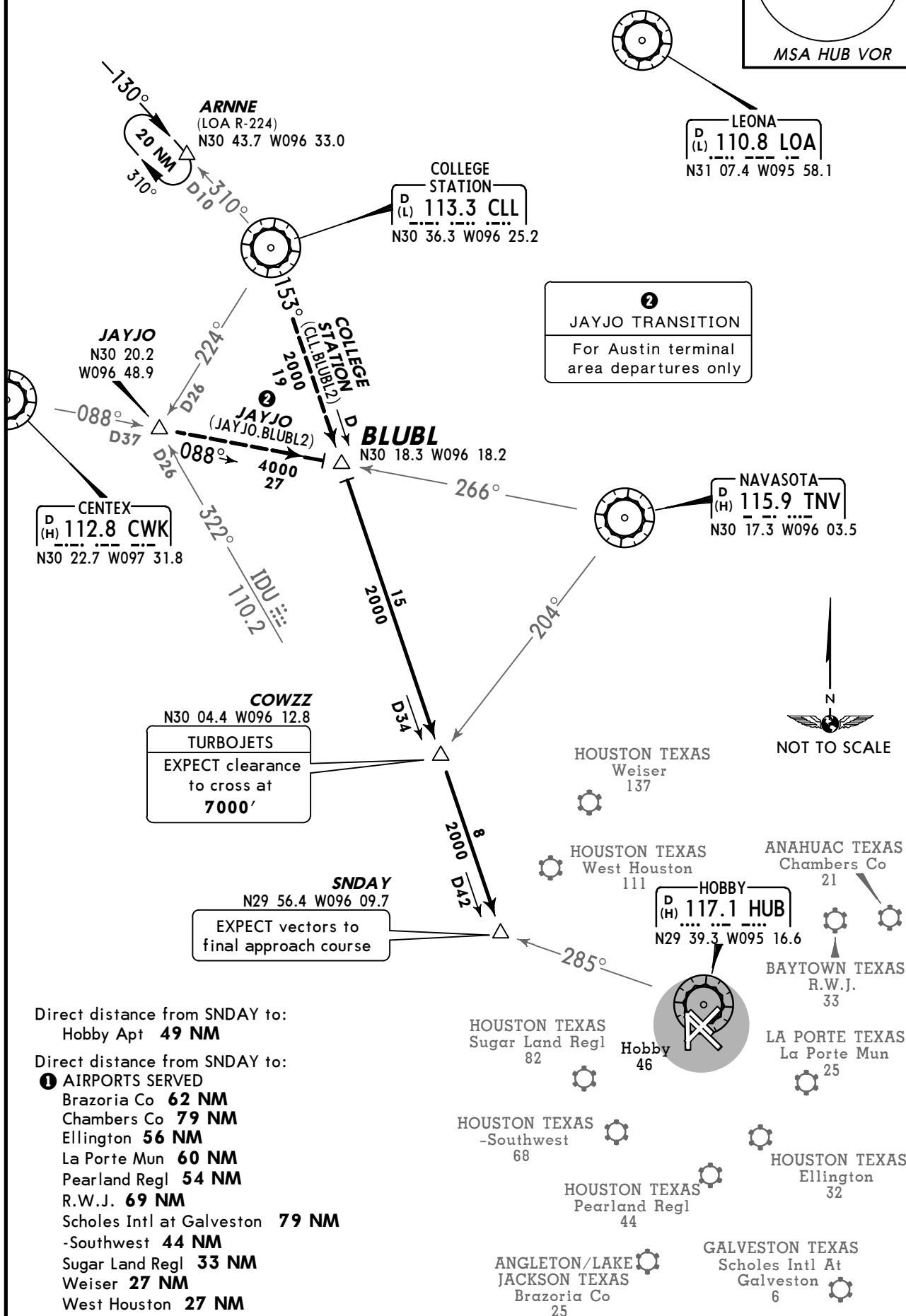
Houston Clearance Delivery 125.2

Houston Approach Control 134.45

Houston Departure Control 134.45

HOBBY
D-ATIS
124.6Apt Elev
See graphicAlt set: INCHES
Trans level: FL180 Trans alt: 18000'
Also Serves ①

BLUBELL TWO ARRIVAL (BLUBL.BLUBL2)



ROUTING

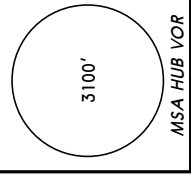
From over BLUBL via CLL R-153 to SNDAY. EXPECT vectors to final approach course.

HOBBY D-ATIS
124.6

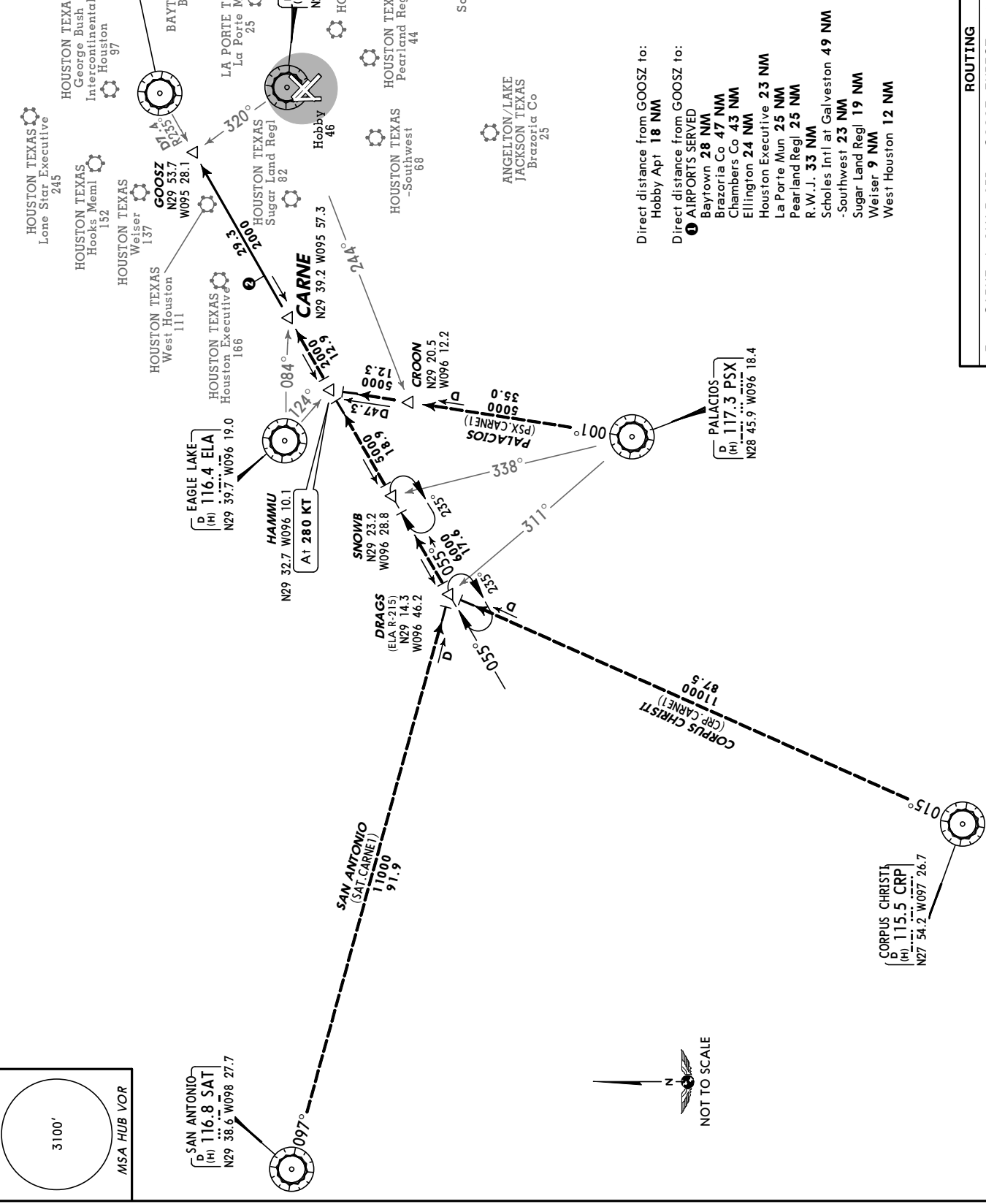
Ap'l Elev
See graphic

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

1. For conventional navigation equipped aircraft only.
2. DME/DME/IRU or GPS equipped aircraft file via the HAMMU (RNAV) STAR.
3. Also Serves 1



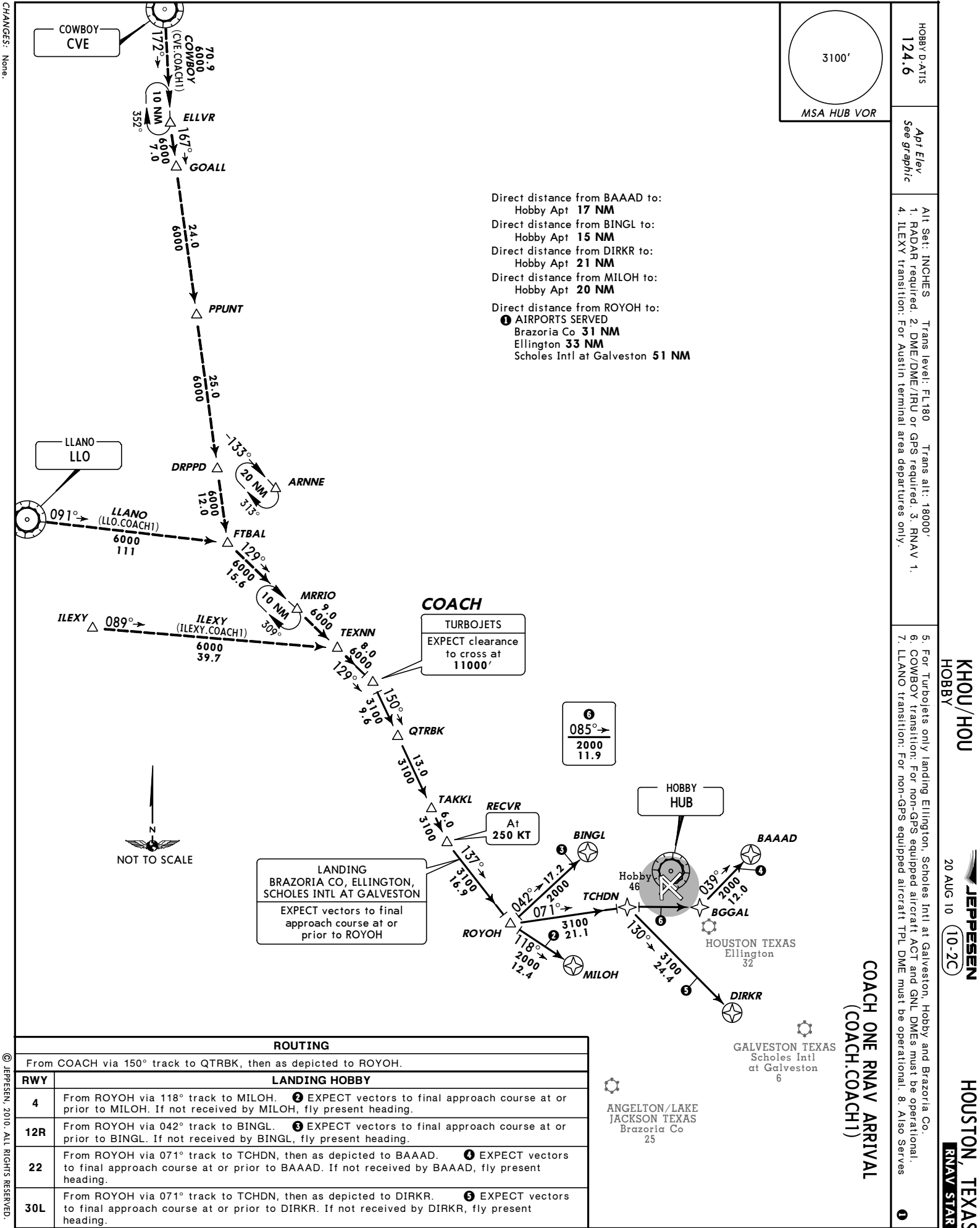
CARNE ONE ARRIVAL
(CARNE.CARNE1)



- Direct distance from GOOSZ to:
Hobby Apt 18 NM
- Direct distance from GOOSZ to:
1 AIRPORTS SERVED
Baytown 28 NM
Brazoria Co 47 NM
Chambers Co 43 NM
Ellington 24 NM
Houston Executive 23 NM
La Porte Mun 25 NM
Pearland Regl 25 NM
R.W.J. 33 NM
Scholes Intl at Galveston 49 NM
Southwest 23 NM
Sugar Land Regl 19 NM
Weiser 9 NM
West Houston 12 NM

ROUTING

From CARNE via IAH R-235 to GOOSZ. EXPECT vectors to final approach course at or prior to GOOSZ.



HOBBY D-ATIS
124.6

Apt Elev
See graphic

Alt Set: INCHES Trans alt: 18000'
1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. ILEXY transition: For Austin terminal area departures only.

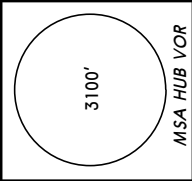
5. For Turbojets only landing Ellington, Scholes Intl at Galveston, Hobby and Brazoria Co.
6. COWBOY transition: For non-GPS equipped aircraft ACT and GNL DMEs must be operational.
7. LLANO transition: For non-GPS equipped aircraft TPL DME must be operational. 8. Also Serves
1

Alt Set: INCHES Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. ATC assigned only, do not file.

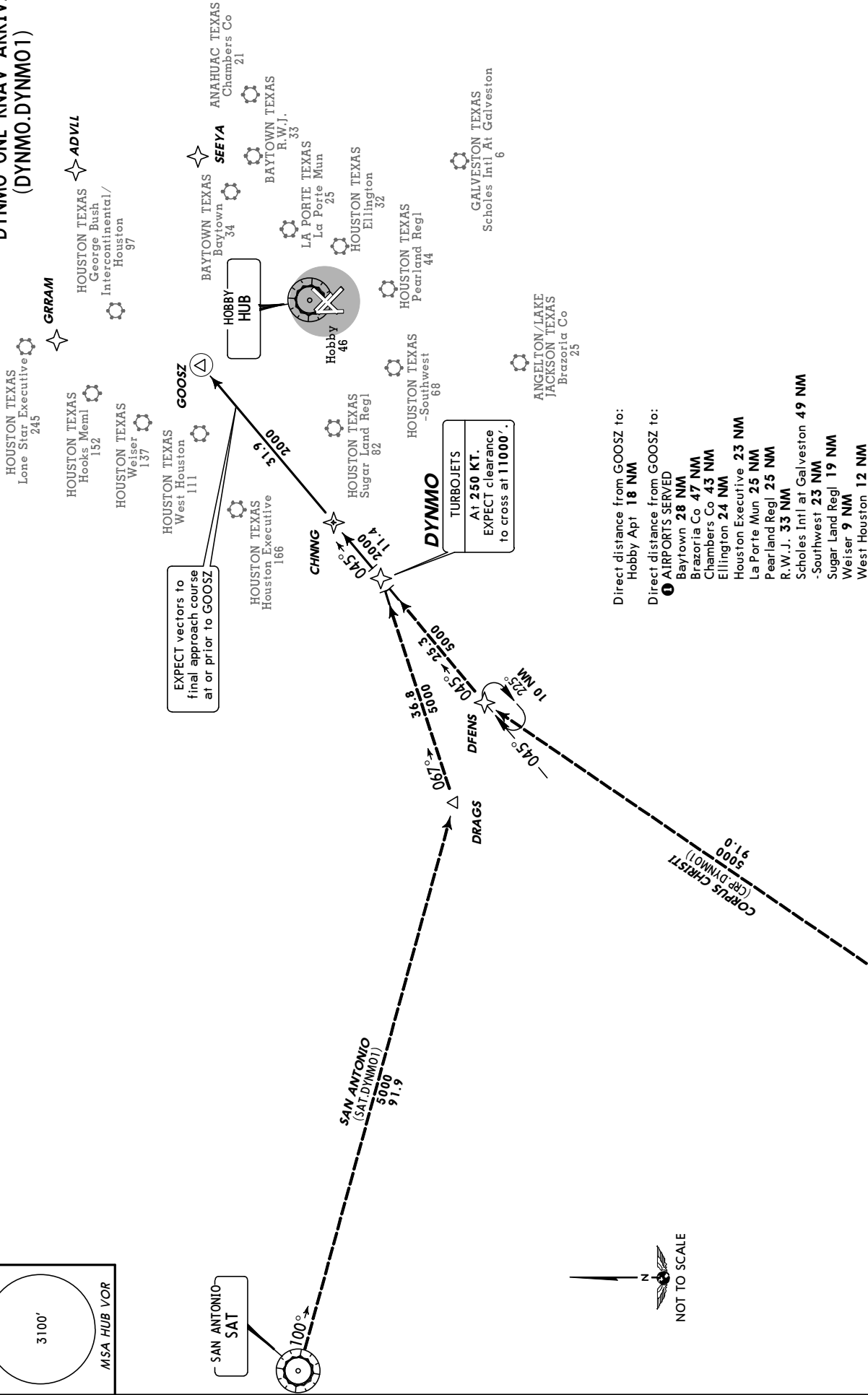
Apt Elev
See graphic

HOBBY
D-ATIS
124.6

5. CORPUS CHRISTI transition: For non-GPS equipped aircraft ELA, HUB, IAH, PSX and VCT DMEs must be operational. 6. SAN ANTONIO transition: For non-GPS equipped aircraft CWK, ELA, HUB, IAH, PSX and SAT DMEs must be operational. 7. Also Serves 1

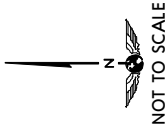


DYNMO ONE RNAV ARRIVAL
(DYNMO.DYNMO1)



Direct distance from GOOSZ to:
Hobby Apt 18 NM

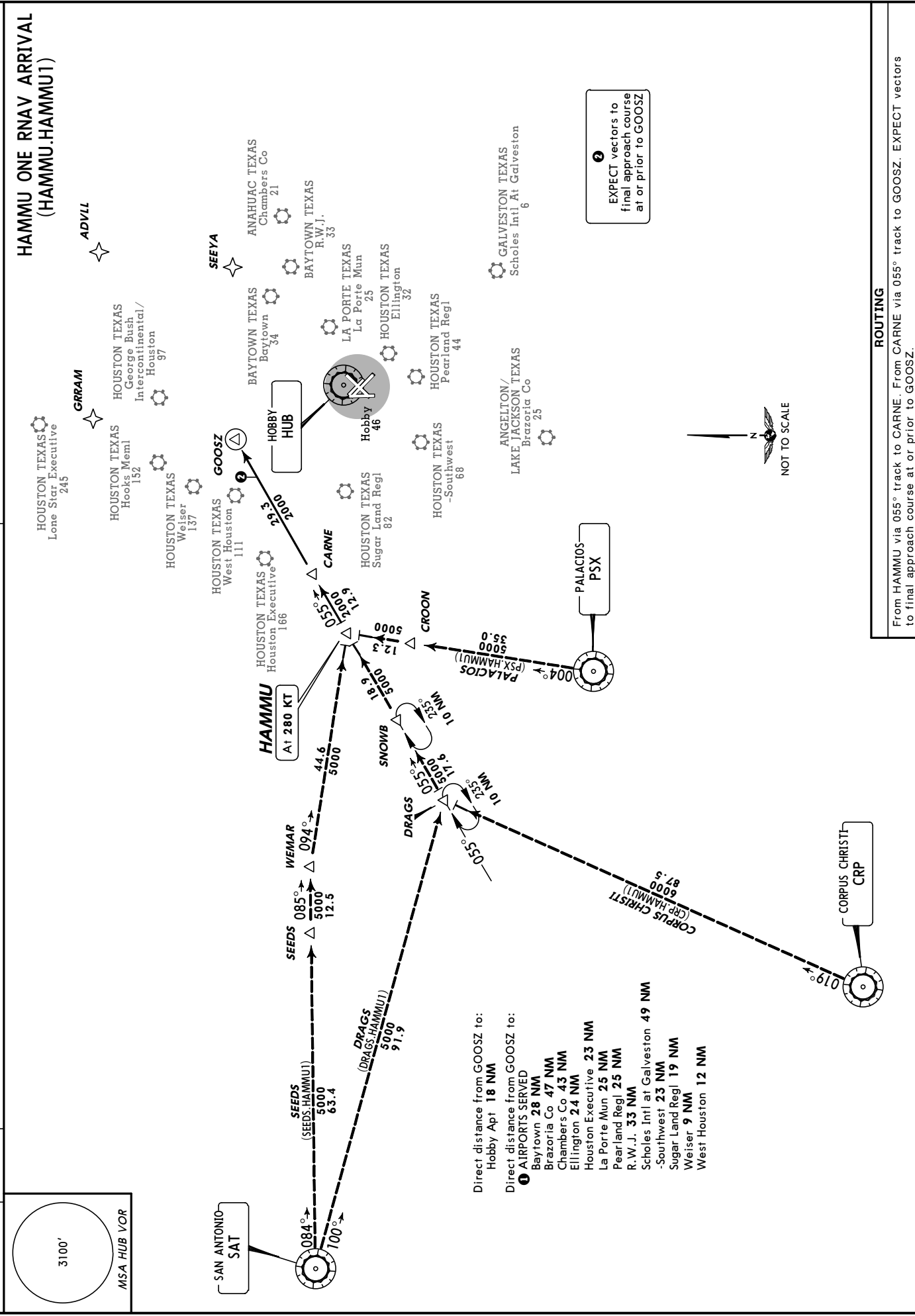
Direct distance from GOOSZ to:
1 AIRPORTS SERVED
Baytown 28 NM
Brazoria Co 47 NM
Chambers Co 43 NM
Ellington 24 NM
Houston Executive 23 NM
La Porte Mun 25 NM
Pearland Regl 25 NM
R.W.J. 33 NM
Scholes Intl at Galveston 49 NM
-Southwest 23 NM
Sugar Land Regl 19 NM
Weiser 9 NM
West Houston 12 NM

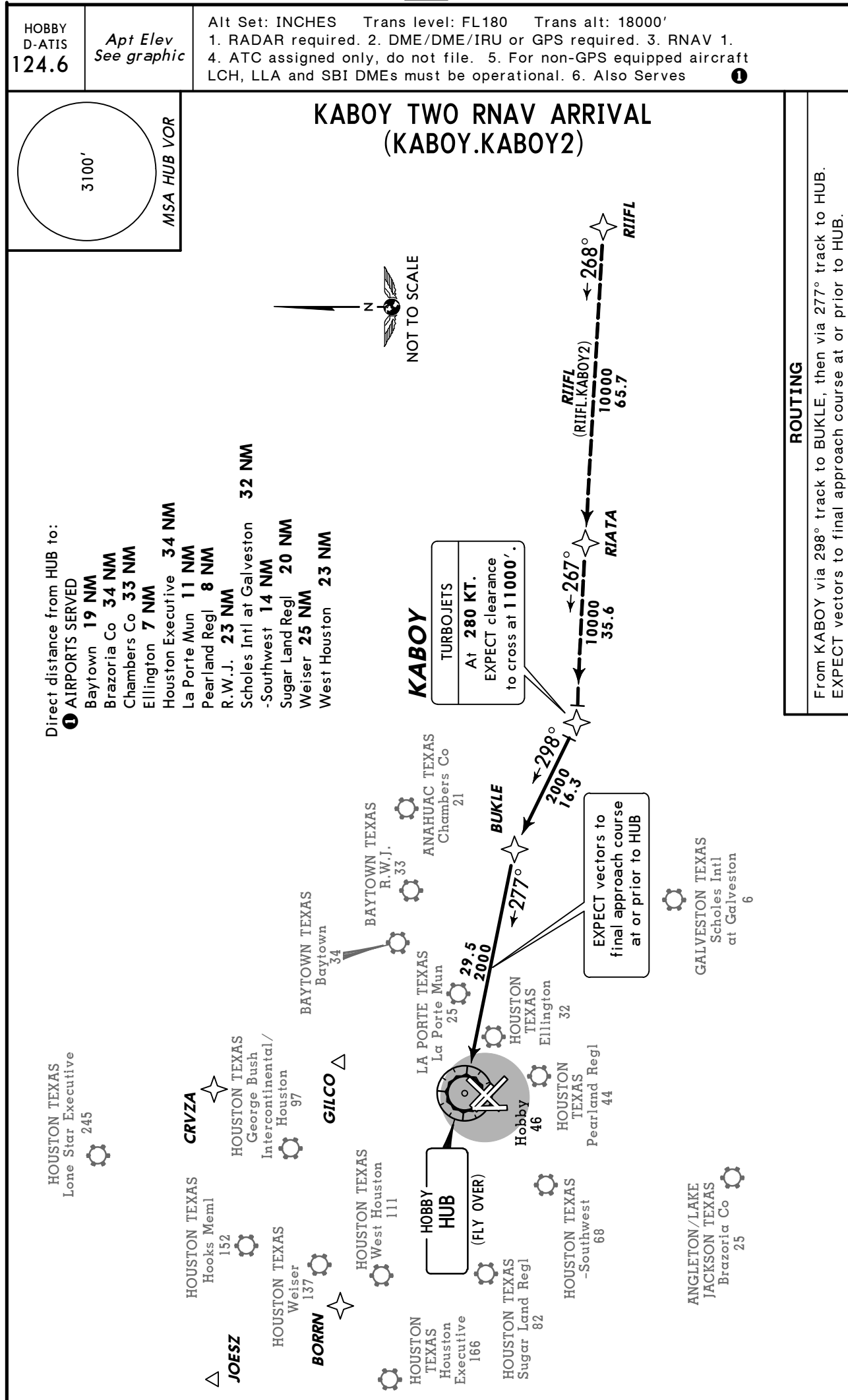


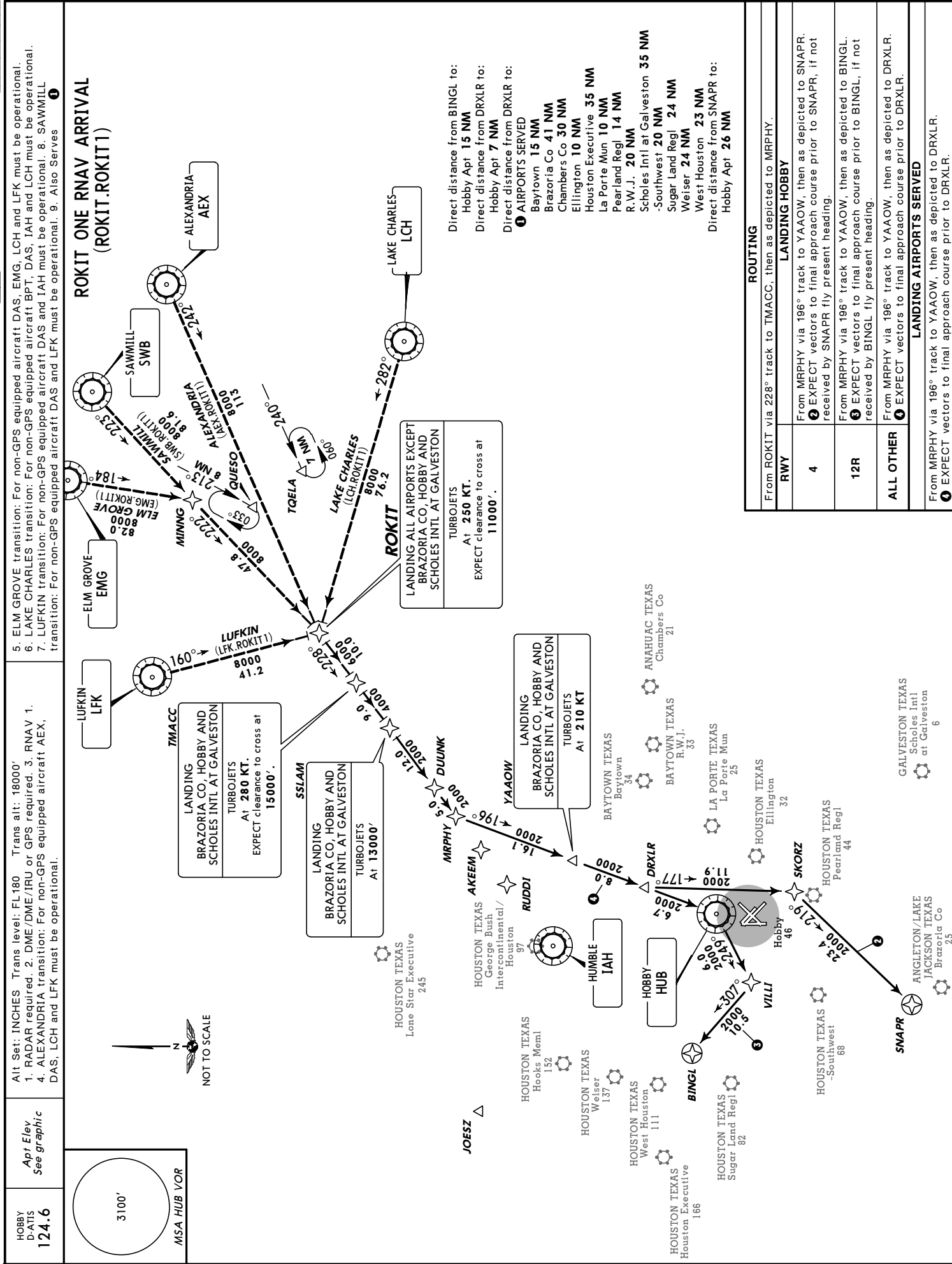
ROUTING

From DYNMO via 045° track to CHNNNG. From CHNNNG via 045° track to GOOSZ.
EXPECT vectors to final approach course at or prior to GOOSZ.

HOBBY D-ATIS 124.6	<i>Apt Elev</i> <i>See graphic</i>	Alt Set: INCHES Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1. 4. CORPUS CHRISTI transition: For non-GPS equipped aircraft IDU, PSX and VCT DMEs must be operational. 5. DRAGS transition: For non-GPS equipped aircraft IDU, PSX, SAT, THX and VCT DMEs must be operational.	6. PALACIOS transition: For non-GPS equipped aircraft VCT DME must be operational. 7. SEEDS transition: For non-GPS equipped aircraft ELA, IDU, SAT and THX DMEs must be operational. 8. Also Serves 1





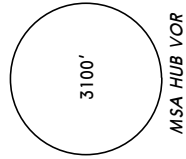


CHANGES: Procedure reapproved airports served

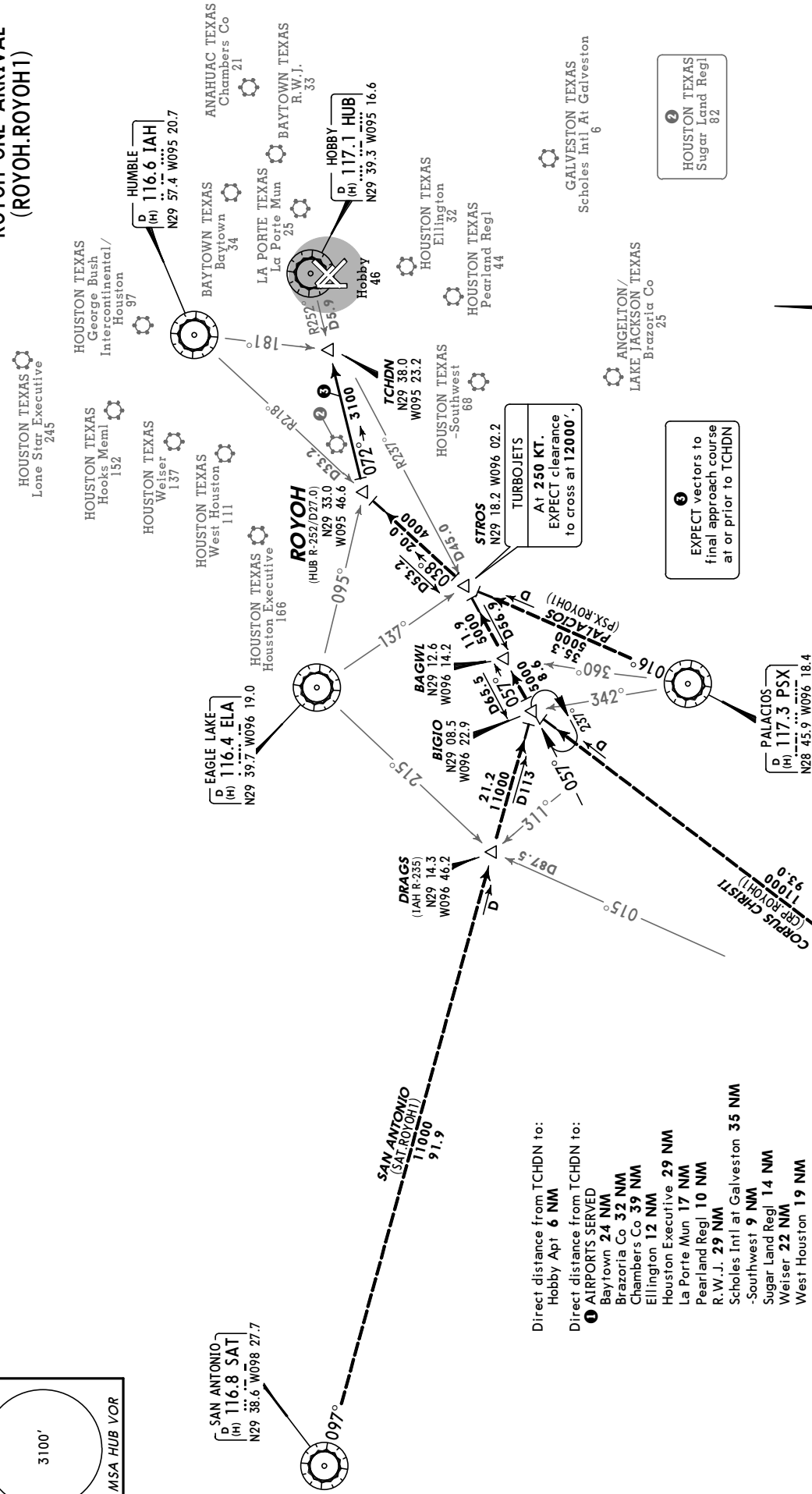
Alt Set: INCHES Trans level: FL180 Trans alt: 18000'

Apt Elev
See graphic

HOBBY D-ATI
124.6



**ROYOH ONE ARRIVAL
(ROYOH.ROYOH1)**



Direct distance from TCHDN to:
Hobby Apt **6 NM**

Direct distance from TCHDN to:
1 AIRPORTS SERVED

Baytown	24 NM
Brazoria Co	32 NM
Chambers Co	39 NM
Ellington	12 NM
Houston Executive	29 NM
La Porte Mun	17 NM
Pearland Regl	10 NM
R.W.J.	29 NM
Scholes Intl at Galveston	35 NM
-Southwest	9 NM
Sugar Land Regl	14 NM
Weiser	22 NM
West Houston	19 NM

CORPUS CHRISTI
D 115.5 CRP
(H) N27 54.2 W097 26.7

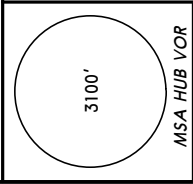
ROUTING

From over ROYOH via HUB R-252 to TCHDN. EXPECT vectors to final approach course at or prior to TCHDN.

CHANGES: New procedure at this airport.

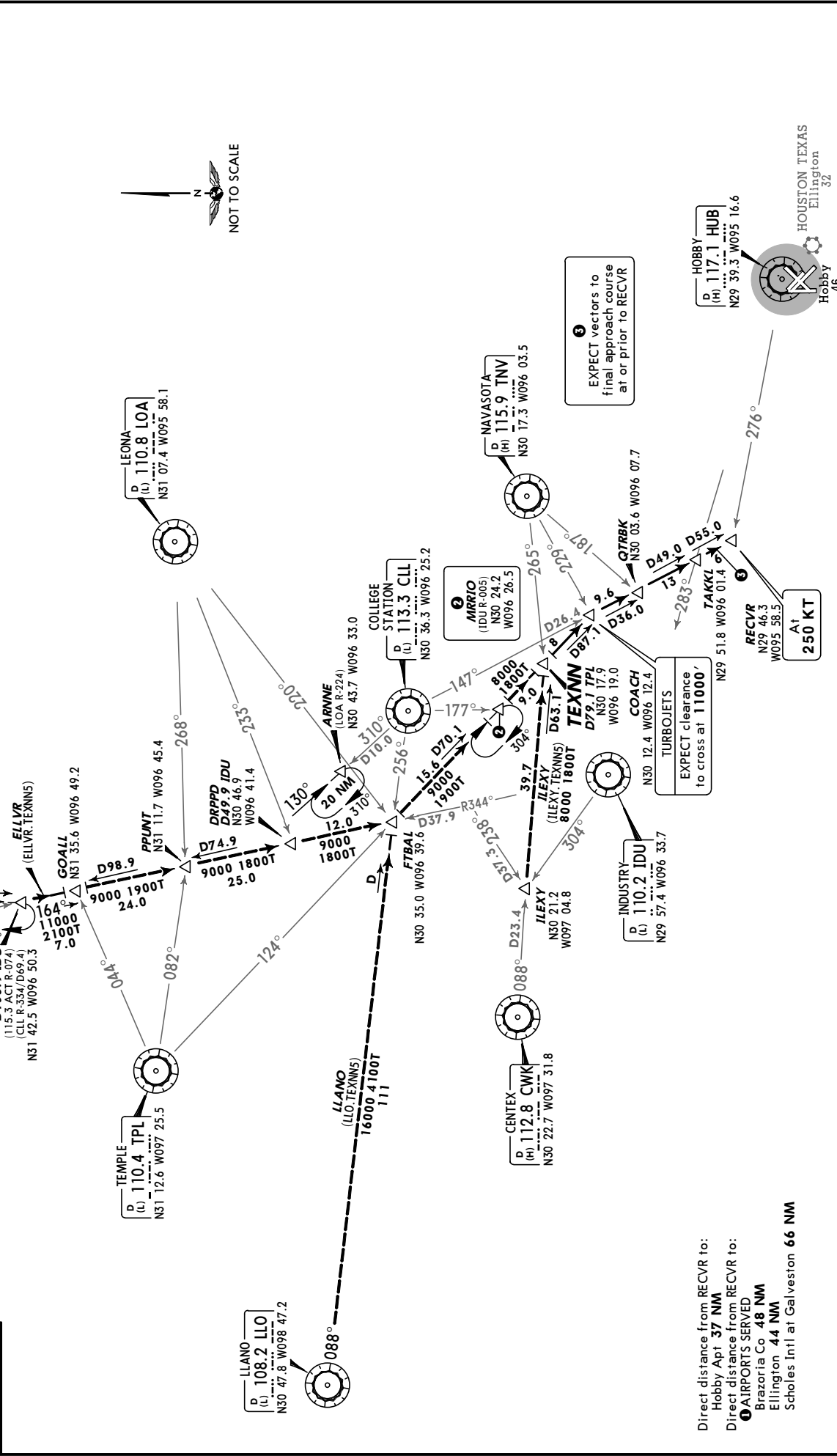
© JEPPESEN, 2010. ALL RIGHTS RESERVED.

HOBBY D-ATIS 124.6	Apt Elev See graphic	Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'



TEXNN FIVE ARRIVAL
(TEXNN.TEXNN5)

1. For turbojets only landing Brazoria Co, Ellington, Hobby and Scholes Intl at Galveston.
2. For conventional navigation equipped aircraft only.
3. DME/DME/IRU or GPS equipped aircraft file via the COACH (RNAV) STAR.
4. ILEXY transition for Austin terminal area departures only.
5. Also Serves 1

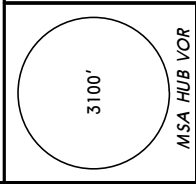


HOUSTON Departure (R)
132.25

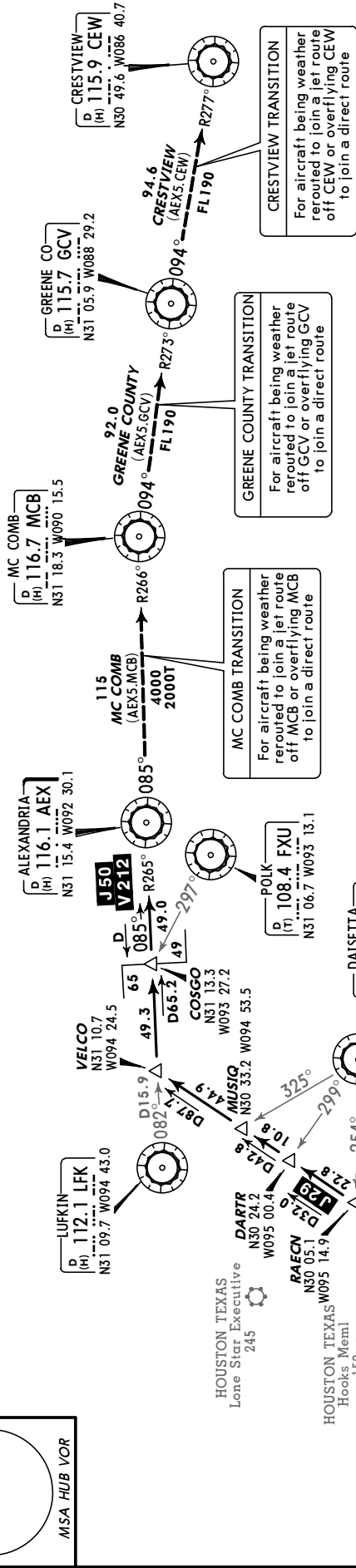
Apt Elev
See graphic

Trans level: FL180 Trans alt: 18000'

1. **RADAR required.**
2. CRESTVIEW, GREENE COUNTY and MC COMB Transitions are ATC assigned only, do not file.
3. Also serves **1**



ALEXANDRIA FIVE DEPARTURE
(AEX5.AEX)



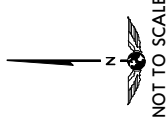
OBSTACLE
For TAKEOFF OBSTACLE NOTES
see 10-30B1.

This SID requires take-off minimums
(for standard minimums, refer to airport chart):
ELLINGTON: Rwy 4, 17L/R, 22, 35L/R: Standard
(or lower than standard, if authorized).
HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.
Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).
Rwy 17: 300-1.
Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290' per
NM to **1500'**.
HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).
HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).
LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:
Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).
Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.
SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).
TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).
WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).
WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

Direct distance from Hobby Apt to:
RAECN **26 NM**
Direct distance from AIRPORTS
SERVED to RAECN:
1 AIRPORTS SERVED
Ellington **29 NM**
Houston Executive **38 NM**
La Porte Mun **27 NM**
Scholes Intl at Galveston **53 NM**
-Southwest **37 NM**
Sugar Land Regl **35 NM**
Texas Gulf Coast Regl **59 NM**
Weiser **22 NM**
West Houston **27 NM**



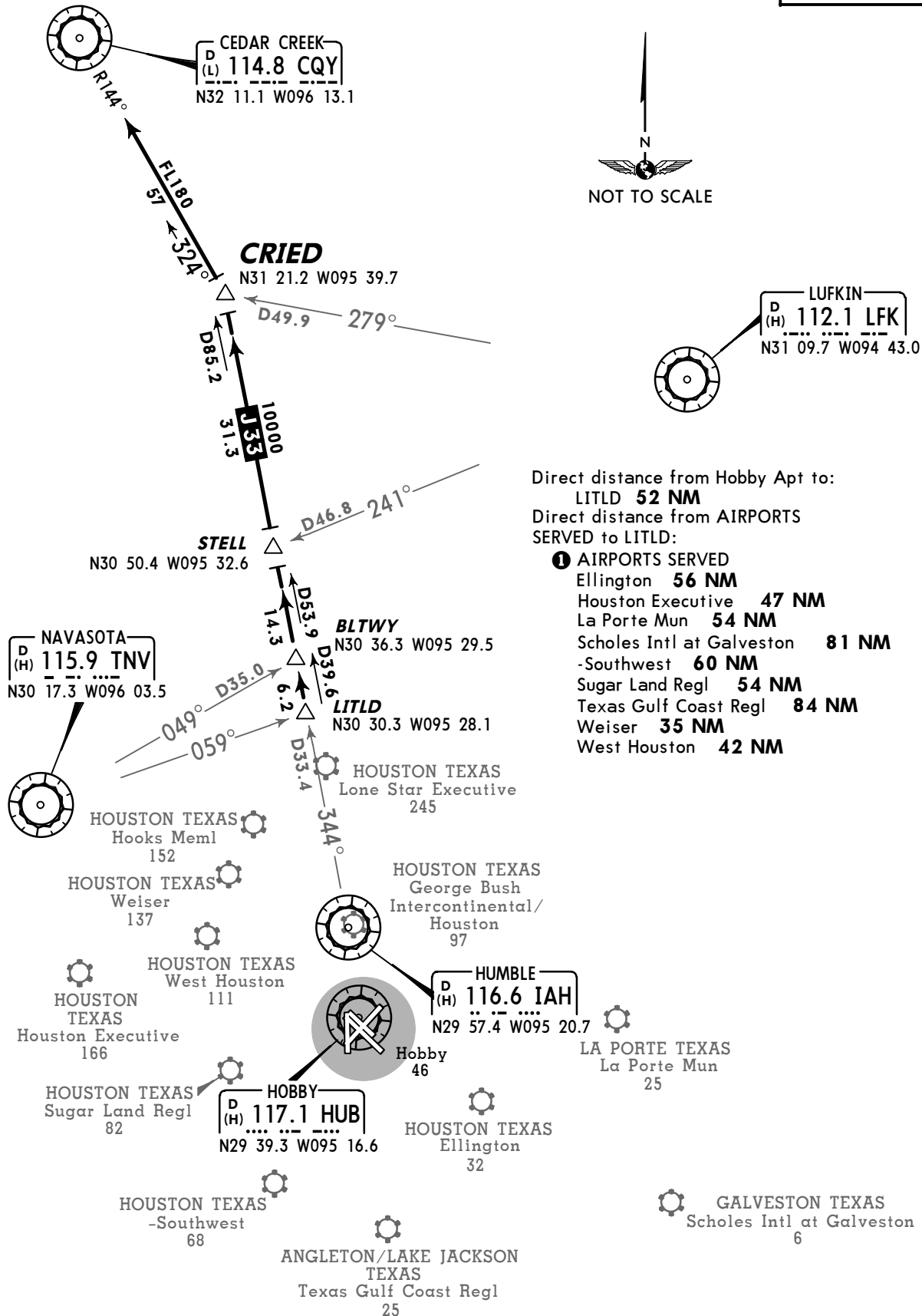
AIRPORT		INITIAL CLIMB	ALTITUDE
HOBBY		Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 5000'
ELLINGTON		Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 4000'
1 ALL OTHER AIRPORTS		When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.	
ROUTING			
At RAECN, via IAH R-028 to VELCO, then RIGHT turn via LFK R-082 and AEX R-265 to AEX. EXPECT filed altitude 10 minutes after departure.			

HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. RADAR required.
2. Also serves ①

3100'

MSA HUB VOR

CRIED FOUR DEPARTURE (CRIED4.CRIED)

For Procedure Text, Takeoff Minimums
see 10-3A-1

CRIED FOUR DEPARTURE (CRIED4.CRIED)

For Procedure Graphic see 10-3A
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to LITLD.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to LITLD.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD.	
ROUTING		
At LITLD, via IAH R-344 to STELL, then via IAH R-344 to CRIED, then LEFT turn via CQY R-144 to CQY. EXPECT filed altitude 10 minutes after departure.		

HOUSTON
Departure (R)
132.25*Apt Elev
See graphic*

Trans level: FL180 Trans alt: 18000'

1. RADAR required.2. For aircraft destined Memphis Intl, or filed
via Q-32 or J-42.3. Also serves **1**

3100'

MSA HUB VOR

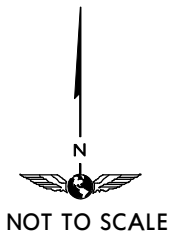
EL DORADO THREE DEPARTURE (ELD3.ELD)For Procedure Text and Takeoff Minimums
see 10-3B-1

Direct distance from Hobby Apt to:

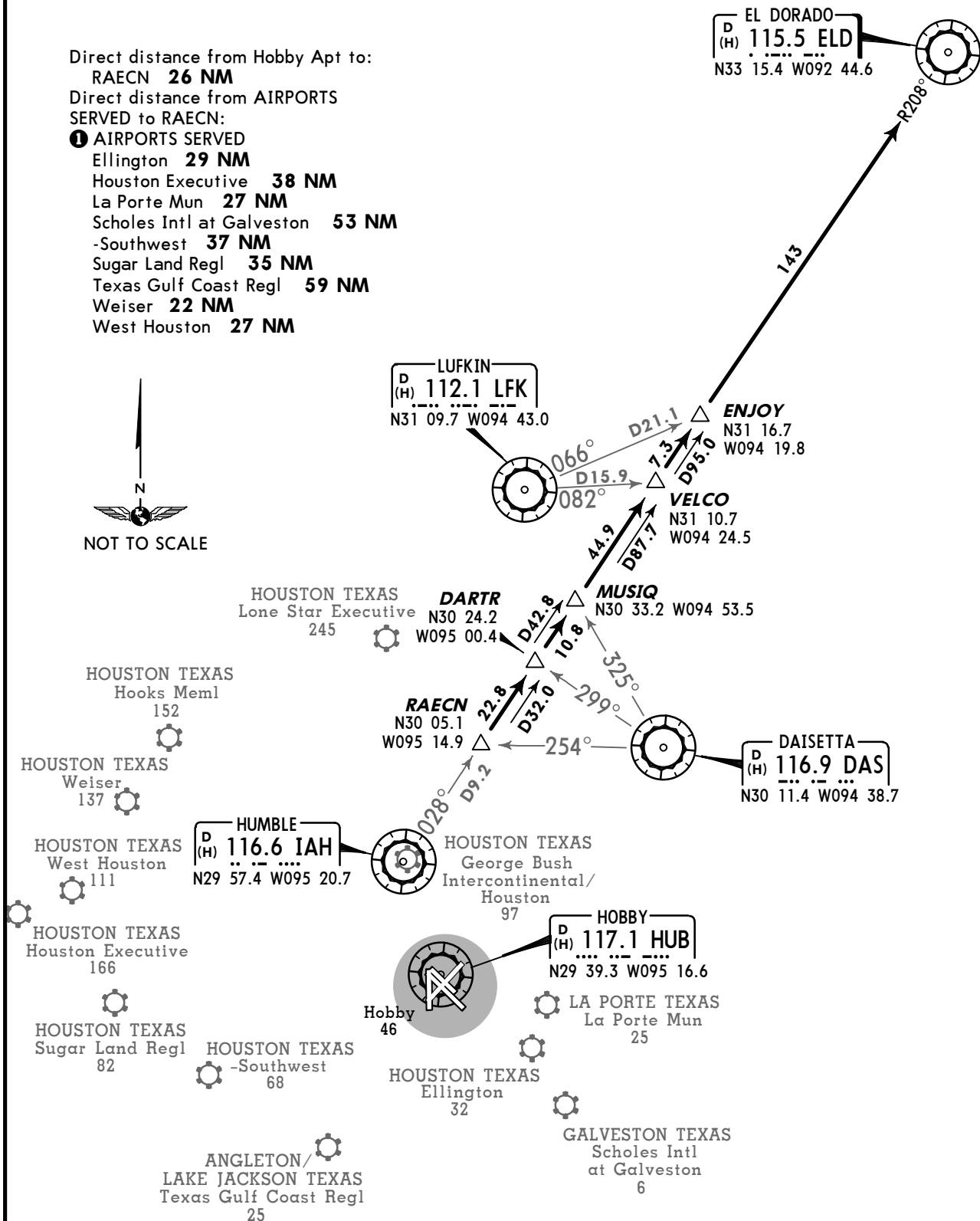
RAECN **26 NM**

Direct distance from AIRPORTS

SERVED to RAECN:

1 AIRPORTS SERVEDEllington **29 NM**Houston Executive **38 NM**La Porte Mun **27 NM**Scholes Intl at Galveston **53 NM**-Southwest **37 NM**Sugar Land Regl **35 NM**Texas Gulf Coast Regl **59 NM**Weiser **22 NM**West Houston **27 NM**

NOT TO SCALE

**OBSTACLE**

For TAKEOFF OBSTACLE NOTES see 10-3OB1.

EL DORADO THREE DEPARTURE (ELD3.ELD)

For Procedure Graphic see 10-3B
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

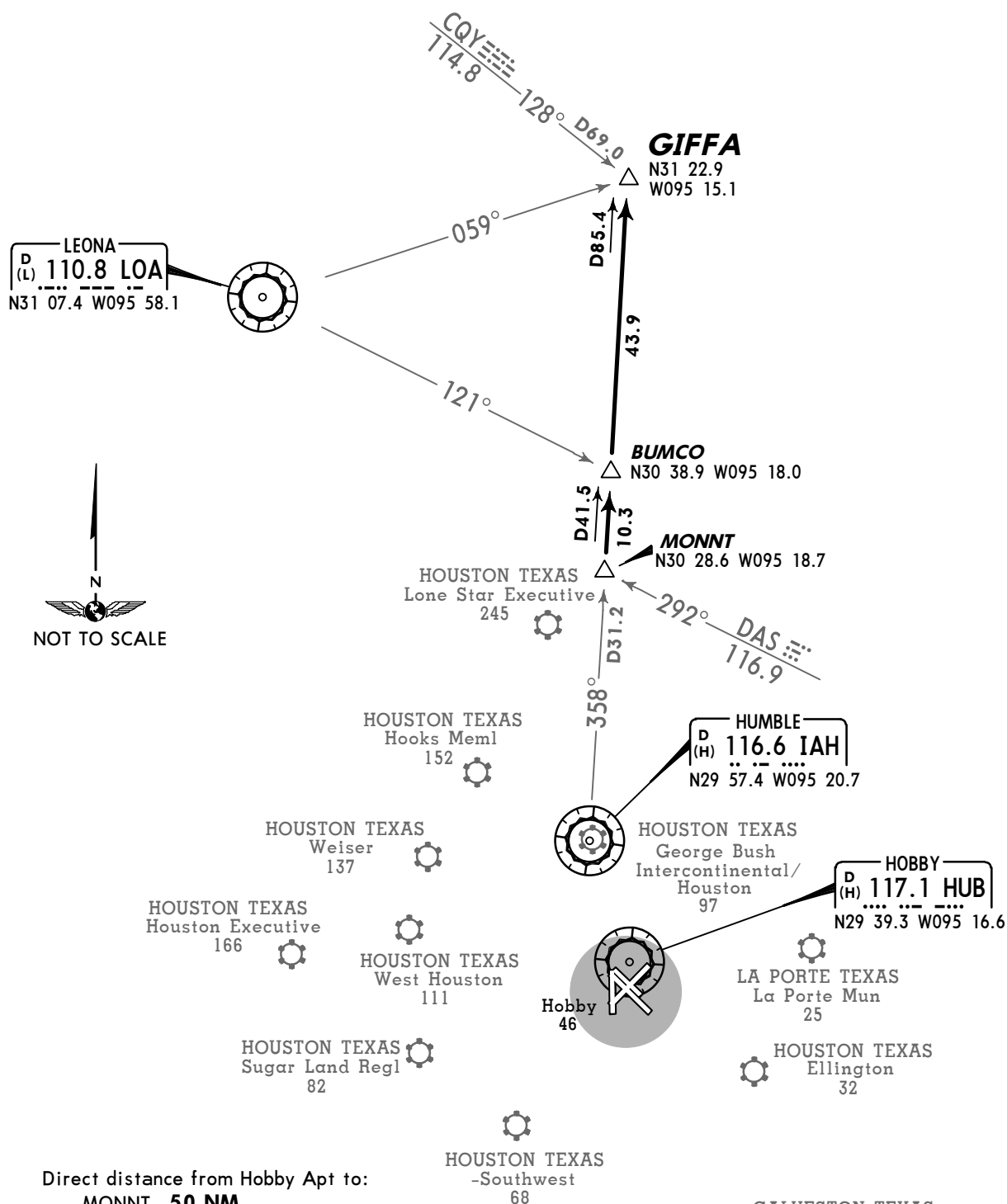
Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.	
ROUTING		
At RAECN via IAH R-028 and the ELD R-208 to ELD. EXPECT filed altitude 10 minutes after departure.		

HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. RADAR required.
2. Also serves **1**

3100'

MSA HUB VOR

GIFFA FOUR DEPARTURE (GIFFA4.GIFFA)For Procedure Text and Takeoff Minimums
see 10-3C-1Direct distance from Hobby Apt to:
MONNT 50 NMDirect distance from AIRPORTS
SERVED to MONNT:

- 1 AIRPORTS SERVED**
- Ellington **53 NM**
 - Houston Executive **51 NM**
 - La Porte Mun **50 NM**
 - Scholes Intl at Galveston **76 NM**
 - Southwest **59 NM**
 - Sugar Land Regl **54 NM**
 - Texas Gulf Coast Regl **82 NM**
 - Weiser **37 NM**
 - West Houston **44 NM**

GIFFA FOUR DEPARTURE (GIFFA4.GIFFA)

For Procedure Graphic see 10-3C

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

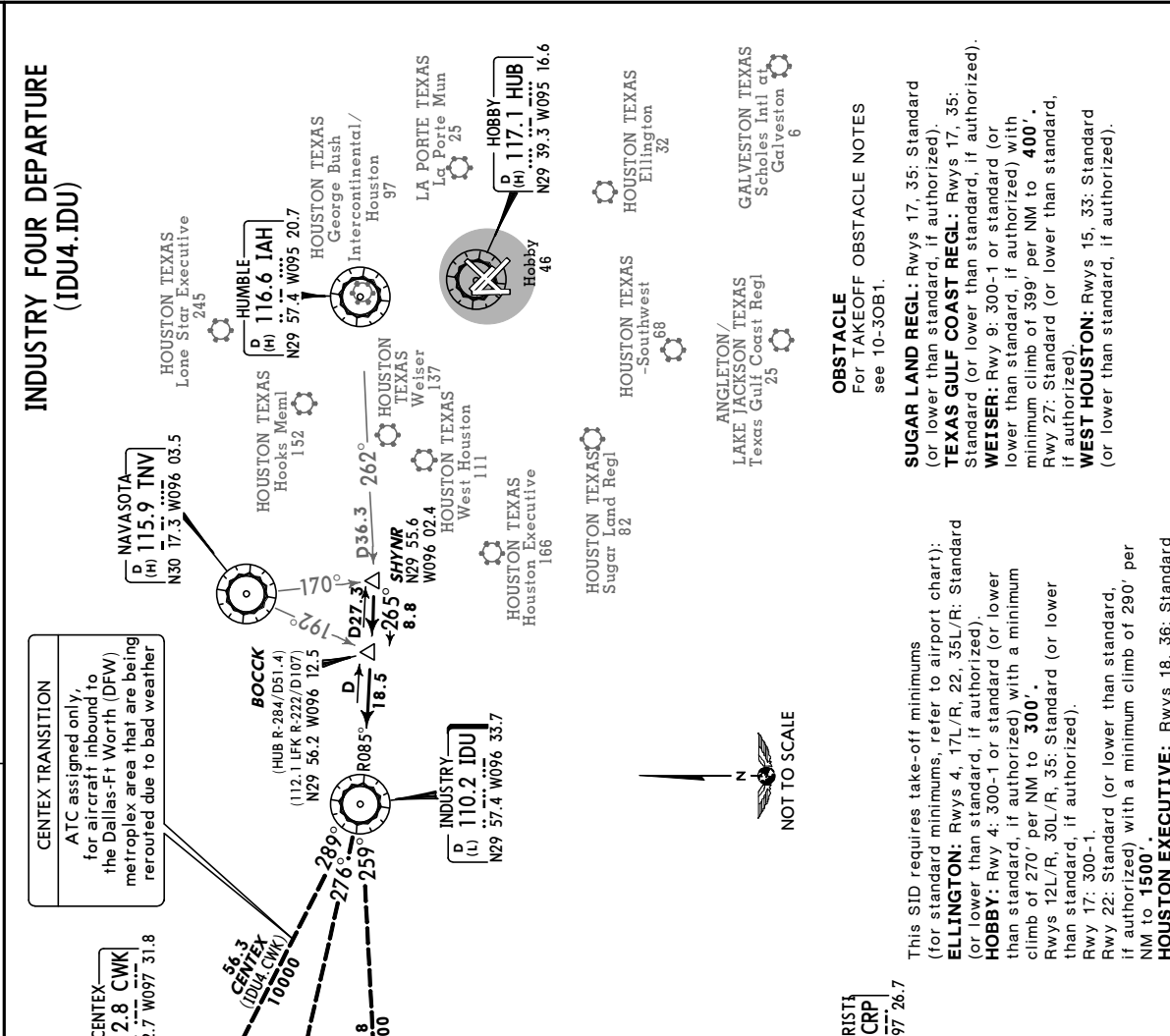
WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to MONNT.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to MONNT.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT.	
ROUTING		
At MONNT, via IAH R-358 to GIFFA. EXPECT filed altitude 10 minutes after departure.		

	1. RADAR required. 2. Also serves 1



(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rlys 9, 27: Standard (or lower than standard, if authorized).

LA PORTE MUN: Rlys 5, 12, 23, 30: Standard (or lower than standard, if authorized).

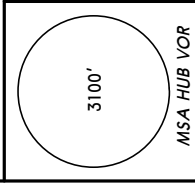
SCHOLES INTL at GALVESTON:
 Rlys 13, 31, 35: Standard (or lower than standard, if authorized).

Rwy 17: 300-1 or standard (or lower than standard, if authorized) with minimum climb of 502' per NM to 300'.

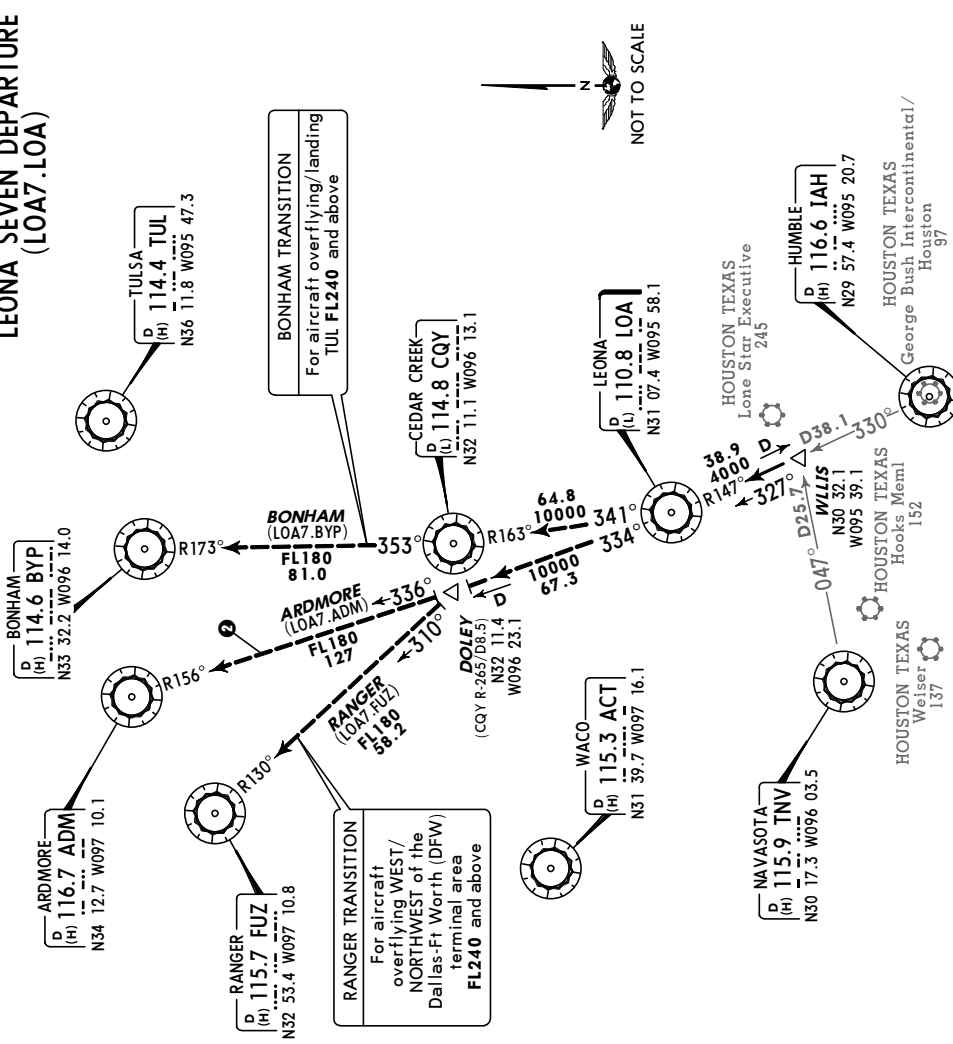
Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

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HOUSTON Departure (R) 132.25	<i>Apt Elev</i> <i>See graphic</i>	Trans level: FL180 Trans alt: 18000'



LEONA SEVEN DEPARTURE
(LOA7.LOA)



2 ARDMORE TRANSITION

For aircraft
overflying NORTH/
NORTHWEST of the
Dallas-Ft Worth (DFW)
terminal area
FL240 and above

This SID requires take-off minimums (for standard minimums, refer to airport chart):
ELLINGTON: Rwy's 4, 17L/R, 22, 35L/R:
 Standard (or lower than standard, if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower than standard, if authorized) with a minimum climb of 270' per NM to **300'**.
Rwys 12L/R, 30L/R, 35: Standard (or lower than standard, if authorized).

Rwy 22: Standard (or lower than standard, if authorized) with a minimum climb of 290' per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard (or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard (or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard (or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:
Rwys 13, 31, 35: Standard (or lower than standard, if authorized).

Rwy 17: 200-1 or standard (or lower than standard, if authorized) with minimum climb of 502' per NM to **300'**

SUGAR LAND REG: Rwy 17, 35: Standard
(or lower than standard if authorized)

TEXAS GULF COAST REG: Rwy's 17, 35:
Standard (or lower than standard if authorized)
(or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or lower than standard, if authorized) with

minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard).

WEST HOUSTON: Rwy 15, 33: Standard if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

OBSTACLE
For TAKEOFF OBSTACLE NOTES
see 10-30B1.

OBSTACLE

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to WILLIS.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to WILLIS.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to WILLIS.	

ROUTING			
At	W	I	S
via	OA	B-147	to
OA	EXPECT	filed	altitude
10	minutes	after	departure

HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. **RADAR required.**
2. For aircraft destined LIT, or overflying
LIT or PXV.
3. Also serves ①

3100'

MSA HUB VOR

LUFKIN SIX DEPARTURE (LFK6.LFK)

For Procedure Text and Takeoff Minimums
see 10-3F-1

Direct distance from Hobby Apt to:

KYANN 37 NM

Direct distance from AIRPORTS
SERVED to KYANN:

① AIRPORTS SERVED

Ellington 39 NM

Houston Executive 44 NM

La Porte Mun 36 NM

Scholes Intl at Galveston 63 NM

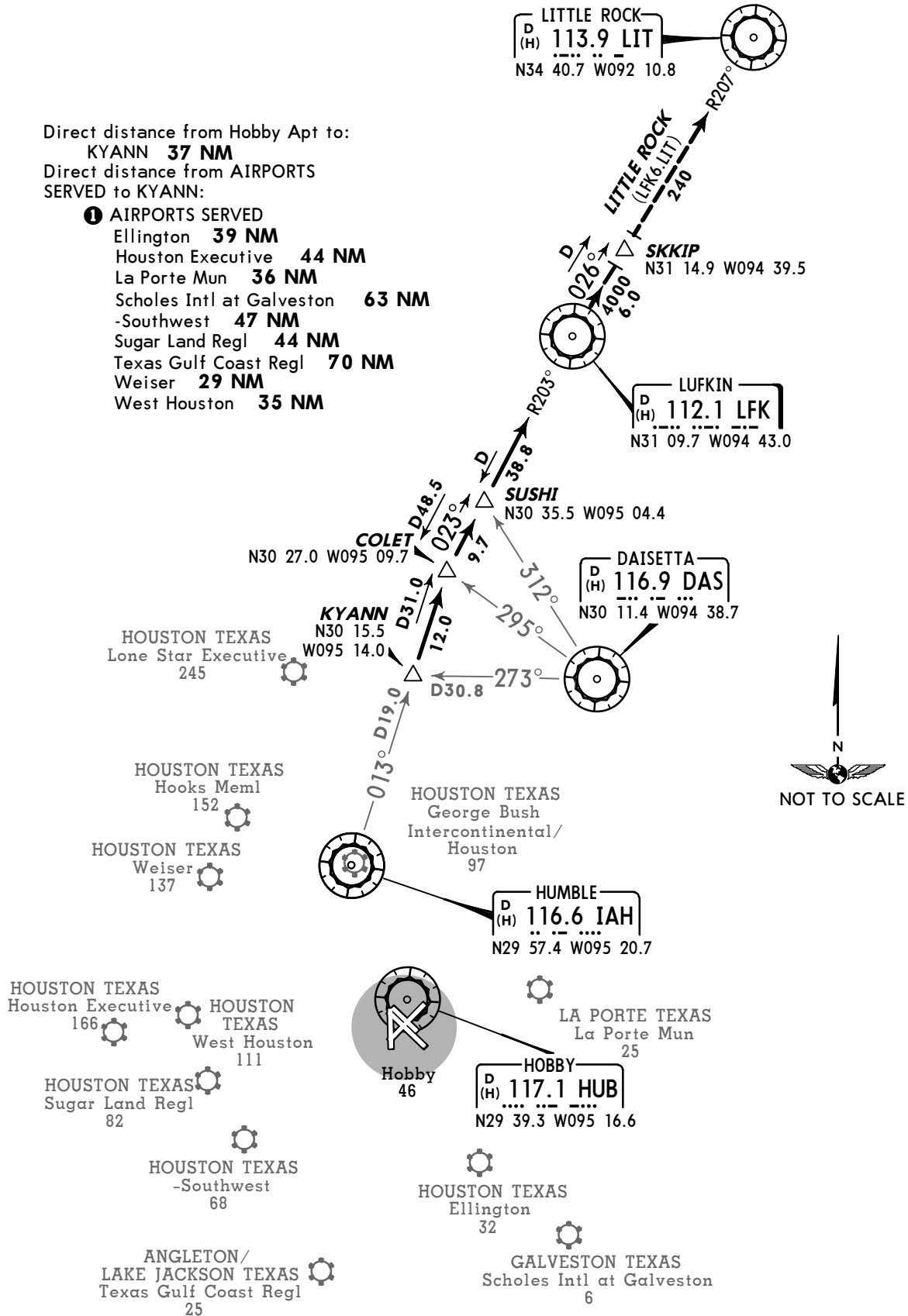
-Southwest 47 NM

Sugar Land Regl 44 NM

Texas Gulf Coast Regl 70 NM

Weiser 29 NM

West Houston 35 NM



LUFKIN SIX DEPARTURE (LFK6.LFK)

For Procedure Graphic see 10-3F
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to KYANN.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to KYANN.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN.	
ROUTING		
At KYANN via IAH R-013 to COLET, then RIGHT turn via LFK R-203 to LFK. EXPECT filed altitude 10 minutes after departure.		

Trans level: FL180 Trans alt: 18000'

1. **RADAR required.**
2. Also serves ①

SID

see 10-3G-1



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PALACIOS FOUR DEPARTURE (PSX4.PSX)

For Procedure Graphic see 10-3G
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to SKUBA.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to SKUBA.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA.	
ROUTING		
At SKUBA via PSX R-038 to PSX. EXPECT filed altitude 10 minutes after departure.		

Houston Departure (R)
127.12

Apt Elev
See graphic

Trans level: FL180 Trans alt: 18000'

SABINE PASS TWO
RNAV DEPARTURE
(SBI2.SBI)

DAISETTA
DAS

HOUSTON TEXAS
Lone Star Executive
245

HOUSTON TEXAS
George Bush
Intercontinental/Houston
97

HOUSTON TEXAS
Weiser
137

HOUSTON TEXAS
West Houston
111

HOUSTON TEXAS
Houston Executive
166

HOUSTON TEXAS
Sugar Land Regl
82

HOUSTON TEXAS
-Southwest
68

HOBBY HUB

LA PORTE TEXAS
La Porte Mun
25

LINGG

HOUSTON TEXAS
Ellington
32

GALVESTON TEXAS
Scholes Intl at Galveston
6

ANGLETON/
LAKE JACKSON
TEXAS
Texas Gulf Coast Regl
25

WHITE LAKE LLA

WHITE LAKE SBI

LEEVILLE LEV

NOT TO SCALE

N

This SID requires take-off minimums (for standard minimums, refer to airport chart):
ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
ATC climb of 280' per NM to 4000'.
HOBBY: Rwy 4: 300-1 or standard (or lower than standard, if authorized) with a minimum climb of 270' per NM to 300'.
Rwys 12L/R, 30L/R, 35: Standard (or lower than standard, if authorized).
Rwy 17: 300-1.
Rwy 22: Standard (or lower than standard, if authorized) with a minimum climb of 290' per NM to 1500'.
HOUSTON EXECUTIVE: Rwys 18, 36: Standard (or lower than standard, if authorized).
HOUSTON-SOUTHWEST: Rwys 9, 27: Standard (or lower than standard, if authorized).
LA PORTE MUN: Rwys 5, 12, 23, 30:
ATC climb of 438' per NM to 4000'.

OBSTACLE
For TAKEOFF OBSTACLE NOTES see 10-30B1.

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to LINGG.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to LINGG.	
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to LINGG.	MAINTAIN 4000'

ROUTING

At LINGG, via transition. EXPECT filed altitude 10 minutes after departure on depicted route to SBI.

Direct distance from Hobby Apt to:
LINGG 30 NM

Direct distance from AIRPORTS SERVED to LINGG:
AIRPORTS SERVED
Ellington 24 NM
Houston Executive 63 NM
La Porte Mun 19 NM
Scholes Intl at Galveston 28 NM
-Southwest 42 NM
Sugar Land Regl 50 NM
Texas Gulf Coast Regl 53 NM
Weiser 51 NM
West Houston 51 NM

SCHOLLES INTL AT GALVESTON:
Rwys 13, 31, 35: Standard (or lower than standard, if authorized).
Rwy 17: 300-1 or standard (or lower than standard, if authorized) with a minimum climb of 502' per NM to 300'.
SUGAR LAND REGL: Rwys 17, 35: Standard (or lower than standard, if authorized).
TEXAS GULF COAST REGL: Rwys 17, 35: Standard (or lower than standard, if authorized).
WEISER: Rwy 9: 300-1 or standard (or lower than standard, if authorized) with a minimum climb of 399' per NM to 400'.
Rwy 27: Standard (or lower than standard, if authorized).
WEST HOUSTON: Rwys 15, 33: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
280' per NM	350	467	700	933	1167	1400
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
438' per NM	548	730	1095	1460	1825	2190
502' per NM	628	837	1255	1673	2092	2510

[illegible]

HOUSTON Departure (R) 127.12	<i>Apt Elev</i> <i>See graphic</i>	Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP to international destinations. 3. Also serves ①

TRUAX TWO DEPARTURE (NGP2.NGP)

Direct distance from AIRPORTS

SERVED to YAWNS:

① AIRPORTS SERVED

Ellington **52 NM**
Scholes Intl at Galveston **46 NM**
Sugar Land Regl **48 NM**
Texas Gulf Coast Regl **18 NM**

This SID requires take-off minimums

(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R: Standard (or lower than standard, if authorized).**HOBBY:** Rwy 4: 200-1 or standard (or lower than standard, if authorized) with a minimum climb of 270' per NM to **300'**.

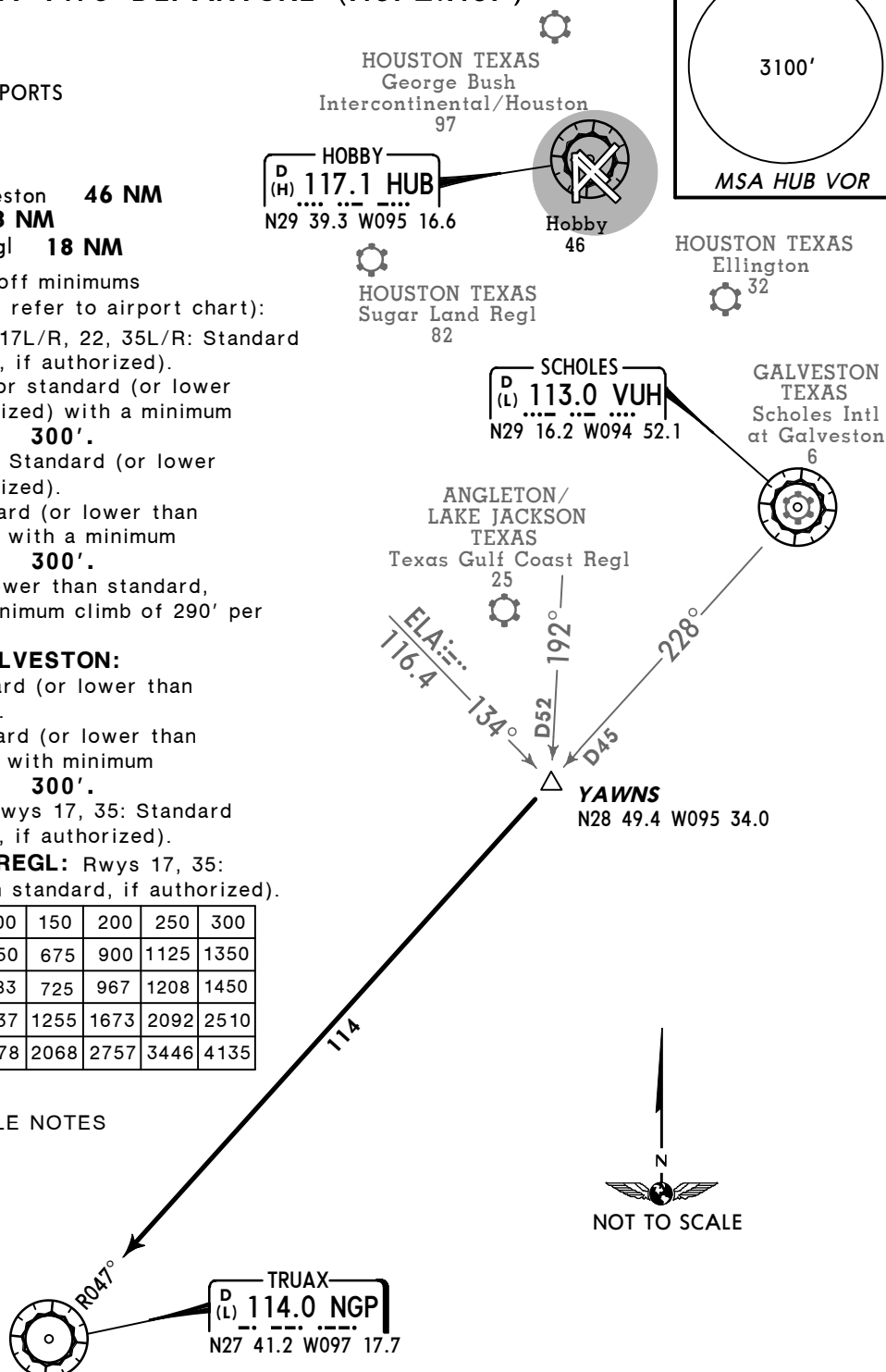
Rwys 12L/R, 30L/R, 35: Standard (or lower than standard, if authorized).

Rwy 17: 200-1 or standard (or lower than standard, if authorized) with a minimum climb of 827' per NM to **300'**.Rwy 22: Standard (or lower than standard, if authorized) with a minimum climb of 290' per NM to **1500'**.**SCHOLES INTL at GALVESTON:**

Rwys 13, 31, 35: Standard (or lower than standard, if authorized).

Rwy 17: 200-1 or standard (or lower than standard, if authorized) with minimum climb of 502' per NM to **300'**.**SUGAR LAND REGL:** Rwys 17, 35: Standard (or lower than standard, if authorized).**TEXAS GULF COAST REGL:** Rwys 17, 35: Standard (or lower than standard, if authorized).

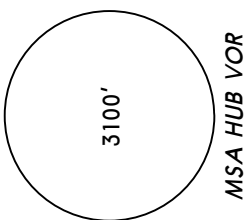
Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
502' per NM	628	837	1255	1673	2092	2510
827' per NM	1034	1378	2068	2757	3446	4135

OBSTACLEFor TAKEOFF OBSTACLE NOTES
see 10-3OB1.

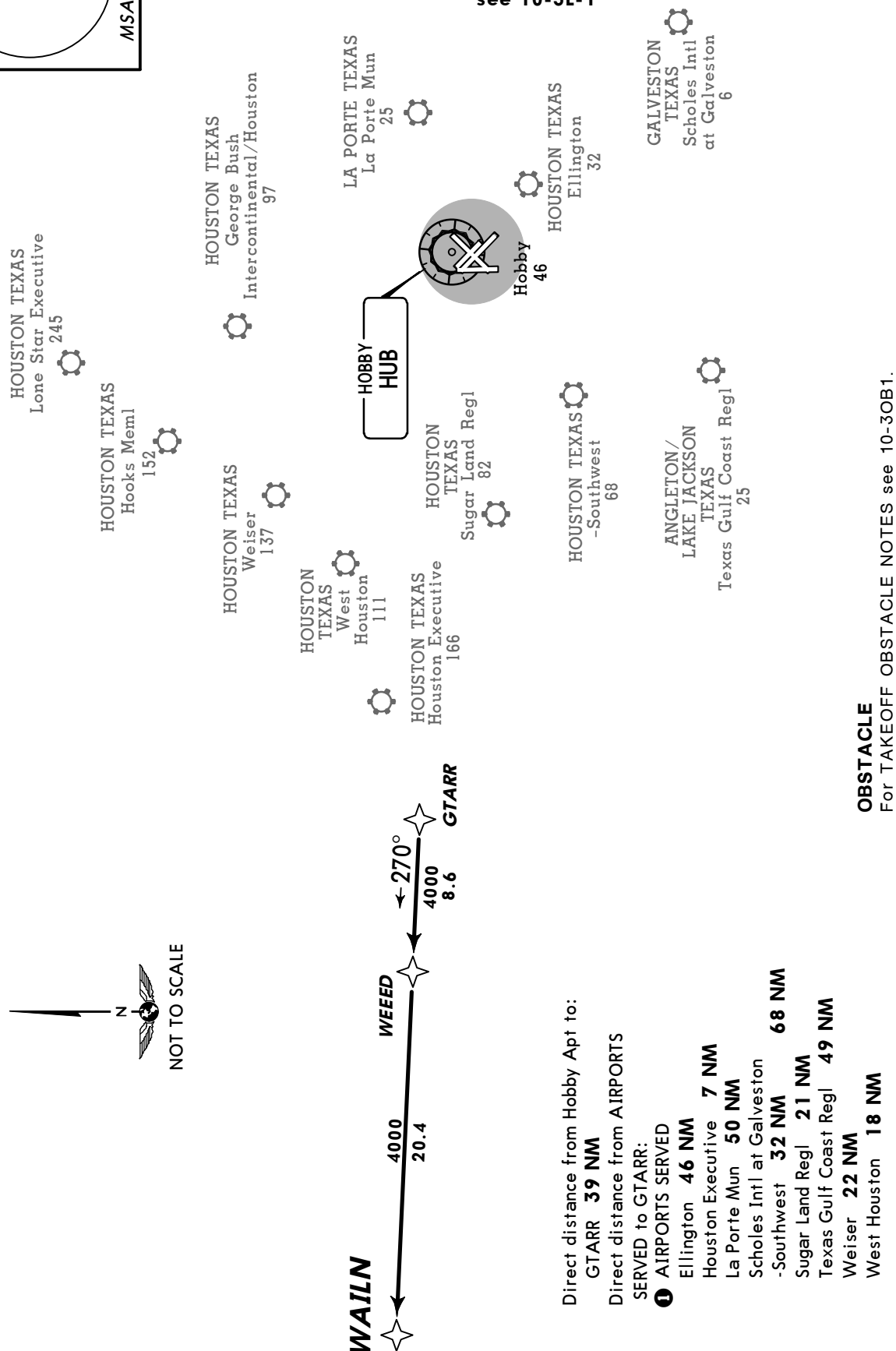
AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	EXPECT vectors to YAWNS. Rwy 17: Climb heading 174° to 700' before turning WESTBOUND. Rwys 30L/R: Climb heading 309° to 800' before turning WESTBOUND.	MAINTAIN 5000'
ELLINGTON	EXPECT vectors to YAWNS.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace fly assigned heading for vectors to YAWNS. SUGAR LAND REGL: Rwy 17: Climb heading 170° to 1500' before turning EASTBOUND. Rwy 35: Climb heading 350° to 1100' before turning SOUTHBOUND.	
ROUTING		
Via VUH R-228 and NGP R-047 to NGP. EXPECT filed altitude 10 minutes after departure.		

HOUSTON
Departure (R)
126.67*Apt Elev*
See graphic

Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. For advanced navigation aircraft destined Austin/San Antonio
terminal areas. Austin: Departing all Houston airports except George
Bush Intercontinental/Houston, Hooks Meml, Lone Star Executive.
San Antonio: Departing all Houston airports. 5. Also serves **1**



MSA HUB VOR

WAILN ONE RNAV DEPARTURE
(WAILN1.WAILN)**For Procedure Text and Takeoff Minimums**
see 10-3L-1

WAILN ONE RNAV DEPARTURE (WAILN1.WAILN)

For Procedure Graphic see 10-3L

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.

Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: ATC climb
gradient 213' per NM to 4000'.

Gnd speed-KT	75	100	150	200	250	300
213' per NM	266	355	533	710	888	1065
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to GTARR.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to GTARR.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to GTARR.	
ROUTING		
At GTARR, EXPECT filed altitude 10 minutes after departure on depicted route to WAILN.		

TAKEOFF OBSTACLE NOTES**ELLINGTON**

- RWY 17R:
POLE 1489' FROM DER, 817' RIGHT OF CENTERLINE, 40' AGL/74' MSL.
- RWY 22:
ANTENNA ON BUILDING 1998' FROM DER, 598' RIGHT OF CENTERLINE, 54' AGL/83' MSL. OBSTACLE LIGHT ON GLIDESLOPE 327' FROM DER, 543' LEFT OF CENTERLINE, 39' AGL/68' MSL.
- RWY 35L:
MULTIPLE TREES BEGINNING 1118' FROM DER, 679' RIGHT OF CENTERLINE, UP TO 37' AGL/77' MSL. CRANE 2352' FROM DER, 1024' LEFT OF CENTERLINE, 37' AGL/97' MSL.
- RWY 35R:
TREE 1597' FROM DER, 32' LEFT OF CENTERLINE, 33' AGL/80' MSL.

HOBBY

- RWY 4:
POLE 4403' FROM DER, 1069' RIGHT OF CENTERLINE, 121' AGL/166' MSL. LIGHT ON BUILDING 1562' FROM DER, 859' RIGHT OF CENTERLINE, 59' AGL/103' MSL. BUILDING 3990' FROM DER, 1223' RIGHT OF CENTERLINE, 139' AGL/174' MSL. LIGHT ON FLAGPOLE 4618' FROM DER, 768' RIGHT OF CENTERLINE, 117' AGL/161' MSL.
- RWY 12L:
ANTENNA ON HANGAR 1548' FROM DER, 424' LEFT OF CENTERLINE, 45' AGL/85' MSL.
- RWY 12R:
VEHICLE ON ROAD 514' FROM DER, 543' RIGHT OF CENTERLINE, 17' AGL/55' MSL. TREE 1217' FROM DER, 756' RIGHT OF CENTERLINE, 43' AGL/89' MSL. FENCE 85' FROM DER, 492' LEFT OF CENTERLINE, 4' AGL/45' MSL. VEHICLE AND ROAD 176' FROM DER, 497' LEFT OF CENTERLINE, 17' AGL/55' MSL. POLE 1011' FROM DER, 696' LEFT OF CENTERLINE, 33' AGL/73' MSL. TREE 1256' FROM DER, 783' LEFT OF CENTERLINE, 38' AGL/78' MSL.
- RWY 17:
MULTIPLE POLES BEGINNING 606' FROM DER, 393' RIGHT OF CENTERLINE, UP TO 79' AGL/124' MSL. CRANE 1795' FROM DER, 689' RIGHT OF CENTERLINE, 100' AGL/150' MSL. ANTENNA ON BUILDING 620' FROM DER, 312' LEFT OF CENTERLINE, 27' AGL/72' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 260' LEFT OF CENTERLINE, UP TO 71' AGL/116' MSL. RADAR REFLECTOR 1214' FROM DER, 258' LEFT OF CENTERLINE, 32' AGL/77' MSL.
- RWY 22:
POLE 727' FROM DER, 626' RIGHT OF CENTERLINE, 28' AGL/77' MSL. TREE 1310' FROM DER, 679' RIGHT OF CENTERLINE, 27' AGL/76' MSL. ANTENNA ON LIGHT POLE, 1805' FROM DER, 968' RIGHT OF CENTERLINE, 60' AGL/109' MSL.
- RWY 30L:
ANTENNA ON BUILDING 547' FROM DER, 274' RIGHT OF CENTERLINE, 23' AGL/69' MSL. MULTIPLE POLES BEGINNING 341' FROM DER, 501' LEFT OF CENTERLINE, UP TO 39' AGL/84' MSL. MULTIPLE TREES BEGINNING 1392' FROM DER, 466' LEFT OF CENTERLINE, UP TO 78' AGL/118' MSL.
- RWY 30R:
POLE 1096' FROM DER, 785' RIGHT OF CENTERLINE, 29' AGL/75' MSL. ANTENNA ON BUILDING 500' FROM DER, 525' LEFT OF CENTERLINE, 33' AGL/69' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 2)**HOBBY (CONTD)**

◦ RWY 35:

ANTENNA ON LIGHT POLE 738' FROM DER, 519' RIGHT OF CENTERLINE, 40' AGL/86' MSL. LIGHT POLE 1119' FROM DER, 353' RIGHT OF CENTERLINE, 31' AGL/77' MSL. ANTENNA ON BUILDING 66' FROM DER, 471' LEFT OF CENTERLINE, 33' AGL/69' MSL

HOUSTON EXECUTIVE

◦ 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

◦ 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.

LA PORTE MUN

◦ RWY 12:

TREES AND POLES BEGINNING 128' FROM DER, 42' LEFT OF CENTERLINE, UP TO 50' AGL/74' MSL. TREES AND POLES BEGINNING 131' FROM DER, 114' RIGHT OF CENTERLINE, UP TO 39' AGL/63' MSL. CHIMNEY 676' FROM DER, 412' RIGHT OF CENTERLINE, 31' AGL/55' MSL.

◦ RWY 23:

TREES BEGINNING 1320' FROM DER, 43' LEFT OF CENTERLINE, UP TO 63' AGL/87' MSL. HANGARS BEGINNING 233' FROM DER, 288' RIGHT OF CENTERLINE, UP TO 35' AGL/59' MSL. VEHICLE ON ROAD 594' FROM DER, 513' LEFT OF CENTERLINE, 15' AGL/39' MSL. TREES 1010' FROM DER, 1010' RIGHT OF CENTERLINE, UP TO 63' AGL/87' MSL.

◦ RWY 30:

TREES AND POLES BEGINNING 114' FROM DER, 67' LEFT OF CENTERLINE, UP TO 63' AGL/87' MSL. BUILDINGS 335' FROM DER, 356' LEFT OF CENTERLINE, 25' AGL/50' MSL. TREES AND POLES BEGINNING 44' FROM DER, 35' RIGHT OF CENTERLINE, UP TO 52' AGL/76' MSL.

SCHOLES INTL AT GALVESTON

◦ RWY 13:

BUSH 381' FROM DER, 533' LEFT OF CENTERLINE, 15' AGL/20' MSL. FENCE 201' FROM DER, 490' LEFT OF CENTERLINE, 6' AGL/11' MSL. TREE 343' FROM DER, 468' RIGHT OF CENTERLINE, 12' AGL/17' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 3)**SCHOLES INTL AT GALVESTON (CONTD)**

- RWY 17:
BUILDING 3057' FROM DER, 339' LEFT OF CENTERLINE, 123' AGL/130' MSL. MULTIPLE POLES BEGINNING 2034' FROM DER, 87' RIGHT OF CENTERLINE, UP TO 60' AGL/70' MSL. MULTIPLE TRANSMISSION TOWERS BEGINNING 636' FROM DER, 551' RIGHT OF CENTERLINE, UP TO 55' AGL/60' MSL. TREE 460' FROM DER, 316' RIGHT OF CENTERLINE, 22' AGL/29' MSL.
- RWY 31:
MULTIPLE CRANES BEGINNING 4341' FROM DER, 1017' LEFT OF CENTERLINE, UP TO 131' AGL/131' MSL.
- RWY 35:
TREE 730' FROM DER, 501' RIGHT OF CENTERLINE, 27' AGL/32' MSL.

SUGAR LAND REGL

- 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.
- 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.

TEXAS GULF COAST REGL

- RWY 35:
TREE 1510' FROM DER, 721' LEFT OF CENTERLINE, 48' AGL/68' MSL.

WEST HOUSTON

- RWY 15:
VEHICLES ON ROADWAY BEGINNING ABEAM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 15' AGL/124' MSL. BUILDING 177' FROM DER, 398' LEFT OF CENTERLINE, 18' AGL/126' MSL. TREES BEGINNING 178' FROM DER, 289' RIGHT OF CENTERLINE, UP TO 100' AGL/209' MSL.
- RWY 33:
BUILDING 265' FROM DER, 364' LEFT OF CENTERLINE, 35' AGL/143' MSL. TREES BEGINNING 2706' FROM DER, 700' LEFT OF CENTERLINE, UP TO 100' AGL/214' MSL. TREES BEGINNING 3159' FROM DER, 747' RIGHT OF CENTERLINE, UP TO 100' AGL/216' MSL.

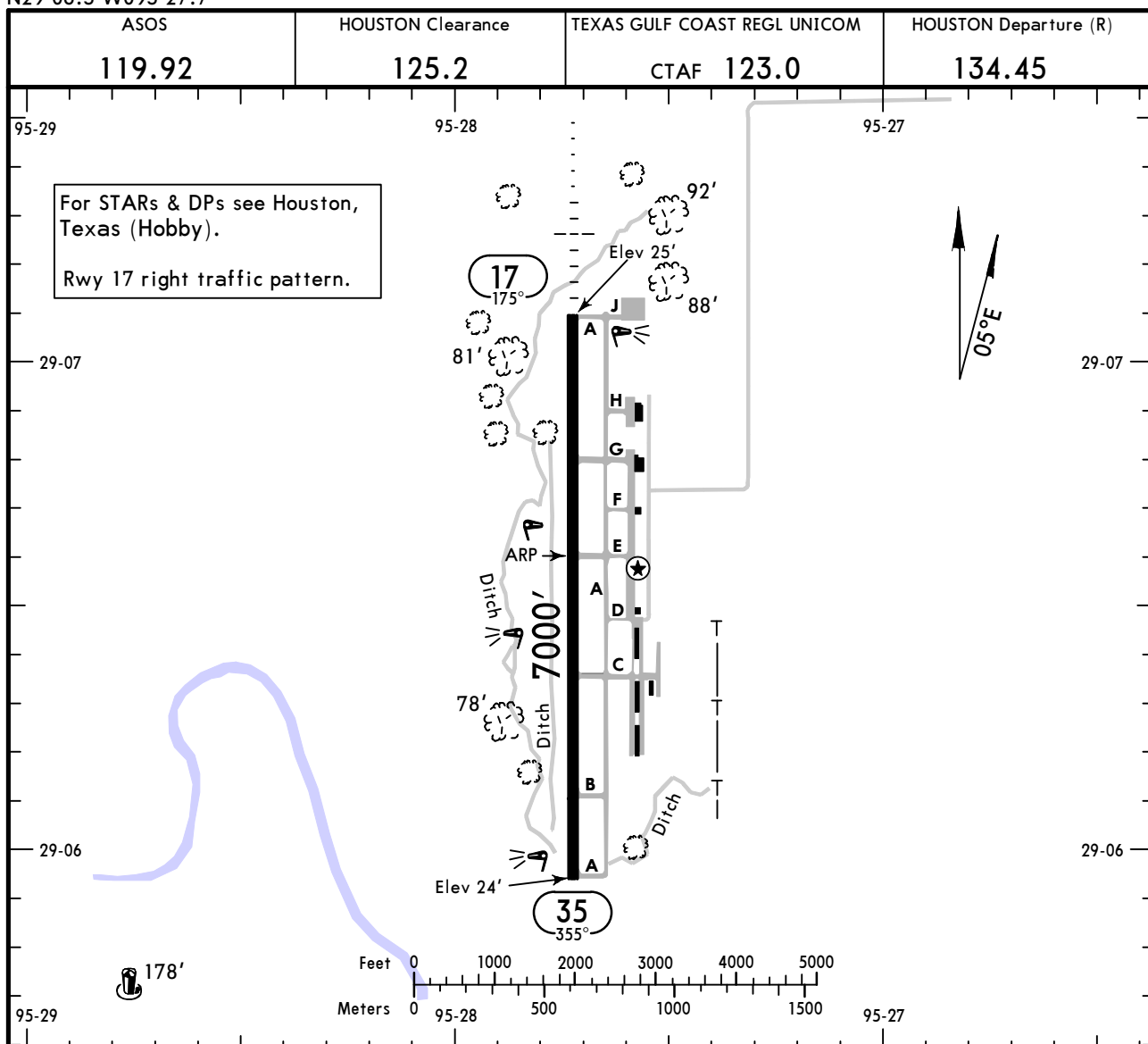
WEISER

- RWY 9:
TANK 4127' FROM DER, 1455' LEFT OF CENTERLINE, 147' AGL/282' MSL.
- RWY 27:
RAILROAD 462' FROM DER, 555' LEFT OF CENTERLINE, 23' AGL/165' MSL. VEHICLE AND ROAD 650' FROM DER, 7' LEFT OF CENTERLINE, 17' AGL/159' MSL.

KLBX/LJN
Apt Elev 25'
N29 06.5 W095 27.7

JEPPESEN
10 DEC 10 (11-1)

ANGLETON/LAKE JACKSON, TEXAS
TEXAS GULF COAST REGL



ADDITIONAL RUNWAY INFORMATION

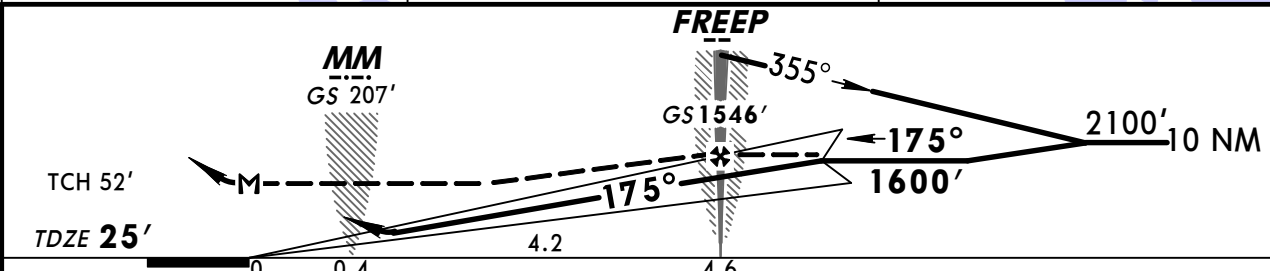
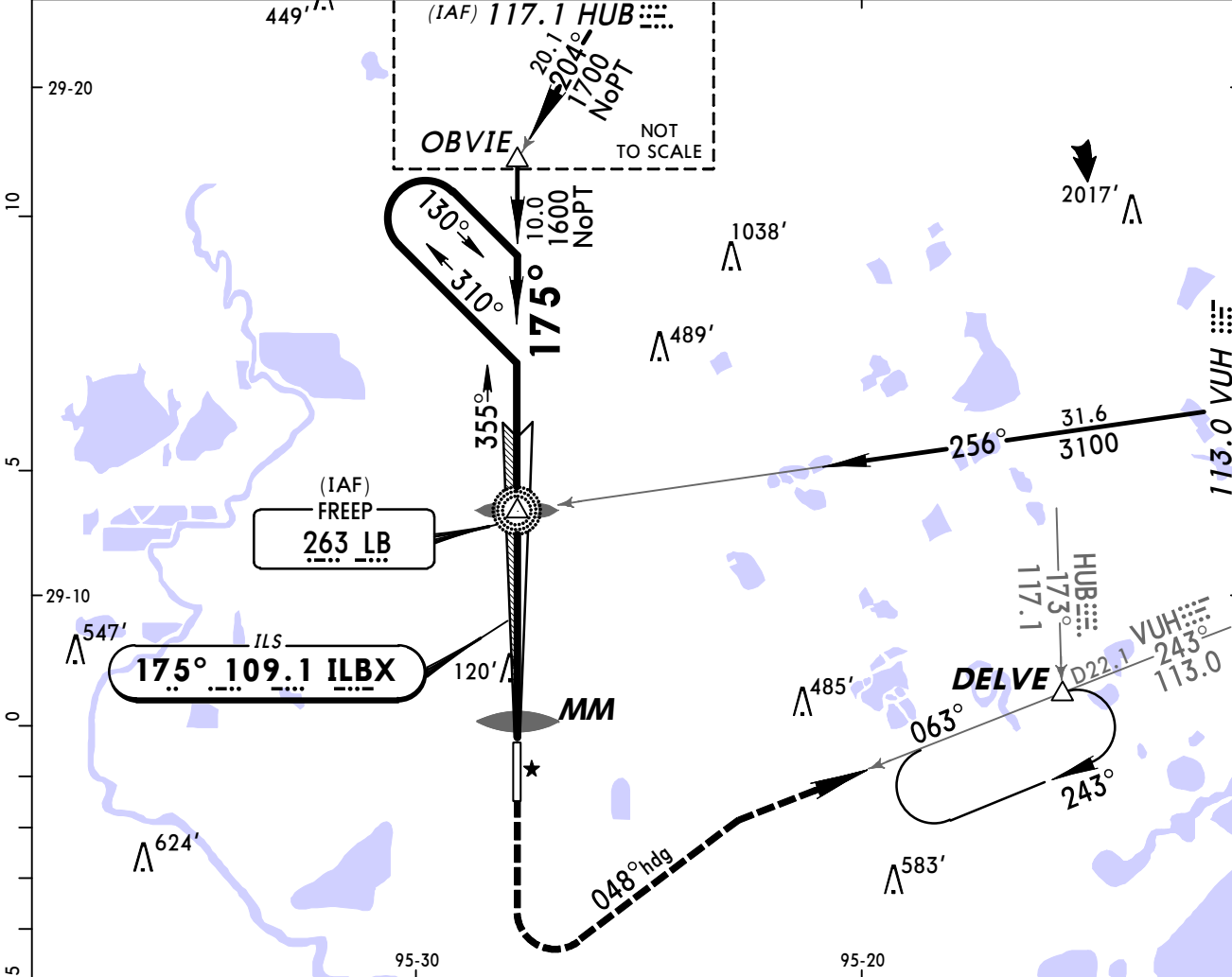
RWY				USABLE LENGTHS		TAKE-OFF	WIDTH
				— LANDING BEYOND —			
				Threshold	Glide Slope		
17	① MIRL	② MALSR PAPI-L (angle 3.0°)	grooved		6011'		100'
35	① MIRL	PAPI-L (angle 3.00°)	grooved				

- ① Increase intensity on 123.0.
- ② Activate on 123.0.

TAKE-OFF			FOR FILING AS ALTERNATE	
All Rwys			Authorized When Local Weather Available	
			RNAV (GPS) Rwy 17 RNAV (GPS) Rwy 35	Other
1 & 2 Eng	1/4	1	800-2	NA
3 & 4 Eng		1/2		

BRIEFING STRIP™

ASOS 119.92		HOUSTON Approach (R) 134.45		TEXAS GULF COAST REGL UNICOM CTAF 123.0	
LOC ILBX 109.1	Final Apch Crs 175°	GS FREEP 1546' (1521')	ILS DA(H) (CONDITIONAL) 225' (200')	Apt Elev 25' TDZE 25'	3100' MSA LB LOM
MISSED APCH: Climb to 1000' then climbing LEFT turn to 2000' via heading 048° and inbound on VUH VOR R-243 to DELVE INT and hold.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'					
1. Use local altimeter setting; if not received, use Hobby altimeter setting. 2. Pilot controlled lighting 123.0.					



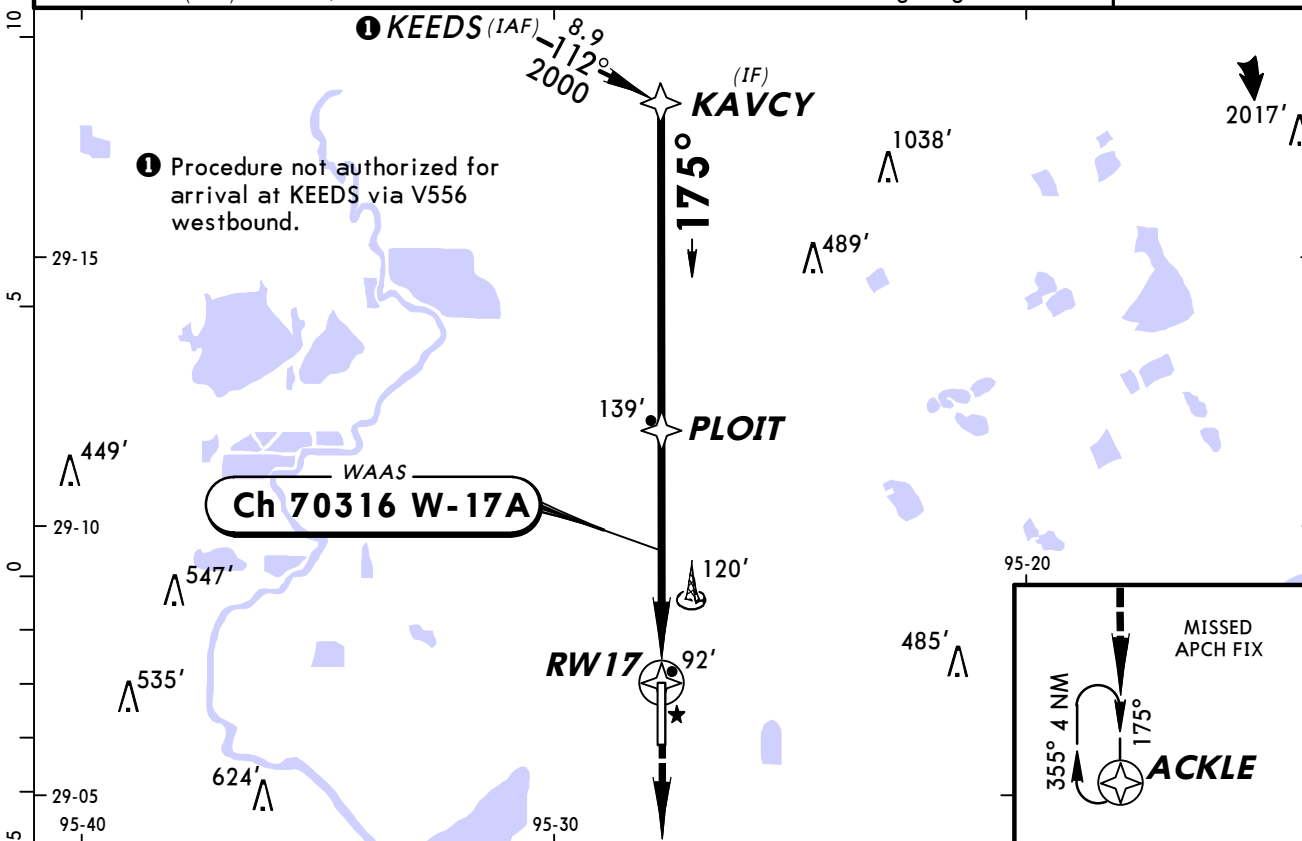
Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	1000' ↑	2000' ↶ LT	via 048° hdg and 113.0 R-243
GS 3.00°	377	484	538	646	753	861				
FREEP to MAP 4.6	3:57	3:04	2:46	2:18	1:58	1:43				

STRAIGHT-IN LANDING RWY 17					CIRCLE-TO-LAND		
1 ILS		2 LOC (GS out)			Not Authorized East of Rwy 17-35		
DA(H) 225' (200')		MDA(H) 420' (395')			With Local Altimeter Setting		With Hobby Altimeter Setting
FULL	RAIL or ALS out		RAIL out	ALS out	Max Kts	MDA(H)	MDA(H)
A					90	480' (455') - 1	580' (555') - 1
B					120		
C	1/2	3/4	1/2	3/4	140	480' (455') - 1 1/2	580' (555') - 1 1/2
D			3/4	1 1/4	165	580' (555') - 2	680' (655') - 2

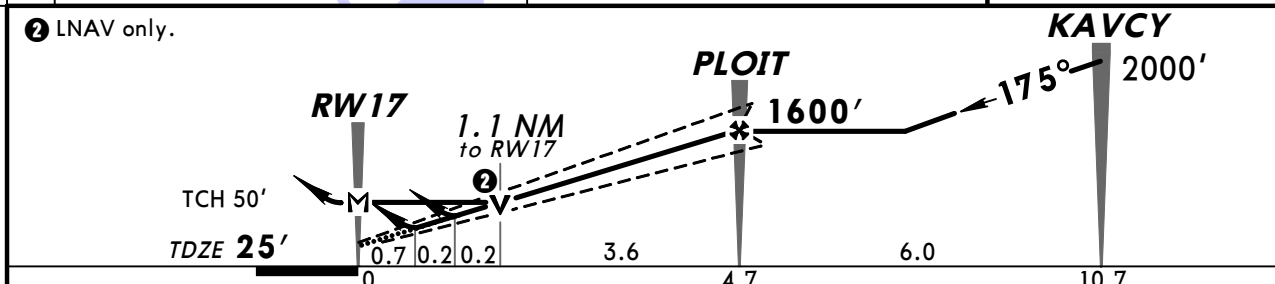
1 DA(H) 325' (300') with Hobby altimeter setting.
2 MDA(H) 520' (495') with Hobby altimeter setting.

BRIEFING STRIP™

ASOS 119.92		HOUSTON Approach (R) 134.45		TEXAS GULF COAST REGL UNICOM CTAF 123.0	
WAAS Ch 70316 W-17A	Final Apch Crs 175°	Minimum Alt PLOIT 1600' (1575')	LPV DA(H) (CONDITIONAL) 282' (257')	Apt Elev 25' TDZE 25'	3100' MSA RW17
MISSED APCH: Climb to 2000' direct ACKLE and hold.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'					
1. Use local altimeter setting; if not received, use Hobby altimeter setting. 2. Baro-VNAV and VDP not authorized when using Hobby altimeter setting. 3. Baro-VNAV not authorized below -16°C (4°F). 4. DME/DME RNP-0.30 not authorized. 5. Pilot controlled lighting 123.0.					



② LNAV only.



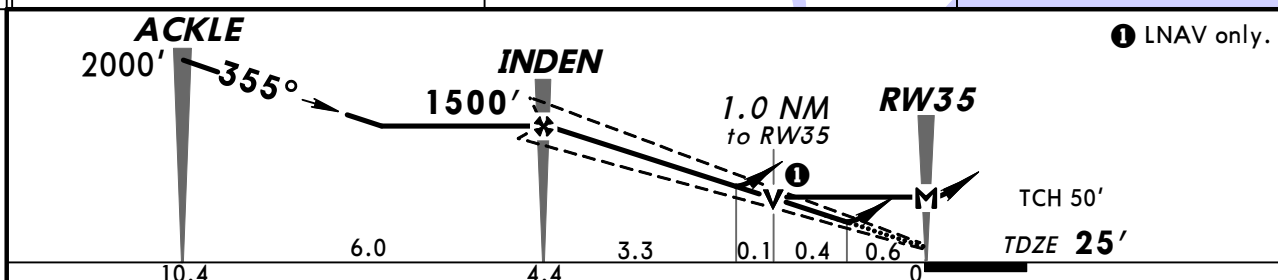
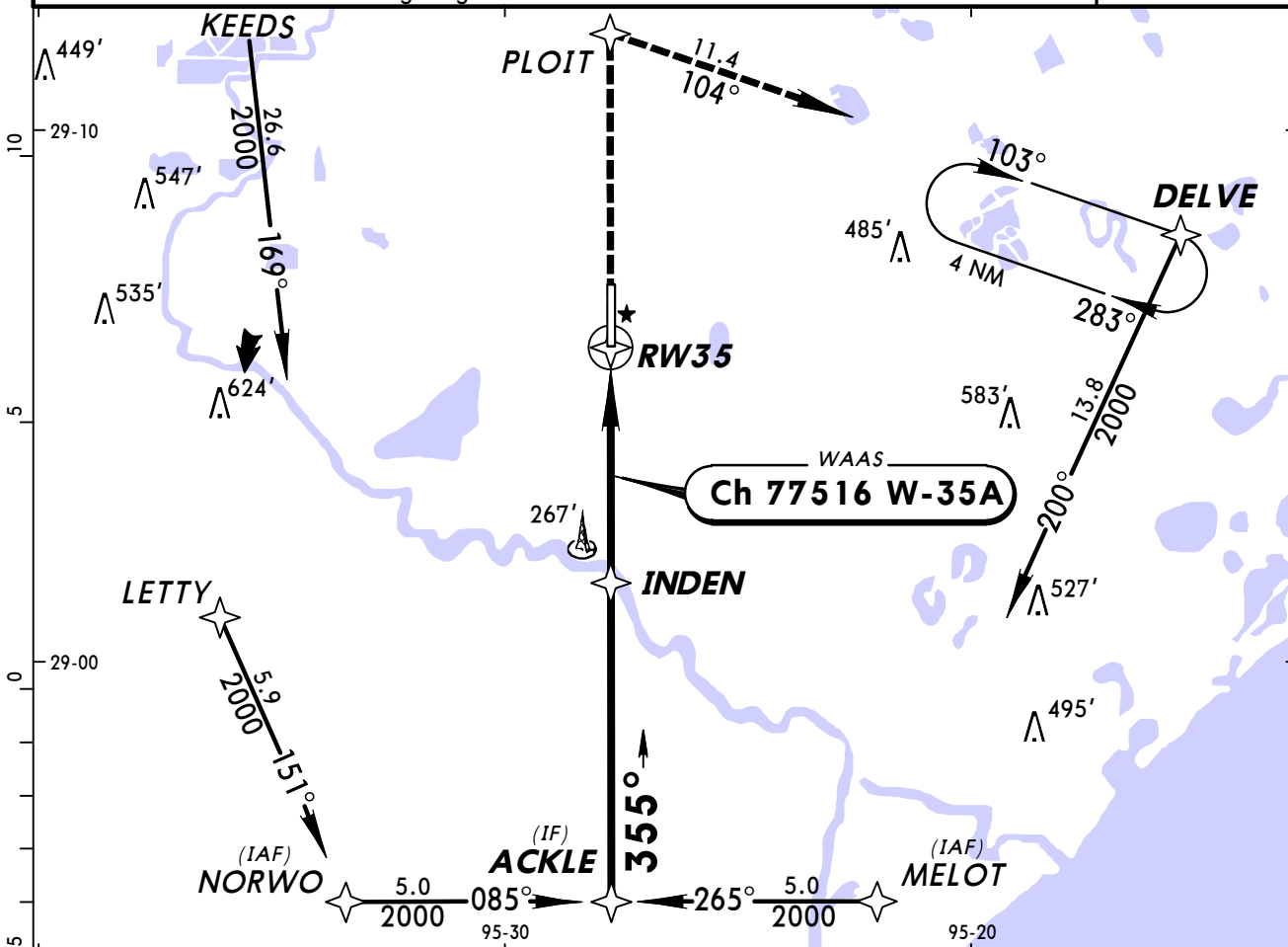
Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	2000' ↑	→ D →	ACKL
Glide Path Angle 3.00°	372	478	531	637	743	849				
MAP at RW17										

STRAIGHT-IN LANDING RWY 17 With Local Altimeter Setting							CIRCLE-TO-LAND Not Authorized East of Rwy 17-35	
LPV DA(H) 282' (257')		LNAV/VNAV DA(H) 360' (335')		LNAV MDA(H) 420' (395')			With Local Altimeter Setting	
RAIL or ALS out		RAIL or ALS out		RAIL out	ALS out	Max Kts	MDA(H)	
A						90	480' (455') - 1¼	
B						120	480' (455') - 1½	
C	1/2	1	3/4	1¼	1/2	140	480' (455') - 1½	
D					1	165	580' (555') - 2	
With Hobby Altimeter Setting							With Hobby Altimeter Setting	
LPV DA(H) 382' (357')		LNAV/VNAV DA(H) 460' (435')		LNAV MDA(H) 520' (495')			MDA(H)	
RAIL or ALS out		RAIL or ALS out		RAIL out	ALS out	Max Kts		
A						90	580' (555') - 1¼	
B						120	580' (555') - 1½	
C	1/2	1	3/4	1¼	1/2	140	580' (555') - 1½	
D					1	165	680' (655') - 2	

TERPS 2

BRIEFING STRIP™

ASOS 119.92		HOUSTON Approach (R) 134.45		TEXAS GULF COAST REGL UNICOM CTAF 123.0	
WAAS Ch 77516 W-35A	Final Apch Crs 355°	Minimum Alt INDEN 1500' (1475')	LPV DA(H) (CONDITIONAL) 275' (250')	Apt Elev 25' TDZE 25'	3100' MSA RW35
MISSED APCH: Climb to 2000' direct PLOIT and RIGHT turn via 104° track to DELVE and hold.					
Alt Set: INCHES					



Gnd speed-Kts	70	90	100	120	140	160	PAPI-L		2000'	D	PLOIT
Glide Path Angle 3.00°	372	478	531	637	743	849					
MAP at RW35											

STRAIGHT-IN LANDING RWY 35						CIRCLE-TO-LAND			
1 LPV		2 LNAV/VNAV		3 LNAV		Not Authorized East of Rwy 17-35			
DA(H) 275' (250')		DA(H) 428' (403')		MDA(H) 420' (395')		With Local Altimeter Setting		With Hobby Altimeter Setting	
						MDA(H)		MDA(H)	
A						Max Kts			
B						90			
C	3/4	1 1/2		1		120	480' (455') - 1 1/2	580' (555') - 1 1/2	
D				1 1/4		140			
						165	580' (555') - 2	680' (655') - 2	

1 DA(H) 375' (350') with Hobby altimeter setting. **3** MDA(H) 520' (495') with Hobby altimeter setting.
2 DA(H) 528' (503') with Hobby altimeter setting.

General Information

Location: Laredo TX USA
IATA Code: LRD
Lat/Long: N27° 32.7' W099° 27.7'
Elevation: 508 ft

Airport Use: Public
Magnetic Variation: 5.4 °E
Sectional Chart: Brownsville

Fuel Types: 100 Octane (LL), Jet A, Jet 4
Oxygen Types: Low Pressure, LP Bottle
Customs: ADCUS
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1304 Z
Sunset: 0037 Z,

Runway Information

Runway: 14
Length x Width: 5927 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 508 ft
Lighting: Edge, Pilot controlled

Runway: 17L
Length x Width: 8236 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 499 ft
Lighting: Edge
Stopway: 992 ft

Runway: 17R
Length x Width: 8743 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 504 ft
Lighting: Edge, ALS
Stopway: 383 ft

Runway: 32
Length x Width: 5927 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 494 ft
Lighting: Edge, Pilot controlled

Runway: 35L
Length x Width: 8743 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 497 ft
Lighting: Edge
Displaced Threshold: 120 ft
Stopway: 976 ft

Runway: 35R
Length x Width: 8236 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 487 ft
Lighting: Edge
Stopway: 998 ft

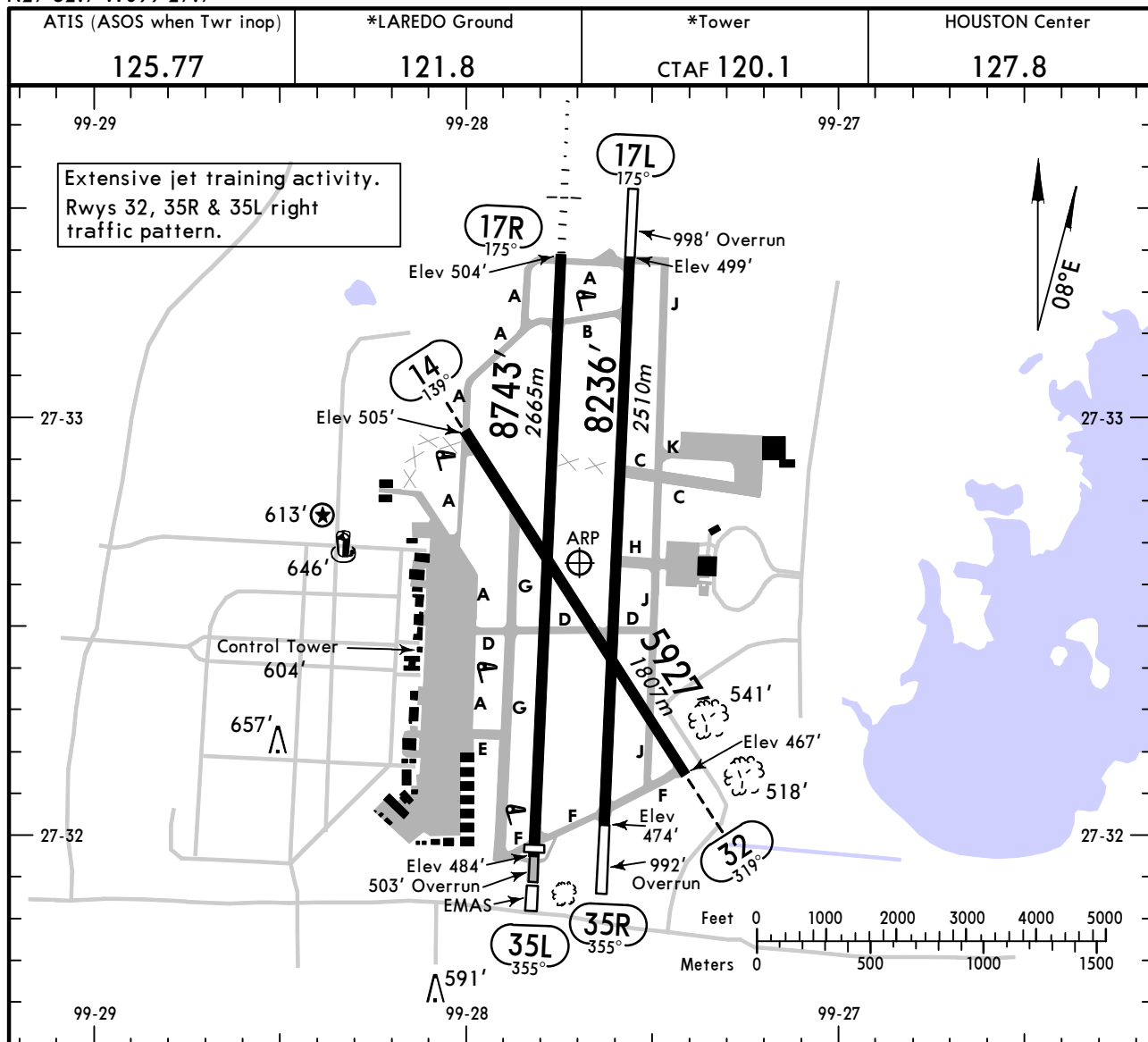
Communication Information

ATIS 125.775
ASOS 125.775
Laredo Tower Tower 120.1 CTAF PCL
Laredo Ground Ground Control 121.8
Laredo Intl Unicom 122.95
San Angelo Flight Service Station 122.3 RCO
Houston Center 127.8 Remote Communications Air-Ground

KLRD/LRD
Apt Elev **508'**
N27 32.7 W099 27.7

JEPPESEN
20 JAN 12 **(11-1)**

LAREDO, TEXAS
LAREDO INTL



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			
		LANDING BEYOND		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
14	① 32 ② MIRL VASI-L				150' 46m
17R	② HIRL ④ MALSR PAPI-L (angle 3.00°)		7662' 2335m		150' 46m
35L	② HIRL PAPI-L (angle 3.00°)	8623' 2628m			150' 46m
17L	② HIRL PAPI-L grooved				150' 46m
35R	② HIRL grooved				150' 46m

- ① Restricted to acft less than 60,000 lbs dual tandem wheels.
- ② Preset medium intensity when Twr inop.
- ③ Grooved (center 75' 23m).
- ④ Activate on 120.1 when Twr inop.

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

All Rwys

Adequate
Vis Ref

STD

1 & 2
Eng

1/4

1

3 & 4
Eng

1/2

FOR FILING AS ALTERNATE

Authorized Only When Twr Operating

Authorized Only When
Local Weather Available

ILS Rwy 17R

LOC DME
Rwy 17R

LOC DME (BC)
Rwy 35L
NDB Rwy 17L

Authorized Only When
Local Weather Available

RNAV (GPS) Rwy 17R
RNAV (GPS) Rwy 32
VOR Rwy 32

RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 17L
RNAV (GPS) Rwy 35L
VOR DME Rwy 14

A
B
C
D

700-2

800-2

800-2

800-2

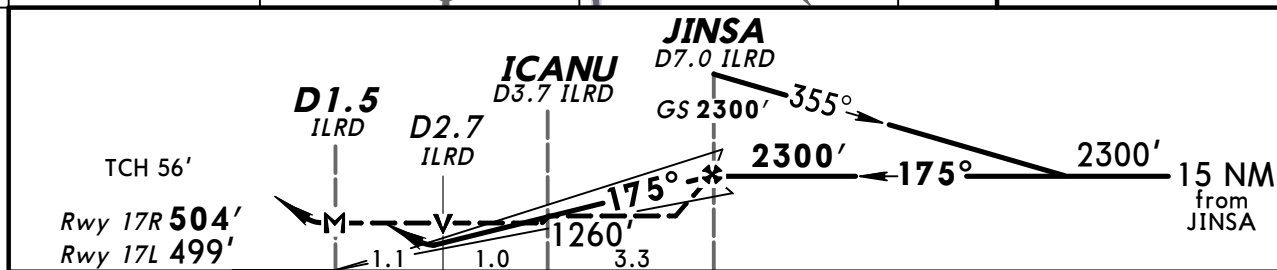
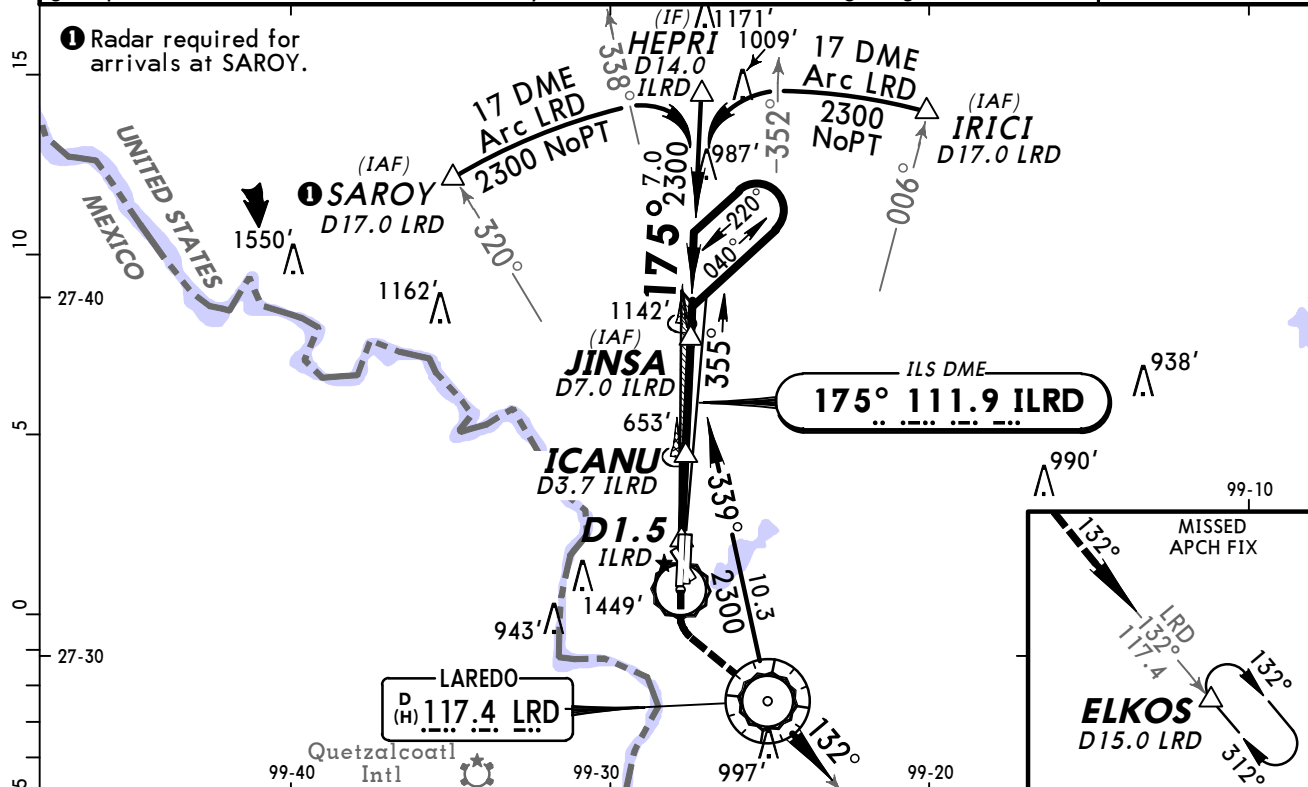
800-2

OBSTACLE DP: Rwy 14, climb heading 139° to 1000' before turning right. Rwy 17L, climb heading 160° to 1200' before turning right. Rwy 17R, climb heading 160° to 1300' before turning right.

Rwy 32, climb heading 319° to 1200' before turning left. Rwys 35L/R, climb heading 355° to 1000' before turning left.

BRIEFING STRIP™

ATIS (ASOS when Twr inop) 125.77		HOUSTON Center 127.8		*LAREDO Tower CTAF 120.1		*Ground 121.8				
LOC ILRD 111.9		Final Apch Crs 175°		GS JINSA 2300' (1796')		ILS DA(H) (CONDITIONAL) 704' (200')		Apt Elev 508' Rwy 17R 504'		2600' MSA LRD VOR
MISSED APCH: Climb to 1100' then climbing LEFT turn to 2500' direct LRD VOR and outbound on LRD VOR R-132 to ELKOS/D15.0 LRD and hold.										
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. DME required. 2. Use local altimeter setting; if not received, use Hebbronville altimeter setting. 3. Use ILRD DME when on the localizer course. 4. VGSI and ILS glidepath not coincident. 5. PAPI-L on Rwy 17L. 6. Pilot controlled lighting 120.1.										



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	1100'	2500'	D	LRD 117.4
GS	3.00°	372	478	531	637	743					
MAP at D1.5 ILRD											

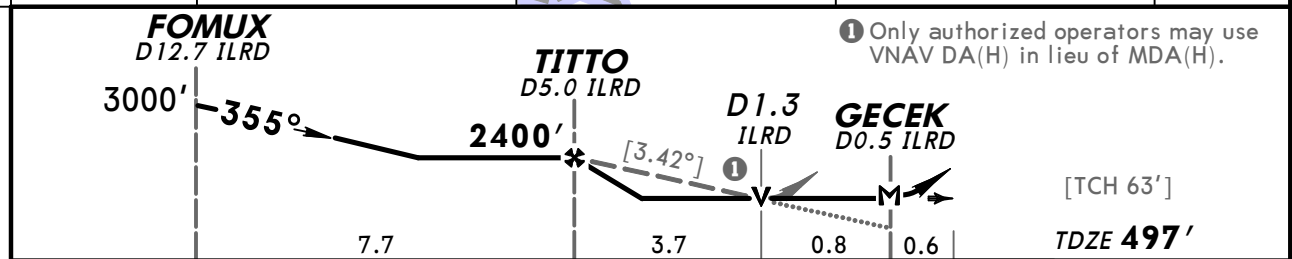
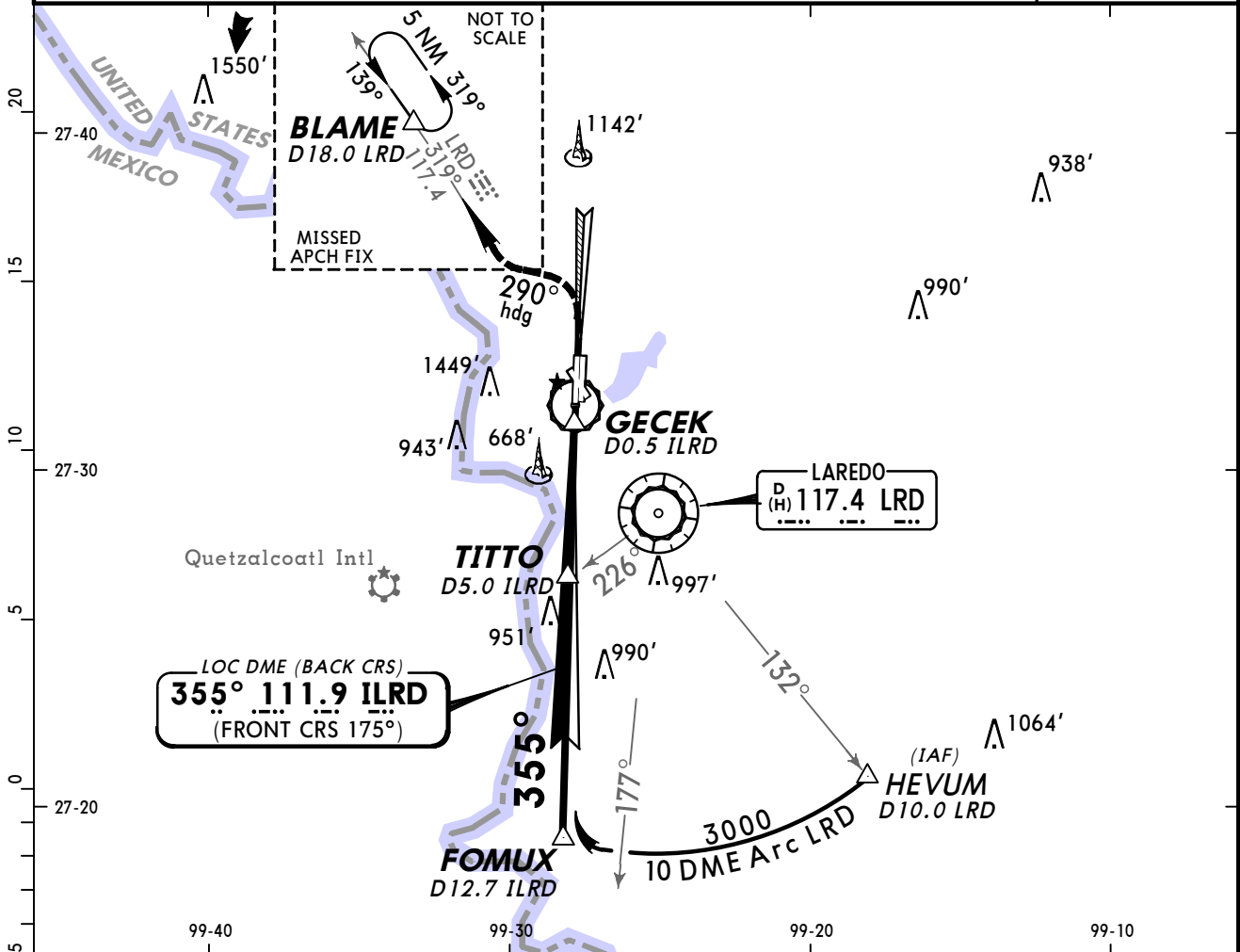
TERPS STRAIGHT-IN LANDING RWY 17R With Local Altimeter Setting						SIDESTEP LANDING RWY 17L With Local Altimeter Setting		CIRCLE-TO-LAND Not Authorized West of Rwy 14 and 35L With Local Altimeter Setting	
ILS DA(H) 704' (200')			LOC (GS out) MDA(H) 920' (416')			MDA(H) 1140' (641')		MDA(H)	
FULL	RAIL or ALS out			RAIL out	ALS out			Max Kts	
A			1/2	3/4	1	1		90	1140' (632') - 1
B								120	
C	1/2	3/4				1 7/8		140	1140' (632') - 1 7/8
D			3/4	1	1 1/8	2		165	1140' (632') - 2
With Hebbronville Altimeter Setting						With Hebbronville Altimeter Setting		With Hebbronville Altimeter Setting	
ILS DA(H) 819' (315')			LOC (GS out) MDA(H) 1040' (536')			MDA(H) 1260' (761')		MDA(H)	
FULL	RAIL or ALS out			RAIL out	ALS out			Max Kts	
A			1/2	3/4	1	1		90	1260' (752') - 1
B								120	1260' (752') - 1 1/4
C	1/2	1				2 1/8		140	
D			1	1 1/4	1 1/2	2 1/2		165	1260' (752') - 2 1/2

KLRD/LRD LAREDO INTL HOUSTON Center 11-2 LOC DME (BACK CRS) Rwy 35L LAREDO, TEXAS

20 JAN 12

LOC DME (BACK CRS) Rwy 35L

ATIS (ASOS when Twr inop) 125.77	HOUSTON Center 127.8	*LAREDO Tower CTAF 120.1	*Ground 121.8
LOC ILRD 111.9	Final Apch Crs 355° (Front Crs 175°)	Minimum Alt TITTO 2400' (1903')	MDA(H) 980' (483')
Apt Elev 508'			
TDZE 497'			
MISSED APCH: Climb to 1400' then climbing LEFT turn to 2600' via heading 290° and LRD VOR R-319 to BLAME/D18.0 LRD and hold.			
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'			
1. Disregard glide slope indications. 2. Use ILRD DME when on localizer course. 3. VGSI and descent angles not coincident. 4. Pilot controlled lighting 120.1.			
2600' MSA LRD VOR			



Gnd speed-Kts	70	90	100	120	140	160	PAPI-L	1400'	2600'	290°	LRD
Descent angle [3.42°]	424	545	605	726	847	968		↑	LT	hdg	117.4
MAP at GECEK											R-319

STRAIGHT-IN LANDING RWY 35L				CIRCLE-TO-LAND			
MDA(H) 980' (483')				Not Authorized West of Rwy 14 & 35L			
A	1			Max Kts	MDA(H)		
B				90	980'(472')-1		
C	1 1/4			120			
D	1 1/2			140	980'(472')-1 1/2		
				165	1060'(552')-2		

CHANGES: Lighting.

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KLRD/LRD LAREDO INTL

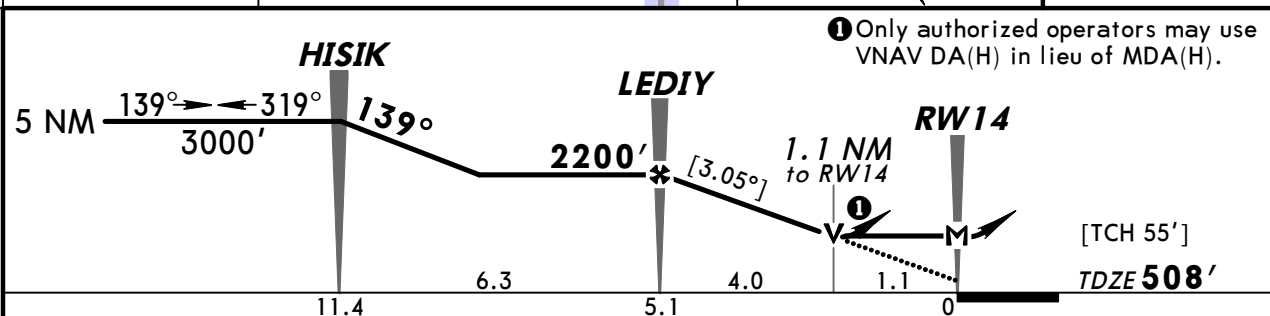
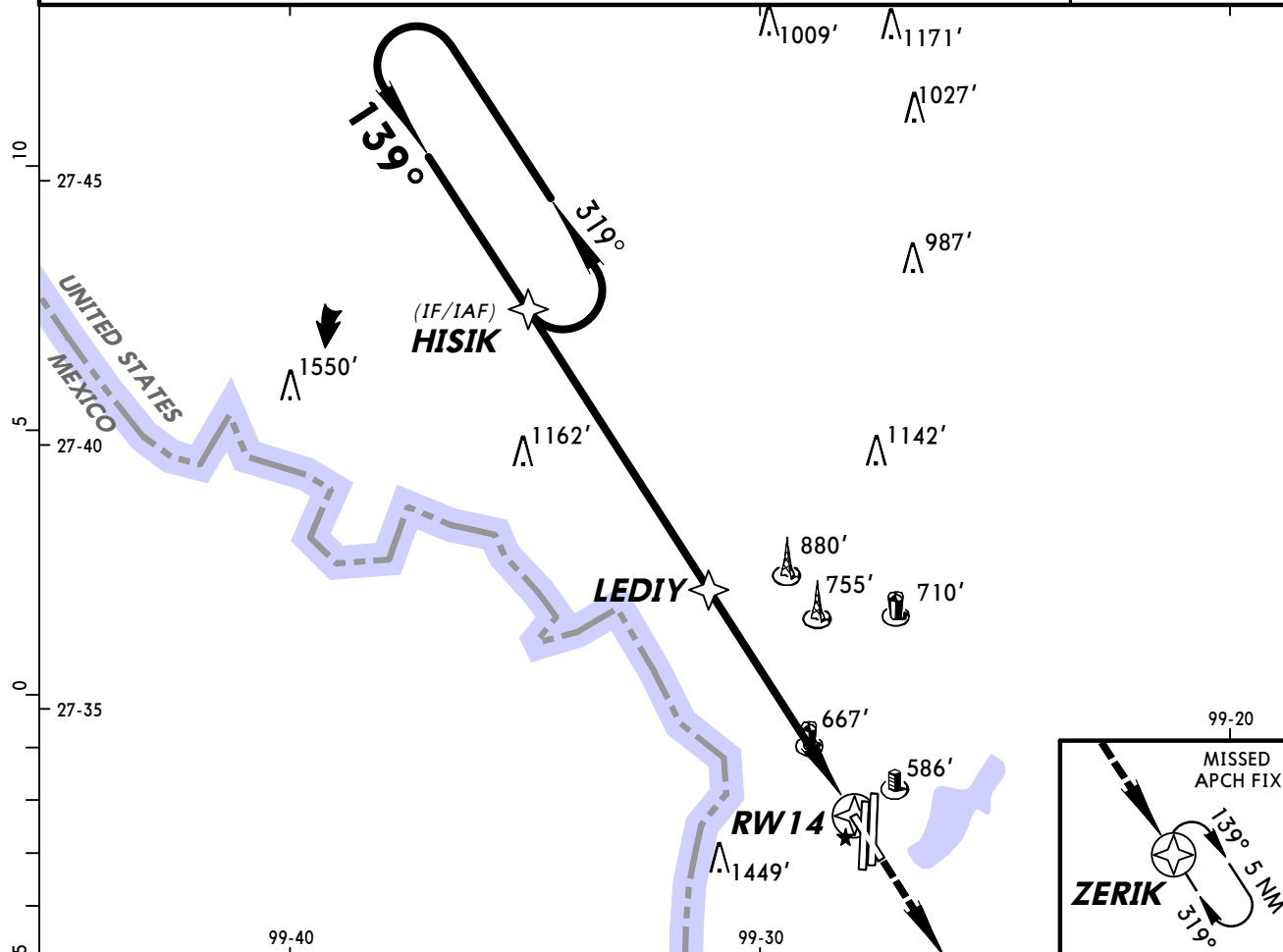
25 AUG 06 (12-1)

LAREDO, TEXAS
RNAV (GPS) Rwy 14

BRIEFING STRIP

TM

ATIS (ASOS when Twr inop)		HOUSTON Center		*LAREDO Tower		*Ground	
125.77		127.8		CTAF 120.1		121.8	
RNAV	Final Apch Crs 139°	Minimum Alt LEDIY 2200' (1692')	LNAV MDA(H) 920' (412')	Apt Elev 508' TDZE 508'		2600' MSA RW14	
MISSED APCH: Climb to 2500' direct ZERIK and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. RADAR required. 2. DME/DME RNP-0.3 not authorized. 3. Pilot controlled lighting 120.1.							



Gnd speed-Kts	70	90	100	120	140	160	VASI-L		2500'	→	ZERIK
Descent angle [3.05°]	378	486	540	648	755	863					
MAP at RW14											

STRAIGHT-IN LANDING RWY 14 RNAV MDA(H) 920' (412')						CIRCLE-TO-LAND Not Authorized West of Rwys 14 and 35L					
A	1					Max Kts	MDA(H)				
B						90	960' (452') - 1				
C						120	980' (472') - 1				
D	1 1/4					140	980' (472') - 1 1/2				
						165	1060' (552') - 2				

CHANGES: None.

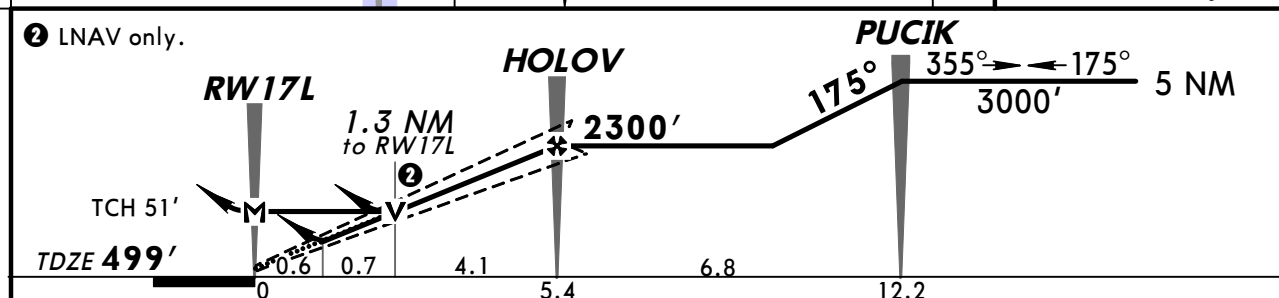
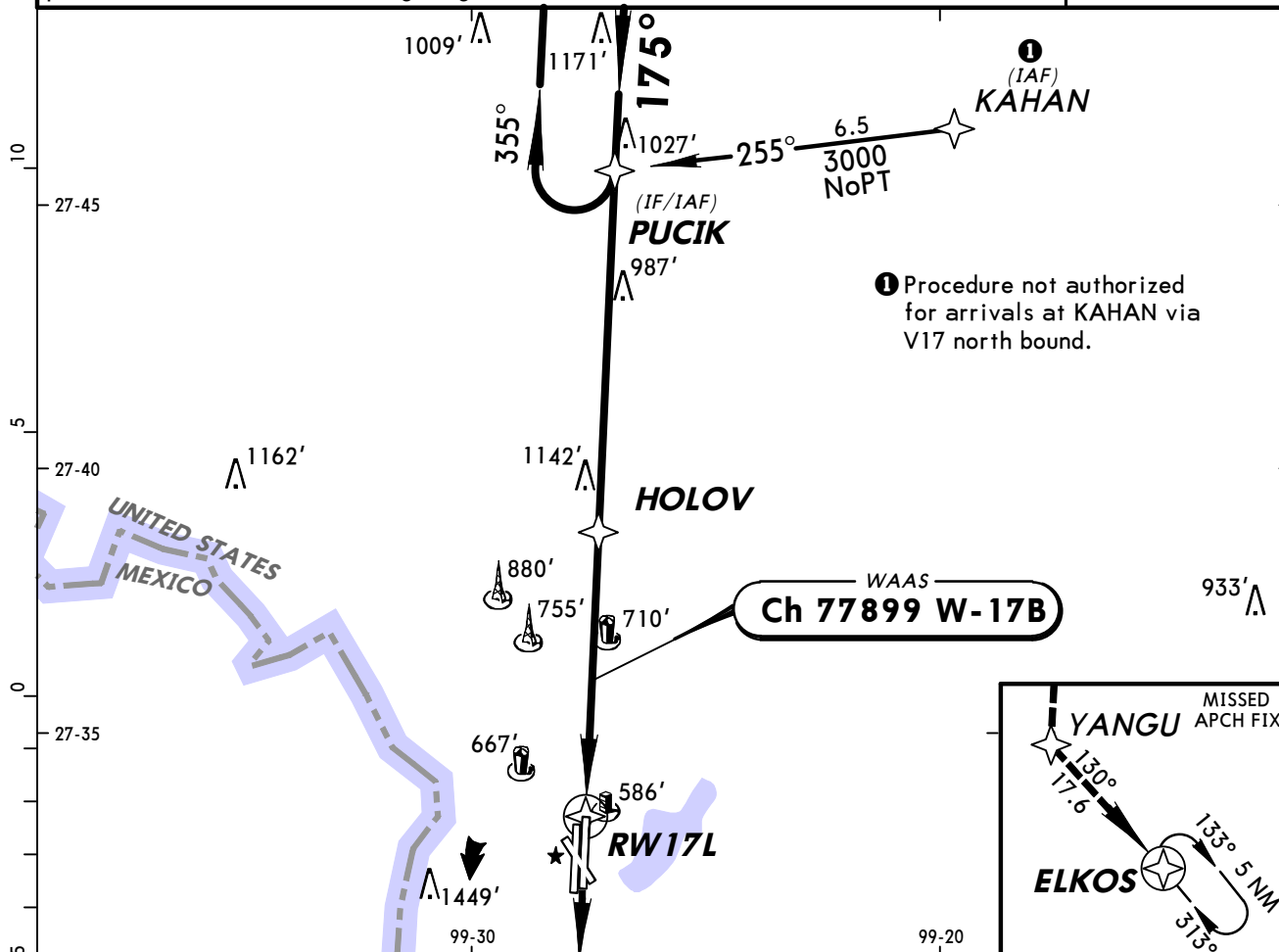
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KLRD/LRD
LAREDO INTL

JEPPESSEN
25 AUG 06 **(12-2)**

LAREDO, TEXAS
RNAV (GPS) Rwy 17L

ATIS (ASOS when Twr inop) 125.77	HOUSTON Center 127.8	*LAREDO Tower CTAF 120.1	*Ground 121.8
WAAS Ch 77899 W-17B	Final Apch Crs 175°	Minimum Alt HOLOV 2300' (1801')	LPV DA(H) 749' (250')
Apt Elev 508' TDZE 499'			
MISSED APCH: Climb to 2500' direct YANGU and via 130° track to ELKOS and hold. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. DME/DME RNP-0.3 not authorized. 2. Baro-VNAV not authorized below -16°C (4°F). 3. WAAS VNAV outages may occur daily. WAAS VNAV NOTAM service is not provided. 4. Pilot controlled lighting 120.1.			
2600' MSA RW17L			



Gnd speed-Kts	70	90	100	120	140	160				
Glide Path Angle 3.00°	372	478	531	637	743	849				
MAP at RW17L										
							PAPI-L	2500'	→	YANGU

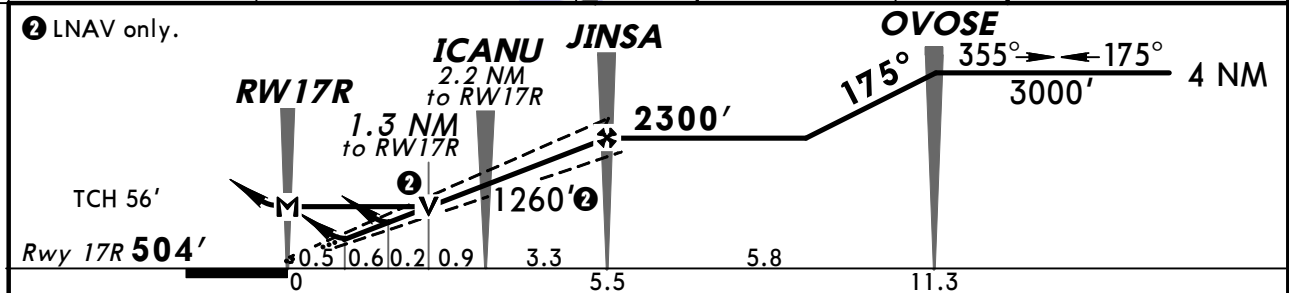
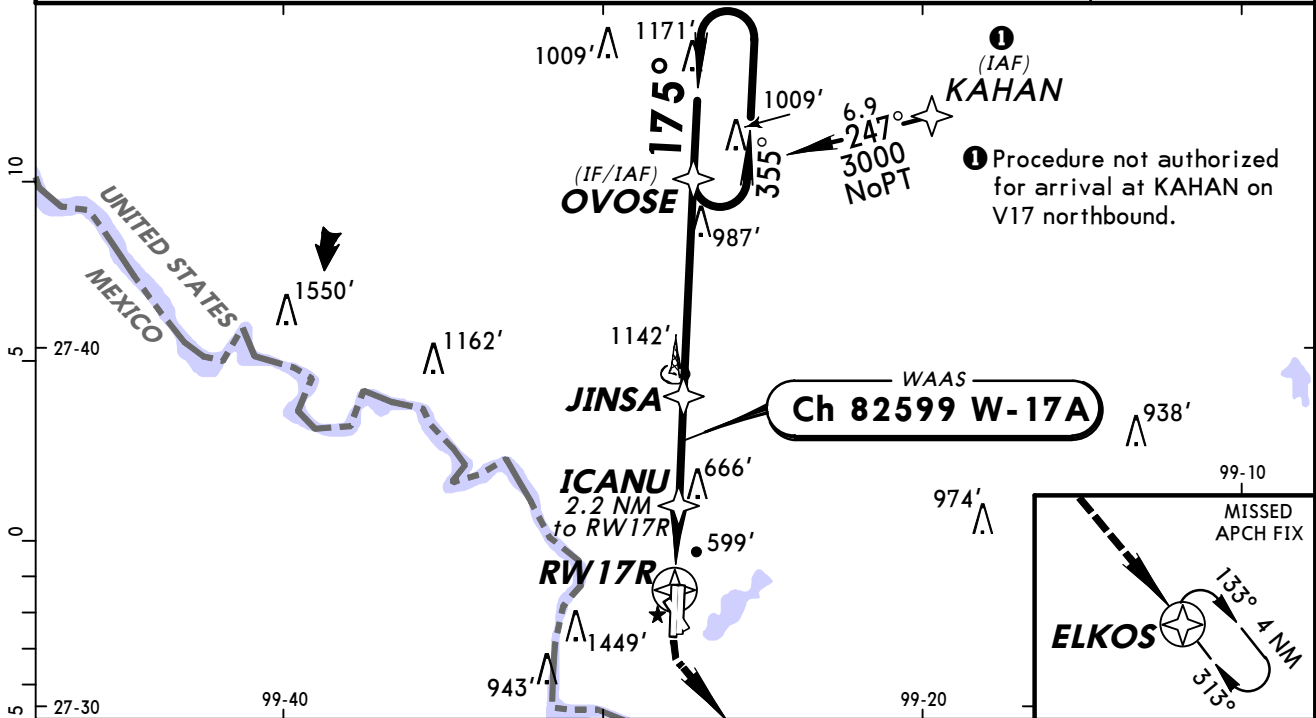
STRAIGHT-IN LANDING RWY 17L				CIRCLE-TO-LAND Not Authorized West of Rwys 14 and 35L	
LPV DA(H) 749' (250')	LNAV/VNAV DA(H) 954' (455')	LNAV MDA(H) 960' (461')		Max Kts	MDA(H)
3/4	1 1/2	1		90	960' (452') - 1 1/2
		1 1/4		120	980' (472') - 1 1/2
		1 1/2		140	
		1 1/2		165	1060' (552') - 2

KLRD/LRD
LAREDO INTL

JEPPesen
20 JAN 12 **(12-3)**

LAREDO, TEXAS
RNAV (GPS) Rwy 17R

ATIS (ASOS when Twr inop) 125.77	HOUSTON Center 127.8	*LAREDO Tower CTAF 120.1	*Ground 121.8
WAAS Ch 82599 W-17A	Final Apch Crs 175°	Minimum Alt JINSA 2300' (1796')	LPV DA(H) (CONDITIONAL) 704' (200')
Apt Elev 508' Rwy 17R 504'			
MISSED APCH: Climb to 1000' then climbing LEFT turn to 2500' direct ELKOS and hold.			
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'			
1. Use local altimeter setting; if not received, use Hebbronville altimeter setting. 2. VDP and Baro-VNAV not authorized when using Hebbronville altimeter setting. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 40°C (104°F). 4. DME/DME RNP-0.30 not authorized. 5. VGSI and RNAV glidepath not coincident. 6. Pilot controlled lighting 120.1.			
2600'			
MSA RW17R			



Gnd speed-Kts	70	90	100	120	140	160	MALS R	1000'	2500'	→	ELKOS
Glide Path Angle 3.00°	372	478	531	637	743	849	PAPI	↑	LT		
MAP at RW17R											

TERPS								CIRCLE-TO-LAND			
STRAIGHT-IN LANDING RWY 17R								Not Authorized West of Rwy 14 and 35L			
With Local Altimeter Setting								With Local Altimeter Setting			
LPV		LNAV/VNAV		LNAV		LNAV		MDA(H)			
DA(H) 704' (200')		DA(H) 896' (392')		DA(H) 980' (476')		DA(H) 980' (476')					
RAIL or ALS out		RAIL out		RAIL out		RAIL out					
A								Max Kts			
B								90			
C	1/2	3/4	7/8	1 1/4	1/2	3/4	1	120			980' (472') - 1
D					1	1 1/8	1 3/8	140			980' (472') - 1 1/2
								165			1060' (552') - 2
With Hebbronville Altimeter Setting								Not Authorized West of Rwy 14 and 35L			
LPV		LNAV/VNAV		LNAV		LNAV		With Hebbronville Altimeter Setting			
DA(H) 819' (315')		DA(H) 1011' (507')		DA(H) 1100' (596')		DA(H) 1100' (596')					
RAIL or ALS out		RAIL out		RAIL out		RAIL out					
A								Max Kts			
B								90			1100' (592') - 1
C	1/2	1	1 1/4	1 3/4	1/2	3/4	1	120			1100' (592') - 1 3/4
D					1 1/4	1 3/8	1 3/4	140			1100' (592') - 1 3/4
								165			1180' (672') - 2 1/4

CHANGES: Lighting.

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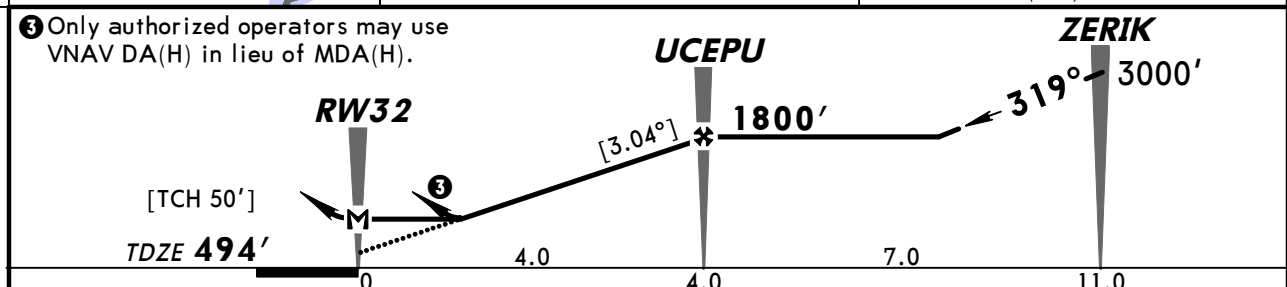
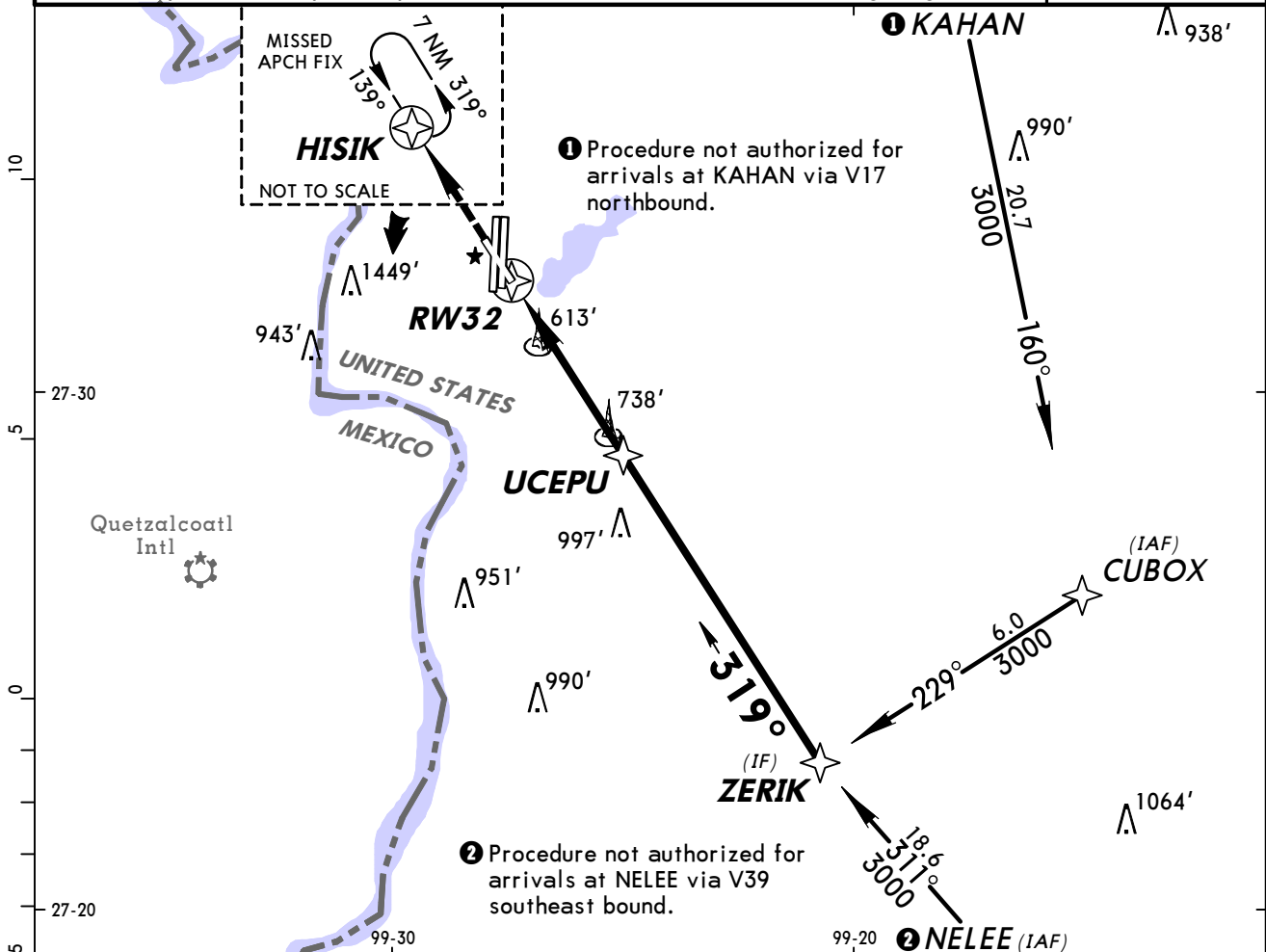
TERPS AMEND 1 20 OCT 2011

KLRD/LRD LAREDO INTL

JEPPESSEN
20 JAN 12 (12-4)

LAREDO, TEXAS
RNAV (GPS) Rwy 32

ATIS (ASOS when Twr inop)		HOUSTON Center		*LAREDO Tower		*Ground	
125.77		127.8		CTAF 120.1		121.8	
RNAV	Final Apch Crs 319°	Minimum Alt UCEPU 1800' (1306')	LNAV MDA(H) (CONDITIONAL) 900' (406')	Apt Elev 508' TDZE 494'		2600' MSA RW32	
MISSED APCH: Climb to 3000' direct HISIK and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. Use local altimeter setting; if not received, use Hebbronville altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. VGSI and descent angles not coincident. 4. Visibility reduction by helicopters not authorized. 5. Pilot controlled lighting 120.1.							



Gnd speed-Kts	70	90	100	120	140	160	VASI-L	3000'	D	HISIK
Descent angle [3.04°]	376	484	538	645	753	861				
MAP at RW32										

STRAIGHT-IN LANDING RWY 32				CIRCLE-TO-LAND			
LNAV				Not Authorized West of Rwy 14 & 35L			
MDA(H) 900' (406')		MDA(H) 1020' (526')		With Local Altimeter Setting		With Hebbronville Altimeter Setting	
With Local Altimeter Setting		With Hebbronville Altimeter Setting		Max Kts	MDA(H)	MDA(H)	
1		1		90	960' (452') - 1	1080' (572') - 1	
1		1		120	980' (472') - 1	1100' (592') - 1	
1 1/4		1 1/4		140	980' (472') - 1 1/2	1100' (592') - 1 1/2	
1 1/4		1 1/4		165	1060' (552') - 2	1180' (672') - 2	

CHANGES: None.

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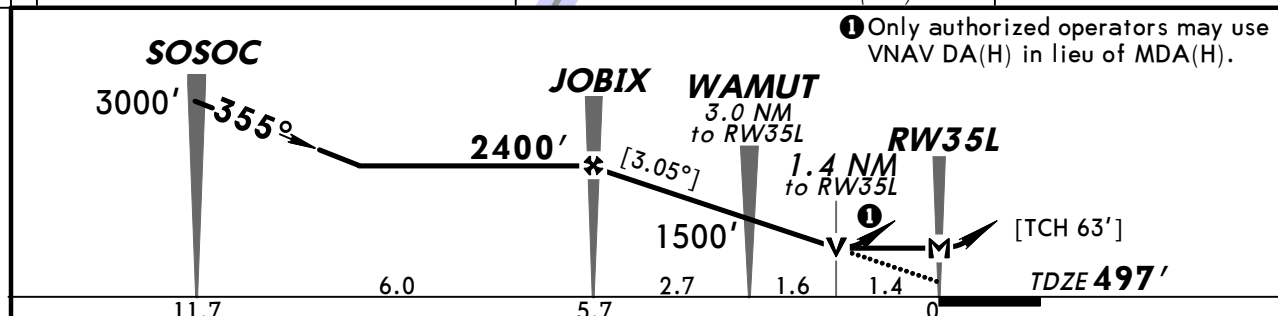
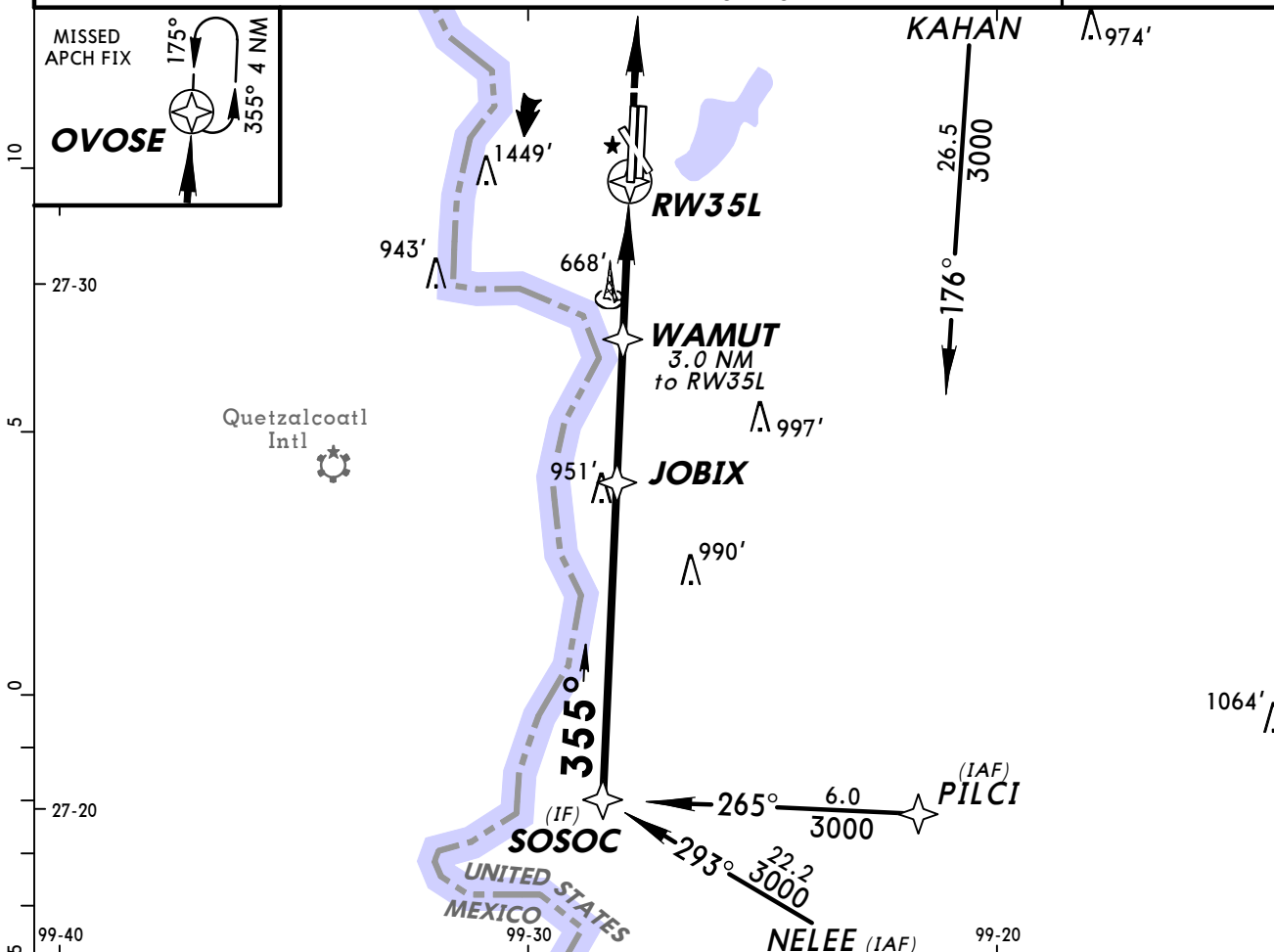
KLRD/LRD
LAREDO INTL

JEPPesen
20 JAN 12 **(12-5)**

LAREDO, TEXAS
RNAV (GPS) Rwy 35L

BRIEFING STRIP

ATIS (ASOS when Twr inop)		HOUSTON Center		*LAREDO Tower		*Ground	
125.77		127.8		CTAF 120.1		121.8	
RNAV	Final Apch Crs 355°	Minimum Alt JOBIX 2400' (1903')	LNAV MDA(H) 980' (483')	Apt Elev 508' TDZE 497'		2600' MSA RW35L	
MISSED APCH: Climb to 3000' direct OVOSE and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. DME/DME RNP-0.30 not authorized. 2. Pilot controlled lighting 120.1.							



Gnd speed-Kts	70	90	100	120	140	160	PAPI-L		3000'		D → OVOSE	
Descent angle [3.05°]	378	486	540	648	755	863						
MAP at RW35L												

STRAIGHT-IN LANDING RWY 35L						CIRCLE-TO-LAND					
RNAV						Not Authorized West of Rwy 14 and 35L					
MDA(H) 980' (483')						MDA(H)					
A	1					Max Kts					
B						90	980' (472')-1				
C	1 1/4					120					
D	1 1/2					140	980' (472')-1 1/2				
						165	1060' (552')-2				

CHANGES: Lighting.

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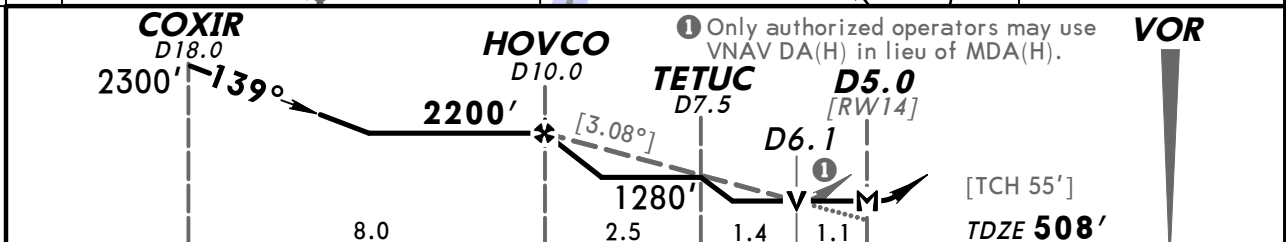
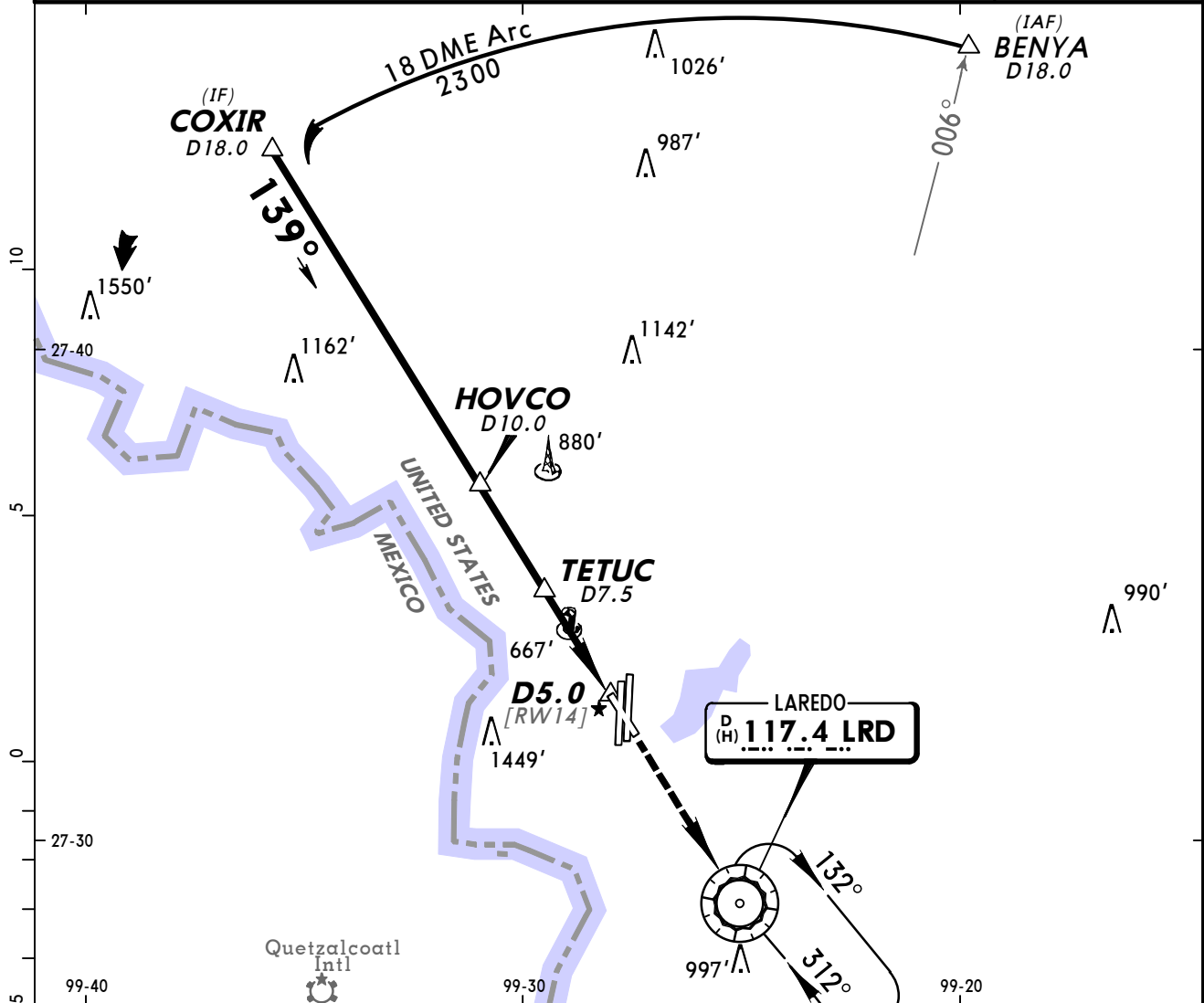
KLRD/LRD
LAREDO INTL

JEPPesen
1 APR 11 **(13-1)**

LAREDO, TEXAS
VOR DME Rwy 14

BRIEFING STRIP™

ATIS (ASOS when Twr inop) 125.77		HOUSTON Center 127.8		*LAREDO Tower CTAF 120.1		*Ground 121.8	
VOR LRD 117.4	Final Apch Crs 139°	Minimum Alt HOVCO 2200' (1692')	MDA(H) 920' (412')	Apt Elev 508' TDZE 508'		2600' MSA LRD VOR	
MISSED APCH: Climb to 2500' direct LRD VOR and hold, continue climb-in-hold to 2500'.							
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'			
1. Radar required. 2. Pilot controlled lighting 120.1.							



Gnd speed-Kts	70	90	100	120	140	160	VASI-L	2500'	D	LRD 117.4
Descent angle [3.08°]	381	490	545	654	763	872				
MAP at D5.0										

STRAIGHT-IN LANDING RWY14				CIRCLE-TO-LAND Not Authorized West of Rwys 14 and 35L			
MDA(H) 920' (412')				MDA(H)			
A	1			Max Kts			
B				90	960'(452') - 1		
C	1 1/4			120	980'(472') - 1		
D				140	980'(472') - 1 1/2		
				165	1060'(552') - 2		

CHANGES: None.

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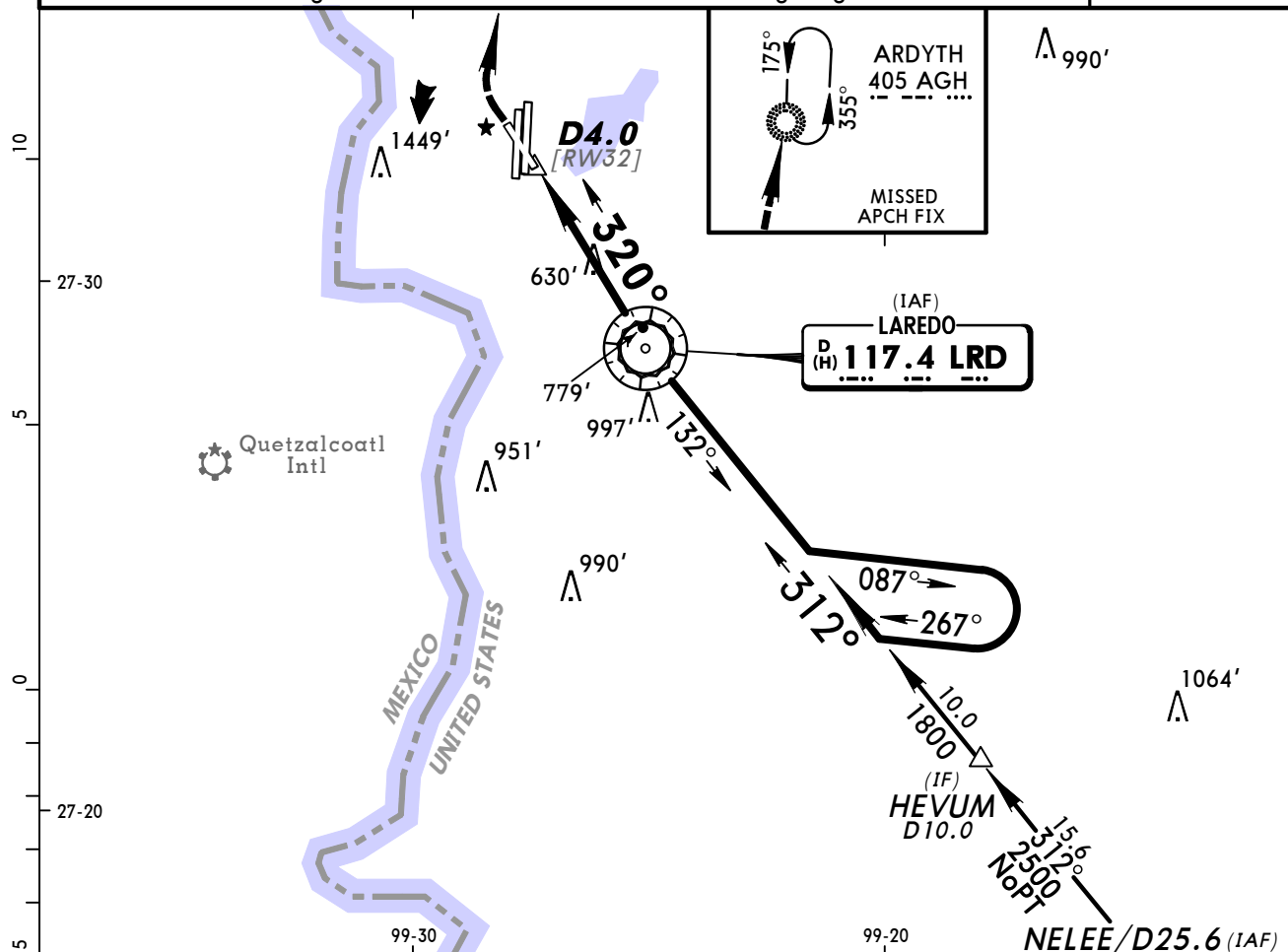
KLRD/LRD LAREDO INTL

JEPPESSEN
1 APR 11 13-2

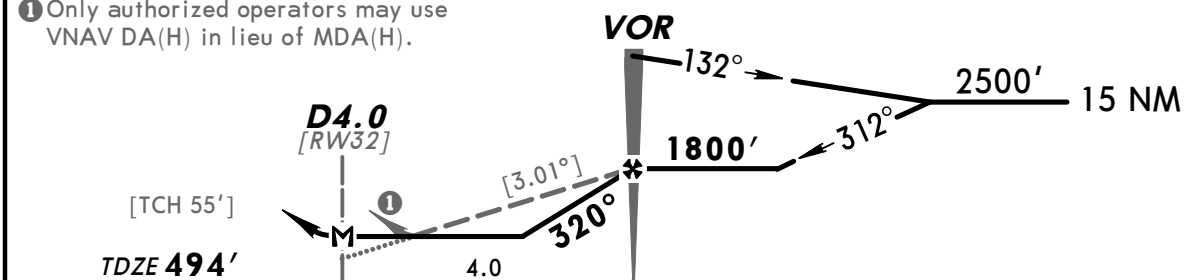
LAREDO, TEXAS
VOR Rwy 32

BRIEFING STRIP™

ATIS (ASOS when Twr inop)		HOUSTON Center		*LAREDO Tower		*Ground	
125.77		127.8		CTAF 120.1		121.8	
VOR LRD 117.4	Final Apch Crs 320°	Minimum Alt VOR 1800' (1306')	MDA(H) (CONDITIONAL) 900' (406')	Apt Elev 508' TDZE 494'		2600' MSA LRD VOR	
MISSED APCH: Climb to 2500' direct AGH NDB and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. ADF required for VOR approach. 2. Use local altimeter setting; if not received, use Hebbronville altimeter setting. 3. Visibility reduction by helicopters not authorized. 4. VGSI and descent angles not coincident. 5. Pilot controlled lighting 120.1.							



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160	VASI-L	2500' ↑	D→	AGH 405
Descent angle [3.01°]	373	479	532	639	745	852				
MAP at D4.0 or VOR to MAP	4.0	3:26	2:40	2:24	2:00	1:43				

STRAIGHT-IN LANDING RWY32				CIRCLE-TO-LAND			
MDA(H) 900' (406')		MDA(H) 1020' (526')		Not Authorized West of Rwy 14 & 35L		With Local Altimeter Setting	
With Local Altimeter Setting		With Hebbronville Altimeter Setting		Max Kts	MDA(H)	MDA(H)	MDA(H)
A	1	1	1	90	960' (452') - 1	1080' (572') - 1	
B				120	980' (472') - 1	1100' (592') - 1	
C	1¼	1½	1½	140	980' (472') - 1½	1100' (592') - 1½	
D		1¾	1¾	165	1060' (552') - 2	1180' (672') - 2¼	

CHANGES: Missed approach hold.

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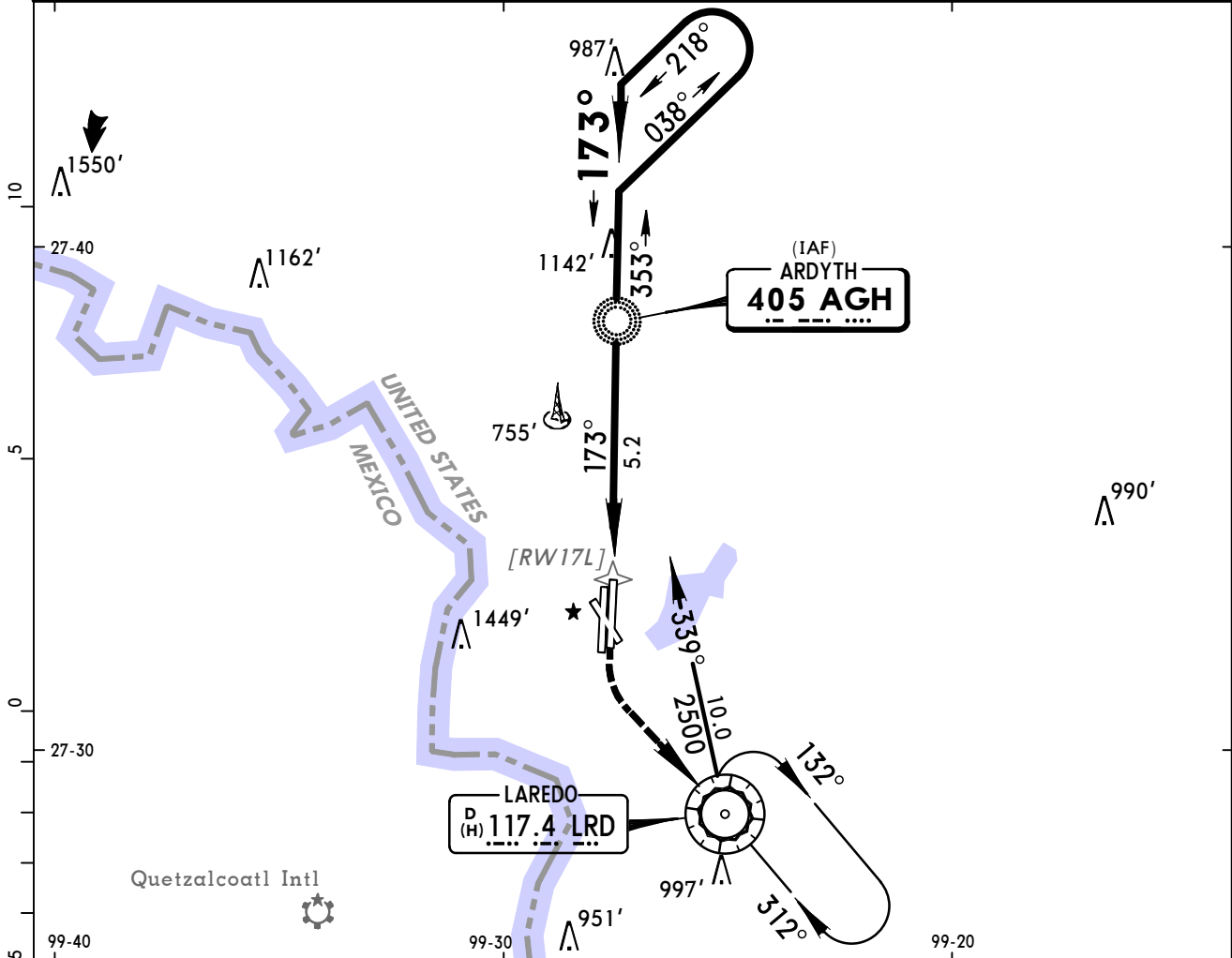
KLRD/LRD LAREDO INTL

JEPPESSEN
15 OCT 10 **16-1** Eff 21 Oct

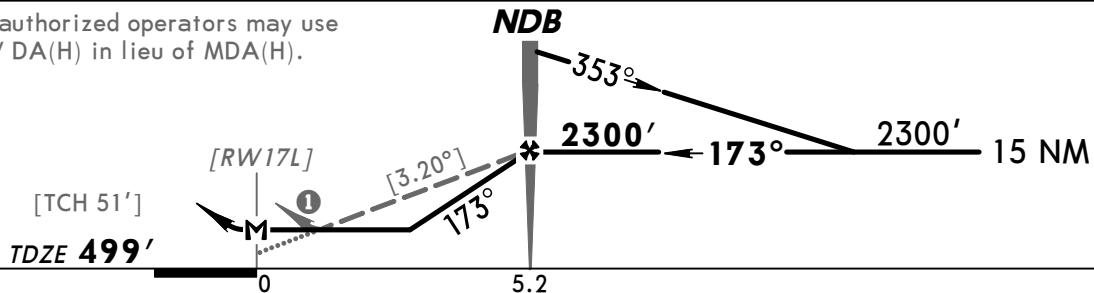
LAREDO, TEXAS
NDB Rwy 17L

BRIEFING STRIP

ATIS (ASOS when Twr inop) 125.77		HOUSTON Center 127.8		*LAREDO Tower CTAF 120.1		*Ground 121.8	
NDB AGH 405	Final Apch Crs 173°	Minimum Alt NDB 2300' (1801')	MDA(H) 1060' (561')	Apt Elev 508' TDZE 499'		2600' MSA AGH NDB	
MISSED APCH: Climb to 1200' then climbing LEFT turn to 2500' direct LRD VOR and hold, continue climb-in-hold to 2500'.							
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'			
1. Pilot controlled lighting 120.1.							



① Only authorized operators may use
VNAV DA(H) in lieu of MDA(H).



<i>Gnd speed-Kts</i>	70	90	100	120	140	160	PAPI-L	1200'	2500'		LRD 117.4
<i>Descent angle</i> [3.20°]	396	510	566	679	793	906		↑	LT ↓		
<i>NDB to MAP</i> 5.2	4:27	3:28	3:07	2:36	2:14	1:57					

STRAIGHT-IN LANDING RWY17L

MDA(H) **1060'** (561')

CIRCLE-TO-LAND

Not Authorized West of
Rwys 14 and 35L

	Max Kts	MDA(H)
A	90	1060' (552') - 1
B	120	
C	140	1060' (552') - 1½
D	165	1060' (552') - 2

TERPS AMEND 3A 21 OCT 2010

CHANGES: PEKKS LOM deleted, AGH NDB added.

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General Information

Location: Midland TX USA
IATA Code: MAF
Lat/Long: N31° 56.6' W102° 12.1'
Elevation: 2872 ft

Airport Use: Public
Magnetic Variation: 6.8°E
Sectional Chart: San Antonio

Fuel Types: 100 Octane (LL), Jet A, Jet A-1, Jet B
Oxygen Types: Low Pressure, LP Bottle
Repair Types: Major Airframe, Major Engine
Customs: Upon Prior Request
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: Yes
Beacon: Yes

Sunrise: 1319 Z
Sunset: 0045 Z,

Runway Information

Runway: 04
Length x Width: 4605 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 2851 ft
Lighting: Edge

Runway: 10
Length x Width: 8302 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 2869 ft
Lighting: Edge, ALS

Runway: 16L
Length x Width: 4247 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 2865 ft
Lighting: Edge

Runway: 16R
Length x Width: 9501 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 2872 ft
Lighting: Edge

Runway: 22
Length x Width: 4605 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 2855 ft
Lighting: Edge

Runway: 28
Length x Width: 8302 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 2858 ft
Lighting: Edge, ALS
Displaced Threshold: 691 ft

Runway: 34L
Length x Width: 9501 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 2858 ft
Lighting: Edge, REIL

Runway: 34R
Length x Width: 4247 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 2857 ft
Lighting: Edge

Communication Information

ATIS 126.8
ASOS 126.8
Midland Tower 118.7 CTAF
Midland Ground Control 121.9
Midland Clearance Delivery 118.05
Midland Approach Control 124.6 (316°-135°) Initial Contact
Midland Approach Control 121.1 (136°-315°)
Midland App ARSA 124.6 (316°-135°)
Midland App ARSA 121.1 (136°-315°)
Midland Departure Control 124.6 (316°-135°)
Midland Departure Control 121.1 (136°-315°)
Midland Intl Unicom 122.95
San Angelo Flight Service Station 122.6 RCO
FT Worth Center 133.1 Remote Communications Air-Ground

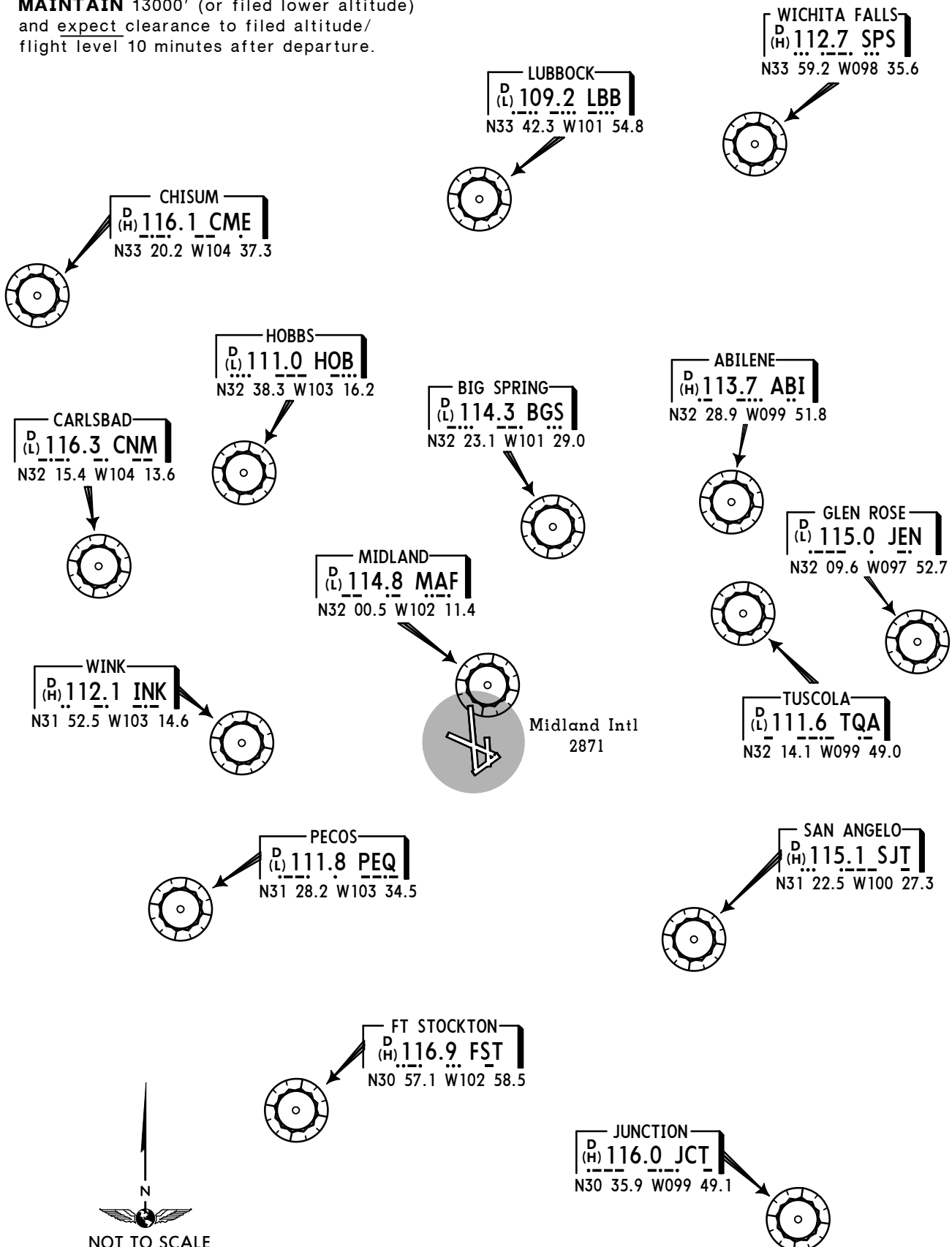
MIDLAND Departure (R) 316°-135° **124.6**
136°-315° **121.1**

FT WORTH Center (R) **133.1** when Dep inop.

MIDLAND, TEXAS**MIDLAND INTL****MIDLAND FOUR DEPARTURE (VECTOR)****TAKE-OFF**

All runways: Fly runway heading. Expect vectors to filed route/fix.

MAINTAIN 13000' (or filed lower altitude) and expect clearance to filed altitude/flight level 10 minutes after departure.

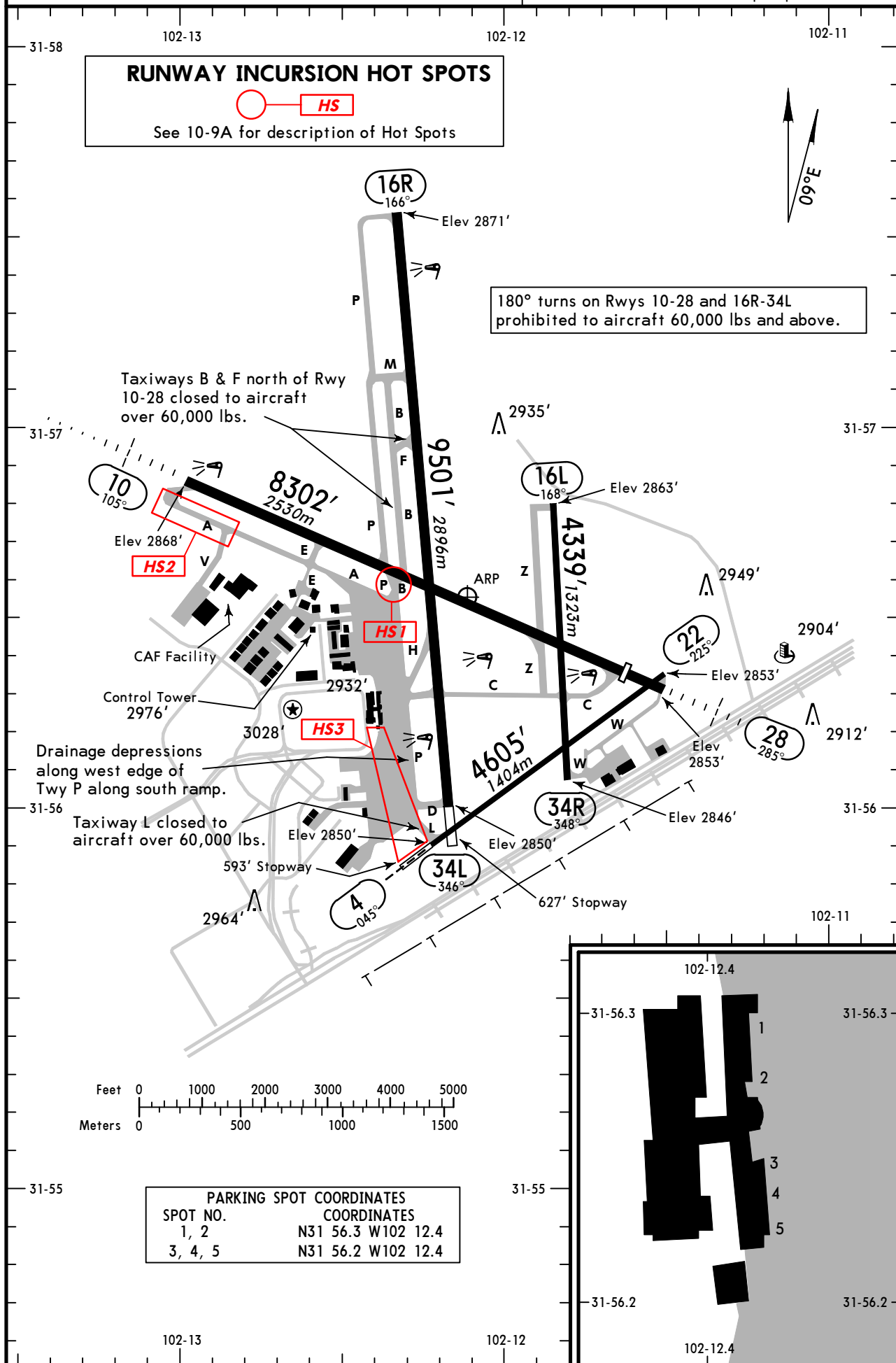


KMAF/MAF
Apt Elev 2871'
N31 56.6 W102 12.1

JEPPESSEN
15 MAY 09 (10-9)

MIDLAND, TEXAS
MIDLAND INTL

*ATIS (ASOS when Twr inop.) 126.8 VOT 108.2	*MIDLAND Clearance 118.05	*Ground 121.9	*Tower CTAF 118.7	UNICOM 122.95
*MIDLAND Departure (R) 136°-315° 121.1			FT WORTH Center (R) 316°-135° 124.6 133.1 when Dep inop.	



CHANGES: Hot Spots added.

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GENERAL					
Birds in vicinity of airport.					
Low-level wind shear alert system.					
ADDITIONAL RUNWAY INFORMATION					
		USABLE LENGTHS			
		LANDING BEYOND		TAKE-OFF	WIDTH
RWY		Threshold	Glide Slope		
4	MIRL				75' 23m
① 22					
① Closed to aircraft over 60,000 lbs.					
10	HIRL ③ MALSR VASI-L	porous friction course overlay	RVR	6514' 1985m	150' 46m
② 28	HIRL ③ MALS VASI-L			7610' 2320m	
② Grooved. East 700' closed to aircraft over 60,000 lbs.					
③ Activate on 118.7 when Twr inop.					
16R	HIRL VASI-L	grooved			150' 46m
34L	HIRL REIL VASI-L	grooved			
16L	MIRL				100' 30m
④ 34R					
④ Closed to aircraft over 60,000 lbs.					
RUNWAY INCURSION HOT SPOTS					
HS					
For information only, not to be construed as ATC instructions.					
HS1 Twy B and Twy P merge. HS2 Area not visible from tower. Limited air traffic services provided. HS3 Area not visible from tower. Limited air traffic services provided.					
TAKE-OFF					
All Rwys					
Adequate Vis Ref		STD			
1 & 2 Eng	RVR 16 or 1/4	RVR 50 or 1			
3 & 4 Eng		RVR 24 or 1/2			
FOR FILING AS ALTERNATE					
Authorized Only When Tower Operating					
ILS Rwy 10		LOC Rwy 10 LOC (BC) Rwy 28	RADAR-1	RNAV (GPS) Rwy 28 VOR Rwy 16R VOR DME Rwy 34L	Other
A	600-2	800-2	800-2	800-2	NA
B					
C					
D					
			800-2 1/4		

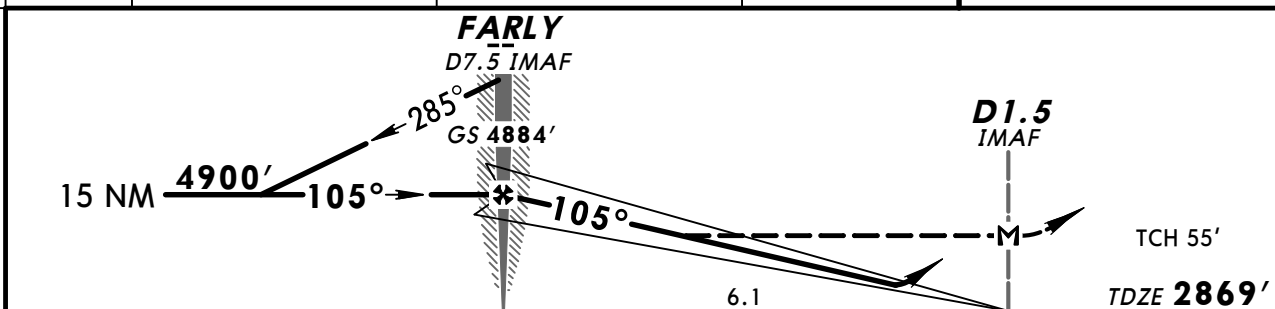
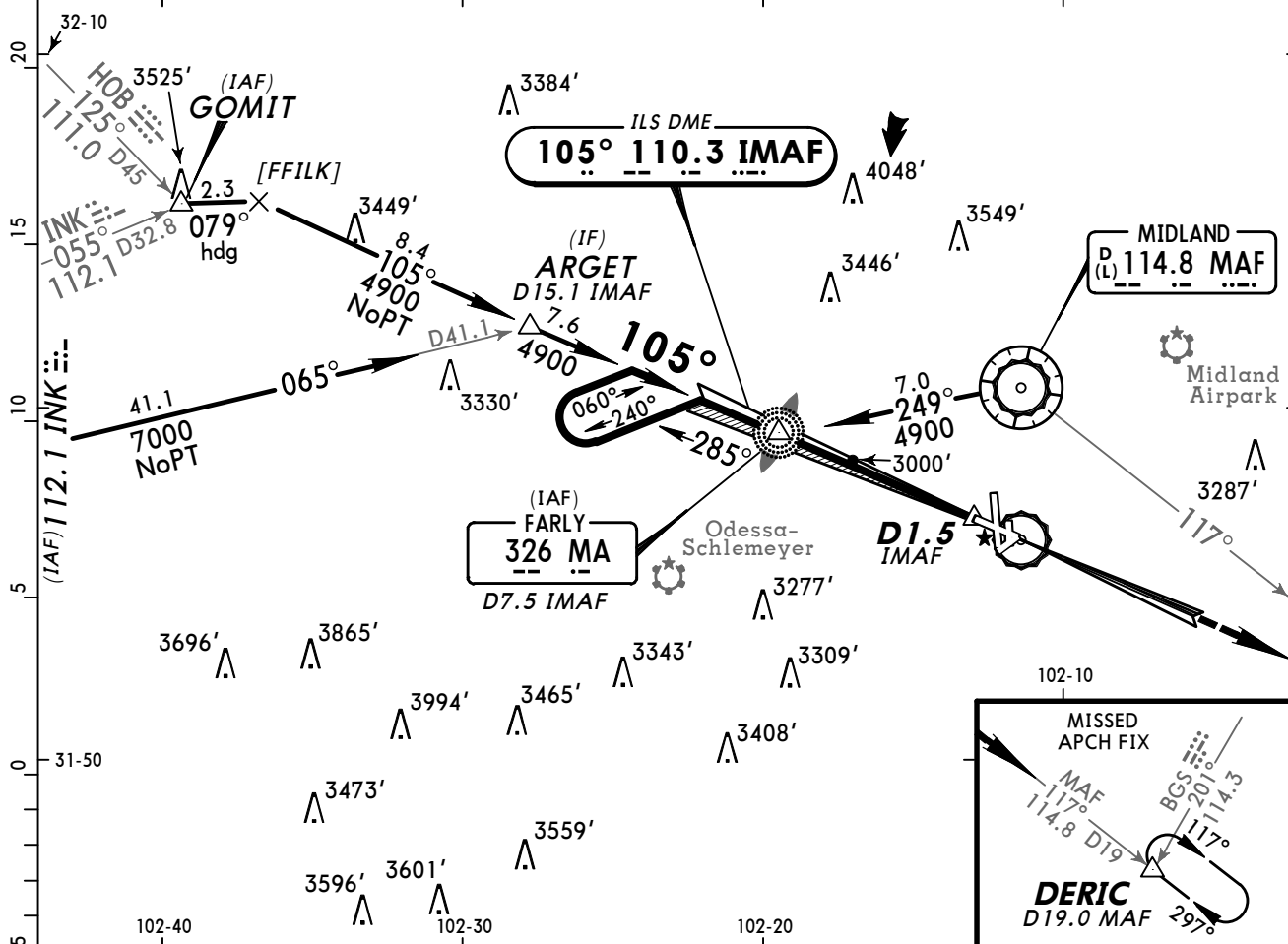
KMAF/MAF MIDLAND INTL

JEPPSEN
15 OCT 10 (11-1)

MIDLAND, TEXAS
ILS or LOC Rwy 10

BRIEFING STRIP™

ATIS (ASOS when Twr inop)		*MIDLAND Approach (R)		FT WORTH Center (R)		*MIDLAND Tower		*Ground	
126.8		124.6		133.1 when App inop.		CTAF 118.7		121.9	
LOC IMAF 110.3	Final Apch Crs 105°	GS FARLY 4884' (2015')	ILS DA(H) 3069' (200')	Apt Elev 2872'	TDZE 2869'	5500' MSA MA LOM			
MISSED APCH: Climb to 4900' via IMAF LOC SOUTHEAST course and outbound on MAF VOR R-117 to DERIC INT/D19.0 MAF and hold.									
Alt Set: INCHES 1. Pilot controlled lighting 118.7.		Trans level: FL 180		Trans alt: 18000'					



Gnd speed-Kts	70	90	100	120	140	160	MALSR	4900'	IMAF	MAF	DERIC
GS	3.00°	377	484	538	646	753	861	↑	110.3	114.8	
MAP at D1.5 IMAF or FARLY to MAP	6.1	5:14	4:04	3:40	3:03	2:37	2:17		SOUTH-EAST COURSE	R-117	

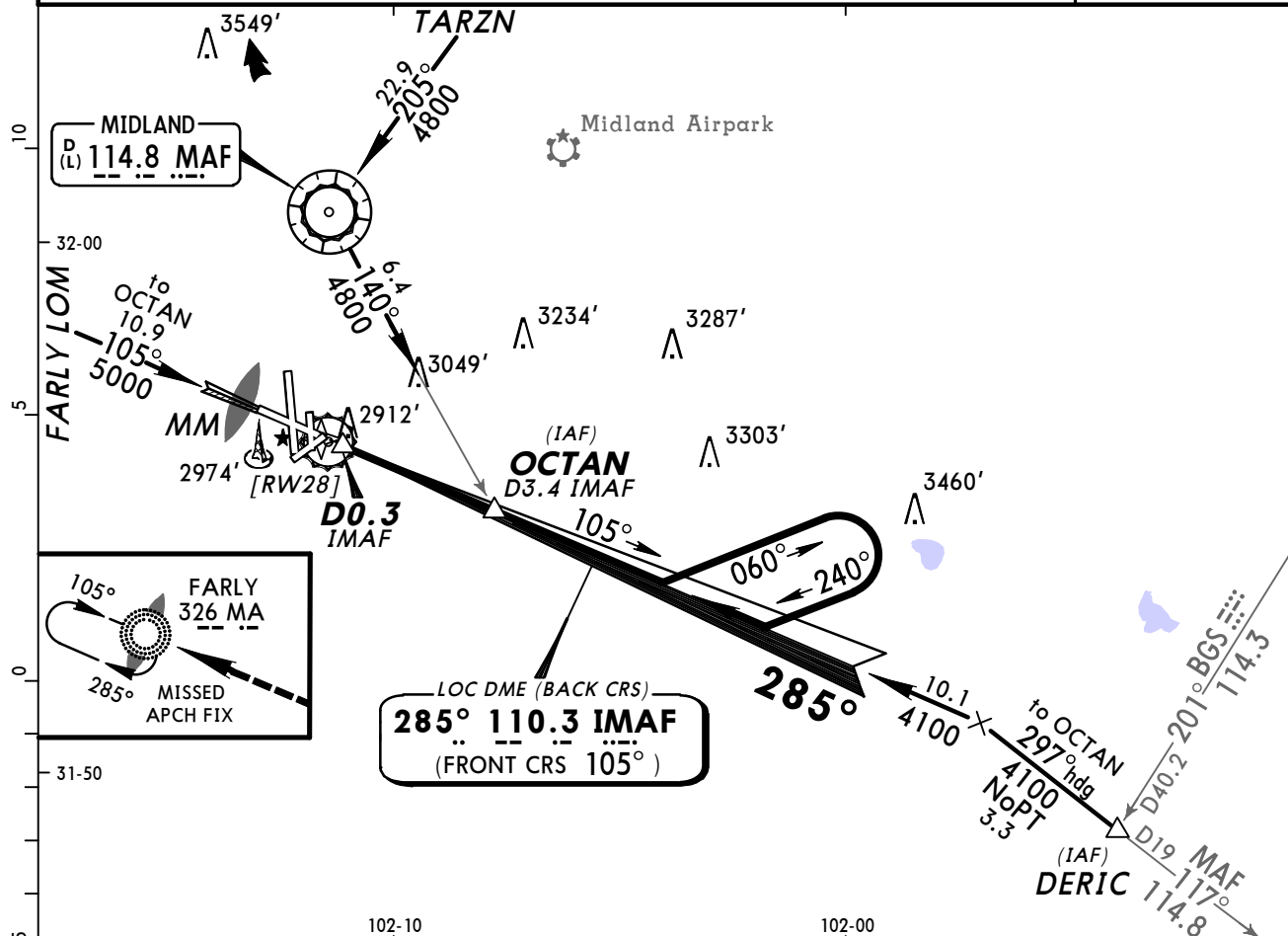
STRAIGHT-IN LANDING RWY 10						CIRCLE-TO-LAND	
ILS DA(H) 3069' (200')			LOC (GS out) MDA(H) 3260' (391')			Max Kts	MDA(H)
FULL	RAIL or ALS out		RAIL out	ALS out		90	3340' (468')-1
A	RVR 24 or 1/2	RVR 40 or 3/4	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	120	3340' (468')-1 1/2
			RVR 40 or 3/4	RVR 60 or 1 1/4		140	3440' (568')-2

1 RVR 18 with Flight Director or Autopilot or HUD to DA.

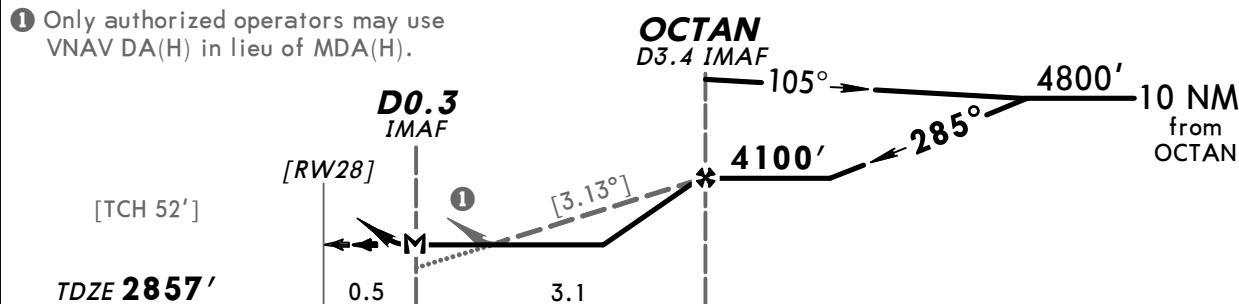
CHANGES: Airport and TDZE elevations, NoPT legs, minimums.

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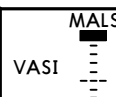
*ATIS (ASOS O/T)	*MIDLAND Approach (R)	FT WORTH Center (R)	*MIDLAND Tower	*Ground
126.8	124.6	133.1 when App inop.	CTAF 118.7	121.9
LOC IMAF 110.3	Final Apch Crs 285° (Front Crs 105°)	Minimum Alt OCTAN 4100' (1243')	MDA(H) 3180' (323')	Apt Elev 2871' TDZE 2857'
MISSED APCH: Climb to 4800' via IMAF LOC NORTHWEST course to MA LOM and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. Disregard glide path indications. 2. Pilot controlled lighting 118.7.				
5100'				
MSA MAF VOR				



Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160
Descent angle [3.13°]	388	498	554	665	775	886
MAP at D0.3 IMAF or OCTAN to MAP	3.1	2:39	2:04	1:52	1:33	1:20



4800'	IMAF 110.3 NORTHWEST course	MA 326

STRAIGHT-IN LANDING RWY 28

CIRCLE-TO-LAND

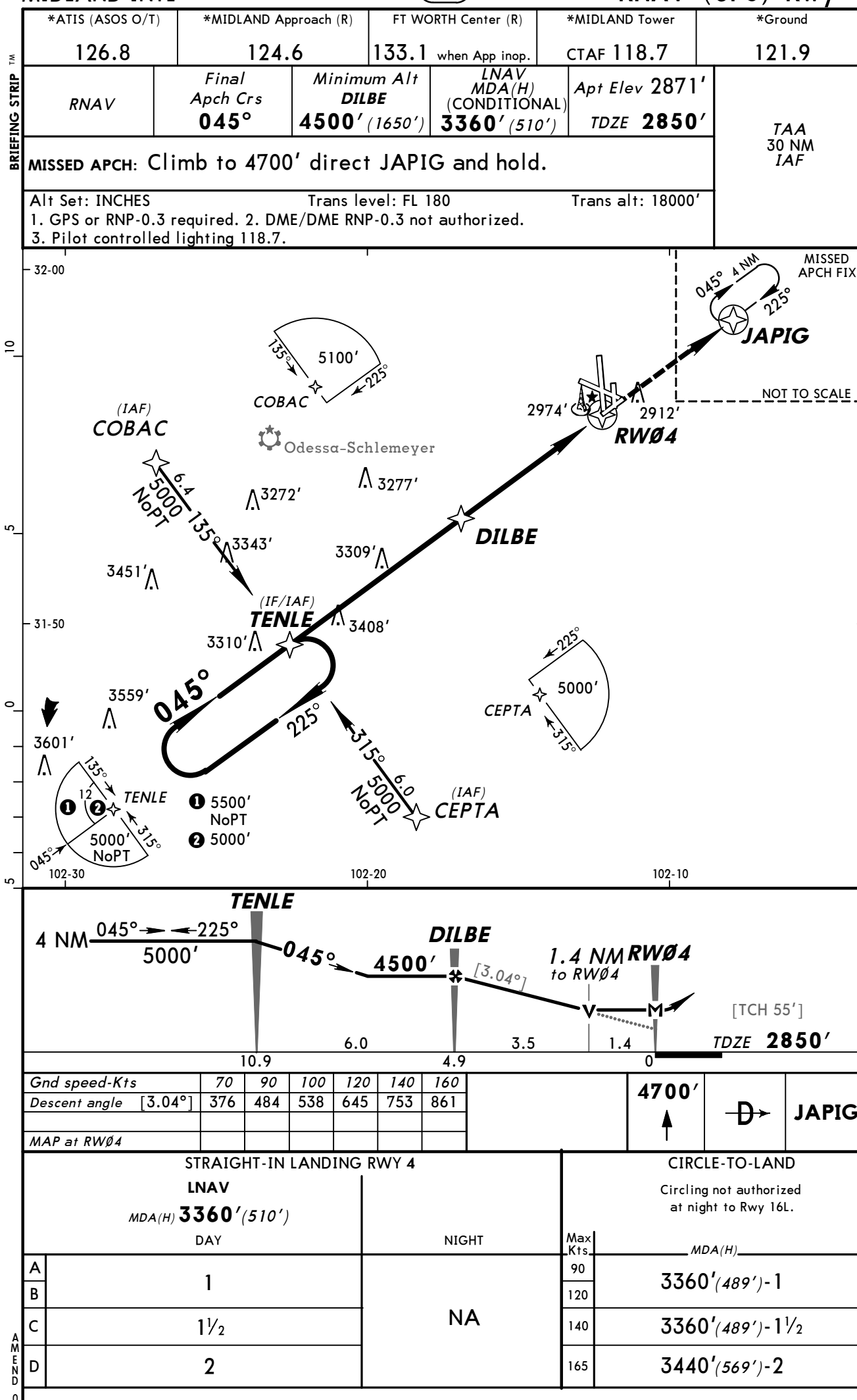
MDA(H) **3180'** (323')

ALS out

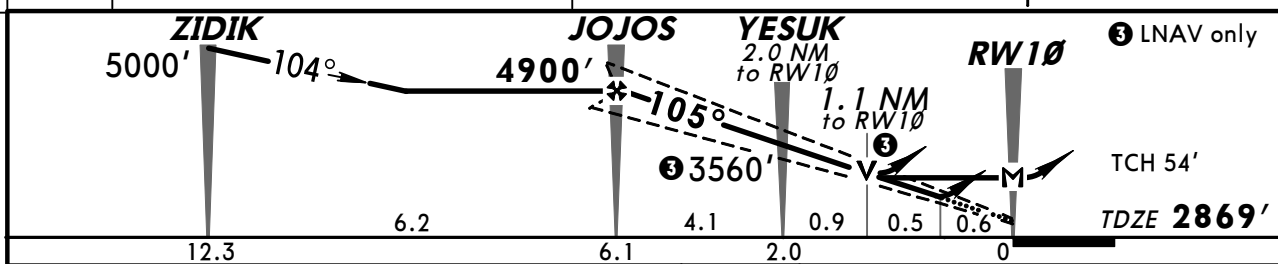
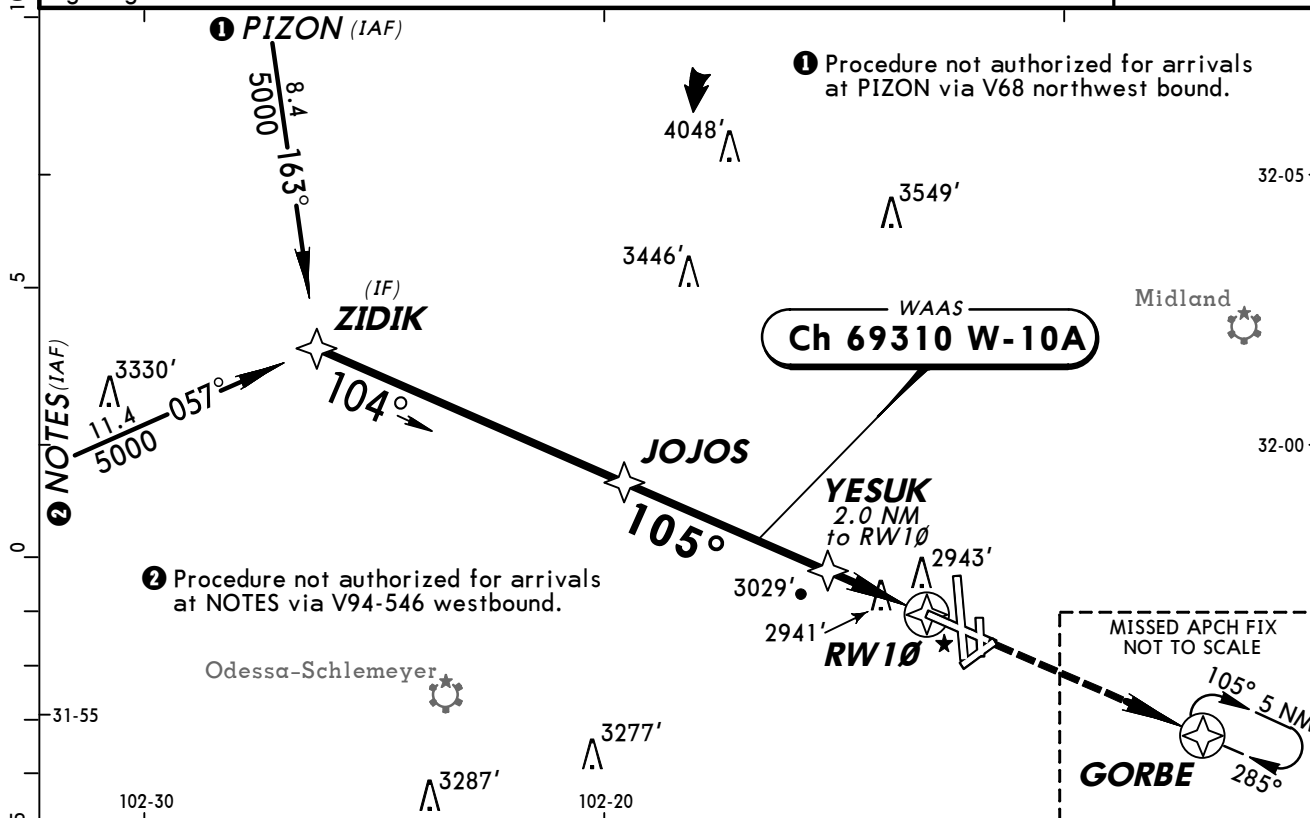
Max Kts

MDA(H)

	ALS out	Max Kts	MDA(H)
A		90	3340' (469') - 1
B	3/4	120	3340' (469') - 1 1/2
C		140	3340' (469') - 1 1/2
D	1	165	3440' (569') - 2



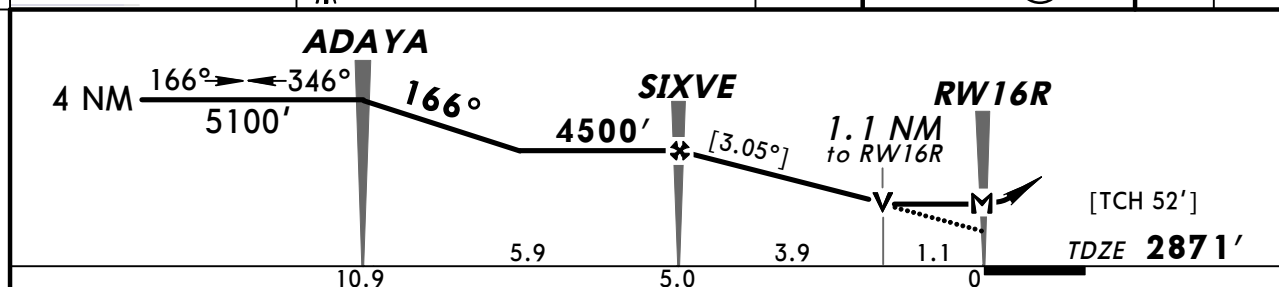
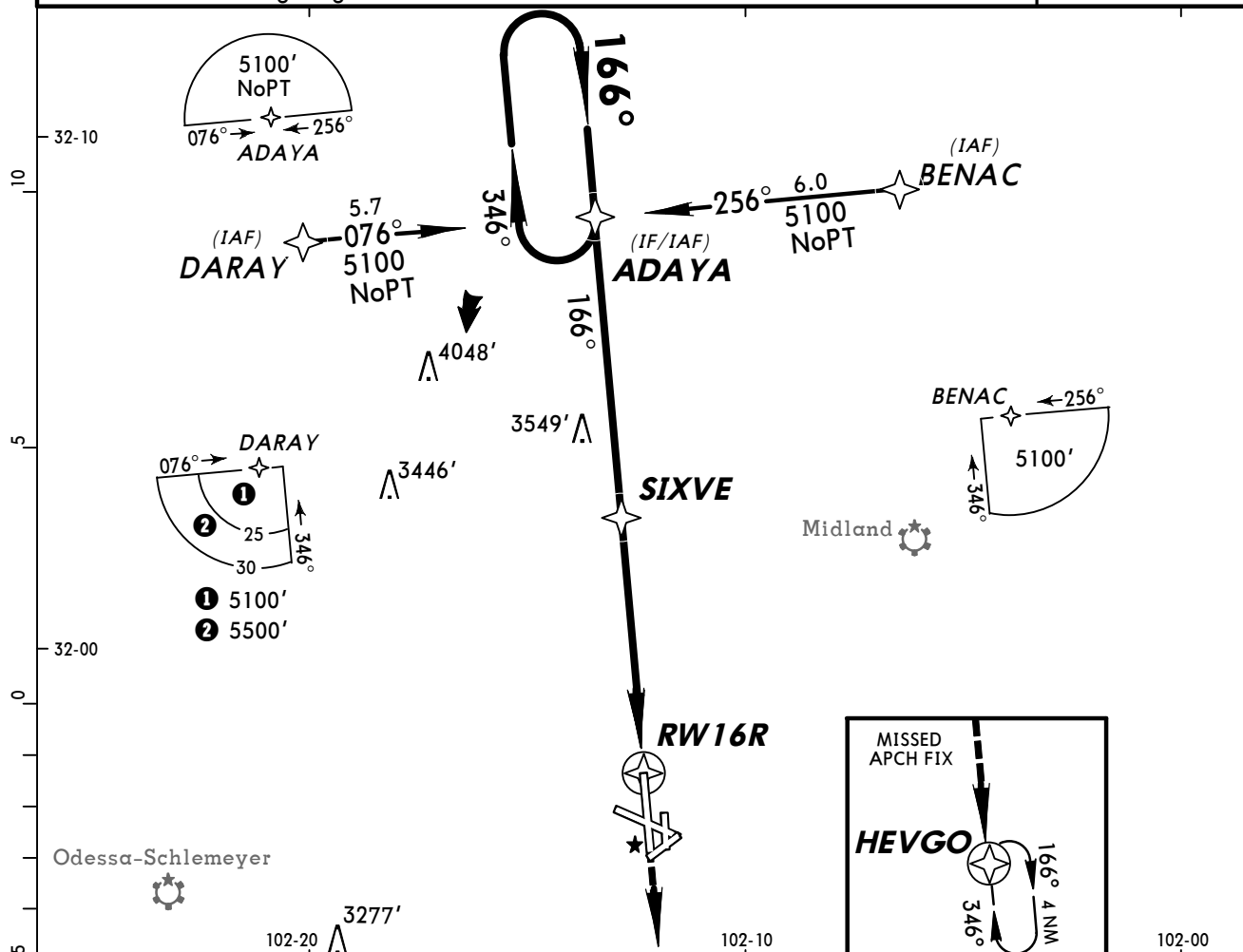
*ATIS (ASOS when Twr inop.) 126.8	*MIDLAND Approach (R) 124.6	FT WORTH Center (R) 133.1 when App inop.	*MIDLAND Tower CTAF 118.7	*Ground 121.9
WAAS Ch 69310 W-10A	Final Apch Crs 105°	Minimum Alt JOJOS 4900' (2031')	LPV DA(H) (CONDITIONAL) 3119' (250')	Apt Elev 2872' TDZE 2869'
MISSED APCH: Climb to 4500' direct GORBE and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Odessa altimeter setting. 2. Baro-VNAV and VDP not authorized when using Odessa altimeter setting. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -20°C (-4°F) or above 43°C (109°F). 4. DME/DME RNP-0.30 not authorized. 5. Pilot controlled lighting 118.7.				
5300' MSA RW10				



Gnd speed-Kts	70	90	100	120	140	160	MALS	4500'	D	GORBE
Glide Path Angle 3.00°	372	478	531	637	743	849	VASI			
MAP at RW10										

STRAIGHT-IN LANDING RWY 10 With Local Altimeter Setting							CIRCLE-TO-LAND With Local Altimeter Setting		
LPV DA(H) 3119' (250')		LNAV/VNAV DA(H) 3269' (400')		LNAV MDA(H) 3280' (411')			Max Kts		
RAIL or ALS out		RAIL out ALS out		RAIL out ALS out			MDA(H)		
A							90		
B	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	RVR 60 or 1 1/4	RVR 24 or 1/2	RVR 40 or 3/4	120		3340' (468')-1
C					RVR 40 or 3/4	RVR 60 or 1 1/4	140		3340' (468')-1 1/2
D					RVR 50 or 1		165		3440' (568')-2
With Odessa Altimeter Setting							With Odessa Altimeter Setting		
DA(H) 3160' (291')		DA(H) 3310' (441')		MDA(H) 3340' (471')			Max Kts		
RAIL or ALS out		RAIL out ALS out		RAIL out ALS out			MDA(H)		
A							90		
B		RVR 50 or 1	RVR 50 or 1	RVR 60 or 1 1/4	RVR 24 or 1/2	RVR 40 or 3/4	120		3400' (528')-1
C					RVR 40 or 3/4	RVR 60 or 1 1/4	140		3400' (528')-1 1/2
D					RVR 50 or 1	1 1/2	165		3500' (628')-2

*ATIS (ASOS when Twr inop.) 126.8	*MIDLAND Approach (R) 124.6	FT WORTH Center (R) 133.1 when App inop.	*MIDLAND Tower CTAF 118.7	*Ground 121.9
RNAV	Final Apch Crs 166°	Minimum Alt SIXVE 4500' (1629')	RNAV MDA(H) 3280' (409')	Apt Elev 2872' TDZE 2871'
MISSED APCH: Climb to 4700' direct HEVGO and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. GPS or RNP-0.30 required. 2. DME/DME RNP-0.30 not authorized. 3. Pilot controlled lighting 118.7.				



Gnd speed-Kts	70	90	100	120	140	160		VASI-L	4700'	HEVGO
Descent Angle [3.05°]	378	486	540	648	755	863				
MAP at RW16R										

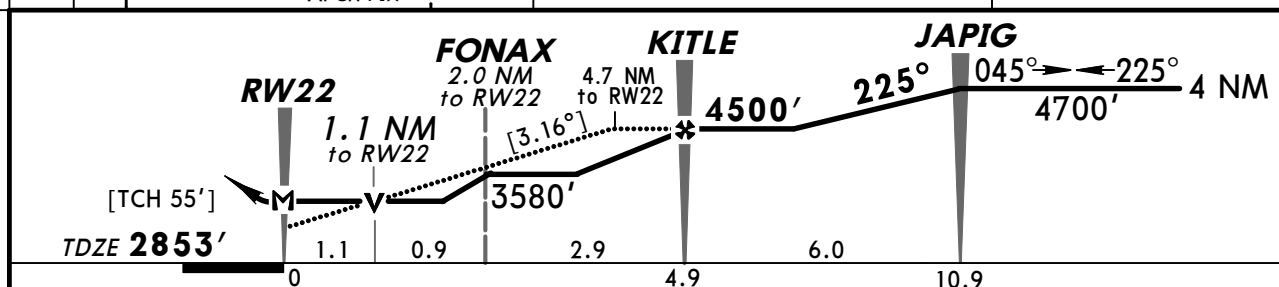
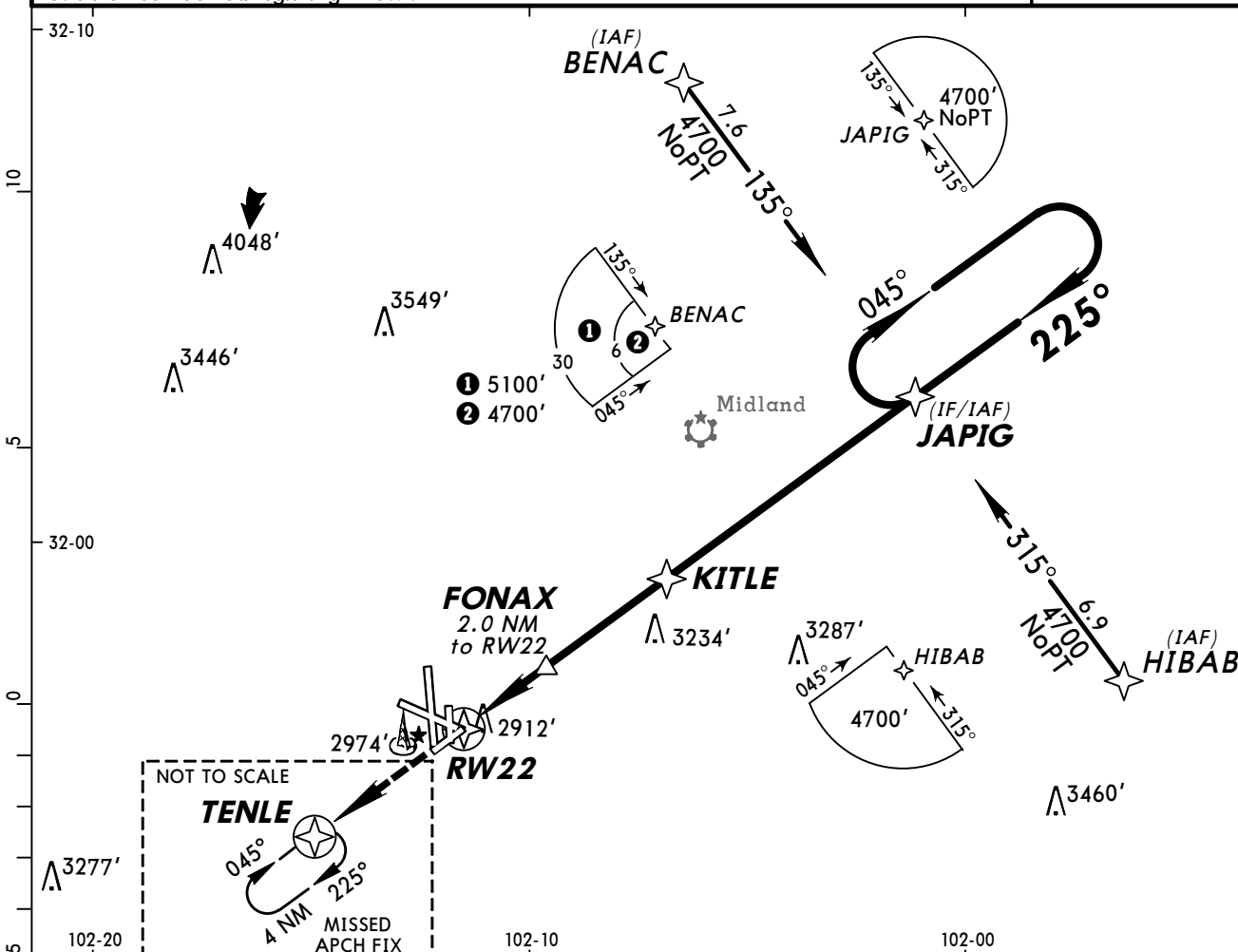
STRAIGHT-IN LANDING RWY 16R						CIRCLE-TO-LAND			
RNAV						Not Authorized at Night to Rwy 16L			
MDA(H) 3280' (409')						Max Kts	MDA(H)		
A	1					90	3340' (468')-1		
B						120			
C	1 1/4					140	3340' (468')-1 1/2		
D						165	3440' (568')-2		

KMAF/MAF MIDLAND INTL

JEPPESSEN
29 JUL 05 **12-4** Eff 4 Aug

MIDLAND, TEXAS
RNAV (GPS) Rwy 22

ATIS (ASOS when Twr inop)	*MIDLAND Approach (R)	FT WORTH Center (R)	*MIDLAND Tower	*Ground
126.8	124.6	133.1 when App inop.	CTAF 118.7	121.9
RNAV	Final Apch Crs 225°	Minimum Alt KITLE 4500' (1647')	LNAV MDA(H) (CONDITIONAL) 3280' (427')	Apt Elev 2871' TDZE 2853'
MISSED APCH: Climb to 4700' direct TENLE and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. GPS or RNP-0.3 required. 2. DME/DME RNP-0.3 not authorized. 3. Pilot controlled lighting 118.7.				



Gnd speed-Kts	70	90	100	120	140	160		4700'		TENLE
Descent angle [3.16°]	391	503	559	671	783	895				
MAP at RW22										

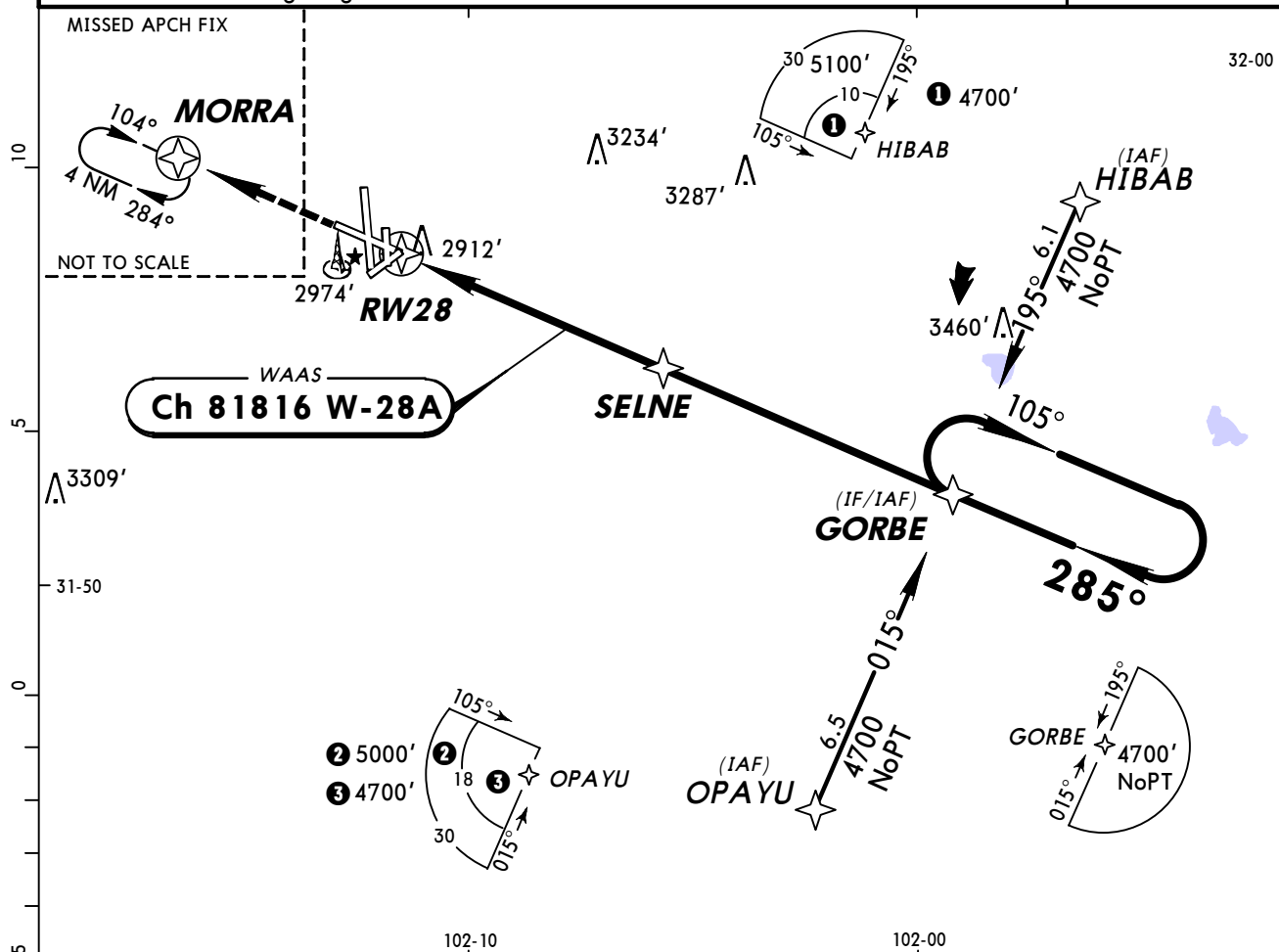
STRAIGHT-IN LANDING RWY 22				CIRCLE-TO-LAND			
LNAV MDA(H) 3280' (427') DAY				Not Authorized at Night to Rwy 16L			
NIGHT				Max Kts	MDA(H)		
A	1			90	3340' (469') - 1		
B				120			
C	1 1/4			140	3340' (469') - 1 1/2		
D	1 1/2			165	3440' (569') - 2		

CHANGES: None.

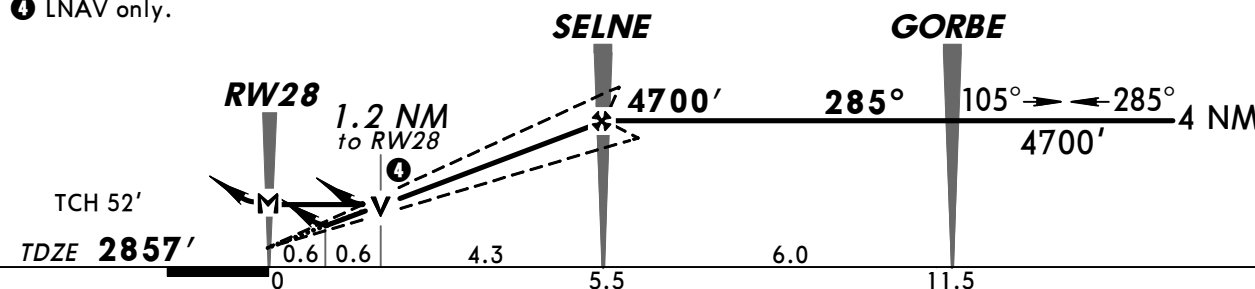
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ATIS (ASOS when Twr inop)	*MIDLAND Approach (R)	FT WORTH Center (R)	*MIDLAND Tower	*Ground
126.8	124.6	133.1 when App inop.	CTAF 118.7	121.9
WAAS Ch 81816 W-28A	Final Apch Crs 285°	Minimum Alt SELNE 4700' (1843')	LPV (CONDITIONAL) DA(H) 3110' (253')	Apt Elev 2871' TDZE 2857'
MISSED APCH: Climb to 4700' direct MORRA and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. Baro-VNAV not authorized below -20°C (-4°F). 2. DME/DME RNP-0.3 not authorized.				
3. Pilot controlled lighting 118.7.				

TAA
30 NM
IAF



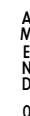
④ LNAV only.



Gnd speed-Kts	70	90	100	120	140	160		MALS	4700'	→ MORRA
Glide Path Angle 3.00°	372	478	531	637	743	849		VASI		
MAP at RW28										

STRAIGHT-IN LANDING RWY 28				CIRCLE-TO-LAND	
LPV		LNAV/VNAV		LNAV	
DA(H) 3110' (253')		DA(H) 3280' (423')		MDA(H) 3280' (423')	
ALS out		ALS out		ALS out	
A				3/4	1
B					
C	3/4	1 1/2		1 1/4	
D					
				Max Kts	MDA(H)
				90	
				120	3340' (469')-1 1/2
				140	
				165	3440' (569')-2

BRIEFING STRIP™



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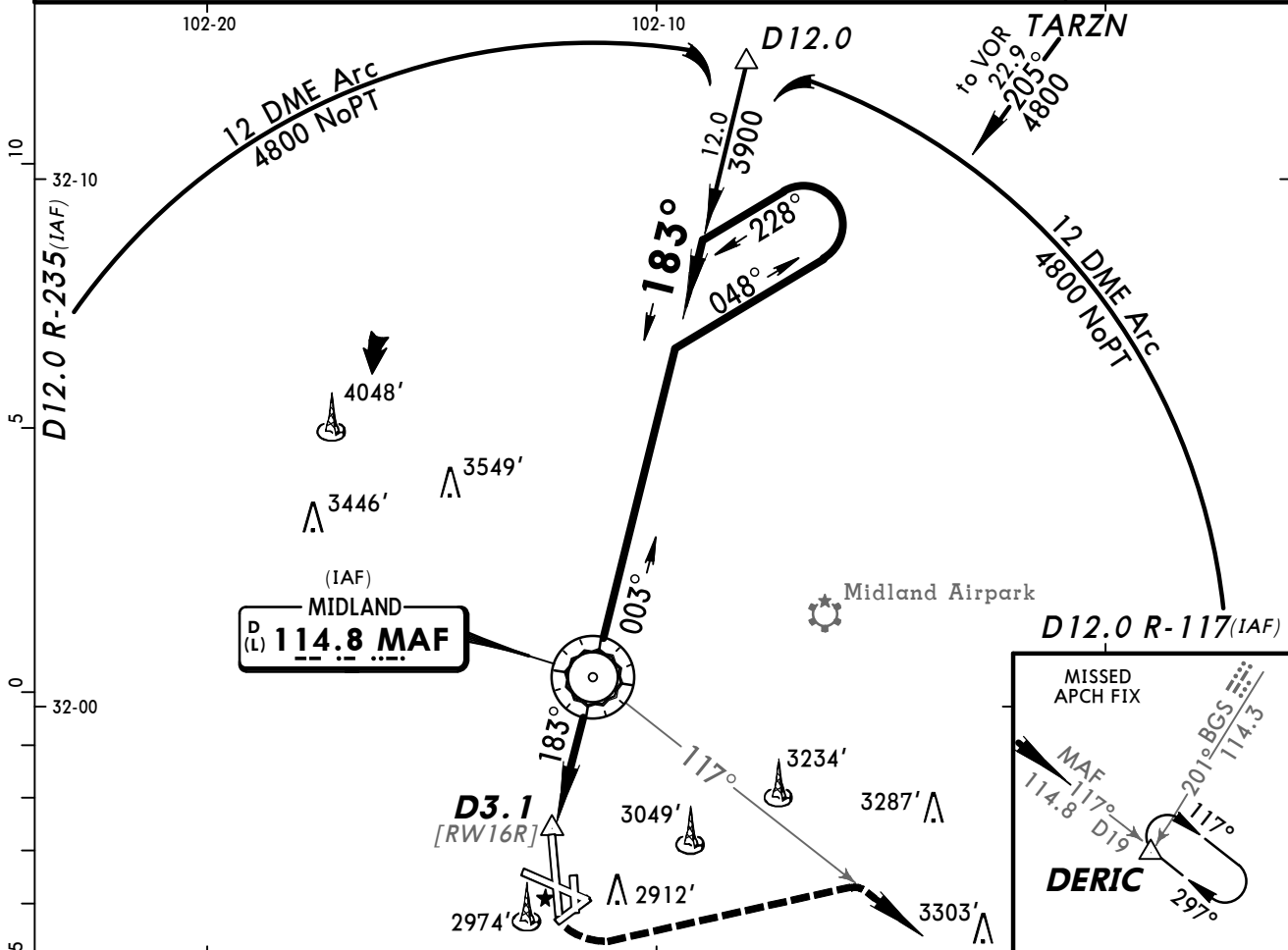
KMAF/MAF MIDLAND INTL

JEPPESSEN
2 JUL 04 (13-1)

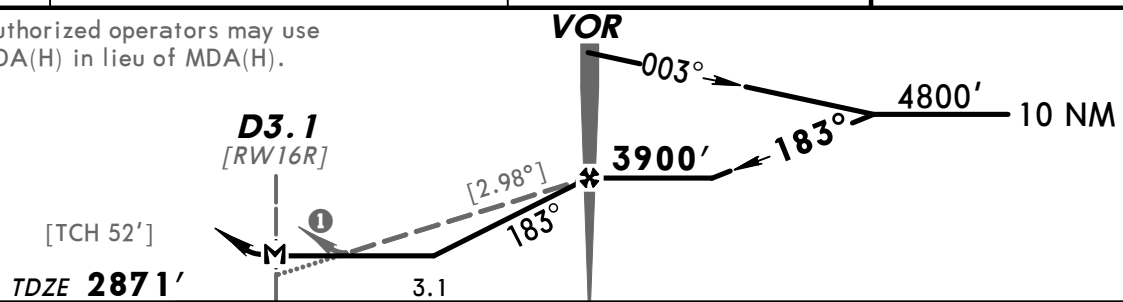
MIDLAND, TEXAS
VOR Rwy 16R

BRIEFING STRIP™

ATIS (ASOS when Twr inop)		*MIDLAND Approach (R)		FT WORTH Center (R)		*MIDLAND Tower		*Ground			
126.8		124.6		133.1 when App inop.		CTAF 118.7		121.9			
VOR MAF 114.8		Final Apch Crs 183°		Minimum Alt VOR 3900' (1029')		MDA(H) 3260' (389')		Apt Elev 2871' TDZE 2871'			
MISSED APCH: Climb to 3300' then climbing LEFT turn to 4800' outbound via MAF VOR R-117 to DERIC INT and hold.								5100' MSA MAF VOR			
Alt Set: INCHES 1. Pilot controlled lighting 118.7.				Trans level: FL 180						Trans alt: 18000'	



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160
Descent angle [2.98°]	369	474	527	633	738	843
MAP at D3.1 or VOR to MAP	3.1	2:39	2:04	1:52	1:33	1:20

VASI-L	3300'	4800'	MAF	DERIC
	↑	LT	via 114.8 R-117	

STRAIGHT-IN LANDING RWY16R

CIRCLE-TO-LAND

MDA(H) 3260' (389')

Max
Kts

MDA(H)

A	1	90	3340' (469') - 1
B	1	120	3340' (469') - 1
C	1 1/4	140	3340' (469') - 1 1/2
D	1 1/4	165	3440' (569') - 2

CHANGES: Straight-in minimums.

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MIDLAND, TEXAS
VOR DME Rwy 34L

13-2

BRIEFING STRIP™

TERPS
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9 CTERPS
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AMEND
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KMAF

JEPPESSEN

MIDLAND, TEXAS

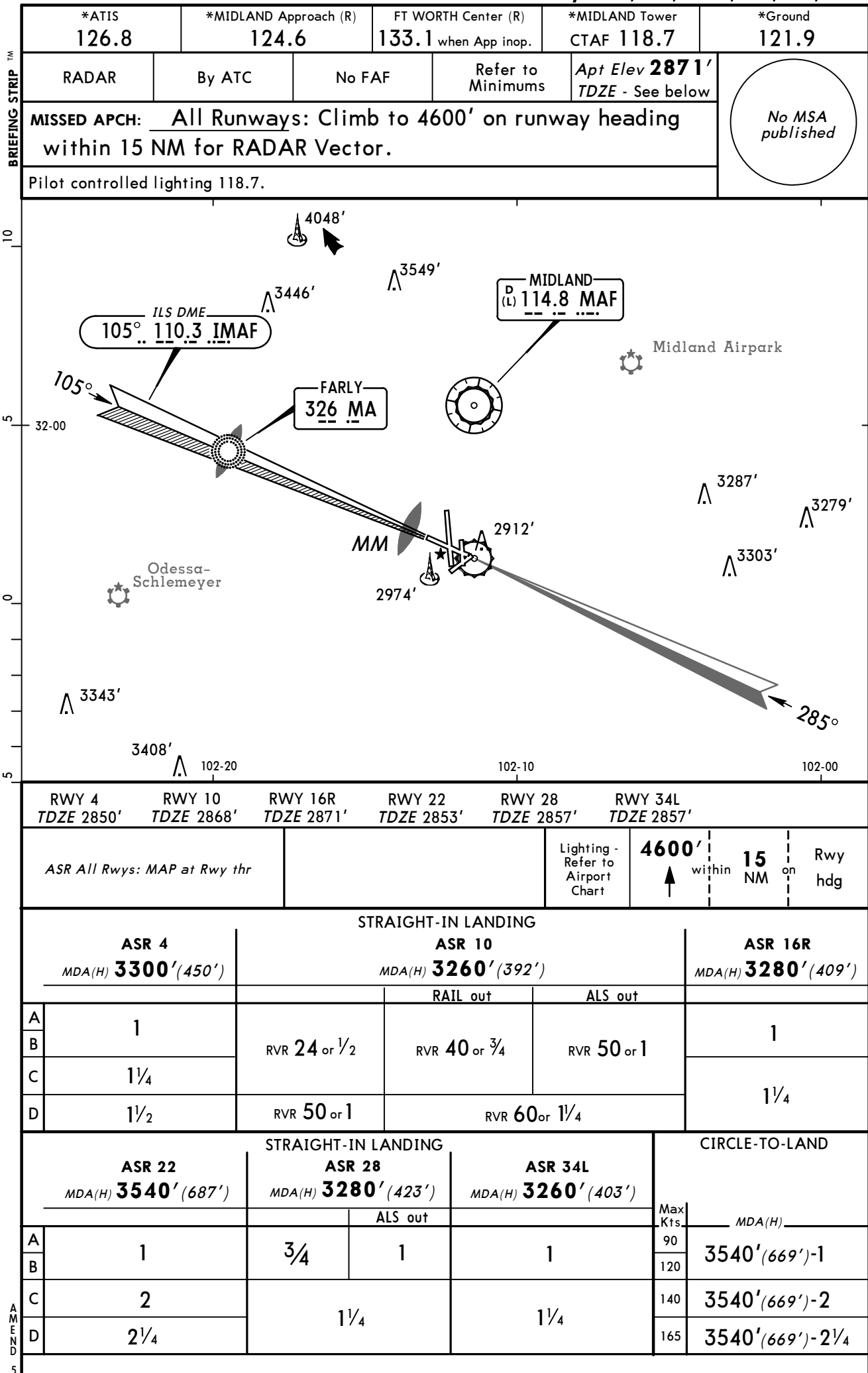
13 APR 01

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RADAR-1

MIDLAND INTL

ASR Rwy 4, 10, 16R, 22, 28, 34L



CHANGES: Communications.

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General Information

Location: MC Allen TX USA
IATA Code: MFE
Lat/Long: N26° 10.5' W098° 14.3'
Elevation: 107 ft

Airport Use: Public
Magnetic Variation: 4.8°E
Sectional Chart: Brownsville

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: HP Bottle
Repair Types: Major Airframe, Major Engine
Customs: ADCUS
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1259 Z
Sunset: 0033 Z,

Runway Information

Runway: 13
Length x Width: 7120 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 107 ft
Lighting: Edge, ALS
Displaced Threshold: 137 ft

Runway: 18
Length x Width: 2638 ft x 60 ft
Surface Type: asphalt
TDZ-Elev: 104 ft
Lighting: Edge, Pilot controlled

Runway: 31
Length x Width: 7120 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 102 ft
Lighting: Edge, REIL

Runway: 36
Length x Width: 2638 ft x 60 ft
Surface Type: asphalt
TDZ-Elev: 104 ft
Lighting: Edge, Pilot controlled

Communication Information

ATIS 128.5

ASOS 128.5

MC Allen Tower 118.5 CTAF PCL

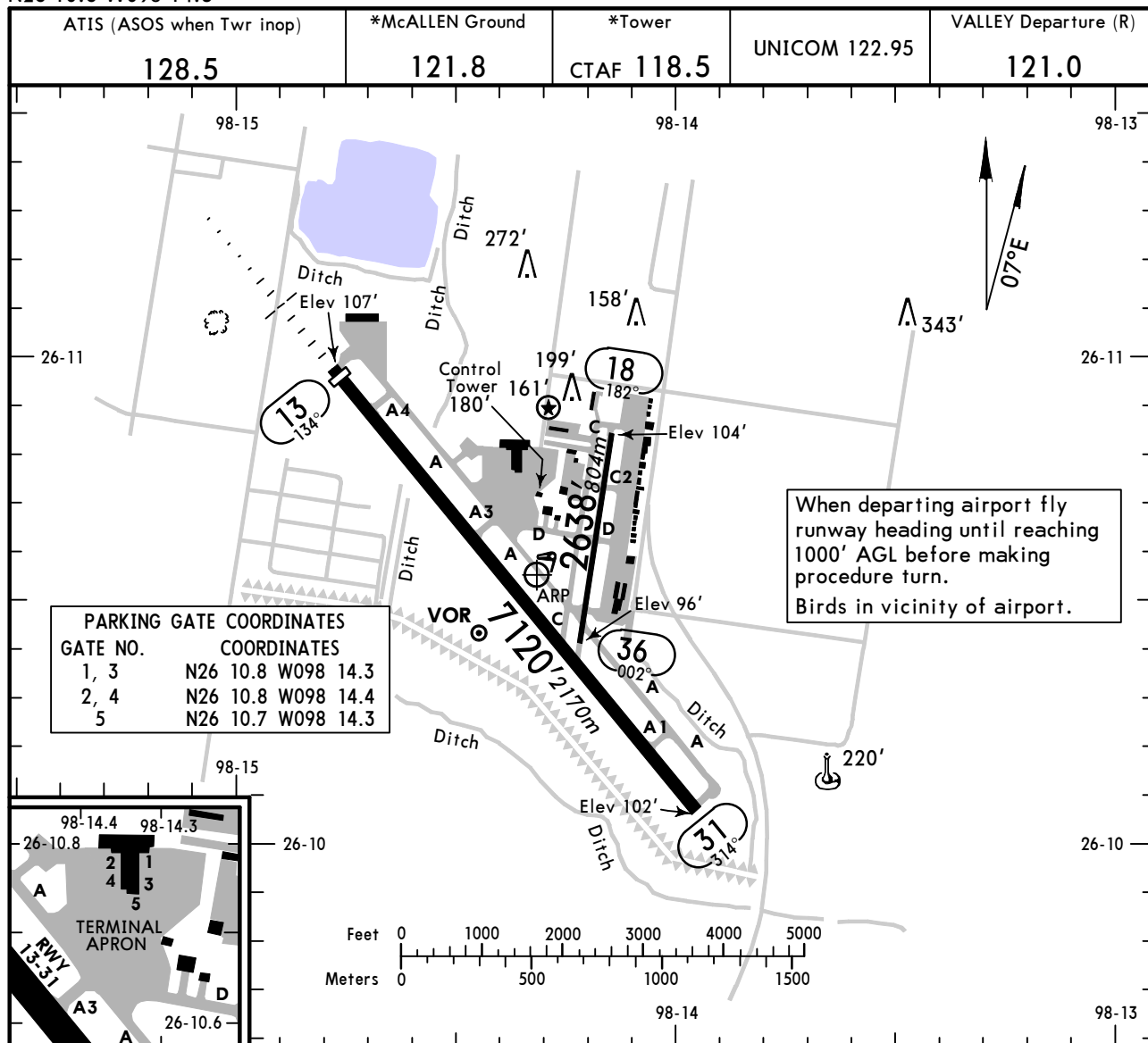
MC Allen Ground Control 121.8

Valley Approach Control 121.0

Valley Departure Control 121.0

MC Allen Miller Intl Unicom 122.95

San Angelo Flight Service Station 122.2 RCO



ADDITIONAL RUNWAY INFORMATION

RWY				USABLE LENGTHS		TAKE-OFF	WIDTH
				Threshold	Glide Slope		
13 ① 31	② HIRL ② MALSR	grooved	6983' 2128m	5736' 1748m			150' 46m
	② HIRL REIL VASI-L	grooved		6120' 1865m			
18 ③ 36	② MIRL PAPI-L (angle 4.0°)						60' 18m
	② MIRL						

- ① No 180° locked wheel turns.
- ② Activate on 118.5 when Twr inop.
- ③ Not available for air carrier operations.

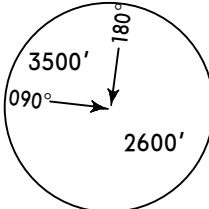
TAKE-OFF

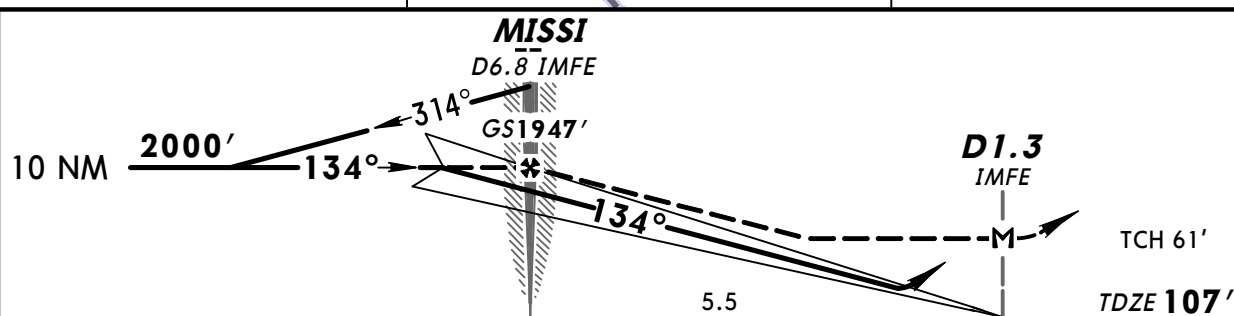
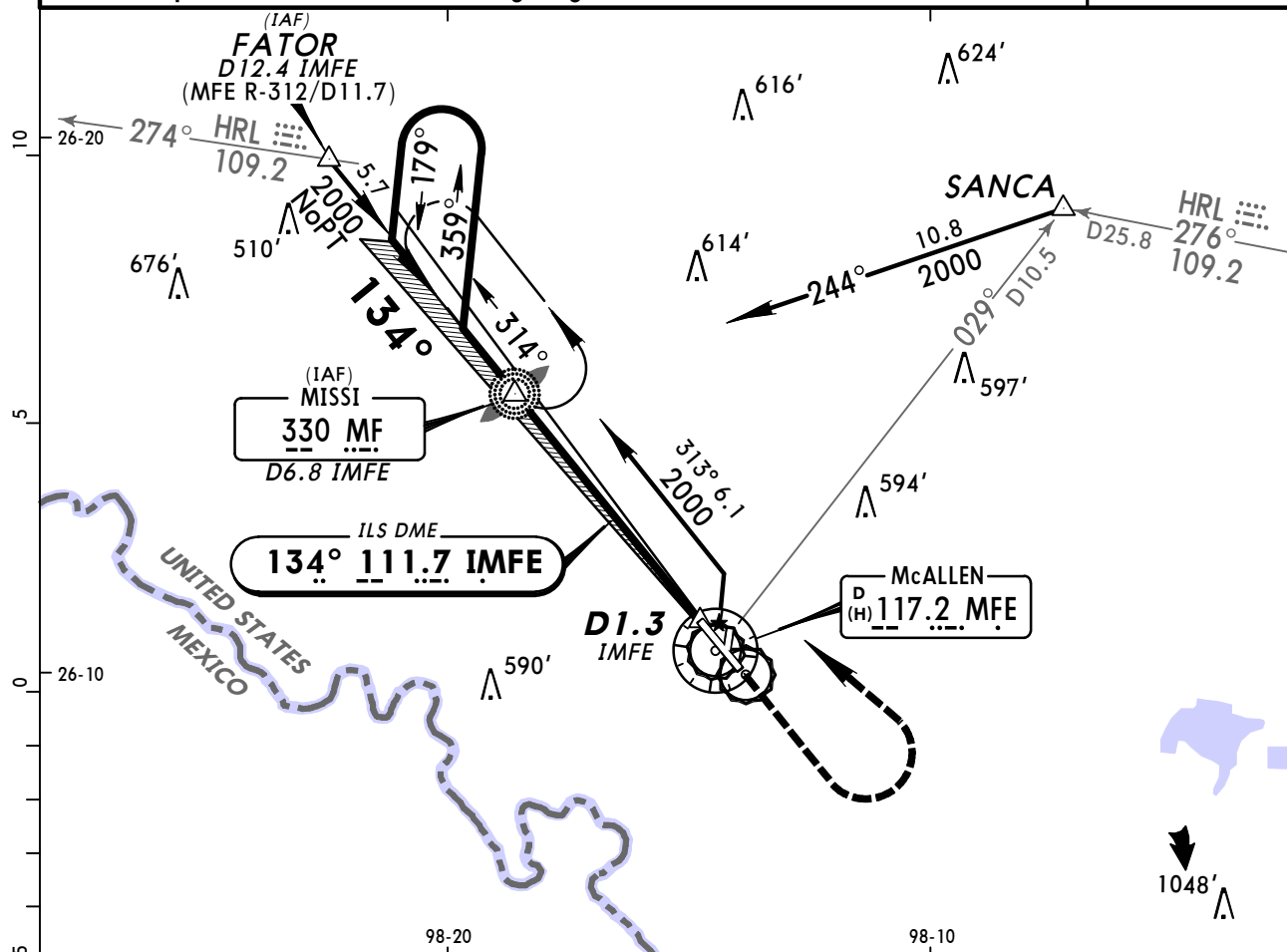
	Rwys 13, 18, 31		Rwy 36		
	Adequate Vis Ref	STD	With Mim climb of 298'/NM to 500'		Other
			Adequate Vis Ref	STD	
1 & 2 Eng	1/4	1	1/4	1	300-2½
3 & 4 Eng		1/2		1/2	

FOR FILING AS ALTERNATE

	Authorized Only When Twr Operating and Local Weather Available		Authorized Only When Twr Operating		Authorized Only When Local Weather Available	VOR Rwy 31 RNAV(GPS)Rwy 13
	ILS Rwy 31	LOC Rwy 31	ILS Rwy 13	LOC Rwy 13 VOR Rwy 13	RNAV(GPS)Rwy 31	
A	600-2	800-2	600-2	800-2	800-2	800-2
B						
C						
D						

BRIEFING STRIP™

ATIS (ASOS when Twr inop)		VALLEY Approach (R)		*McALLEN Tower		*Ground	
128.5		121.0		CTAF 118.5		121.8	
LOC IMFE 111.7	Final Apch Crs 134°	GS MISSI 1947' (1840')	ILS DA(H) 307' (200')	Apt Elev 107'	TDZE 107'		
MISSED APCH: Climb to 1500', then climbing LEFT turn to 2000' direct MISSI LOM and hold.							
Alt Set: INCHES		Trans level: FL 180			Trans alt: 18000'		
1. ADF required. 2. Pilot controlled lighting 118.5.							MSA MF LOM



Gnd speed-Kts	70	90	100	120	140	160	MALSR		1500'	2000'	D	MF 330
GS 3.00°	377	484	538	646	753	861			↑	LT		
MAP at D1.3 IMFE or MISSI to MAP 5.5	4:43	3:40	3:18	2:45	2:21	2:04						

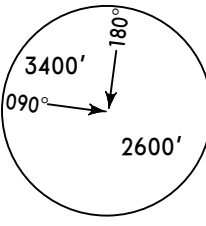
STRAIGHT-IN LANDING RWY13					CIRCLE-TO-LAND		
ILS		LOC (GS out)			Not Authorized		
DA(H) 307' (200')		MDA(H) 540' (433')			Northeast of Rwy 13-31		
FULL	RAIL or ALS out		RAIL out	ALS out	Max Kts	MDA(H)	
A		1/2	3/4	1	90	580' (473')-1	
B					120		
C	1/2	3/4		1 1/4	140	580' (473')-1 1/2	
D		1		1 1/2	165	660' (553')-2	

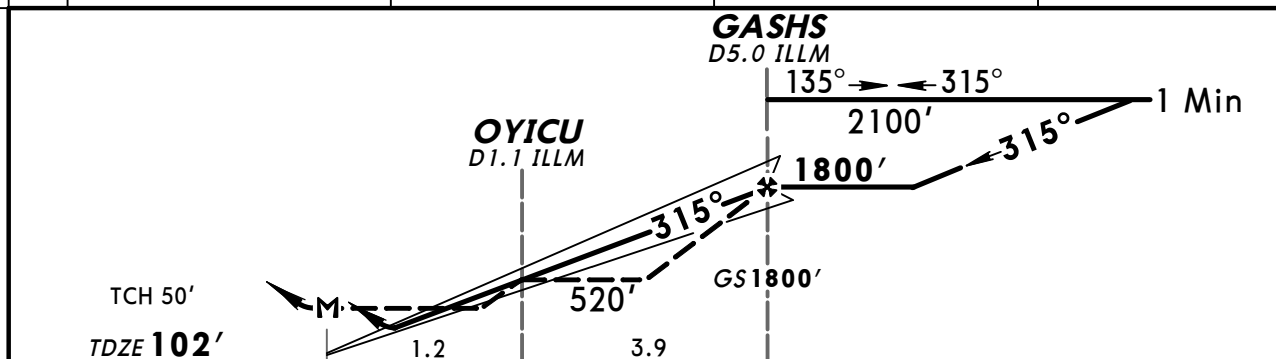
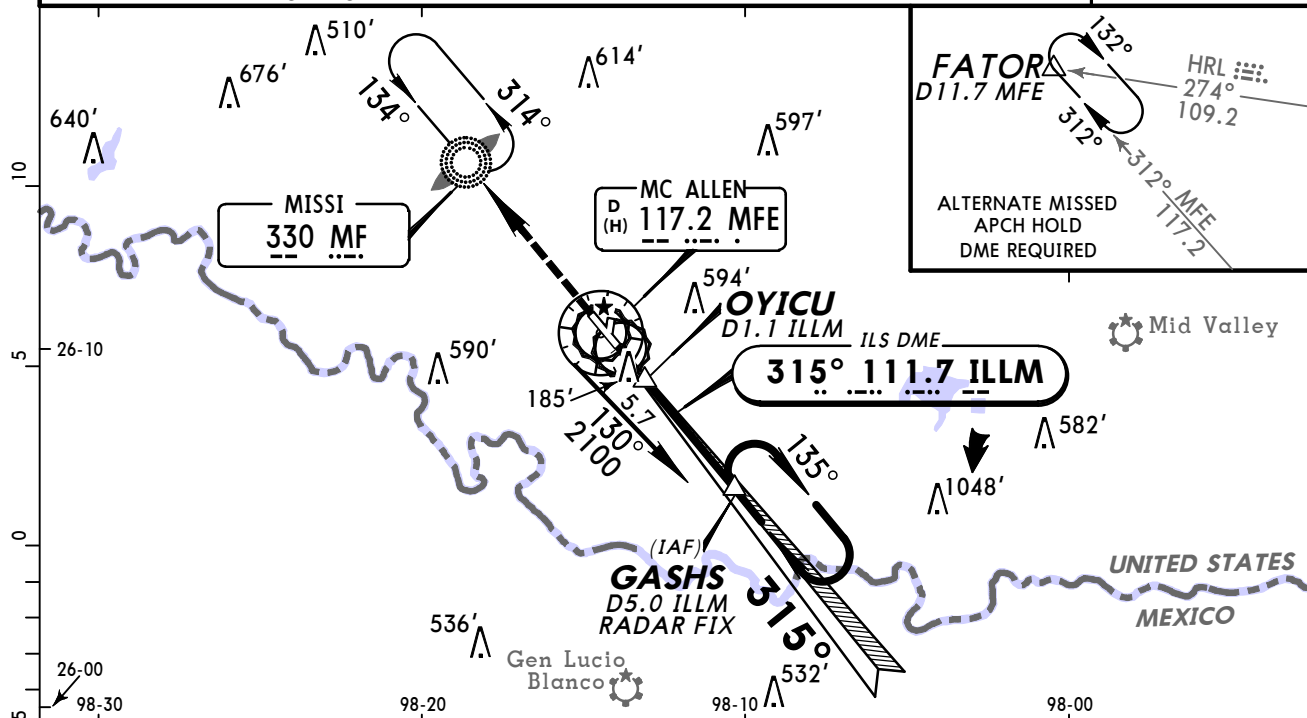
KMFE/MFE McALLEN MILLER INTL

JEPPesen
18 FEB 11 (11-2)

McALLEN, TEXAS
ILS or LOC Rwy 31

BRIEFING STRIP™

ATIS (ASOS when Twr Inop) 128.5		VALLEY Approach (R) 121.0		*McALLEN Tower CTAF 118.5		*Ground 121.8	
LOC ILLM 111.7	Final Apch Crs 315°	GS GASHS 1800' (1698')	ILS DA(H) (CONDITIONAL) 302' (200')	Apt Elev 107' TDZE 102'			 MSA MF LOM
MISSED APCH: Climb to 2100' direct MF LOM and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. ADF and DME or RADAR required. 2. Use local altimeter setting; if not received, use Valley Intl altimeter setting. 3. Visibility reduction by helicopters not authorized. 4. Pilot controlled lighting 118.5.							



Gnd speed-Kts	70	90	100	120	140	160		REIL VASI-L	2100'		MF 330
GS	3.00°	377	484	538	646	753	861				
GASHS to MAP	5.1	4:22	3:24	3:04	2:33	2:11	1:55				

STRAIGHT-IN LANDING RWY 31					2 CIRCLE-TO-LAND				
ILS		1 LOC (GS out)				With OYICU		Without OYICU	
With Local Altimeter Setting					With Local Altimeter Setting				
DA(H) 302' (200')		MDA(H) 440' (338')		MDA(H) 520' (418')		Max Kts	MDA(H)		
A	3/4		1		90		580' (473') - 1		
120									
140					580' (473') - 1 1/2				
165					660' (553') - 2				
With Valley Intl Altimeter Setting					With Valley Intl Altimeter Setting				
DA(H) 385' (283')		MDA(H) 620' (518')		Max Kts			MDA(H)		
A	1		NA		90		680' (573') - 1		
120									
140					680' (573') - 1 1/2				
165					760' (653') - 2				

1 DME or RADAR required. 2 Not Authorized Northeast of Rwy 13-31.

CHANGES: LOM frequency, notes.

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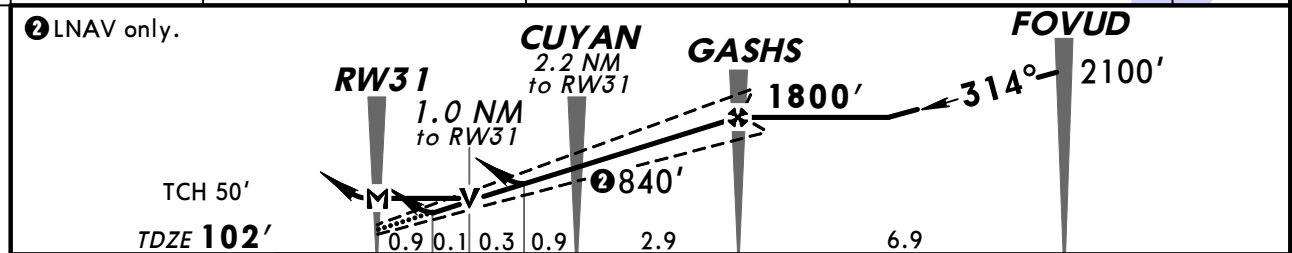
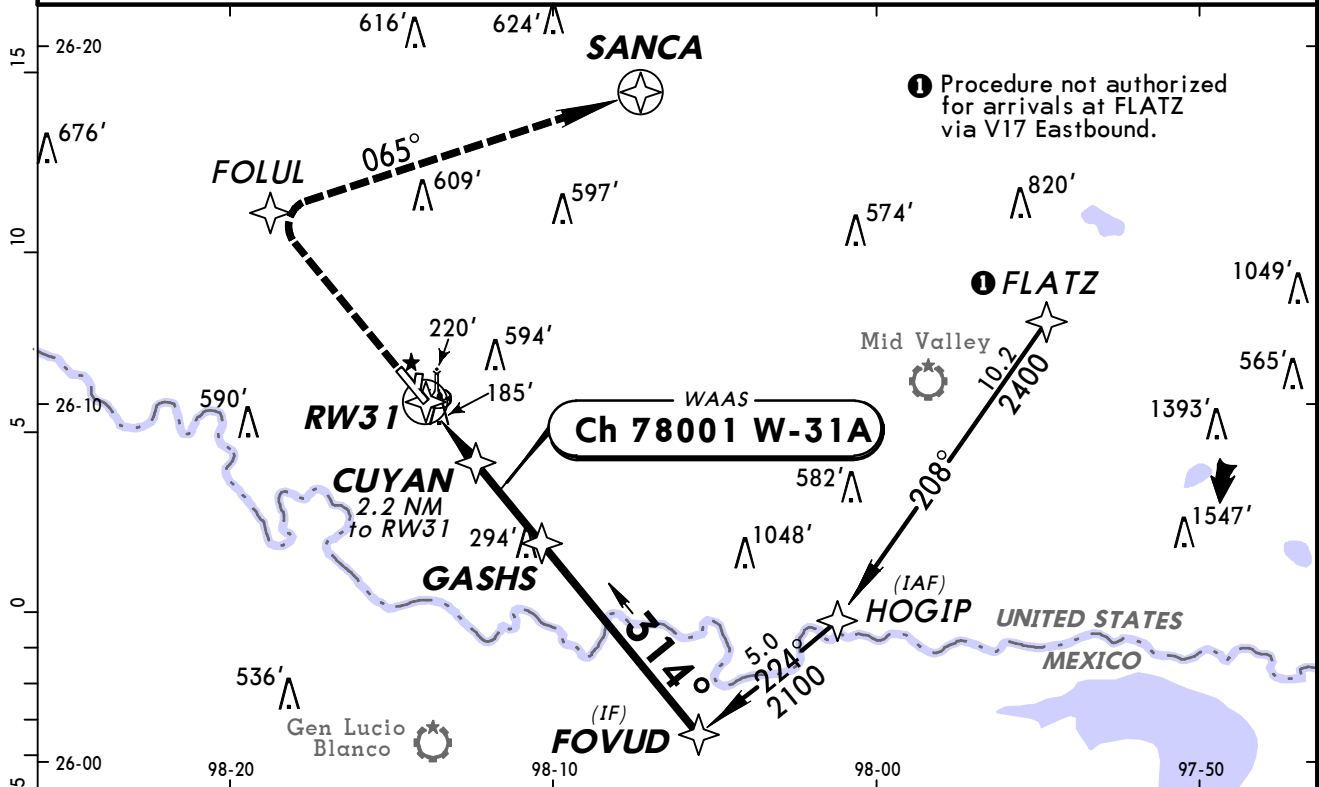
ATIS (ASOS when Twr Inop) 128.5		VALLEY Approach (R) 121.0		*McALLEN Tower CTAF 118.5		*Ground 121.8	
WAAS Ch 78001 W-31A	<i>Final</i> <i>Apch Crs</i> 314°	<i>Minimum Alt</i> GASHS 1800' (1698')	<i>LPV</i> <i>DA(H)</i> (CONDITIONAL) 424' (322')	<i>Apt Elev</i> 107' <i>TDZE</i> 102'		2600' MSA RW31	
MISSED APCH: Climb to 2000' direct FOLUL and RIGHT turn via 065° track to SANCA.							

Alt Set: INCHES

Trans level: FL 180

Trans alt: 18000'

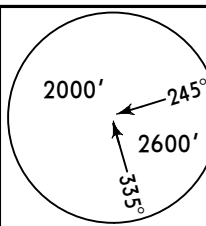
1. Use local altimeter setting; if not received, use Valley Intl altimeter setting. 2. Baro-VNAV and VDP not authorized when using Valley Intl altimeter setting. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 48°C (118°F). 4. DME/DME RNP-0.3 not authorized. 5. Visibility reduction by helicopters not authorized. 6. Pilot controlled lighting 118.5.



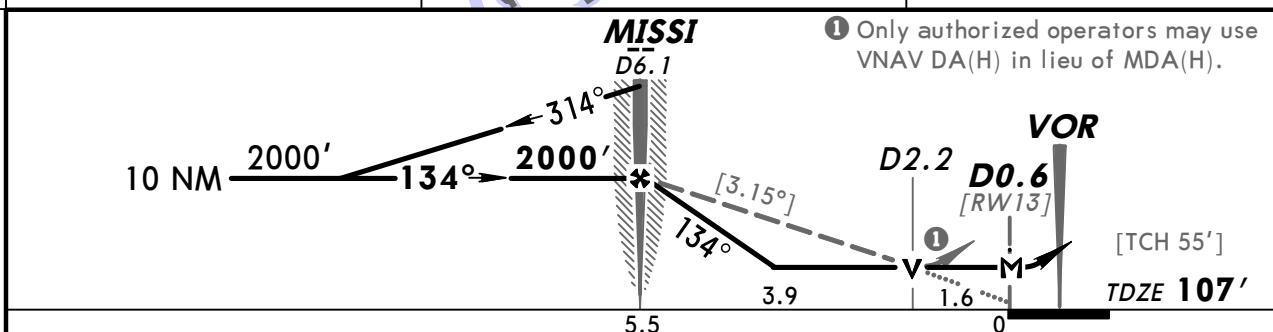
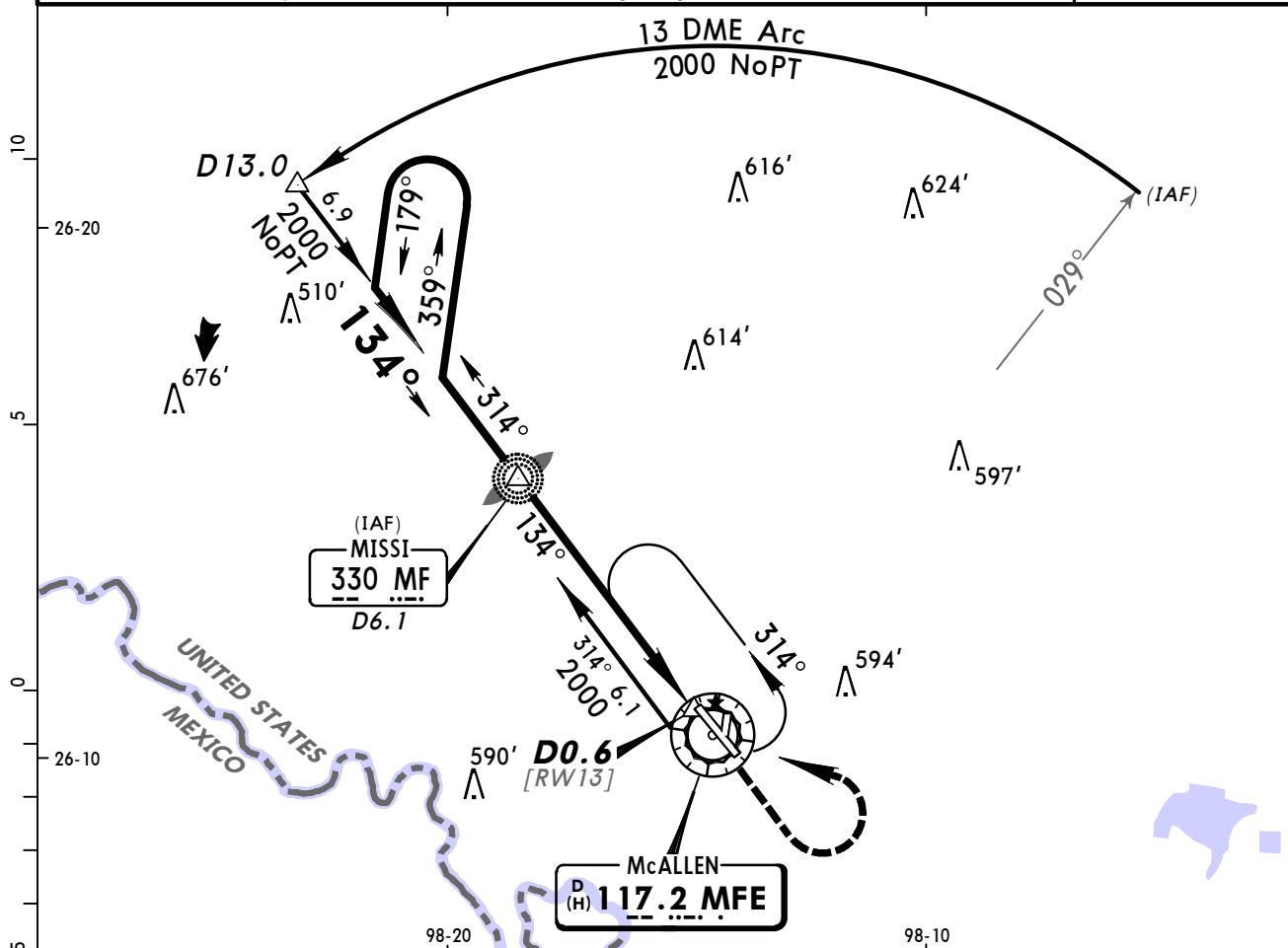
Gnd speed-Kts	70	90	100	120	140	160	REIL	2000'	D→	FOLUL
Glide Path Angle 3.00°	372	478	531	637	743	849				
MAP at RW31							VASI-L			

STRAIGHT-IN LANDING RWY 31							CIRCLE-TO-LAND	
With Local Altimeter Setting							Not Authorized	
LPV		LNAV/VNAV		LNAV		Northeast of Rwy 13-31		
DA(H) 424' (322')		DA(H) 562' (460')		MDA(H) 480' (378')		With Local		
						Altimeter Setting		
						MDA(H)		
A	1	1½	1		Max Kts	580' (473')-1		
B					90			
C					120	580' (473')-1½		
D			1¼		140	580' (473')-1½		
							165	660' (553')-2
With Valley Intl Altimeter Setting							With Valley Intl	
DA(H) 507' (405')		DA(H) 645' (543')		MDA(H) 580' (478')		Altimeter Setting		
						MDA(H)		
A	1½	2	1		Max Kts	680' (573')-1		
B					90			
C					120	680' (573')-1½		
D			1¼		140	680' (573')-1½		
							165	760' (653')-2

BRIEFING STRIP™

ATIS (ASOS when Twr Inop)		VALLEY Approach (R)		*McALLEN Tower		*Ground	
128.5		121.0		CTAF 118.5		121.8	
VOR MFE 117.2	Final Apch Crs 134°	Minimum Alt MISSI 2000' (1893')	MDA(H) 600' (493')	Apt Elev 107' TDZE 107'			
MISSED APCH: Climb to 1000', then climbing LEFT turn to 2000' direct MFE VOR and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. ADF or DME required. 2. Pilot controlled lighting 118.5.							

MSA MFE VOR

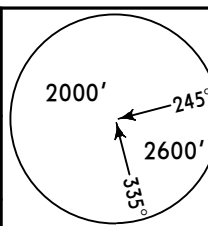


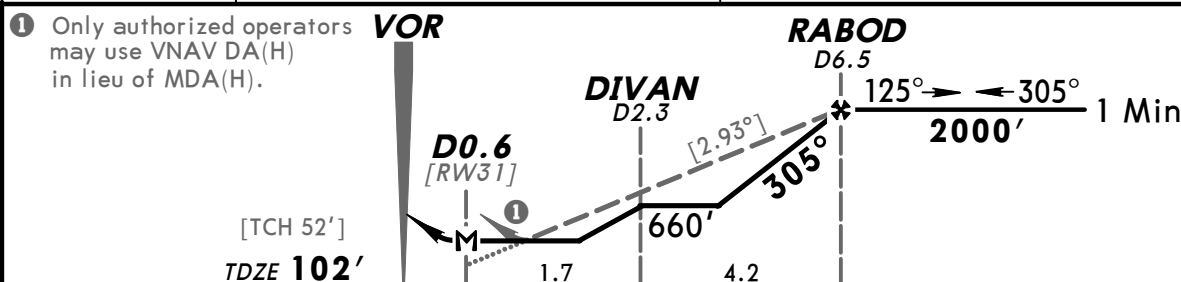
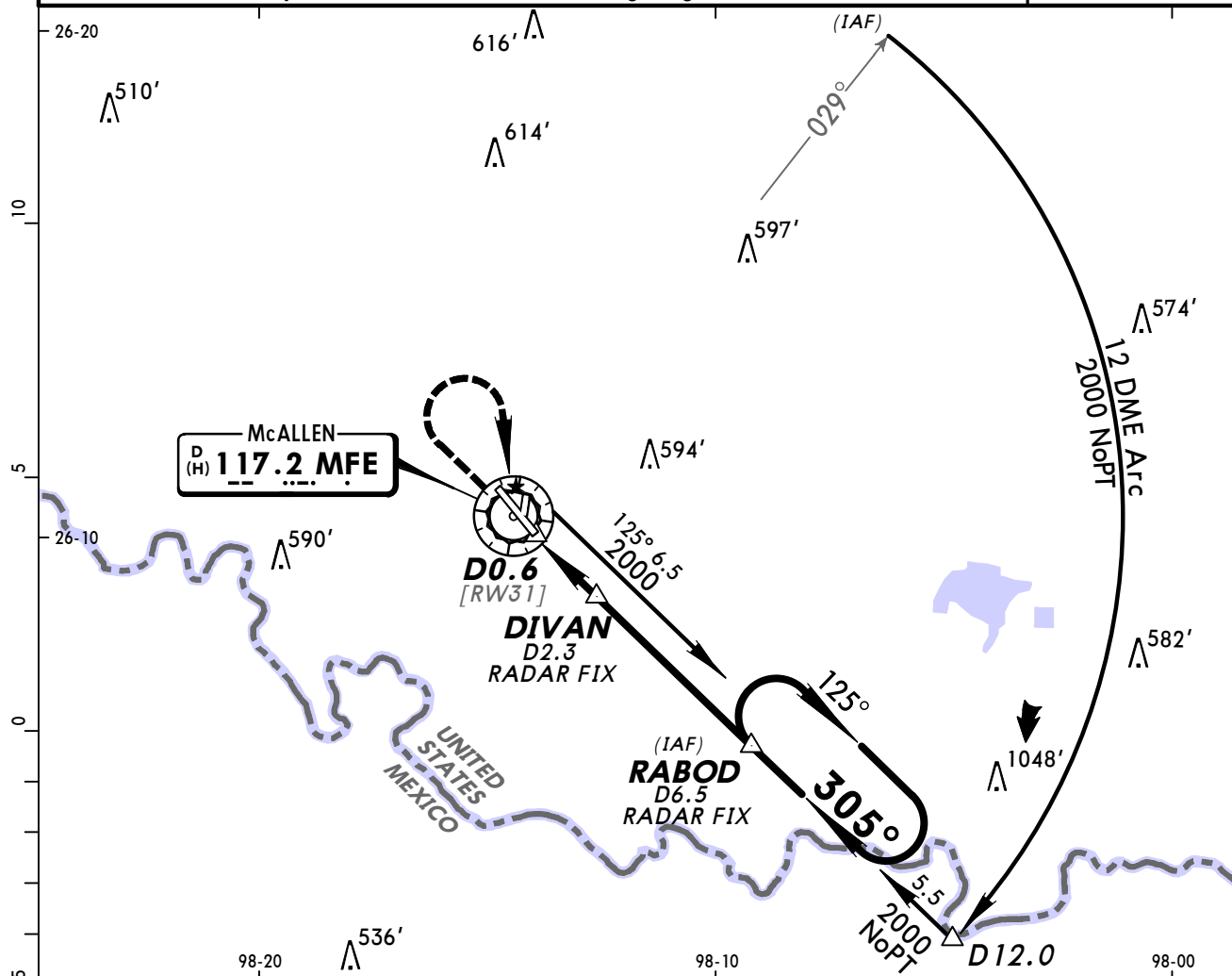
Gnd speed-Kts	70	90	100	120	140	160	MALSR	1000'	2000'	D	MFE 117.2
Descent angle [3.15°]	390	502	557	669	780	892		↑	LT		
MAP at D0.6 or MISSI to MAP	5.5	4:43	3:40	3:18	2:45	2:21					

STRAIGHT-IN LANDING RWY13					CIRCLE-TO-LAND	
MDA(H) 600' (493')					Not Authorized Northeast of Rwy 13-31	
		RAIL out	ALS out	Max Kts	MDA(H)	
A	1/2	3/4	1	90	600' (493')-1	
B				120		
C	3/4		1 1/4	140	600' (493')-1 1/2	
D	1		1 1/2	165	660' (553')-2	

TERPS

BRIEFING STRIP™

ATIS (ASOS when Twr inop)		VALLEY Approach (R)		*McALLEN Tower		*Ground	
128.5		121.0		CTAF 118.5		121.8	
VOR MFE 117.2	Final Apch Crs 305°	Minimum Alt RABOD 2000' (1898')	MDA(H) 480' (378')	Apt Elev 107' TDZE 102'			
MISSED APCH: Climb to 900', then climbing RIGHT turn to 2000' direct MFE VOR.							
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'			
1. RADAR or DME required.		2. Pilot controlled lighting 118.5.		MSA MFE VOR			



Gnd speed-Kts	70	90	100	120	140	160	REIL VASI-L	900'	2000'	D→	MFE 117.2
Descent angle [2.93°]	363	466	518	622	726	829					
MAP at D0.6 or RABOD to MAP	5.9	5:03	3:56	3:32	2:57	2:32					

STRAIGHT-IN LANDING RWY 31				CIRCLE-TO-LAND			
MDA(H) 480' (378')				Not Authorized Northeast of Rwy 13-31			
				Max Kts	MDA(H)		
A				90	580' (473') - 1		
B	1			120			
C				140	580' (473') - 1½		
D	1¼			165	660' (553') - 2		

General Information

Location: Corpus Christi TX USA

IATA Code: NGP

Lat/Long: N27° 41.6' W097° 17.4'

Elevation: 18 ft

Airport Use: Military

Magnetic Variation: 4.3°E

Sectional Chart: Brownsville

Fuel Types: 100 Octane (LL), Jet 4

Repair Types: Major Airframe, Major Engine

Customs: Upon Prior Request

Airport Type: IFR

Landing Fee: No

Control Tower: Yes

Jet Start Unit: Yes

LLWS Alert: No

Beacon: Yes

Sunrise: 1256 Z

Sunset: 0028 Z,

Runway Information

Runway: 04

Length x Width: 5004 ft x 196 ft

Surface Type: asphalt

TDZ-Elev: 17 ft

Lighting: Edge, Pilot controlled

Runway: 13L

Length x Width: 5000 ft x 196 ft

Surface Type: asphalt

TDZ-Elev: 18 ft

Lighting: Edge

Runway: 13R

Length x Width: 8002 ft x 200 ft

Surface Type: asphalt

TDZ-Elev: 13 ft

Lighting: Edge, ALS, REIL, Pilot controlled

Stopway: 750 ft

Runway: 17

Length x Width: 5003 ft x 196 ft

Surface Type: asphalt

TDZ-Elev: 18 ft

Lighting: Edge

Runway: 22
Length x Width: 5004 ft x 196 ft
Surface Type: asphalt
TDZ-Elev: 15 ft
Lighting: Edge, Pilot controlled

Runway: 31L
Length x Width: 8002 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 17 ft
Lighting: Edge, REIL, Pilot controlled
Stopway: 1000 ft

Runway: 31R
Length x Width: 5000 ft x 196 ft
Surface Type: asphalt
TDZ-Elev: 18 ft
Lighting: Edge

Runway: 35
Length x Width: 5003 ft x 196 ft
Surface Type: asphalt
TDZ-Elev: 18 ft
Lighting: Edge

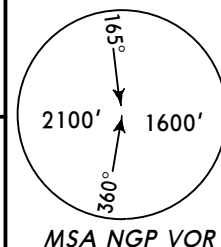
Communication Information

ATIS 127.9
ATIS 114.0
Navy Corpus Tower 134.85 PCL
Navy Corpus Tower 125.525
Navy Corpus Ground Control 118.7
Corpus Approach Control 127.5
Corpus Approach Control 120.9
Corpus Approach Control 128.675
Corpus Departure Control 128.675
Navy Corpus Radar 683.5
Navy Corpus Radar 134.1
X-Ray Charlie Operations 139.2 Military
Corpus Christi Operations 796.5 Military

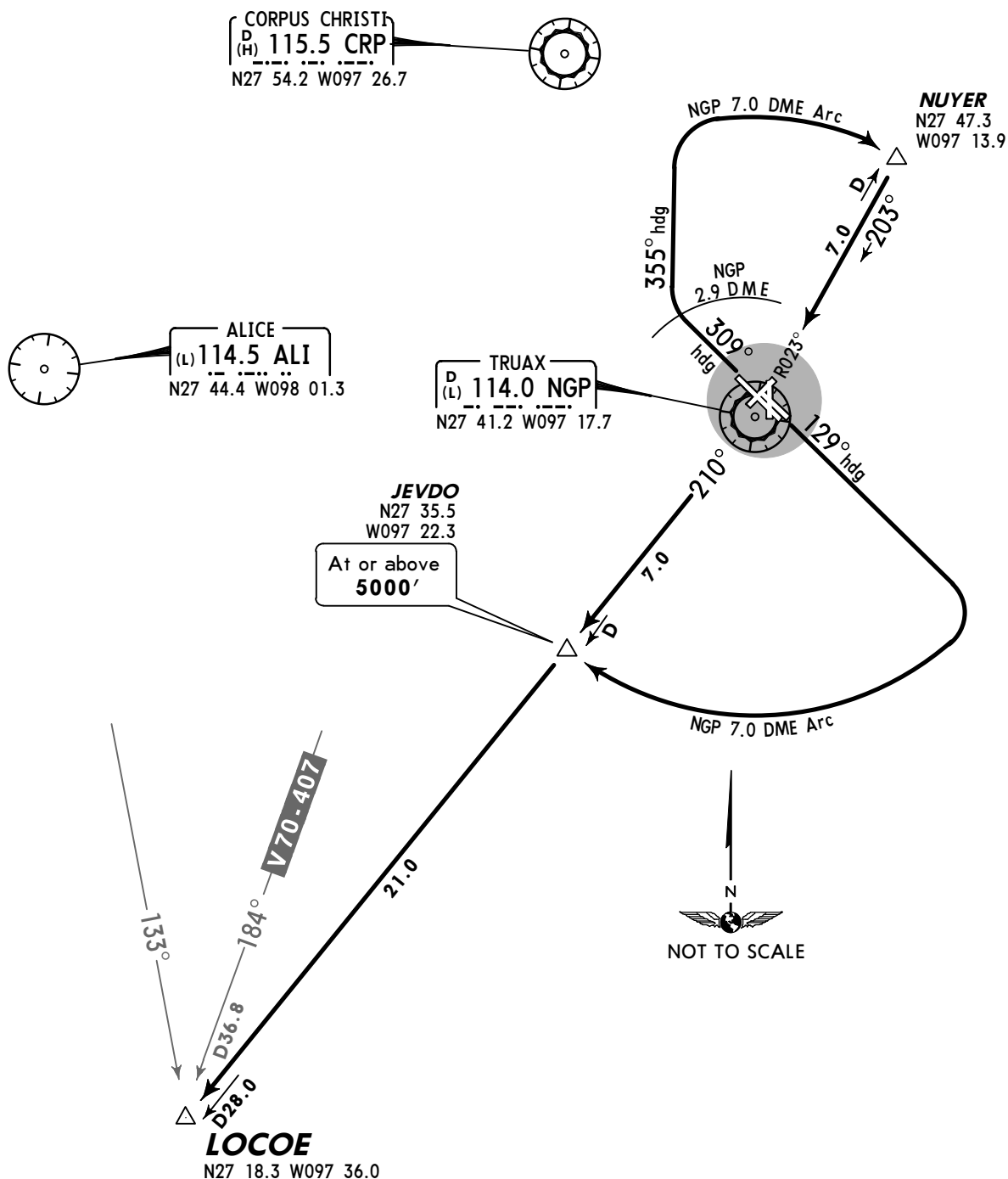
CORPUS CHRISTI
Departure (R)
128.67

Apt Elev
18'

Trans level: FL 180 Trans alt: 18000'
1. Emergency safe altitude within 100 NM 2600'.
2. DME required.



LOCOE ONE DEPARTURE (LOCOE1.LOCOE)



Minimum climb Rate to 5000'

Rwys	Gnd speed-KT	75	100	150	200	250	300
13L/R	V/V (fpm)	400	533	800	1067	1333	1600
31L/R	V/V (fpm)	313	417	625	833	1042	1250

RWY

INITIAL CLIMB

13L/R

Climb via heading 129° to intercept NGP 7.0 DME Arc. Arc clockwise SOUTH of NGP fly NGP 7.0 DME Arc to JEVDO.

31L/R

Climb via heading 309° to NGP 2.9 DME, then climbing RIGHT turn fly heading 355° to intercept NGP 7.0 DME Arc. Arc clockwise NORTH of NGP fly NGP 7.0 DME Arc to NUVER, then fly NGP R-023 to NGP and NGP R-210 to JEVDO.

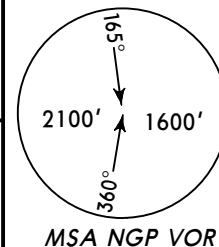
ROUTING

From JEVDO fly NGP R-210 to LOCOE, then fly assigned route. EXPECT clearance to filed altitude/flight level 10 minutes after departure.

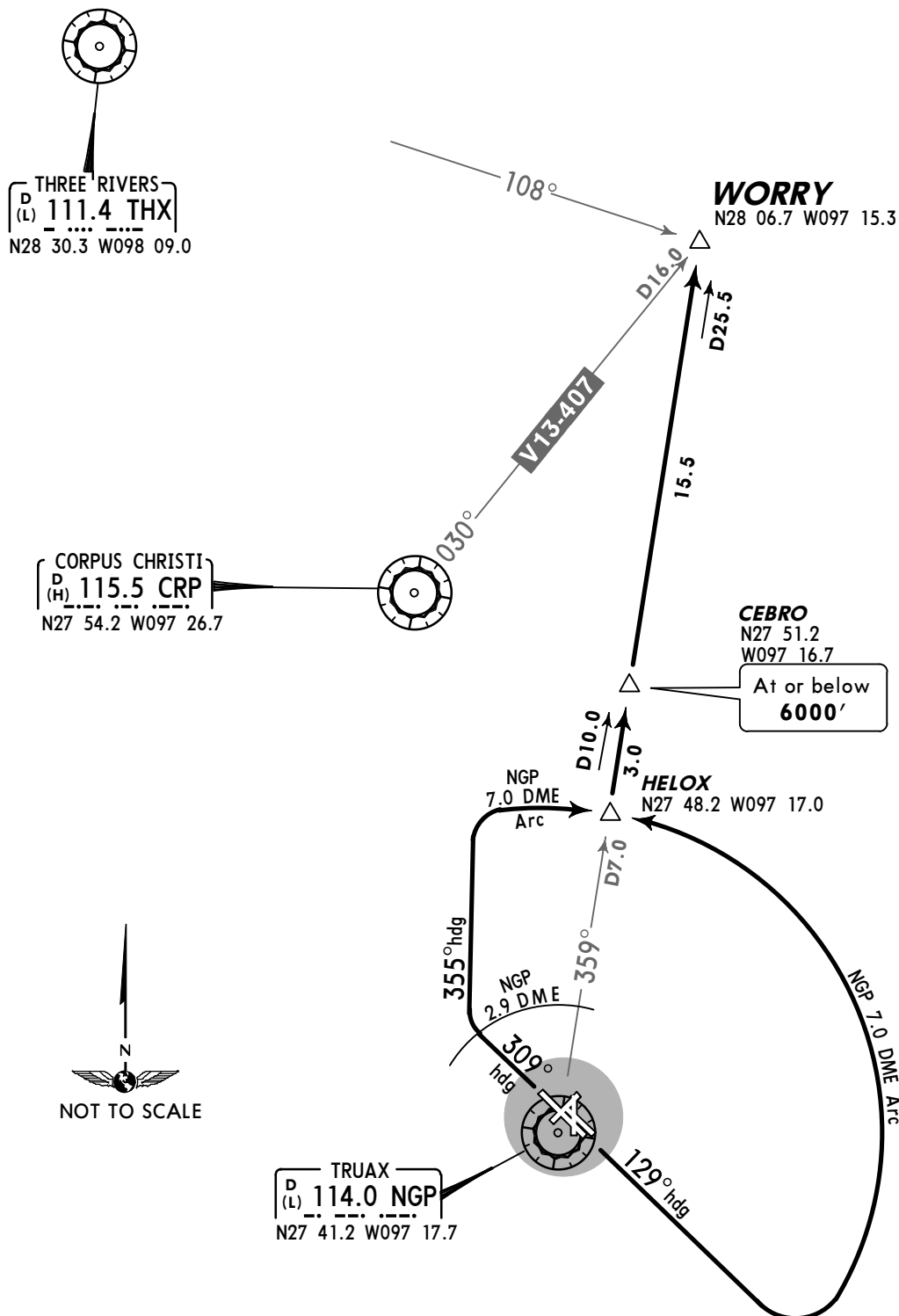
CORPUS CHRISTI
Departure (R)
128.67

Apt Elev
18'

Trans level: FL 180 Trans alt: 18000'
1. Emergency safe altitude within 100 NM 2600'.
2. DME required.



WORRY ONE DEPARTURE (WORRY1.WORRY)



RWY

INITIAL CLIMB

13L/R	Climb via heading 129° to intercept NGP 7.0 DME Arc. Arc counter-clockwise NORTH of NGP fly NGP 7.0 DME Arc to HELOX.
31L/R	Climb via heading 309° to NGP 2.9 DME, then climbing RIGHT turn fly heading 355° to intercept NGP 7.0 DME Arc. Arc clockwise NORTH of NGP fly NGP 7.0 DME Arc to HELOX.

ROUTING

From HELOX fly NGP R-359 to WORRY, then fly assigned route. EXPECT clearance to filed altitude/flight level 10 minutes after departure.

KNGP/NGP

Apt Elev 18'

N27 41.6 W097 17.4

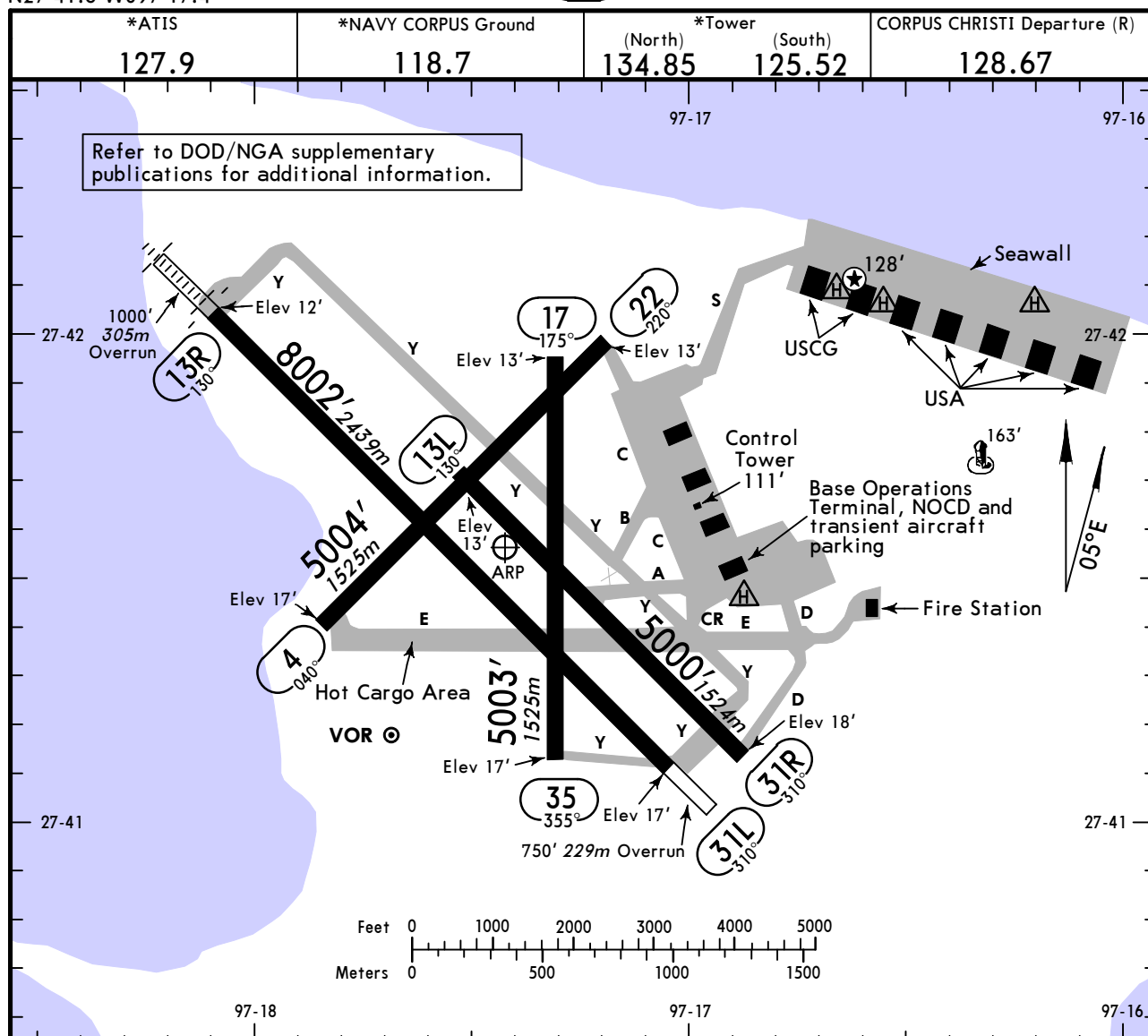
JEPPesen

23 DEC 11

(30-9)

CORPUS CHRISTI NAS

CORPUS CHRISTI, TEXAS



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			
		LANDING BEYOND		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
4	22	① HIRL			196' 60m
13R		① HIRL ① SALS REIL PAPI-L			200' 61m
	31L	① HIRL REIL PAPI-L			
13L					196' 60m
	31R	HIRL			
17		HIRL			196' 60m
	35	HIRL PAPI-L			

① Activate on 134.85 when Twr inop.

TAKE-OFF			FOR FILING AS ALTERNATE	
1 & 2 Eng	All Rwy's		Precision	Non-Precision
	Adequate Vis Ref	STD	600-2	800-2
	1/4	1		
3 & 4 Eng		1/2		

NOTE: Rwy 13L, Powerline, 139' MSL, 3884' from DER, 457' left of centerline. Pylon, 112' MSL, 3304' from DER, 362' right of centerline. Pylon, 112' MSL, 3476' from DER, 1017' right of centerline. Pylon, 110' MSL, 3137' from DER, 299' left of centerline.

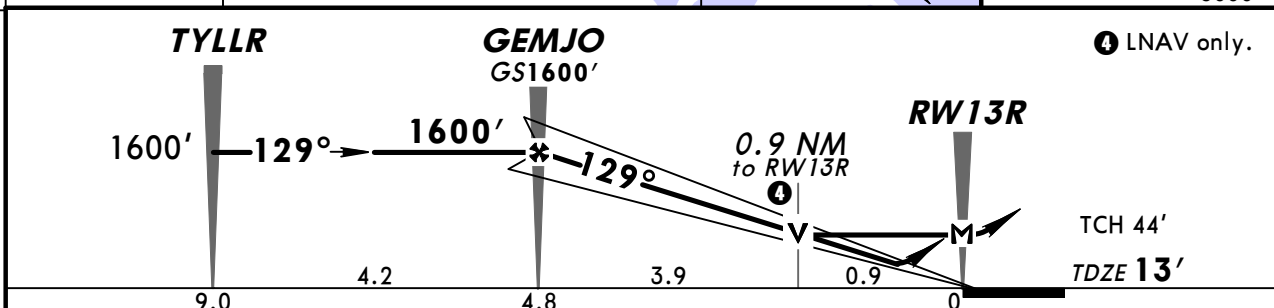
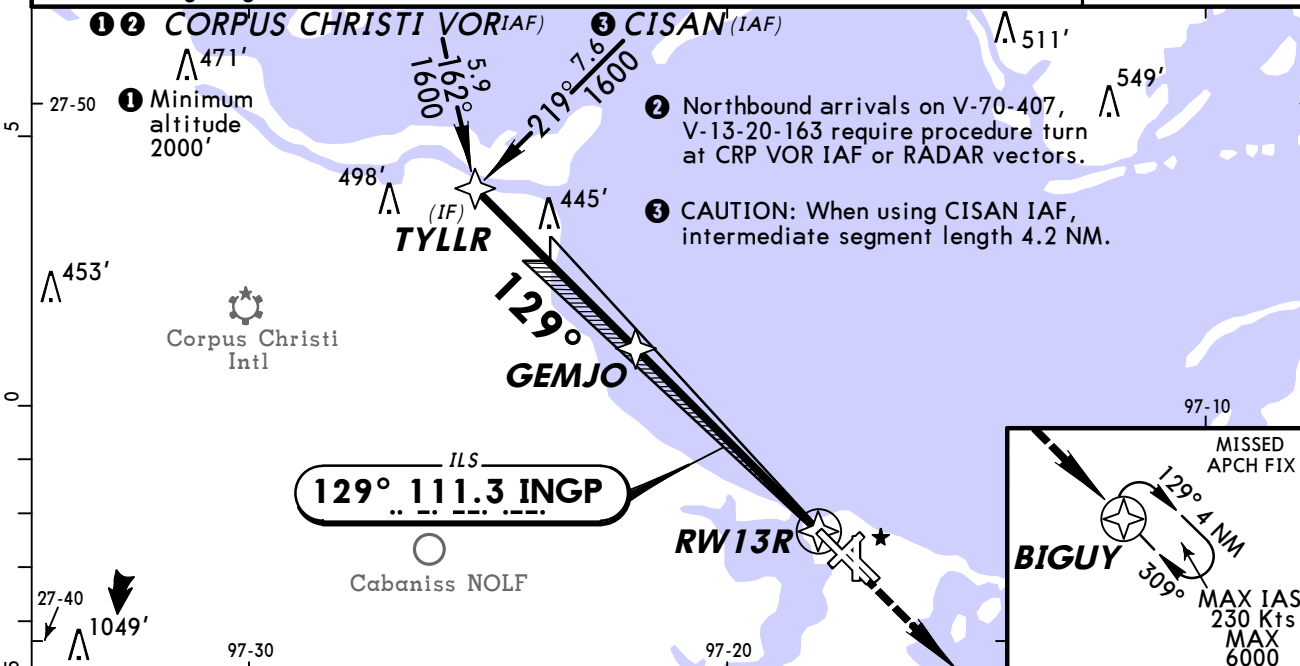
Pylon, 107' MSL, 3561' from DER, 665' left of centerline. Rwy 13R, Powerline, 139' MSL, 4434' from DER, 1208' left of centerline. Pylon, 100' MSL, 3686' from DER, 1050' left of centerline.

CHANGES: Notes.

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BRIEFING STRIP™

*ATIS 127.9		CORPUS CHRISTI Approach (R) 128.67		*NAVY CORPUS Tower (North) (South) 134.85 125.52		*Ground 118.7
LOC INGP 111.3	Final Apch Crs 129°	GS GEMJO 1600' (1587')	ILS DA(H) (CONDITIONAL) 213' (200')	Apt Elev 18' TDZE 13'		2100' MSA RW13R
MISSED APCH: Climb to 1600' direct BIGUY and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. GPS required for ILS procedure. 2. CAUTION: Max speed IAF to FAF 210 KIAS. 3. EMERG SAFE ALT 100 NM 2600'. 4. Use local altimeter setting; if not received, use Corpus Christi Intl altimeter setting. 5. VDP not authorized when using Corpus Christi Intl altimeter setting. 6. DME/DME RNP-0.30 not authorized. 7. Pilot controlled lighting 134.85.						



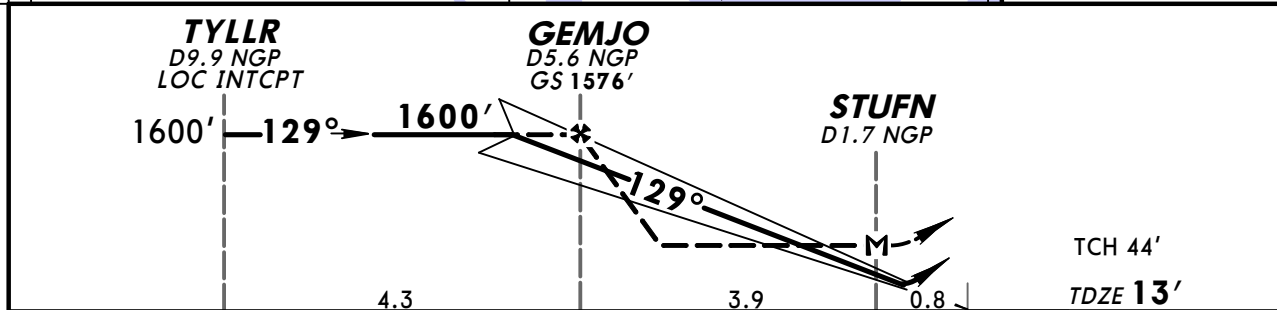
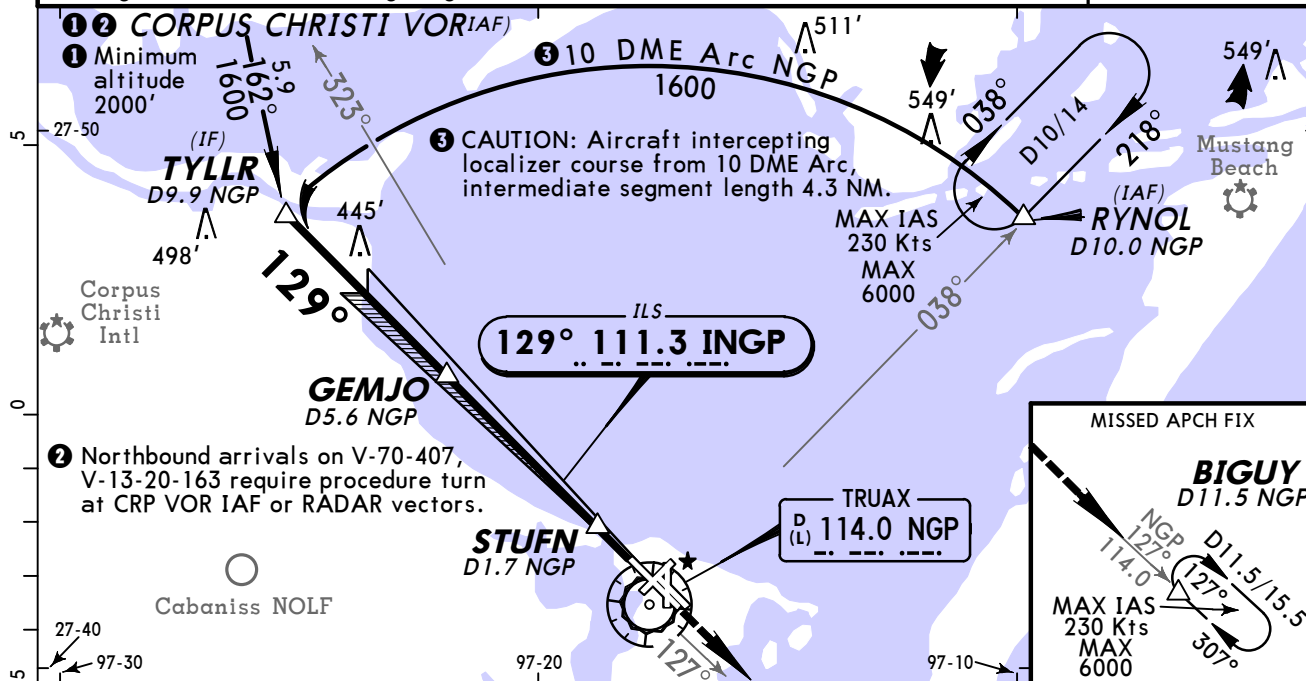
Grnd speed-Kts	70	90	100	120	140	160	SALSF		1600'	BIGUY
GS	3.00°	372	478	531	637	743	849	REIL PAPI	↑	
MAP at RW13R										

STRAIGHT-IN LANDING RWY 13R				CIRCLE-TO-LAND	
ILS		LNAV		With Local Altimeter Setting	
DA(H) 213' (200')		MDA(H) 360' (347')		MDA(H)	
FULL	ALS out	FULL	ALS out	Max Kts	
A	1/2	3/4	1	90	480' (462')-1
B				120	
C	3/4	1	1 1/4	140	480' (462')-1 1/2
D				165	580' (562')-2

With Corpus Christi Intl Altimeter Setting				With Corpus Christi Intl Altimeter Setting	
ILS		LNAV		MDA(H)	
DA(H) 245' (232')		MDA(H) 400' (387')		MDA(H)	
FULL	ALS out	FULL	ALS out	Max Kts	
A	3/4	3/4	1	90	500' (482')-1
B				120	
C	3/4	1	1 1/4	140	500' (482')-1 1/2
D				165	580' (562')-2

*ATIS		CORPUS CHRISTI Approach (R)		*NAVY CORPUS Tower (North) (South)		*Ground
127.9		128.67		134.85 125.52		118.7
LOC INGP 111.3	Final Apch Crs 129°	GS GEMJO 1576' (1563')	ILS DA(H) (CONDITIONAL) 213' (200')	Apt Elev 18' TDZE 13'		

MSA NGP VOR

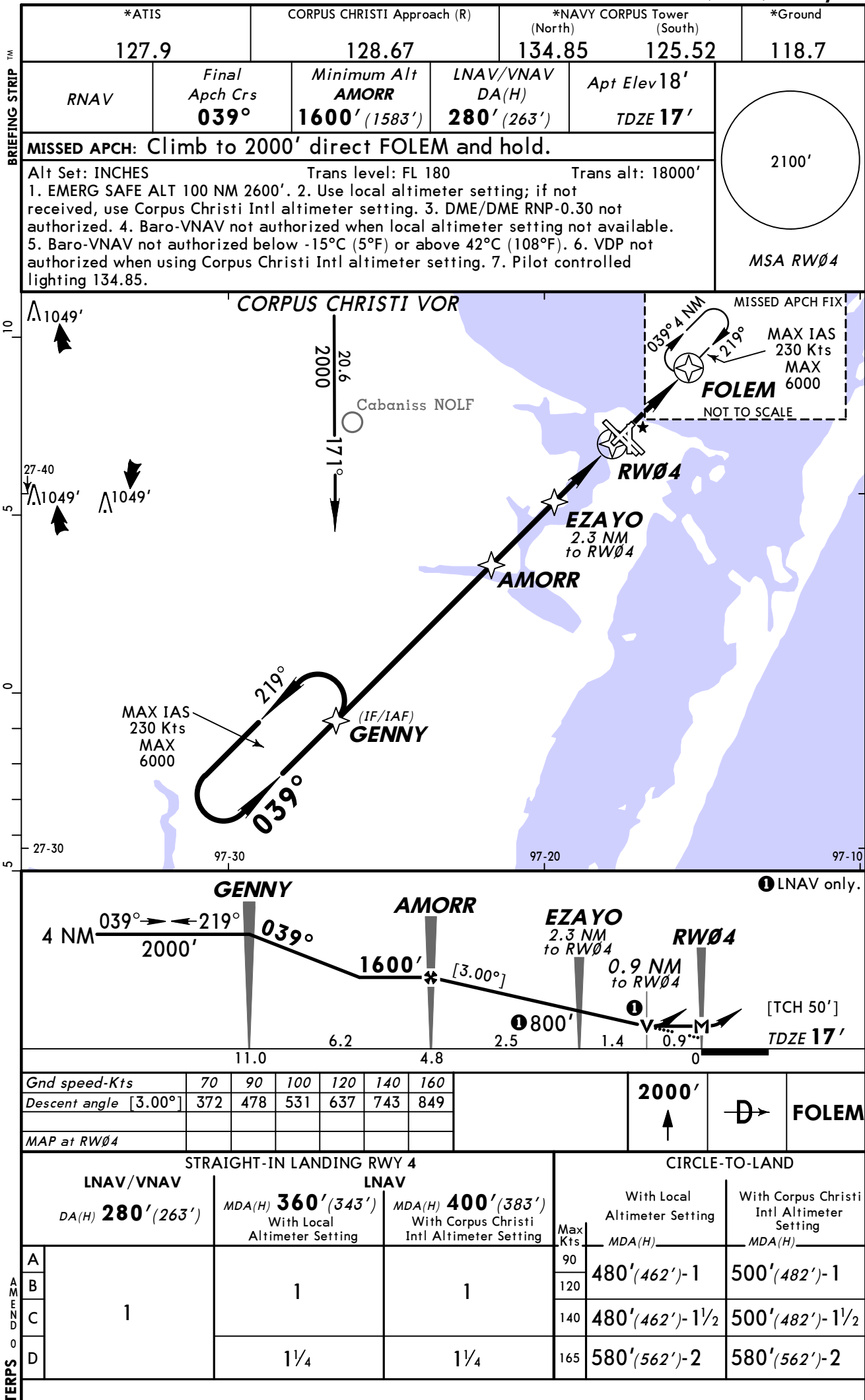


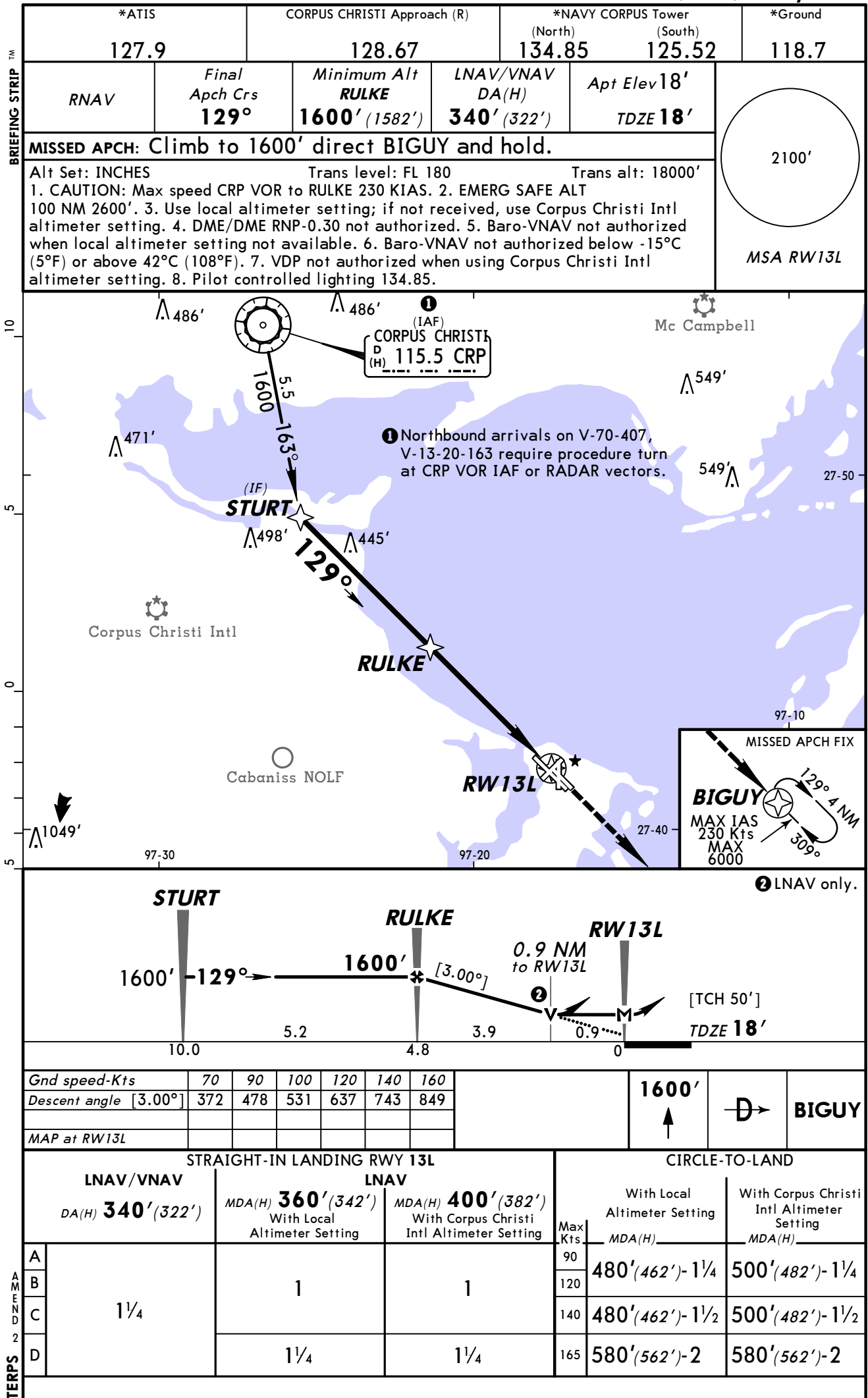
<i>Gnd speed-Kts</i>	70	90	100	120	140	160		BIGUYY
<i>GS</i> 3.00°	372	478	531	637	743	849		
<i>MAP at STUFN or</i>								
<i>GEMJO to MAP</i> 3.9	3:21	2:36	2:20	1:57	1:40	1:28		

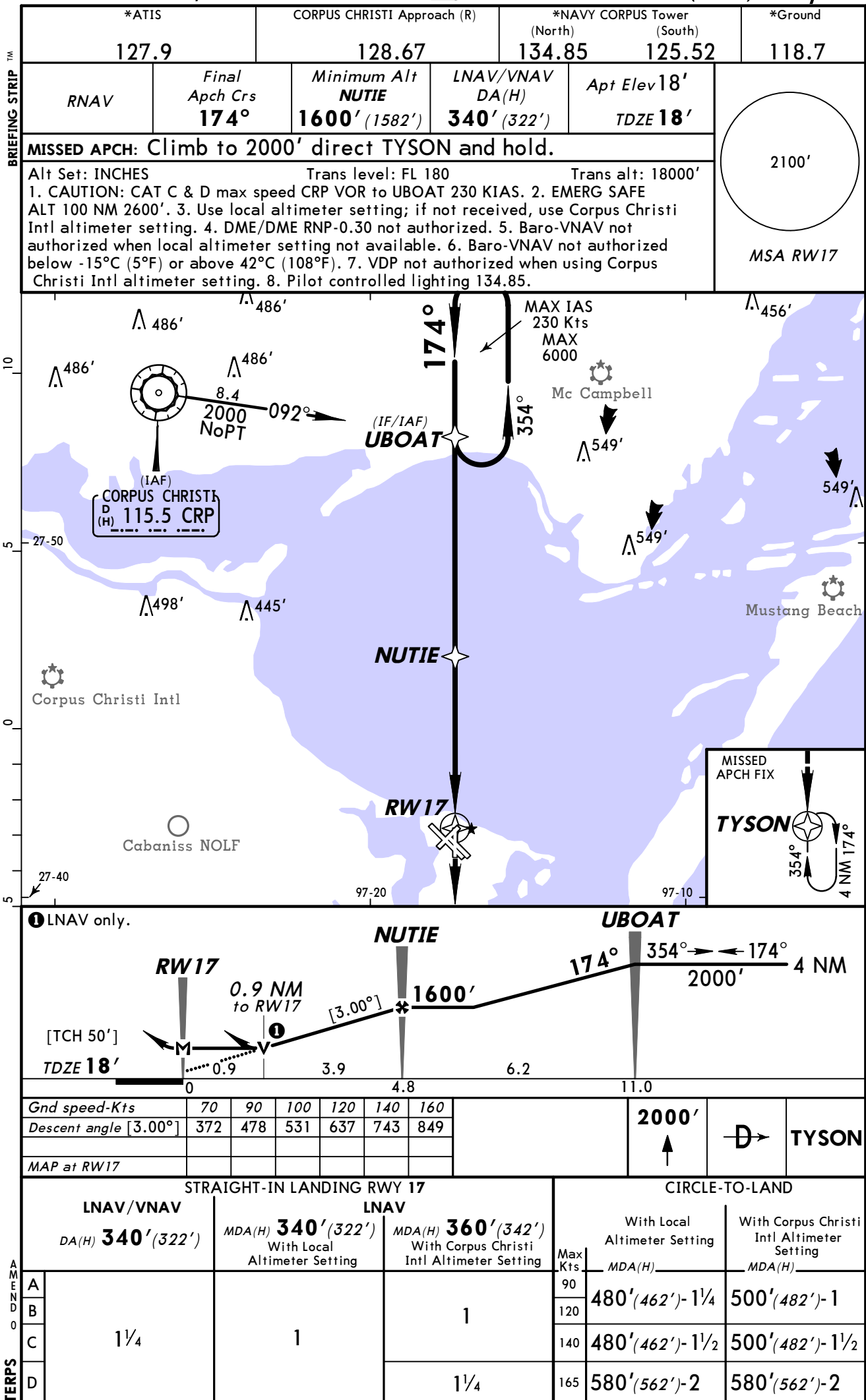
STRAIGHT-IN LANDING RWY 13R With Local Altimeter Setting					CIRCLE-TO-LAND With Local Altimeter Setting	
ILS <i>DA(H)</i> 213' (<i>200'</i>)			LOC (GS out) <i>MDA(H)</i> 340' (<i>327'</i>)		Max Kts	
FULL		ALS out	ALS out			
A	1/2	3/4	3/4	1	90	480' (<i>462'</i>)-1
B					120	
C	3/4				140	480' (<i>462'</i>)-1 1/2
D					165	580' (<i>562'</i>)-2

With Corpus Christi Intl Altimeter Setting					With Corpus Christi Intl Altimeter Setting	
ILS <i>DA(H)</i> 245' (232')			LOC (GS out) <i>MDA(H)</i> 360' (347')		Max Kts.	
FULL		ALS out		ALS out		
A	3/4	1	3/4	1	90	500' (482')- 1
B					120	
C					140	500' (482')- 1 1/2
D			1	1 1/4	165	580' (562')- 2

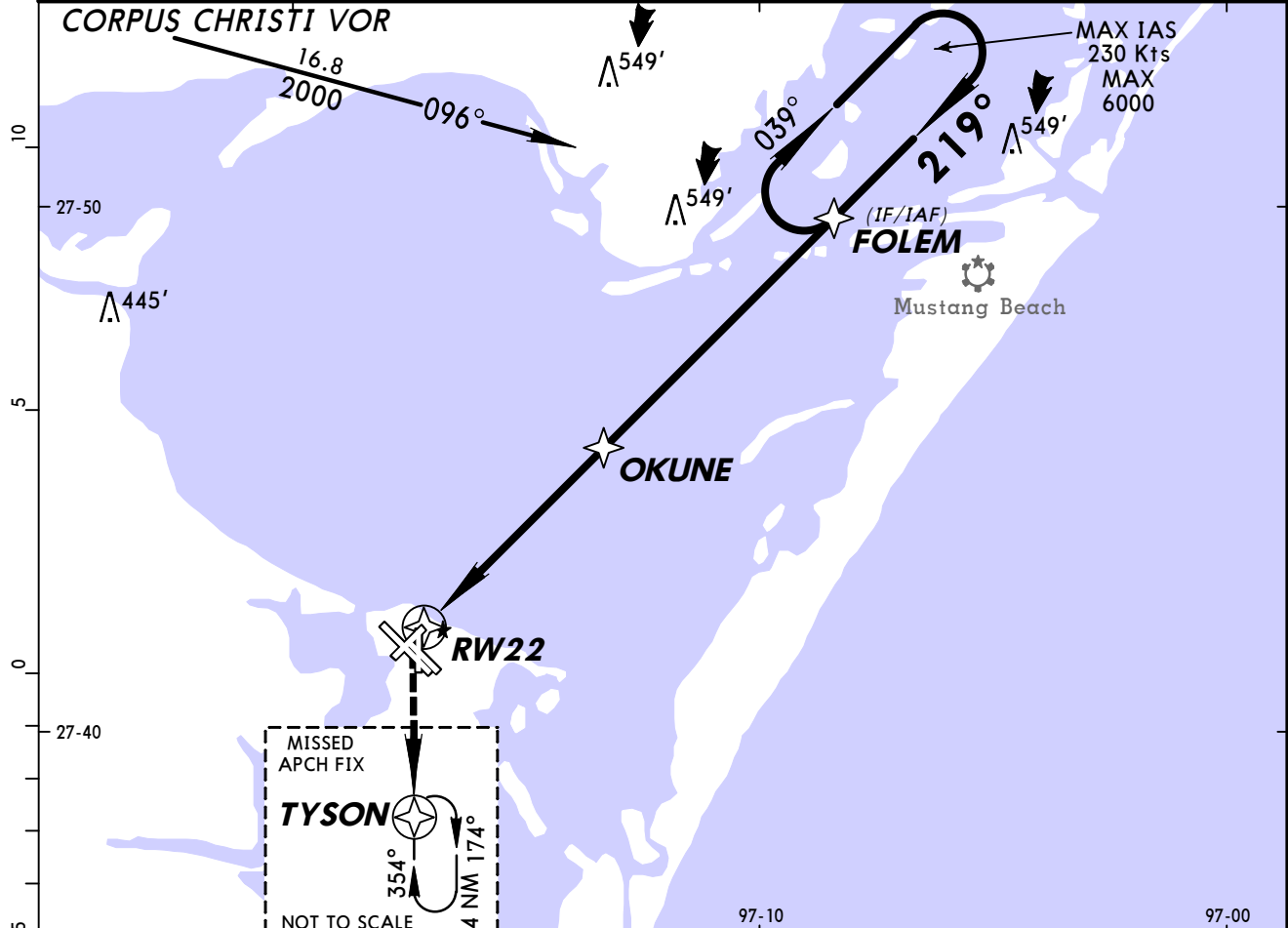
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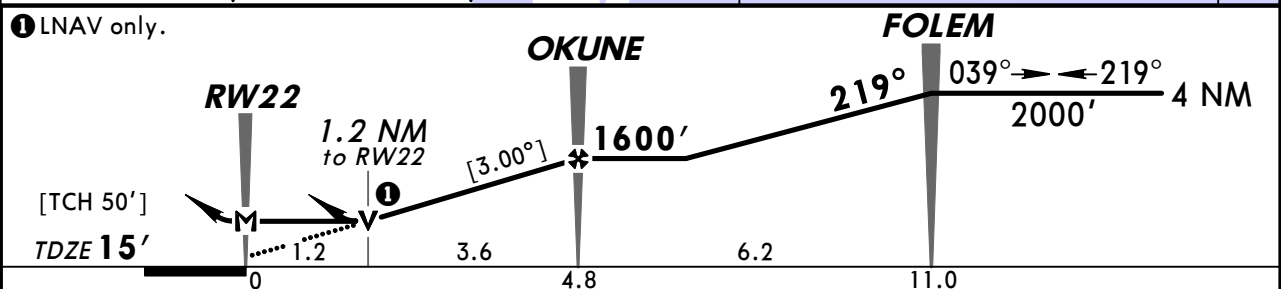




BRIEFING STRIP™	*ATIS	CORPUS CHRISTI Approach (R)		*NAVY CORPUS Tower (North) (South)		*Ground
	127.9	128.67		134.85	125.52	118.7
RNAV	Final Apch Crs 219°	Minimum Alt OKUNE 1600' (1585')	LNAV/VNAV DA(H) 340' (325')	Apt Elev 18' TDZE 15'	2100' MSA RW22	
MISSED APCH: Climbing LEFT turn to 2000' direct TYSON and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'						
1. EMERG SAFE ALT 100 NM 2600'. 2. Use local altimeter setting; if not received, use Corpus Christi Intl altimeter setting. 3. DME/DME RNP-0.30 not authorized. 4. Baro-VNAV not authorized when local altimeter setting not available. 5. Baro-VNAV not authorized below -15°C (5°F) or above 42°C (108°F). 6. VDP not authorized when using Corpus Christi Intl altimeter setting. 7. Pilot controlled lighting 134.85.						



① LNAV only.



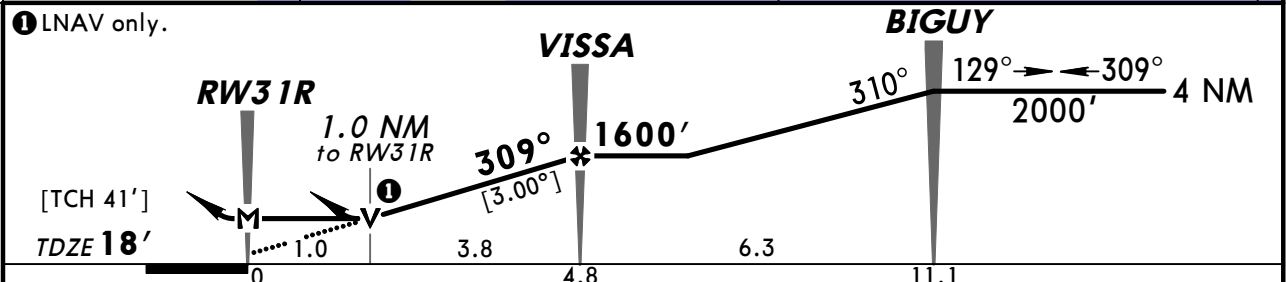
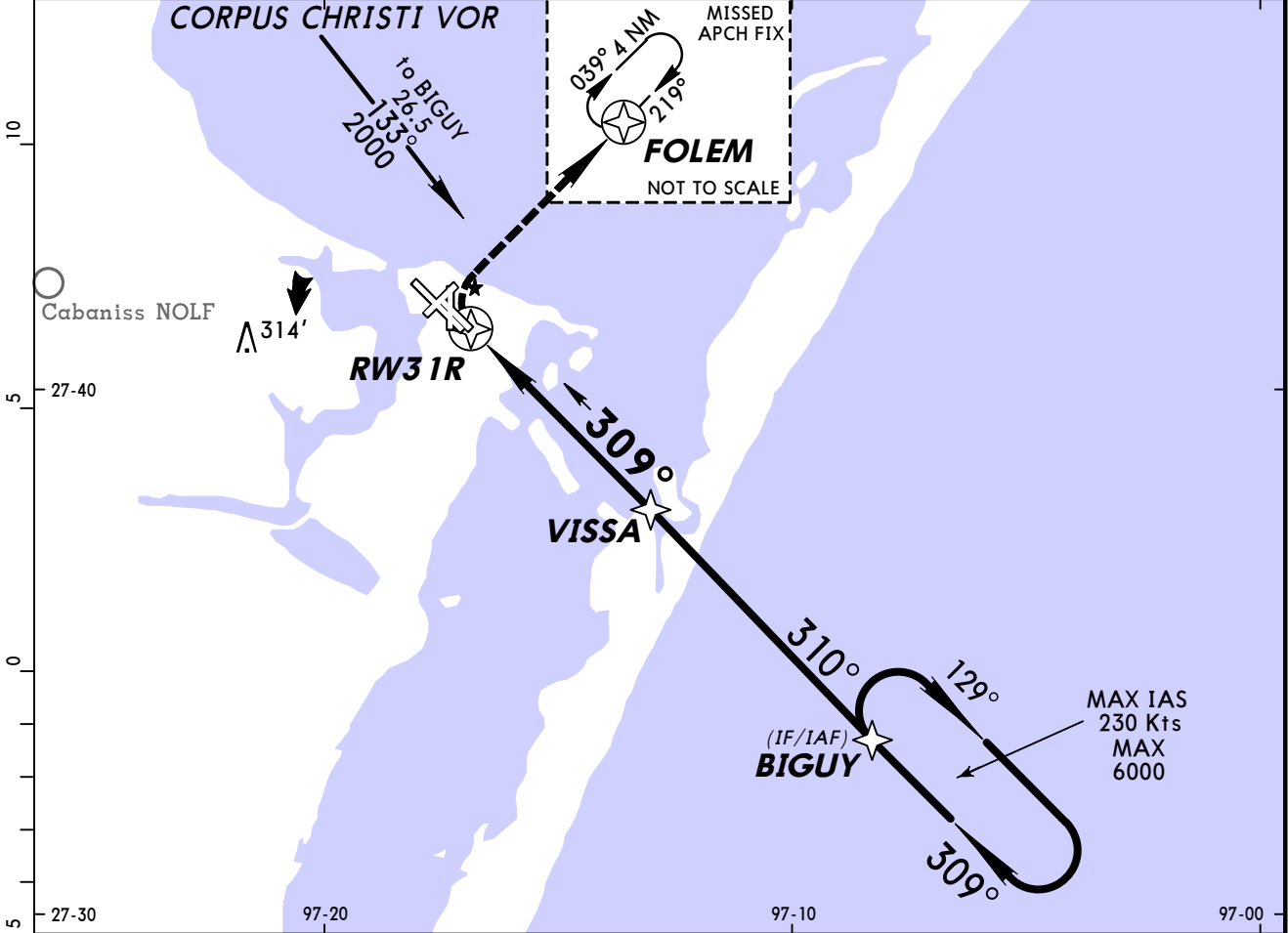
Gnd speed-Kts	70	90	100	120	140	160	2000' LT	→	TYSON
Descent angle [3.00°]	372	478	531	637	743	849			
MAP at RW22									

STRAIGHT-IN LANDING RWY 22					CIRCLE-TO-LAND		
LNAV/VNAV		LNAV		Max Kts	With Local Altimeter Setting	With Corpus Christi Intl Altimeter Setting	
DA(H) 340' (325')		MDA(H) 420' (405') With Local Altimeter Setting	MDA(H) 460' (445') With Corpus Christi Intl Altimeter Setting		MDA(H)	MDA(H)	
A	1¼	1	1	90	480' (462')- 1¼	500' (482')- 1	
B				120			
C		1¼	1¼	140	480' (462')- 1½	500' (482')- 1½	
D				1½			165

STRAIGHT-IN LANDING RWY 31L				CIRCLE-TO-LAND		
LNAV/VNAV		LNAV				
DA(H) 440' (423')		MDA(H) 400' (383') With Local Altimeter Setting	MDA(H) 440' (423') With Corpus Christi Intl Altimeter Setting	Max Kts	With Local Altimeter Setting MDA(H)	With Corpus Christi Intl Altimeter Setting MDA(H)
A	1½	1	1	90	480'(462')- 1½	500'(482')- 1
B				120		
C			1¼	140		500'(482')- 1½
D		1¼	1½	165	580'(562')- 2	580'(562')- 2

BRIEFING STRIP

*ATIS		CORPUS CHRISTI Approach (R)		*NAVY CORPUS Tower (North) (South)		*Ground
127.9		128.67		134.85 125.52		118.7
RNAV	Final Apch Crs 309°	Minimum Alt VISSA 1600' (1582')	LNAV/VNAV DA(H) 380' (362')	Apt Elev 18' TDZE 18'	2100' MSA RW31R	
MISSED APCH: Climbing RIGHT turn to 2000' direct FOLEM and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. EMERG SAFE ALT 100 NM 2600'. 2. Use local altimeter setting; if not received, use Corpus Christi Intl altimeter setting. 3. DME/DME RNP-0.30 not authorized. 4. Baro-VNAV not authorized when local altimeter setting not available. 5. Baro-VNAV not authorized below -15°C (5°F) or above 42°C (108°F). 6. VDP not authorized when using Corpus Christi Intl altimeter setting. 7. Pilot controlled lighting 134.85.						



Gnd speed-Kts	70	90	100	120	140	160		2000'		FOLEM
Descent angle [3.00°]	372	478	531	637	743	849				
MAP at RW31R								RT		

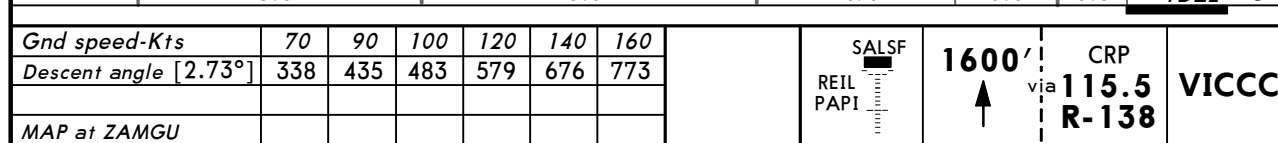
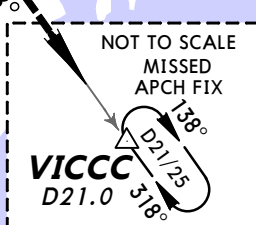
TERPS	STRAIGHT-IN LANDING RWY 31R			CIRCLE-TO-LAND		
	LNAV/VNAV DA(H) 380' (362')	LNAV MDA(H) 400' (382') With Local Altimeter Setting	LNAV MDA(H) 440' (422') With Corpus Christi Intl Altimeter Setting	Max Kts	With Local Altimeter Setting MDA(H)	With Corpus Christi Intl Altimeter Setting MDA(H)
	1 1/4	1	1	90	480' (462') - 1 1/4	500' (482') - 1
				120	480' (462') - 1 1/2	500' (482') - 1 1/2
		1 1/4	1 1/4	140	480' (462') - 1 1/2	500' (482') - 1 1/2
				165	580' (562') - 2	580' (562') - 2

BRIEFING STRIP™

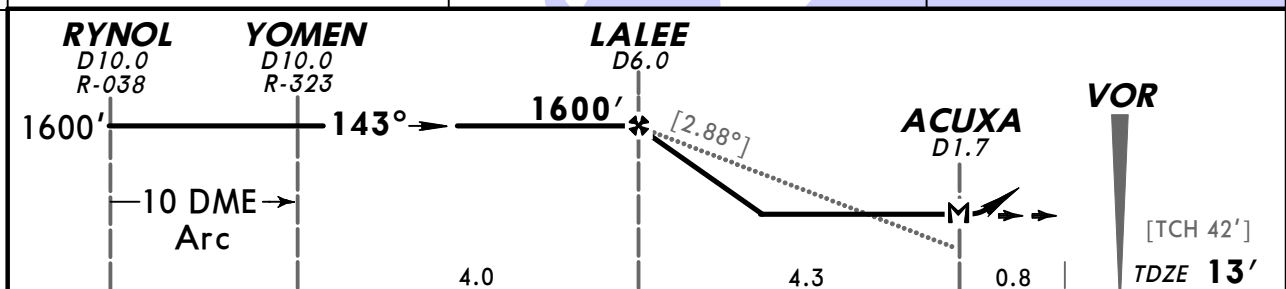


<i>Gnd speed-Kts</i>	70	90	100	120	140	160
<i>Descent angle [3.00°]</i>	372	478	531	637	743	849
<i>MAP at RW35</i>						

TERPS
AMEND
0



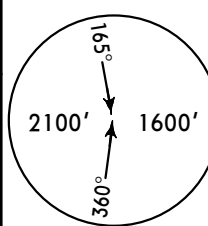
TERPS

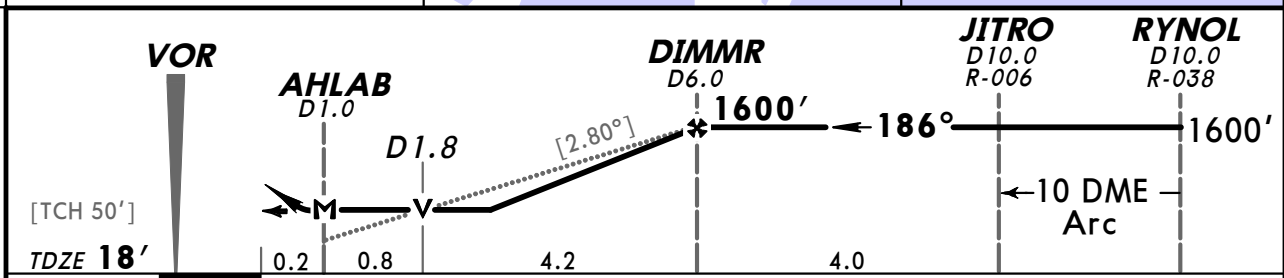


<i>Gnd speed-Kts</i>	70	90	100	120	140	160	
<i>Descent angle [2.88°]</i>	357	459	509	611	713	815	
<i>MAP at ACUXA</i>							

STRAIGHT-IN LANDING RWY13R					CIRCLE-TO-LAND		
With Local Altimeter Setting MDA(H) 360' (347')			With Corpus Christi Intl Altimeter Setting MDA(H) 400' (387')		Max Kts	With Local Altimeter Setting	With Corpus Christi Intl Altimeter Setting
ALS out			ALS out			MDA(H)	MDA(H)
A	3/4	1	3/4	1	90	480' (462') - 1	500' (482') - 1
B					120	480' (462') - 1 1/2	500' (482') - 1 1/2
C					140	580' (562') - 2	580' (562') - 2
D	1	1 1/4	1	1 1/4	165		

BRIEFING STRIP TM

*ATIS 127.9		CORPUS CHRISTI Approach (R) 128.67		*NAVY CORPUS Tower (North) 134.85	*NAVY CORPUS Tower (South) 125.52	*Ground 118.7
VOR NGP 114.0	Final Apch Crs 186°	Minimum Alt DIMMR 1600' (1582')	MDA(H) (CONDITIONAL) 380' (362')	Apt Elev 18' TDZE 18'		
MISSED APCH: Climb to NGP VOR via NGP VOR R-006, then climbing LEFT turn to 1600' outbound via NGP VOR R-038 to RYNOL and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'						
1. CAUTION: Intermediate segment lengths 4 NM. 2. EMERG SAFE ALT 100 NM 2600'. 3. Use local altimeter setting; if not received, use Corpus Christi Intl altimeter setting. 4. VDP not authorized when using Corpus Christi Intl altimeter setting. 5. Pilot controlled lighting 134.85.						

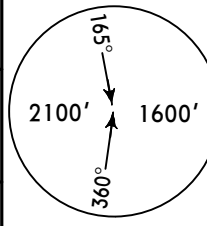


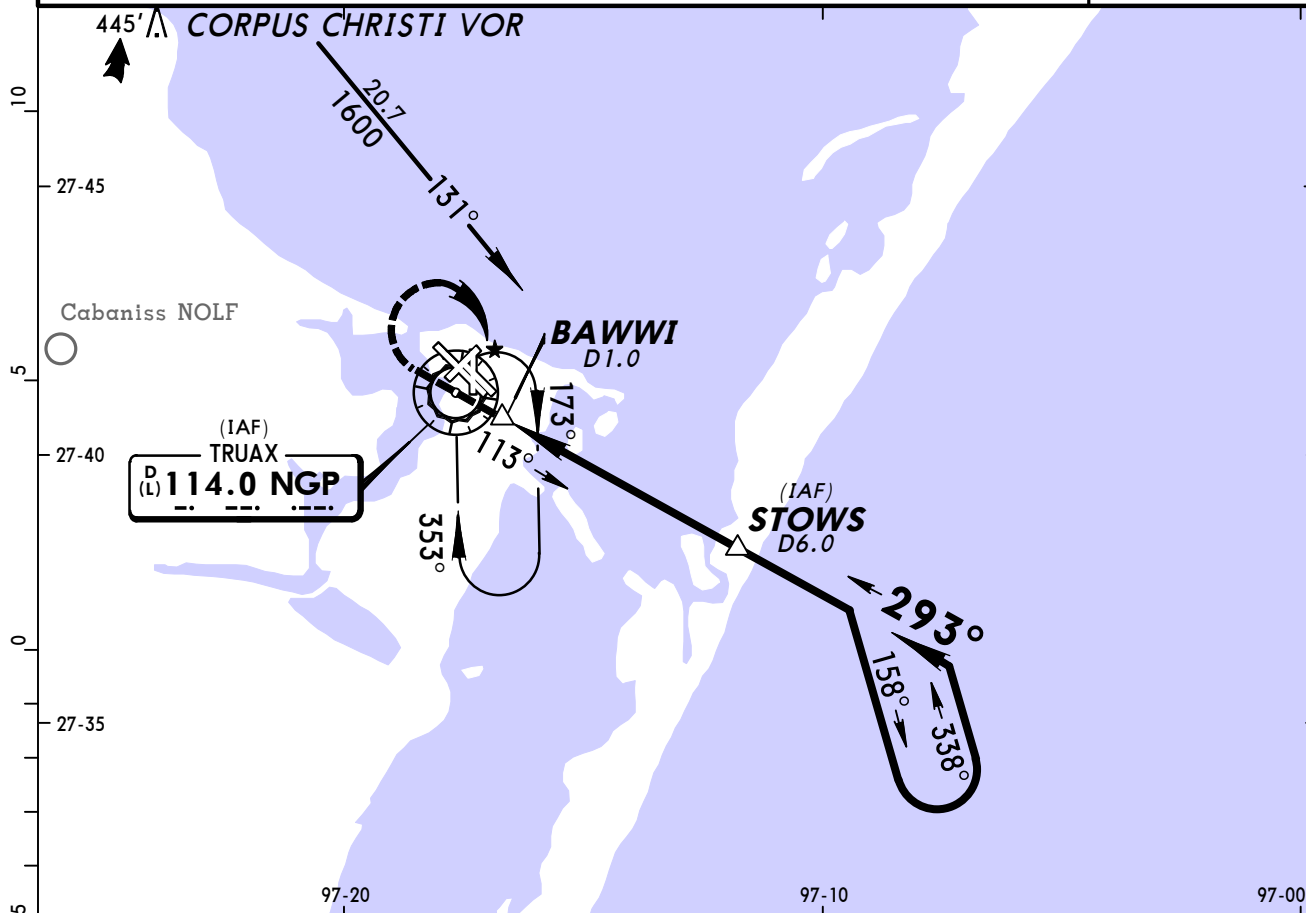
Gnd speed-Kts	70	90	100	120	140	160	↑ via NGP 114.0 R-006 NGP 114.0	
Descent angle [2.80°]	347	446	495	594	693	792		
MAP at AHLAB or DIMMR to MAP	5.0	4:17	3:20	3:00	2:30	2:09		

STRAIGHT-IN LANDING RWY 17				CIRCLE-TO-LAND			
With Local Altimeter Setting MDA(H) 380' (362')		With Corpus Christi Intl Altimeter Setting MDA(H) 420' (402')		Max Kts	With Local Altimeter Setting MDA(H)	With Corpus Christi Intl Altimeter Setting MDA(H)	
A	1	1	1	90	480' (462') - 1	500' (482') - 1	
				120	480' (462') - 1 1/2	500' (482') - 1 1/2	
				140	480' (462') - 1 1/2	500' (482') - 1 1/2	
D	1 1/4	1 1/4	1 1/4	165	580' (562') - 2	580' (562') - 2	

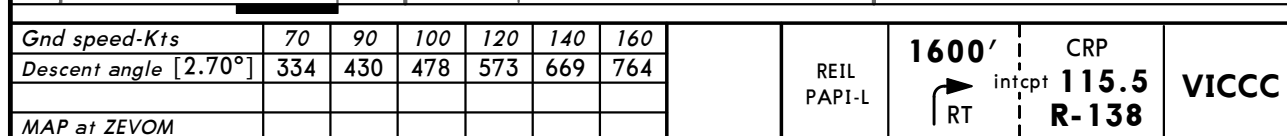


BRIEFING STRIP™

*ATIS		CORPUS CHRISTI Approach (R)		*NAVY CORPUS Tower (North) (South)		*Ground
127.9		128.67		134.85 125.52		118.7
VOR NGP 114.0	Final Apch Crs 293°	Minimum Alt STOWS 1600' (1583')	MDA(H) (CONDITIONAL) 400' (383')	Apt Elev 18' TDZE 17'		 MSA NGP VOR
MISSED APCH: Climb to NGP VOR via NGP VOR R-113, then climbing RIGHT turn to 1600' direct NGP VOR and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. EMERG SAFE ALT 100 NM 2600'. 2. Use local altimeter setting; if not received, use Corpus Christi Intl altimeter setting. 3. VDP not authorized when using Corpus Christi Intl altimeter setting. 4. Pilot controlled lighting 134.85.						

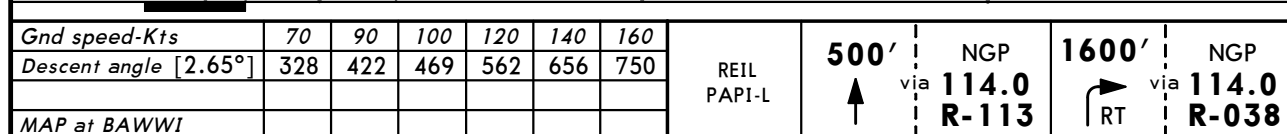


A diagram of a circular sector. The radius is labeled as 2100'. The central angle is labeled as 360°. A point is marked on the arc at a distance of 1600' from the center.



AMEND 2

BRIEFING STRIP™

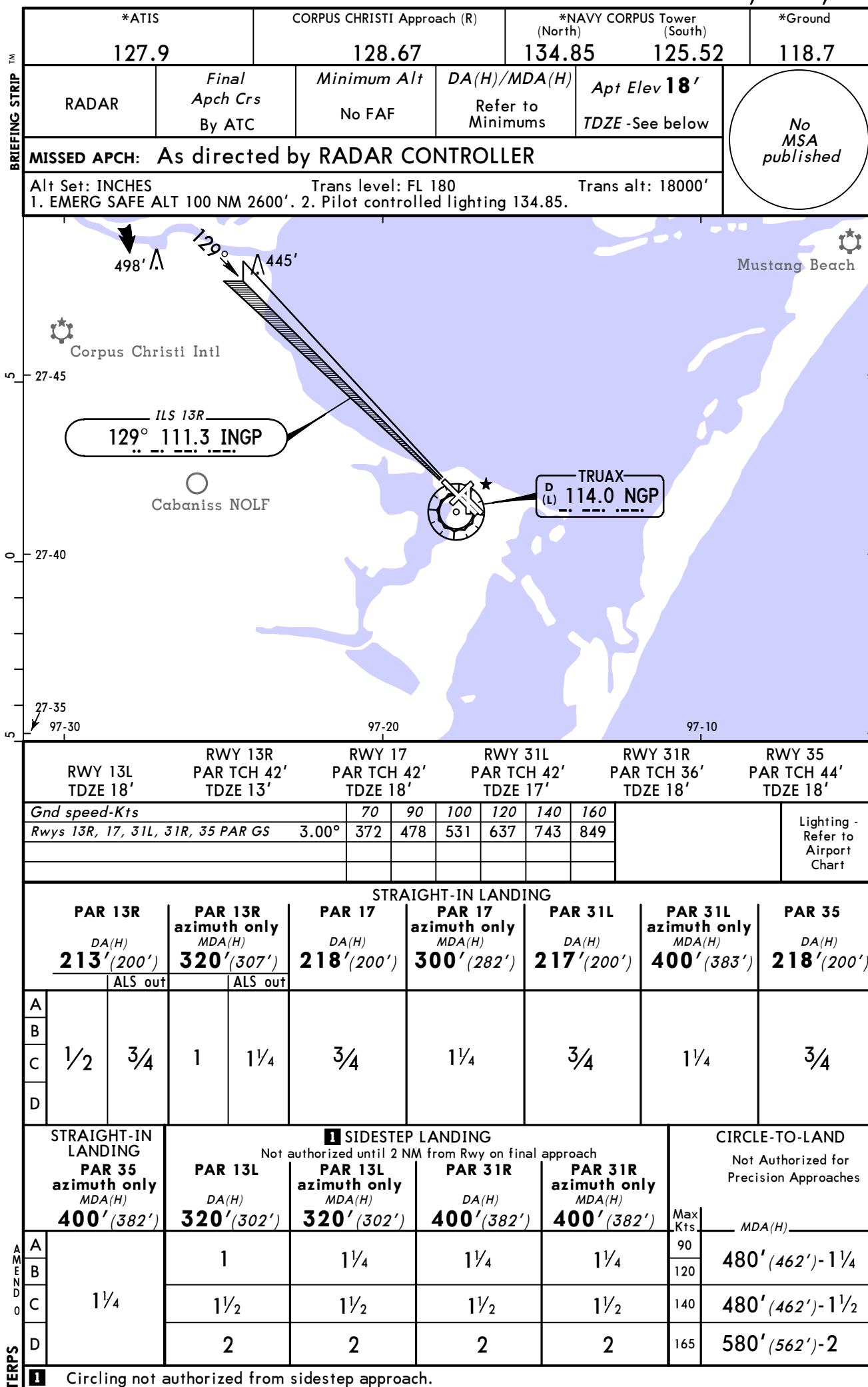


AMEND
2
TERPS

5

STRAIGHT-IN LANDING RWY 35			CIRCLE-TO-LAND		
With Local Altimeter Setting <i>MDA(H)</i> 400'(382')		With Corpus Christi Intl Altimeter Setting <i>MDA(H)</i> 440'(422')		With Local Altimeter Setting <i>MDA(H)</i> _____	With Corpus Christi Intl Altimeter Setting <i>MDA(H)</i> _____
A	1	1	Max Kts 90	480'(462') - 1	500'(482') - 1
B			120		
C		1 ¼	1 ¼	140	480'(462') - 1 ½
D	165			580'(562') - 2	580'(562') - 2

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General Information

Location: Kingsville TX USA
IATA Code: NQI
Lat/Long: N27° 30.3' W097° 48.5'
Elevation: 50 ft

Airport Use: Military
Magnetic Variation: 4.5°E
Sectional Chart: Brownsville

Fuel Types: 115-145 Octane, Jet 5
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1258 Z
Sunset: 0030 Z,

Runway Information

Runway: 13L
Length x Width: 8001 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 50 ft
Lighting: Edge

Runway: 13R
Length x Width: 8000 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 50 ft
Lighting: Edge

Runway: 17L
Length x Width: 8000 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 50 ft
Lighting: Edge, Centerline

Runway: 17R
Length x Width: 8000 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 50 ft
Lighting: Edge

Runway: 31L

Length x Width: 8000 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 44 ft
Lighting: Edge

Runway: 31R
Length x Width: 8001 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 45 ft
Lighting: Edge

Runway: 35L
Length x Width: 8000 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 49 ft
Lighting: Edge

Runway: 35R
Length x Width: 8000 ft x 200 ft
Surface Type: asphalt
TDZ-Elev: 49 ft
Lighting: Edge, ALS, Centerline

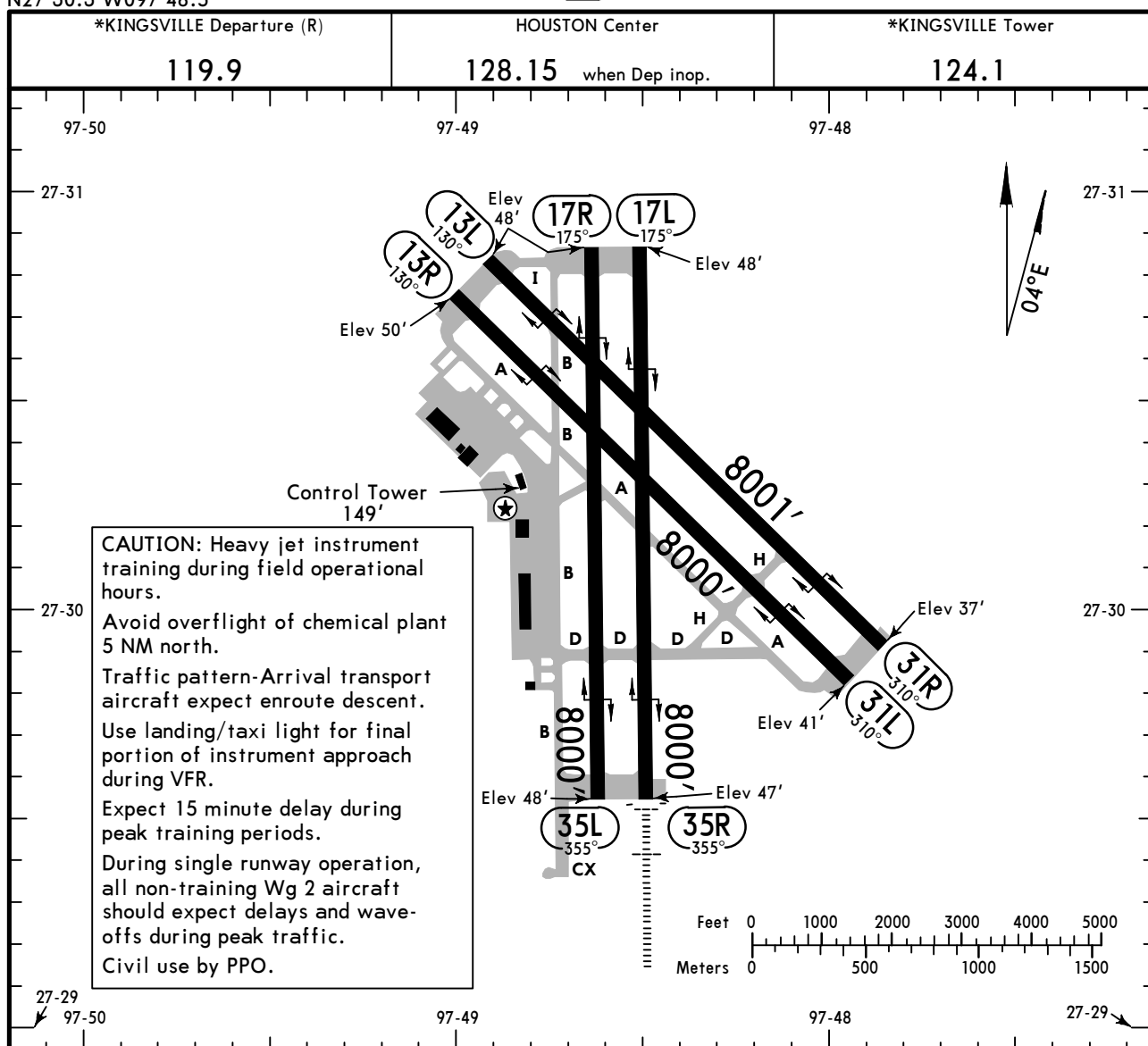
Communication Information

Kingsville Tower 124.1
Kingsville Approach Control 119.9
Kingsville Departure Control 119.9
Kingsville Radar 128.45
Houston Center 128.15 Remote Communications Air-Ground

KNQI/NQI
 Apt Elev **50'**
 N27 30.3 W097 48.5

JEPPESEN
 19 SEP 08 **(31-1)** **Eff 25 Sep**

KINGSVILLE NAS
 KINGSVILLE, TEXAS



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			WIDTH
		Threshold	Landing Beyond Glide Slope	TAKE-OFF	
13R 31L	HIRL				200'
13L 31R	HIRL				200'
17R 35L	HIRL				200'
17L 35R	HIRL CL TDZ				200'
	HIRL CL ALSF-I				

TAKE-OFF

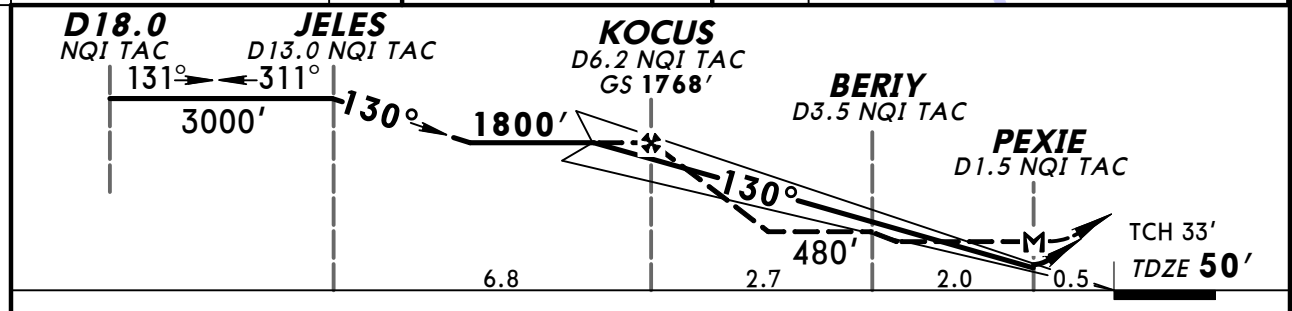
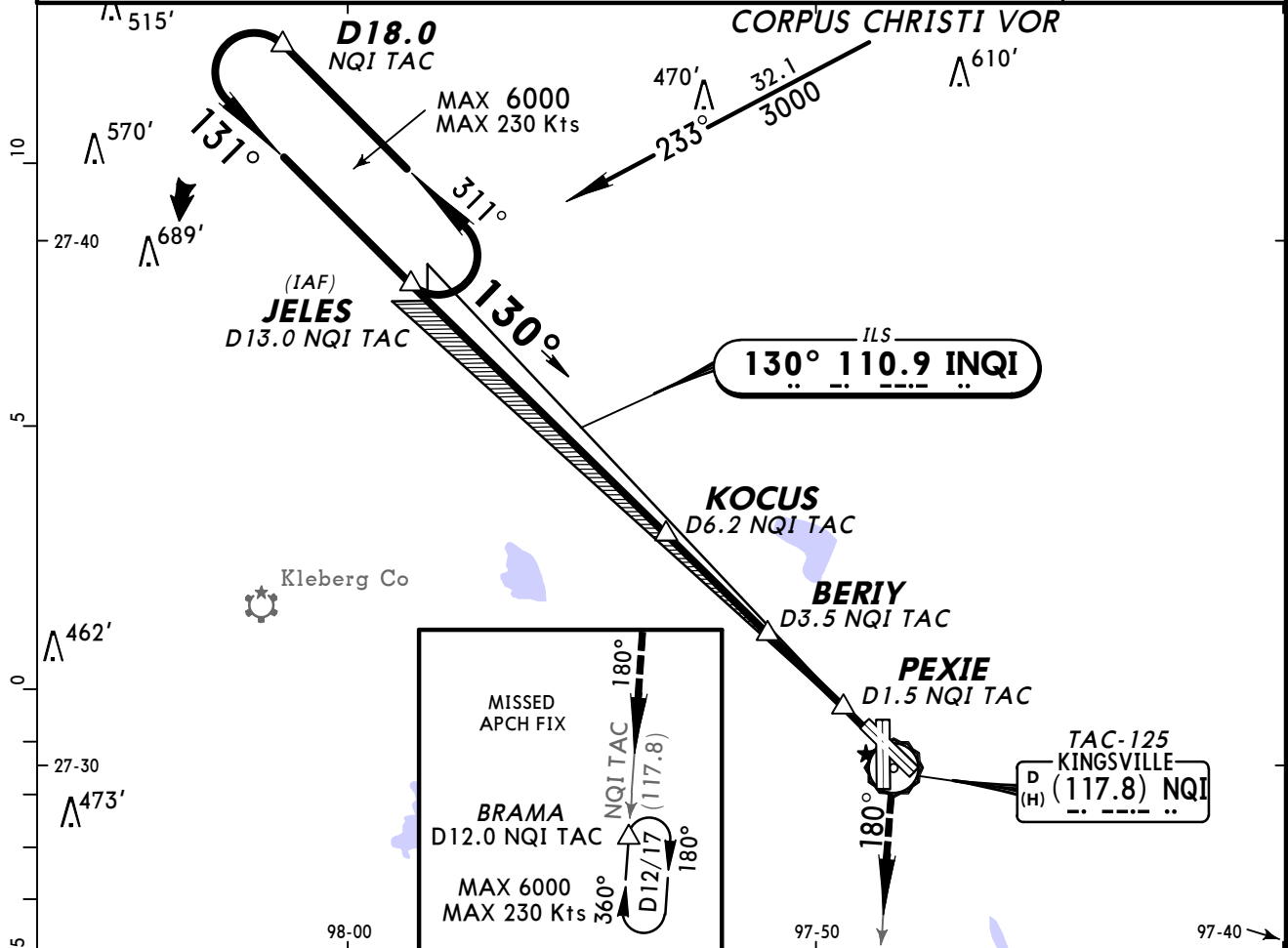
FOR FILING AS ALTERNATE

	All Rwys			
	Adequate Vis Ref	STD	Precision	Non-Precision
1 & 2 Eng	1/4	1	600-2	800-2
3 & 4 Eng		1/2		

CHANGES: Magnetic variation, rwy 13L/31R length, alt mims.

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*KINGVILLE Approach (R)		HOUSTON Center		*KINGVILLE Tower	
119.9		128.15 when App inop.		124.1	
LOC INQI 110.9	Final Apch Crs 130°	GS KOCUS 1768' (1718')	ILS DA(H) 250' (200')	Apt Elev 50' TDZE 50'	
MISSED APCH: Climbing RIGHT turn to 3000' outbound via NQI TAC R-180 to BRAMA and hold.					
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'	
MSA NQI TAC					



Gnd speed-Kts	70	90	100	120	140	160	3000' RT via NQI TAC (117.8) R-180	BRAMA
GS 3.00°	377	484	538	646	753	861		
MAP at PEXIE								

STRAIGHT-IN LANDING RWY 13R			CIRCLE-TO-LAND	
ILS <i>DA(H)</i> 250' (200')		LOC (GS out) <i>MDA(H)</i> 400' (350')	Max Kts	<i>MDA(H)</i> _____
A	3/4	1	90	500'(450')-1
B			120	
C			140	500'(450')-1½
D		1¼	165	620'(570')-2

KNQI/NQI

KINGSVILLE, TEXAS

JEPPesen

16 OCT 09 (38-1) Eff 22 Oct

KINGSVILLE NAS
RADAR *PAR All Rws
*ASR All Rws

*KINGSVILLE Approach (R) 119.9		HOUSTON Center 128.15 when App inop.		*KINGSVILLE Tower 124.1					
RADAR	Final Apch Crs By ATC	Minimum Alt No FAF	DA(H) Refer to Minimums	Apt Elev 50' TDZE-See Below	No MSA published				
MISSED APCH: As directed by RADAR CONTROLLER.									
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'									
1. Use landing/taxi lights when conducting approach during VMC.									
RWY 13L PAR TCH 35' TDZE 50'		RWY 13R PAR TCH 33' TDZE 50'	RWY 17L PAR TCH 35' TDZE 50'	RWY 17R PAR TCH 36' TDZE 50'	RWY 31L PAR TCH 33' TDZE 44'	RWY 31R PAR TCH 37' TDZE 45'	RWY 35L PAR TCH 33' TDZE 49'	RWY 35R PAR TCH 34' TDZE 48'	
Gnd speed-Kts	70	90	100	120	140	160	Lighting - Refer to Airport Chart		
All Rws PAR GS	3.00°	377	484	538	646	753	861		
STRAIGHT-IN LANDING									
PAR 13L DA(H) 250' (200')		GS out MDA(H) 420' (370')		PAR 13R DA(H) 250' (200')		GS out MDA(H) 480' (430')		PAR 17L/R DA(H) 250' (200')	
GS out MDA(H) 340' (290')		PAR 31L DA(H) 244' (200')		GS out MDA(H) 320' (276')					
A									
B									
C	1/2	1 1/4	1/2	1 1/4	1/2	1 1/4	1/2	1 1/4	
D									
STRAIGHT-IN LANDING									
PAR 31R DA(H) 245' (200')		GS out MDA(H) 320' (275')		PAR 35L DA(H) 249' (200')		GS out MDA(H) 400' (351')		PAR 35R DA(H) 248' (200')	
ALS out		ALS out		ALS out		ALS out		ALS out	
A									
B									
C	1/2	1 1/4	1/2	1 1/4	1/2	3/4	3/4	1 1/4	
D									
STRAIGHT-IN LANDING									
ASR 13L/R MDA(H) 500' (450')		ASR 17L/R MDA(H) 400' (350')		ASR 31L MDA(H) 380' (336')		ASR 31R MDA(H) 380' (335')		ASR 35L MDA(H) 400' (351')	
ASR 35R MDA(H) 400' (352')		ALS out		Max Kts		CIRCLE-TO-LAND PAR without GS & ASR All Rws MDA(H)			
A	1	1	1	1	1	1	1	1	
B									
C	1 1/4								
D	1 1/2	1 1/4			1 1/4	3/4	1 1/4	165	
								500'(450')-1	
								500'(450')-1 1/2	
								620'(570')-2	

1 For Circling from PAR w/o GS vis 1 1/4.

CHANGES: Minimums.

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General Information

Location: Sherman-Denison TX USA

IATA Code: PNX

Lat/Long: N33° 42.8' W096° 40.4'

Elevation: 749 ft

Airport Use: Public

Magnetic Variation: 3.8°E

Sectional Chart: Dallas Ft Worth

Fuel Types: 100 Octane (LL), Jet A

Oxygen Types: HP Bottle

Repair Types: Major Airframe, Major Engine

Customs: No

Airport Type: IFR

Landing Fee: No

Control Tower: Yes

Jet Start Unit: No

LLWS Alert: No

Beacon: Yes

Pattern Altitude: 1000 ft AGL

Sunrise: 1258 Z

Sunset: 0021 Z,

Runway Information

Runway: 13

Length x Width: 2277 ft x 60 ft

Surface Type: asphalt

TDZ-Elev: 730 ft

Runway: 17L

Length x Width: 9000 ft x 150 ft

Surface Type: asphalt

TDZ-Elev: 741 ft

Lighting: Edge, ALS, Pilot controlled

Runway: 31

Length x Width: 2277 ft x 60 ft

Surface Type: asphalt

TDZ-Elev: 742 ft

Runway: 35R

Length x Width: 9000 ft x 150 ft

Surface Type: asphalt

TDZ-Elev: 749 ft

Lighting: Edge, ALS, Pilot controlled

Communication Information

ATIS 118.775

AWOS 118.775

North Texas Tower 120.575 PCL

North Texas Regl Ground Control 124.125

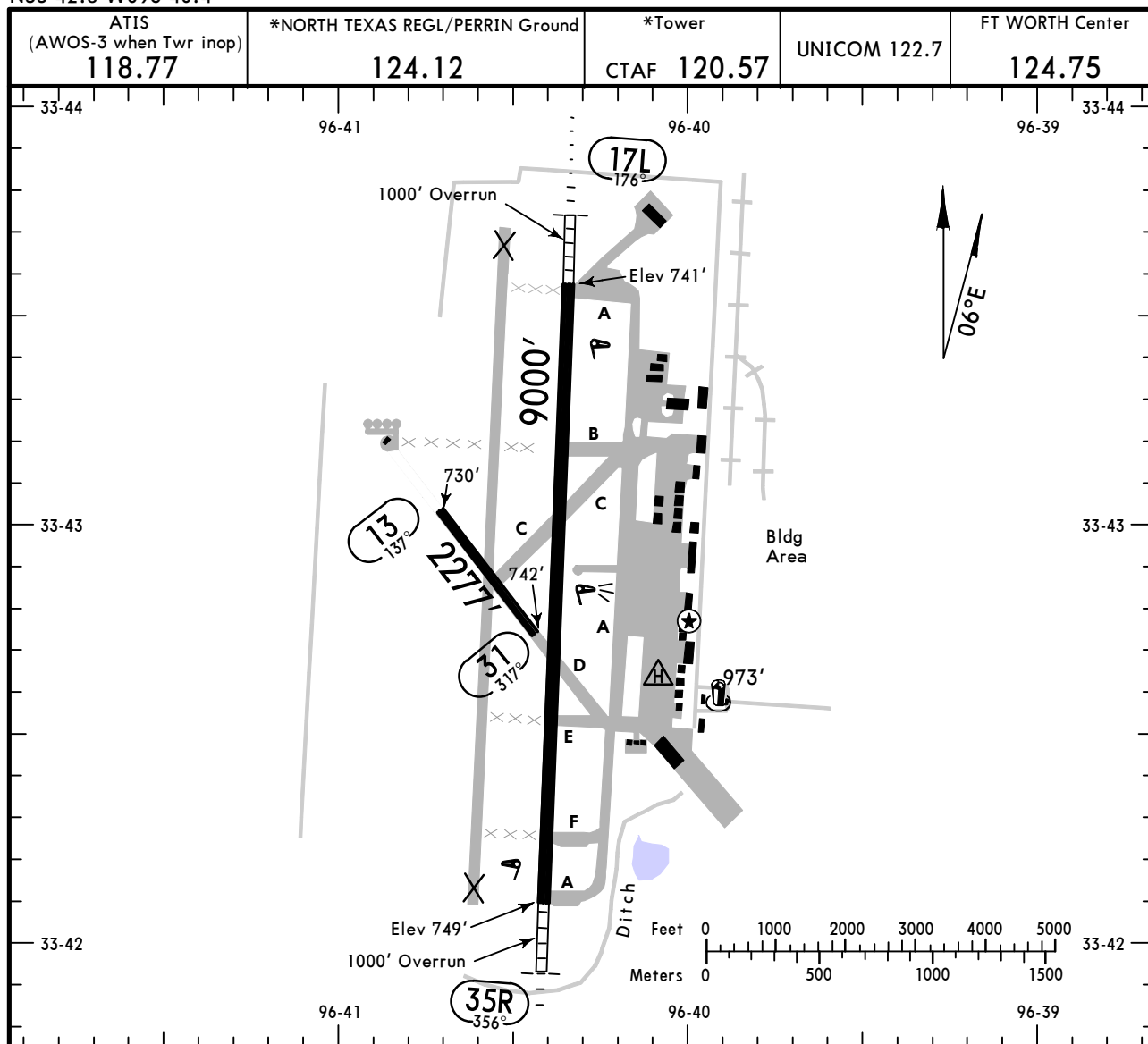
North Texas Regl Unicom 122.7 CTAF

FT Worth Flight Service Station 122.3 RCO

FT Worth Center 124.75 Remote Communications Air-Ground

KGYI/PNX
Apt Elev 749'
N33 42.8 W096 40.4

JEPPESEN SHERMAN/DENISON, TEXAS
29 APR 11 (21-1) Eff 5 May NORTH TEXAS REGL/PERRIN



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		— LANDING BEYOND			
		Threshold	Glide Slope		
13					60'
31					
17L	① MIRL ② MALSR VASI-L		7900'		150'
35R	① MIRL ② MALS VASI-L				

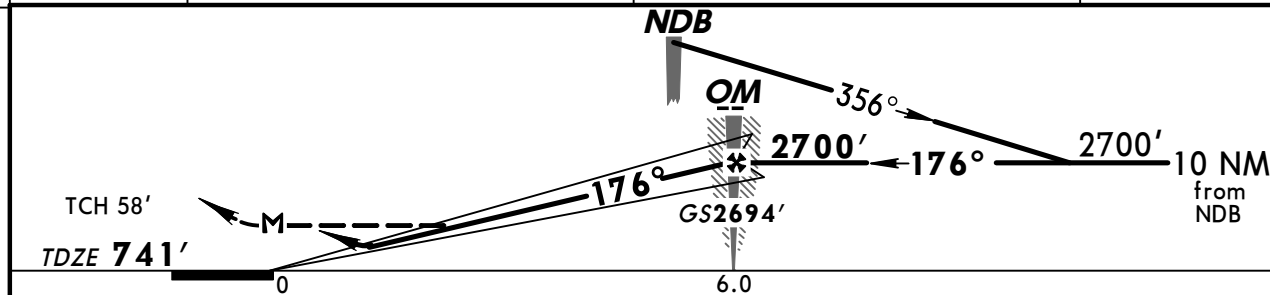
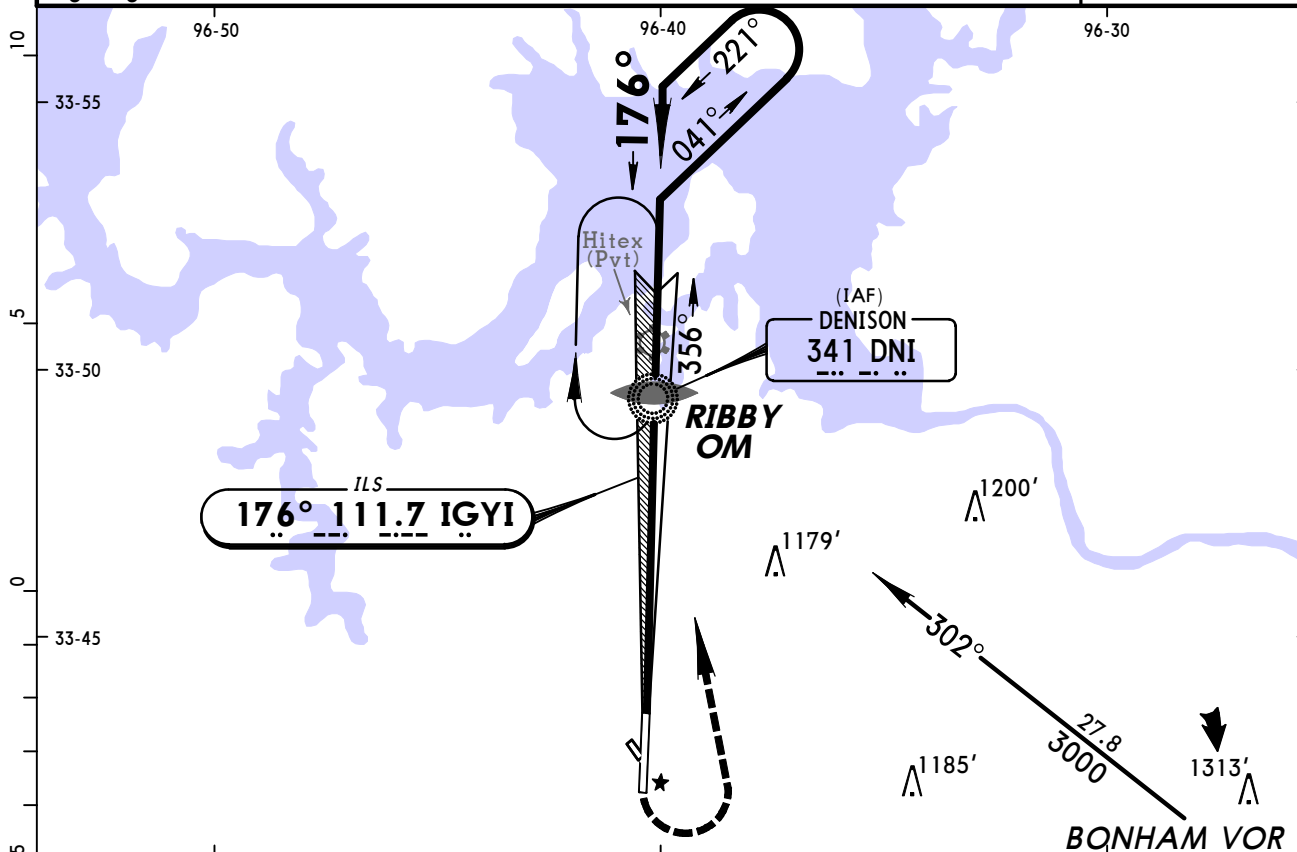
- ① Increase intensity on 122.7.
- ② Activate on 122.7.

TAKE-OFF			FOR FILING AS ALTERNATE	
All Rwys				
Adequate Vis Ref		STD		
1 & 2 Eng	1/4	1	A	NA
3 & 4 Eng		1/2	C	
			D	

OBSTACLE DP: Rwy 17L, climb heading 176° to 1800' before turning right.

KGYI/PNX NORTH TEXAS REGL/PERRIN 29 APR 11 (21-1) Eff 5 May ILS or LOC Rwy 17L

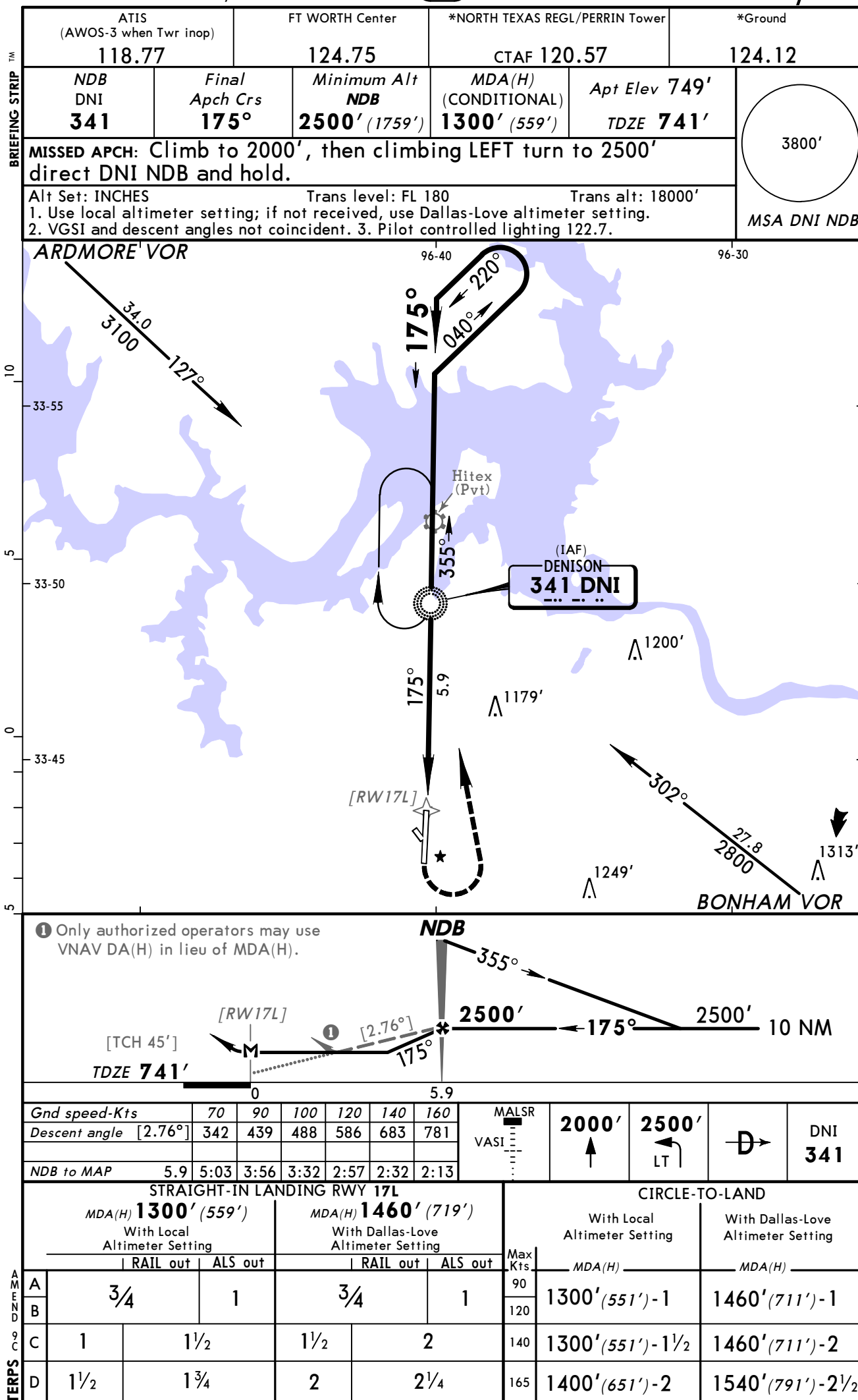
ATIS (AWOS-3 when Twr inop) 118.77	FT WORTH Center 124.75	*NORTH TEXAS REGL/PERRIN Tower CTAF 120.57	*Ground 124.12
LOC IGYI 111.7	Final Apch Crs 176°	GS RIBBY OM 2694' (1953')	ILS DA(H) (CONDITIONAL) 941' (200') Apt Elev 749' TDZE 741'
MISSED APCH: Climb to 2000', then climbing LEFT turn to 2700' direct DNI NDB and hold.			
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. ADF required. 2. Use local altimeter setting; if not received, use Dallas-Love altimeter setting. 3. VGSI and ILS glidepath not coincident. 4. Pilot controlled lighting 122.7.			
3800' MSA DNI NDB			



Gnd speed-Kts	70	90	100	120	140	160						
GS	3.00°	372	478	531	637	743	849					
FAF to MAP	6.0	5:09	4:00	3:36	3:00	2:34	2:15					

STRAIGHT-IN LANDING RWY 17L With Local Altimeter Setting						CIRCLE-TO-LAND With Local Altimeter Setting	
ILS DA(H) 941' (200')			LOC (GS out) MDA(H) 1240' (499')			Max Kts	MDA(H)
FULL		RAIL or ALS out		RAIL out	ALS out	90/120	
A/B	1/2	3/4	1/2	3/4	1	140	1280' (531') - 1
C			3/4	1 1/4		165	1280' (531') - 1 1/2
D			1	1 1/2			1400' (651') - 2
With Dallas-Love Altimeter Setting						With Dallas-Love Altimeter Setting	
ILS DA(H) 1099' (358')			LOC (GS out) MDA(H) 1400' (659')			Max Kts	MDA(H)
FULL		RAIL or ALS out		RAIL out	ALS out	90/120	
A/B	3/4	1 1/4	1/2	3/4	1	140	1440' (691') - 1 1/4
C			1 1/4	1 3/4		165	1440' (691') - 2
D			1 1/2	2			1540' (791') - 2 1/2

MSA BYP VORMAP at D24.0TERPS



MSA BRASS

MAP at BRASS

TERPS

General Information

Location: Universal City TX USA
IATA Code: RND
Lat/Long: N29° 31.7' W098° 16.7'
Elevation: 761 ft

Airport Use: Military
Magnetic Variation: 4.8°E
Sectional Chart: San Antonio

Fuel Types: 100 Octane (LL), Jet 4
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1301 Z
Sunset: 0031 Z,

Runway Information

Runway: 14L
Length x Width: 8351 ft x 200 ft
Surface Type: concrete
TDZ-Elev: 742 ft
Lighting: Edge, ALS
Stopway: 1000 ft

Runway: 14R
Length x Width: 8352 ft x 198 ft
Surface Type: asphalt
TDZ-Elev: 761 ft
Lighting: Edge
Stopway: 1000 ft

Runway: 32L
Length x Width: 8352 ft x 198 ft
Surface Type: asphalt
TDZ-Elev: 727 ft
Lighting: Edge
Stopway: 1000 ft

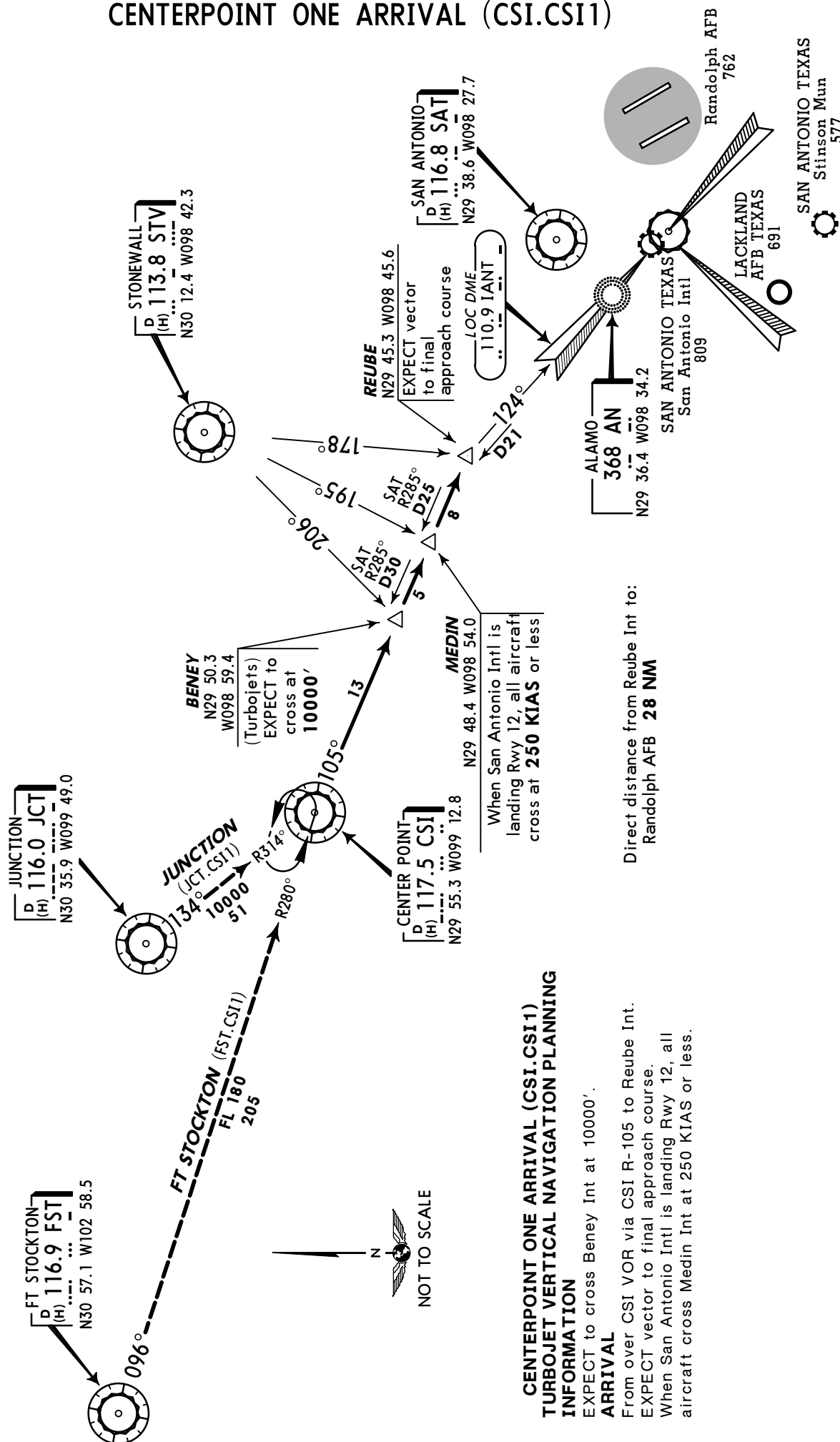
Runway: 32R
Length x Width: 8351 ft x 200 ft
Surface Type: concrete
TDZ-Elev: 723 ft
Lighting: Edge, ALS

Stopway: 1000 ft

Communication Information

- Randolph Tower 128.25 Initial Contact
- Hangover Tower 120.5
- Randolph Ground Control 119.65
- Hangover Ground Control 124.75
- San Antonio Approach Control 128.05
- San Antonio Approach Control 127.1
- San Antonio Approach Control 124.45
- San Antonio Departure Control 128.05
- San Antonio Departure Control 127.1

CENTERPOINT ONE ARRIVAL (CSI.CSI11)



CENTERPOINT ONE ARRIVAL (CSI.CSI11) TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION

EXPECT to cross Beney Int at 10000'.

ARRIVAL

From over CSI VOR via CSI R-105 to Reube Int.

EXPECT vector to final approach course.

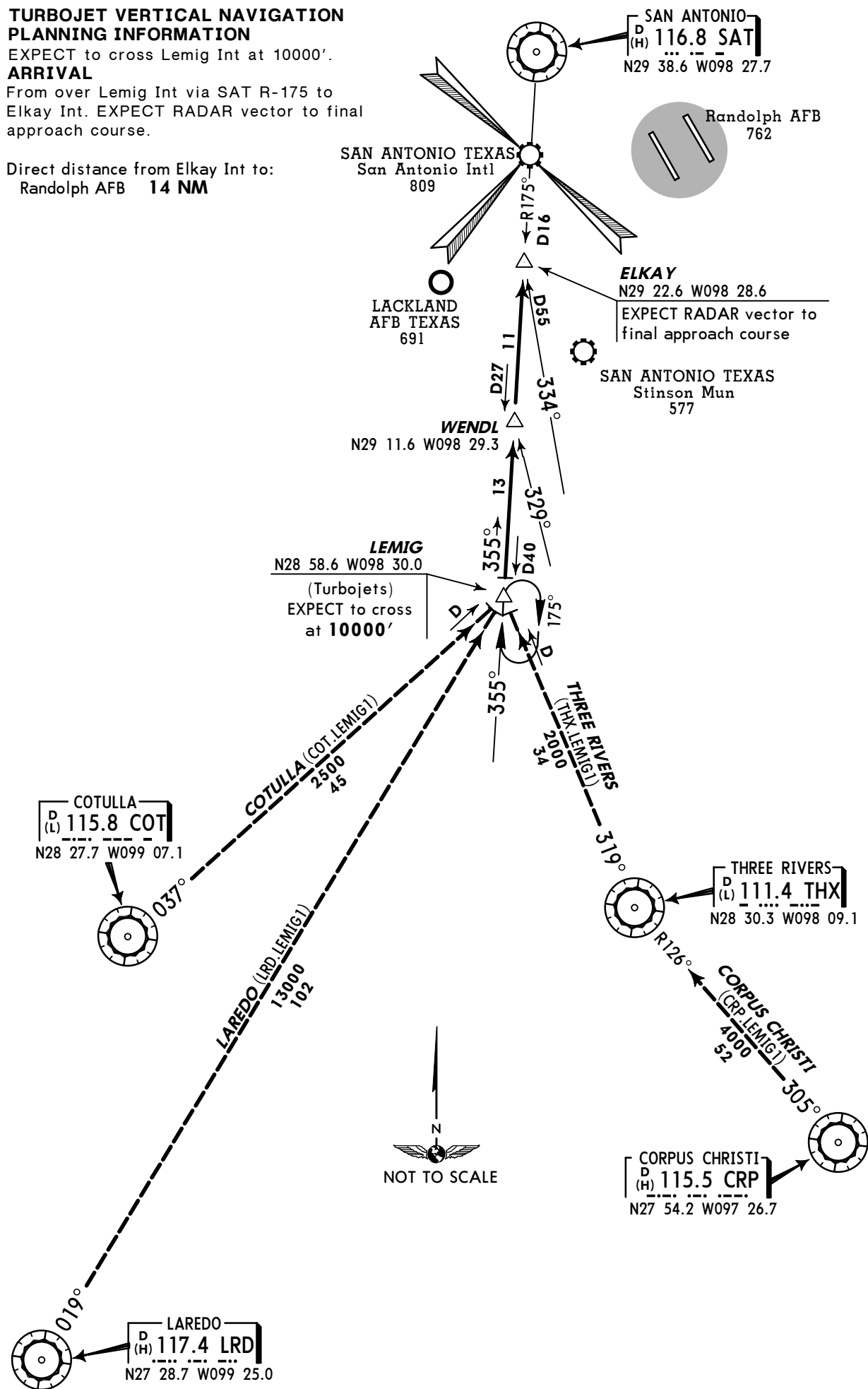
When San Antonio Intl is landing Rwy 12, all
aircraft cross Medin Int at 250 KIAS or less.

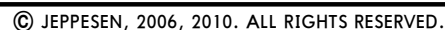
LEMIG ONE ARRIVAL (LEMIG.LEMIG1)

TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION

EXPECT to cross Lemig Int at 10000'.

ARRIVAL

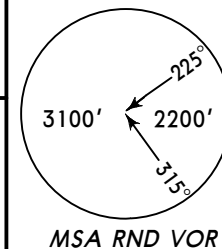
From over Lemig Int via SAT R-175 to
Elkay Int. EXPECT RADAR vector to final
approach course.Direct distance from Elkay Int to:
Randolph AFB **14 NM**



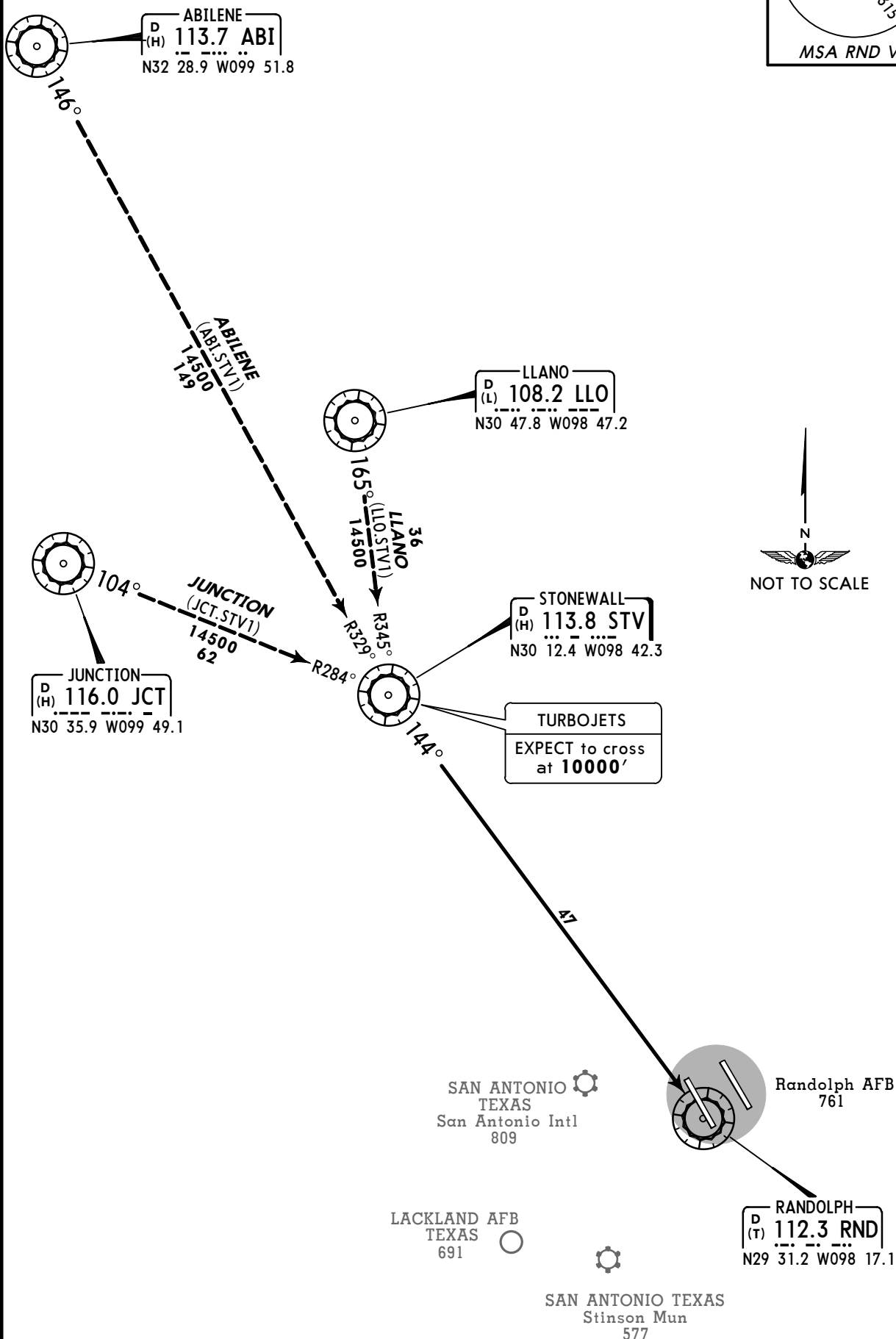


Apt Elev
See Graphic

Alt Set: INCHES
Trans level: FL180 Trans alt: 18000'



STONEWALL ONE ARRIVAL (STV.STV1)



ROUTING

From over STV via direct RND.

KRND/RND
Apt Elev 761'
N29 31.7 W098 16.7

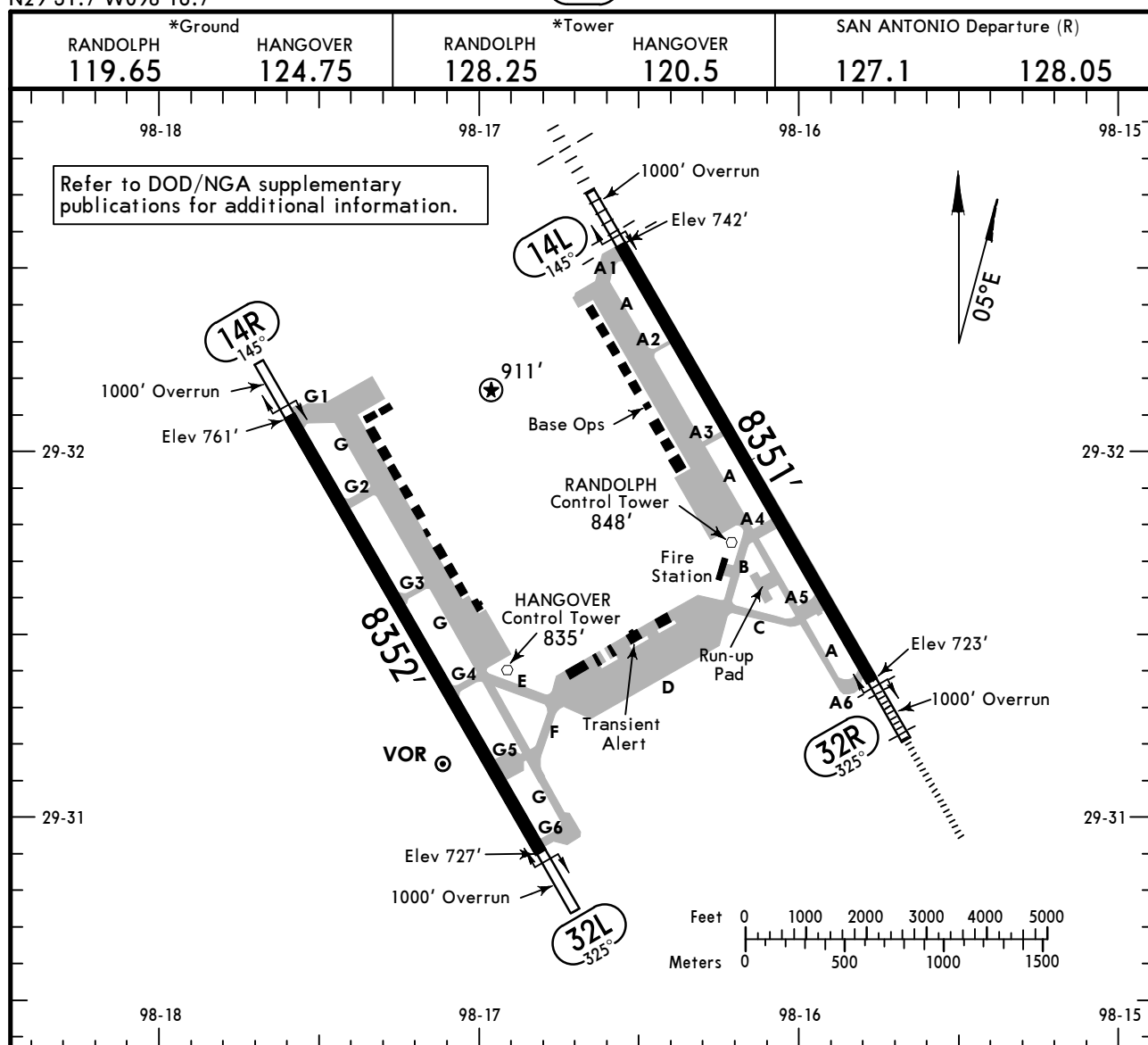
JEPPesen

6 JAN 12

(30-9)

Eff 12 Jan

RANDOLPH AFB
UNIVERSAL CITY, TEXAS



ADDITIONAL RUNWAY INFORMATION

RWY				USABLE LENGTHS		TAKE-OFF	WIDTH
				— LANDING BEYOND —			
14R	HIRL	PAPI-L (angle 3.00°)	RVR		7393'		198'
32L	HIRL	PAPI-L (angle 3.00°)	RVR		7535'		
14L	HIRL	①SALSF PAPI-L (angle 3.00°)	RVR		7441'		200'
32R	HIRL	ALSF-I PAPI-L (angle 3.00°)	RVR		7359'		

① Non-standard 2100'.

TAKE-OFF			FOR FILING AS ALTERNATE		
All Rwys					
Adequate Vis Ref		STD	Precision		Non-Precision
1 & 2 Eng	RVR 16 or 1/4	RVR 50 or 1	A	600-2	800-2
			B		
3 & 4 Eng			RVR 24 or 1/2		
			D		

CHANGES: Notes removed, Rwy 14R/32L RVR added, usable lengths.

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KRND/RND

UNIVERSAL CITY, TEXAS

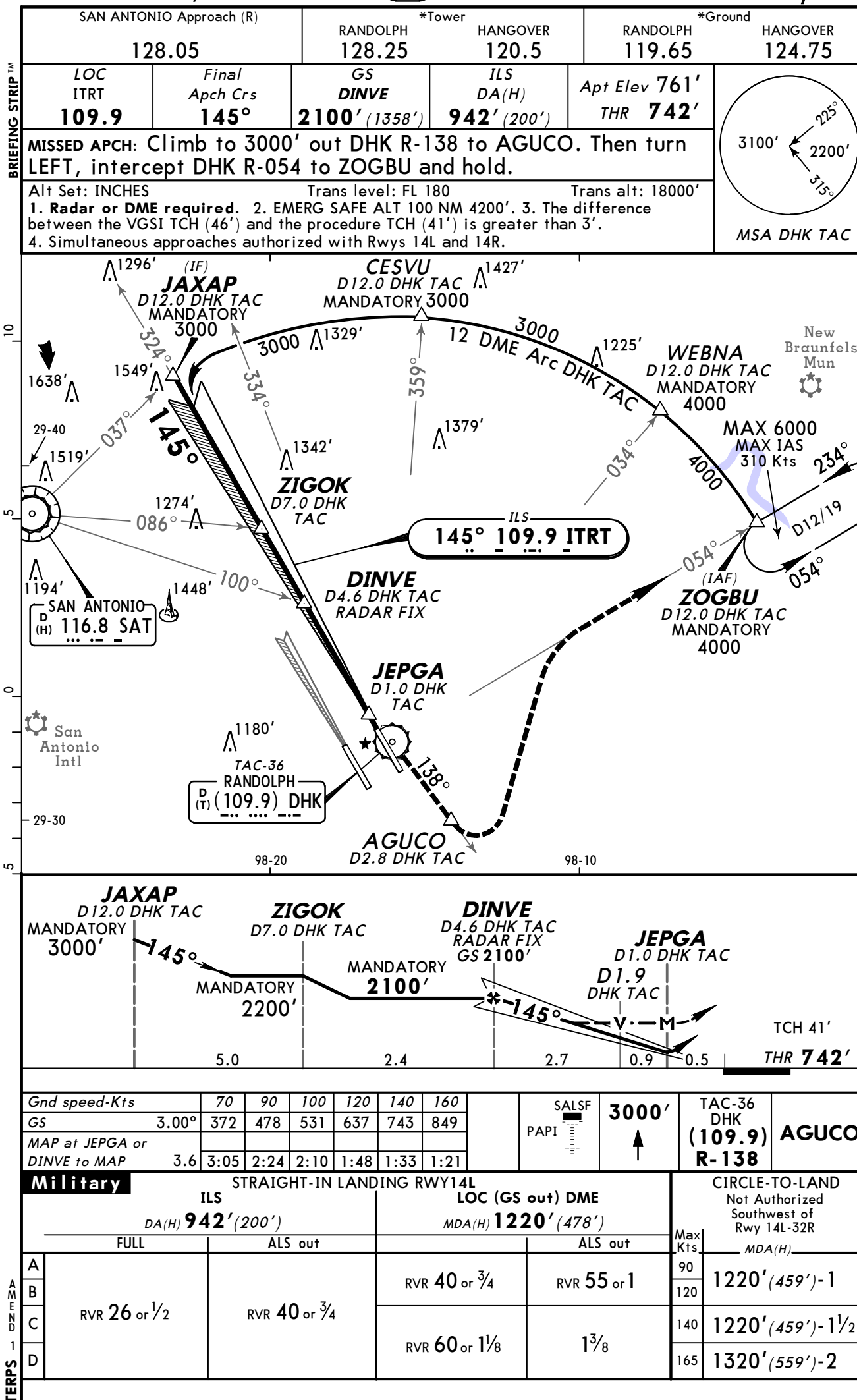
JEPPesen

6 JAN 12 (31-1)

Eff 12 Jan

RANDOLPH AFB

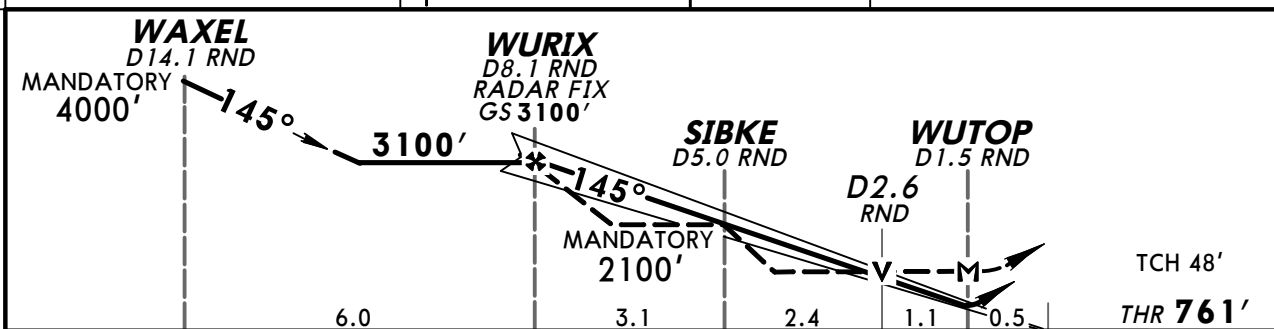
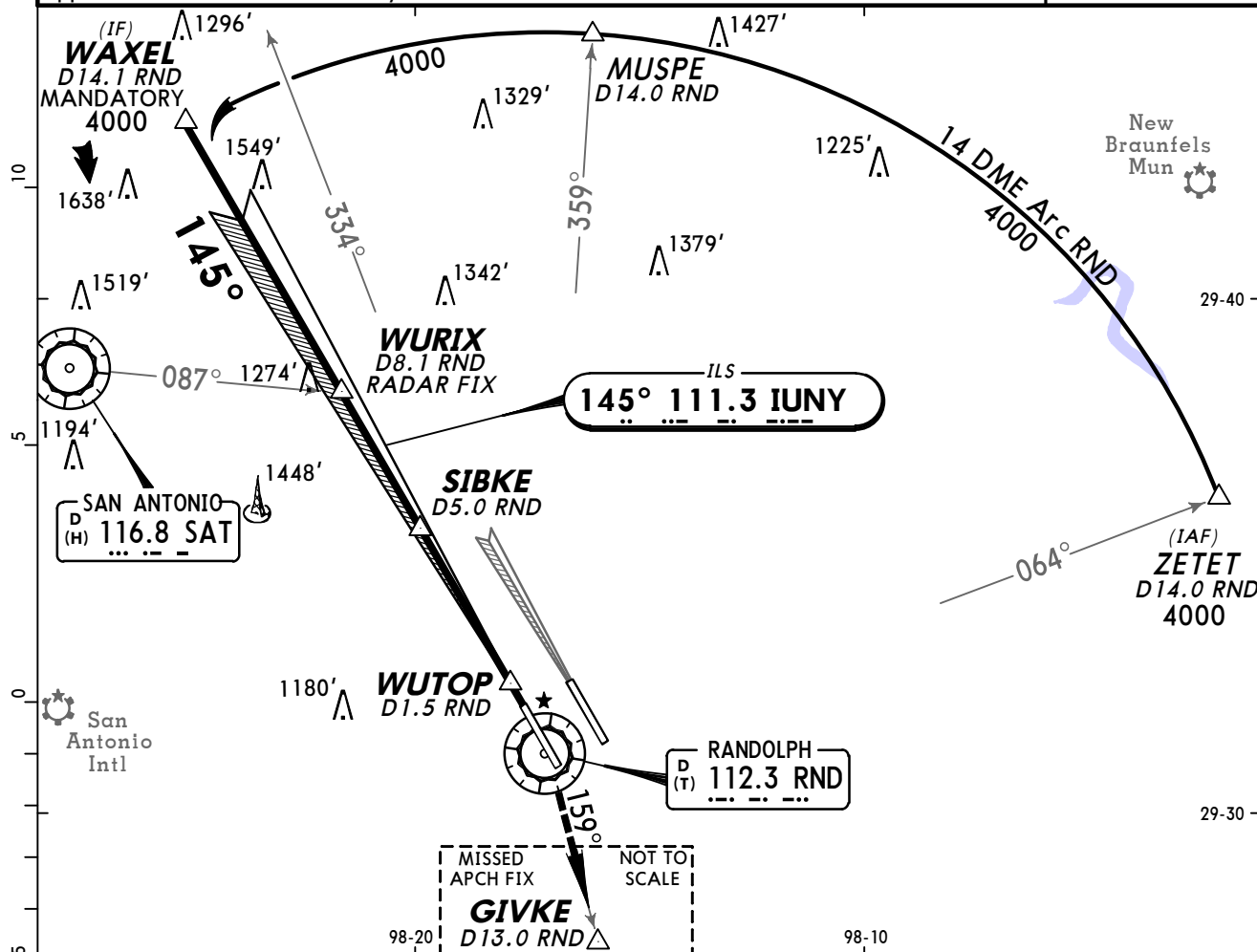
ILS or LOC DME Rwy 14L



BRIEFING STRIP

TM

SAN ANTONIO Approach (R)		RANDOLPH *Tower		HANGOVER		RANDOLPH *Ground		HANGOVER	
128.05		128.25		120.5		119.65		124.75	
LOC IUNY 111.3	Final Apch Crs 145°	GS WURIX 3100' (2339')	ILS DA(H) 961' (200')	Apt Elev 761' THR 761'		3100' 225° 2200' 315° MSA RND VOR			
MISSED APCH: Climb to 3000' out RND R-159 to GIVKE/D13.0. Expect ATC instructions.									
Alt Set: INCHES									



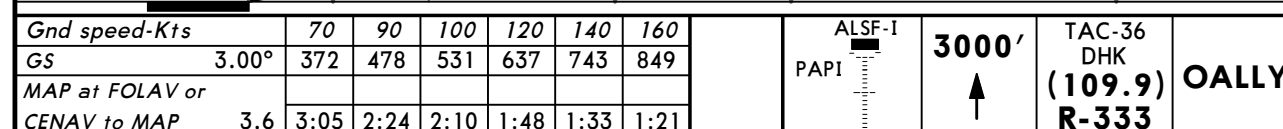
Gnd speed-Kts	70	90	100	120	140	160	PAPI-L	3000'	RND 112.3 R-159	GIVKE
GS	3.00°	372	478	531	637	743				
MAP at WUTOP or WURIX to MAP	6.6	5:39	4:24	3:58	3:18	2:50				

Military		STRAIGHT-IN LANDING RWY 14R				CIRCLE-TO-LAND			
ILS		LOC (GS out) DME				Not Authorized Northeast of Rwy 14R-32L			
DA(H) 961'(200')		MDA(H) 1300'(539') With SIBKE		MDA(H) 1480'(719') Without SIBKE		Max Kts	With SIBKE	Without SIBKE	
							MDA(H)	MDA(H)	
A	RVR 40 or ¾	RVR 55 or 1		RVR 55 or 1		90	1300'(539')-1	1480'(719')-1	
B						120			
C						140	1300'(539')-1½	1480'(719')-2	
D		1½		2		165	1360'(599')-2	1480'(719')-2¼	

BRIEFING STRIP™

Military		STRAIGHT-IN LANDING RWY 32L			CIRCLE-TO-LAND	
ILS		LOC (GS out) DME		Not Authorized Northeast of Rwy 14R-32L		
DA(H) 927' (200')		MDA(H) 1060' (333') With HICKU	MDA(H) 1160' (433') Without HICKU	Max Kts	MDA(H)	
A	RVR 40 or $\frac{3}{4}$	RVR 55 or 1	RVR 55 or 1	90	1240' (479') - 1	
B				120		
C		RVR 50 or 1	1 $\frac{1}{4}$	140	1280' (519') - 1 $\frac{1}{2}$	
D				165	1360' (599') - 2	

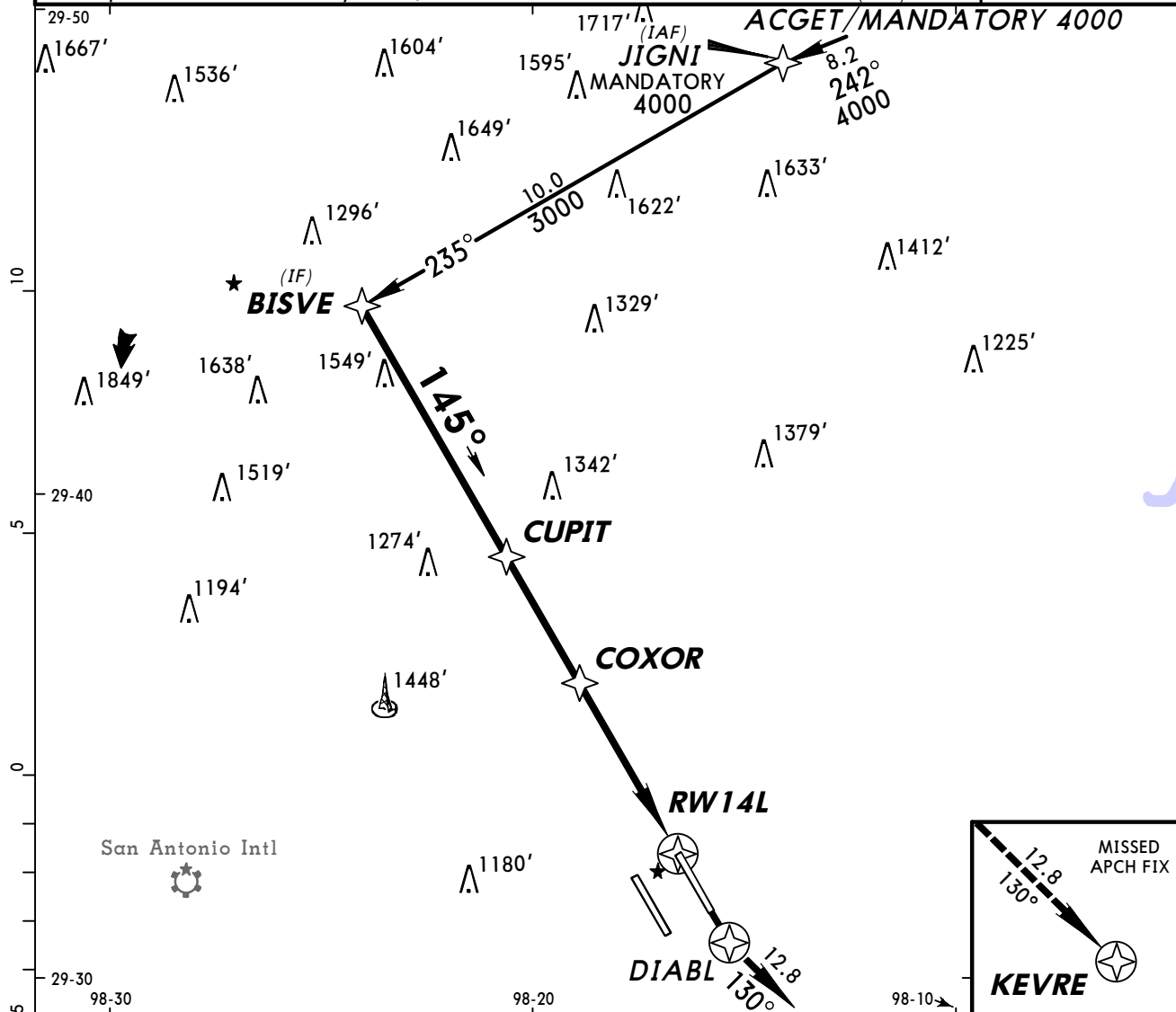
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BRIEFING STRIP™

AMEND 1

BRIEFING STRIP™

SAN ANTONIO Approach (R)		*Tower		*Ground	
128.05		RANDOLPH 128.25	HANGOVER 120.5	RANDOLPH 119.65	HANGOVER 124.75
RNAV	Final Apch Crs 145°	Mandatory Alt COXOR 2100' (1358')	LNAV MDA(H) 1220' (478')	Apt Elev 761' THR 742'	3100' MSA RW14L
MISSED APCH: Climb to 3000' direct DIABL, then direct KEVRE. Expect ATC instructions.					
Alt Set: INCHES 1. SAFE ALTITUDE WITHIN 100 NM 4200'. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (3°F).					
Trans level: FL 180		Trans alt: 18000'			

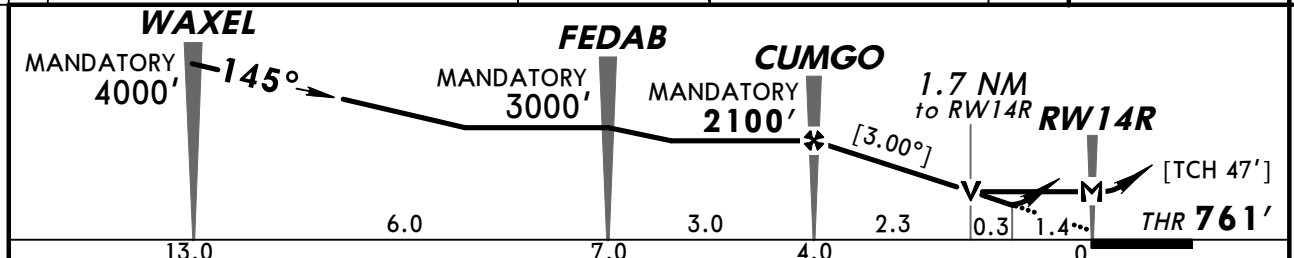
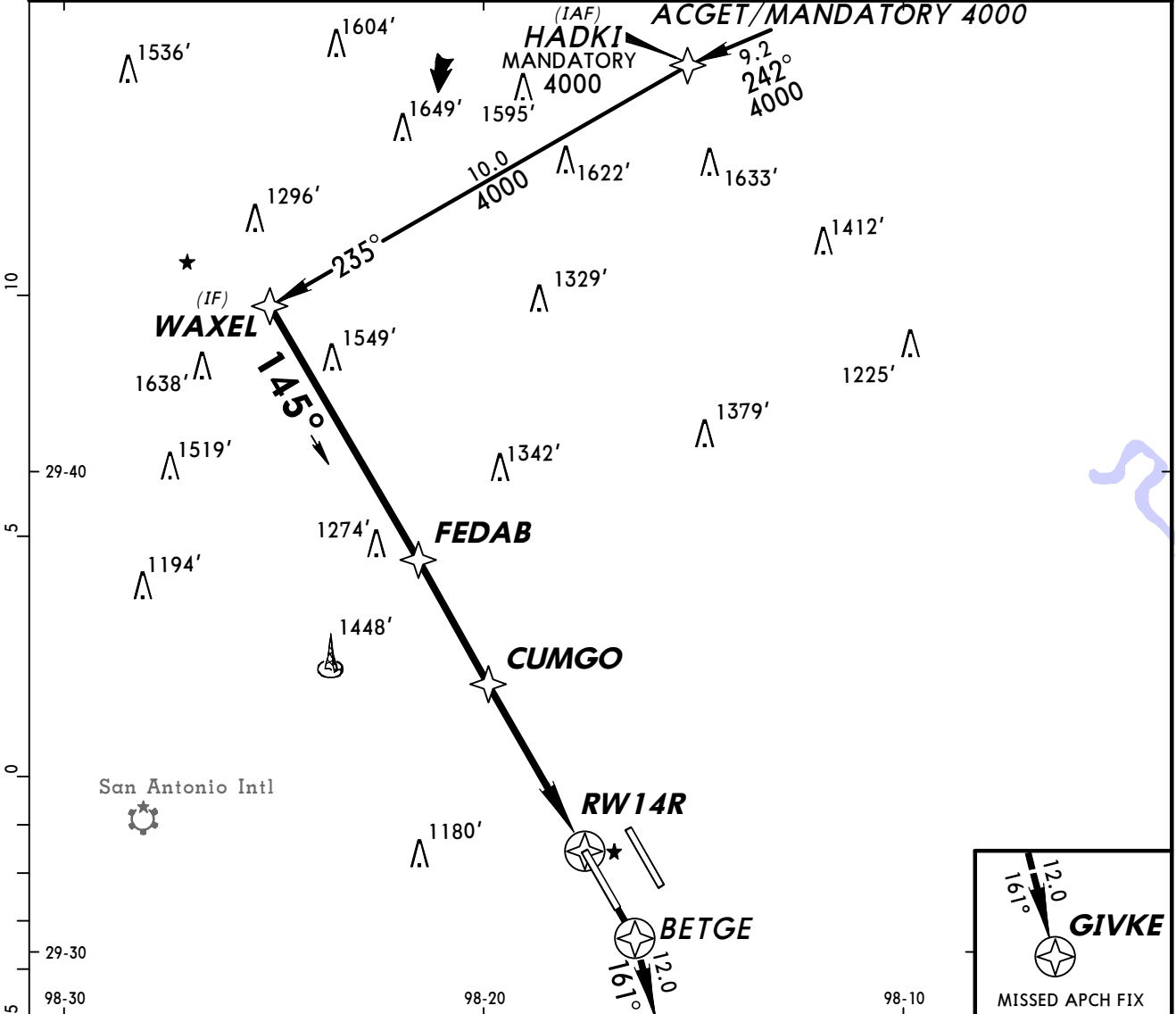


BISVE MANDATORY 3000'		CUPIT MANDATORY 2200'		COXOR MANDATORY 2100'		1.4 NM to RW14L [3.00°]		RW14L [TCH 46'] THR 742'	
13.1	6.0	7.1	3.0	4.1	2.6	0.1	1.4	0	
Gnd speed-Kts		70	90	100	120	140	160	SALSF 3000'	
Descent Angle [3.00°]		372	478	531	637	743	849	PAPI	
MAP at RW14L								DIABL	

STRAIGHT-IN LANDING RWY 14L				CIRCLE-TO-LAND Not Authorized Southwest of Rwy 14L-32R			
LNAV/VNAV DA(H) 1280' (538')		LNAV MDA(H) 1220' (478')		Max Kts		MDA(H)	
ALS out		ALS out		90		1220' (459')-1	
A		RVR 40 or 3/4	RVR 55 or 1	120		1220' (459')-1 1/2	
B	1 1/4			140		1320' (559')-2	
C		RVR 60 or 1 1/8	1 3/8	165			
D	1 1/2						

BRIEFING STRIP™

SAN ANTONIO Approach (R)		*Tower		*Ground	
128.05		RANDOLPH 128.25	HANGOVER 120.5	RANDOLPH 119.65	HANGOVER 124.75
RNAV	Final Apch Crs 145°	Mandatory Alt CUMGO 2100' (1339')	LNAV/VNAV DA(H) 1260' (499')	Apt Elev 761' THR 761'	3200' MSA RW14R
MISSED APCH: Climb to 3000' direct BETGE, then direct GIVKE. Expect ATC instructions.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. SAFE ALTITUDE WITHIN 100 NM 4200'. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (3°F).					

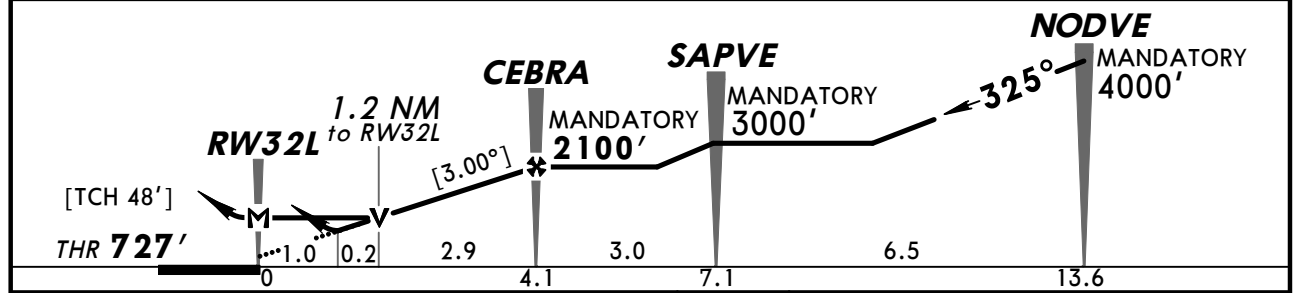
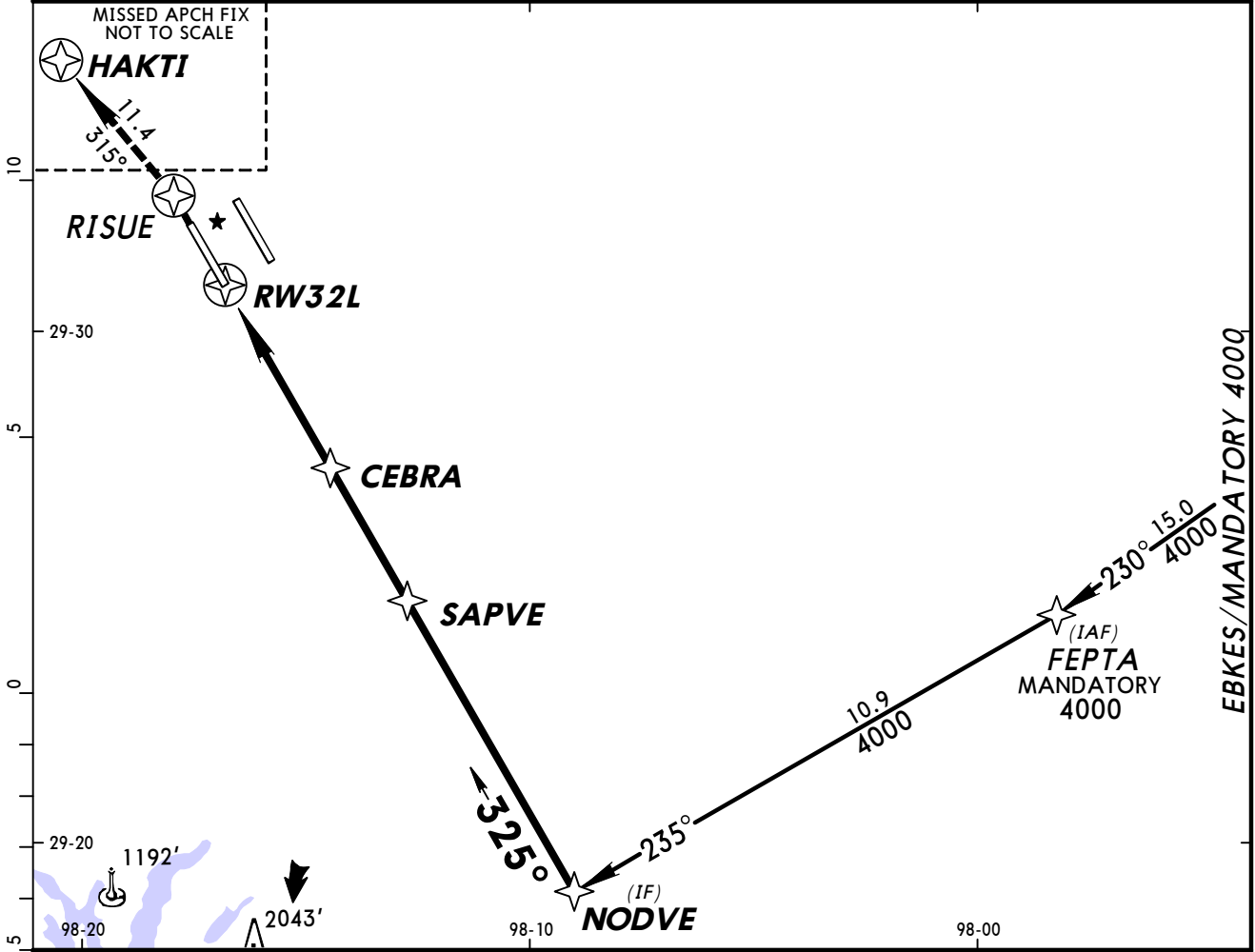


Gnd speed-Kts	70	90	100	120	140	160	PAPI-L		3000'	BETGE
Descent Angle [3.00°]	372	478	531	637	743	849				
MAP at RW14R										

STRAIGHT-IN LANDING RWY 14R				CIRCLE-TO-LAND	
LNAV/VNAV		LNAV		Not Authorized	
DA(H) 1260' (499')		MDA(H) 1360' (599')		Northeast of Rwy 14R-32L	
				MDA(H)	
A	1 3/8	RVR 55 or 1		Max Kts	1360' (599') - 1
B				90	
C		1 3/4		120	1360' (599') - 1 3/4
D				140	
				165	1360' (599') - 2

BRIEFING STRIP™

SAN ANTONIO Approach (R)		*Tower		*Ground	
128.05		RANDOLPH 128.25	HANGOVER 120.5	RANDOLPH 119.65	HANGOVER 124.75
RNAV	Final Apch Crs 325°	Mandatory Alt CEBRA 2100' (1373')	LNAV/VNAV DA(H) 1080' (353')	Apt Elev 761' THR 727'	3100' MSA RW32L
MISSED APCH: Climb to 3000' direct RISUE, then direct HAKTI. Expect ATC instructions.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. SAFE ALTITUDE WITHIN 100 NM 4200'. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (3°F).					

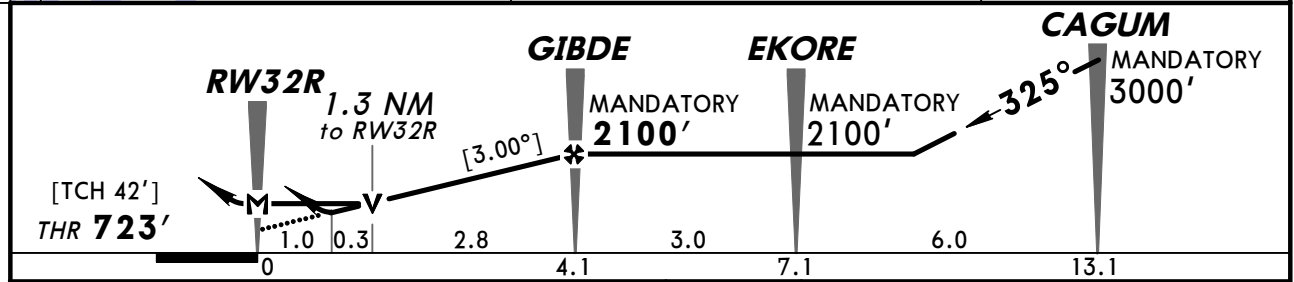
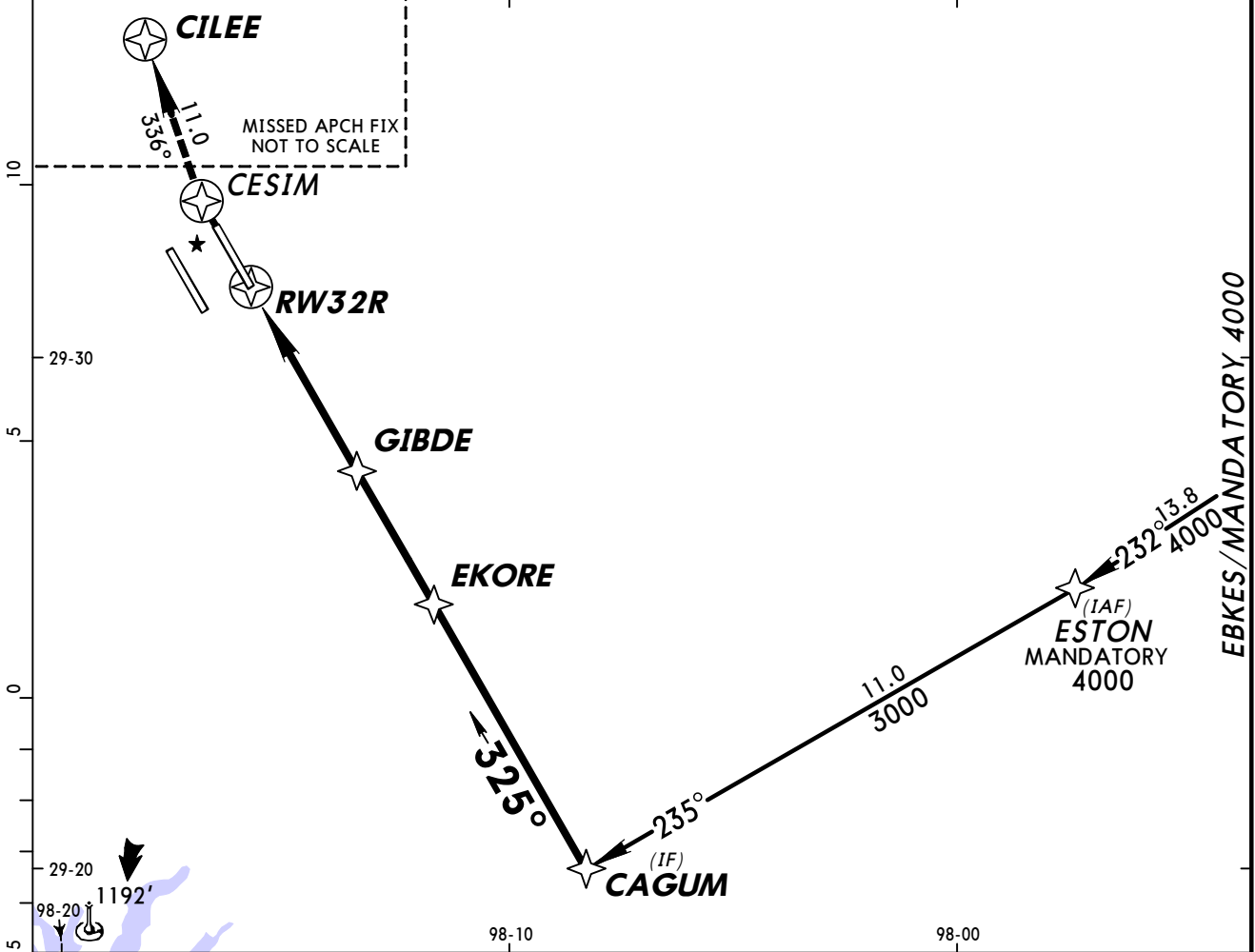


Gnd speed-Kts	70	90	100	120	140	160	PAPI-L	3000'	D	RISUE
Descent Angle [3.00°]	372	478	531	637	743	849				
MAP at RW32L										

STRAIGHT-IN LANDING RWY 32L				CIRCLE-TO-LAND			
LNAV/VNAV		LNAV		Not Authorized Northeast of Rwy 14R-32L			
DA(H) 1080' (353')		MDA(H) 1160' (433')		Max Kts	MDA(H)		
RVR 55 or 1		1 1/4		90	1240'(479')-1		
				120			
				140	1280'(519')-1 1/2		
				165	1360'(599')-2		

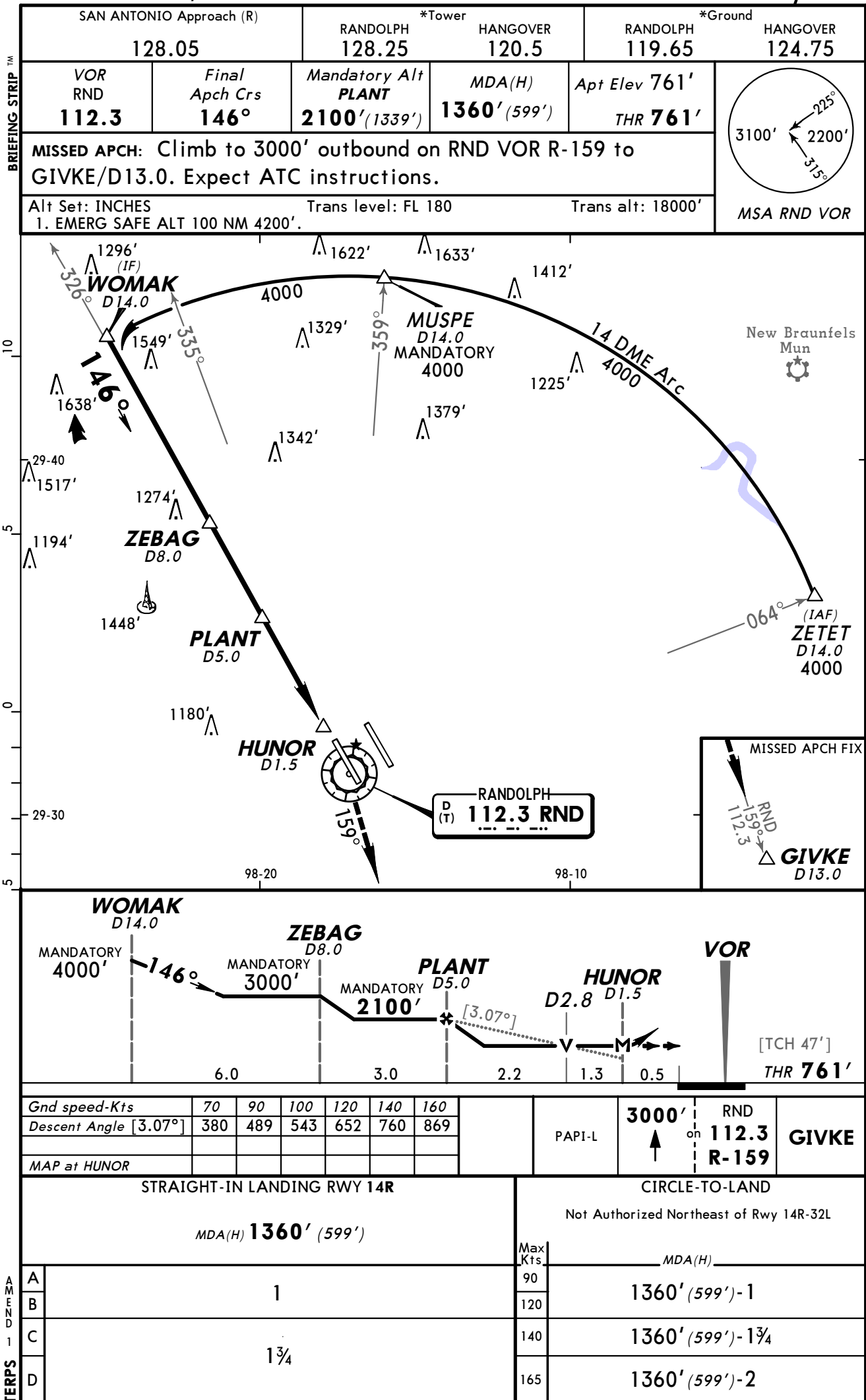
BRIEFING STRIP™

SAN ANTONIO Approach (R)		*Tower		*Ground	
128.05		RANDOLPH 128.25	HANGOVER 120.5	RANDOLPH 119.65	HANGOVER 124.75
RNAV	Final Apch Crs 325°	Mandatory Alt GIBDE 2100'(1377')	LNAV/VNAV DA(H) 1080'(357')	Apt Elev 761' THR 723'	3100' MSA RW32R
MISSED APCH: Climb to 3000' direct CESIM, then direct CILEE. Expect ATC instructions.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. SAFE ALTITUDE WITHIN 100 NM 4200'. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (3°F).					

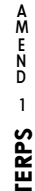


Gnd speed-Kts	70	90	100	120	140	160	ALSF-I PAPI 3000' CESIM
Descent Angle [3.00°]	372	478	531	637	743	849	
MAP at RW32R							

STRAIGHT-IN LANDING RWY 32R				CIRCLE-TO-LAND	
LNAV/VNAV DA(H) 1080' (357')		LNAV MDA(H) 1180' (457')		Not Authorized Southwest of Rwy 14L-32R	
ALS out		ALS out		Max Kts	MDA(H)
RVR 30 or 5/8	RVR 55 or 1	RVR 24 or 1/2	RVR 55 or 1	90	1180' (419') - 1
				120	1220' (459') - 1
		RVR 45 or 7/8	1 3/8	140	1220' (459') - 1 1/2
				165	1320' (559') - 2



BRIEFING STRIP™



TERPS

AMEND 1 TERPS

General Information

Location: San Antonio TX USA
IATA Code: SAT
Lat/Long: N29° 32.0' W098° 28.2'
Elevation: 809 ft

Airport Use: Public
Magnetic Variation: 4.9°E
Sectional Chart: San Antonio

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: High Pressure, Low Pressure, HP Bottle, LP Bottle
Repair Types: Major Airframe, Major Engine
Customs: Upon Prior Request
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1302 Z
Sunset: 0032 Z,

Runway Information

Runway: 03
Length x Width: 7505 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 786 ft
Lighting: Edge, ALS, Centerline

Runway: 12L
Length x Width: 5519 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 797 ft
Lighting: Edge, REIL

Runway: 12R
Length x Width: 8502 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 809 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 21
Length x Width: 7505 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 773 ft
Lighting: Edge, Centerline, REIL

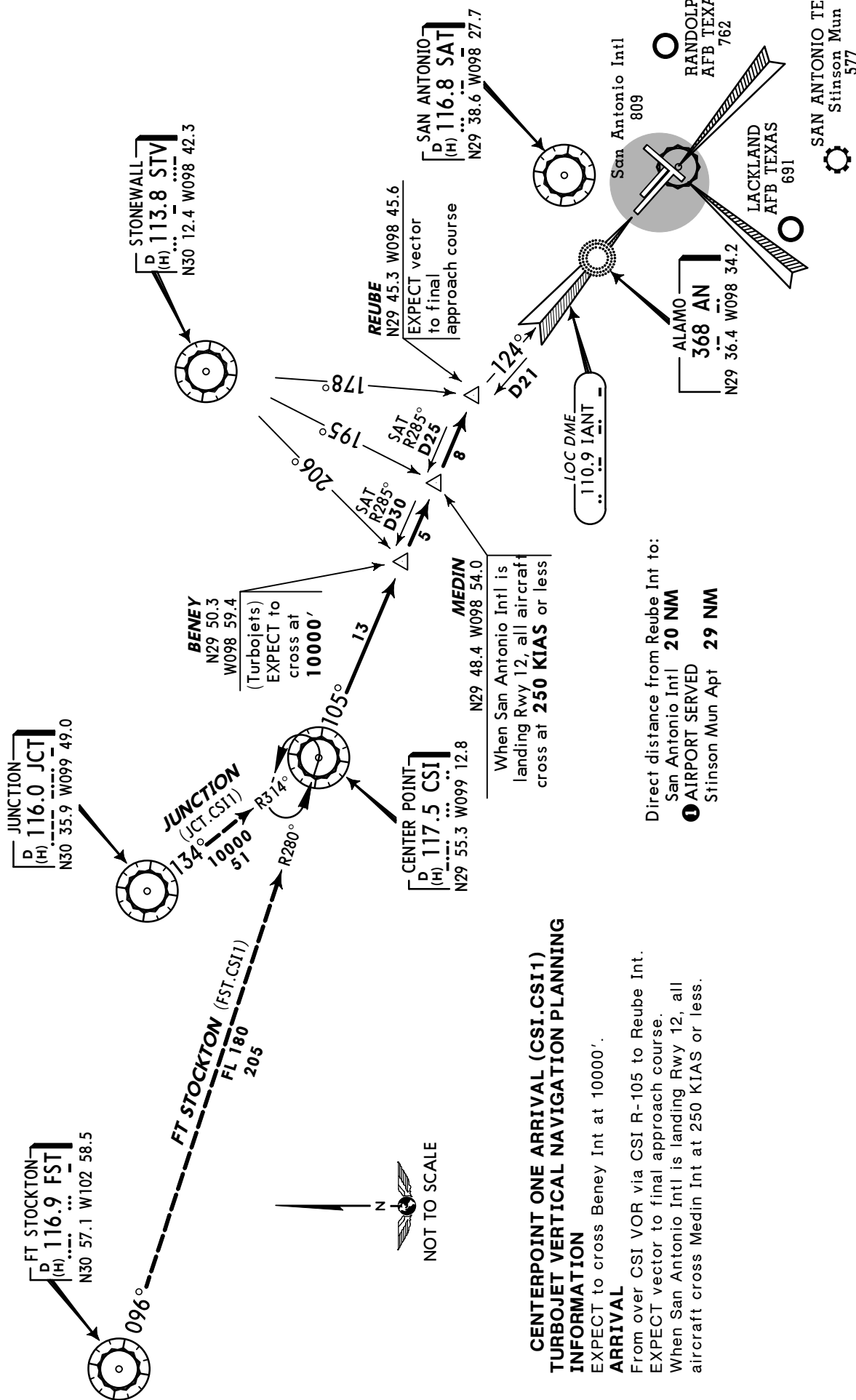
Runway: 30L
Length x Width: 8502 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 790 ft
Lighting: Edge, ALS, Centerline

Runway: 30R
Length x Width: 5519 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 788 ft
Lighting: Edge, REIL

Communication Information

ATIS 118.9
San Antonio Tower 119.8
San Antonio Ground Control 121.9
San Antonio Clearance Delivery 126.7
San Antonio Approach Control 128.05 (91°-140°)
San Antonio Approach Control 127.1 Secondary
San Antonio Approach Control 125.7 Secondary
San Antonio Approach Control 125.1 (271°-359°) Initial Contact
San Antonio Approach Control 124.45 (360°-90°)
San Antonio Approach Control 118.05 (141°-270°)
San Antonio App ARSA 128.05 (91°-140°)
San Antonio App ARSA 125.1 (271°-359°)
San Antonio App ARSA 124.45 (360°-90°)
San Antonio App ARSA 118.05 (141°-270°)
San Antonio Departure Control 128.05 (91°-140°)
San Antonio Departure Control 127.1 Secondary
San Antonio Departure Control 125.7 Secondary
San Antonio Departure Control 125.1 (271°-359°)
San Antonio Departure Control 124.45 (360°-90°)
San Antonio Departure Control 118.05 (141°-270°)
San Antonio Intl Unicom 122.95
San Angelo Flight Service Station 122.3 RCO
San Angelo Flight Service Station 122.2 RCO

CENTERPOINT ONE ARRIVAL (CSI.CSI1)



CENTERPOINT ONE ARRIVAL (CSI.CSI1) TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION

EXPECT to cross BENEY Int at 10000'.

ARRIVAL

From over CSI VOR via CSI R-105 to Reube Int.
EXPECT vector to final approach course.
When San Antonio Intl is landing Rwy 12, all aircraft cross Medin Int at 250 KIAS or less.

LEMIG ONE ARRIVAL (LEMIG.LEMIG1)

TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION

EXPECT to cross Lemig Int at 10000'.

ARRIVAL

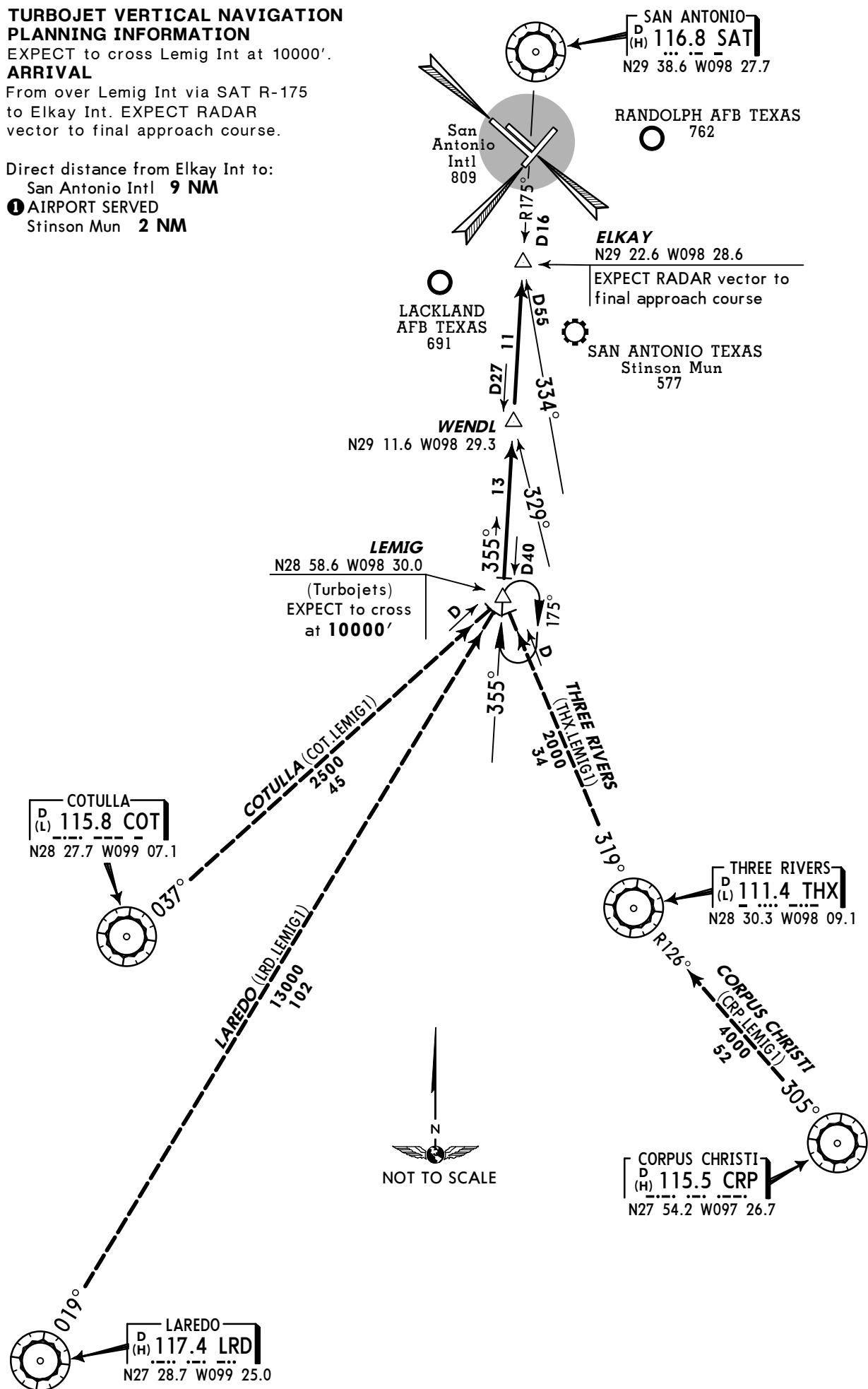
From over Lemig Int via SAT R-175
to Elkay Int. EXPECT RADAR
vector to final approach course.

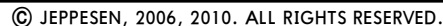
Direct distance from Elkay Int to:

San Antonio Intl 9 NM

1 AIRPORT SERVED

Stinson Mun 2 NM



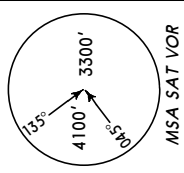


1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. LUFKIN transition: For non-GPS equipped aircraft, CWK, ELA, I
5. SAT and TNV DMEs must be operational. 5. WACO transition: For
6. WINDU transition: For non-GPS equipped aircraft, ACT, CWK, R
7. HUMBLE, HOBBS and WALIN trans
8. Also Serves

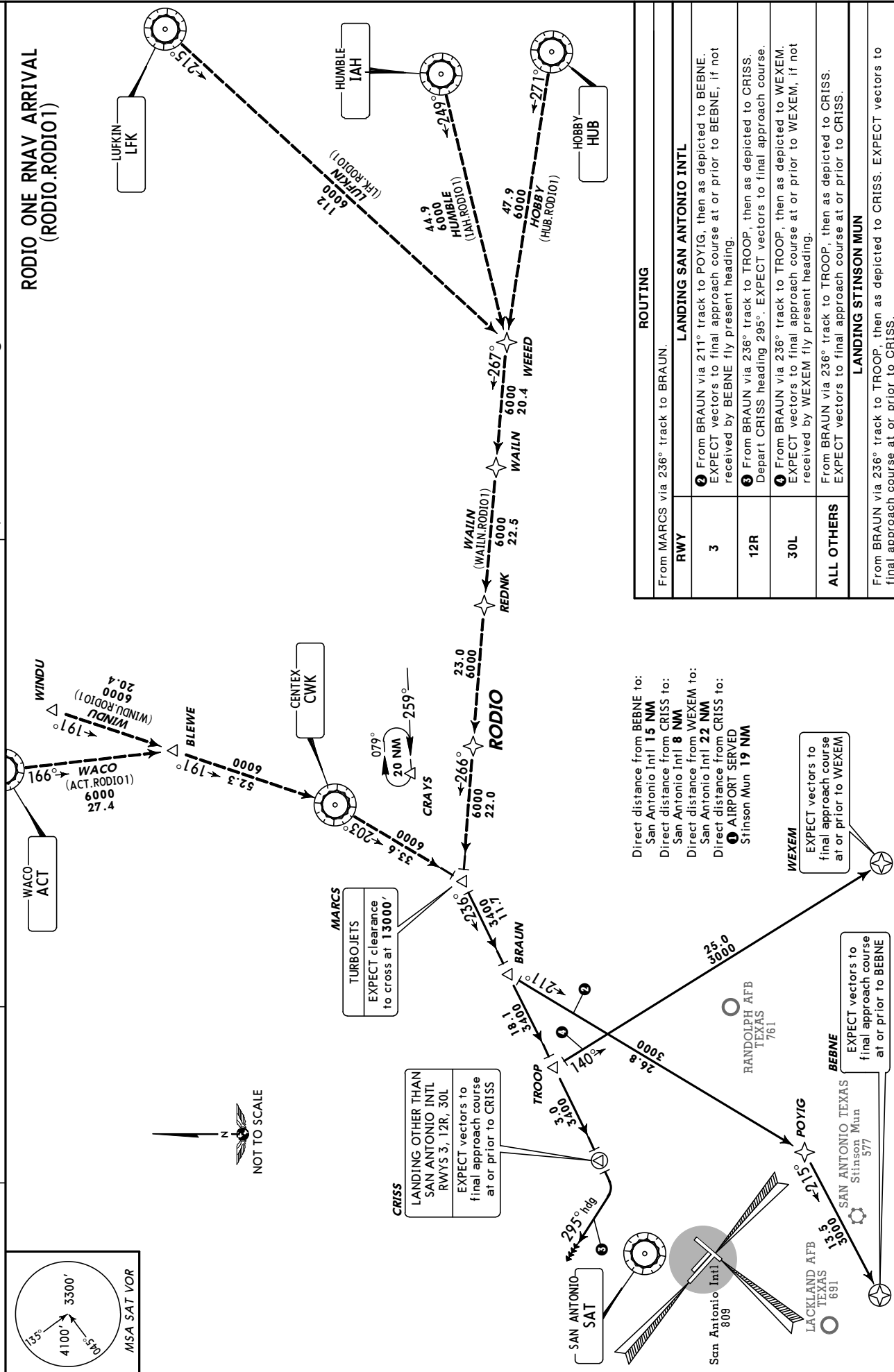
Alt Set: INCHES Trans level: FL180 Trans alt: 18000

Apt Elev
See Graphic

SAN ANTONIO
INTL D-ATIS
118.9



RADIO ONE RNAV ARRIVAL
(RADIO.RODIO1)



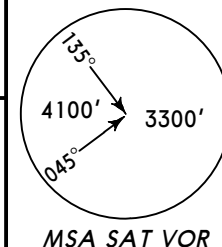
ROUTING	
From MARCS via 236° track to BRAUN.	
RWY	LANDING SAN ANTONIO INTL
3	② From BRAUN via 211° track to POYIG, then as depicted to BEBNE. EXPECT vectors to final approach course at or prior to BEBNE, if not received by BEBNE fly present heading.
12R	③ From BRAUN via 236° track to TROOP, then as depicted to CRISS. Depart CRISS heading 295° EXPECT vectors to final approach course.
30L	④ From BRAUN via 236° track to TROOP, then as depicted to WEXEM. EXPECT vectors to final approach course at or prior to WEXEM, if not received by WEXEM fly present heading.
ALL OTHERS	From BRAUN via 236° track to TROOP, then as depicted to CRISS. EXPECT vectors to final approach course at or prior to CRISS.
LANDING STINSON MUN	
From BRAUN via 236° track to TROOP, then as depicted to CRISS. EXPECT vectors to final approach course at or prior to CRISS.	

CHANGES: New procedure at this airport.

SAN ANTONIO
INTL D-ATIS
118.9

Apt Elev
See Graphic

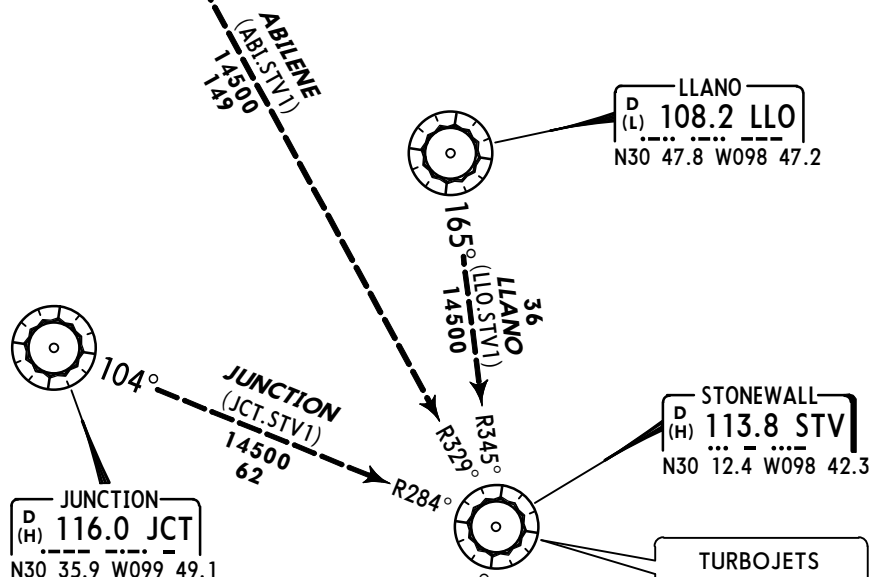
Alt Set: INCHES
Trans level: FL180 Trans alt: 18000'
Also Serves **1**



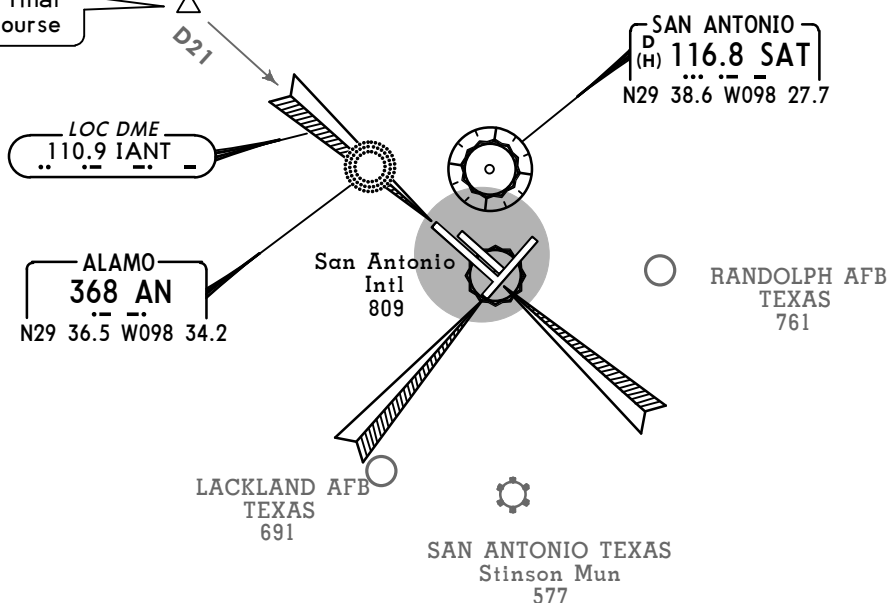
STONEWALL ONE ARRIVAL (STV.STV1)

ABILENE
D (H) 113.7 ABI
N32 28.9 W099 51.8

Direct distance from REUBE to:
San Antonio Intl **20 NM**
Direct distance from REUBE to:
1 AIRPORT SERVED
Stinson Mun **29 NM**



REUBE
(AN 124° bearing to)
N29 45.3 W098 45.6
EXPECT RADAR
vectors to final
approach course



ROUTING

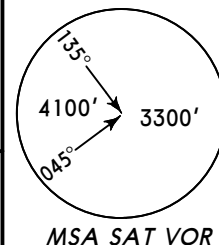
From over STV via STV R-178 to REUBE. EXPECT RADAR vectors to final approach course.

Gnd speed-KT	75	100	150	200	250	300
221' per NM	276	368	553	737	921	1105
225' per NM	281	375	563	750	938	1125

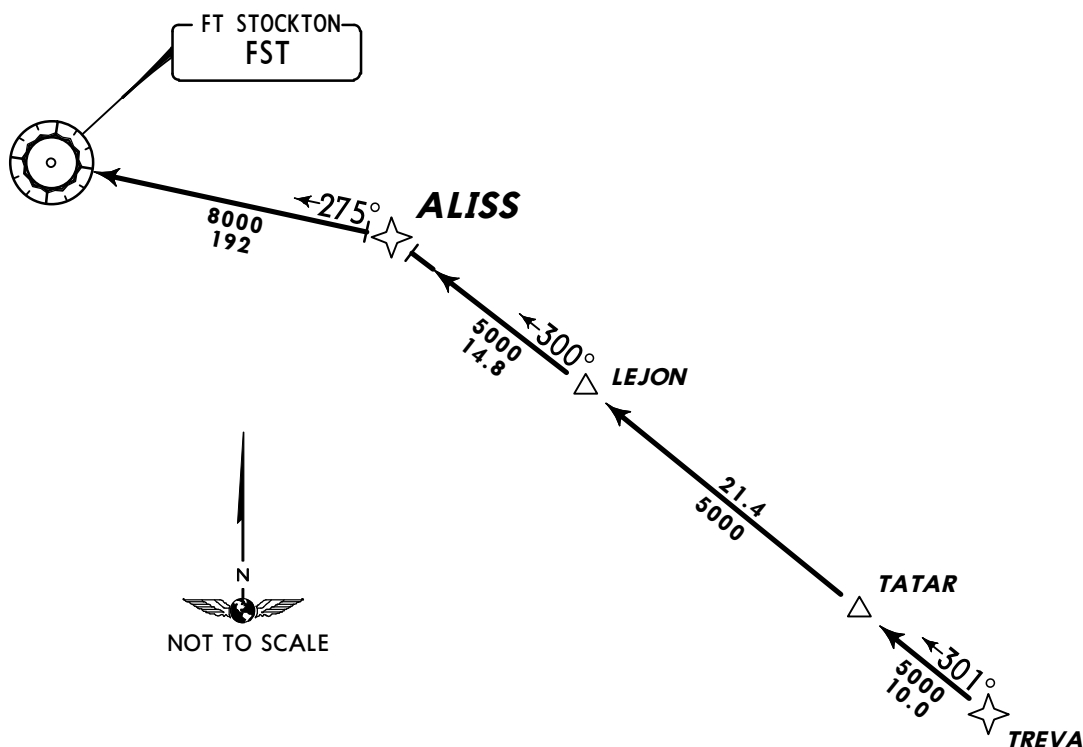
SAN ANTONIO
Departure (R)
125.1
125.7

Apt Elev
See
Graphic

Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. RNAV 1.
3. DME/DME/IRU or GPS required. 4. For non-GPS
equipped aircraft CSI, JCT, RSG, SJT, MAF and
PEQ DMEs must be operational. 5. Also serves



ALISS ONE RNAV DEPARTURE (ALISS1.ALISS)



OBSTACLES

For TAKEOFF OBSTACLE NOTES
see 10-3OB1.

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

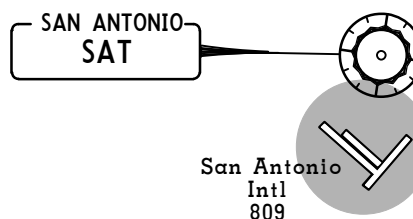
SAN ANTONIO INTL: Rwy 3, 12L/R, 21,
30L/R: ATC climb of 415' per NM to **5000'**.

STINSON MUN: Rwy 14, 32: Standard (or
lower than standard, if authorized).

Rwy 9: Standard (or lower than standard, if
authorized) with minimum climb of 225' per NM
to **1900'**.

Rwy 27: 300-1 3/4 or standard (or lower than
standard, if authorized) with minimum climb of
221' per NM to **900'**, or alternatively, with
standard (or lower than standard, if authorized)
take-off minimums and a normal 200' per NM
climb gradient, take-off must occur no later
than 1700' prior to departure end of runway.

Gnd speed-KT	75	100	150	200	250	300
221' per NM	276	368	553	737	921	1105
225' per NM	281	375	563	750	938	1125
415' per NM	519	692	1038	1383	1729	2075



SAN ANTONIO TEXAS
Stinson Mun 577

Direct distance from San Antonio Intl to:
TREVA 18 NM

Direct distance from AIRPORT SERVED to
TREVA: **1 AIRPORT SERVED**
Stinson Mun **28 NM**

AIRPORT	INITIAL CLIMB	ALTITUDE
SAN ANTONIO INTL	Climb on assigned heading for RADAR vectors to TREVA.	MAINTAIN 5000'
STINSON MUN	Climb on assigned heading and altitude for RADAR vectors to TREVA.	
ROUTING		
From TREVA via depicted route to FST. EXPECT filed altitude 10 minutes after departure.		

MSA SAT VOR

San Antonio
Intl
809

SAN ANTONIO
D 116.8 SAT
(H)
N29 38.6 W098 27.7

SAN ANTONIO TEXAS
Stinson Mun
577

MILET
N28 43.8 W098 47.9

COTULLA
D (L) 115.8 COT
N28 27.7 W099 07.1

THREE RIVERS
D (L) 111.4 THX
N28 30.3 W098 09.0

09.0 126 CC(B)

CORPUS CHRISTI
D
(H) 115.5 CRP
N27 54.2 W097 26.7

LAREDO
D
(H) 117.4 LRD
... ..
N27 28.7 W099 25.1

Rwy 27: 300-1 3/4 or standard (or lower than standard, if authorized) with minimum climb of 221' per NM to **900'** or alternatively, with standard (or lower than standard, if authorized) take-off minimums and a normal 200' per NM climb gradient, take-off must occur no later than 1700' prior to departure end of runway.

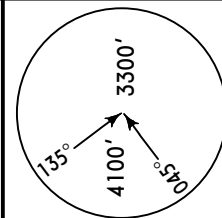
Gnd speed-KT	75	100	150	200	250	300
221' per NM	276	368	553	737	921	1105
225' per NM	281	375	563	750	938	1125

AIRPORT	INITIAL CLIMB	ALTITUDE
SAN ANTONIO INTL	Climb on assigned heading for RADAR vectors to SAT.	MAINTAIN 5000'
STINSON MUN	Climb on assigned heading and altitude for RADAR vectors to SAT.	
ROUTING		
From SAT via transition. EXPECT filed altitude 10 minutes after departure.		

SAN ANTONIO
Departure (R)
124.45

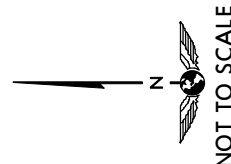
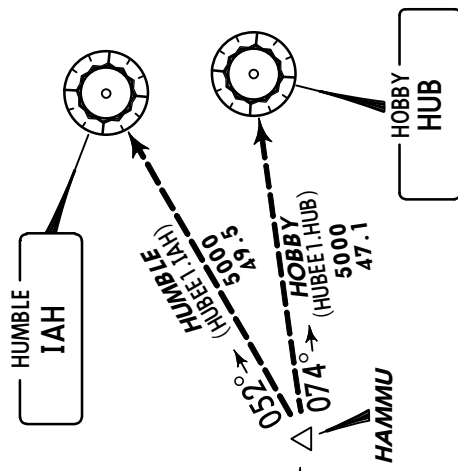
*Apt Elev
See
Graphic*

Trans level: FL180 Trans alt: 18000'
1. DME/DME/IRU or GPS required. 2. RNAV 1.
3. RADAR required. 4. HAMMU and HUMBLE
transitions: For non-GPS equipped aircraft, ELA,
IDU, PSX and TNV DMEs must be operational.
5. HOBBI transition: For non-GPS equipped aircraft,
ELA, IAH, IDU, PSX and TNV DMEs must be
operational. 6. Also serves **①**

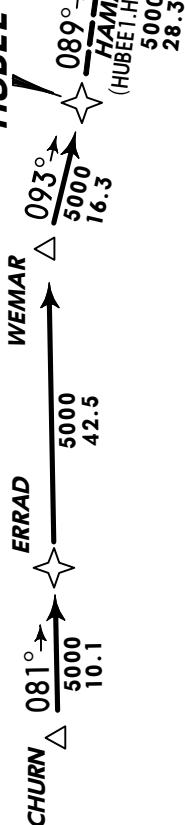


MSA SAT VOR

HUBEE ONE RNAV DEPARTURE (HUBEE1.HUBEE)



HUBEE



This SID requires take-off minimums
(for standard minimums, refer to airport chart):

SAN ANTONIO INTL: Rwy 3, 12L/R, 21, 30L/R:
Standard (or lower than standard, if authorized).

STINSON MUN: Rwy 9: Standard (or lower
than standard, if authorized) with a minimum
climb of 225' per NM to **1900'**.

Rwys 14, 32: Standard (or lower than standard,
if authorized).

Rwy 27: 300-1 3/4 or standard (or lower than
standard, if authorized) with a minimum climb of
221' per NM to **900'**, or alternatively, with
standard (or lower than standard, if authorized)
take-off minimums and a normal 200' per NM climb
gradient, take-off must occur no later than 1700'
prior to departure end of runway.

Gnd speed-KT	75	100	150	200	250	300
221' per NM	276	368	553	737	921	1105
225' per NM	281	375	563	750	938	1125

OBSTACLES

For TAKEOFF OBSTACLE NOTES
see 10-30B1.

Direct distance from San Antonio Intl to:

CHURN: **25 NM**

Direct distance from AIRPORT SERVED to

CHURN: **① AIRPORT SERVED**

Stinson Mun **30 NM**

AIRPORT	INITIAL CLIMB	ALTITUDE
SAN ANTONIO INTL	Climb on assigned heading for RADAR vectors to CHURN, then via depicted route to HUBEE.	MAINTAIN 5000'
STINSON MUN	Climb on assigned heading and altitude for RADAR vectors to CHURN, then via depicted route to HUBEE.	
ROUTING		
From HUBEE via transition. EXPECT filed altitude 10 minutes after departure.		

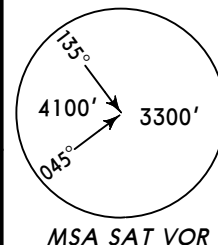
SAN ANTONIO
Departure (R)

125.1
125.7

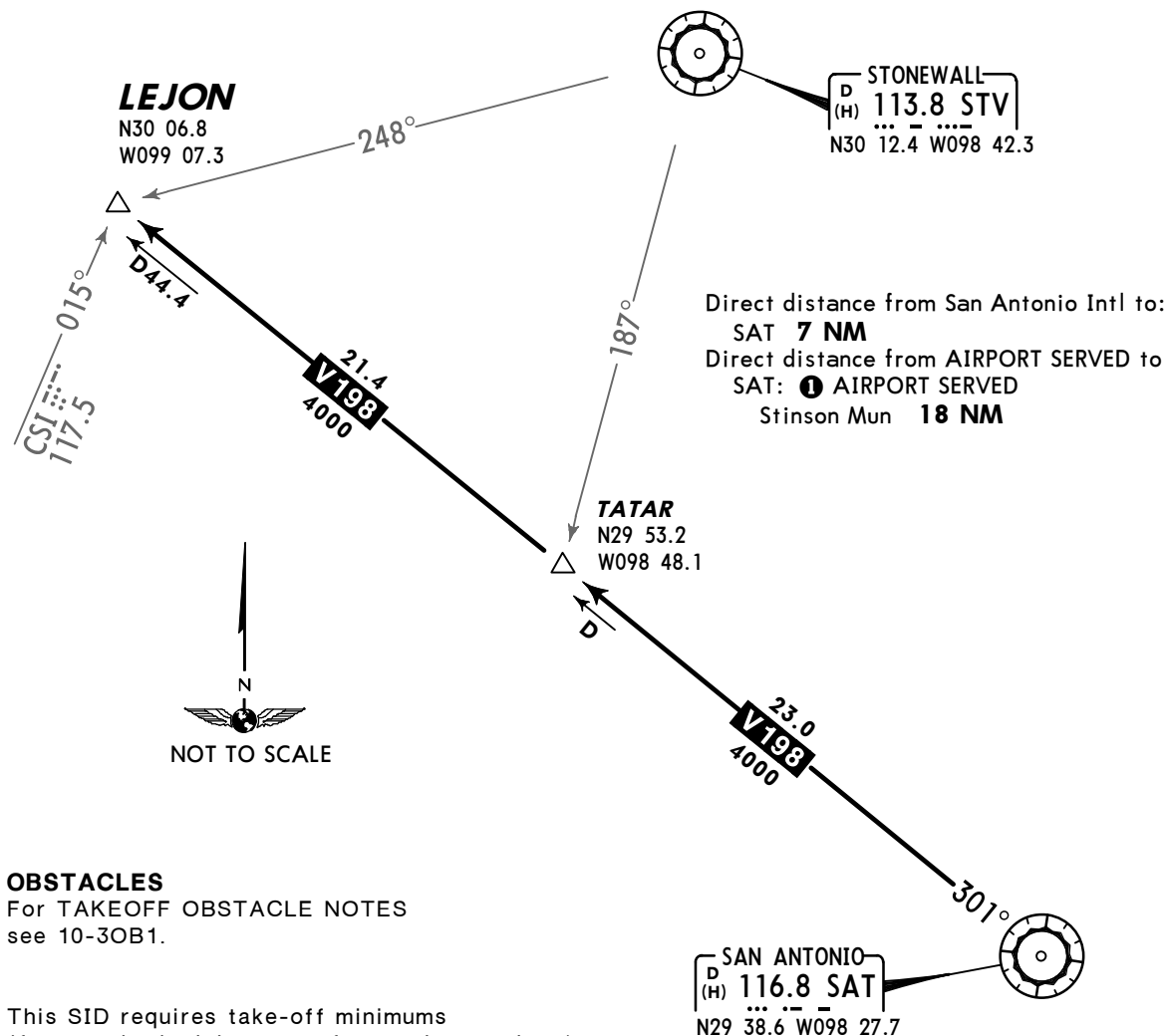
Apt Elev
See
Graphic

Trans level: FL180
1. RADAR required.
2. Also serves **1**

Trans alt: 18000'



LEJON ONE DEPARTURE (LEJON1.LEJON)



OBSTACLES

For TAKEOFF OBSTACLE NOTES
see 10-3OB1.

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

SAN ANTONIO INTL: Rwy 3, 12L/R, 21,
30L/R: Standard (or lower than standard, if
authorized).

STINSON MUN: Rwy 14, 32: Standard (or
lower than standard, if authorized).
Rwy 9: Standard (or lower than standard, if
authorized) with a minimum climb of 225' per
NM to **1900'**.

Rwy 27: 300-1 3/4 or standard (or lower than
standard, if authorized) with a minimum climb
of 221' per NM to **900'**, or alternatively, with
standard (or lower than standard, if authorized)
take-off minimums and a normal 200' per NM
climb gradient, take-off must occur no later
than 1700' prior to departure end of runway.

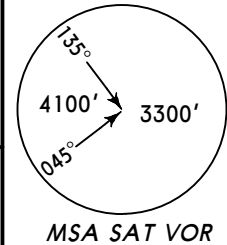
Gnd speed-KT	75	100	150	200	250	300
221' per NM	276	368	553	737	921	1105
225' per NM	281	375	563	750	938	1125

AIRPORT	INITIAL CLIMB	ALTITUDE
SAN ANTONIO INTL	Climb on assigned heading for RADAR vectors to SAT.	MAINTAIN 5000'
STINSON MUN	Climb on assigned heading and altitude for RADAR vectors to SAT.	
ROUTING		
From SAT via depicted route to LEJON. EXPECT filed altitude 10 minutes after departure.		

SAN ANTONIO
Departure (R)
125.1
125.7

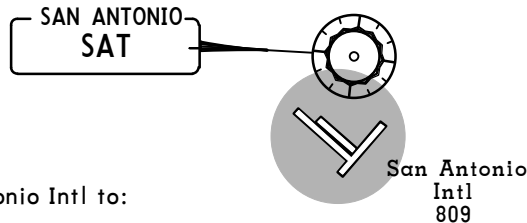
Apt Elev
See
Graphic

Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. RNAV 1.
3. DME/DME/IRU or GPS required. 4. For non-GPS
equipped aircraft SAT, THX, and COT DMEs must
be operational. 5. Also serves ①

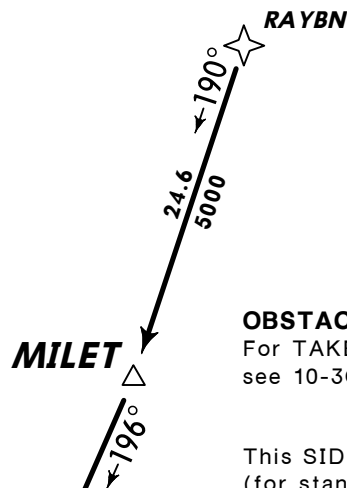


MILET ONE RNAV DEPARTURE (MILET1.MILET)

Direct distance from San Antonio Intl to:
RAYBN **27 NM**
Direct distance from AIRPORT SERVED to
RAYBN: ① AIRPORT SERVED
Stinson Mun **16 NM**




SAN ANTONIO TEXAS
Stinson Mun
577



OBSTACLES

For TAKEOFF OBSTACLE NOTES
see 10-3OB1.

This SID requires take-off minimums
(for standard minimums, refer to airport chart):
SAN ANTONIO INTL: Rwys 3, 12L/R, 21,
30L/R: Standard (or lower than standard, if
authorized).

STINSON MUN: Rwys 14, 32: Standard (or
lower than standard, if authorized).

Rwy 9: Standard (or lower than standard, if
authorized) with a minimum climb of 225' per
NM to **1900'**.

Rwy 27: 300-1 3/4 or standard (or lower than
standard, if authorized) with a minimum climb
of 221' per NM to **900'**, or alternatively, with
standard (or lower than standard, if authorized)
take-off minimums and a normal 200' per NM
climb gradient, take-off must occur no later
than 1700' prior to departure end of runway.

Rwys 9, 14, 27, 32: ATC climb of 373' per NM
to **5000'**.

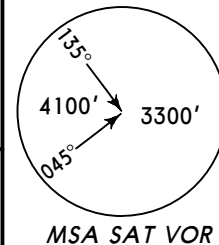
Gnd speed-KT	75	100	150	200	250	300
221' per NM	276	368	553	737	921	1105
225' per NM	281	375	563	750	938	1125
373' per NM	466	622	933	1243	1554	1865

AIRPORT	INITIAL CLIMB	ALTITUDE
SAN ANTONIO INTL	Climb on assigned heading for RADAR vectors to RAYBN.	MAINTAIN 5000'
STINSON MUN	Climb on assigned heading and altitude for RADAR vectors to RAYBN.	
ROUTING		
From RAYBN via depicted route to LRD. EXPECT filed altitude 10 minutes after departure.		

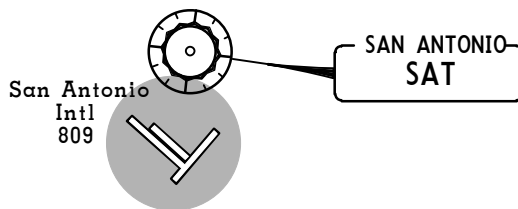
SAN ANTONIO
Departure (R)
125.1
125.7

*Apt Elev
See
Graphic*

Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. RNAV 1.
3. DME/DME/IRU or GPS required. 4. For non-GPS
equipped aircraft COT, THX and VCT DMEs must
be operational. 5. Also serves **1**



THREE RIVERS ONE RNAV DEPARTURE (THX1.THX)



SAN ANTONIO TEXAS
Stinson Mun
577

Direct distance from San Antonio Intl to:
YENNS **29 NM**
Direct distance from AIRPORT SERVED to
YENNS: **1** AIRPORT SERVED
Stinson Mun **18 NM**



OBSTACLES

For TAKEOFF OBSTACLE NOTES
see 10-3OB1.

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

SAN ANTONIO INTL: Rwy 3, 12L/R, 21,
30L/R: Standard (or lower than standard, if
authorized).

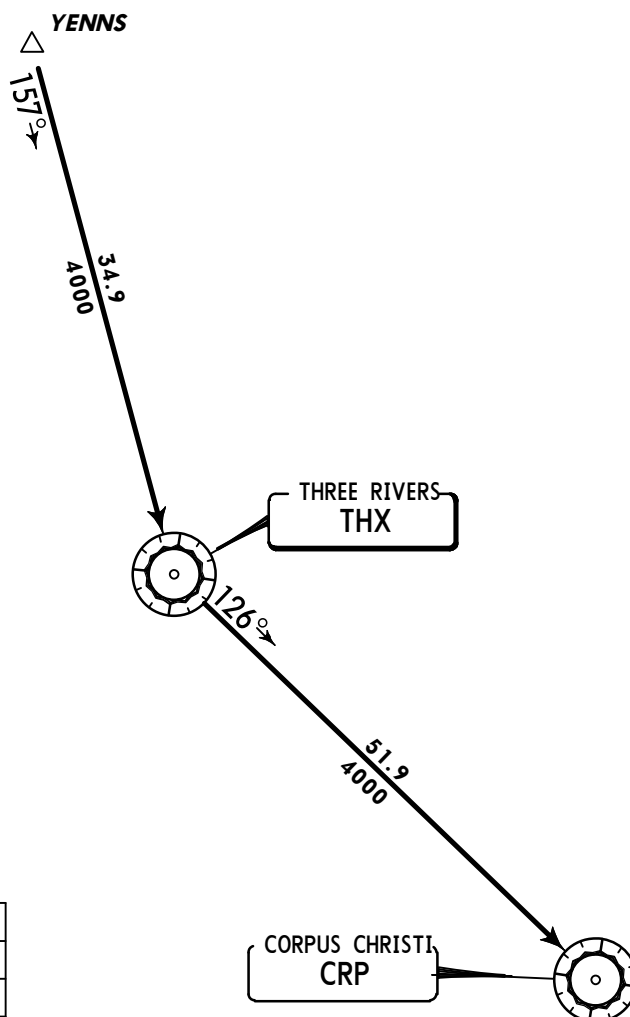
STINSON MUN: Rwy 14, 32: Standard (or
lower than standard, if authorized).

Rwy 9: Standard (or lower than standard, if
authorized) with minimum climb of 225' per NM
to **1900'**.

Rwy 27: 300-1 3/4 or standard (or lower than
standard, if authorized) with minimum climb of
221' per NM to **900'**, or alternatively, with
standard (or lower than standard, if authorized)
take-off minimums and a normal 200' per NM
climb gradient, take-off must occur no later
than 1700' prior to departure end of runway.

Rwys 9, 14, 27, 32: ATC climb of 310' per NM
to **5000'**.

Gnd speed-KT	75	100	150	200	250	300
221' per NM	276	368	553	737	921	1105
225' per NM	281	375	563	750	938	1125
310' per NM	388	517	775	1033	1292	1550



AIRPORT	INITIAL CLIMB	ALTITUDE
SAN ANTONIO INTL	Climb on assigned heading for RADAR vectors to YENNS.	MAINTAIN 5000'
STINSON MUN	Climb on assigned heading and altitude for RADAR vectors to YENNS.	
ROUTING		
From YENNS via depicted route to CRP. EXPECT filed altitude 10 minutes after departure.		

TAKEOFF OBSTACLE NOTES**SAN ANTONIO INTL**

- RWY 3:
TREE 734' FROM DER, 695' LEFT OF CENTERLINE, 31' AGL/793' MSL.
- RWY 12R:
ANTENNA ON TOWER 1034' FROM DER, 723' RIGHT OF CENTERLINE, 42' AGL/820' MSL. BUILDING AND VENT ON BUILDING BEGINNING 3801' FROM DER, 1488' RIGHT OF CENTERLINE, 117' AGL/881' MSL.
- RWY 21:
ANTENNA ON HANGAR AND FLAGPOLE BEGINNING 1198' FROM DER, 700' RIGHT OF CENTERLINE, UP TO 39' AGL/825' MSL. SIGN 2713' FROM DER, 1034' RIGHT OF CENTERLINE, 71' AGL/857' MSL.
- RWY 30L:
TOWER AND POLES BEGINNING 1931' FROM DER, 834' LEFT OF CENTERLINE, UP TO 42' AGL/892' MSL. SIGN 2435' FROM DER, 1042' RIGHT OF CENTERLINE, 54' AGL/873' MSL.
- RWY 30R:
ROD ON OBSTRUCTION LIGHT 1261' FROM DER, 591' LEFT OF CENTERLINE, 57' AGL / 854' MSL.

STINSON MUN

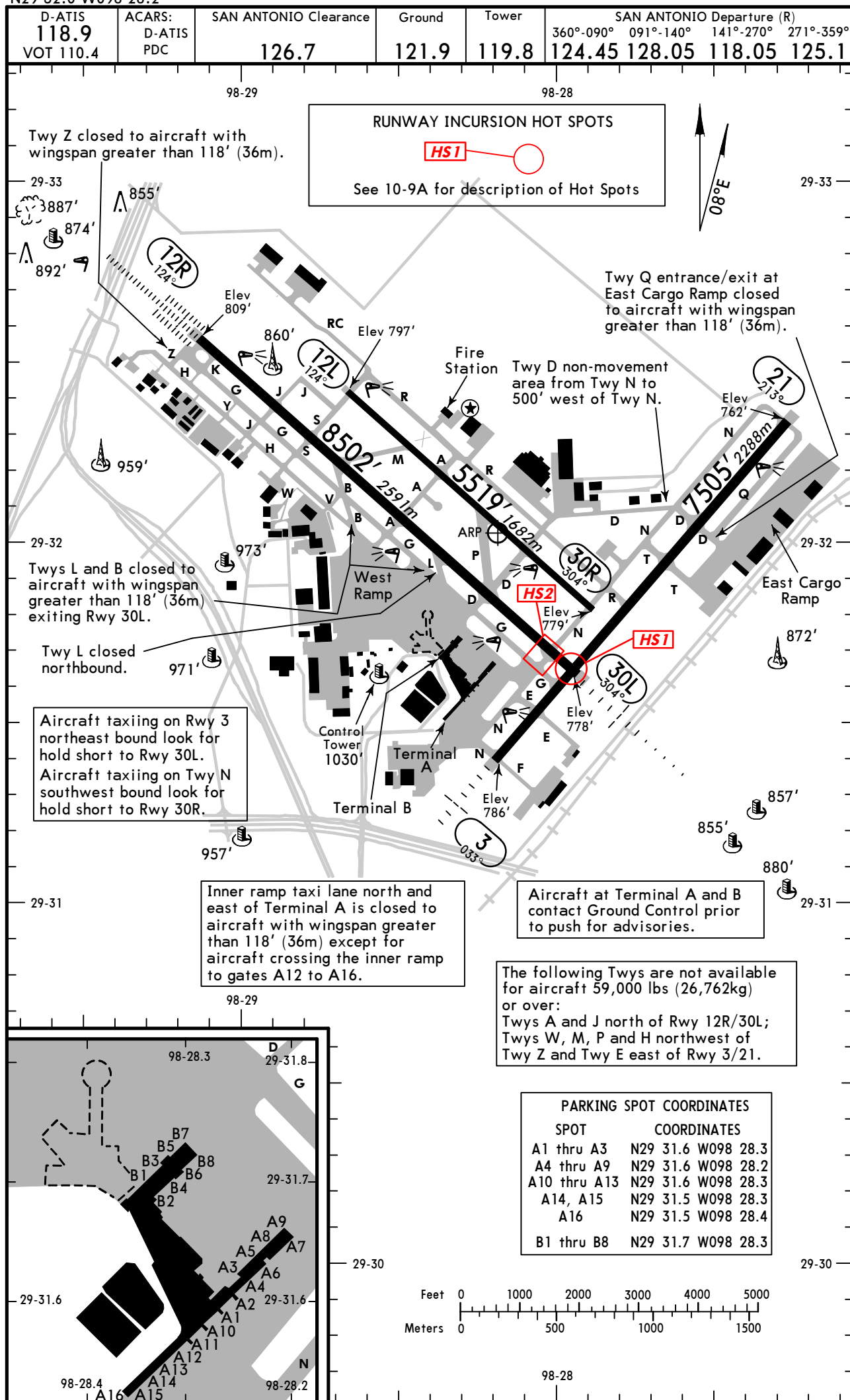
- RWY 9:
VEHICLE ON ROAD 285' FROM DER, 380' LEFT OF CENTERLINE, 15' AGL/584' MSL. TREES BEGINNING 1653' FROM DER, 435' RIGHT OF CENTERLINE, UP TO 70' AGL/629' MSL.
- RWY 14:
VEHICLE ON ROAD 114' FROM DER, ON CENTERLINE EXTENDING 373' LEFT OF CENTERLINE, UP TO 15' AGL/564' MSL. TREES BEGINNING 72' FROM DER, 79' RIGHT OF CENTERLINE, UP TO 70' AGL/607' MSL. TREES BEGINNING 232' FROM DER, 54' LEFT OF CENTERLINE, UP TO 70' AGL/618' MSL. TRANSMISSION LINE TOWER 4205' FROM DER, 133' RIGHT OF CENTERLINE, 119' AGL/663' MSL.
- RWY 27:
FENCE 41' FROM DER, 30' RIGHT OF CENTERLINE, 8' AGL/584' MSL. VEHICLE ON ROAD 108' FROM DER, 202' RIGHT OF CENTERLINE, 15' AGL/584' MSL. VEHICLE ON ROAD 123' FROM DER, 113' RIGHT OF CENTERLINE, 15' AGL/596' MSL. TREES AND POLES BEGINNING 229' FROM DER, 117' RIGHT OF CENTERLINE, UP TO 70' AGL/645' MSL. TREES AND POLES BEGINNING 599' FROM DER, 6' LEFT OF CENTERLINE, UP TO 70' AGL/634' MSL. TANK 1.32 NM FROM DER, 1338' RIGHT OF CENTERLINE, 179' AGL/799' MSL. BUILDING 1422' FROM DER, 432' RIGHT OF CENTERLINE, 40' AGL/627' MSL. BUILDING 2133' FROM DER, 36' LEFT OF CENTERLINE, 55' AGL/635' MSL.
- RWY 32:
FENCE 17' FROM DER, 80' LEFT OF CENTERLINE, 8' AGL/578' MSL. VEHICLE ON ROAD 54' FROM DER, 199' LEFT OF CENTERLINE, 15' AGL/586' MSL. TREES BEGINNING 164' FROM DER, 125' RIGHT OF CENTERLINE, UP TO 70' AGL/639' MSL. TREES AND POLES BEGINNING 43' FROM DER, 41' LEFT OF CENTERLINE, UP TO 75' AGL/668' MSL.

KSAT/SAT
Apt Elev 809'
N29 32.0 W098 28.2

27 MAY 11

10-9

SAN ANTONIO, TEXAS
SAN ANTONIO INTL



GENERAL

Birds in vicinity of airport.
 Glider/soaring operations approximately 17 miles northwest of airport during VFR.
 Weather Systems Processor provided by tower.
 Terminal Gate A1 use only with prior permission.
 Rwy 12L not available for air carrier operations.
 C130 and C141 aircraft shall park on west ramp to clear customs.
 Aircraft transitioning to or from the inner ramp north of Terminal B be alert for vehicle lane.
 A barricaded pavement elevation change exists along eastern side of the west ramp.
 General Aviation aircraft clearing U.S. Customs at Terminal A be alert for personnel and equipment while taxiing to and from the assigned customs clearance location.
 Engine run-up permitted between 0600-2300.
 Ground run-up enclosure available 24 hrs.
 Prior permission required from airport operations for aircraft powering back from terminal gates.

ADDITIONAL RUNWAY INFORMATION

RWY				USABLE LENGTHS		TAKE-OFF	WIDTH
				Threshold	Glide Slope		
3 ① 21	HIRL CL MALS PAPI-L (angle 3.0°) RVR				6552' 1997m		150' 46m
	HIRL CL REIL PAPI-L (angle 3.0°)						
① Grooved.							
12R ② 30L	HIRL CL ALSF-II TDZ PAPI-L (angle 3.0°) RVR				7307' 2227m		150' 46m
	HIRL CL MALSR PAPI-L (angle 3.0°) RVR				7447' 2270m		
② Grooved.							
12L 30R	MIRL REIL PAPI-L (angle 3.0°)						100' 30m
	MIRL REIL PAPI-L						

RUNWAY INCURSION HOT SPOTS**HS1**

For information only, not to be construed as ATC instructions.

HS1

Rwy 3 at Rwy 30L. Aircraft taxiing on Rwy 3 sometimes fail to hold short of Rwy 30L.

HS2

Twys G and N in close proximity of Rwy 30L. Aircraft taxiing northbound on Twy N sometimes fail to make the right turn onto Twy G and enter Rwy 30L without approval.

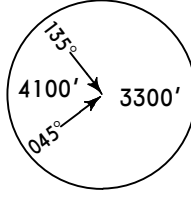
TAKE-OFF

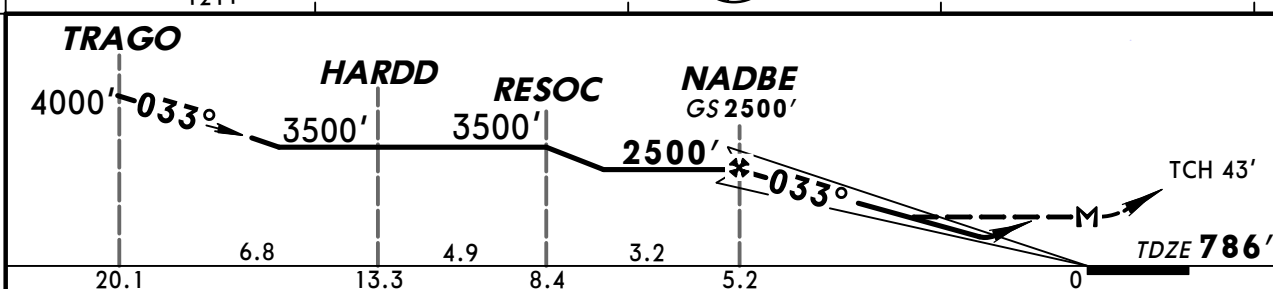
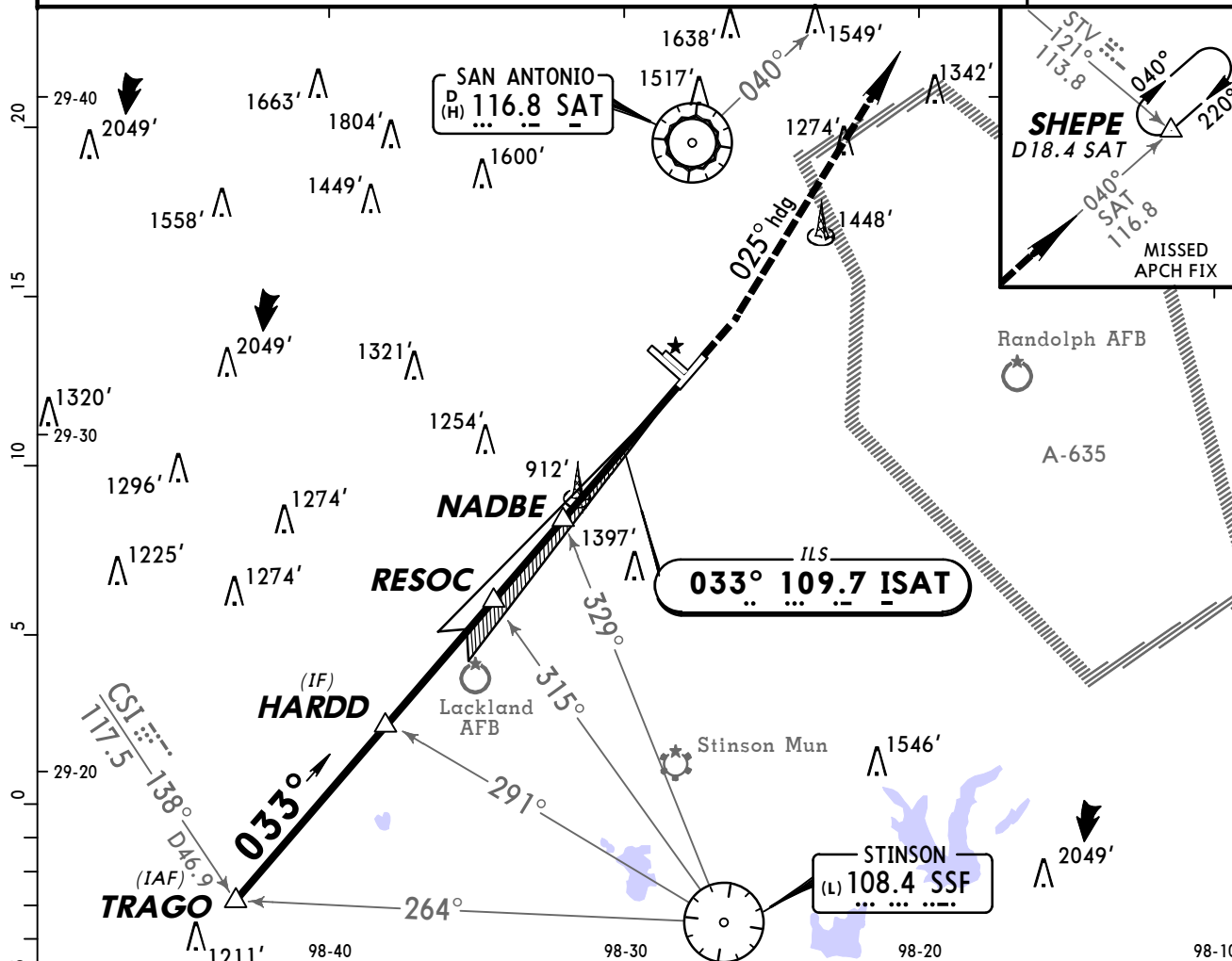
Rwys 12R, 30L					Rwys 3, 12L, 21, 30R		
2 operating RVRs are required. All operating RVRs are controlling.		Adequate Vis Ref	STD		Adequate Vis Ref	STD	
			3 & 4 Eng	1 & 2 Eng		3 & 4 Eng	1 & 2 Eng
CL & HIRL	CL, or RCLM & HIRL						
TDZ RVR 5	TDZ RVR 10	RVR 16 or 1/4	RVR 24 or 1/2	RVR 50 or 1	RVR 16 or 1/4	RVR 24 or 1/2	RVR 50 or 1
Mid RVR 5	Mid RVR 10						
Rollout RVR 5	Rollout RVR 10						

FOR FILING AS ALTERNATE

ILS Rwy 3 ILS Rwy 30L		ILS Rwy 12R	LOC Rwy 3 LOC Rwy 12R LOC Rwy 30L RNAV (GPS) Y Rwy 3 RNAV (GPS) Y Rwy 21	RNAV (GPS) Rwy 30L RNAV (RNP) Z Rwy 3 RNAV (RNP) Z Rwy 12R RNAV (RNP) Z Rwy 21 RNAV (RNP) Z Rwy 30L	RNAV (GPS) Y Rwy 12R
A	600-2	700-2	800-2		900-2
B					900-2½
C					
D					

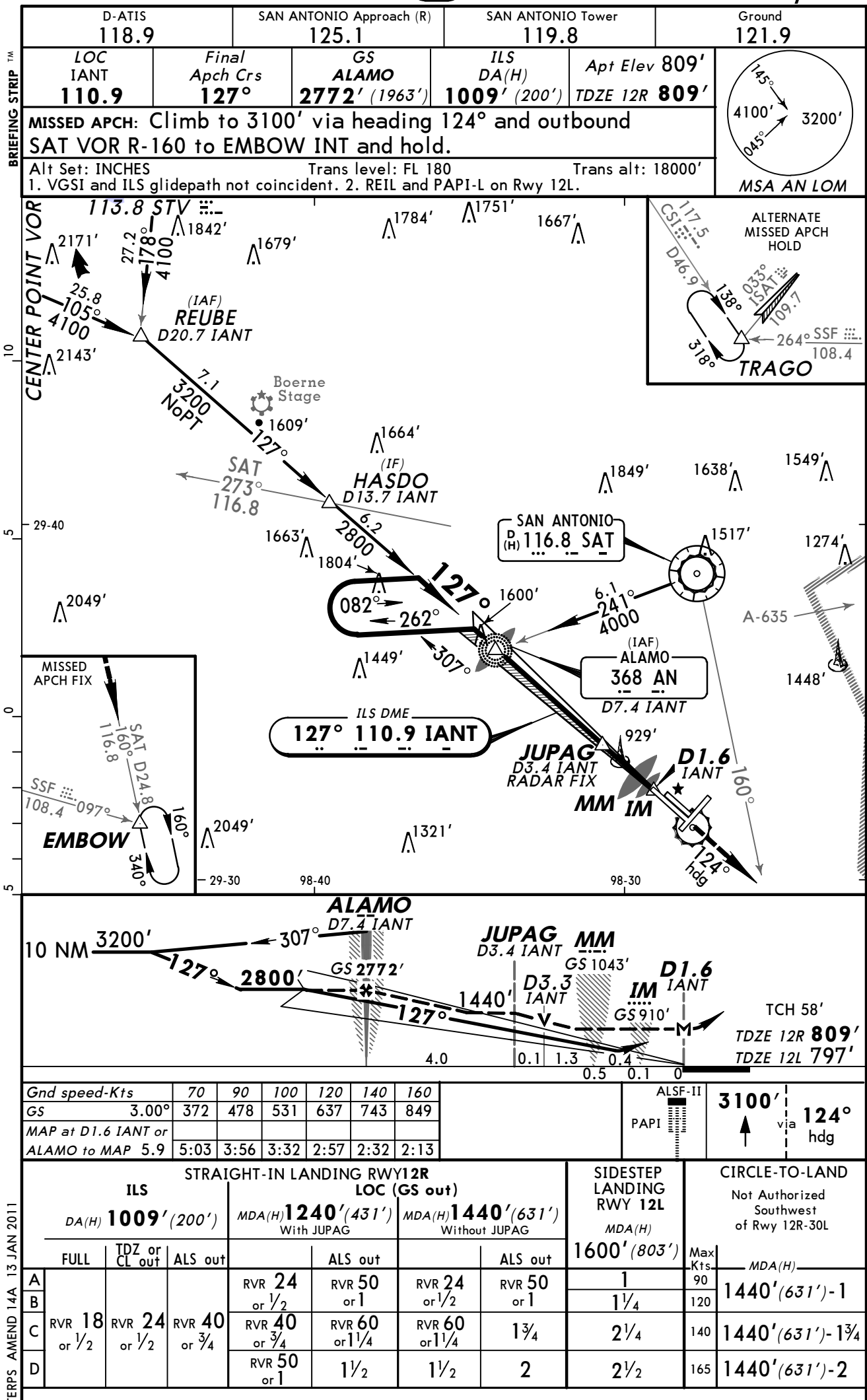
BRIEFING STRIP™

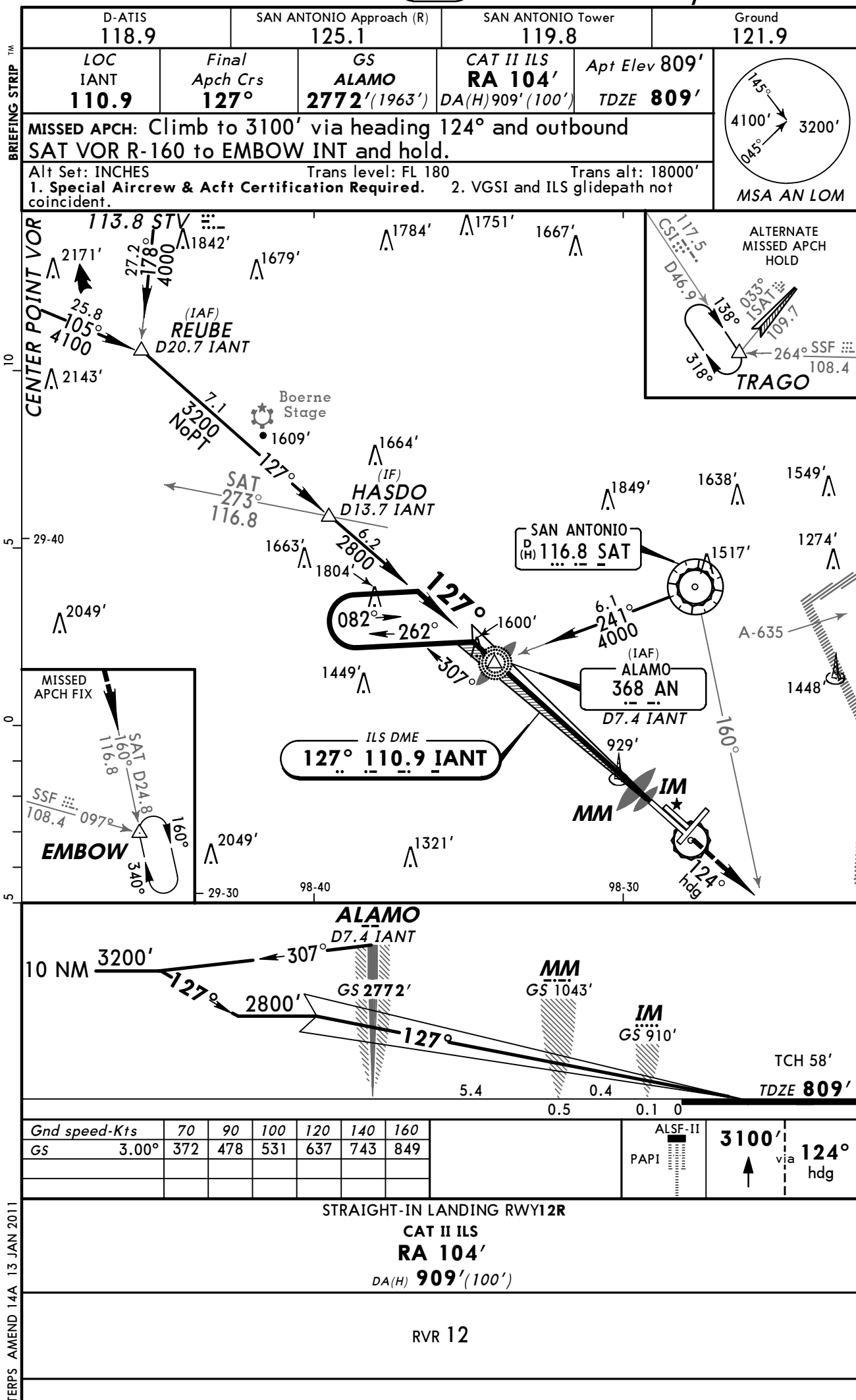
D-ATIS 118.9	SAN ANTONIO Approach (R) 125.1	SAN ANTONIO Tower 119.8	Ground 121.9
LOC ISAT 109.7	Final Apch Crs 033°	GS NADBE 2500' (1714')	ILS DA(H) 986' (200')
Apt Elev 809' TDZE 786'			
MISSED APCH: Climb to 1700' then climbing LEFT turn to 3500' via 025° heading then outbound via SAT VOR R-040 to SHEPE INT/D18.4 SAT and hold.			
Alt Set: INCHES		Trans level: FL 180	Trans alt: 18000'
1. VGSI and ILS glidepath not coincident.			MSA SAT VOR



Gnd speed-Kts	70	90	100	120	140	160				
GS	3.00°	377	484	538	646	753	861			
NADBE to MAP	5.2	4:27	3:28	3:07	2:36	2:14	1:57			

STRAIGHT-IN LANDING RWY3				CIRCLE-TO-LAND	
ILS		LOC (GS out)		Not Authorized Southwest of Rwy 12R-30L	
DA(H) 986' (200')		MDA(H) 1180' (394')		MDA(H)	
FULL	ALS out	ALS out		Max Kts	
A				90	1300' (491')-1
B				120	
C				140	1320' (511')-1 1/2
D				165	1380' (571')-2





BRIEFING STRIP™

TERPS AMEND 10A 13 JAN 2011PS AMEND 10A 13

CHANGES: Procedure.

D-ATIS 118.9	SAN ANTONIO Approach (R) 125.1	SAN ANTONIO Tower 119.8	Ground 121.9
WAAS Ch 77613 W-03A	Final Apch Crs 033°	Minimum Alt NADBE 2500' (1714')	LPV DA(H) 986' (200')
Apt Elev 809'			
TDZE 786'			
TAA 30 NM IAF			

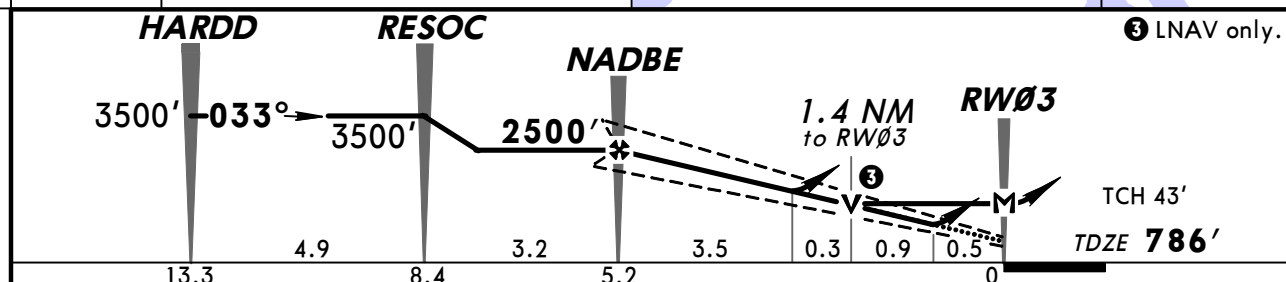
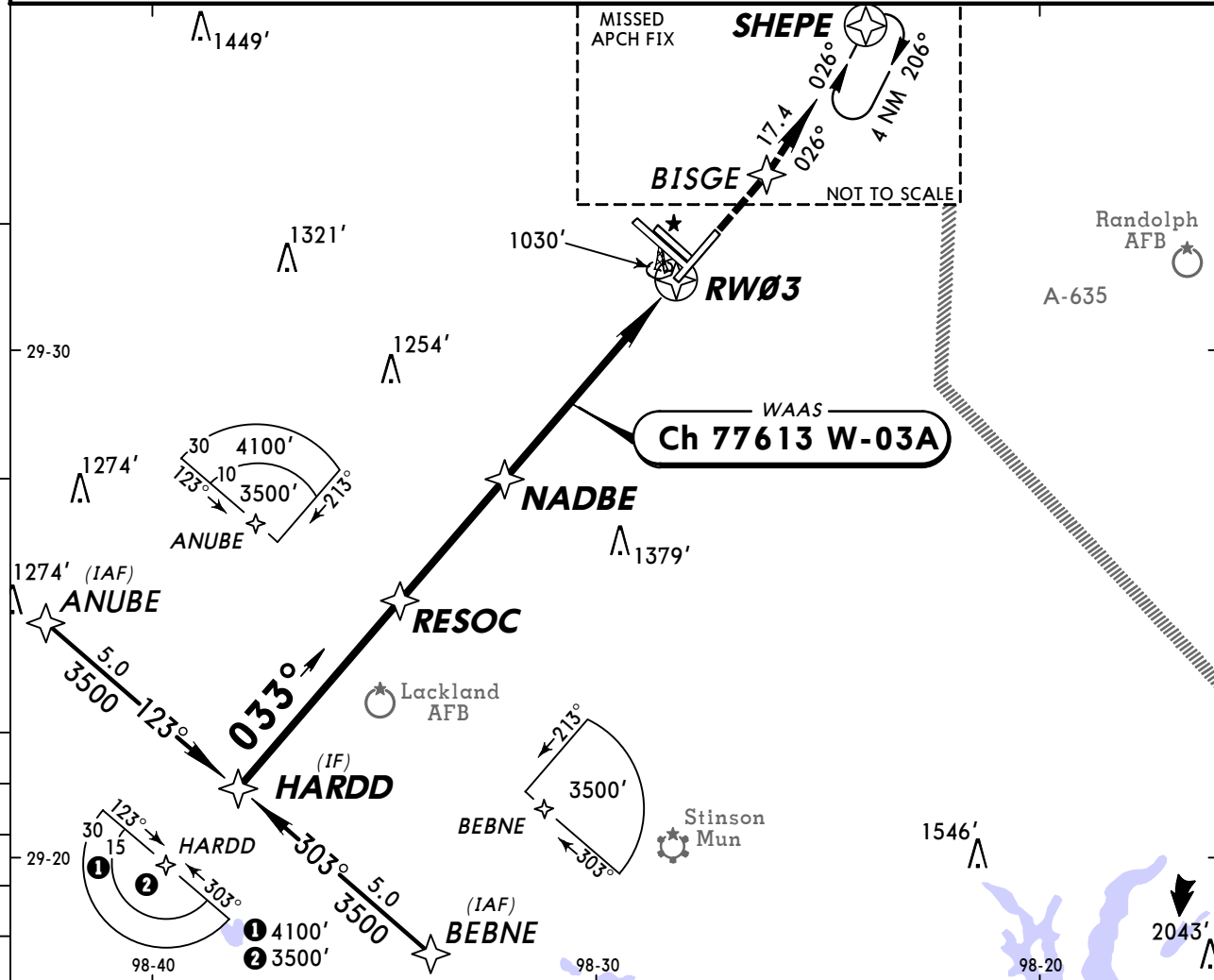
MISSED APCH: Climb to 3500' direct BISGE and on track 026° to SHEPE and hold.

Alt Set: INCHES

Trans level: FL 180

Trans alt: 18000'

1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 2. DME/DME RNP-0.30 not authorized. 3. VGSI and RNAV glidepath not coincident.

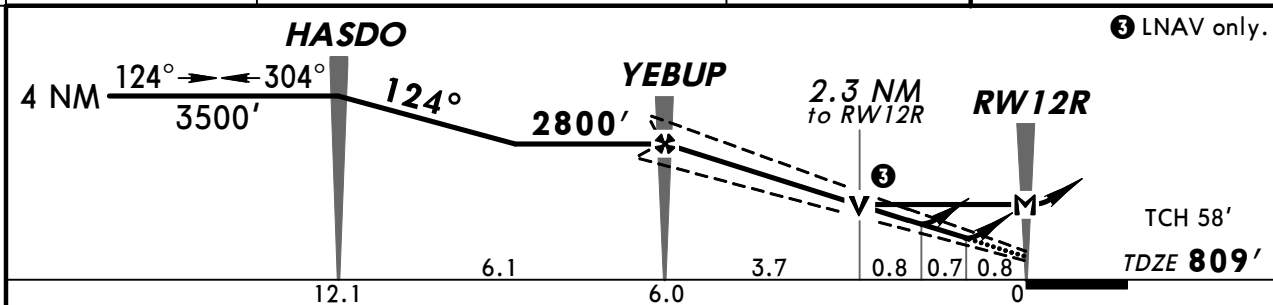
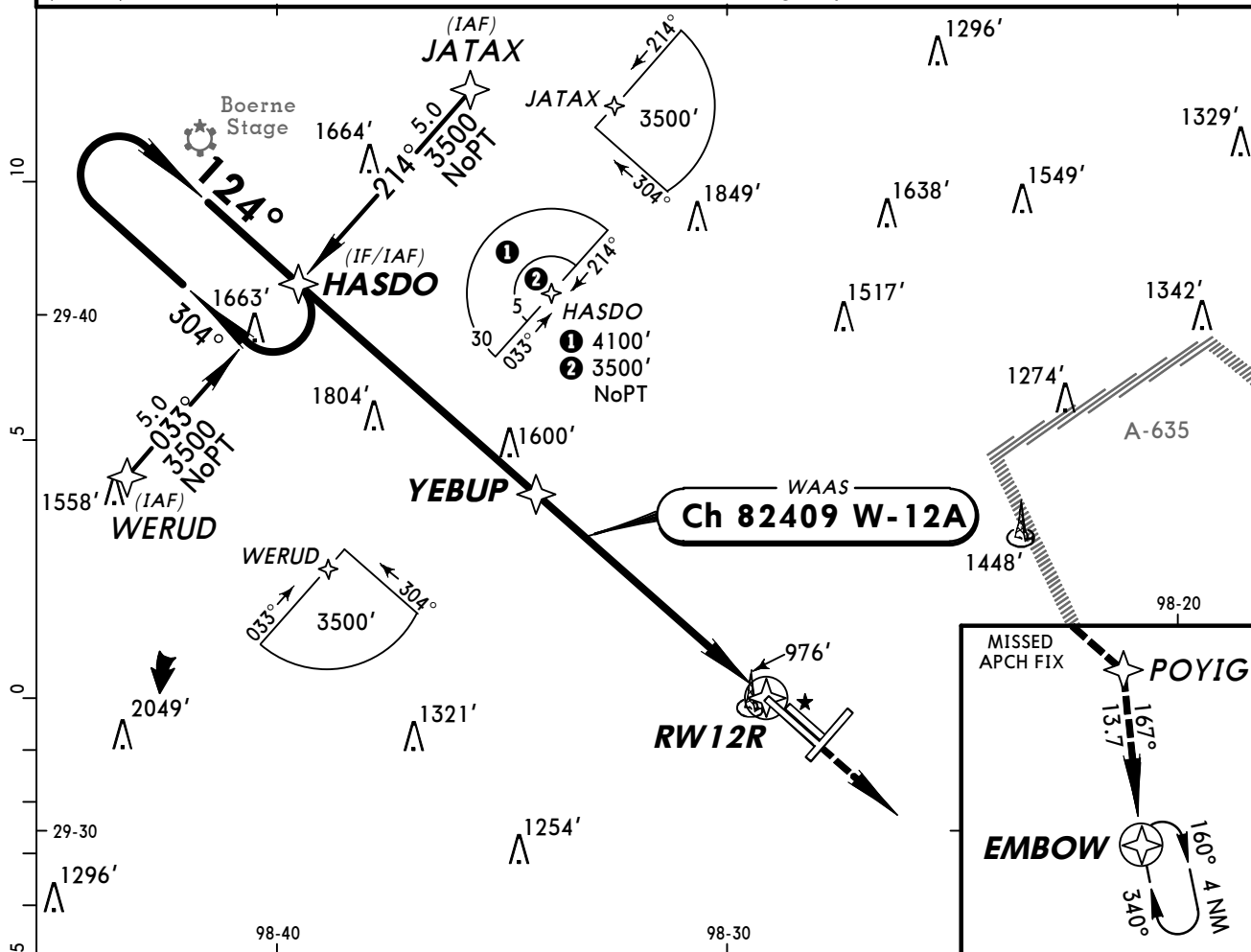


Grnd speed-Kts	70	90	100	120	140	160	MALS	3500'	3500'	BISGE
Glide Path Angle	3.00°	372	478	531	637	743	PAPI	3500'	3500'	BISGE
MAP at RW03										

STRAIGHT-IN LANDING RWY 3				CIRCLE-TO-LAND			
LPV		LNAV/VNAV		LNAV		Not Authorized Southwest of Rwy 12R-30L	
DA(H) 986' (200')		DA(H) 1360' (574')		MDA(H) 1280' (494')		MDA(H)	
ALS out		ALS out		ALS out		Max Kts	
RVR 40 or 3/4		2		RVR 40 or 3/4 RVR 50 or 1		90	
				RVR 60 or 1 1/4		120	
				1 1/2		140	
						165	

BRIEFING STRIP

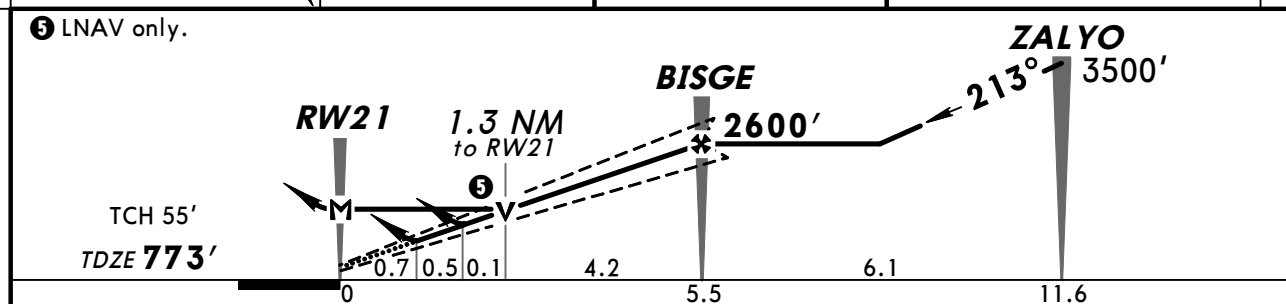
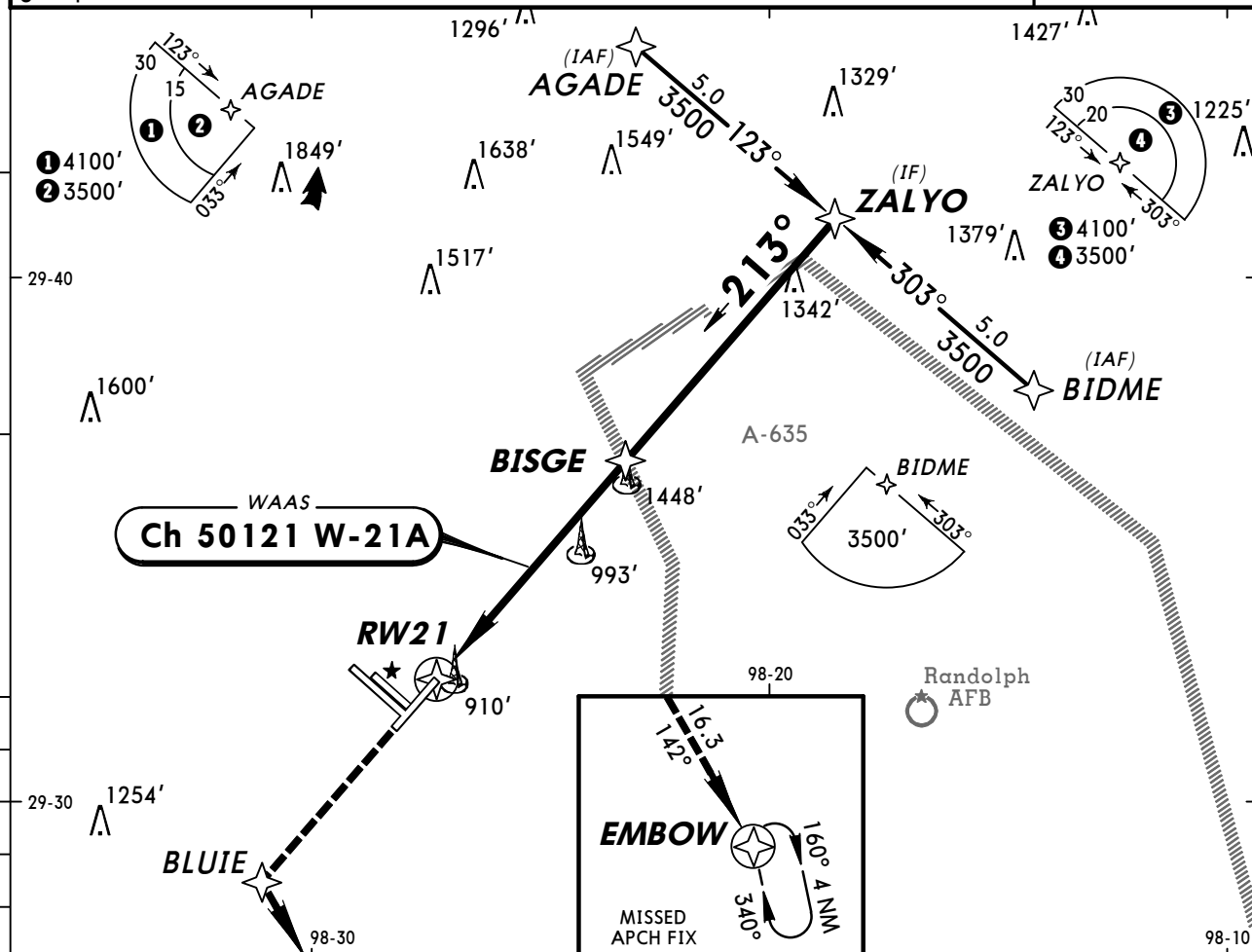
D-ATIS 118.9		SAN ANTONIO Approach (R) 125.1		SAN ANTONIO Tower 119.8		Ground 121.9	
WAAS Ch 82409 W-12A		Final Apch Crs 124°	Minimum Alt YEBUP 2800' (1991')	LPV DA(H) 1107' (298')	Apt Elev 809' TDZE 809'	TAA 30 NM IAF	
MISSED APCH: Climb to 3100' direct POYIG and RIGHT turn on track 167° to EMBOW and hold.							
Alt Set: INCHES		Trans level: FL 180				Trans alt: 18000'	
1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 2. DME/DME RNP-0.30 not authorized. 3. VGSI and RNAV glidepath not coincident.							



Gnd speed-Kts	70	90	100	120	140	160		ALSF-II	3100'		POYIG
Glide Path Angle 3.00°	372	478	531	637	743	849		PAPI			
MAP at RW12R											

STRAIGHT-IN LANDING RWY 12R				CIRCLE-TO-LAND Not Authorized Southwest of Rwy 12R-30L			
LPV DA(H) 1107' (298')		LNAV/VNAV DA(H) 1340' (531')		LNAV MDA(H) 1620' (811')		Max Kts	
ALS out		ALS out		ALS out		MDA(H)	
A				RVR 24 or 1/2	RVR 50 or 1	90	1620' (811')-1
B				RVR 40 or 3/4	RVR 60 or 1/4	120	1620' (811')-1 1/4
C	RVR 24 or 1/2	RVR 50 or 1	RVR 60 or 1/4	2	2 1/2	140	1620' (811')-2 1/2
D				2 1/4	2 3/4	165	1620' (811')-2 3/4

D-ATIS 118.9	SAN ANTONIO Approach (R) 125.1	SAN ANTONIO Tower 119.8	Ground 121.9
WAAS Ch 50121 W-21A	Final Apch Crs 213°	Minimum Alt BISGE 2600' (1827')	LPV DA(H) 1030' (257')
Apt Elev 809' TDZE 773'			
MISSED APCH: Climb to 3100' direct BLUIE and on track 142° to EMBOW and hold.			
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 2. DME/DME RNP-0.30 not authorized. 3. VGSI and RNAV glidepath not coincident.			
TAA 30 NM IAF			

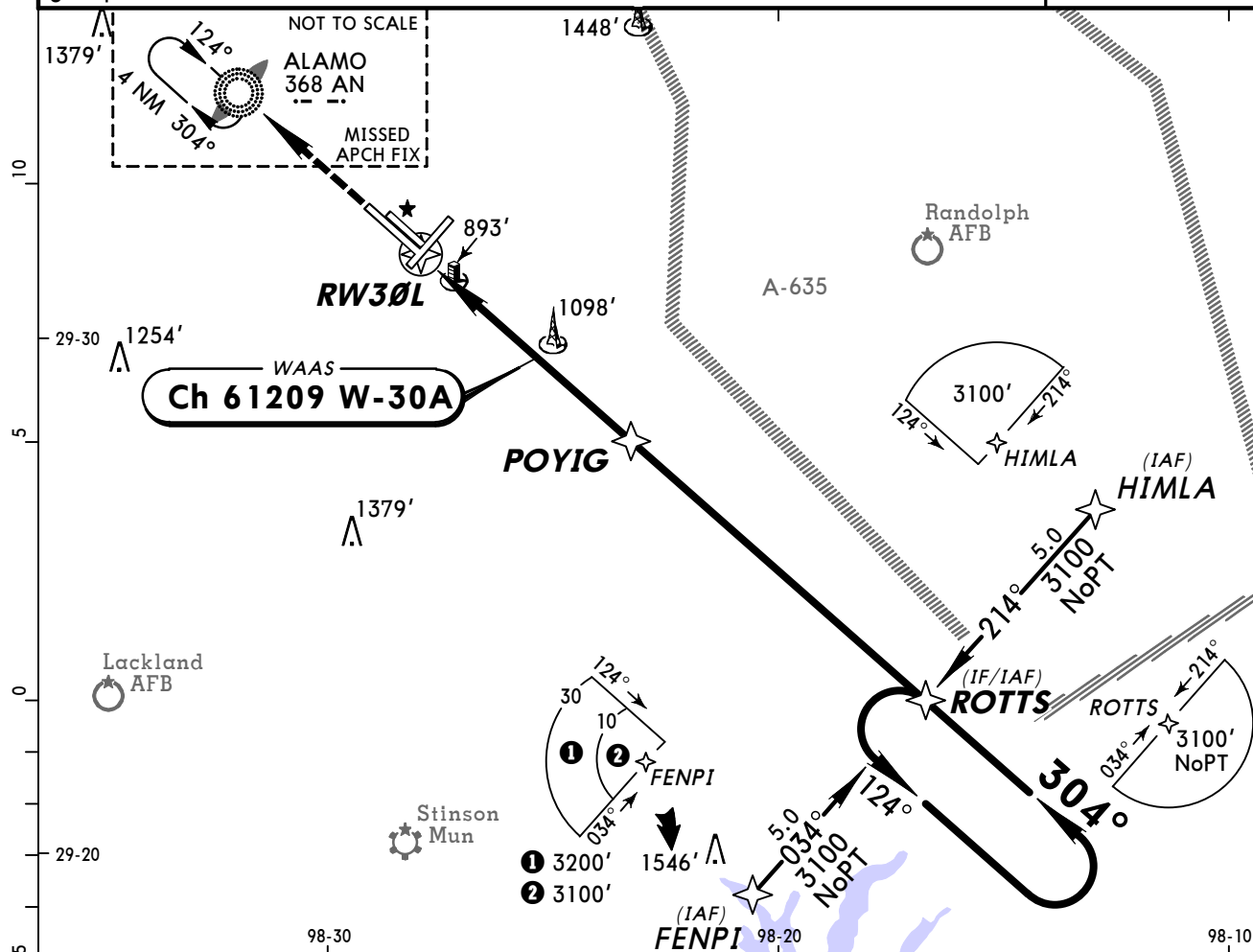


Gnd speed-Kts	70	90	100	120	140	160		REIL	3100'		BLUIE
Glide Path Angle 3.00°	372	478	531	637	743	849		PAPI-L			
MAP at RW21											

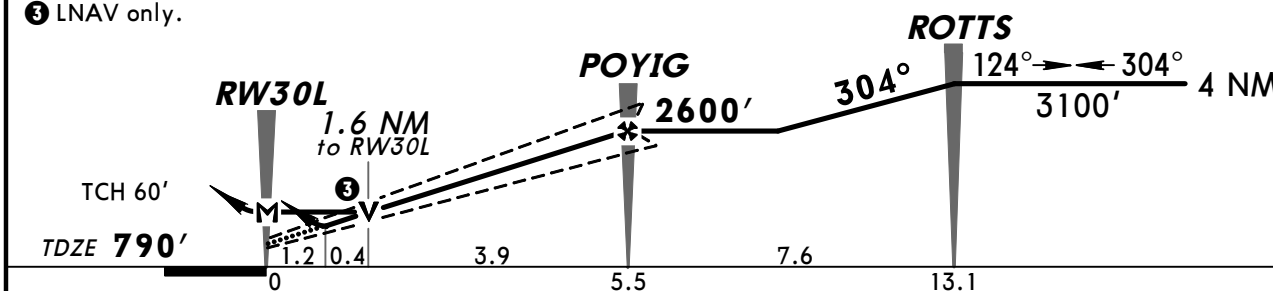
STRAIGHT-IN LANDING RWY 21				CIRCLE-TO-LAND Not Authorized Southwest of Rwy 12R-30L	
LPV DA(H) 1030' (257')	LNAV/VNAV DA(H) 1218' (445')	LNAV MDA(H) 1260' (487')		Max Kts	MDA(H)
1	1½	1	1	90	1300' (491') - 1
				120	
		1¼	1¼	140	1320' (511') - 1½
				165	1380' (571') - 2

BRIEFING STRIP

D-ATIS 118.9		SAN ANTONIO Approach (R) 125.1		SAN ANTONIO Tower 119.8		Ground 121.9			
WAAS Ch 61209 W-30A		Final Apch Crs 304°		Minimum Alt POYIG 2600' (1810')		LPV DA(H) 1207' (417')		Apt Elev 809' TDZE 790'	
MISSED APCH: Climb to 3000' direct AN LOM and hold.								TAA 30 NM IAF	
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'					
1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 2. DME/DME RNP-0.30 not authorized. 3. VGSI and RNAV glidepath not coincident.									



③ LNAV only.



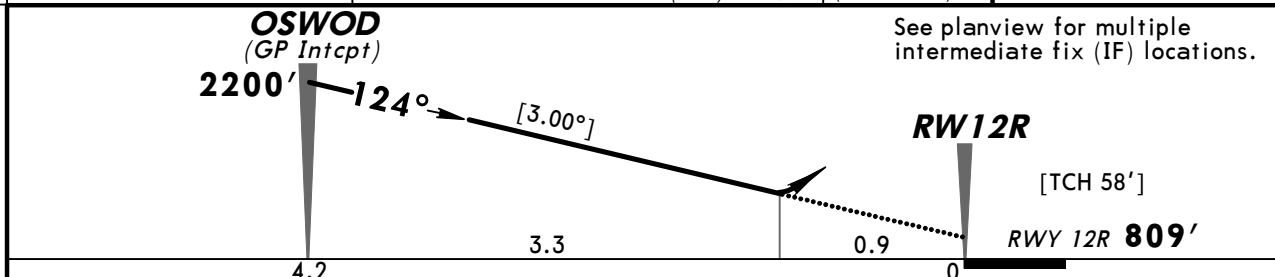
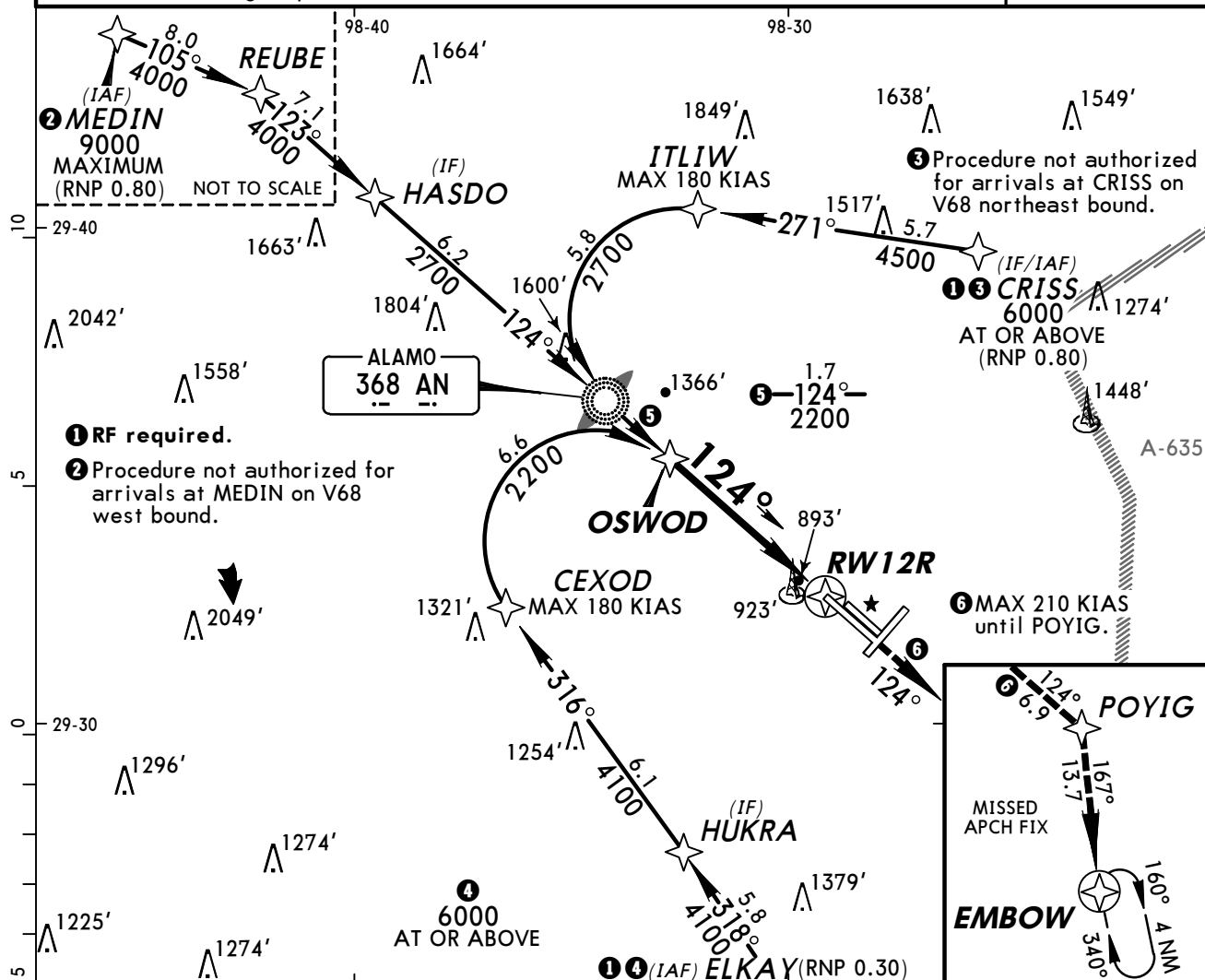
Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	3000'	D	AN 368
Glide Path Angle 3.00°	372	478	531	637	743	849				
MAP at RW30L										

STRAIGHT-IN LANDING RWY 30L							CIRCLE-TO-LAND Not Authorized Southwest of Rwy 12R-30L		
LPV DA(H) 1207' (417')		LNAV/VNAV DA(H) 1246' (456')		LNAV MDA(H) 1360' (570')					
RAIL or ALS out		RAIL or ALS out		RAIL out		ALS out	Max Kts	MDA(H)	
A RVR 50 or 1	1½	RVR 50 or 1	1½	RVR 24 or ½	RVR 40 or ¾	1	90	1360' (551') - 1	
				RVR 50 or 1	1½		140	1360' (551') - 1½	
				RVR 60 or 1¼	1¾		165	1380' (571') - 2	

CHANGES: Procedure ident.

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TERPS AMEND 1A 10 MAR 2011

BRIEFING STRIP™

<i>Gnd speed-Kts</i>	70	90	100	120	140	160	
<i>Descent Angle [3.00°]</i>	372	478	531	637	743	849	
<i>MAP at DA</i>							

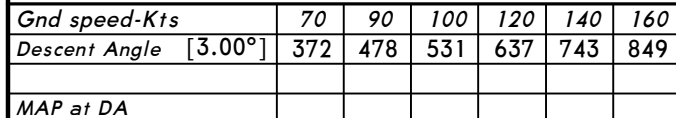
TERPS AMEND 0 5 MAY 2011

		RNP 0.15 <i>DA(H)</i> 1142' (333')				RNP 0.30 <i>DA(H)</i> 1303' (494')	
		ALS out				ALS out	
A	RVR 40 or $\frac{3}{4}$	RVR 50 or 1		RVR 60 or $1\frac{1}{8}$		$1\frac{5}{8}$	
B							
C							
D							

BRIEFING STRIP™



UPTEY
(GP Intcpt)



RAIL or ALS out

TERPS AMEND 0 5 MAY 2011

General Information

Location: Houston TX USA

IATA Code: SGR

Lat/Long: N29° 37.3' W095° 39.4'

Elevation: 82 ft

Airport Use: Public

Magnetic Variation: 3.3°E

Sectional Chart: Houston

Fuel Types: 100 Octane (LL), Jet A

Oxygen Types: High Pressure, Low Pressure

Repair Types: Major Airframe, Major Engine

Customs: No

Airport Type: IFR

Landing Fee: Yes

Control Tower: Yes

Jet Start Unit: Yes

LLWS Alert: No

Beacon: Yes

Sunrise: 1251 Z

Sunset: 0020 Z,

Runway Information

Runway: 17

Length x Width: 8000 ft x 100 ft

Surface Type: concrete

TDZ-Elev: 82 ft

Lighting: Edge, REIL, Pilot controlled

Displaced Threshold: 380 ft

Runway: 35

Length x Width: 8000 ft x 100 ft

Surface Type: concrete

TDZ-Elev: 78 ft

Lighting: Edge, REIL, Pilot controlled

Displaced Threshold: 1984 ft

Communication Information

ASOS 118.125

Sugar Land Tower 118.65 CTAF PCL

Sugar Land Ground Control 121.4

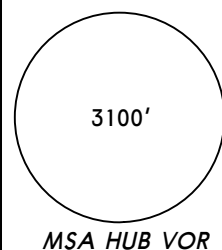
Sugar Land Clearance Delivery 121.4

Houston Clearance Delivery 119.25

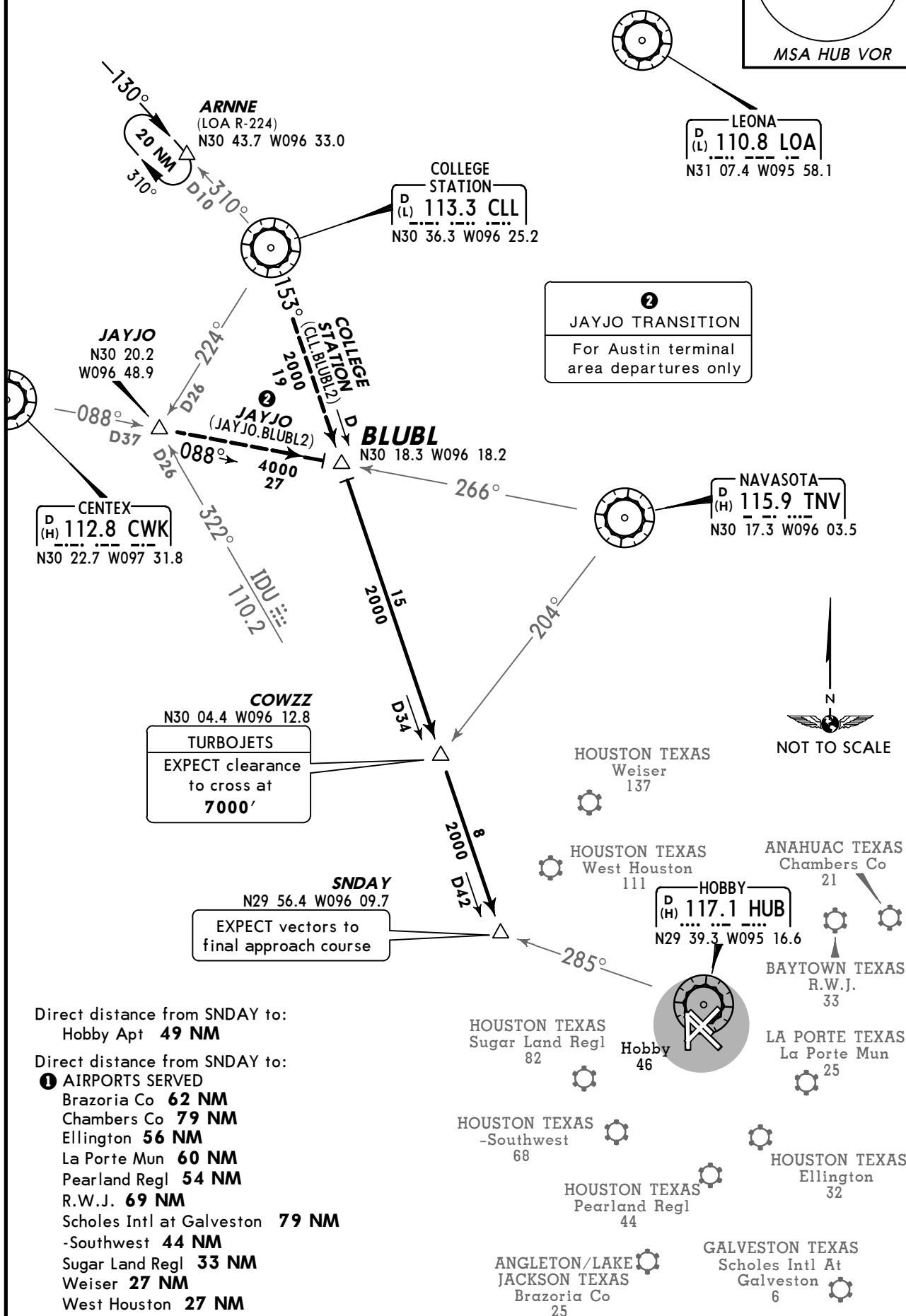
Houston Approach Control 123.8

Houston Departure Control 123.8

Sugar Land Unicom 122.95

HOBBY
D-ATIS
124.6Apt Elev
See graphicAlt set: INCHES
Trans level: FL180 Trans alt: 18000'
Also Serves ①

BLUBELL TWO ARRIVAL (BLUBL.BLUBL2)



ROUTING

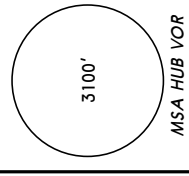
From over BLUBL via CLL R-153 to SNDAY. EXPECT vectors to final approach course.

HOBBY D-ATIS
124.6

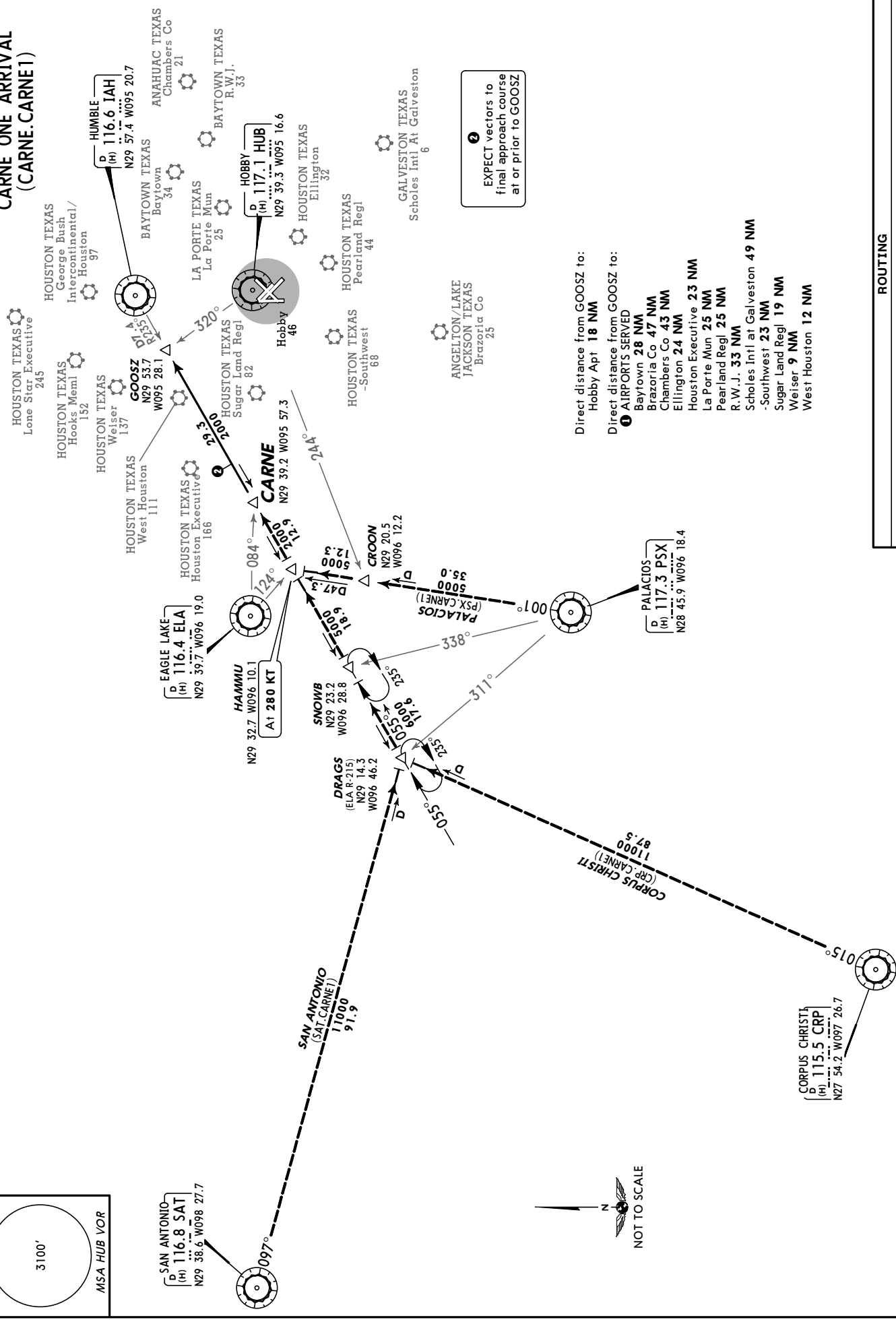
Ap'l Elev
See graphic

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

1. For conventional navigation equipped aircraft only.
2. DME/DME/IRU or GPS equipped aircraft file via the HAMMU (RNAV) STAR.
3. Also Serves 1



CARNE ONE ARRIVAL
(CARNE.CARNE1)

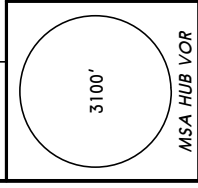


ROUTING

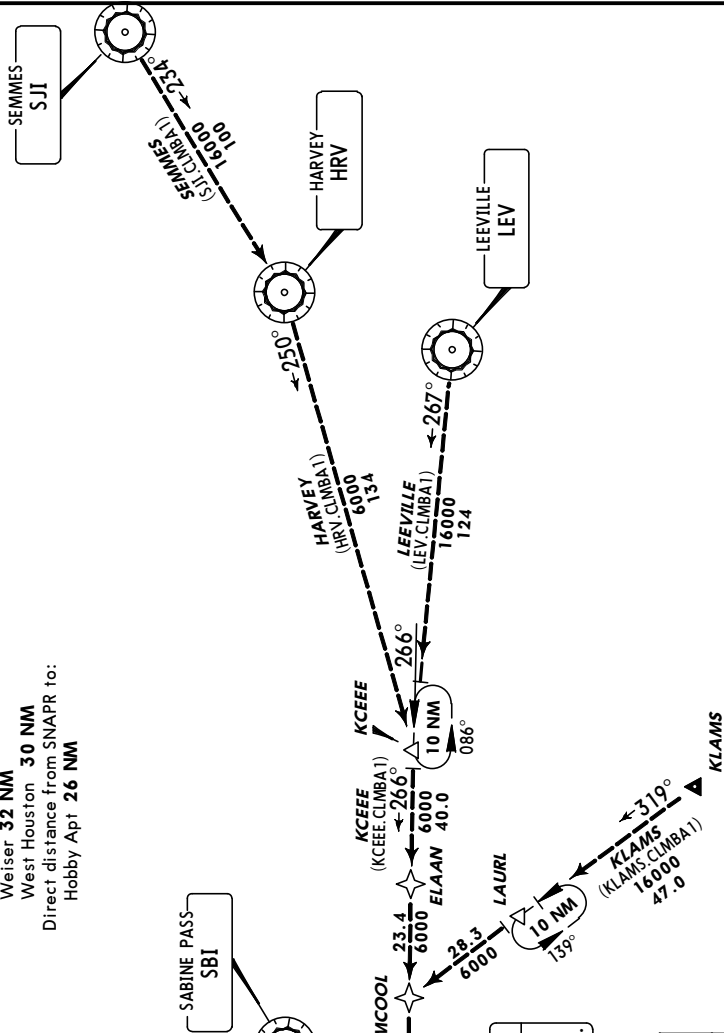
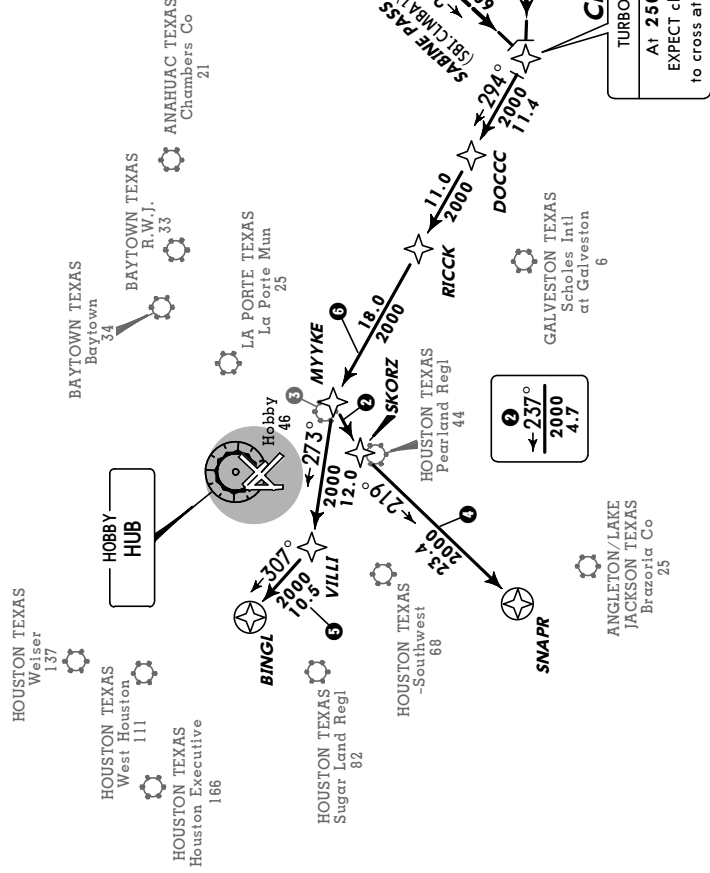
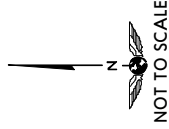
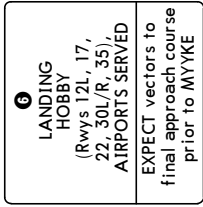
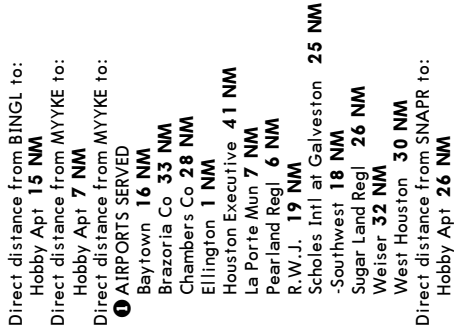
From CARNE via IAH R-235 to GOOSZ. EXPECT vectors to final approach course at or prior to GOOSZ.

Alt Set: INCHES Trans level: FL180 Trans alt: 18000'
1. RADAR required: 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. HARVEY transition: For non-GPS equipped aircraft DAS, HRV,
LCH, LEV, LLA and RQR must be operational.

5. KUEEE transition: For non-GPS equipped aircraft DAS, LCH and LLA must be operational.
6. KLAMS transition: For non-GPS equipped aircraft DAS, LCH, MHF and VUH must be operational.
7. LEEVILLE transition: For non-GPS equipped aircraft DAS, LCH and LLA must be operational.
8. SEMMES transition: For non-GPS equipped aircraft DAS, HRV, LCH, LEV, LLA and RQR must be operational.
9. Also Serves **1**



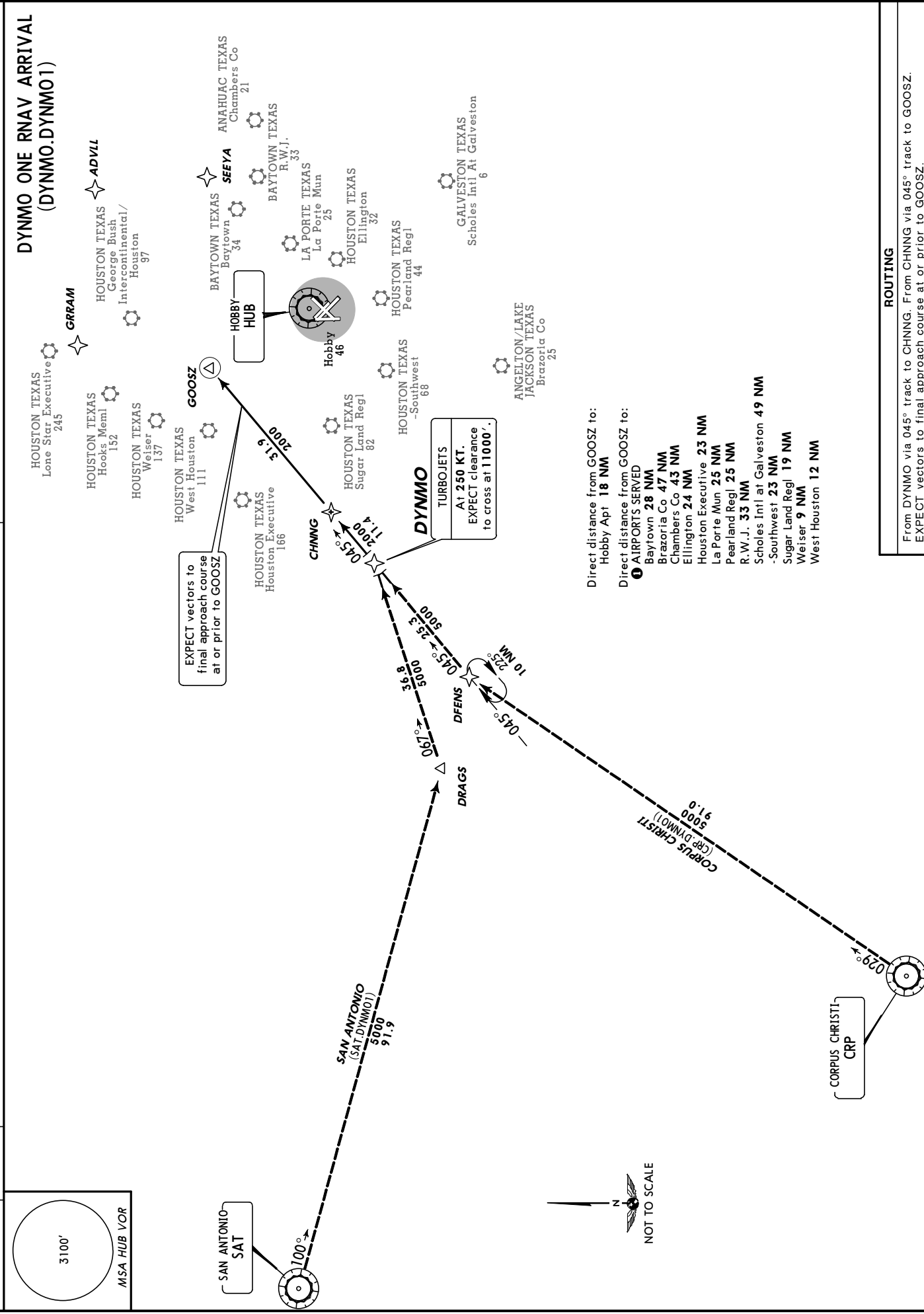
**COLUMBIA ONE RNAV ARRIVAL
(CLMBA.CLMB1)**



ROUTING	
From CLMBA via 294° track to DOCCC, then as depicted to RICKK.	
RWY	LANDING HOBBY
4	From RICKK via 294° track to MYYKE, then as depicted to SNAPR. 4 EXPECT vectors to final approach course prior to SNAPR, if not received by SNAPR fly present heading.
12R	From RICKK via 294° track to MYYKE, then as depicted to BINGL. 5 EXPECT vectors to final approach course prior to BINGL, if not received by BINGL fly present heading.
ALL OTHER	From RICKK via 294° track to MYYKE. EXPECT vectors to final approach course prior to MYYKE..
LANDING AIRPORTS SERVED	
From RICKK via 294° track to MYYKE. EXPECT vectors to final approach course prior to MYYKE.	

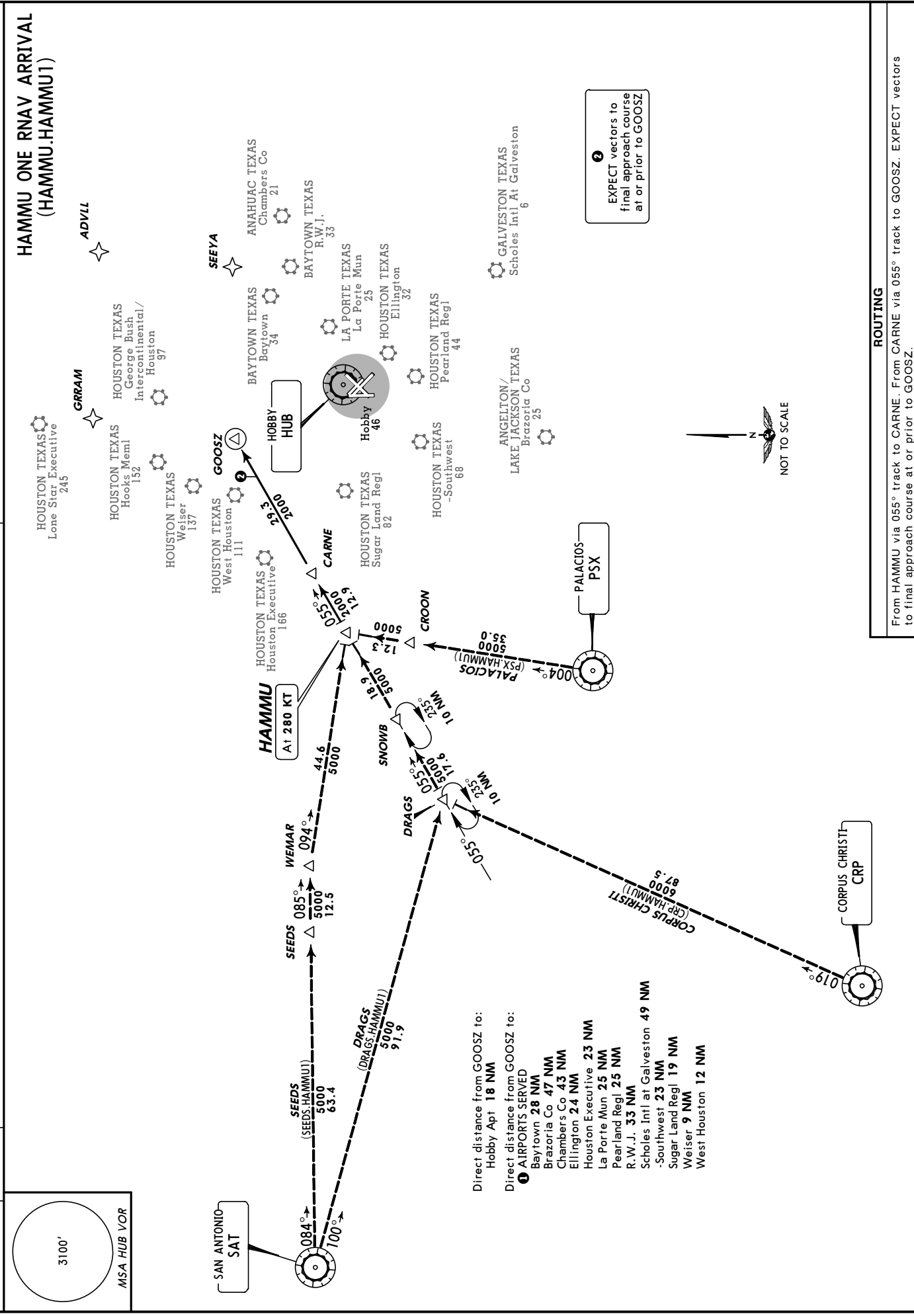
CHANGES: Procedure reindexed, airports served (LISSE Arrival cancelled).

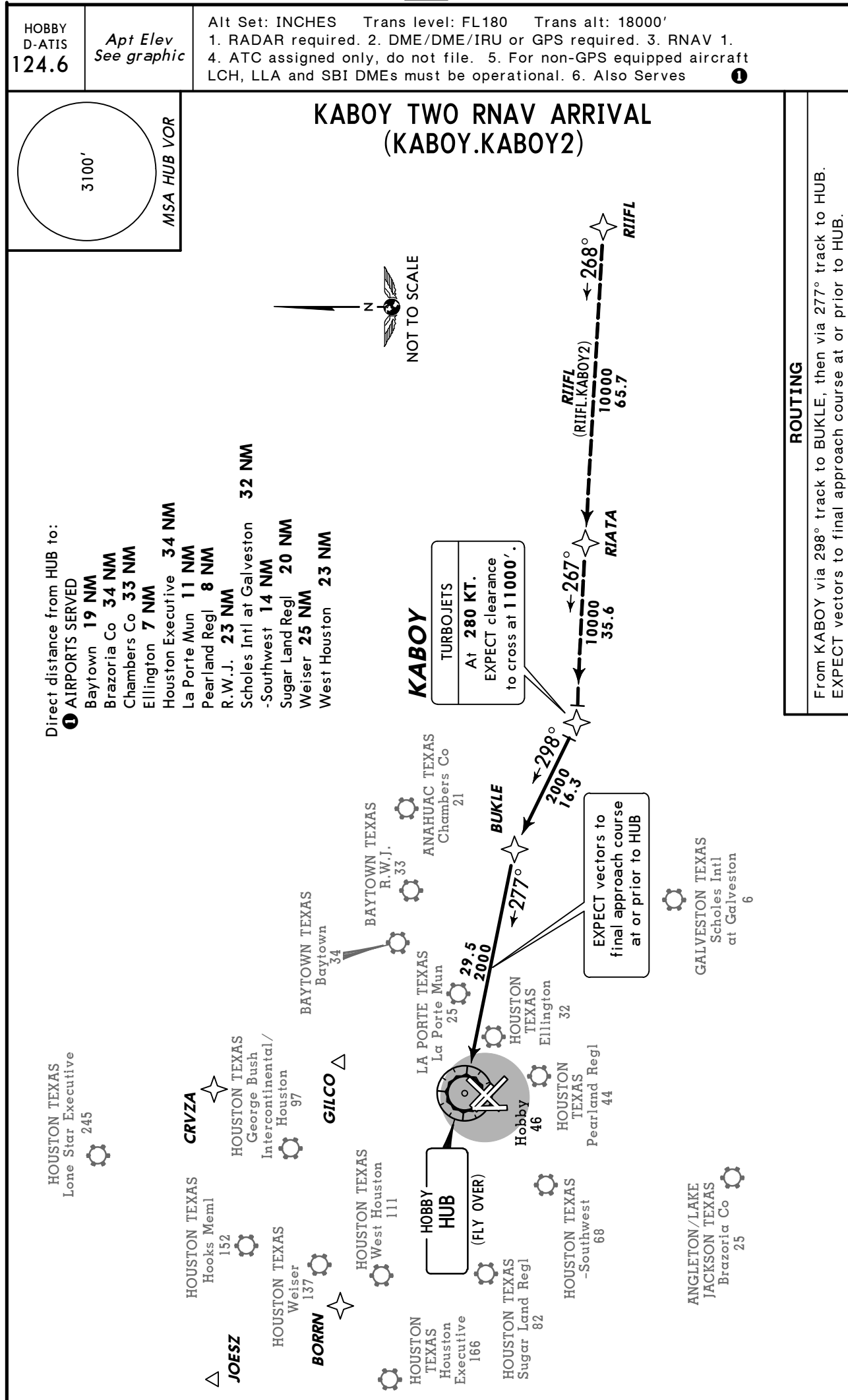
HOBBY D-ATIS 124.6	<i>Apt Elev</i> <i>See graphic</i>	Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1. 4. ATC assigned only, do not file.	5. CORPUS CHRISTI transition: For non-GPS equipped aircraft ELA, HUB, IAH, PSX and VCT DMEs must be operational. 6. SAN ANTONIO transition: For non-GPS equipped aircraft CWK, ELA, HUB, IAH, PSX and SAT DMEs must be operational. 7. Also Serves 1

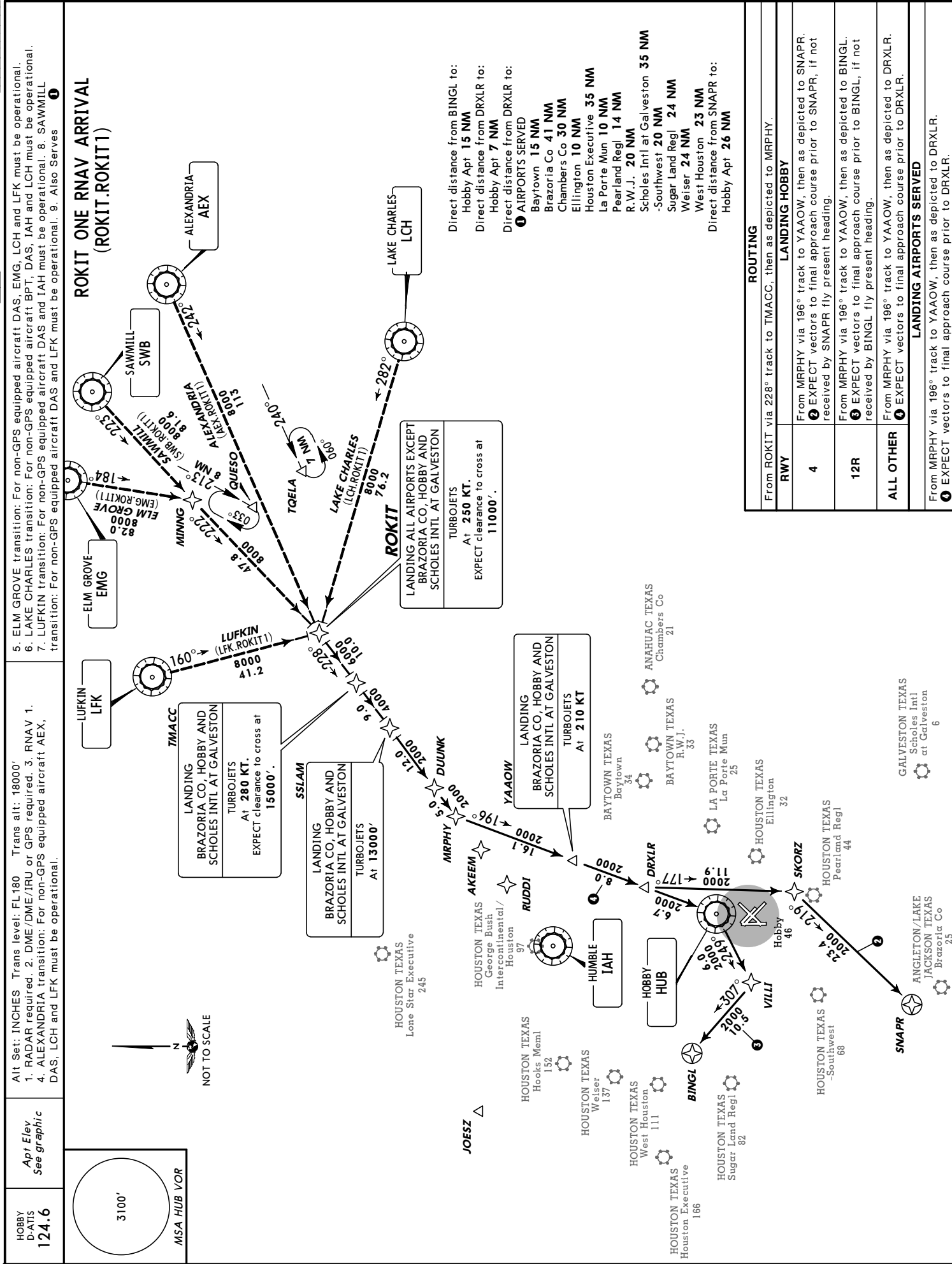


ROUTING
From DYNMO via 045° track to CHNNG. From CHNNG via 045° track to GOOSZ. EXPECT vectors to final approach course at or prior to GOOSZ.

HOBBY D-ATIS 124.6	<i>Apt Elev</i> <i>See graphic</i>	Alt Set: INCHES Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1. 4. CORPUS CHRISTI transition: For non-GPS equipped aircraft IDU, PSX and VCT DMEs must be operational. 5. DRAGS transition: For non-GPS equipped aircraft IDU, PSX, SAT, THX and VCT DMEs must be operational.	6. PALACIOS transition: For non-GPS equipped aircraft VCT DME must be operational. 7. SEEDS transition: For non-GPS equipped aircraft ELA, IDU, SAT and THX DMEs must be operational. 8. Also Serves 1

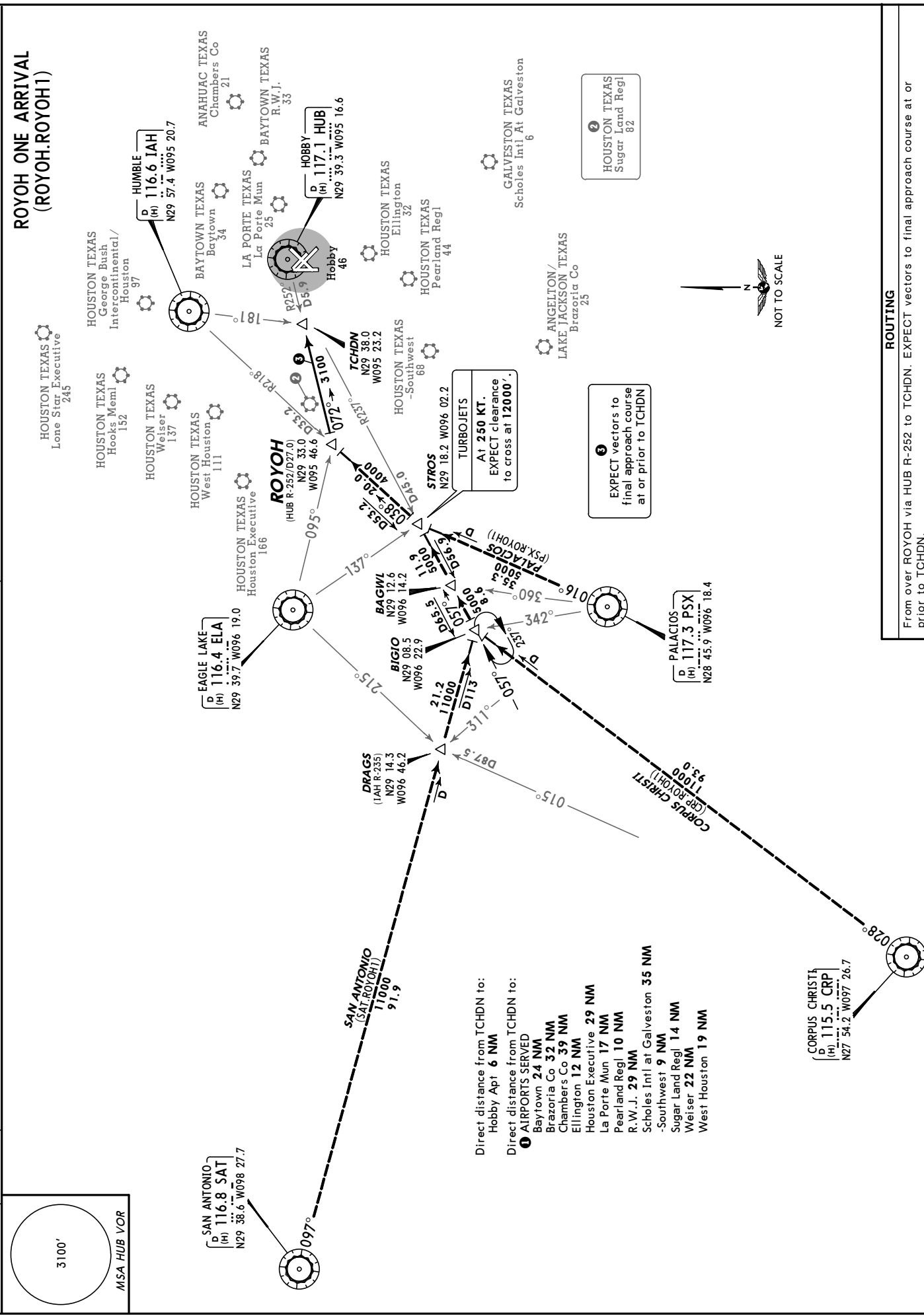
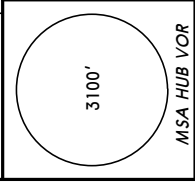






CHANGES: Procedure reapproved airports served

HOBBY D-ATIS 124.6	Apt Elev See graphic	Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

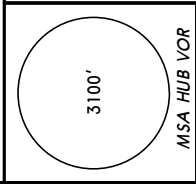


HOUSTON Departure (R)
132.25

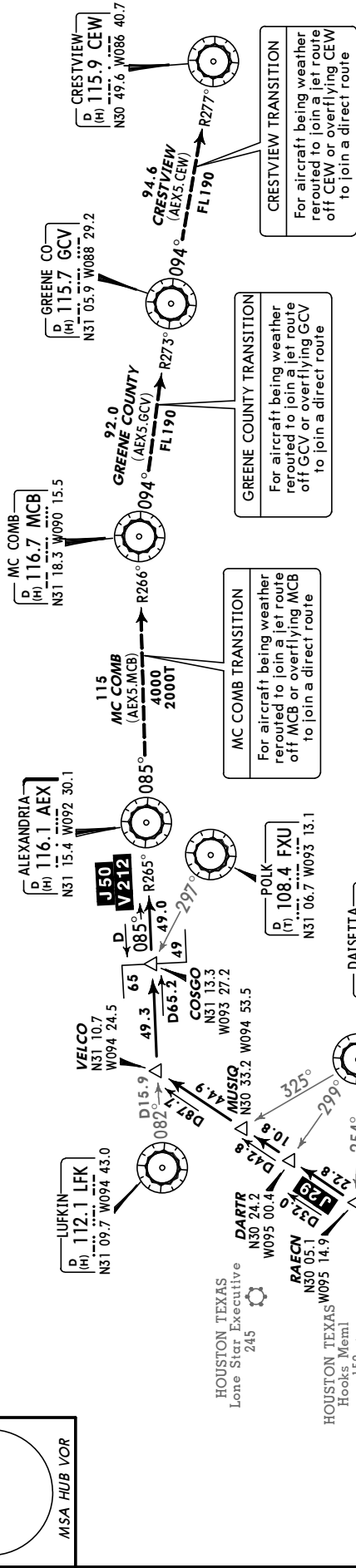
Apt Elev
See graphic

Trans level: FL180 Trans alt: 18000'

1. **RADAR required.**
2. CRESTVIEW, GREENE COUNTY and MC COMB Transitions are ATC assigned only, do not file.
3. Also serves **1**



ALEXANDRIA FIVE DEPARTURE
(AEX5.AEX)



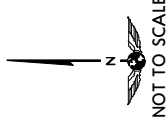
OBSTACLE
For TAKEOFF OBSTACLE NOTES
see 10-30B1.

This SID requires take-off minimums
(for standard minimums, refer to airport chart):
ELLINGTON: Rwy 4, 17L/R, 22, 35L/R: Standard
(or lower than standard, if authorized).
HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.
Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).
Rwy 17: 300-1.
Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290' per
NM to **1500'**.
HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).
HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).
LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:
Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).
Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.
SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).
TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).
WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).
WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

Direct distance from Hobby Apt to:
RAECN **26 NM**
Direct distance from AIRPORTS
SERVED to RAECN:
1 AIRPORTS SERVED
Ellington **29 NM**
Houston Executive **38 NM**
La Porte Mun **27 NM**
Scholes Intl at Galveston **53 NM**
-Southwest **37 NM**
Sugar Land Regl **35 NM**
Texas Gulf Coast Regl **59 NM**
Weiser **22 NM**
West Houston **27 NM**



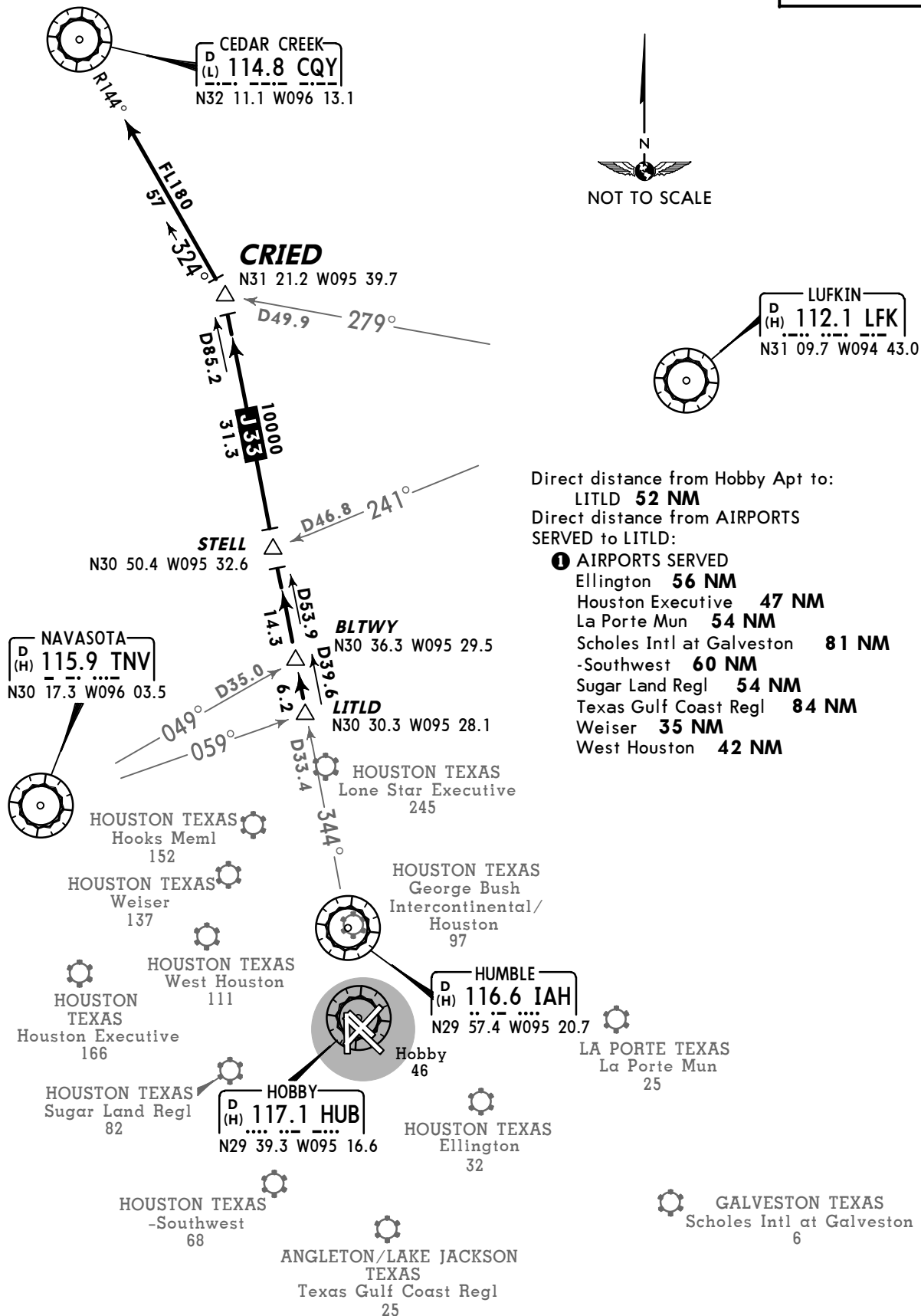
AIRPORT		INITIAL CLIMB	ALTITUDE
HOBBY		Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 5000'
ELLINGTON		Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 4000'
① ALL OTHER AIRPORTS		When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.	
ROUTING			
At RAECN, via IAH R-028 to VELCO, then RIGHT turn via LFK R-082 and AEX R-265 to AEX. EXPECT filed altitude 10 minutes after departure.			

HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. RADAR required.
2. Also serves ①

3100'

MSA HUB VOR

CRIED FOUR DEPARTURE (CRIED4.CRIED)

For Procedure Text, Takeoff Minimums
see 10-3A-1

OBSTACLE

For TAKEOFF OBSTACLE NOTES
see 10-3OB1.

CRIED FOUR DEPARTURE (CRIED4.CRIED)

For Procedure Graphic see 10-3A
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to LITLD.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to LITLD.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to LITLD.	
ROUTING		
At LITLD, via IAH R-344 to STELL, then via IAH R-344 to CRIED, then LEFT turn via CQY R-144 to CQY. EXPECT filed altitude 10 minutes after departure.		

HOUSTON
Departure (R)
132.25*Apt Elev*
See graphic

Trans level: FL180 Trans alt: 18000'

1. RADAR required.2. For aircraft destined Memphis Intl, or filed
via Q-32 or J-42.3. Also serves **1**

3100'

MSA HUB VOR

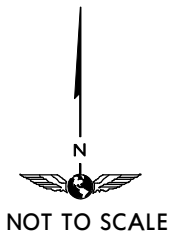
EL DORADO THREE DEPARTURE (ELD3.ELD)For Procedure Text and Takeoff Minimums
see 10-3B-1

Direct distance from Hobby Apt to:

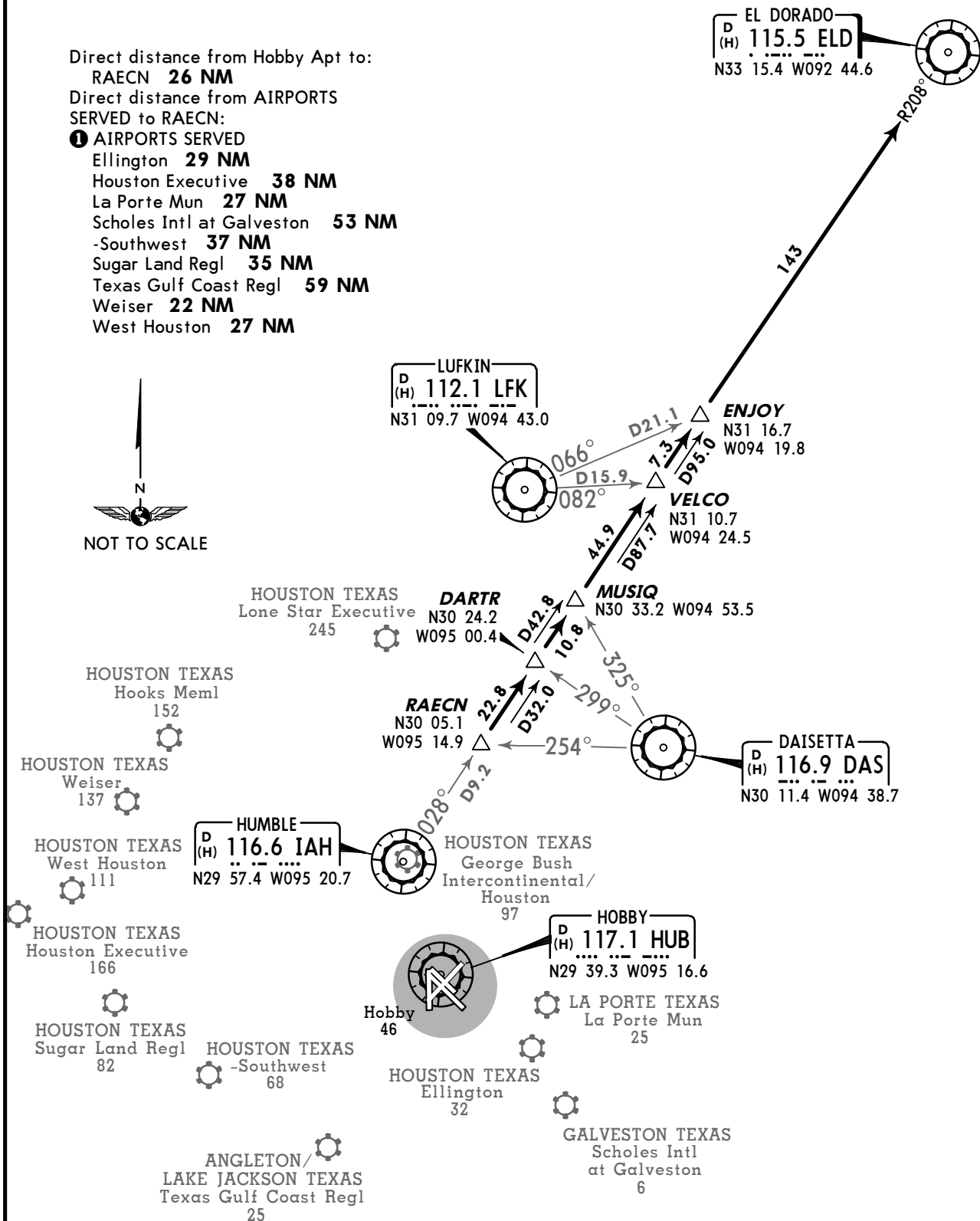
RAECN **26 NM**

Direct distance from AIRPORTS

SERVED to RAECN:

1 AIRPORTS SERVEDEllington **29 NM**Houston Executive **38 NM**La Porte Mun **27 NM**Scholes Intl at Galveston **53 NM**-Southwest **37 NM**Sugar Land Regl **35 NM**Texas Gulf Coast Regl **59 NM**Weiser **22 NM**West Houston **27 NM**

NOT TO SCALE

**OBSTACLE**

For TAKEOFF OBSTACLE NOTES see 10-3OB1.

EL DORADO THREE DEPARTURE (ELD3.ELD)

For Procedure Graphic see 10-3B

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

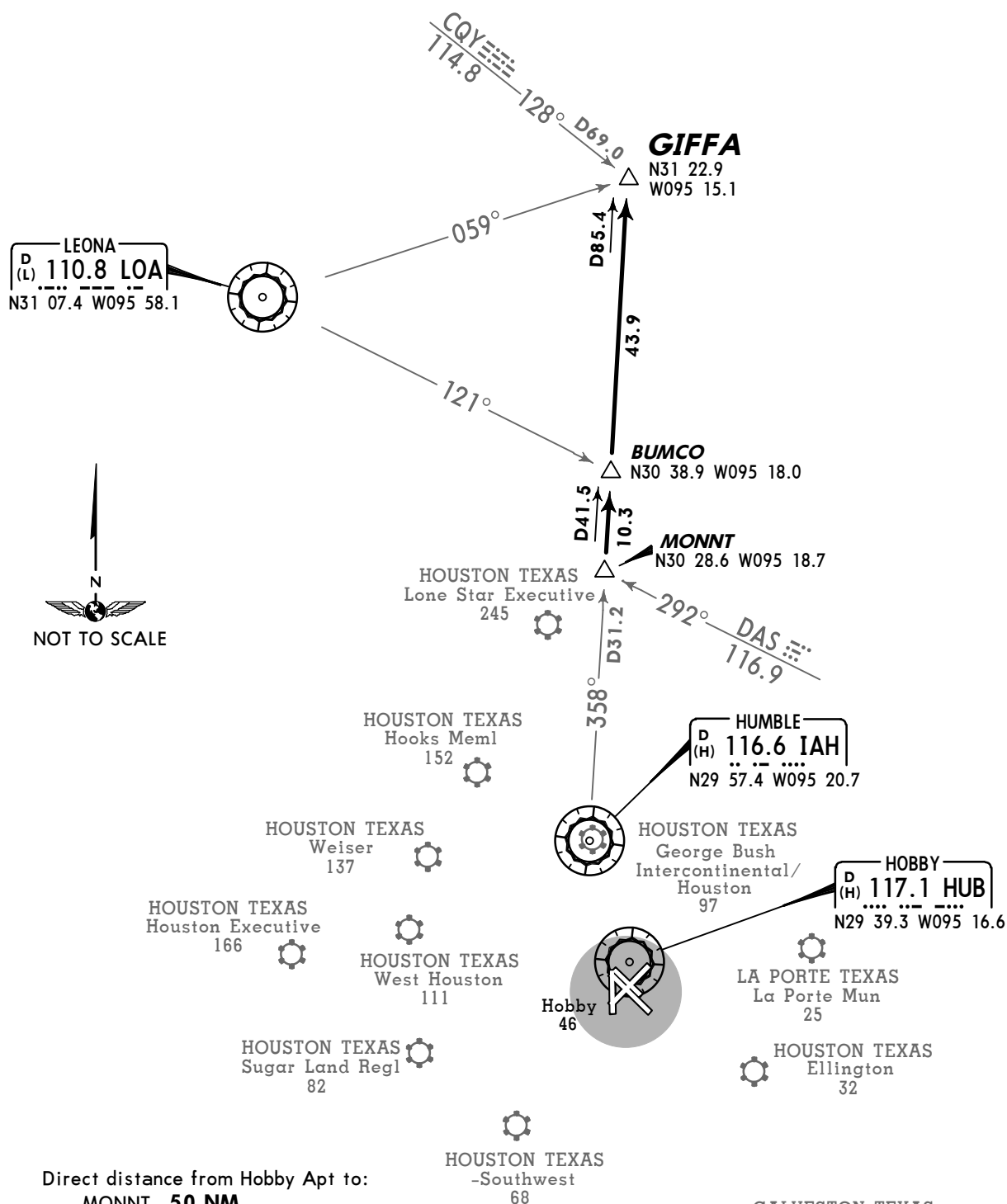
Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to RAECN.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to RAECN.	
ROUTING		
At RAECN via IAH R-028 and the ELD R-208 to ELD. EXPECT filed altitude 10 minutes after departure.		

HOUSTON Departure (R)
132.25Apt Elev
See
graphicTrans level: FL180 Trans alt: 18000'
1. RADAR required.
2. Also serves **1**

3100'

MSA HUB VOR

GIFFA FOUR DEPARTURE (GIFFA4.GIFFA)For Procedure Text and Takeoff Minimums
see 10-3C-1**OBSTACLE**For TAKEOFF OBSTACLE NOTES
see 10-3OB1.

GIFFA FOUR DEPARTURE (GIFFA4.GIFFA)

For Procedure Graphic see 10-3C

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:
Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

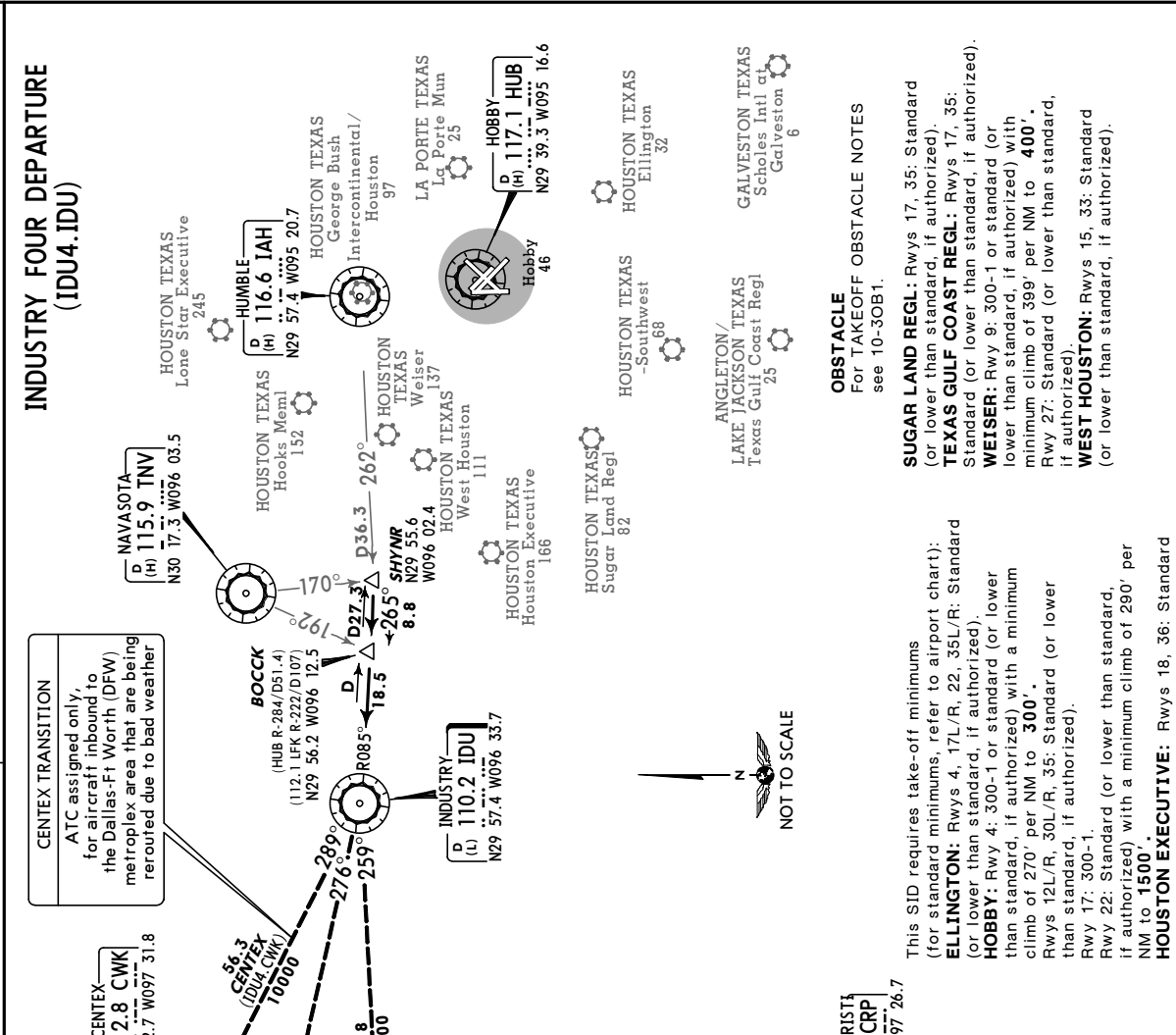
WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

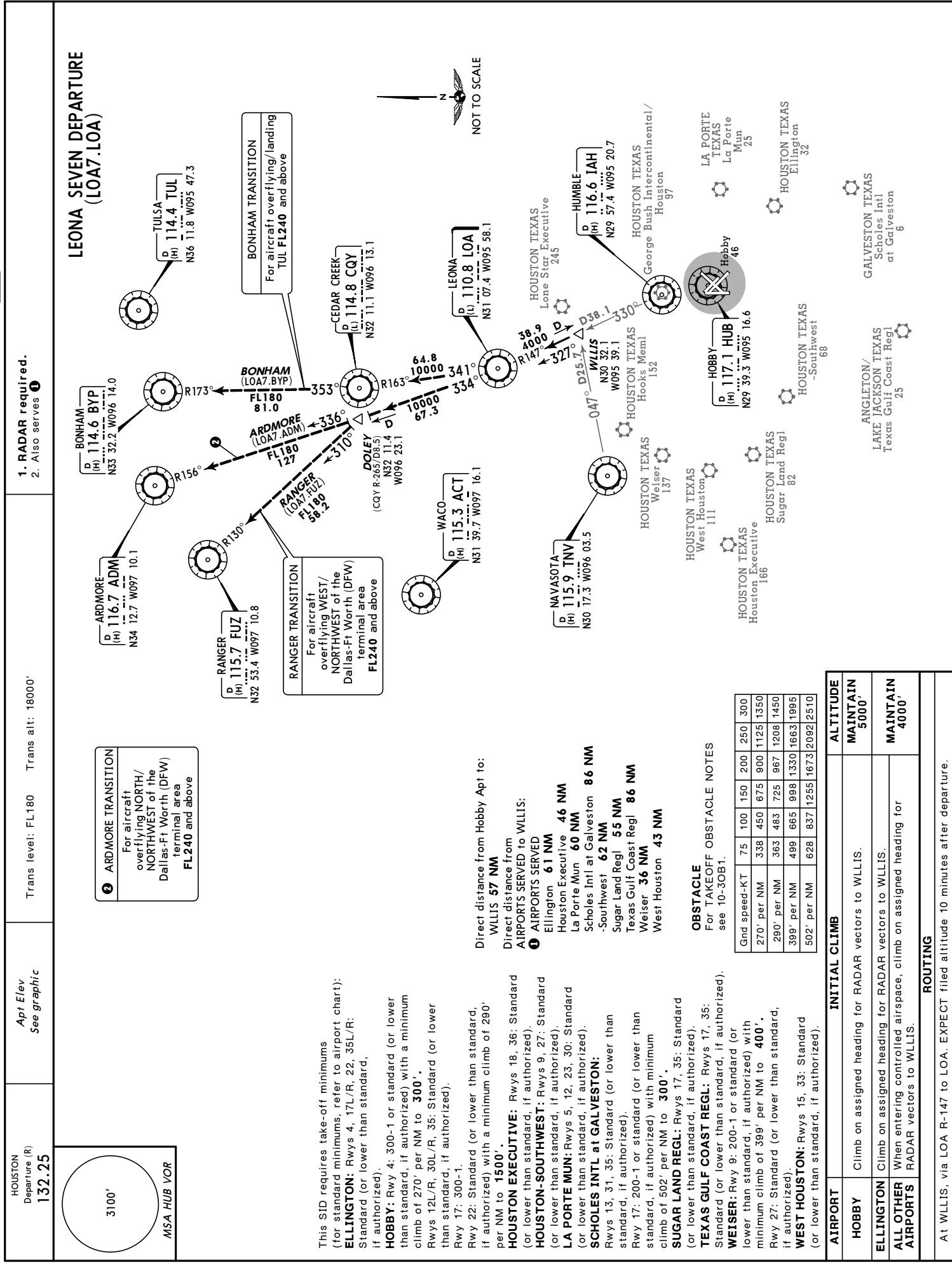
AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to MONNT.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to MONNT.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to MONNT.	
ROUTING		
At MONNT, via IAH R-358 to GIFFA. EXPECT filed altitude 10 minutes after departure.		

	1. RADAR required. 2. Also serves 1



(or lower than standard, if authorized).
HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
 (or lower than standard, if authorized).
LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
 (or lower than standard, if authorized).
SCHOLES INTL at GALVESTON:
 Rwy 13, 31, 35: Standard (or lower than
 standard, if authorized).
 Rwy 17: 300-1 or standard (or lower than
 standard, if authorized) with minimum
 climb of 502' per NM to **300'**.

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3100'

MSA HUB VOR

**For Procedure Text and Takeoff Minimums
see 10-3F-1**

For TAKEOFF OBSTACLE NOTES see 10-3OB1.

LUFKIN SIX DEPARTURE (LFK6.LFK)

For Procedure Graphic see 10-3F
PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.
Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: Standard
(or lower than standard, if authorized).

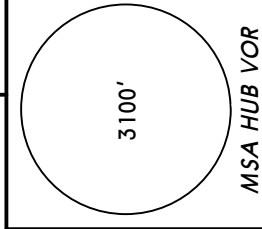
Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to KYANN.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to KYANN.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to KYANN.	
ROUTING		
At KYANN via IAH R-013 to COLET, then RIGHT turn via LFK R-203 to LFK. EXPECT filed altitude 10 minutes after departure.		

HOUSTON Departure (R)
127.12

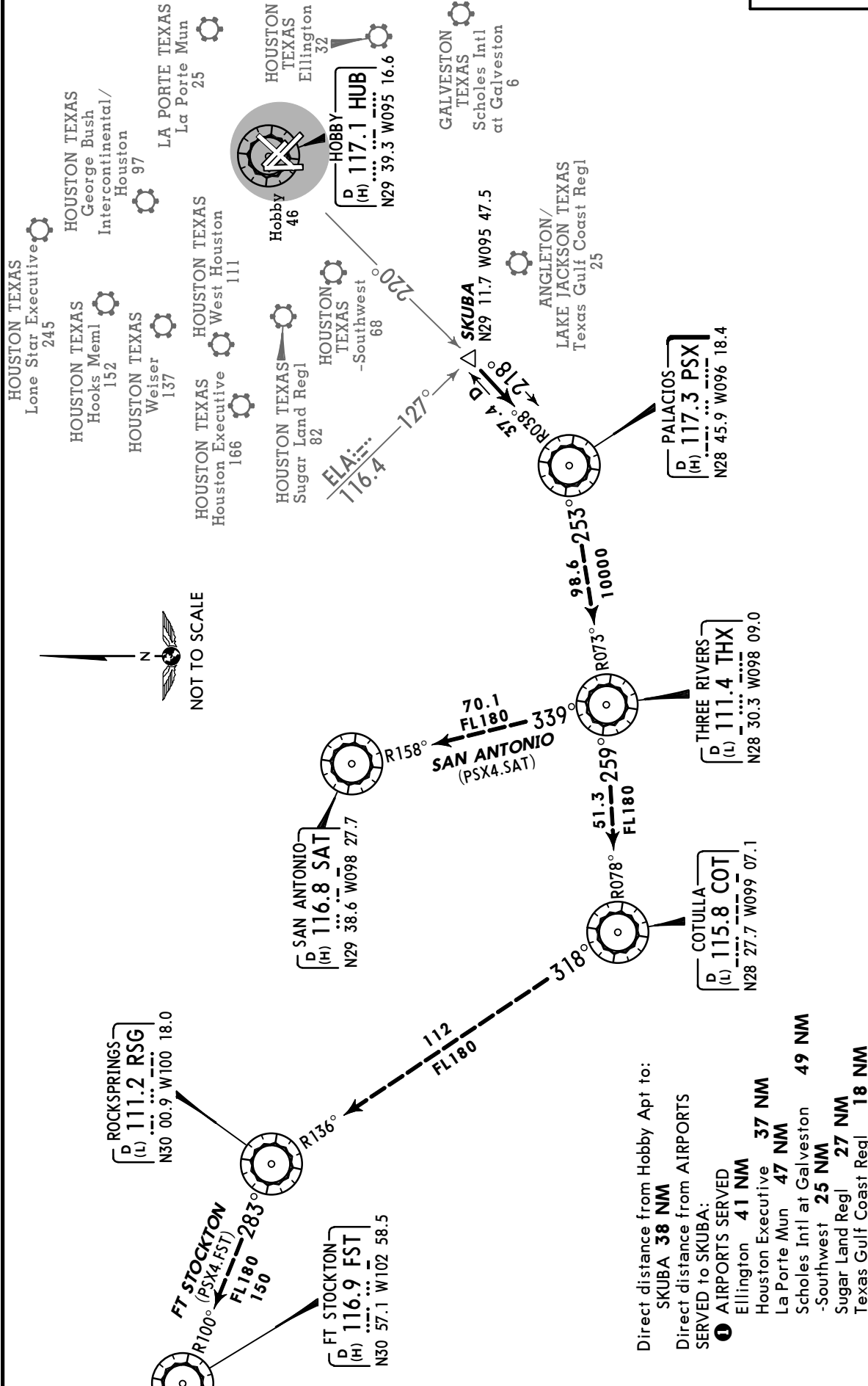
Apt Elev
See graphic

Trans level: FL180 Trans alt: 18000'
1. RADAR required.
2. Also serves ①



PALACIOS FOUR DEPARTURE (PSX4.PSX)

For Procedure Text and Takeoff Minimums
see 10-3G-1



OBSTACLE
For TAKEOFF OBSTACLE NOTES see 10-3OB1.

Direct distance from Hobby Apt to:
SKUBA 38 NM

Direct distance from AIRPORTS
SERVED to SKUBA:

① AIRPORTS SERVED

Ellington 41 NM
Houston Executive 37 NM
La Porte Mun 47 NM
Scholes Intl at Galveston 49 NM
-Southwest 25 NM
Sugar Land Regl 27 NM
Texas Gulf Coast Regl 18 NM
Weiser 45 NM
West Houston 38 NM

PALACIOS FOUR DEPARTURE (PSX4.PSX)

For Procedure Graphic see 10-3G

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwys 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwys 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwys 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwys 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwys 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.

Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwys 15, 33: Standard
(or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to SKUBA.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to SKUBA.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to SKUBA.	
ROUTING		
At SKUBA via PSX R-038 to PSX. EXPECT filed altitude 10 minutes after departure.		

[illegible]

[illegible]

HOUSTON Departure (R) 127.12	<i>Apt Elev</i> <i>See graphic</i>	Trans level: FL180 Trans alt: 18000' 1. RADAR required. 2. For aircraft filed FL180 and above to Rio Grande Valley area or for aircraft filed FL180 and above overflying NGP to international destinations. 3. Also serves ①

TRUAX TWO DEPARTURE (NGP2.NGP)

Direct distance from AIRPORTS

SERVED to YAWNS:

① AIRPORTS SERVED

Ellington **52 NM**
Scholes Intl at Galveston **46 NM**
Sugar Land Regl **48 NM**
Texas Gulf Coast Regl **18 NM**

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R: Standard
(or lower than standard, if authorized).

HOBBY: Rwy 4: 200-1 or standard (or lower than standard, if authorized) with a minimum climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower than standard, if authorized).

Rwy 17: 200-1 or standard (or lower than standard, if authorized) with a minimum climb of 827' per NM to **300'**.

Rwy 22: Standard (or lower than standard, if authorized) with a minimum climb of 290' per NM to **1500'**.

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than standard, if authorized).

Rwy 17: 200-1 or standard (or lower than standard, if authorized) with minimum climb of 502' per NM to **300'**.

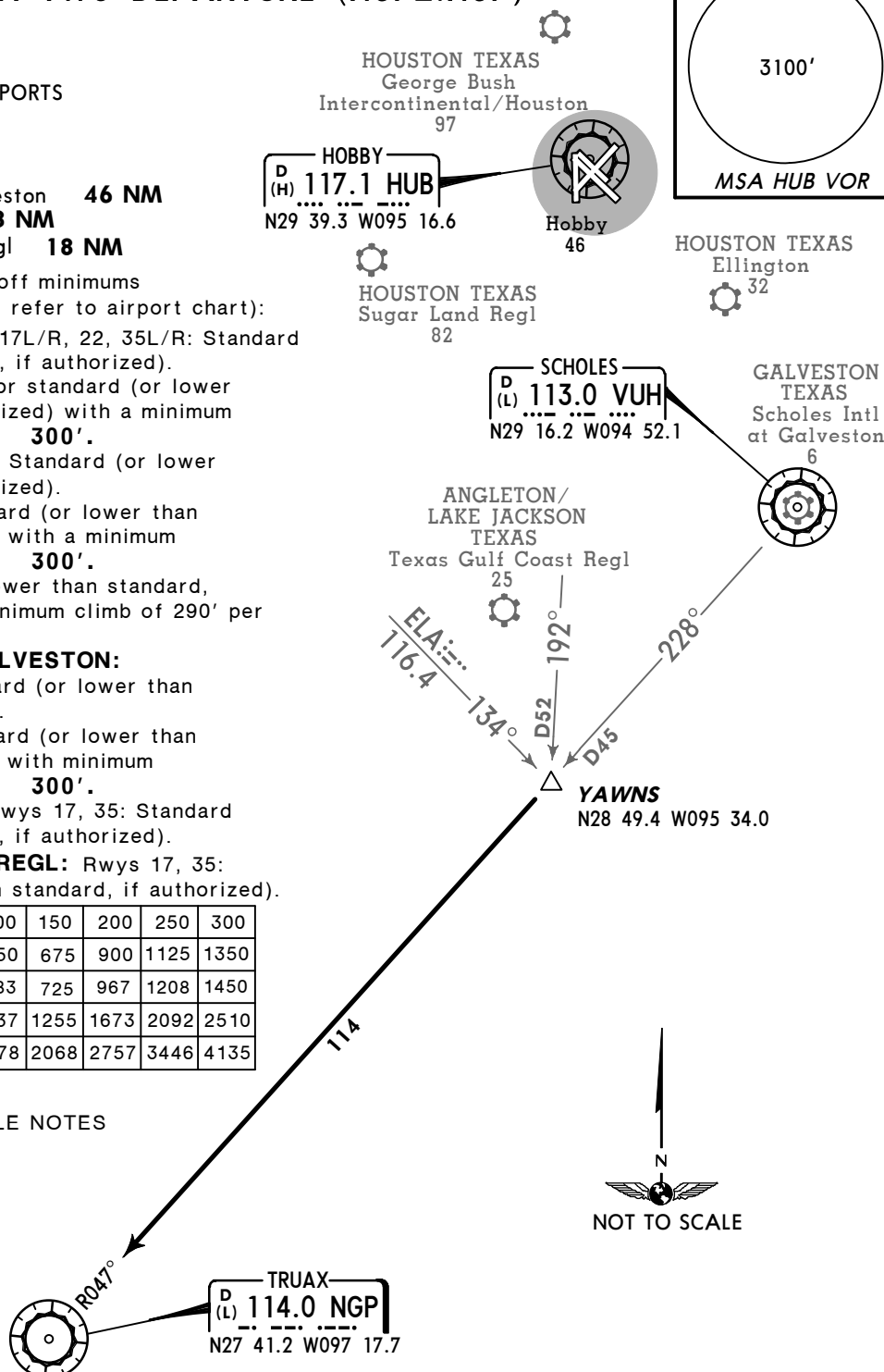
SUGAR LAND REGL: Rwys 17, 35: Standard (or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwys 17, 35: Standard (or lower than standard, if authorized).

Gnd speed-KT	75	100	150	200	250	300
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
502' per NM	628	837	1255	1673	2092	2510
827' per NM	1034	1378	2068	2757	3446	4135

OBSTACLE

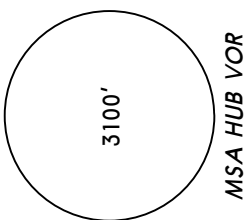
For TAKEOFF OBSTACLE NOTES
see 10-3OB1.



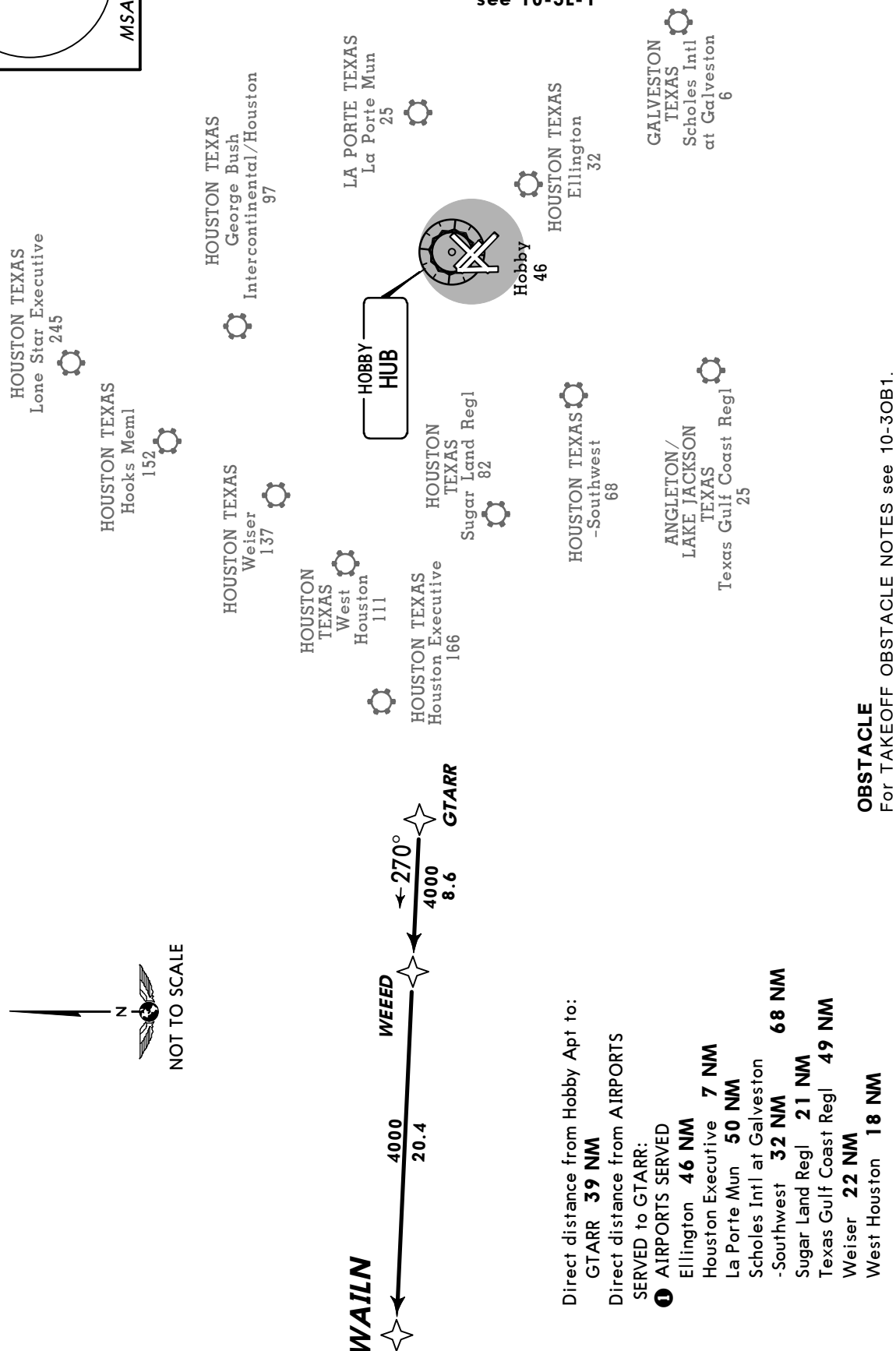
AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	EXPECT vectors to YAWNS. Rwy 17: Climb heading 174° to 700' before turning WESTBOUND. Rwys 30L/R: Climb heading 309° to 800' before turning WESTBOUND.	MAINTAIN 5000'
ELLINGTON	EXPECT vectors to YAWNS.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace fly assigned heading for vectors to YAWNS. SUGAR LAND REGL: Rwy 17: Climb heading 170° to 1500' before turning EASTBOUND. Rwy 35: Climb heading 350° to 1100' before turning SOUTHBOUND.	
ROUTING		
Via VUH R-228 and NGP R-047 to NGP. EXPECT filed altitude 10 minutes after departure.		

HOUSTON
Departure (R)
126.67*Apt Elev*
See graphic

Trans level: FL180 Trans alt: 18000'
1. RADAR required. 2. DME/DME/IRU or GPS required. 3. RNAV 1.
4. For advanced navigation aircraft destined Austin/San Antonio
terminal areas. Austin: Departing all Houston airports except George
Bush Intercontinental/Houston, Hooks Meml, Lone Star Executive.
San Antonio: Departing all Houston airports. 5. Also serves **1**



MSA HUB VOR

WAILN ONE RNAV DEPARTURE
(WAILN1.WAILN)**For Procedure Text and Takeoff Minimums**
see 10-3L-1

WAILN ONE RNAV DEPARTURE (WAILN1.WAILN)

For Procedure Graphic see 10-3L

PROCEDURE TEXT

This SID requires take-off minimums
(for standard minimums, refer to airport chart):

ELLINGTON: Rwy 4, 17L/R, 22, 35L/R:

Standard (or lower than standard,
if authorized).

HOBBY: Rwy 4: 300-1 or standard (or lower
than standard, if authorized) with a minimum
climb of 270' per NM to **300'**.

Rwys 12L/R, 30L/R, 35: Standard (or lower
than standard, if authorized).

Rwy 17: 300-1.

Rwy 22: Standard (or lower than standard,
if authorized) with a minimum climb of 290'
per NM to **1500'**.

HOUSTON EXECUTIVE: Rwy 18, 36: Standard
(or lower than standard, if authorized).

HOUSTON-SOUTHWEST: Rwy 9, 27: Standard
(or lower than standard, if authorized).

LA PORTE MUN: Rwy 5, 12, 23, 30: Standard
(or lower than standard, if authorized).

SCHOLES INTL at GALVESTON:

Rwys 13, 31, 35: Standard (or lower than
standard, if authorized).

Rwy 17: 200-1 or standard (or lower than
standard, if authorized) with minimum
climb of 502' per NM to **300'**.

SUGAR LAND REGL: Rwy 17, 35: Standard
(or lower than standard, if authorized).

TEXAS GULF COAST REGL: Rwy 17, 35:
Standard (or lower than standard, if authorized).

WEISER: Rwy 9: 200-1 or standard (or
lower than standard, if authorized) with
minimum climb of 399' per NM to **400'**.

Rwy 27: Standard (or lower than standard,
if authorized).

WEST HOUSTON: Rwy 15, 33: ATC climb
gradient 213' per NM to 4000'.

Gnd speed-KT	75	100	150	200	250	300
213' per NM	266	355	533	710	888	1065
270' per NM	338	450	675	900	1125	1350
290' per NM	363	483	725	967	1208	1450
399' per NM	499	665	998	1330	1663	1995
502' per NM	628	837	1255	1673	2092	2510

AIRPORT	INITIAL CLIMB	ALTITUDE
HOBBY	Climb on assigned heading for RADAR vectors to GTARR.	MAINTAIN 5000'
ELLINGTON	Climb on assigned heading for RADAR vectors to GTARR.	MAINTAIN 4000'
ALL OTHER AIRPORTS	When entering controlled airspace, climb on assigned heading for RADAR vectors to GTARR.	
ROUTING		
At GTARR, EXPECT filed altitude 10 minutes after departure on depicted route to WAILN.		

TAKEOFF OBSTACLE NOTES**ELLINGTON**

- RWY 17R:
POLE 1489' FROM DER, 817' RIGHT OF CENTERLINE, 40' AGL/74' MSL.
- RWY 22:
ANTENNA ON BUILDING 1998' FROM DER, 598' RIGHT OF CENTERLINE, 54' AGL/83' MSL. OBSTACLE LIGHT ON GLIDESLOPE 327' FROM DER, 543' LEFT OF CENTERLINE, 39' AGL/68' MSL.
- RWY 35L:
MULTIPLE TREES BEGINNING 1118' FROM DER, 679' RIGHT OF CENTERLINE, UP TO 37' AGL/77' MSL. CRANE 2352' FROM DER, 1024' LEFT OF CENTERLINE, 37' AGL/97' MSL.
- RWY 35R:
TREE 1597' FROM DER, 32' LEFT OF CENTERLINE, 33' AGL/80' MSL.

HOBBY

- RWY 4:
POLE 4403' FROM DER, 1069' RIGHT OF CENTERLINE, 121' AGL/166' MSL. LIGHT ON BUILDING 1562' FROM DER, 859' RIGHT OF CENTERLINE, 59' AGL/103' MSL. BUILDING 3990' FROM DER, 1223' RIGHT OF CENTERLINE, 139' AGL/174' MSL. LIGHT ON FLAGPOLE 4618' FROM DER, 768' RIGHT OF CENTERLINE, 117' AGL/161' MSL.
- RWY 12L:
ANTENNA ON HANGAR 1548' FROM DER, 424' LEFT OF CENTERLINE, 45' AGL/85' MSL.
- RWY 12R:
VEHICLE ON ROAD 514' FROM DER, 543' RIGHT OF CENTERLINE, 17' AGL/55' MSL. TREE 1217' FROM DER, 756' RIGHT OF CENTERLINE, 43' AGL/89' MSL. FENCE 85' FROM DER, 492' LEFT OF CENTERLINE, 4' AGL/45' MSL. VEHICLE AND ROAD 176' FROM DER, 497' LEFT OF CENTERLINE, 17' AGL/55' MSL. POLE 1011' FROM DER, 696' LEFT OF CENTERLINE, 33' AGL/73' MSL. TREE 1256' FROM DER, 783' LEFT OF CENTERLINE, 38' AGL/78' MSL.
- RWY 17:
MULTIPLE POLES BEGINNING 606' FROM DER, 393' RIGHT OF CENTERLINE, UP TO 79' AGL/124' MSL. CRANE 1795' FROM DER, 689' RIGHT OF CENTERLINE, 100' AGL/150' MSL. ANTENNA ON BUILDING 620' FROM DER, 312' LEFT OF CENTERLINE, 27' AGL/72' MSL. MULTIPLE TREES BEGINNING 721' FROM DER, 260' LEFT OF CENTERLINE, UP TO 71' AGL/116' MSL. RADAR REFLECTOR 1214' FROM DER, 258' LEFT OF CENTERLINE, 32' AGL/77' MSL.
- RWY 22:
POLE 727' FROM DER, 626' RIGHT OF CENTERLINE, 28' AGL/77' MSL. TREE 1310' FROM DER, 679' RIGHT OF CENTERLINE, 27' AGL/76' MSL. ANTENNA ON LIGHT POLE, 1805' FROM DER, 968' RIGHT OF CENTERLINE, 60' AGL/109' MSL.
- RWY 30L:
ANTENNA ON BUILDING 547' FROM DER, 274' RIGHT OF CENTERLINE, 23' AGL/69' MSL. MULTIPLE POLES BEGINNING 341' FROM DER, 501' LEFT OF CENTERLINE, UP TO 39' AGL/84' MSL. MULTIPLE TREES BEGINNING 1392' FROM DER, 466' LEFT OF CENTERLINE, UP TO 78' AGL/118' MSL.
- RWY 30R:
POLE 1096' FROM DER, 785' RIGHT OF CENTERLINE, 29' AGL/75' MSL. ANTENNA ON BUILDING 500' FROM DER, 525' LEFT OF CENTERLINE, 33' AGL/69' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 2)**HOBBY (CONTD)**

◦ RWY 35:

ANTENNA ON LIGHT POLE 738' FROM DER, 519' RIGHT OF CENTERLINE, 40' AGL/86' MSL. LIGHT POLE 1119' FROM DER, 353' RIGHT OF CENTERLINE, 31' AGL/77' MSL. ANTENNA ON BUILDING 66' FROM DER, 471' LEFT OF CENTERLINE, 33' AGL/69' MSL

HOUSTON EXECUTIVE

◦ 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

◦ 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.

LA PORTE MUN

◦ RWY 12:

TREES AND POLES BEGINNING 128' FROM DER, 42' LEFT OF CENTERLINE, UP TO 50' AGL/74' MSL. TREES AND POLES BEGINNING 131' FROM DER, 114' RIGHT OF CENTERLINE, UP TO 39' AGL/63' MSL. CHIMNEY 676' FROM DER, 412' RIGHT OF CENTERLINE, 31' AGL/55' MSL.

◦ RWY 23:

TREES BEGINNING 1320' FROM DER, 43' LEFT OF CENTERLINE, UP TO 63' AGL/87' MSL. HANGARS BEGINNING 233' FROM DER, 288' RIGHT OF CENTERLINE, UP TO 35' AGL/59' MSL. VEHICLE ON ROAD 594' FROM DER, 513' LEFT OF CENTERLINE, 15' AGL/39' MSL. TREES 1010' FROM DER, 1010' RIGHT OF CENTERLINE, UP TO 63' AGL/87' MSL.

◦ RWY 30:

TREES AND POLES BEGINNING 114' FROM DER, 67' LEFT OF CENTERLINE, UP TO 63' AGL/87' MSL. BUILDINGS 335' FROM DER, 356' LEFT OF CENTERLINE, 25' AGL/50' MSL. TREES AND POLES BEGINNING 44' FROM DER, 35' RIGHT OF CENTERLINE, UP TO 52' AGL/76' MSL.

SCHOLES INTL AT GALVESTON

◦ RWY 13:

BUSH 381' FROM DER, 533' LEFT OF CENTERLINE, 15' AGL/20' MSL. FENCE 201' FROM DER, 490' LEFT OF CENTERLINE, 6' AGL/11' MSL. TREE 343' FROM DER, 468' RIGHT OF CENTERLINE, 12' AGL/17' MSL.

TAKEOFF OBSTACLE NOTES (CONTD 3)**SCHOLES INTL AT GALVESTON (CONTD)**

- RWY 17:
BUILDING 3057' FROM DER, 339' LEFT OF CENTERLINE, 123' AGL/130' MSL. MULTIPLE POLES BEGINNING 2034' FROM DER, 87' RIGHT OF CENTERLINE, UP TO 60' AGL/70' MSL. MULTIPLE TRANSMISSION TOWERS BEGINNING 636' FROM DER, 551' RIGHT OF CENTERLINE, UP TO 55' AGL/60' MSL. TREE 460' FROM DER, 316' RIGHT OF CENTERLINE, 22' AGL/29' MSL.
- RWY 31:
MULTIPLE CRANES BEGINNING 4341' FROM DER, 1017' LEFT OF CENTERLINE, UP TO 131' AGL/131' MSL.
- RWY 35:
TREE 730' FROM DER, 501' RIGHT OF CENTERLINE, 27' AGL/32' MSL.

SUGAR LAND REGL

- 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.
- 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.

TEXAS GULF COAST REGL

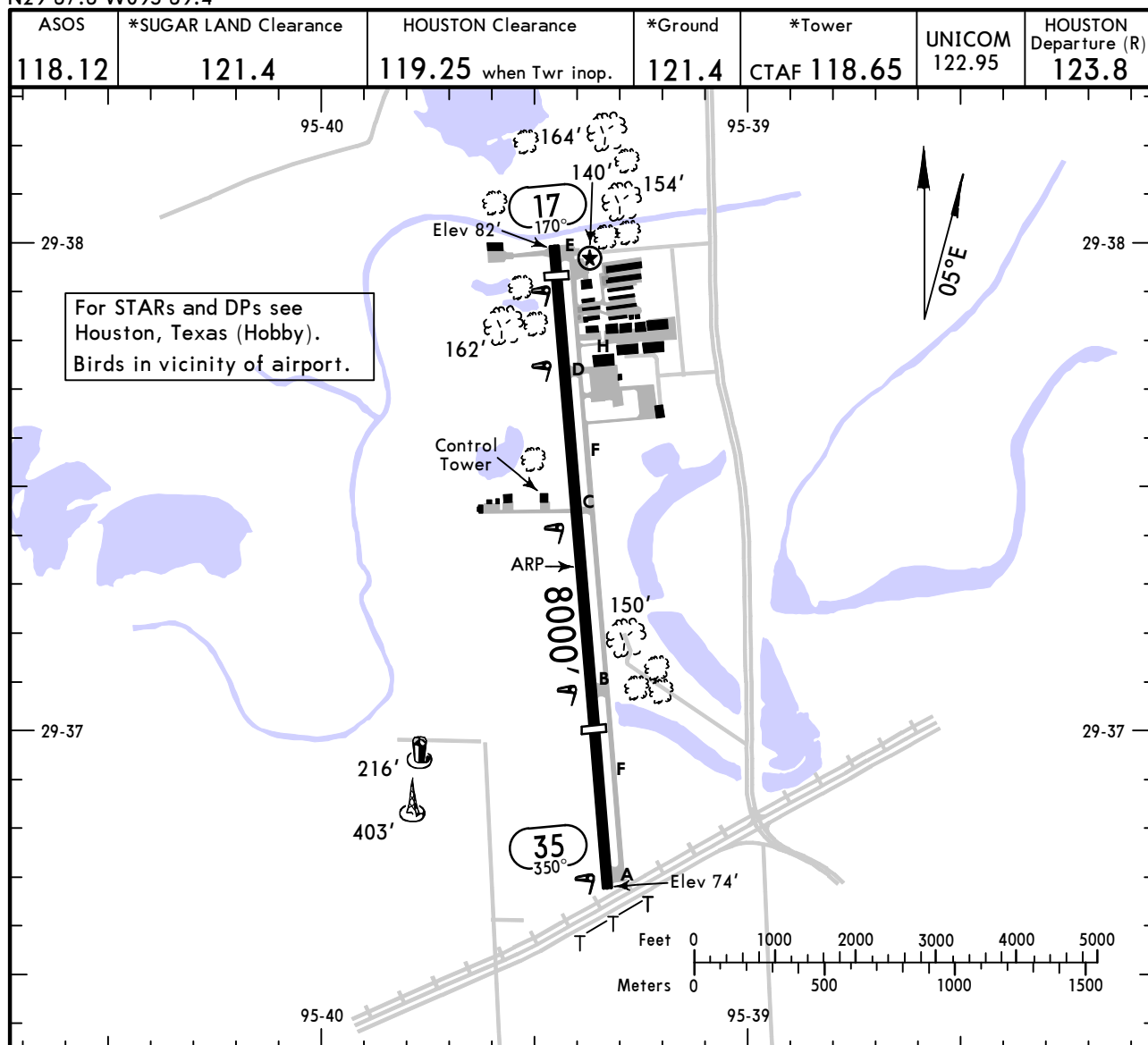
- RWY 35:
TREE 1510' FROM DER, 721' LEFT OF CENTERLINE, 48' AGL/68' MSL.

WEST HOUSTON

- RWY 15:
VEHICLES ON ROADWAY BEGINNING ABEAM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 15' AGL/124' MSL. BUILDING 177' FROM DER, 398' LEFT OF CENTERLINE, 18' AGL/126' MSL. TREES BEGINNING 178' FROM DER, 289' RIGHT OF CENTERLINE, UP TO 100' AGL/209' MSL.
- RWY 33:
BUILDING 265' FROM DER, 364' LEFT OF CENTERLINE, 35' AGL/143' MSL. TREES BEGINNING 2706' FROM DER, 700' LEFT OF CENTERLINE, UP TO 100' AGL/214' MSL. TREES BEGINNING 3159' FROM DER, 747' RIGHT OF CENTERLINE, UP TO 100' AGL/216' MSL.

WEISER

- RWY 9:
TANK 4127' FROM DER, 1455' LEFT OF CENTERLINE, 147' AGL/282' MSL.
- RWY 27:
RAILROAD 462' FROM DER, 555' LEFT OF CENTERLINE, 23' AGL/165' MSL. VEHICLE AND ROAD 650' FROM DER, 7' LEFT OF CENTERLINE, 17' AGL/159' MSL.



ADDITIONAL RUNWAY INFORMATION

RWY				USABLE LENGTHS		TAKE-OFF	WIDTH
				LANDING BEYOND	Glide Slope		
17	① HIRL	① REIL	PAPI-R (angle 3.5°)	7620'			100'
35	① HIRL	① REIL	PAPI-L (angle 3.0°)	6016'	4970'		

① Activate on 118.65.

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

	All Rwys	
	Adequate Vis Ref	STD
	1/4	1
1 & 2 Eng		
3 & 4 Eng		1/2

FOR FILING AS ALTERNATE

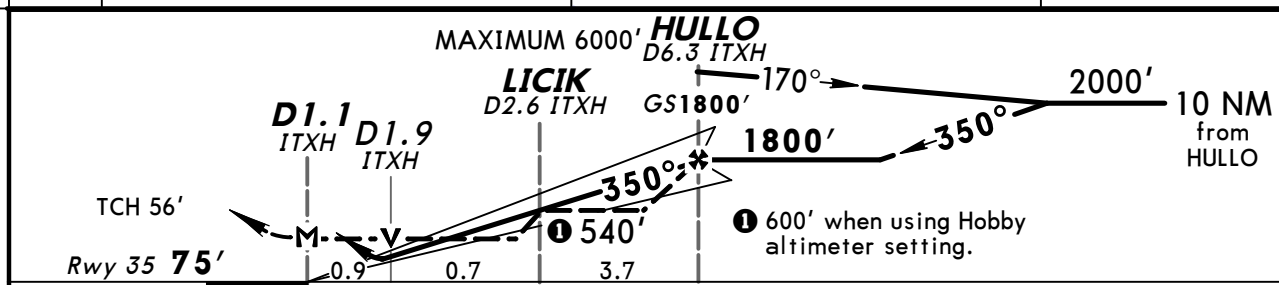
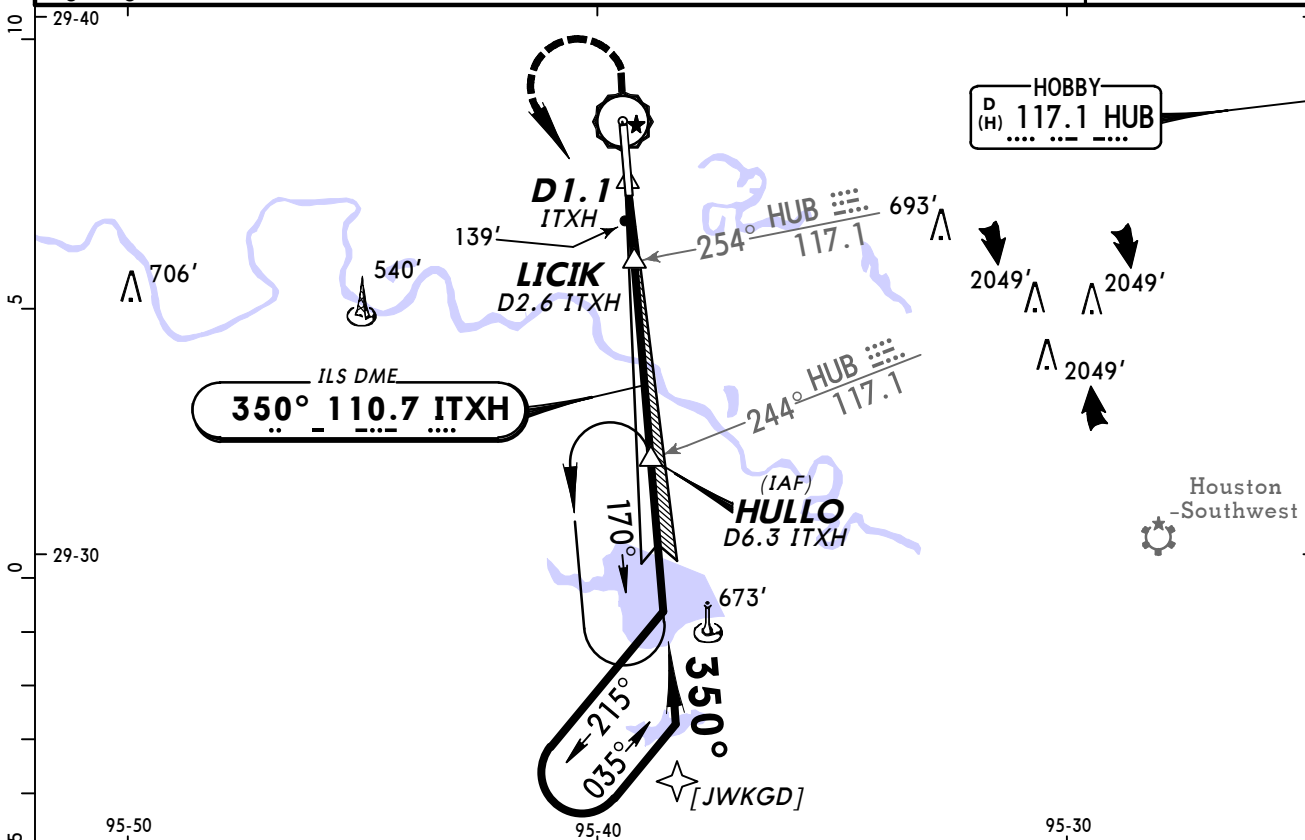
Authorized Only When
Local Weather Available
Authorized Only When
Twr Operating
ILS Rwy 35 | LOC Rwy 35

Authorized Only When
Local Weather Available
RNAV (GPS) Rwy 17
RNAV (GPS) Rwy 35
VOR DME-A

A			
B	700-2	800-2	800-2
C			
D			

OBSTACLE DP: Rwy 17, climb via 170° heading to 1500' before turning eastbound.
Rwy 35, climb via 350° heading to 1100' before turning southbound.

ASOS 118.12	HOUSTON Approach (R) 123.8	*SUGAR LAND Tower CTAF 118.65	*Ground 121.4
LOC ITXH 110.7	Final Apch Crs 350°	GS HULLO 1800' (1725')	ILS DA(H) (CONDITIONAL) 275' (200')
MISSED APCH: Climb to 900' then climbing LEFT turn to 2000' on ITXH LOC SOUTH course to HULLO INT/D6.3 ITXH and hold.			
Alt Set: INCHES 1. Radar required. 2. Use local altimeter setting; if not received, use Hobby altimeter setting. 3. VDP not authorized when using Hobby Altimeter setting. 4. Pilot controlled lighting 118.65.			
Trans level: FL 180 Trans alt: 18000'			
3100'			
MSA HUB VOR			

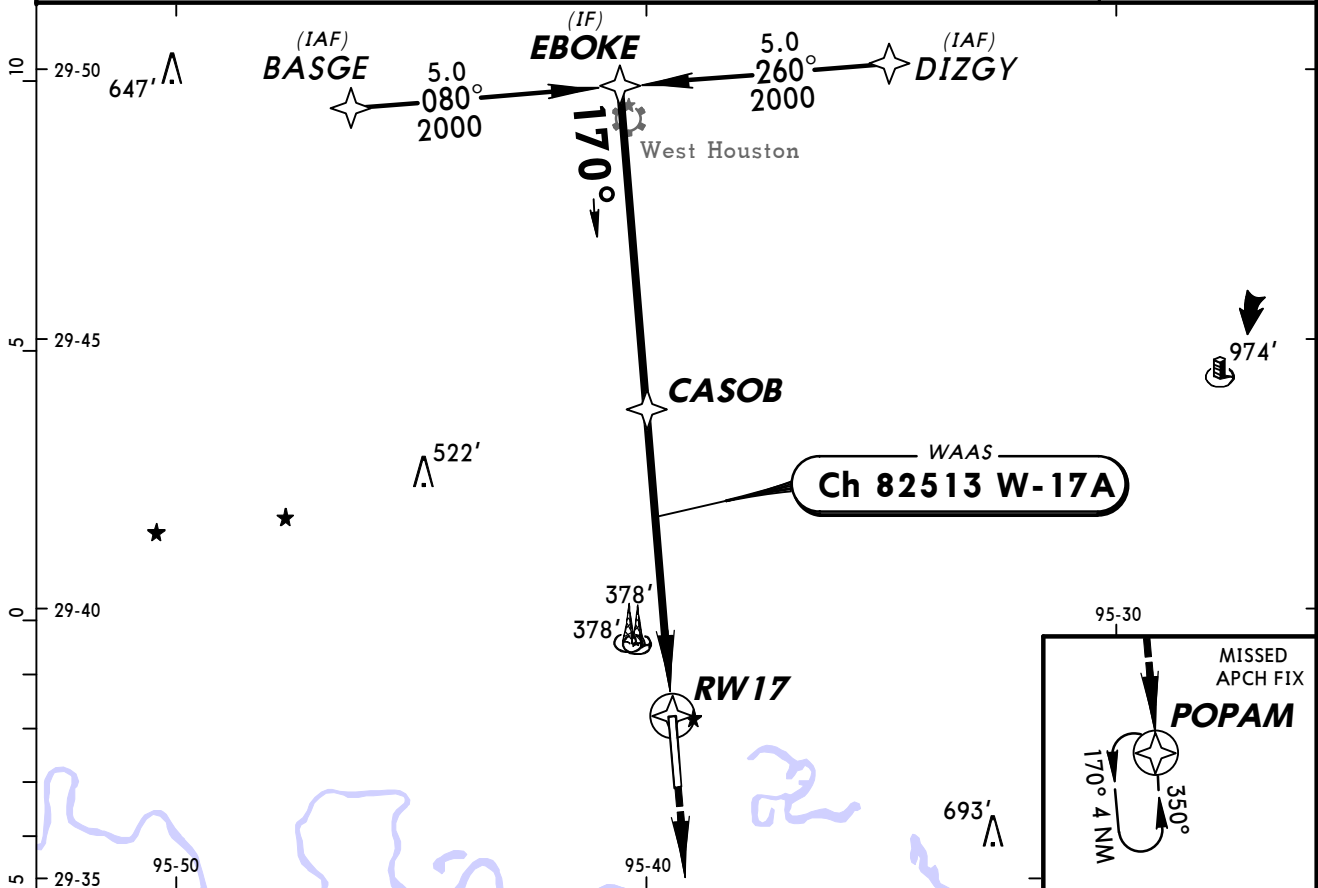


Gnd speed-Kts	70	90	100	120	140	160	REIL	900'	2000'	ITXH	HULLO
GS	3.00°	372	478	531	637	743	PAPI-L	↑	LT	110.7	
MAP at D1.1 ITXH or HULLO to MAP	5.2	4:27	3:28	3:07	2:36	2:14	1:57			SOUTH	

TERPS			STRAIGHT-IN LANDING RWY 35			2 CIRCLE-TO-LAND	
ILS			LOC (GS out)				
			With Local Altimeter Setting 1 With LICIK		Without LICIK	With Local Altimeter Setting	
DA(H) 275' (200')			MDA(H) 400' (325')		MDA(H) 540' (465')	Max Kts	MDA(H)
A/B	3/4		1		1	90/120	720' (638')- 1
C					1 3/8	140	720' (638')- 1 3/4
D						165	720' (638')- 2
			With Hobby Altimeter Setting 1 With LICIK		Without LICIK	With Hobby Altimeter Setting	
DA(H) 326' (251')			MDA(H) 460' (385')		MDA(H) 600' (525')	Max Kts	MDA(H)
A/B	3/4		1		1	90/120	780' (698')- 1
C					1 1/4	140	780' (698')- 2
D						165	780' (698')- 2 1/4

1 Dual VOR receivers or DME required. 2 When VGSI inop, circling Rwy 17 not authorized at night.

ASOS 118.12		HOUSTON Approach (R) 123.8		*SUGAR LAND Tower CTAF 118.65		*Ground 121.4	
WAAS Ch 82513 W-17A	Final Apch Crs 170°	Minimum Alt CASOB 2000' (1918')	LPV DA(H) (CONDITIONAL) 398' (316')	Apt Elev 82' TDZE 82'		3100' MSA RW17	
MISSED APCH: Climb to 2000' direct POPAM and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. RADAR required. 2. Use local altimeter setting, if not received, use Houston, Texas (Hobby) altimeter setting. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 49°C (120°F). 4. Baro-VNAV not authorized when using Houston, Texas (Hobby) altimeter setting. 5. DME/DME RNP-0.30 not authorized. 6. Visibility reduction by helicopters not authorized. 7. VGSI and RNAV glidepath not coincident. 8. Pilot controlled lighting 118.65.							

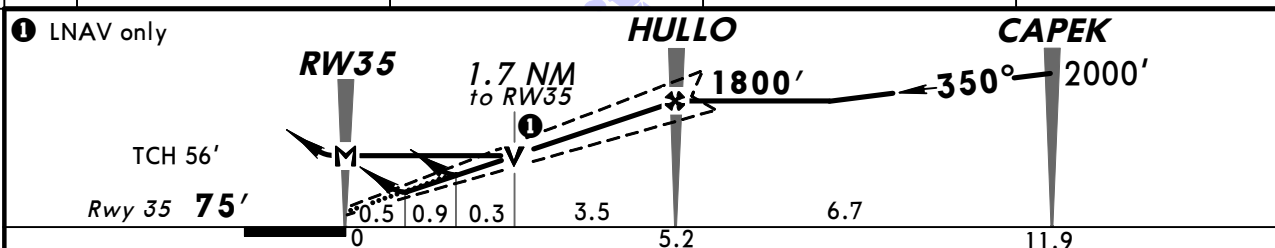
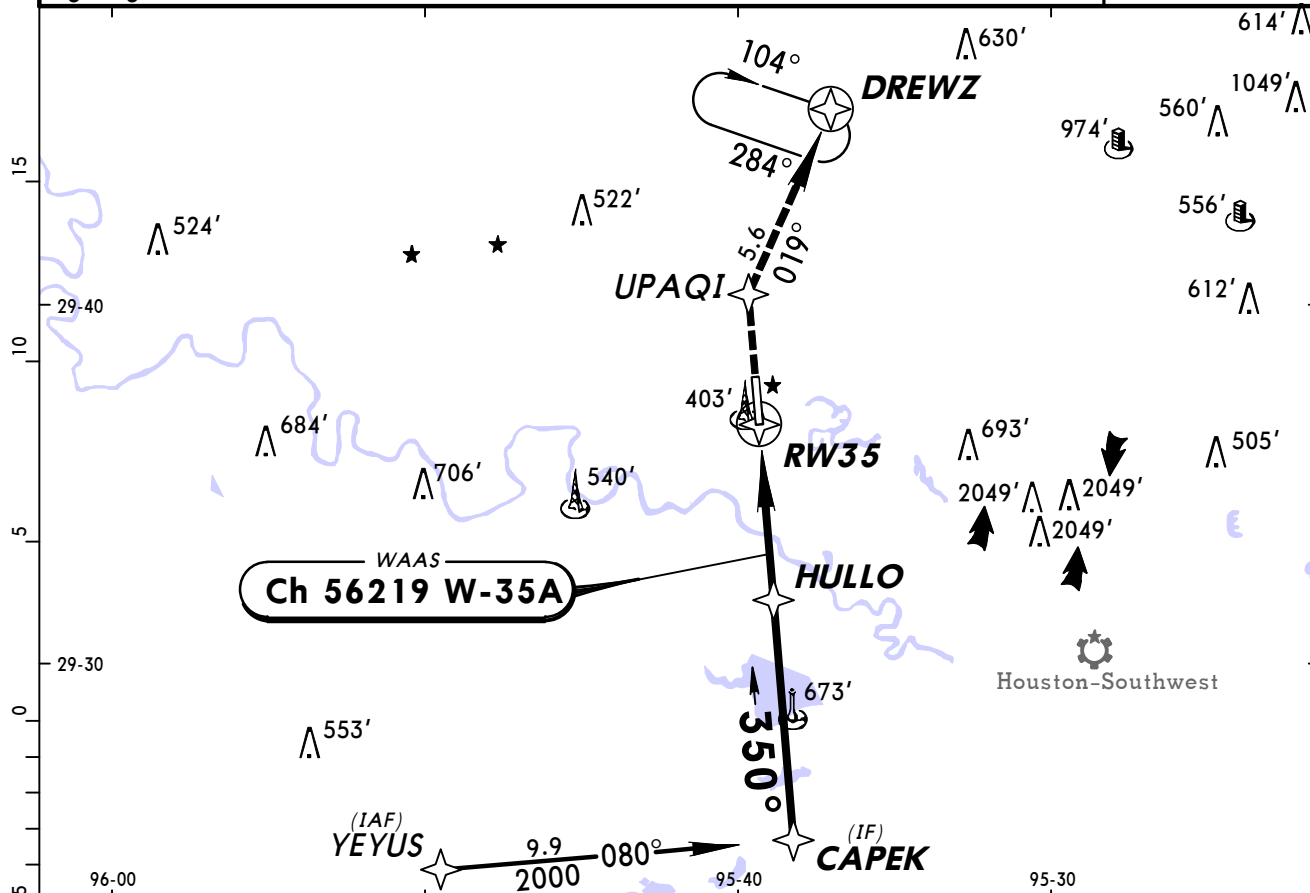


TCH 52'											
TDZE 82'											
11.8 6.0 5.8 4.0 0.2 0.8 0.8 0											
Gnd speed-Kts		70	90	100	120	140	160	REIL PAPI-R	2000'	D →	POPAM
Glide Path Angle 3.00°		372	478	531	637	743	849				
MAP at RW17											

STRAIGHT-IN LANDING RWY 17 With Local Altimeter Setting							CIRCLE-TO-LAND With Local Altimeter Setting		
LPV DA(H) 398' (316')		LNAV/VNAV DA(H) 696' (614')		LNAV MDA(H) 640' (558')		Max Kts	MDA(H)		
A	1	2	1		90	720' (638')-1			
B					120				
C					1½		140	720' (638')-1½	
D					1¾		165	720' (638')-2	
With Houston, Texas (Hobby) Altimeter Setting							With Houston, Texas (Hobby) Altimeter Setting		
LPV DA(H) 458' (376')		LNAV/VNAV DA(H) 756' (674')		LNAV MDA(H) 700' (618')		Max Kts	MDA(H)		
A	1¼	2¼	1		90	780' (698')-1			
B					120				
C					1¾		140	780' (698')-1¾	
D					2		165	780' (698')-2¼	

BRIEFING STRIP™

ASOS 118.12		HOUSTON Approach (R) 123.8		*SUGAR LAND Tower CTAF 118.65		*Ground 121.4	
WAAS Ch 56219 W-35A		Final Apch Crs 350°	Minimum Alt HULLO 1800' (1725')	LPV DA(H) (CONDITIONAL) 275' (200')	Apt Elev 82' Rwy 35 75'		3100' MSA RW35
MISSED APCH: Climb to 2000' direct UPAQI and on track 019° to DREWZ and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'							
1. RADAR required. 2. Use local altimeter setting, if not received, use Hobby altimeter setting. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -15°C (5°F) or above 43°C (109°F). 4. Baro-VNAV and VDP not authorized when using Hobby altimeter setting. 5. DME/DME RNP-0.30 not authorized. 6. Pilot controlled lighting 118.65.							



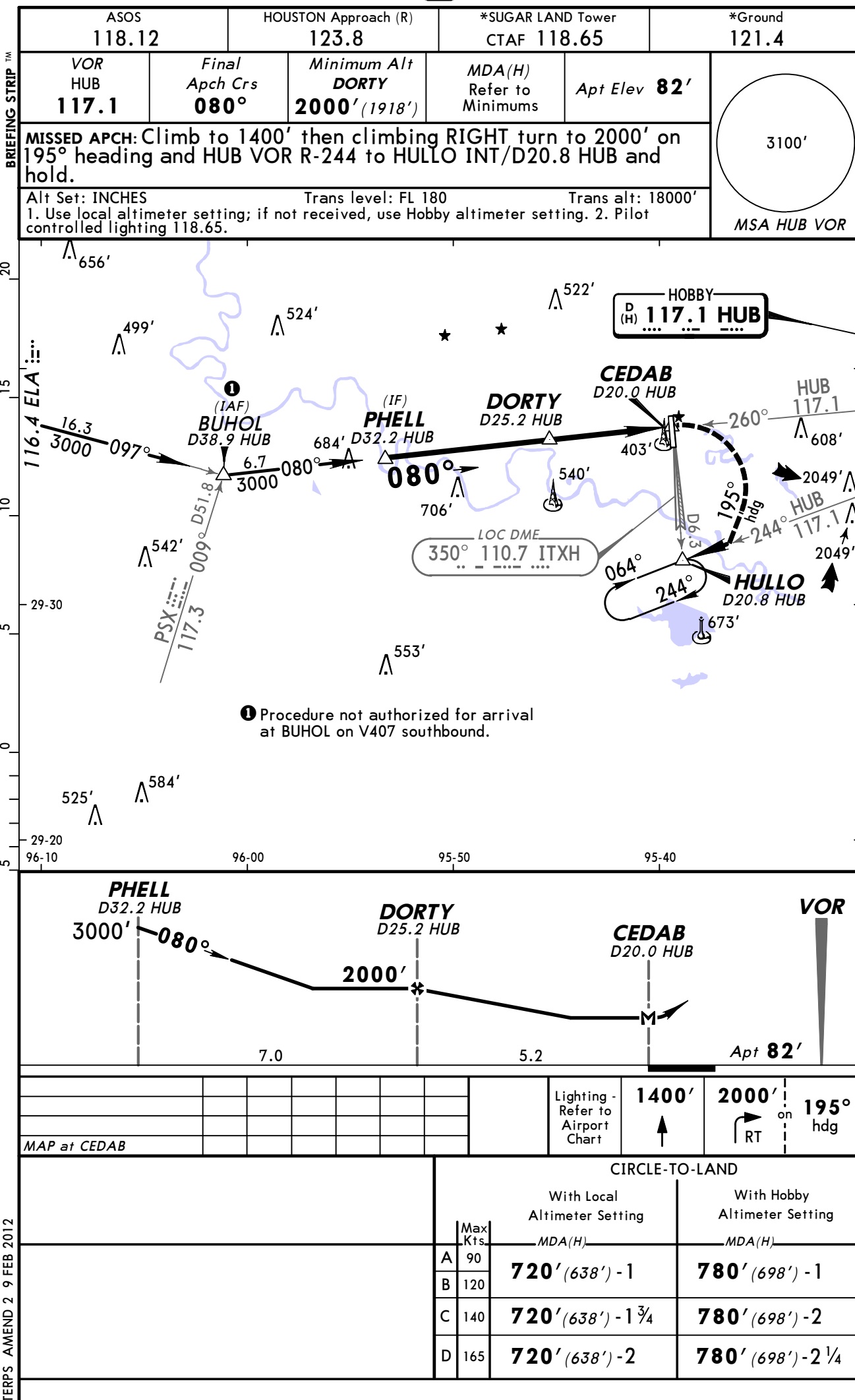
Gnd speed-Kts	70	90	100	120	140	160		REIL	2000'	→	UPAQI
Glide Path Angle 3.00°	372	478	531	637	743	849		PAPI-L	↑		
MAP at RW35											

TERPS				STRAIGHT-IN LANDING RWY 35				1 CIRCLE-TO-LAND			
				With Local Altimeter Setting							
		LPV		LNAV/VNAV		LNAV		Max Kts		With Local Altimeter Setting	
		DA(H) 275' (200')		DA(H) 564' (489')		MDA(H) 660' (585')			MDA(H)		
A/B		3/4		1 5/8		1		90/120		720' (638') - 1	
C						1 3/4		140		720' (638') - 1 3/4	
D								165		720' (638') - 2	
				With Hobby Altimeter Setting							
		LPV		LNAV/VNAV		LNAV		Max Kts		With Hobby Altimeter Setting	
		DA(H) 326' (251')		DA(H) 615' (540')		MDA(H) 720' (645')			MDA(H)		
A/B		3/4		1 3/4		1		90/120		780' (698') - 1	
C						1 7/8		140		780' (698') - 2	
D								165		780' (698') - 2 1/4	

1 When VGSI inop, circling Rwy 17 not authorized at night.

CHANGES: Procedure.

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General Information

Location: San Angelo TX USA
IATA Code: SJT
Lat/Long: N31° 21.5' W100° 29.8'
Elevation: 1919 ft

Airport Use: Public
Magnetic Variation: 6.0°E
Sectional Chart: San Antonio

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: High Pressure, Low Pressure, LP Bottle
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1311 Z
Sunset: 0038 Z,

Runway Information

Runway: 03
Length x Width: 5939 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 1917 ft
Lighting: Edge, ALS, Pilot controlled

Runway: 09
Length x Width: 4402 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 1903 ft
Lighting: Edge, Pilot controlled

Runway: 18
Length x Width: 8049 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 1908 ft
Lighting: Edge, REIL, Pilot controlled
Displaced Threshold: 889 ft

Runway: 21
Length x Width: 5939 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 1906 ft
Lighting: Edge, ALS, Pilot controlled

Runway: 27
Length x Width: 4402 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 1899 ft
Lighting: Edge, Pilot controlled

Runway: 36
Length x Width: 8049 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 1919 ft
Lighting: Edge, Pilot controlled

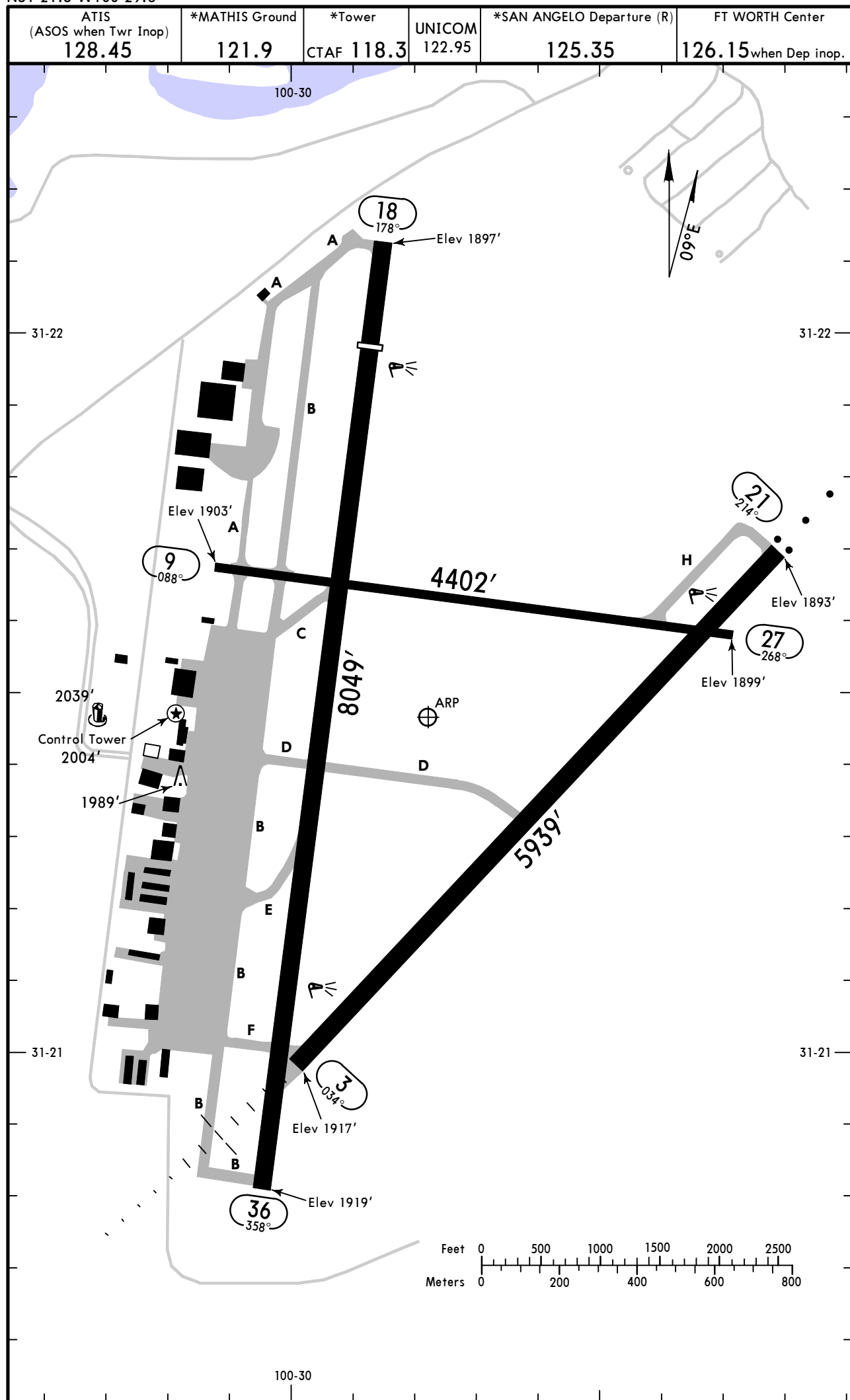
Communication Information

ATIS 128.45
ASOS 128.45
Mathis Tower 118.3 CTAF PCL
Mathis Ground Control 121.9
San Angelo Approach Control 125.35
San Angelo Departure Control 125.35
Mathis Unicom 122.95
San Angelo Radar 125.35
San Angelo Flight Service Station 122.25 RCO
FT Worth Center 126.15 Remote Communications Air-Ground

KSJT/SJT
Apt Elev 1919'
N31 21.5 W100 29.8

JEPPESEN
2 SEP 11 (10-9)

SAN ANGELO, TEXAS
SAN ANGELO REGL/MATHIS



CHANGES: Helipad deleted, taxiway labels.

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GENERAL

12 hour prior permission required for unscheduled air carrier operations with more than 30 passenger seats. Contact airport manager.

ADDITIONAL RUNWAY INFORMATION

RWY			USABLE LENGTHS		TAKE-OFF	WIDTH
			LANDING BEYOND			
3 21		① HIRL ① MALSR		4938'		150'
		① HIRL ① ODALS ① REIL VASI-L				
① Activate and increase intensity on 118.3 when Twr inop.						
9 27		② MIRL				75'
② Activate and increase intensity on 118.3 when Twr inop.						
18 36		③ MIRL ④ REIL ④ PAPI-L (angle 3.0°)	7160'		7160'	150'
		③ MIRL ④ PAPI-L (angle 3.0°)	⑤ 7160'			
③ Increase intensity on 118.3 when Twr inop.						
④ Activate and increase intensity on 118.3 when Twr inop.						
⑤ Last 889' of Rwy 36 not available for landing.						

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

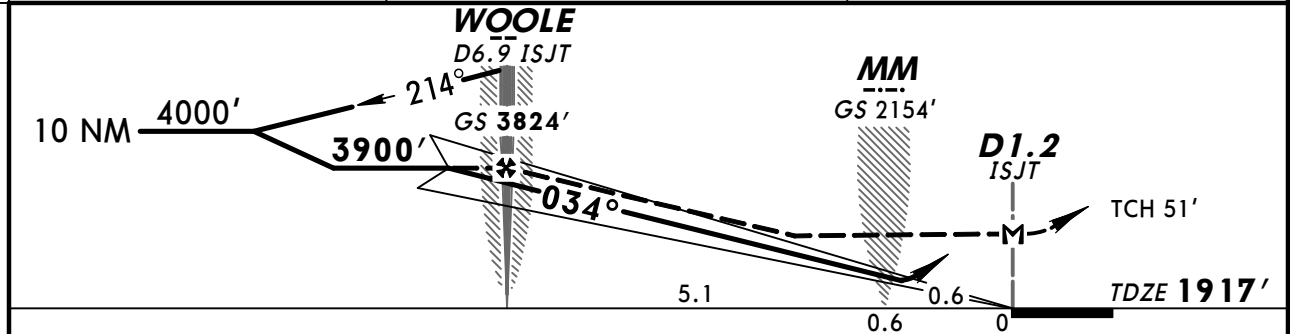
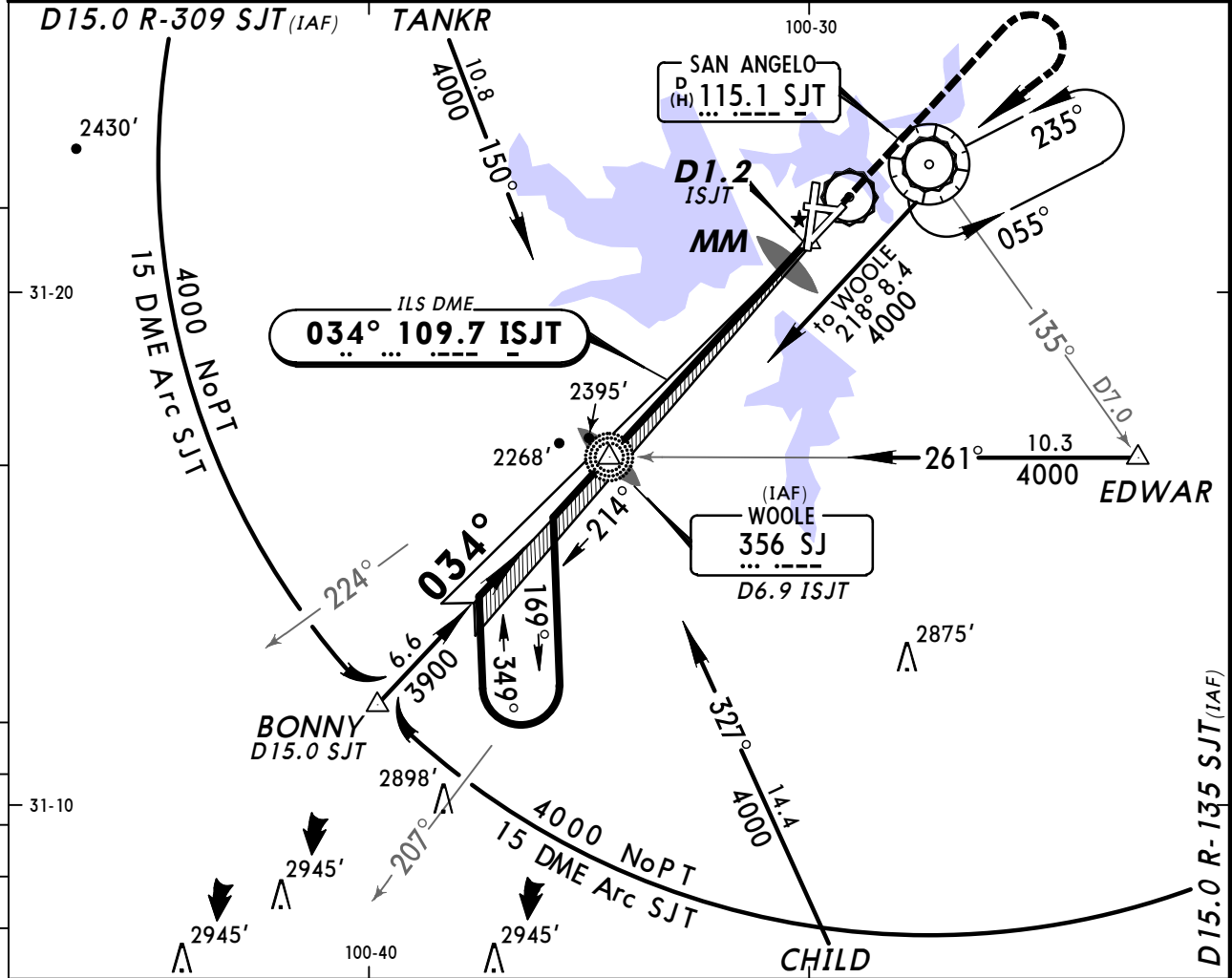
All Rwys		
	Adequate Vis Ref	STD
1 & 2 Eng	1/4	1
3 & 4 Eng		1/2

OBSTACLE DP: Rwy 27, climb to 2500' before turning right. Rwy 36, climb to 2600' before turning left.

FOR FILING AS ALTERNATE

	Authorized Only When Twr Operating		RNAV (GPS) Rwy 3 RNAV (GPS) Rwy 18 RNAV (GPS) Rwy 21 VOR DME Rwy 3 RADAR-1
	ILS Rwy 3	NDB Rwy 3 LOC Rwy 3 LOC BC Rwy 21 VOR Rwy 21	
A	600-2	800-2	800-2
B			
C			
D			

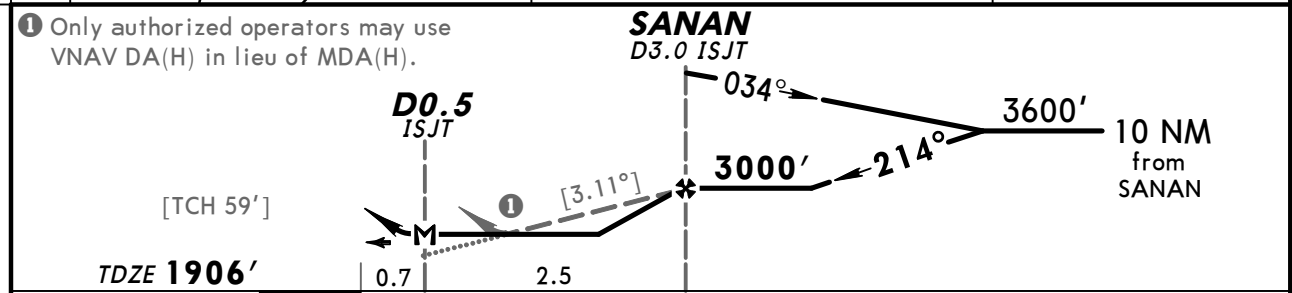
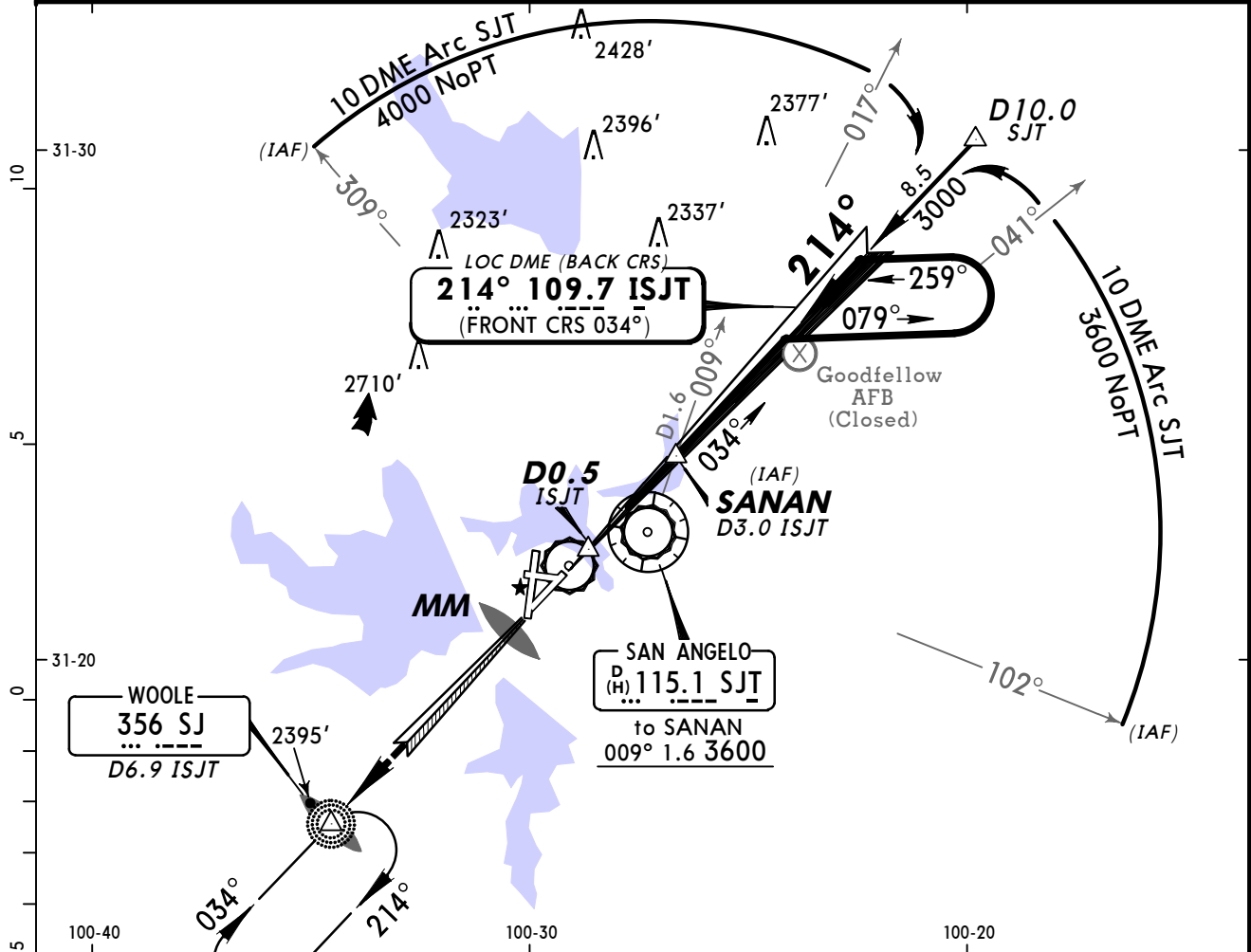
ATIS (ASOS when Twr inop)	*SAN ANGELO Approach (R)	FT WORTH Center	*MATHIS Tower	*Ground
128.45	125.35	126.15 when App inop.	CTAF 118.3	121.9
LOC ISJT 109.7	Final Apch Crs 034°	GS WOOLE 3824' (1907')	ILS DA(H) 2117' (200')	Apt Elev 1919' TDZE 1917'
MISSED APCH: Climb to 4000' then RIGHT turn direct SJT VOR and hold. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use ISJT DME when on LOC course. 2. Pilot controlled lighting 118.3.				
				4400' MSA SJ LOM



Gnd speed-Kts	70	90	100	120	140	160	MALS	4000'	RT	SJT
GS	3.00°	377	484	538	646	753	861			115.1
MAP at D1.2 ISJT or WOOLE to MAP 5.7	4:53	3:48	3:25	2:51	2:27	2:08				

STRAIGHT-IN LANDING RWY 3					CIRCLE-TO-LAND	
ILS		LOC (GS out)			Max Kts	MDA(H)
DA(H) 2117' (200')		MDA(H) 2420' (503')				
FULL	RAIL or ALS out	RAIL out	ALS out			
A		1/2	3/4	1	90	2460' (541') - 1
B					120	
C	1/2	3/4			140	2460' (541') - 1 1/2
D		1	1 1/2		165	2480' (561') - 2

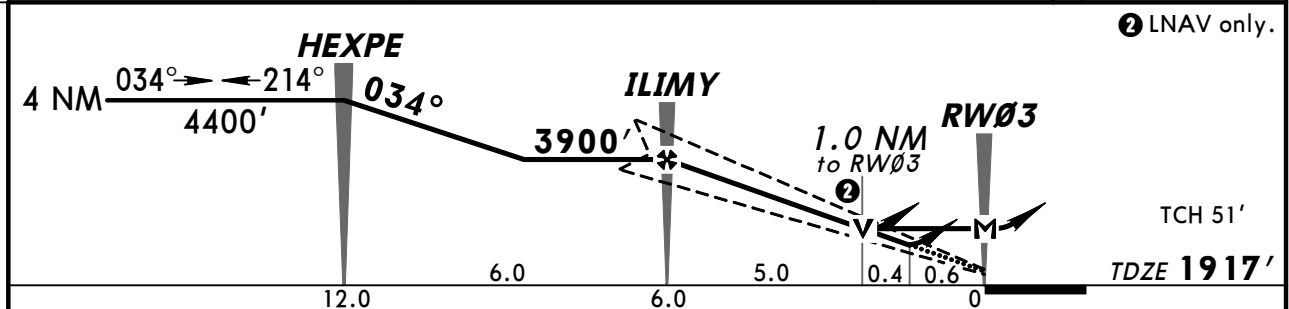
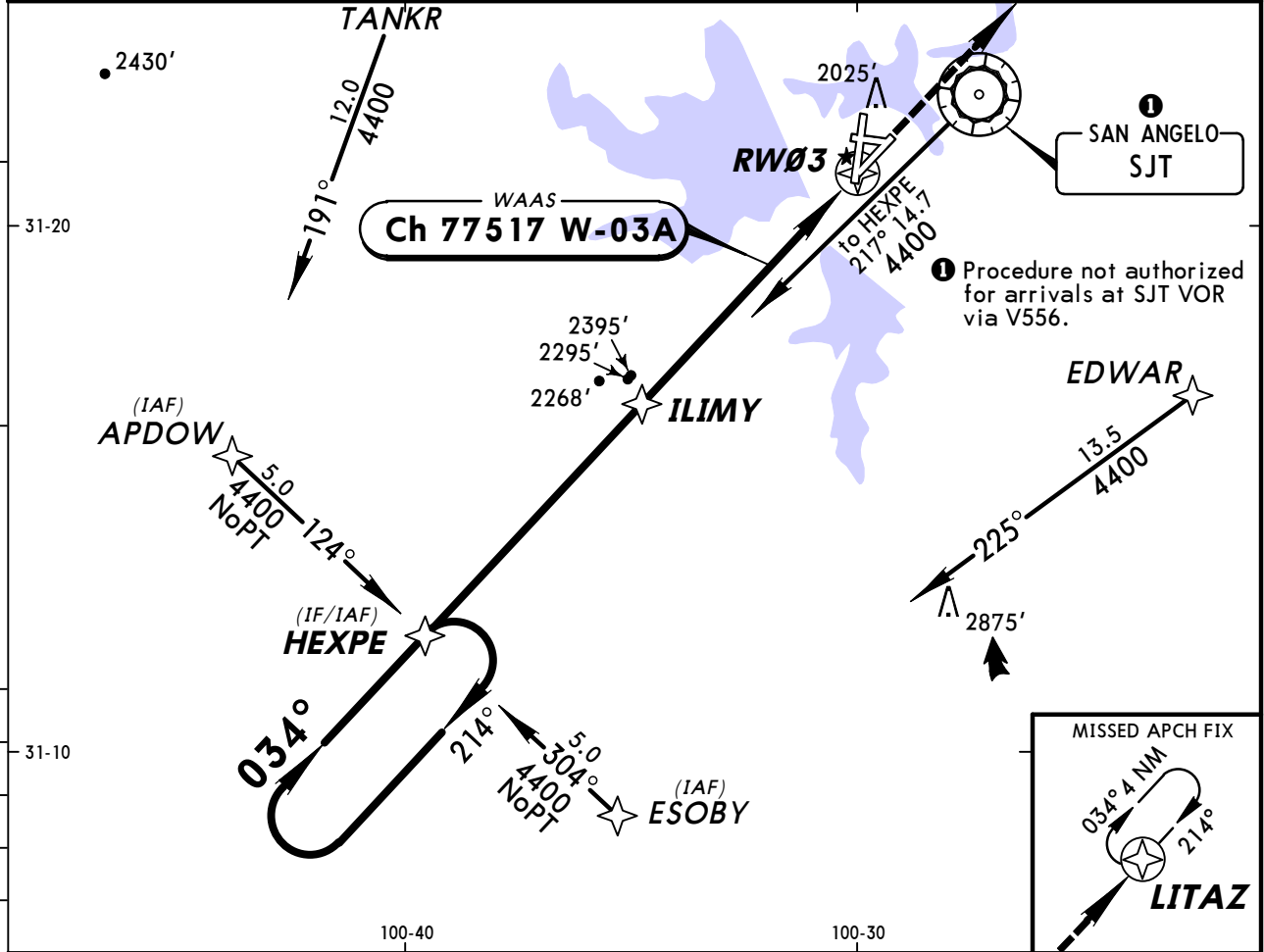
ATIS (ASOS when Twr inop)	*SAN ANGELO Approach (R)	FT WORTH Center	*MATHIS Tower	*Ground
128.45	125.35	126.15 when App inop.	CTAF 118.3	121.9
LOC ISJT 109.7	Final Apch Crs 214° (Front Crs 034°)	Minimum Alt SANAN 3000' (1094')	MDA(H) 2280' (374')	Apt Elev 1919' TDZE 1906'
MISSED APCH: Climb to 5000' via ISJT LOC SOUTHWEST course to SJ LOM/D6.9 ISJT and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. ADF or DME required. 2. Use ISJT DME when on LOC course. 3. Disregard glide slope indications. 4. Pilot controlled lighting 118.3.				
MSA SJT VOR				



Gnd speed-Kts	70	90	100	120	140	160	ODALS	5000'	ISJT	SJ
Descent angle [3.11°]	385	495	550	660	770	880	REIL	↑	109.7	356
MAP at D0.5 ISJT or SANAN to MAP	2.5	2:09	1:40	1:30	1:15	1:04	VASI	via	SOUTHWEST course	

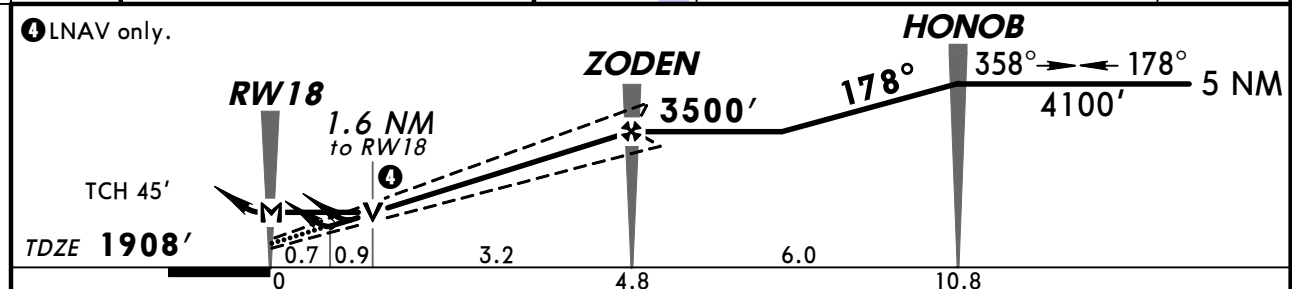
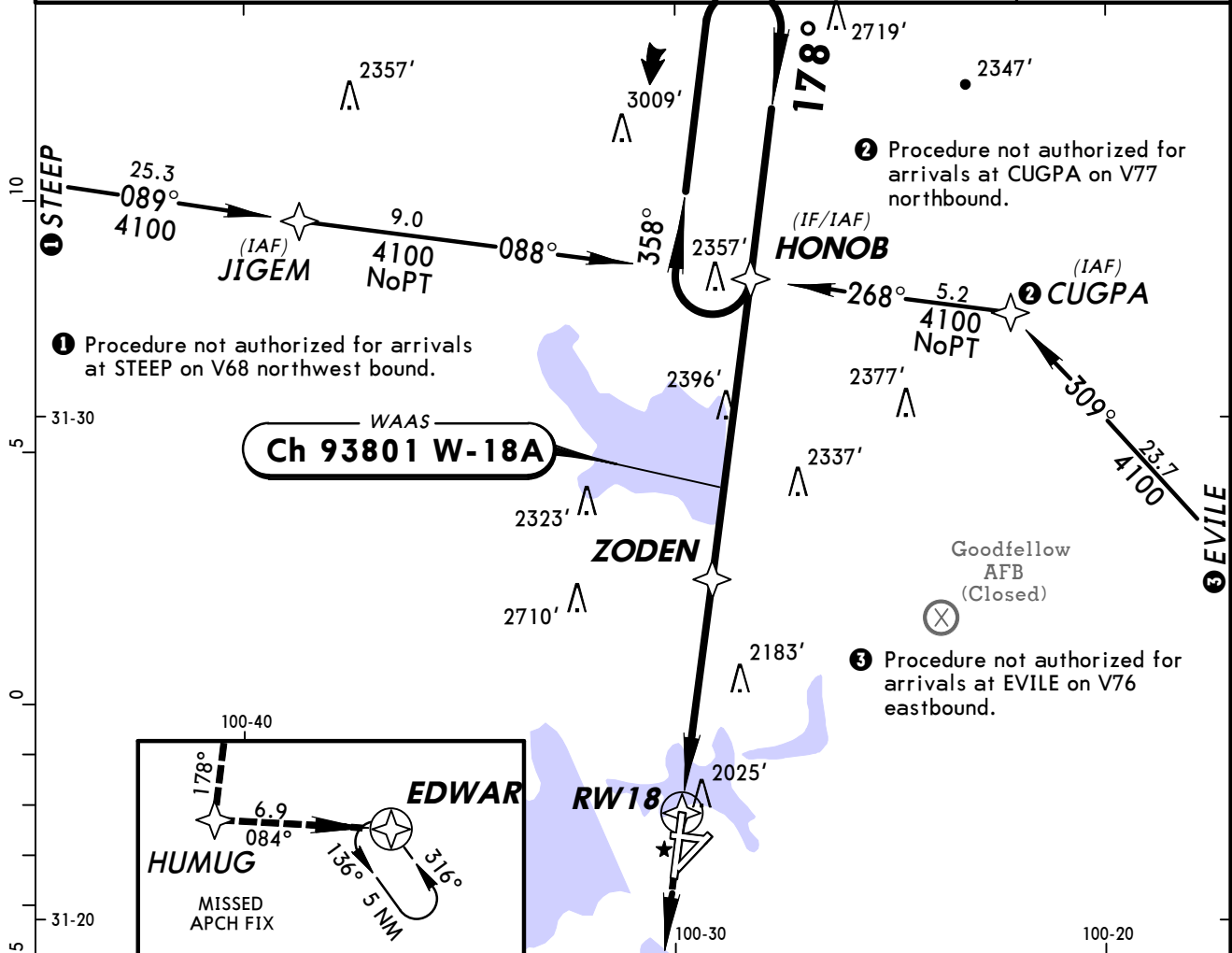
STRAIGHT-IN LANDING RWY21				CIRCLE-TO-LAND			
MDA(H) 2280' (374')				MDA(H)			
ODALS out				Max Kts			
A				90	2460' (541') - 1		
B	3/4		1	120			
C				140	2460' (541') - 1 1/2		
D	1 1/4			165	2480' (561') - 2		

ATIS (ASOS when Twr inop)	*SAN ANGELO Approach (R)	FT WORTH Center	*MATHIS Tower	*Ground
128.45	125.35	126.15 when App inop.	CTAF 118.3	121.9
WAAS Ch 77517 W-03A	Final Apch Crs 034°	Minimum Alt ILIMY 3900' (1983')	LPV DA(H) 2167' (250')	Apt Elev 1919' TDZE 1917'
MISSED APCH: Climb to 3800' direct LITAZ and hold. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Baro-VNAV not authorized below -18°C (0°F). 2. DME/DME RNP-0.3 not authorized. 3. Pilot controlled lighting 118.3.				
				4400' MSA RW03



Gnd speed-Kts		70	90	100	120	140	160	MALSR

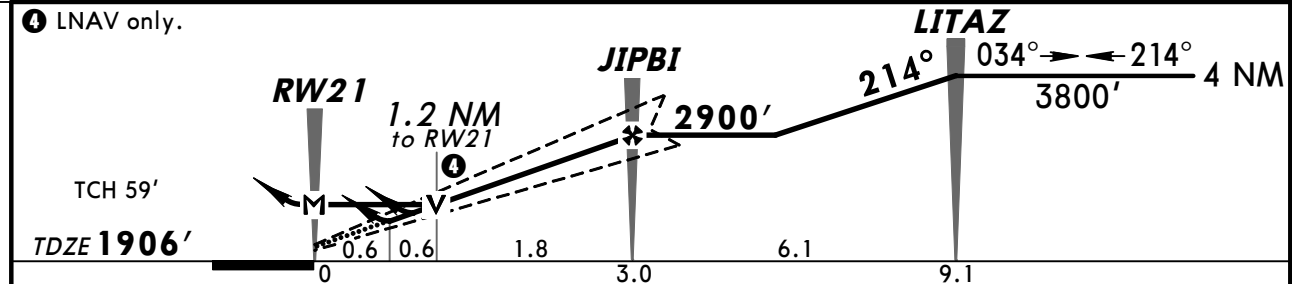
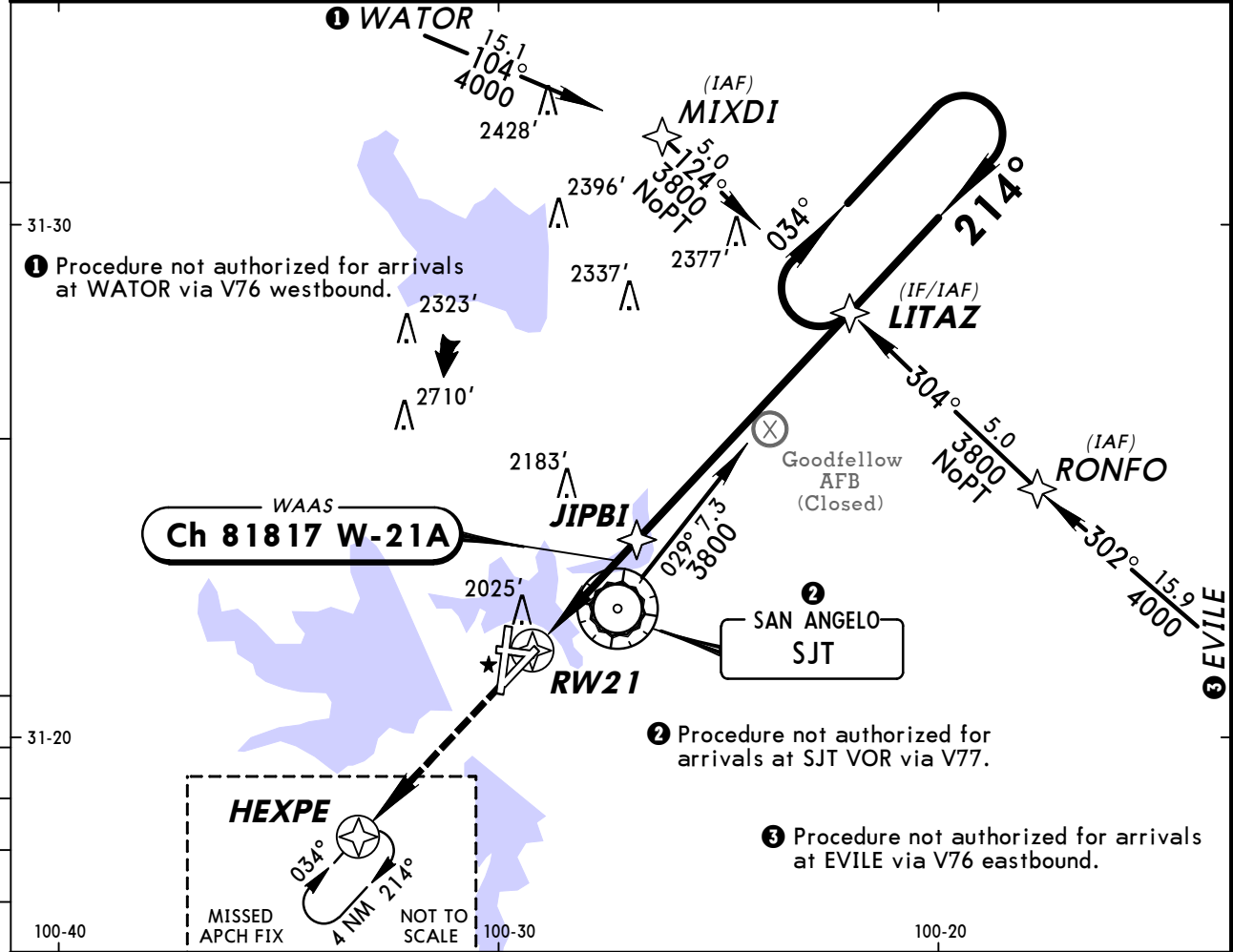
ATIS (ASOS when Twr inop)	*SAN ANGELO Approach (R)	FT WORTH Center	*MATHIS Tower	*Ground
128.45	125.35	126.15 when App inop.	CTAF 118.3	121.9
WAAS Ch 93801 W-18A	Final Apch Crs 178°	Minimum Alt ZODEN 3500' (1592')	LPV DA(H) 2158' (250')	Apt Elev 1919' TDZE 1908'
MISSED APCH: Climb to 4000' direct HUMUG and turn LEFT via 084° track to EDWAR and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -18°C (0°F) or above 45°C (113°F). 2. DME/DME RNP-0.3 not authorized. 3. Pilot controlled lighting 118.3				
				4400'
				MSA RW18



Gnd speed-Kts	70	90	100	120	140	160		REIL	4000'		HUMUG
Glide Path Angle	3.00°	372	478	531	637	743	849	PAPI-L	↑		
MAP at RW18											

STRAIGHT-IN LANDING RWY 18						CIRCLE-TO-LAND	
LPV DA(H) 2158' (250')		LNAV/VNAV DA(H) 2325' (417')		LNAV MDA(H) 2440' (532')		Max Kts	MDA(H)
1	1½	1½	1¾	1	90	2460' (541') - 1½	
				1½	120		
				1¾	140	2480' (561') - 2	
					165		

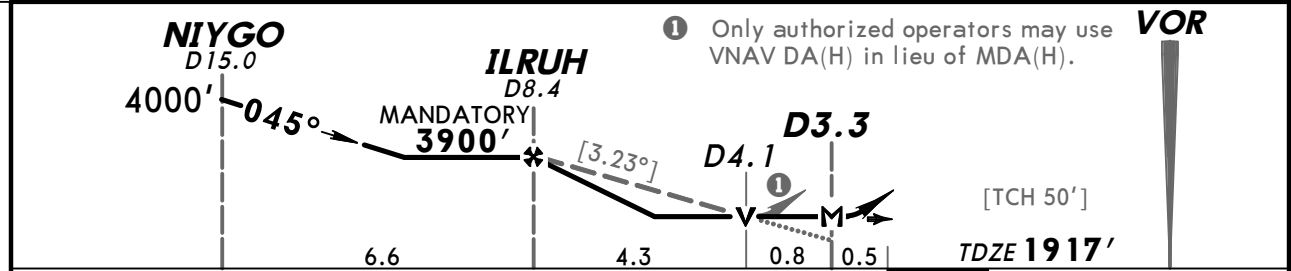
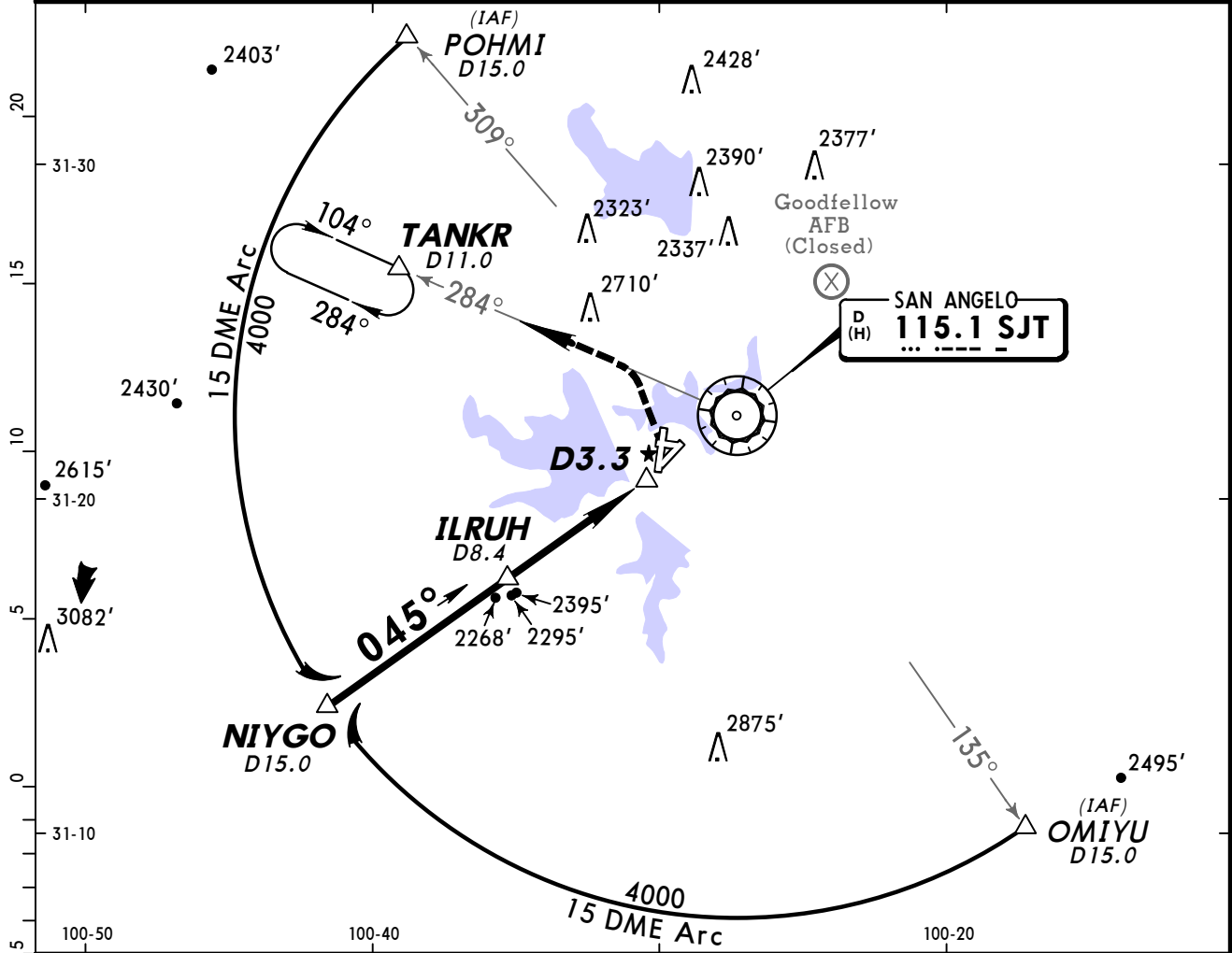
ATIS (ASOS when Twr inop)	*SAN ANGELO Approach (R)	FT WORTH Center	*MATHIS Tower	*Ground
128.45	125.35	126.15 when App inop.	CTAF 118.3	121.9
WAAS Ch 81817 W-21A	Final Apch Crs 214°	Minimum Alt JIPBI 2900' (994')	LPV DA(H) 2156' (250')	Apt Elev 1919' TDZE 1906'
MISSED APCH: Climb to 4400' direct HEXPE and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Baro-VNAV not authorized below -18°C (0°F). 2. DME/DME RNP-0.3 not authorized. 3. Pilot controlled lighting 118.3.				
				4400' MSA RW21



Gnd speed-Kts	70	90	100	120	140	160	ODALS	4400'	HEXPE
Glide Path Angle 3.00°	372	478	531	637	743	849	REIL VASI		
MAP at RW21									

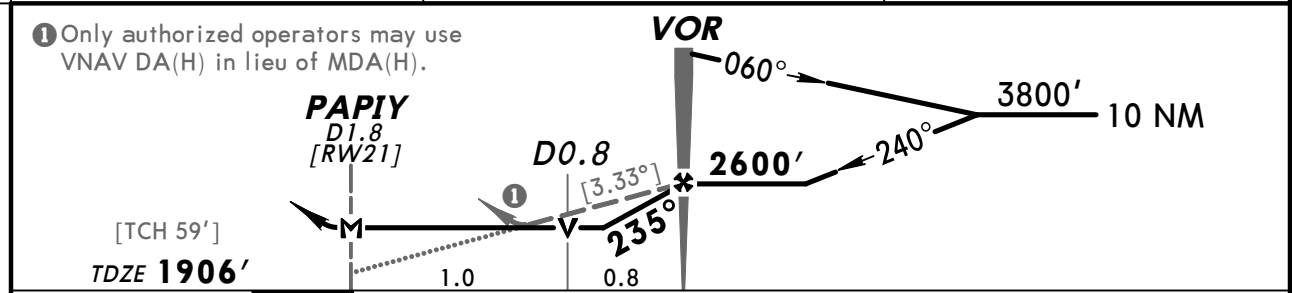
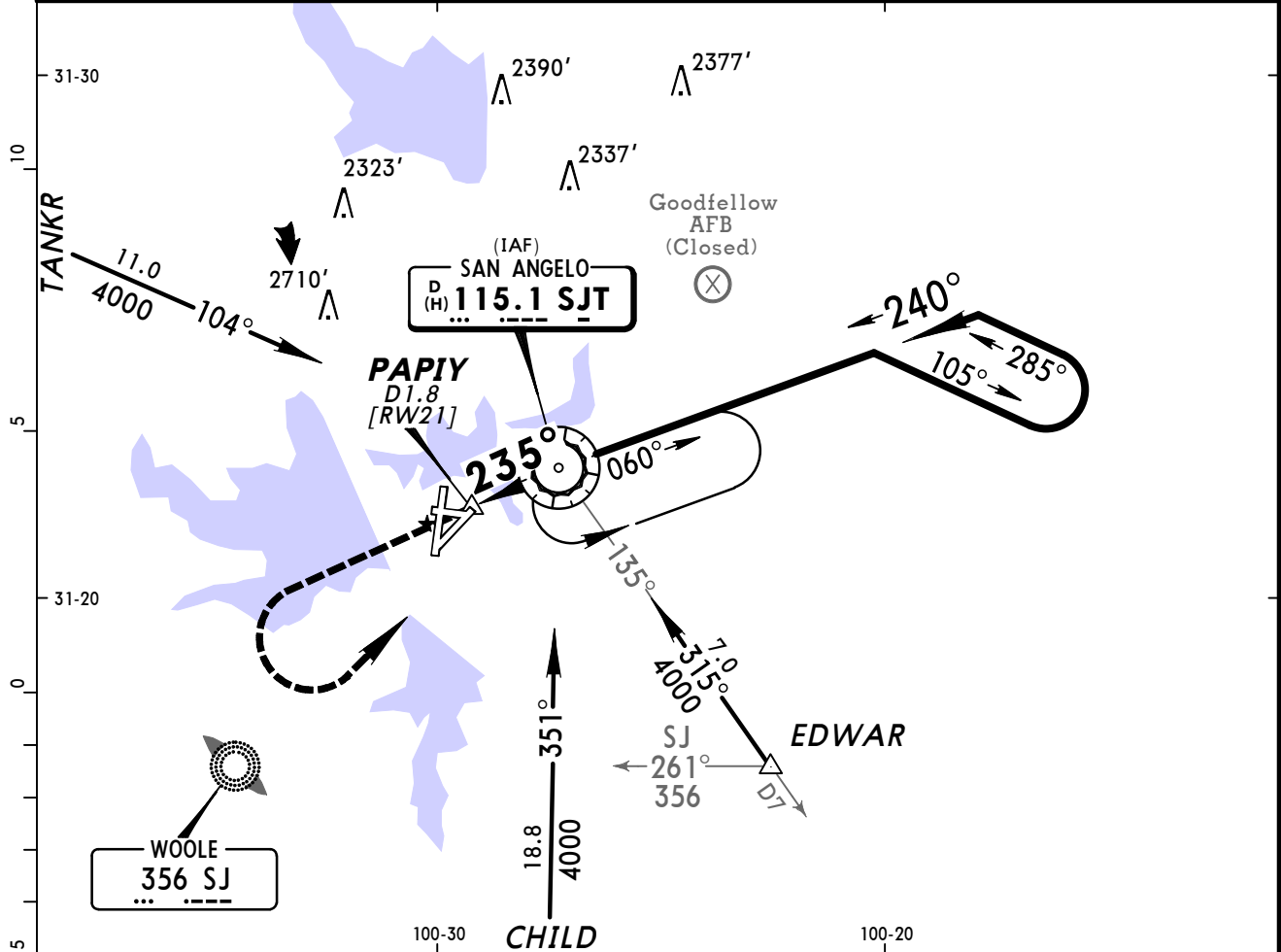
STRAIGHT-IN LANDING RWY 21				CIRCLE-TO-LAND	
LPV	LNAV/VNAV	LNAV		Not Authorized to Rwy 9 & 36 at Night	
DA(H) 2156' (250')	DA(H) 2325' (419')	MDA(H) 2340' (434')			
ODALS out	ODALS out	ODALS out			
A			3/4	1	2460' (541') - 1 1/2
B					
C	3/4	1 1/2	1 1/4		
D			1 1/2		2480' (561') - 2

ATIS (ASOS when Twr inop)	*SAN ANGELO Approach (R)	FT WORTH Center	*MATHIS Tower	*Ground
128.45	125.35	126.15 when App inop.	CTAF 118.3	121.9
VOR SJT 115.1	Final Apch Crs 045°	Mandatory Alt ILRUH 3900' (1983')	MDA(H) 2420' (503')	Apt Elev 1919' TDZE 1917'
MISSED APCH: Climbing LEFT turn to 4400' outbound via SJT VOR R-284 to TANKR/D11.0 and hold. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. Pilot controlled lighting 118.3.				MSA SJT VOR

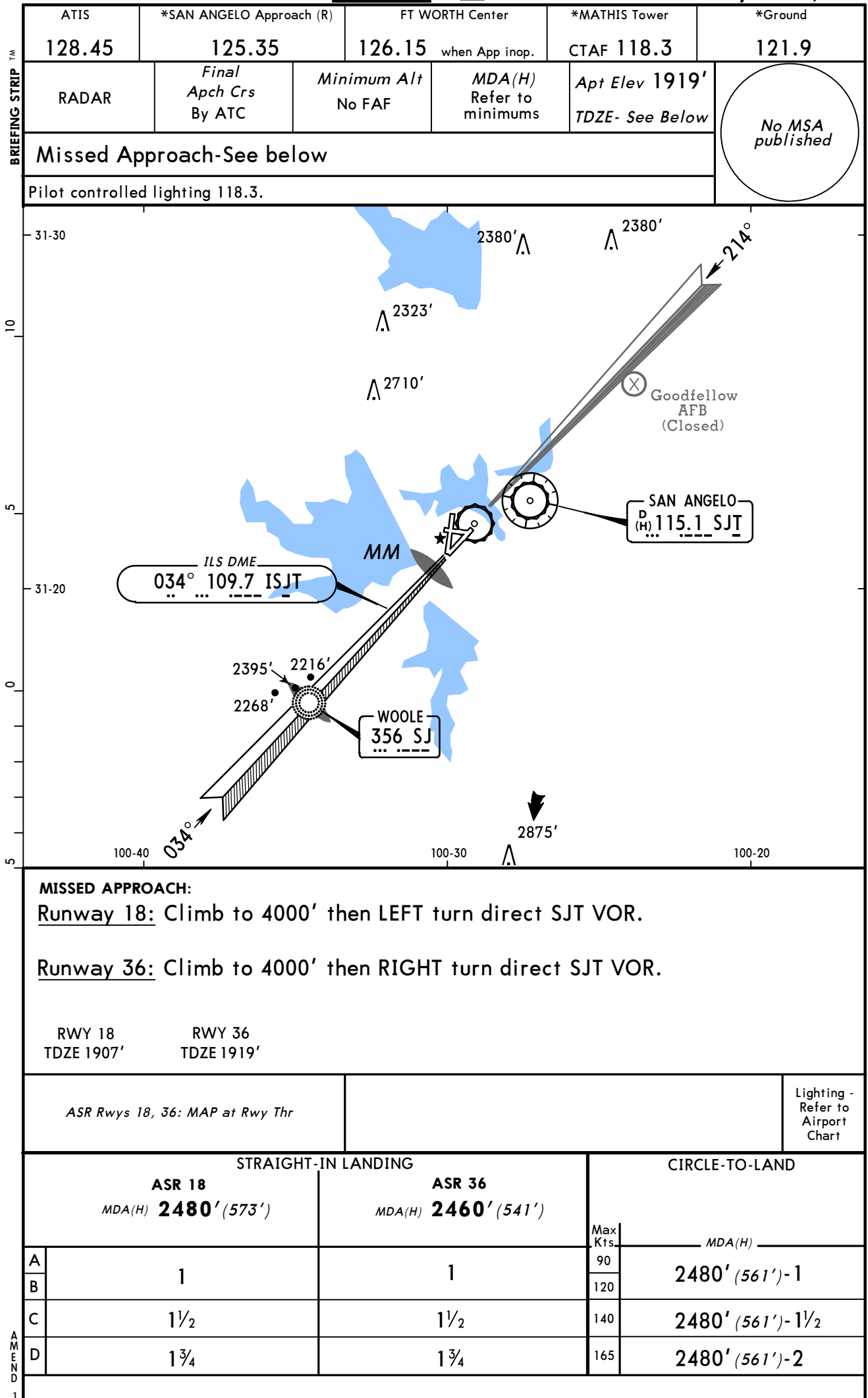


Grnd speed-Kts	70	90	100	120	140	160	MALSR		4400'	SJT	TANKR
Descent angle [3.23°]	400	514	571	686	800	914			LT	via 115.1	
MAP at D3.3										R-284	
STRAIGHT-IN LANDING RWY 3							CIRCLE-TO-LAND				
MDA(H) 2420' (503')							MDA(H)				
RAIL out							Max Kts				
A	1/2	3/4	1				90	2460' (541')-1			
B							120				
C	1	1 1/2					140	2460' (541')-1 1/2			
D							165	2480' (561')-2			

ATIS (ASOS when Twr inop)		*SAN ANGELO Approach (R)		FT WORTH Center		*MATHIS Tower		*Ground	
128.45		125.35		126.15 _{when App inop.}		CTAF 118.3		121.9	
VOR SJT 115.1	Final Apch Crs 235°	Minimum Alt VOR 2600' (694')	MDA(H) 2280' (374')	Apt Elev 1919' TDZE 1906'		4400' MSA SJT VOR			
MISSED APCH: Climb to 4000', then LEFT turn direct SJT VOR and hold.									
Alt Set: INCHES									



Gnd speed-Kts		70	90	100	120	140	160	ODALS VASI	4000' ↑			SJT 115.1	
Descent angle [3.33°]		412	530	589	707	825	943						
MAP at PAPIY or													
VOR to MAP 1.8		1:33	1:12	1:05	0:54	0:46	0:40						
STRAIGHT-IN LANDING RWY21								CIRCLE-TO-LAND					
MDA(H) 2280' (374')													
		ODALS out						Max Kts	MDA(H)				
A	3/4		1						90	2460' (541') - 1			
B									120	2460' (541') - 1 1/2			
C									140	2480' (561') - 2			
D									165				
		1 1/4											



General Information

Location: San Antonio TX USA
IATA Code: SKF
Lat/Long: N29° 23.1' W098° 34.9'
Elevation: 690 ft

Airport Use: Joint
Magnetic Variation: 4.9°E
Sectional Chart: San Antonio

Fuel Types: 115-145 Octane
Repair Types: Major Airframe, Major Engine
Customs: Yes
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes
Pattern Altitude: 2010 ft AGL

Sunrise: 1302 Z
Sunset: 0032 Z,

Runway Information

Runway: 15
Length x Width: 11550 ft x 300 ft
Surface Type: concrete
TDZ-Elev: 690 ft
Lighting: Edge, ALS
Stopway: 1000 ft

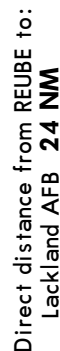
Runway: 33
Length x Width: 11550 ft x 300 ft
Surface Type: concrete
TDZ-Elev: 660 ft
Lighting: Edge, ALS
Stopway: 147 ft

Communication Information

ATIS 120.45
Lackland AFB (Kelly Fld A Tower 124.3
Lackland AFB (Kelly Fld A Ground Control 121.8
San Antonio Approach Control 118.05 Arrival Service
San Antonio Departure Control 125.7 Departure Service
Lackland Unicom 129.725
San Antonio Approach Radar 134.1
San Antonio Approach Radar 124.15

Lackland AFB (Kelly Fld A Operations 898.9 Military

MSA KSY TAC

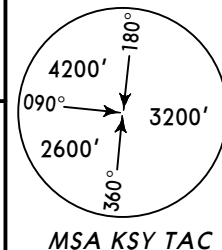


From over CSI via CSI R-105 to REUBE. EXPECT vector to final approach course.

*ATIS
120.45

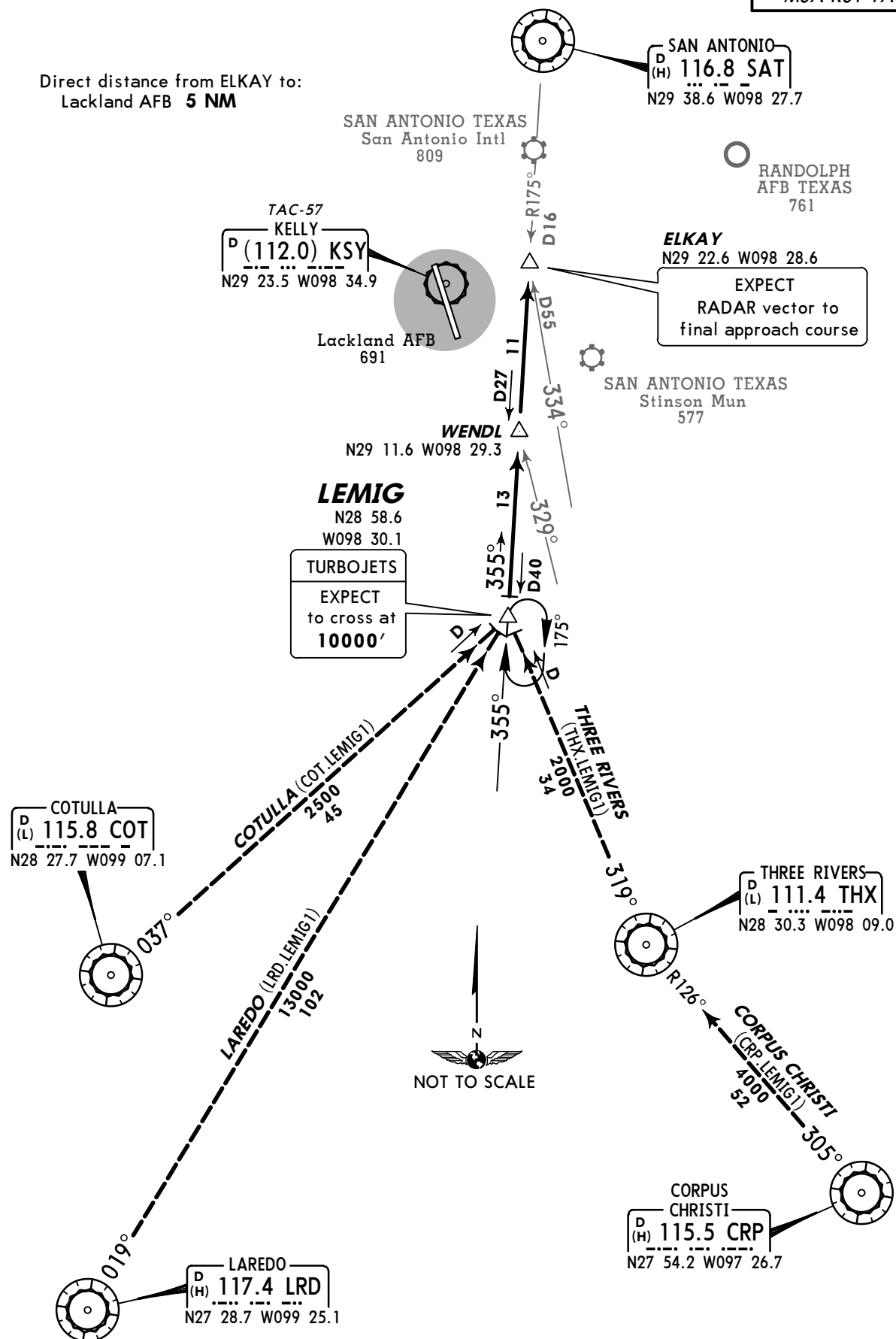
Apt Elev
See graphic

Alt Set: INCHES
Trans level: FL 180 Trans alt: 18000'



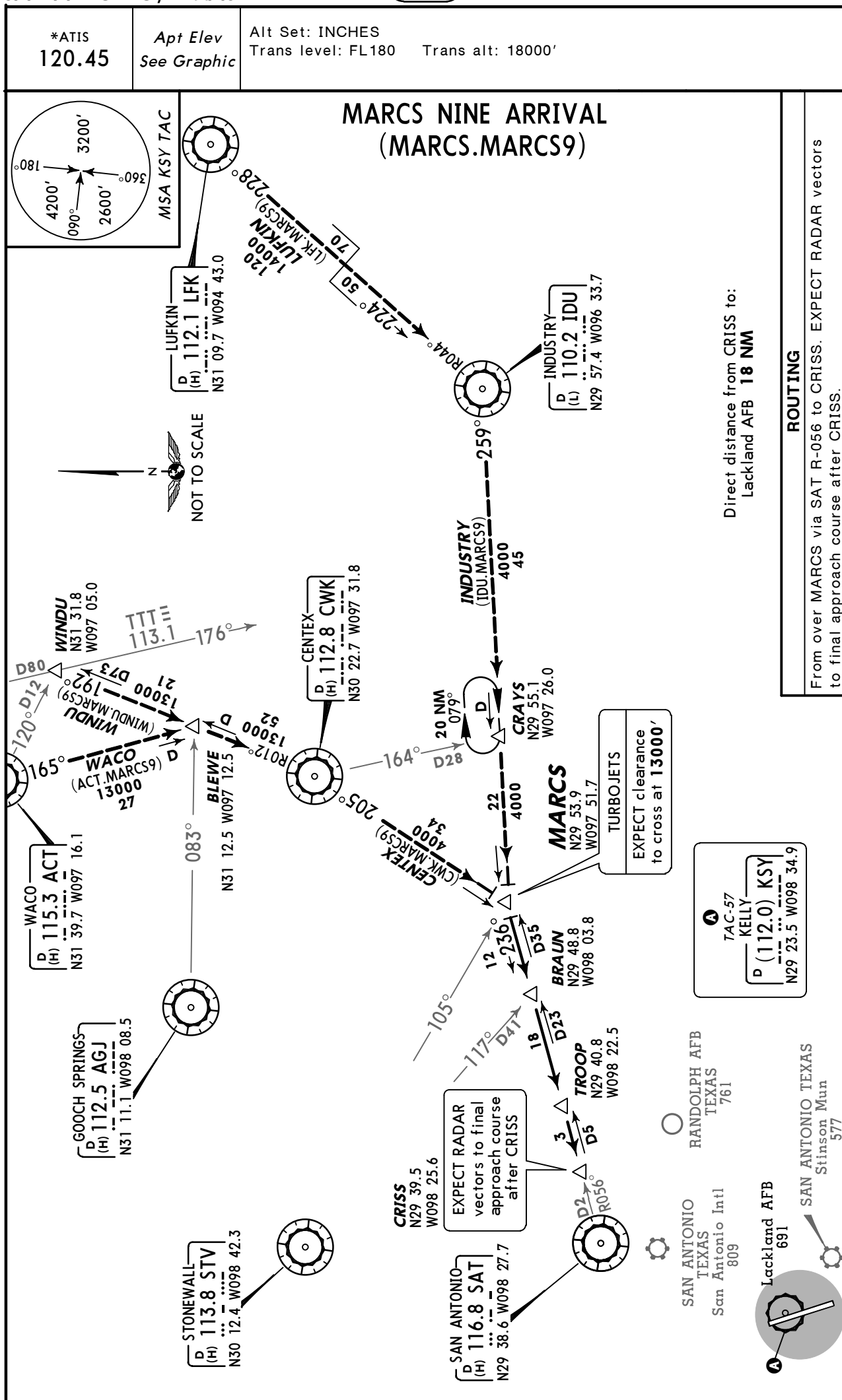
LEMIG ONE ARRIVAL (LEMIG.LEMIG1)

Direct distance from ELKAY to:
Lackland AFB **5 NM**



ROUTING

From over LEMIG via SAT R-175 to ELKAY. EXPECT RADAR vector to final approach course.

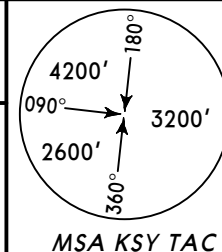




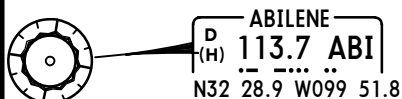
*ATIS
120.45

Apt Elev
See Graphic

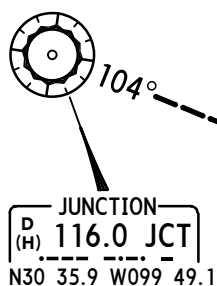
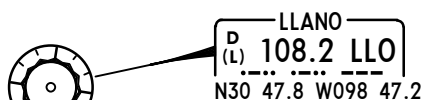
Alt Set: INCHES
Trans level: FL180 Trans alt: 18000'



STONEWALL ONE ARRIVAL (STV.STV1)



Direct distance from REUBE to:
Lackland AFB 24 NM



ABILENE
(ABI STV1)
14500
146°

JUNCTION
(JCT STV1)
14500
62°

LLANO
(LLO STV1)
14500
165°

STONEWALL
(STV)
N30 12.4 W098 42.3

TURBOJETS
EXPECT to cross
at 10000'

REUBE
(110.9 IANT D21)
N29 45.3 W098 45.6
EXPECT RADAR
vectors to final
approach course

ALAMO
368 AN
N29 36.5 W098 34.2

SAN ANTONIO
TEXAS
San Antonio Intl
809

RANDOLPH AFB
TEXAS
761

TAC-57
KELLY
(112.0) KSY
N29 23.5 W098 34.9

Lackland AFB
691

SAN ANTONIO TEXAS
Stinson Mun
577



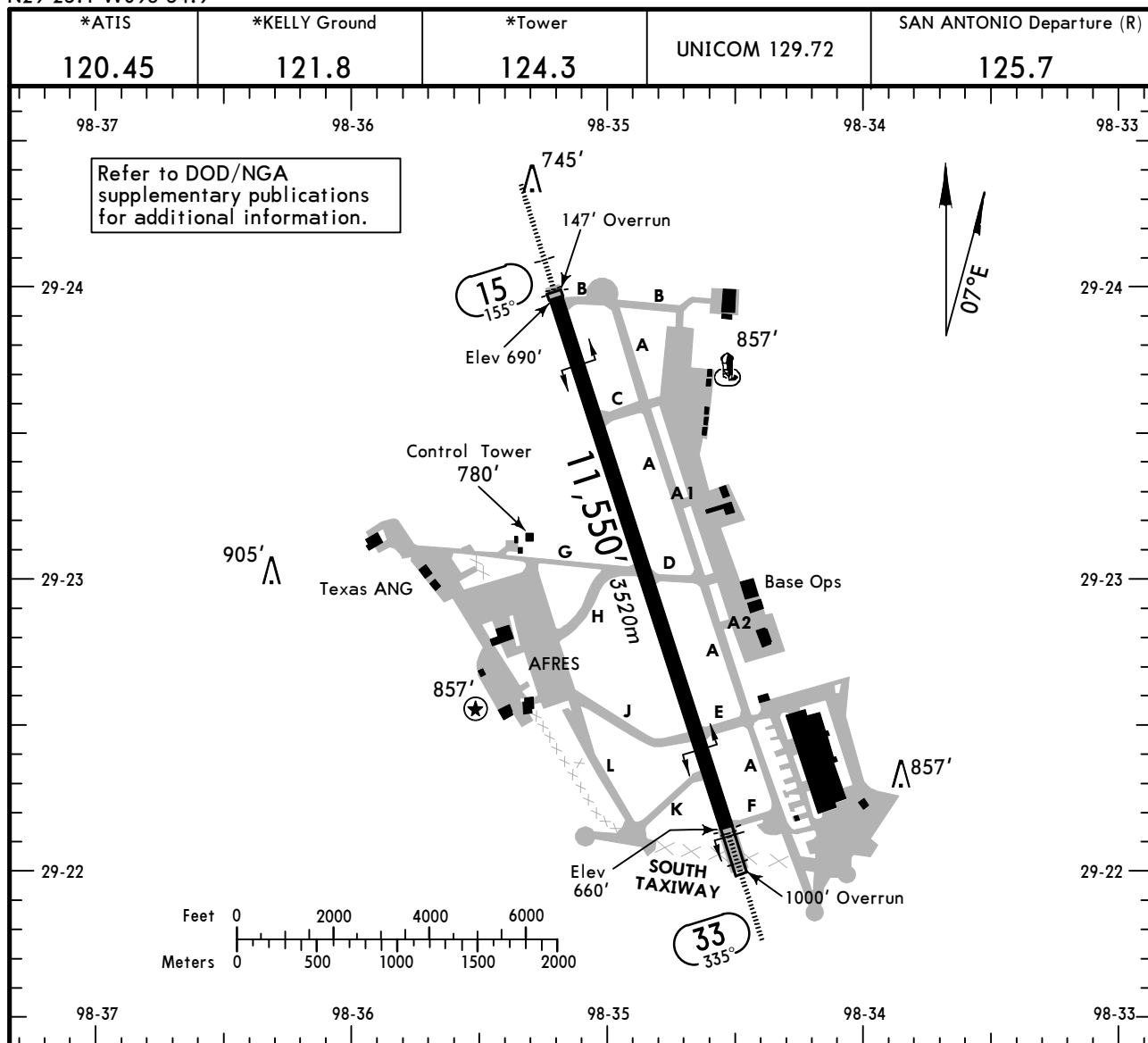
ROUTING

From over STV via STV R-178 to REUBE. EXPECT RADAR vectors to final approach course.

KSKF/SKF
 Apt Elev **690'**
 N29 23.1 W098 34.9

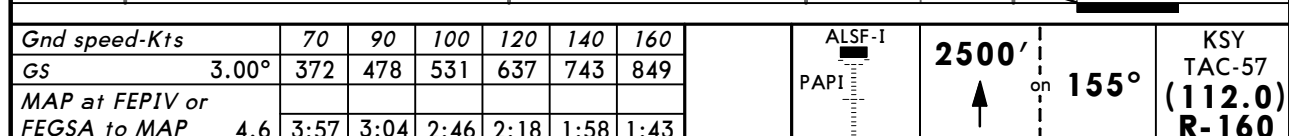
JEPPesen
 6 JAN 12 **(31-1)** Eff 12 Jan

LACKLAND AFB
 SAN ANTONIO, TEXAS

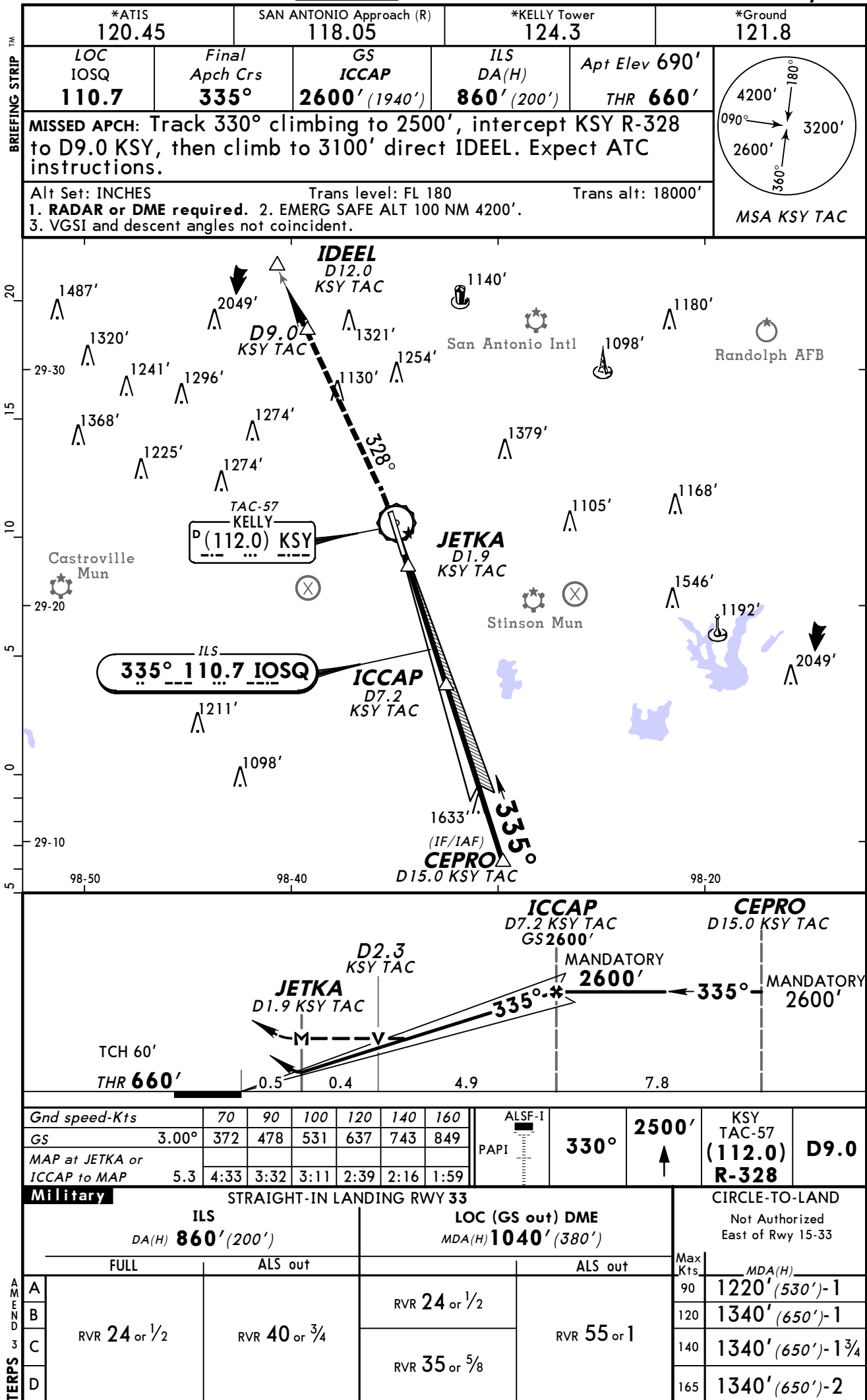


ADDITIONAL RUNWAY INFORMATION							
RWY				USABLE LENGTHS		TAKE-OFF	WIDTH
				— LANDING BEYOND —			
				Threshold	Glide Slope		
15	HIRL ALSF-I PAPI-L (angle 3.00°) RVR				10,338' 3151m		300'
33					10,410' 3173m		

TAKE-OFF					FOR FILING AS ALTERNATE	
All Rwys						
Adequate Vis Ref			STD		ILS Rwy 15 ILS Rwy 33	
RVR 16 or 1/4			RVR 50 or 1		600-2	
			RVR 24 or 1/2		800-2	
1 & 2 Eng			A			
3 & 4 Eng			B			
			C			
			D			



TERPS **AMEND** **3**



General Information

Location: Wichita Falls TX USA
IATA Code: SPS
Lat/Long: N33° 59.3' W098° 29.5'
Elevation: 1019 ft

Airport Use: Joint
Magnetic Variation: 4.9°E
Sectional Chart: Dallas Ft Worth

Fuel Types: 100 Octane (LL), Jet A
Repair Types: Minor Airframe, Minor Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes
Pattern Altitude: 782 ft AGL

Sunrise: 1305 Z
Sunset: 0028 Z,

Runway Information

Runway: 15C
Length x Width: 10002 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 1003 ft
Lighting: Edge, ALS, Part time
Stopway: 1000 ft

Runway: 15L
Length x Width: 6000 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 1019 ft
Lighting: Edge, REIL
Stopway: 1000 ft

Runway: 15R
Length x Width: 13100 ft x 300 ft
Surface Type: concrete
TDZ-Elev: 998 ft
Lighting: Edge, ALS, Pilot controlled
Stopway: 1000 ft

Runway: 17
Length x Width: 7021 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 1012 ft

Lighting: Edge, ALS, Part time

Runway: 33C

Length x Width: 10002 ft x 150 ft

Surface Type: concrete

TDZ-Elev: 989 ft

Lighting: Edge, ALS, Part time

Stopway: 1000 ft

Runway: 33L

Length x Width: 13100 ft x 300 ft

Surface Type: concrete

TDZ-Elev: 1000 ft

Lighting: Edge, ALS, Pilot controlled

Stopway: 1000 ft

Runway: 33R

Length x Width: 6000 ft x 150 ft

Surface Type: asphalt

TDZ-Elev: 1009 ft

Lighting: Edge, REIL

Stopway: 1000 ft

Runway: 35

Length x Width: 7021 ft x 150 ft

Surface Type: asphalt

TDZ-Elev: 1015 ft

Lighting: Edge, REIL, Part time

Communication Information

ATIS 132.05

Sheppard Tower 119.75 CTAF PCL

Sheppard Ground Control 125.5

Sheppard Clearance Delivery 121.2

Sheppard Approach Control 118.2

Sheppard Departure Control 120.4

Sheppard AFB/Mun Unicom 122.95

Sheppard Approach Radar 118.2

Wichita Falls Traffic Multicom 119.75 PCL

FT Worth Flight Service Station 122.65 RCO

FT Worth Center 133.5 Remote Communications Air-Ground

N WICHITA FALLS, TEXAS
SHEPPARD AFB/WICHITA FALLS MUN

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Refer to DOD/NGA supplementary publications for additional information.

ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
15R	HIRL MALSR PAPI-L (angle 3.0°)				
33L	HIRL ① MALSR PAPI-L (angle 3.0°)		12,000'		300'

① Activate on 119.75 when Twr inop.

15C	HIRL ALSF-I PAPI-L (angle 3.0°)		8853'		
33C	HIRL ALSF-I PAPI-R (angle 3.0°)				150'

15L	② HIRL REIL PAPI-L (angle 3.0°)				150'
33R					

② Unlighted when Twr inop.

17	③ HIRL LDIN				
35	HIRL REIL				150'

③ Unlighted when Twr inop.

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

All Rwy's

	Adequate Vis Ref	STD
1 & 2 Eng	1/4	1
3 & 4 Eng		1/2

OBSTACLE DP

Rwy 15R/C/L, climb on heading 153° to 2500' before turning westbound.

Rwy 17, climb heading 160° to 2500', intercept SPS VOR R-120 outbound. Cross SPS VOR R-120/D8.0 (HUNEP) at or below 2500', then climb and maintain 5000' or higher as assigned. Turn on course after reaching 3100'.

Rwy 35, climb on heading 355° to 1500', then proceed on course.

TAKE-OFF OBSTACLES: Rwy 17, Light pole 31' AGL/1040' MSL, 837' from DER, 726' left of centerline.

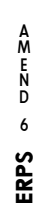
Rwy 35, Large frame aircraft parking, 56' AGL/1053' MSL, 337' from DER, 542' left of centerline. Large frame aircraft parking, 56' AGL/1053' MSL, 451' from DER, 573' left of centerline.

FOR FILING AS ALTERNATE

	ILS Rwy 15C ILS Rwy 33L	LOC DME Rwy 15C LOC DME Rwy 33L RNAV (GPS) Rwy 15R RNAV (GPS) Rwy 33L/R VOR-D VOR DME-E NDB Rwy 33L	RNAV (GPS) Rwy 15L	Authorized Only When Sheppard Apch Control Operating ASR Rwy 15C/R ASR Rwy 33L/C
			NA	
A	600-2	800-2	800-2	800-2
B				
C				
D				

WICHITA FALLS, TEXAS
ILS or LOC DME Rwy 15C
TACAN Azimuth Required

BRIEFING STRIP™



AMEND 6

AMEND 6

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KSPS/SPS

SHEPPARD AFB/

WICHITA FALLS MUN

14 OCT 11
Eff 20 Oct

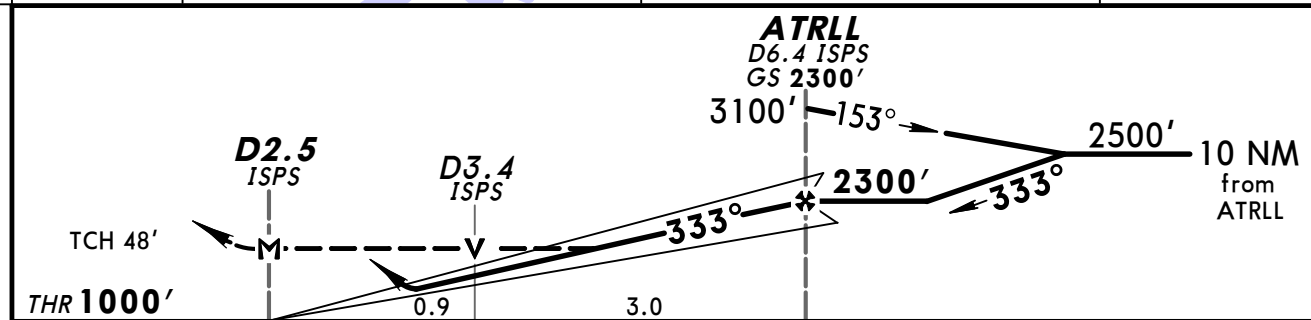
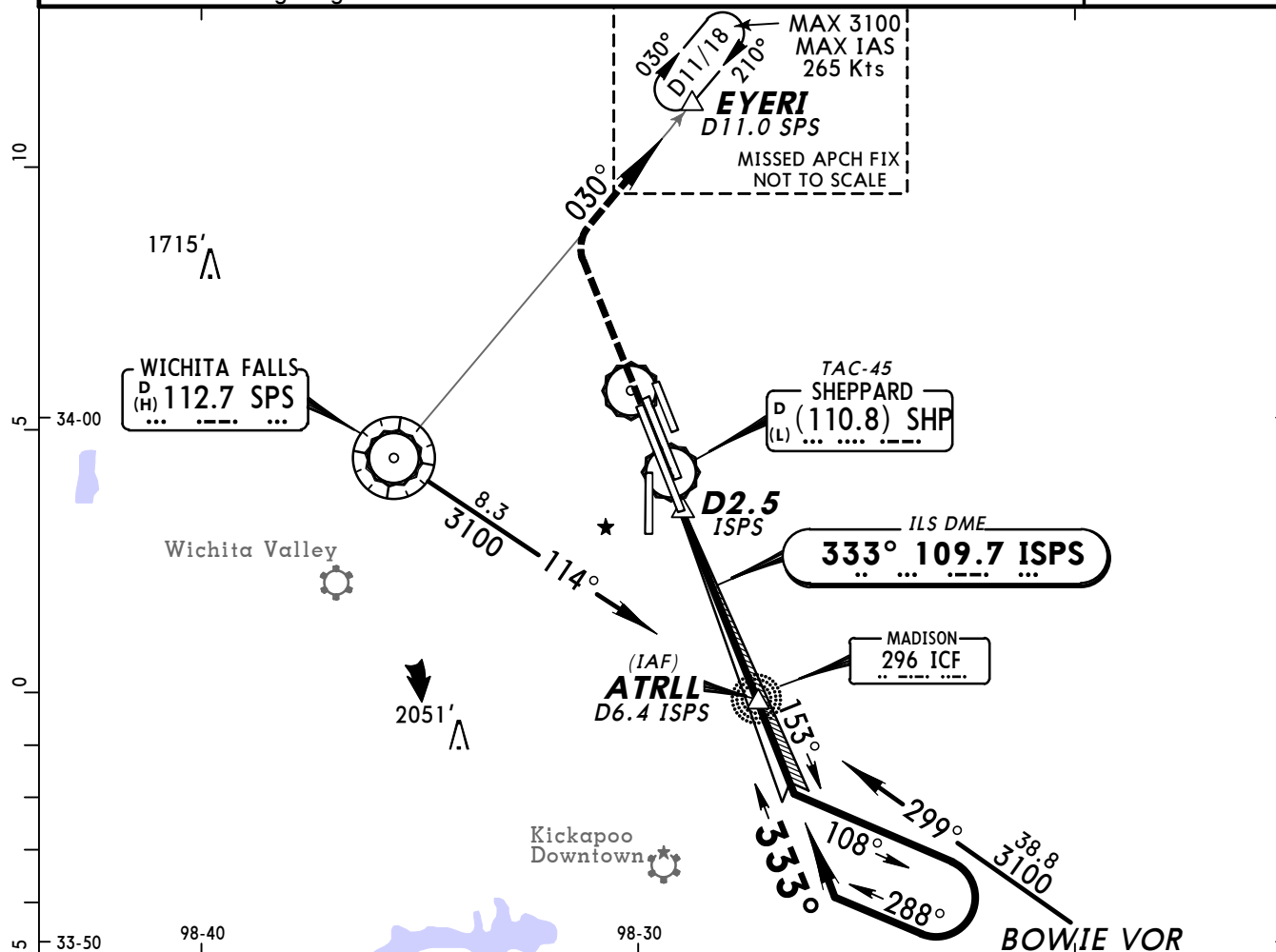
11-2

WICHITA FALLS, TEXAS

ILS or LOC DME Rwy 33L

BRIEFING STRIP

ATIS (ASOS when Twr inop) 132.05	*SHEPPARD Approach (R) 118.2	FT WORTH Center 133.5 when App inop.	*SHEPPARD Tower CTAF 119.75	*Ground 125.5
LOC ISPS 109.7	Final Apch Crs 333°	GS ATRL 2300' (1300')	ILS DA(H) 1200' (200')	Apt Elev 1019' THR 1000'
MISSED APCH: Climb to 2200', then climbing RIGHT turn to 3100' via SPS R-030 to EYERI/D11.0 SPS and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. EMERG SAFE ALT 100 NM 4600'. 2. VGSI and descent angles not coincident. 3. Pilot controlled lighting 119.75.				
3300' MSA SHP TAC				



Gnd speed-Kts	70	90	100	120	140	160	MALS R	2200'	3100'	SPS	EYERI
GS	3.00°	372	478	531	637	743	PAPI	↑	↗	112.7	
MAP at D2.5 ISPS or ATRLL to MAP	3.9	3:21	2:36	2:20	1:57	1:40				R-030	

STRAIGHT-IN LANDING RWY 33L					CIRCLE-TO-LAND Not Authorized West of Rwy 15R-33L	
ILS DA(H) 1200' (200')		LOC (GS out) MDA(H) 1340' (340')			Max Kts	MDA(H)
FULL	RAIL or ALS out		RAIL out	ALS out	90	1440' (421') - 1
A					120	1480' (461') - 1
B					140	1480' (461') - 1 1/2
C					165	1580' (561') - 2
D	1/2	3/4	1/2	3/4		

CHANGES: Notes, procedure bearings.

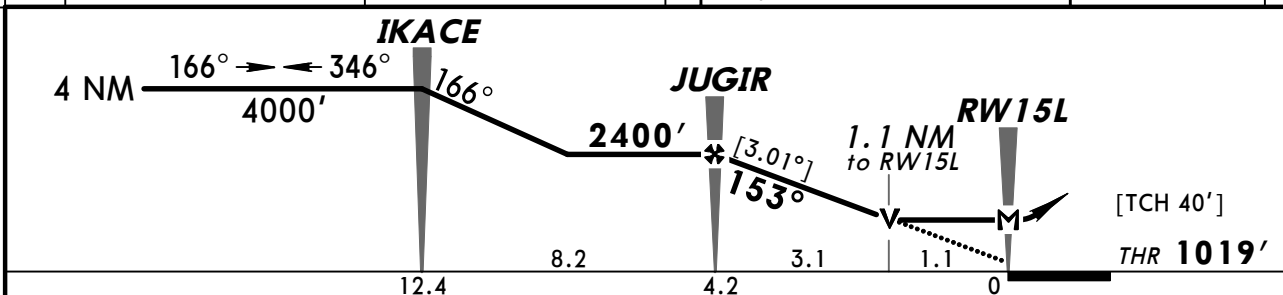
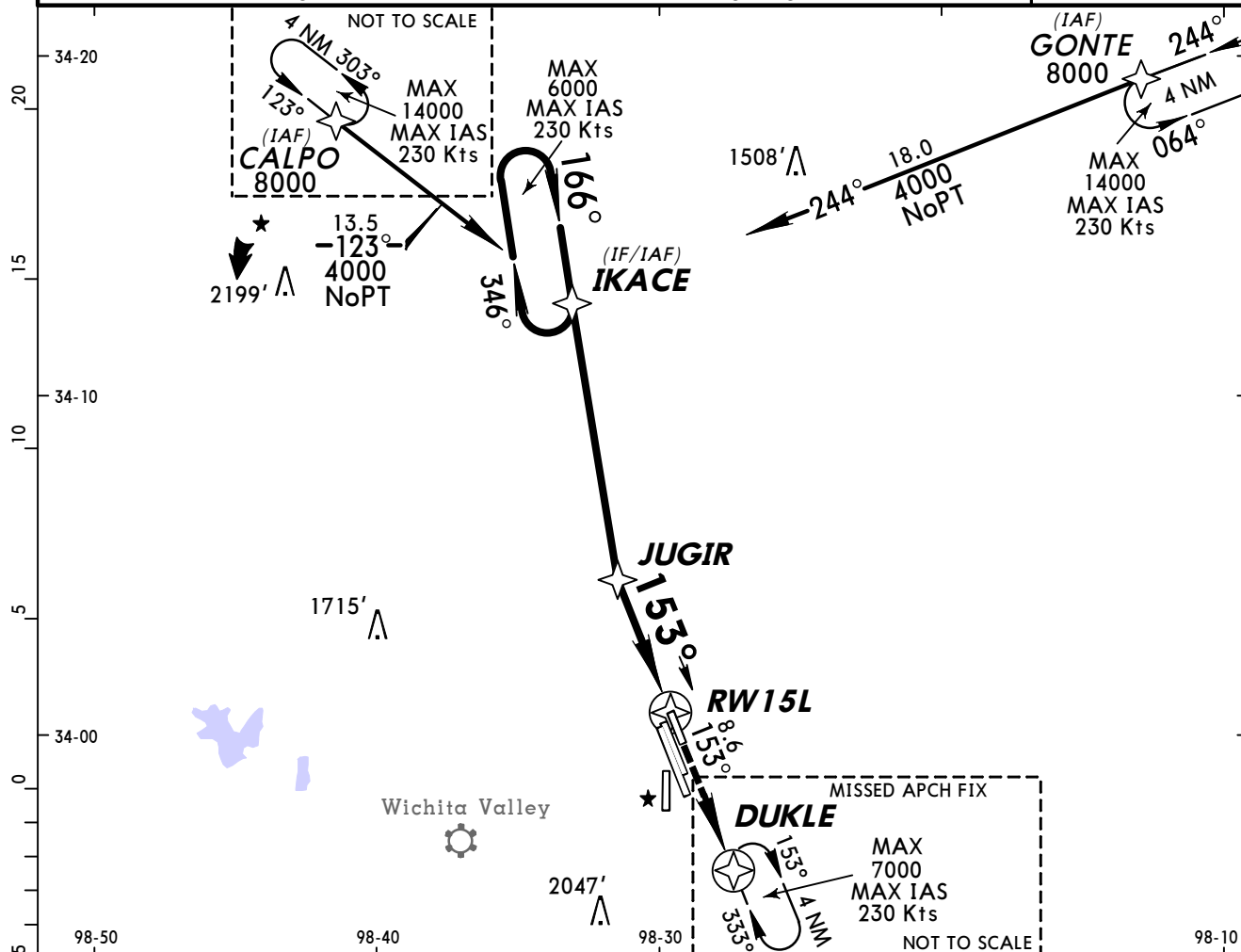
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SHEPPARD AFB/
WICHITA FALLS MUN

JEPPESSEN
 14 OCT 11
Eff 20 Oct (12-1)

WICHITA FALLS, TEXAS
CAT B, C & D **RNAV (GPS) Rwy 15L**

ATIS (ASOS when Twr Inop) 132.05	*SHEPPARD Approach (R) 118.2	FT WORTH Center 133.5 when App inop.	*SHEPPARD Tower CTAF 119.75	*Ground 125.5
RNAV	Final Apch Crs 153°	Minimum Alt JUGIR 2400' (1381')	LNAV MDA(H) 1420' (401')	Apt Elev 1019' THR 1019'
MISSED APCH: Climb and maintain 3100'. Track 153° direct DUKLE and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. EMERG SAFE ALT 100 NM 4600'. 2. DME/DME RNP-0.30 not authorized. 3. VGSI and descent angle not coincident. 4. Pilot controlled lighting 119.75.				
				3300' MSA RW15L



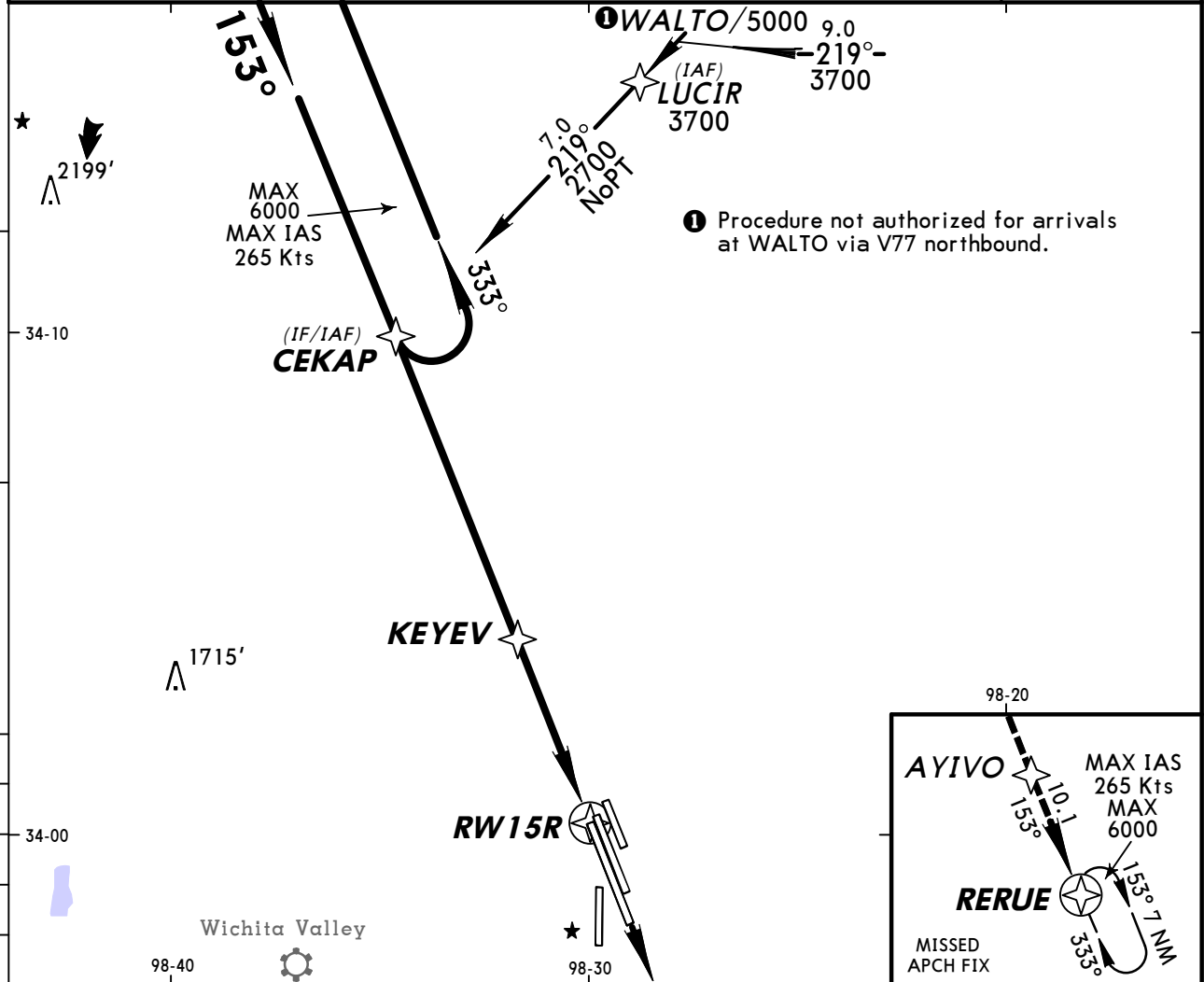
Gnd speed-Kts	70	90	100	120	140	160	REIL PAPI-L	3100'	153°	D➔	DUKLE
Descent angle [3.01°]	373	479	532	639	745	852					
MAP at RW15L											

STRAIGHT-IN LANDING RWY 15L						CIRCLE-TO-LAND					
LNAV MDA(H) 1420' (401')						Not Authorized West of Rwy 15R-33L					
A	NA					Max Kts	MDA(H)				
B	1					120	1480' (461')-1				
C	1 1/8					140	1480' (461')-1 1/2				
D						165	1580' (561')-2				

CHANGES: Procedure.

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ATIS (ASOS when Twr inop) 132.05	*SHEPPARD Approach (R) 118.2	FT WORTH Center 133.5 when App inop.	*SHEPPARD Tower CTAF 119.75	*Ground 125.5
RNAV	Final Apch Crs 153°	Minimum Alt KEYEV 2300' (1302')	RNAV MDA(H) 1420' (422')	Apt Elev 1019' THR 998'
MISSED APCH: Climb to 3500' direct AYIVO and via 153° track to RERUE and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. EMERG SAFE ALT 100 NM 4600'. 2. DME/DME RNP-0.30 not authorized. 3. Baro-VNAV not authorized below -17°C (1°F). 4. Pilot controlled lighting 119.75.				
				3300' MSA RW15R



CEKAP 7 NM 153° → ← 333° 2700' 10.5 6.6 3.9 2.6 0.1 1.2 0						② LNAV only.	
KEYEV 2300' [3.00°] 1.2 NM to RW15R [TCH 55'] THR 998'							
Gnd speed-Kts	70	90	100	120	140	160	
Descent angle	[3.00°]	372	478	531	637	849	
MAP at RW15R							
STRAIGHT-IN LANDING RWY 15R						AYIVO	
LNAV/VNAV DA(H) 1460' (462')			LNAV MDA(H) 1420' (422')			CIRCLE-TO-LAND Not Authorized West of Rwy 15R-33L	
RAIL or ALS out			RAIL out			Max Kts	MDA(H)
1			1 3/8			90	1440' (421')-1
						120	1480' (461')-1
						140	1480' (461')-1 1/2
						165	1580' (561')-2

② LNAV only.

ZEGUM

RERUE

RW33L

1.0 NM
to RW33L

[3.00°]

2300' 333°

153° ← 333°

3500'

7 NM

[TCH 56']

THR 1000'

②

0

1.0

0.1

2.7

3.9

8.1

12.0

Gnd speed-Kts

70

90

100

120

140

160

Descent angle [3.00°]

372

478

531

637

743

849

MAP at RW33L

MALSR

PAPI

3000'

333°

BAILE

STRAIGHT-IN LANDING RWY 33L

CIRCLE-TO-LAND

LNAV/VNAV

LNAV

DA(H) 1420' (420')

MDA(H) 1360' (360')

Not Authorized
West of Rwy 15R-33L

RAIL or ALS out

RAIL out

ALS out

Max
Kts.

MDA(H)

A

3/4

1 1/8

1/2

3/4

1

90

1440' (421') - 1

B

120

1480' (461') - 1

C

140

1480' (461') - 1 1/2

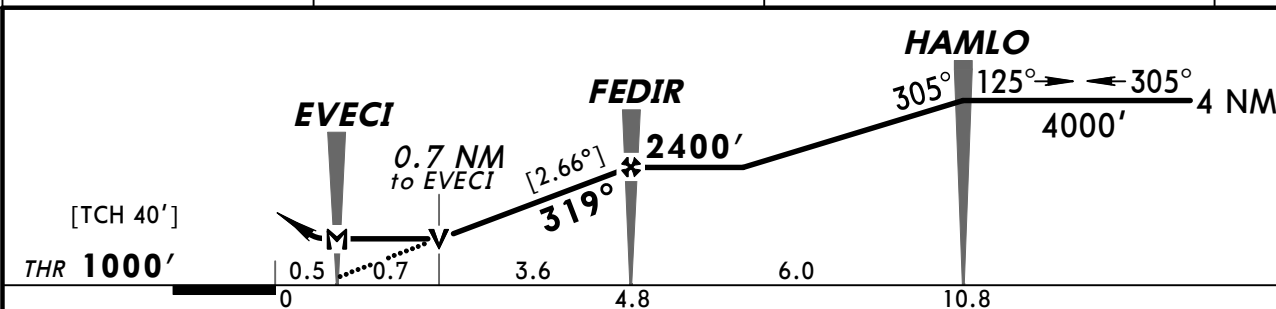
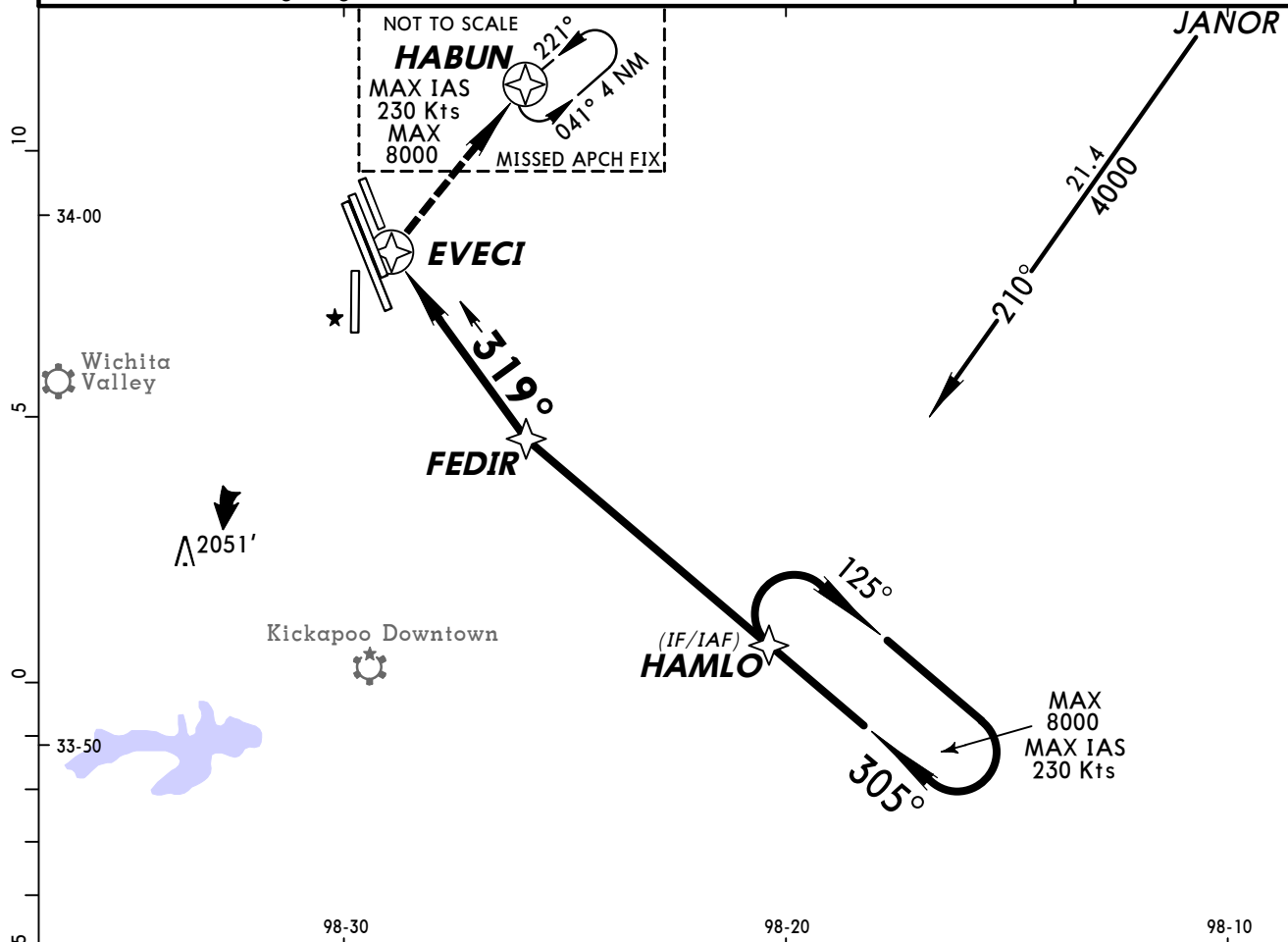
D

165

1580' (561') - 2

TERPS
A
M
E
N
D
2

ATIS (ASOS when Twr Inop) 132.05	*SHEPPARD Approach (R) 118.2	FT WORTH Center 133.5 when App inop.	*SHEPPARD Tower CTAF 119.75	*Ground 125.5
RNAV	Final Apch Crs 319°	Minimum Alt FEDIR 2400' (1400')	LNAV MDA(H) 1420' (420')	Apt Elev 1019' THR 1000'
MISSED APCH: Climbing RIGHT turn to 3000' direct HABUN and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. EMERG SAFE ALT 100 NM 4600'. 2. DME/DME RNP-0.30 not authorized. 3. Pilot controlled lighting 119.75.				
				3300' MSA EVECI



Gnd speed-Kts	70	90	100	120	140	160			REIL PAPI-L	3000'	RT	HABUN
Descent angle [2.66°]	329	423	470	565	659	753						
MAP at EVECI												

STRAIGHT-IN LANDING RWY 33R						CIRCLE-TO-LAND					
LNAV						Not Authorized West of Rwy 15R-33L					
MDA(H) 1420' (420')						MDA(H)					
A	1					Max Kts	90	1440' (421')-1			
B						120	1480' (461')-1				
C						140	1480' (461')-1½				
D	1½					165	1580' (561')-2				

KSPS/SPS

SHEPPARD AFB/
WICHITA FALLS MUN

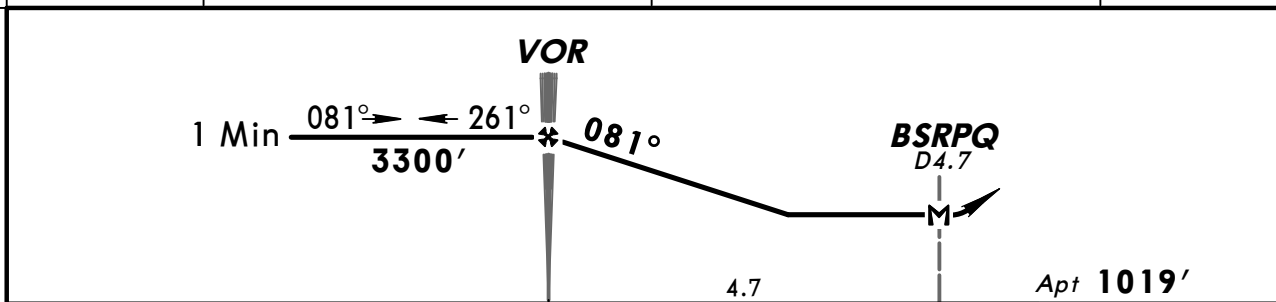
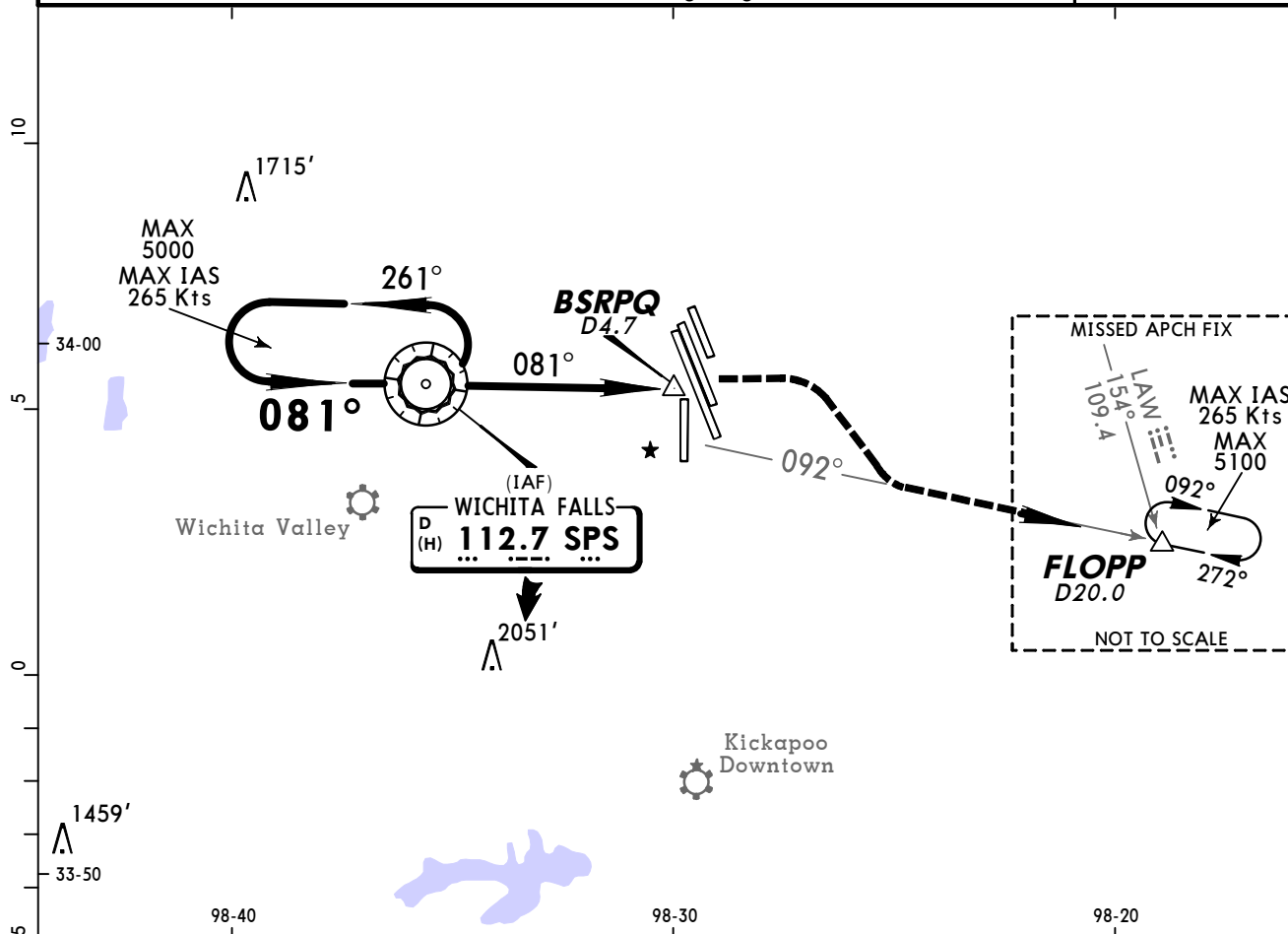
JEPPESEN
14 OCT 11 (13-1) Eff 20 Oct

WICHITA FALLS, TEXAS

VOR-D

BRIEFING STRIP™

ATIS (ASOS when Twr inop) 132.05		*SHEPPARD Approach (R) 118.2		FT WORTH Center 133.5 when App inop.		*SHEPPARD Tower CTAF 119.75		*Ground 125.5	
VOR SPS 112.7		Final Apch Crs 081°		Minimum Alt VOR 3300' (2281')		MDA(H) Refer to Minimums		Apt Elev 1019'	
MISSED APCH: Climb to 2000', then climbing RIGHT turn to 3100' outbound via SPS VOR R-092 to FLOPP INT/D20.0 and hold.									3300'
Alt Set: INCHES									



Gnd speed-Kts	70	90	100	120	140	160	Lighting - Refer to Airport Chart	2000'	3100'	SPS via 112.7 R-092	FLOPP
MAP at BSRPQ or VOR to MAP 4.7	4:02	3:08	2:49	2:21	2:01	1:46		↑	↑ RT		

CIRCLE-TO-LAND		Not Authorized at Night to Rwy 35	
	Max Kts	MDA(H)	
A	90	1580' (561') - 1	
B	120	1580' (561') - 1½	
C	140	1580' (561') - 2	
D	165		

CHANGES: Procedure.

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KSPS/SPS
SHEPPARD AFB/
WICHITA FALLS MUN

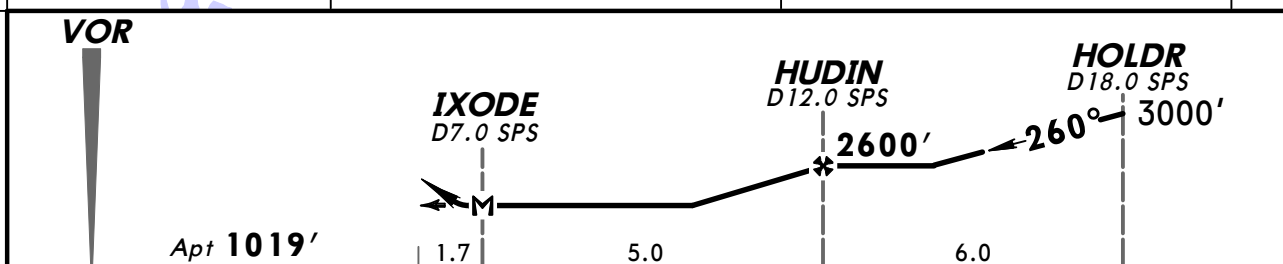
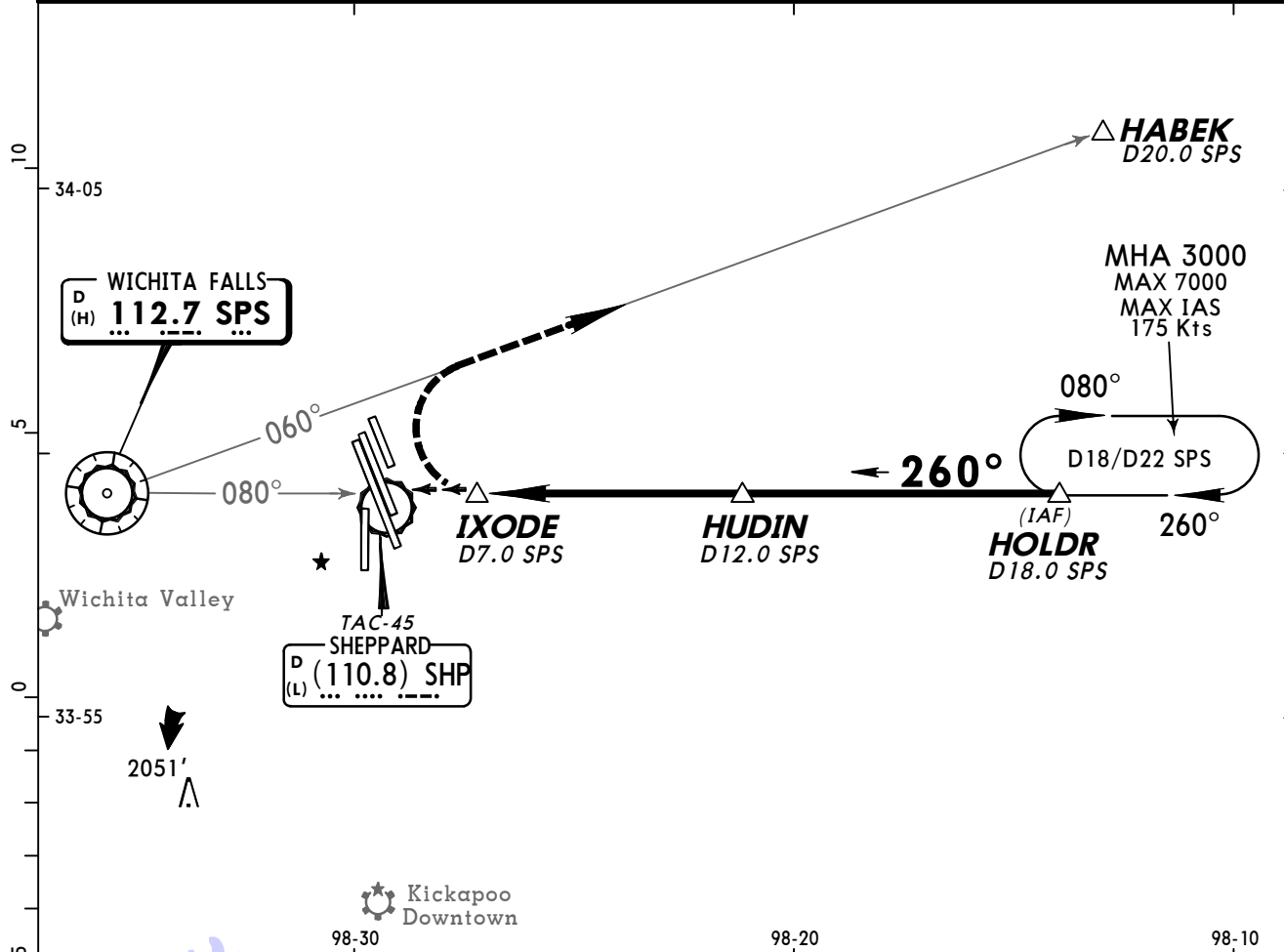
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 14 OCT 11 **(13-2)** **Eff 20 Oct**

WICHITA FALLS, TEXAS

VOR DME-E

BRIEFING STRIP™

ATIS (ASOS when Twr inop) 132.05		*SHEPPARD Approach (R) 118.2		FT WORTH Center 133.5 when App inop.		*SHEPPARD Tower CTAF 119.75		*Ground 125.5	
VOR SPS 112.7		Final Apch Crs 260°		Minimum Alt HUDIN 2600' (1581')		MDA(H) Refer to Minimums		Apt Elev 1019'	
MISSED APCH: Climbing RIGHT turn to 3200', intercept SPS R-060 to HABEK INT/D20.0. Expect RADAR vectors.									3300'
Alt Set: INCHES									



MAP at IXODE	Lighting - Refer to Airport Chart	3200' via RT	SPS 112.7 R-060	HABEK

CIRCLE-TO-LAND		Not Authorized West of Rwy 15R-33L	
		Max Kts	MDA(H)
A	90	1440'	(421') - 1
B	120	1480'	(461') - 1
C	140	1480'	(461') - 1½
D	165	1580'	(561') - 2

TERPS

CHANGES: Missed approach, minimums.

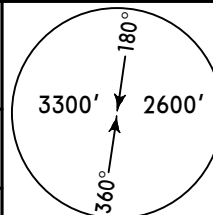
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KSPS/SPS
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WICHITA FALLS MUN

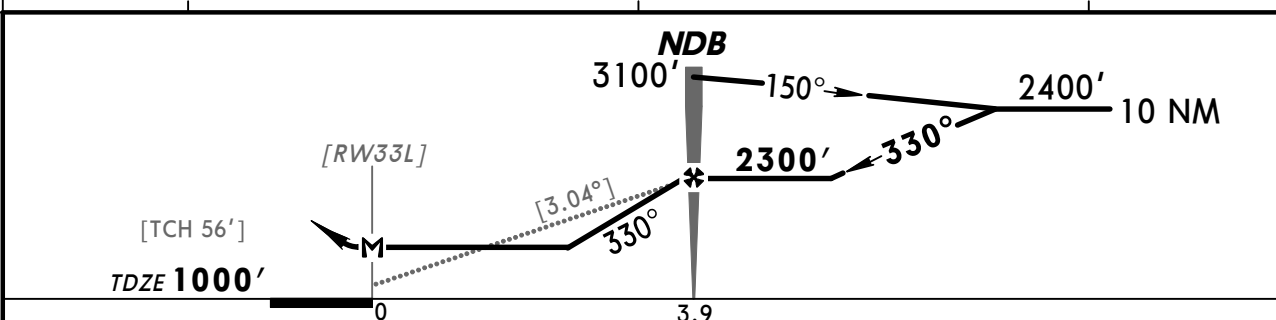
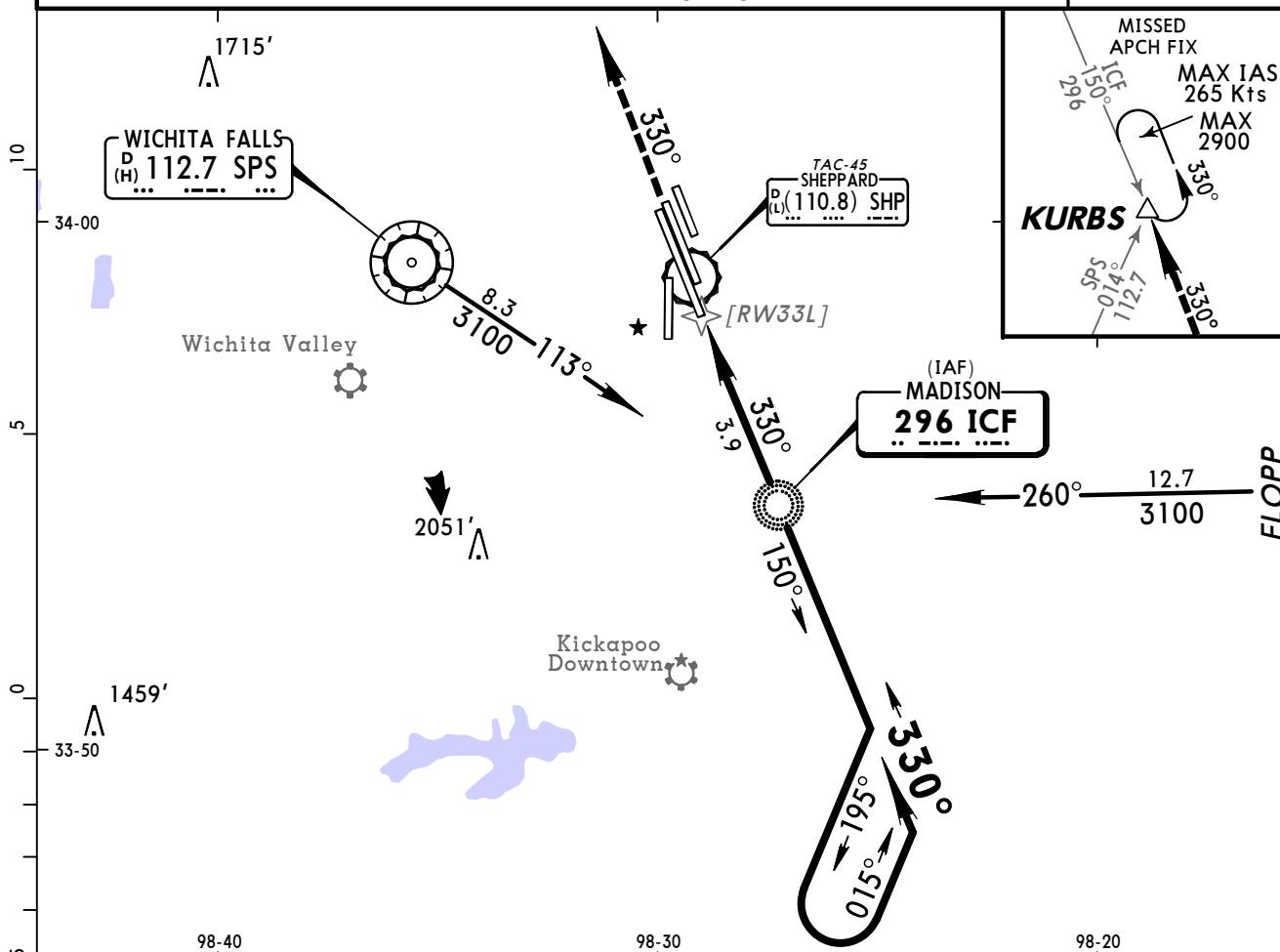
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 14 OCT 11 **(16-1)** **Eff 20 Oct**

WICHITA FALLS, TEXAS
NDB Rwy 33L

ATIS (ASOS when Twr inop) 132.05	*SHEPPARD Approach (R) 118.2	FT WORTH Center 133.5 when App inop.	*SHEPPARD Tower CTAF 119.75	*Ground 125.5
NDB ICF 296	Final Apch Crs 330°	Minimum Alt NDB 2300' (1300')	MDA(H) 1540' (540')	Apt Elev 1019' TDZE 1000'
MISSED APCH: Climb to 2900' on bearing 330° from ICF NDB to KURBS INT and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. EMERG SAFE ALT 100 NM 4600'. 2. Pilot controlled lighting 119.75.				



MSA ICF NDB



Gnd speed-Kts	70	90	100	120	140	160
Descent angle [3.04°]	376	484	538	645	753	861
NDB to MAP	3.9	3:21	2:36	2:20	1:57	1:40

STRAIGHT-IN LANDING RWY 33L				CIRCLE-TO-LAND			
MDA(H) 1540' (540')				Not Authorized West of Rwy 15R-33L			
RAIL out		ALS out		Max Kts	MDA(H)		
A	3/4		1	90	1540' (521') - 1		
B							
C	1		1 1/2	140	1540' (521') - 1 1/2		
D							
				165	1580' (561') - 2		

KSPS/SPS
SHEPPARD AFB/
WICHITA FALLS MUN

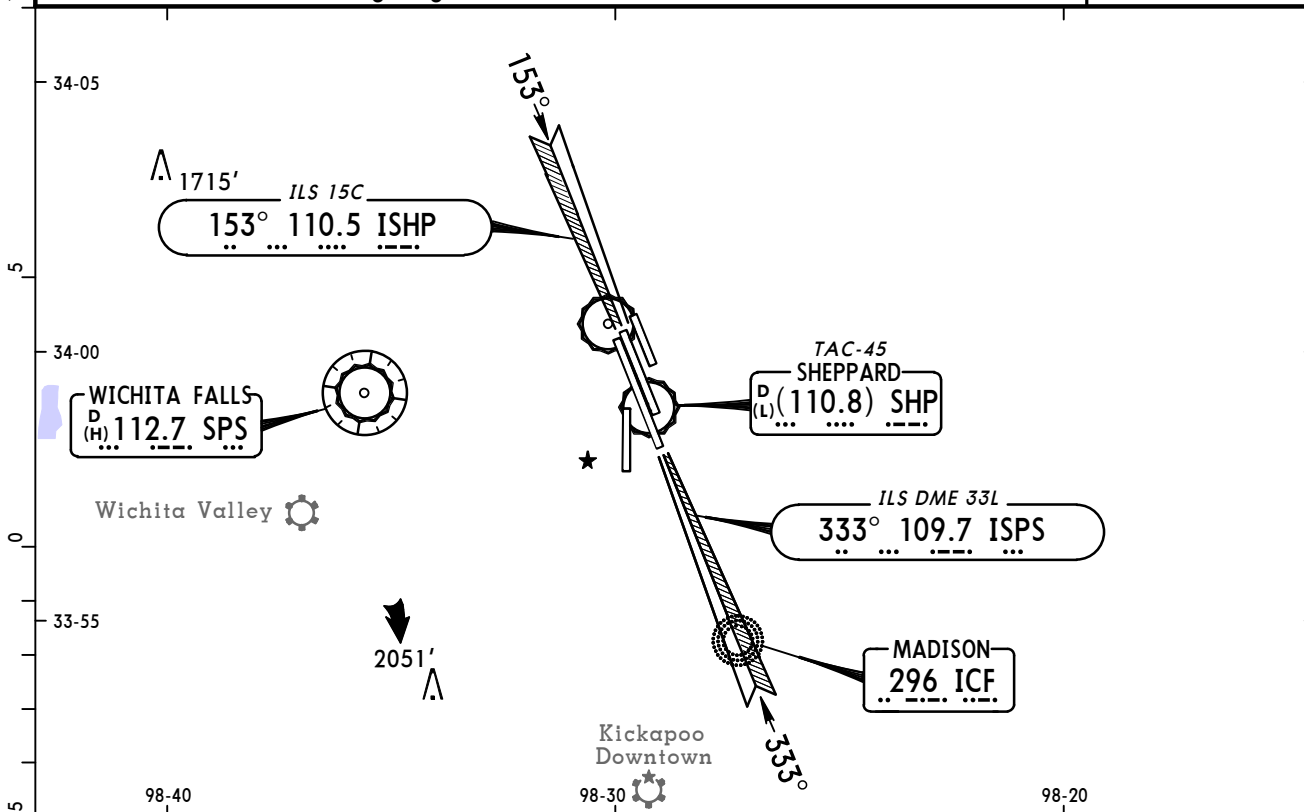
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 14 OCT 11 **(18-1)** **Eff 20 Oct**

WICHITA FALLS, TEXAS
RADAR
***ASR Rwy 15R/C, 33L/C**

10

BRIEFING STRIP™

ATIS (ASOS when Twr inop) 132.05		*SHEPPARD Approach (R) 118.2		FT WORTH Center 133.5 when App inop.		*SHEPPARD Radar 118.2		*SHEPPARD Tower CTAF 119.75		*Ground 125.5	
RADAR		<i>Final Apch Crs</i> By ATC		<i>Minimum Alt</i> No FAF		<i>MDA(H)</i> Refer to Minimums		<i>Apt Elev</i> 1019' <i>THR -See below</i>		3300' MSA SHP TAC	
MISSED APCH: Runway 15C- Cross departure end of runway at or below 2400' MSL, fly runway heading, climb and maintain 3100', contact Departure Control.											
Alt Set: INCHES											



MISSED APCH (cont): Runway 15R- Cross departure end of runway at or below 2400', fly runway heading, climb and maintain 3100', expect RADAR vectors.
Runway 33C/L- Cross departure end of runway at or below 2400', fly runway heading, climb and maintain 3300', expect RADAR vectors.

RWY 15C THR 1003'	RWY 15R THR 998'	RWY 33C THR 989'	RWY 33L THR 1000'	Lighting - Refer to Airport Chart

STRAIGHT-IN LANDING						
ASR 15C MDA(H) 1420' (417')		ASR 15R MDA(H) 1420' (422')			ASR 33C MDA(H) 1440' (451')	
ALS out		RAIL out			ALS out	
A	1/2	1	1/2	3/4	1	1/2
B	1/2	1	1/2	3/4	1	1
C	3/4	1 1/8	3/4	1 1/4	7/8	1 3/8
D	3/4	1 1/8	3/4	1 1/4	7/8	1 3/8

STRAIGHT-IN LANDING				CIRCLE-TO-LAND	
ASR 33L MDA(H) 1440' (440')				Not Authorized West of Rwy 15R-33L	
RAIL out				All Rwys	
ALS out				MDA(H)	
A	1/2	3/4	1	90	1440' (421') - 1
B	1/2	3/4	1	120	1480' (461') - 1
C	3/4	1 1/4		140	1480' (461') - 1 1/2
D	3/4	1 1/4		165	1580' (561') - 2

CHANGES: Procedure.

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General Information

Location: El Paso TX USA

IATA Code:

Lat/Long: N31° 43.2' W106° 14.2'

Elevation: 4007 ft

Airport Use: Public

Magnetic Variation: 8.6°E

Sectional Chart: El Paso

Fuel Types: 100 Octane (LL), Jet A

Repair Types: Minor Airframe, Minor Engine

Customs: No

Airport Type: IFR

Landing Fee: No

Control Tower: No

Jet Start Unit: No

LLWS Alert: No

Beacon: Yes

Pattern Altitude: 797 ft AGL

Sunrise: 1335 Z

Sunset: 0101 Z,

Runway Information

Runway: 08

Length x Width: 6885 ft x 50 ft

Surface Type: asphalt

TDZ-Elev: 4007 ft

Lighting: Edge, Pilot controlled

Runway: 26

Length x Width: 6885 ft x 50 ft

Surface Type: asphalt

TDZ-Elev: 4007 ft

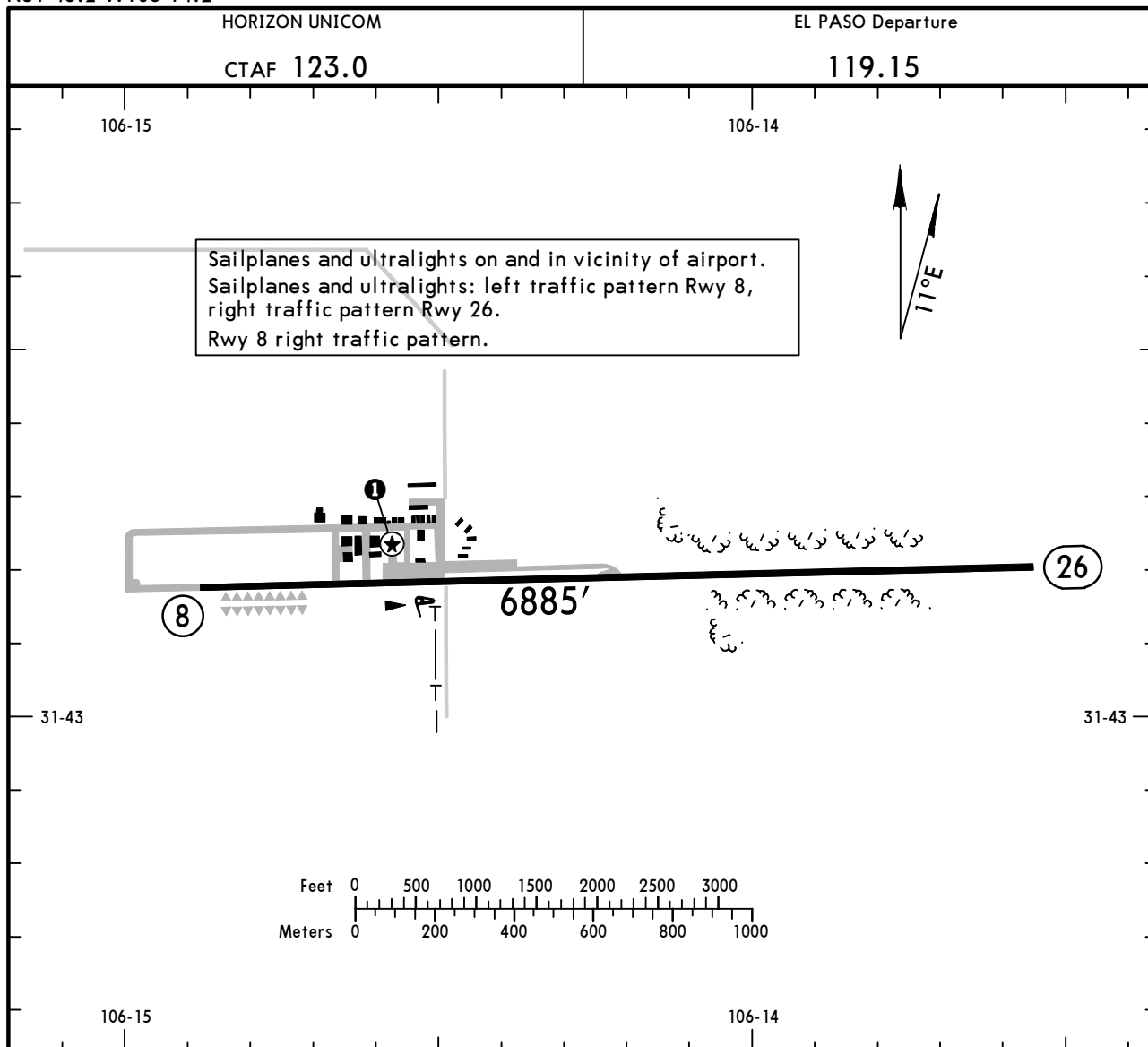
Lighting: Edge, Pilot controlled

Communication Information

Horizon Unicom 123.0 CTAF PCL

El Paso Approach Control 119.15

El Paso Departure Control 119.15



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			
		LANDING BEYOND			
		Threshold	Glide Slope	TAKE-OFF	WIDTH
8	26 1 RL				50'

1 Activate on 123.0.

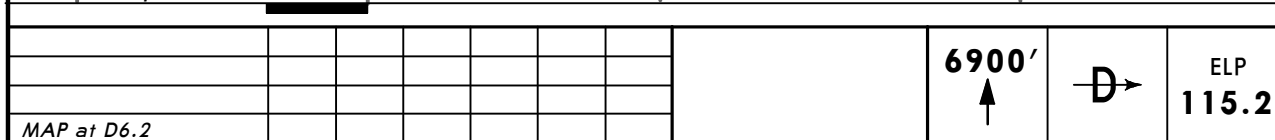
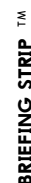
TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

FOR FILING AS ALTERNATE

	Rwy 8		Rwy 26	
	Adequate Vis Ref	STD		
1 & 2 Eng	1/4	1	NA	A
3 & 4 Eng		1/2		B
				C
				D

OBSTACLE DP: Rwy 8, climb heading 077°
to 4900' before proceeding on course.

EL PASO, TEXAS
VOR DME or GPS-A



		CIRCLE-TO-LAND	
		DAY	NIGHT
		Max Kts	MDA(H)
	A	90	4520' (513') - 1
	B	120	
	C	NA	NA
	D		

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General Information

Location: Temple TX USA
IATA Code: TPL
Lat/Long: N31° 09.1' W097° 24.5'
Elevation: 682 ft

Airport Use: Public
Magnetic Variation: 4.3°E
Sectional Chart: San Antonio

Fuel Types: 100 Octane (LL), Jet A, Jet A-1
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: No
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes

Sunrise: 1259 Z
Sunset: 0026 Z,

Runway Information

Runway: 02
Length x Width: 4740 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 675 ft
Lighting: Edge

Runway: 15
Length x Width: 7000 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 682 ft
Lighting: Edge, ALS, Pilot controlled

Runway: 20
Length x Width: 4740 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 665 ft
Lighting: Edge

Runway: 33
Length x Width: 7000 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 674 ft
Lighting: Edge, Pilot controlled

Communication Information

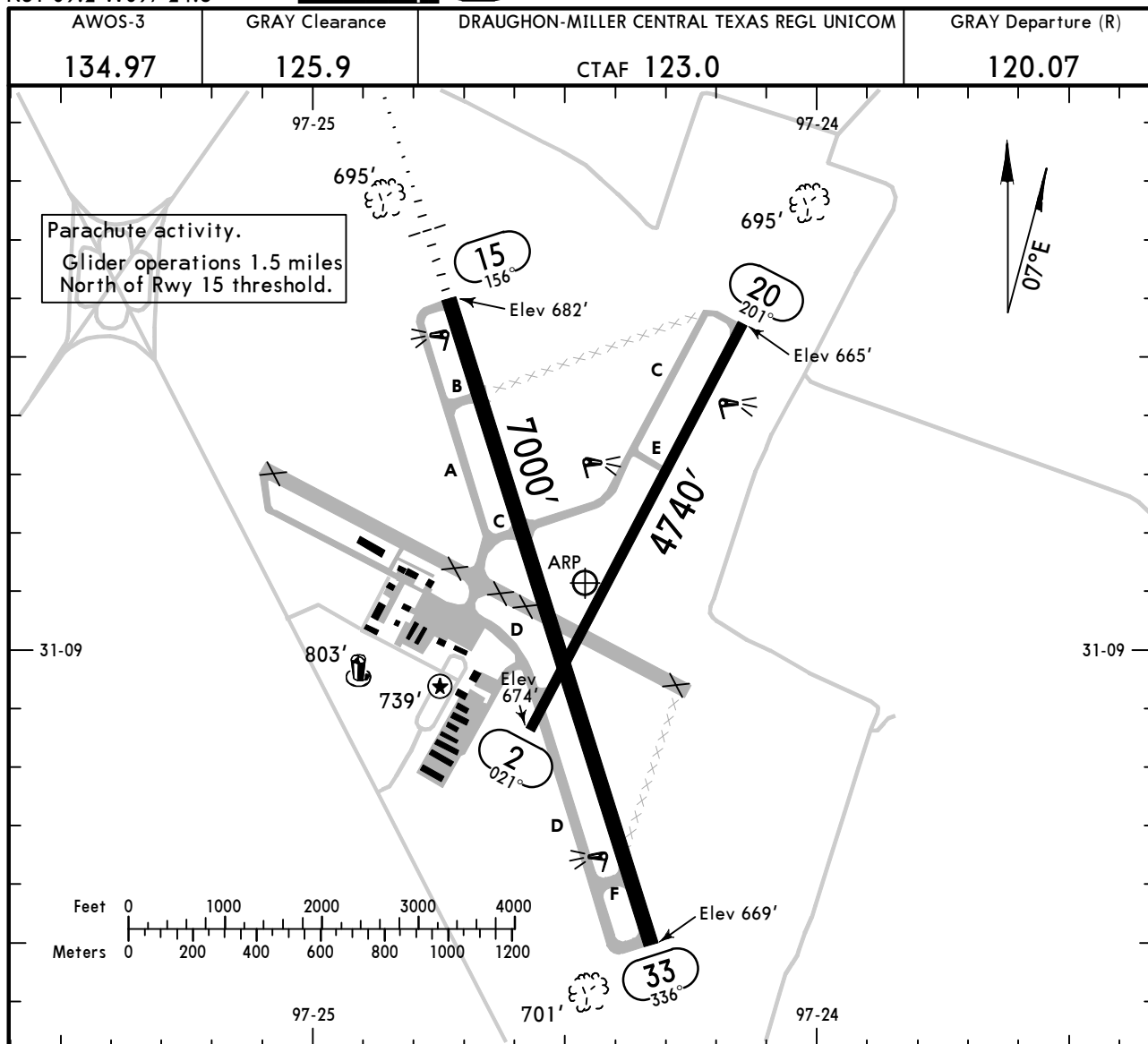
AWOS 134.975
Draughon-Miller Mun Unicom 123.0 CTAF PCL
Gray Approach Control 120.075
Gray Departure Control 120.075 Military
San Angelo Flight Service Station 122.1 RCO
San Angelo Flight Service Station 110.4 RCO

KTPL/TPL
Apt Elev **682'**
N31 09.2 W097 24.5

JEPPESSEN
17 SEP 10
Eff 23 Sep

(11-1)

TEMPLE, TEXAS
DRAUGHON-MILLER CENTRAL TEXAS REGL



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			
		Threshold	Landing Beyond Glide Slope	TAKE-OFF	WIDTH
2	① MIRL				100'
20	① MIRL ② PAPI-L (angle 3.0°)				
15	③ MIRL ② MALSR	grooved	5751'		150'
33	③ MIRL PAPI-L	grooved			

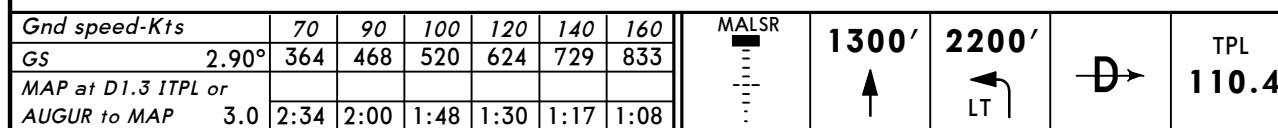
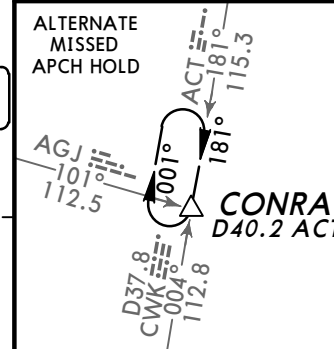
- ① Not available after 2200 LT.
- ② Activate on 123.0.
- ③ Increase intensity on 123.0 after 2200 LT.

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE			FOR FILING AS ALTERNATE	
All Rwys			Authorized Only When Local Weather Available	
Adequate Vis Ref		STD	RNAV (GPS) Rwy 2 RNAV (GPS) Rwy 15 RNAV (GPS) Rwy 33	VOR Rwy 15 VOR Rwy 33 Other
1 & 2 Eng	1/4	1	800-2	NA
3 & 4 Eng		1/2		

OBSTACLE DP: Rwy 2: Climb on heading between 085° clockwise to 200° from DER or climb on heading between 200° clockwise to 345° from DER to 3600' before proceeding on course or minimum climb of 250'/NM to 3200' for all other courses.

Rwy 33: Climb on heading between 070° clockwise to 155° from DER or climb on heading between 155° clockwise to 330° from DER to 3600' before proceeding on course, or minimum climb of 240'/NM to 3200' for all other courses.

ILS or LOC Rwy 15



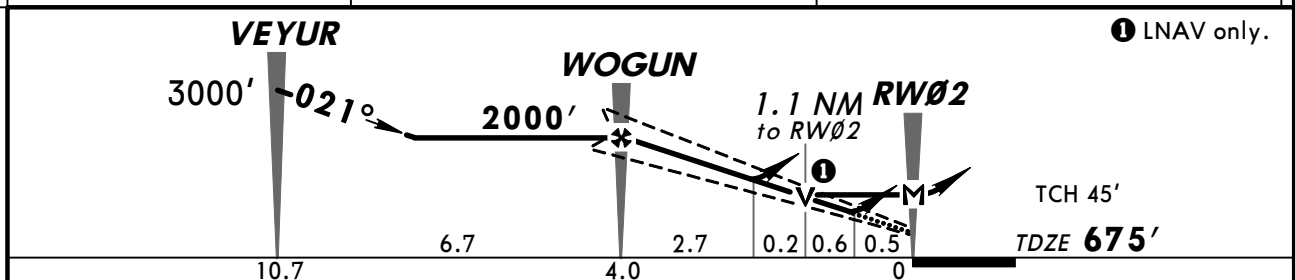
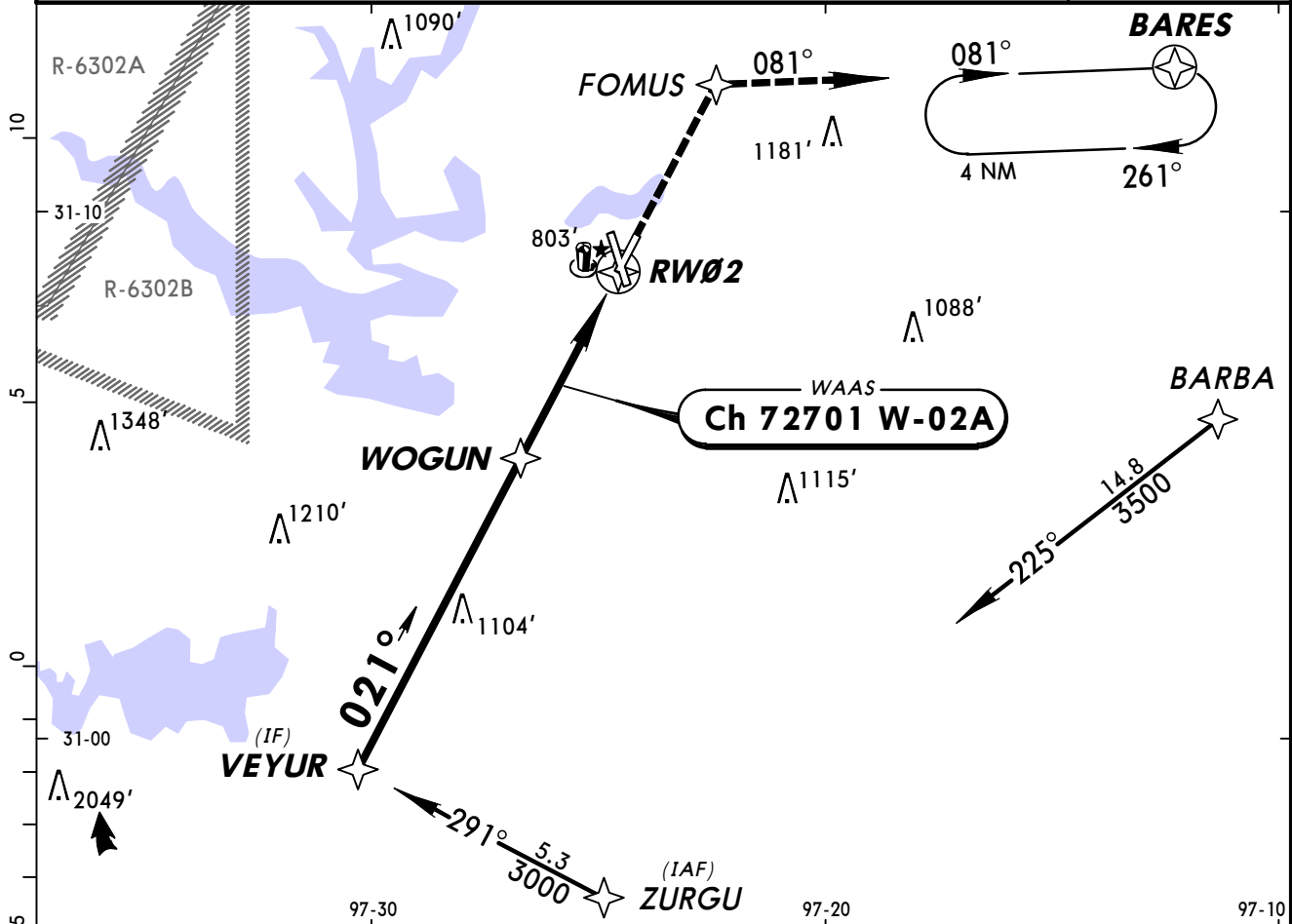
STRAIGHT-IN LANDING RWY15						CIRCLE-TO-LAND	
With Local Altimeter Setting						With Local Altimeter Setting	
ILS DA(H) 882' (200')			LOC (GS out) MDA(H) 1060' (378')			Max Kts	MDA(H)
FULL		RAIL or ALS out		RAIL out	ALS out		
A	1/2	3/4	1/2	3/4	1	90	1120' (438') - 1
B						120	1180' (498') - 1
C						140	1180' (498') - 1 1/2
D			3/4	1 1/4	165	1240' (558') - 2	
With Killeen Altimeter Setting						With Killeen Altimeter Setting	
ILS DA(H) 940' (258')			LOC (GS out) MDA(H) 1120' (438')			Max Kts	MDA(H)
FULL		RAIL or ALS out		RAIL out	ALS out		
A	1/2	3/4	1/2	3/4	1	90	1180' (498') - 1
B						120	1240' (558') - 1
C						140	1240' (558') - 1 1/2
D			1	1 1/2	165	1300' (618') - 2	

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TERPS AMEND 12 23 SEP 2010

BRIEFING STRIP™

AWOS-3 134.97		GRAY Approach (R) 120.07		DRAUGHON-MILLER CENTRAL TEXAS REGL UNICOM CTAF 123.0	
WAAS Ch 72701 W-02A	<i>Final</i> <i>Apch Crs</i> 021°	<i>Minimum Alt</i> WOGUN 2000' (1325')	<i>LPV</i> <i>DA(H)</i> (CONDITIONAL) 875' (200')	<i>Apt Elev</i> 682' <i>TDZE</i> 675'	3600' MSA RW02
MISSED APCH: Climb to 3600' direct FOMUS and on track 081° to BARES and hold, continue climb-in-hold to 3600'.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Killeen altimeter setting. 2. Baro-VNAV and VDP not authorized when using Killeen altimeter setting. 3. DME/DME RNP-0.30 not authorized. 4. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 5. Pilot controlled lighting 123.0.					



Gnd speed-Kts	70	90	100	120	140	160			
Glide Path Angle	3.00°	372	478	531	637	849			
MAP at RW02									

STRAIGHT-IN LANDING RWY 2				CIRCLE-TO-LAND			
1 LPV DA(H) 875' (200')		2 LNAV/VNAV DA(H) 1145' (470')		3 LNAV MDA(H) 1080' (405')		With Local Altimeter Setting MDA(H)	With Killeen Altimeter Setting MDA(H)
A				1	90	1120' (438') - 1	1180' (498') - 1
B					120	1180' (498') - 1	1240' (558') - 1
C	1	1 3/4		1 1/4	140	1180' (498') - 1 1/2	1240' (558') - 1 1/2
D					165	1240' (558') - 2	1300' (618') - 2

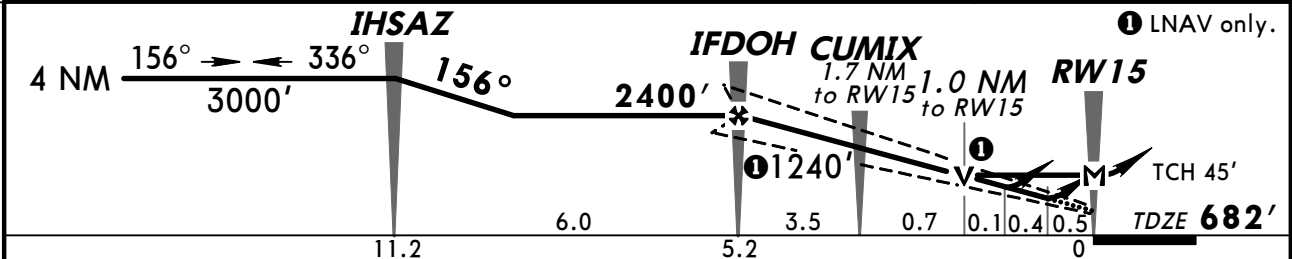
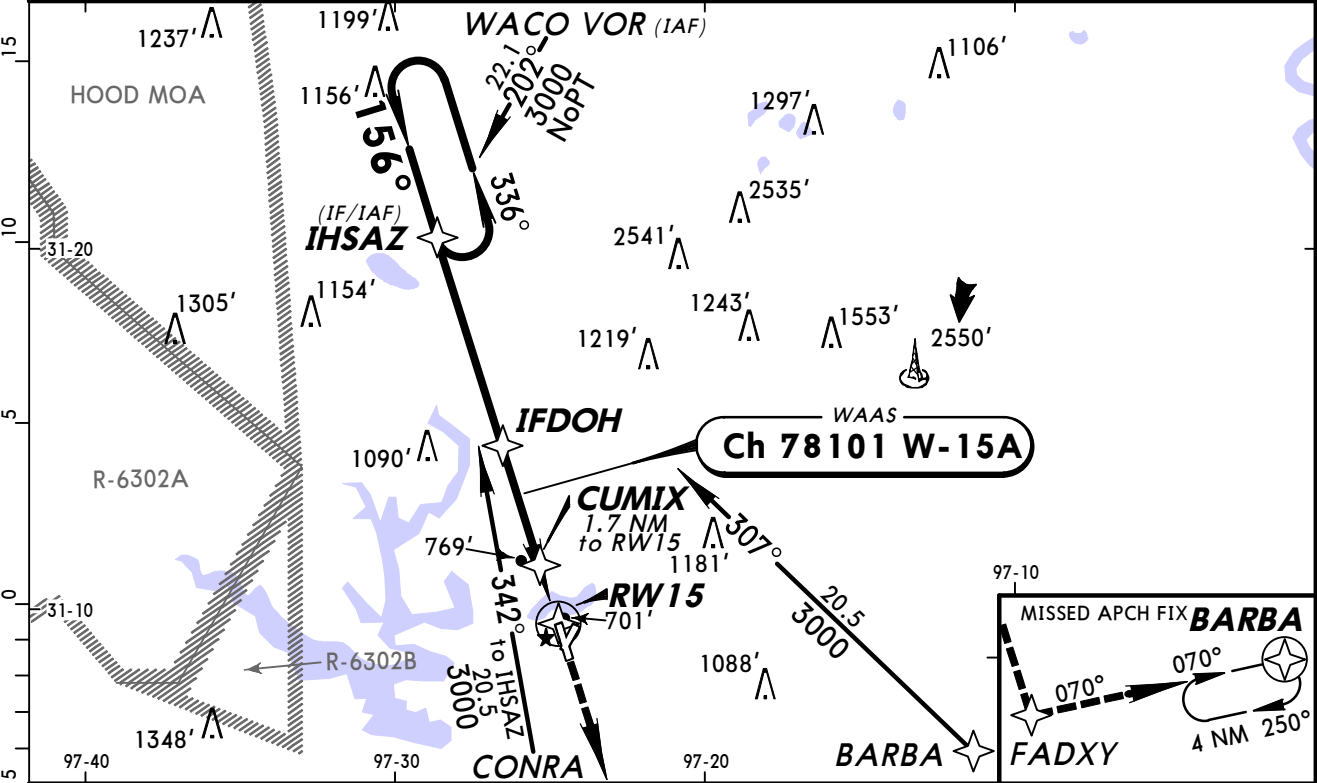
1 DA(H) 933' (258') with Killeen altimeter setting. 3 MDA(H) 1140' (465'), Vis Cat D 1 1/2 with Killeen altimeter setting.
2 DA(H) 1203' (528') with Killeen altimeter setting.

CHANGES: BARES hold length, minimums.

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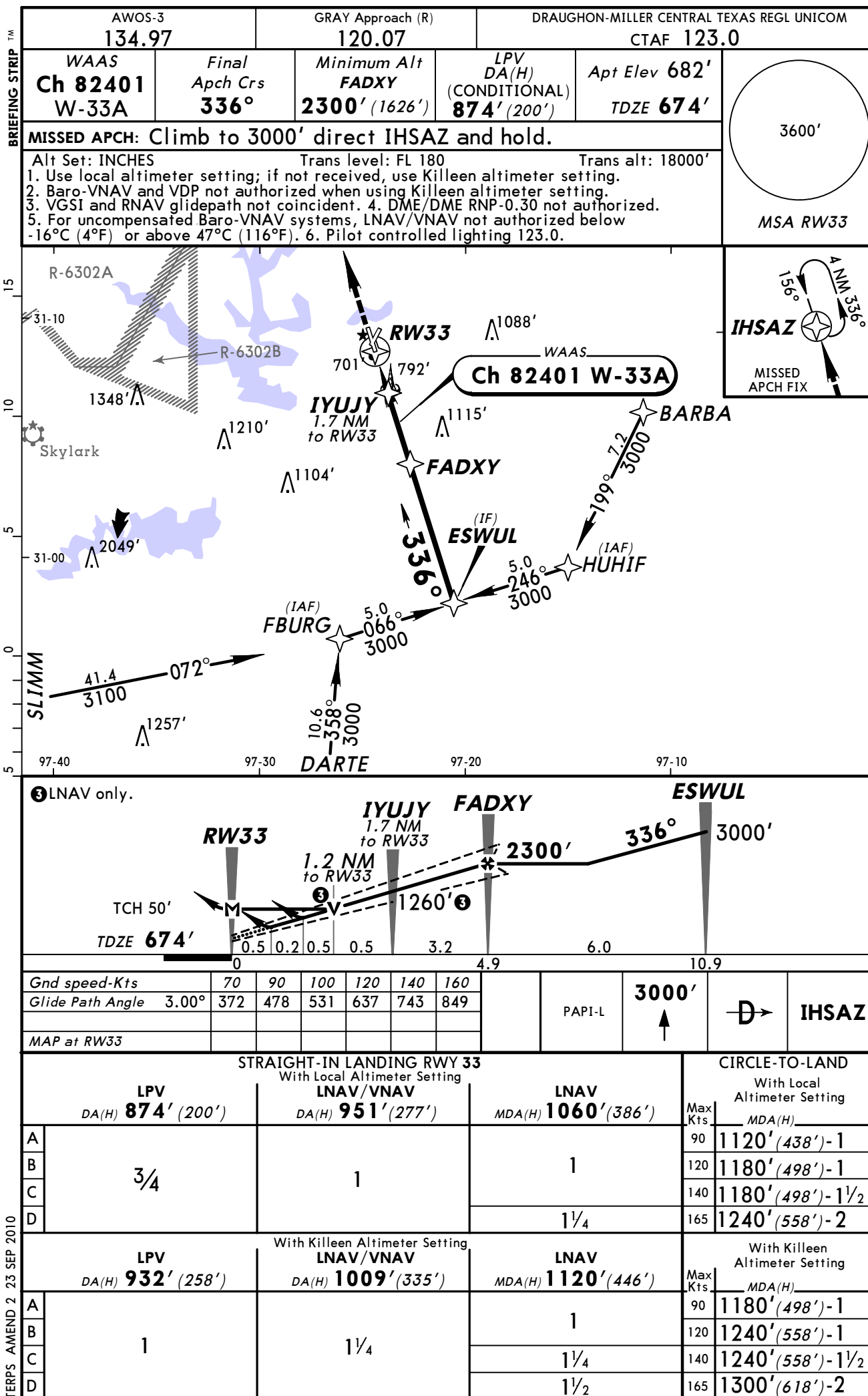
BRIEFING STRIP™

AWOS-3 134.97		GRAY Approach (R) 120.07		DRAUGHON-MILLER CENTRAL TEXAS REGL UNICOM CTAF 123.0	
WAAS Ch 78101 W-15A	Final Apch Crs 156°	Minimum Alt IFDOH 2400' (1718')	LPV DA(H) (CONDITIONAL) 882' (200')	Apt Elev 682' TDZE 682'	3600' MSA RW15
MISSED APCH: Climb to 3600' direct FADXY and on track 070° to BARBA and hold, continue climb-in-hold to 3600'.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Killeen altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. Baro-VNAV and VDP not authorized when using Killeen altimeter setting. 4. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 5. Pilot controlled lighting 123.0.					



Gnd speed-Kts	70	90	100	120	140	160	MALSR	3600'	D	FADXY
Glide Path Angle	3.00°	372	478	531	637	743				
MAP at RW15										

STRAIGHT-IN LANDING RWY 15							CIRCLE-TO-LAND		
With Local Altimeter Setting							With Local Altimeter Setting		
LPV DA(H) 882' (200')		LNAV/VNAV DA(H) 1025' (343')		LNAV MDA(H) 1040' (358')			MDA(H)		
RAIL or ALS out		RAIL or ALS out		RAIL out ALS out			RAIL out ALS out		
A				1/2	3/4	1	90	1120' (438') -1	
B	1/2	3/4	3/4	1/2	3/4	1	120	1180' (498') -1	
C							140	1180' (498') -1 1/2	
D				1	1 1/4		165	1240' (558') -2	
With Killeen Altimeter Setting							With Killeen Altimeter Setting		
LPV DA(H) 940' (258')		LNAV/VNAV DA(H) 1083' (401')		LNAV MDA(H) 1100' (418')			MDA(H)		
RAIL or ALS out		RAIL or ALS out		RAIL out ALS out			RAIL out ALS out		
A				1/2	3/4	1	90	1180' (498') -1	
B	1/2	1 1/4	1	1 1/2	3/4	1	120	1240' (558') -1	
C							140	1240' (558') -1 1/2	
D				1	1 1/2		165	1300' (618') -2	



KTPL/TPL

DRAUGHON-MILLER

CENTRAL TEXAS REGL

17 SEP 10

(13-1)

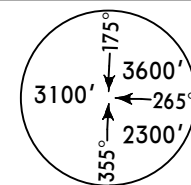
Eff 23 Sep

JEPPesen

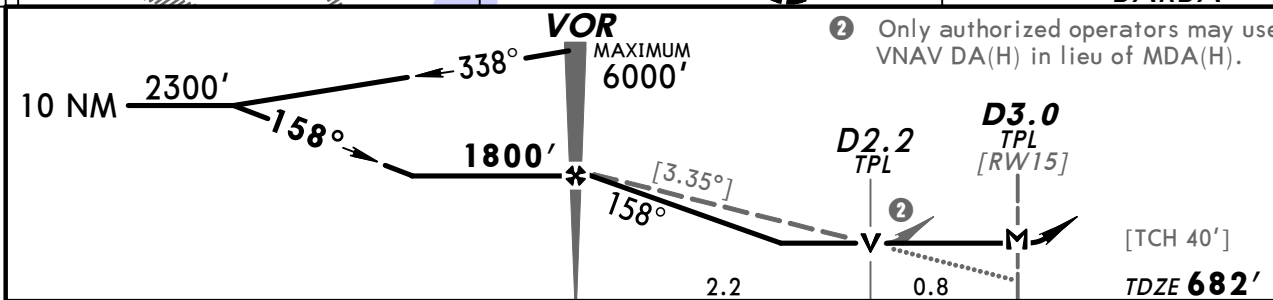
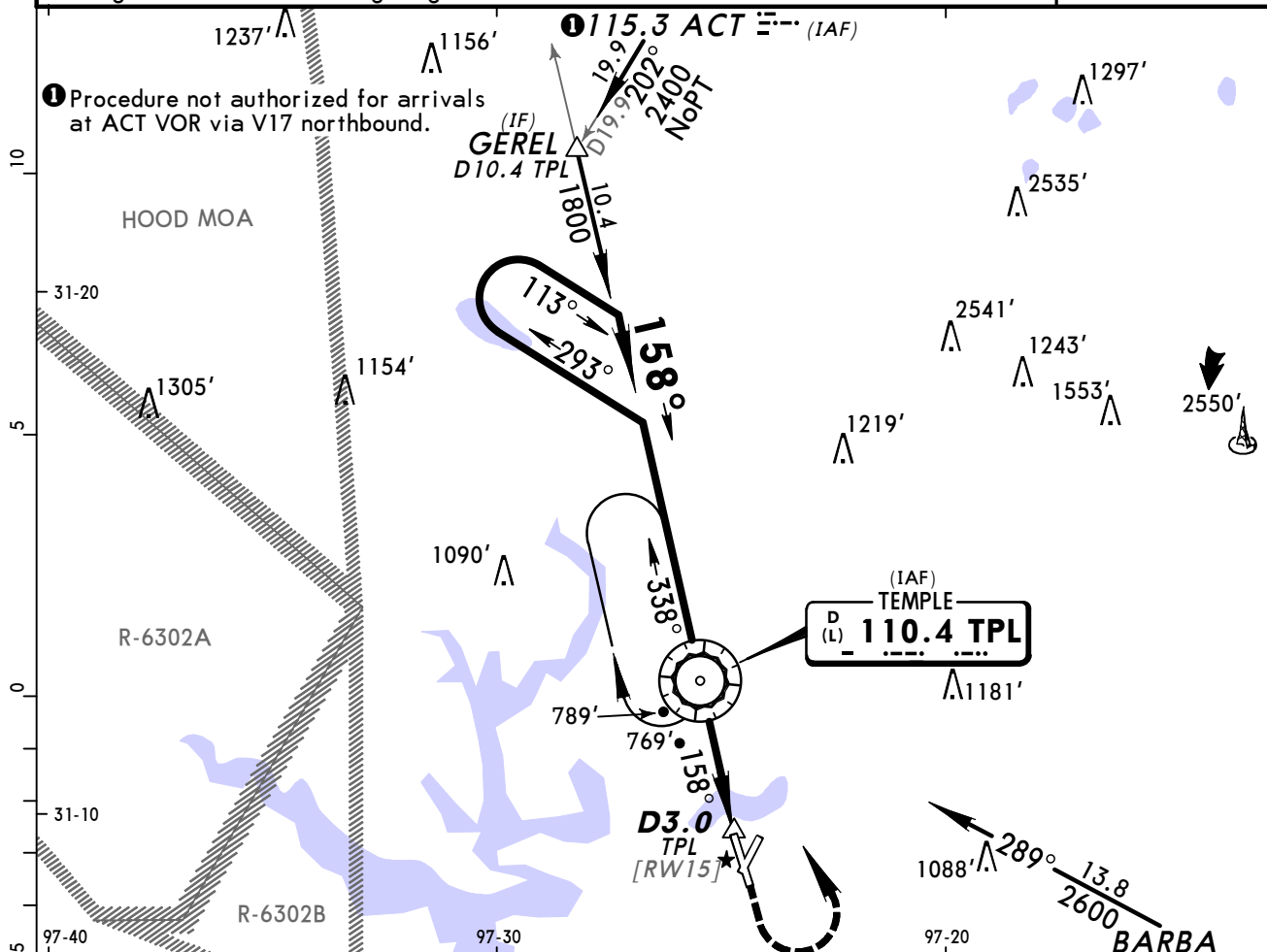
TEMPLE, TEXAS

VOR Rwy 15

AWOS-3 134.97		GRAY Approach (R) 120.07		DRAUGHON-MILLER CENTRAL TEXAS REGL UNICOM CTAF 123.0	
VOR TPL 110.4	Final Apch Crs 158°	Minimum Alt VOR 1800' (1118')	MDA(H) (CONDITIONAL) 1020' (338')	Apt Elev 682'	TDZE 682'
MISSED APCH: Climb to 1300' then climbing LEFT turn to 2300' direct TPL VOR and hold.					
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. RADAR required for procedure turn. 2. Use local altimeter setting; if not received, use Killeen altimeter setting. 3. VDP not authorized with Killeen altimeter setting. 4. Pilot controlled lighting 123.0.					



MSA TPL VOR



Gnd speed-Kts	70	90	100	120	140	160	MALSR	1300'	2300'	D	TPL 110.4
Descent angle [3.35°]	415	534	593	711	830	948		↑	LT		
MAP at D3.0 TPL or VOR to MAP 3.0	2:34	2:00	1:48	1:30	1:17	1:08					

STRAIGHT-IN LANDING RWY 15						CIRCLE-TO-LAND			
MDA(H) 1020' (338') With Local Altimeter Setting			MDA(H) 1080' (398') With Killeen Altimeter Setting			With Local Altimeter Setting		With Killeen Altimeter Setting	
RAIL out		ALS out	RAIL out		ALS out	Max Kts	MDA(H)	MDA(H)	
A						90	1120' (438') - 1	1180' (498') - 1	
B	1/2	3/4	1	1/2	3/4	120	1180' (498') - 1	1240' (558') - 1	
C						140	1180' (498') - 1 1/2	1240' (558') - 1 1/2	
D		1		1	1 1/4	165	1240' (558') - 2	1300' (618') - 2	

CHANGES: Procedure.

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TERPS AMEND 18 23 SEP 2010

General Information

Location: Tyler TX USA
IATA Code: TYR
Lat/Long: N32° 21.2' W095° 24.1'
Elevation: 544 ft

Airport Use: Public
Magnetic Variation: 3.1 °E
Sectional Chart: Dallas Ft Worth

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: High Pressure, HP Bottle
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1252 Z
Sunset: 0017 Z,

Runway Information

Runway: 04
Length x Width: 7200 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 541 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 13
Length x Width: 5200 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 539 ft
Lighting: Edge, ALS, Pilot controlled

Runway: 17
Length x Width: 4850 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 517 ft
Lighting: Edge, Pilot controlled

Runway: 22
Length x Width: 7200 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 538 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 31
Length x Width: 5200 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 544 ft
Lighting: Edge, ALS, Pilot controlled

Runway: 35
Length x Width: 4850 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 543 ft
Lighting: Edge, Pilot controlled

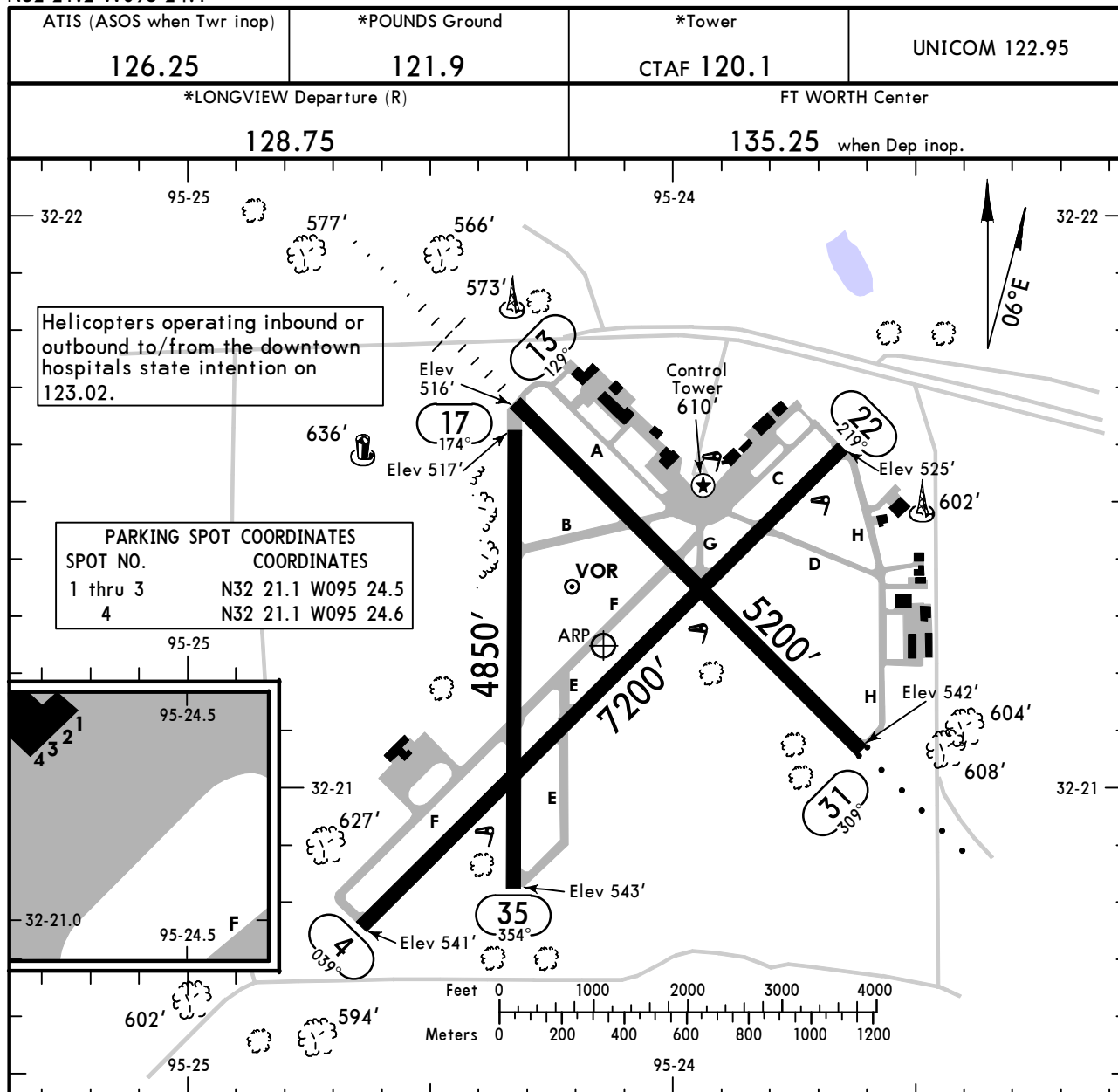
Communication Information

ATIS 126.25
ASOS 126.25
Pounds Tower 120.1 CTAF PCL
Pounds Ground Control 121.9
Longview Approach Control 128.75
Longview Departure Control 128.75
Tyler Pounds Unicom 122.95
FT Worth Flight Service Station 122.3 RCO
FT Worth Center 135.25 Remote Communications Air-Ground

KTYR/TYR
 Apt Elev **544'**
 N32 21.2 W095 24.1

JEPPESSEN
 6 JAN 12 **(11-1)**

TYLER, TEXAS
 TYLER POUNDS REGL



- ① Activate on 120.1 when Twr inop.
 ② Not available when Twr inop.

TAKE-OFF			FOR FILING AS ALTERNATE			
	All Rwys		Authorized Only When Twr Operating		Authorized Only When Local Weather Available	
	Adequate Vis Ref	STD	Precision	LOC Rwy 13 VOR DME Rwy 4 VOR DME Rwy 22 VOR Rwy 31	RNAV (GPS) Rwy 4 RNAV (GPS) Rwy 22	RNAV (GPS) Rwy 13 RNAV (GPS) Rwy 31
1 & 2 Eng	1/4	1	A	600-2	800-2	800-2
3 & 4 Eng		1/2	B			
			C			
			D			

CHANGES: Rwy 17/35 information.

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AMEND 0

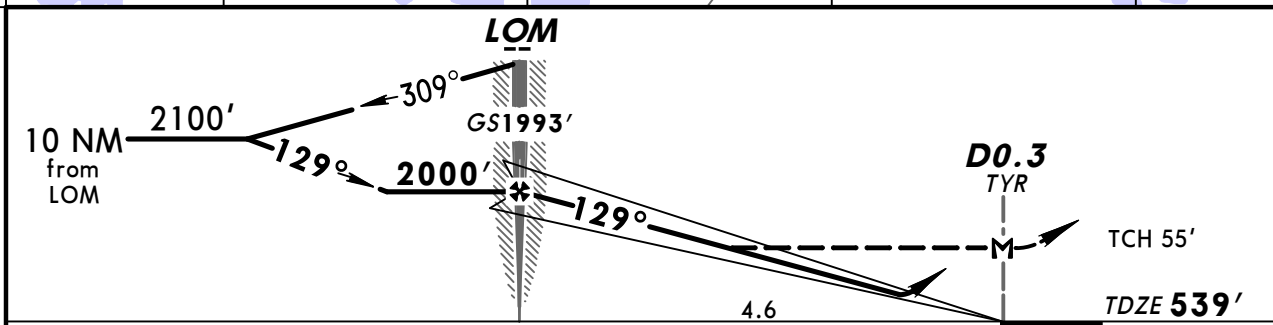
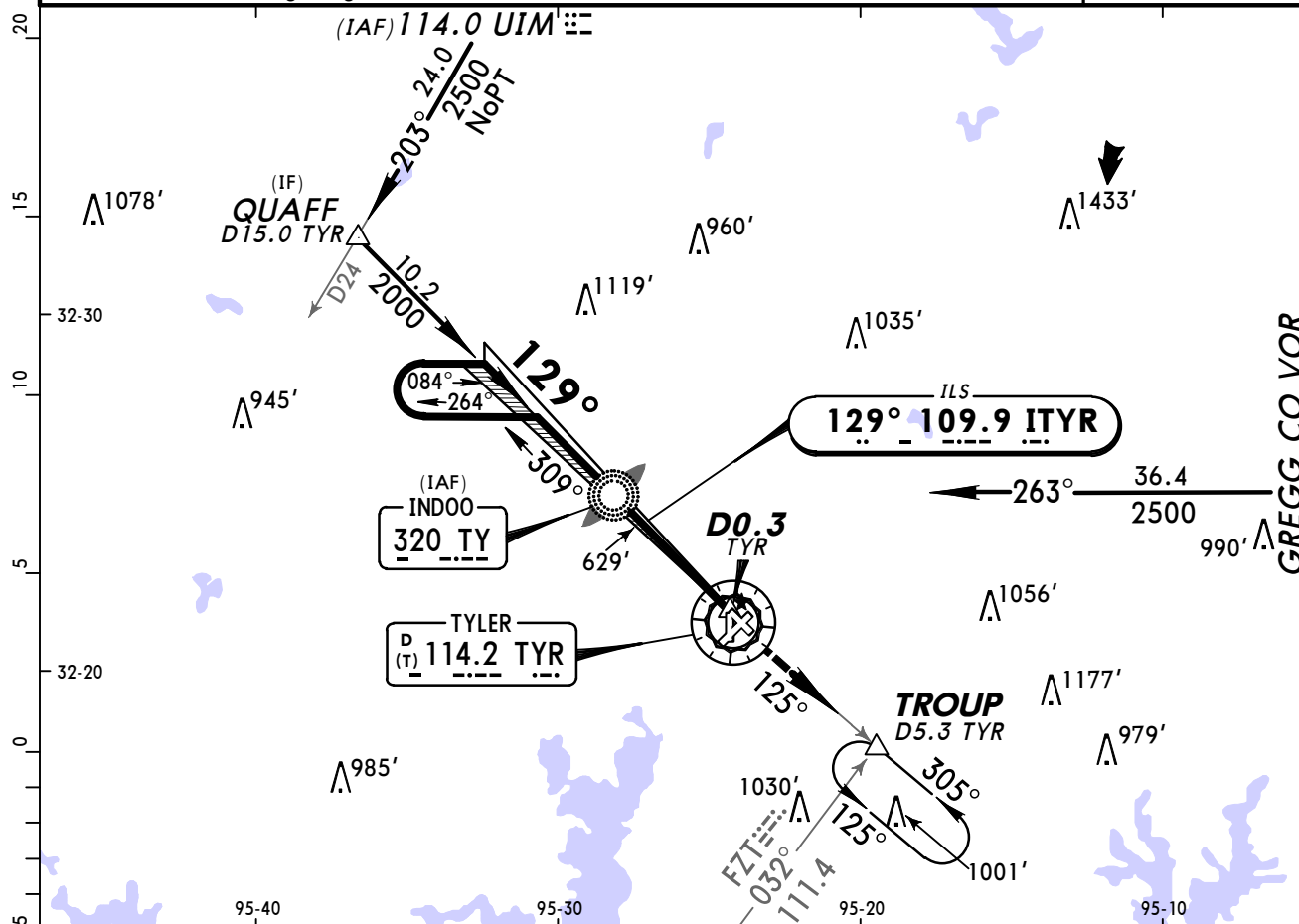
KTYR/TYR TYLER POUNDS REGL

JEPPESEN
6 JAN 12 (11-1)

TYLER, TEXAS
ILS or LOC Rwy 13

BRIEFING STRIP TM

ATIS (ASOS when Twr inop)		*LONGVIEW Approach (R)		FT WORTH Center		*POUNDS Tower		*Ground	
126.25		128.75		135.25 when App inop.		CTAF 120.1		121.9	
LOC ITYR 109.9	Final Apch Crs 129°	GS LOM 1993' (1454')	ILS DA(H) 739' (200')	Apt Elev 544' TDZE 539'		3100' MSA TY LOM			
MISSED APCH: Climb to 2200' outbound via TYR VOR R-125 to TROUP INT/D5.3 TYR and hold.									
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'					
1. Pilot controlled lighting 120.1.									



Gnd speed-Kts	70	90	100	120	140	160	MALSR 2200' ↑	TYR via 114.2 R-125	TROUP
GS	2.87°	355	457	508	609	711			
MAP at D0.3 TYR or LOM to MAP	4.6	3:57	3:04	2:46	2:18	1:58			

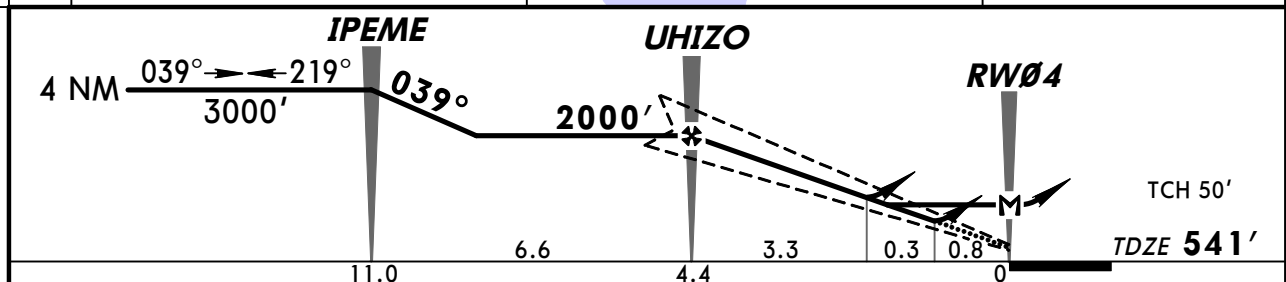
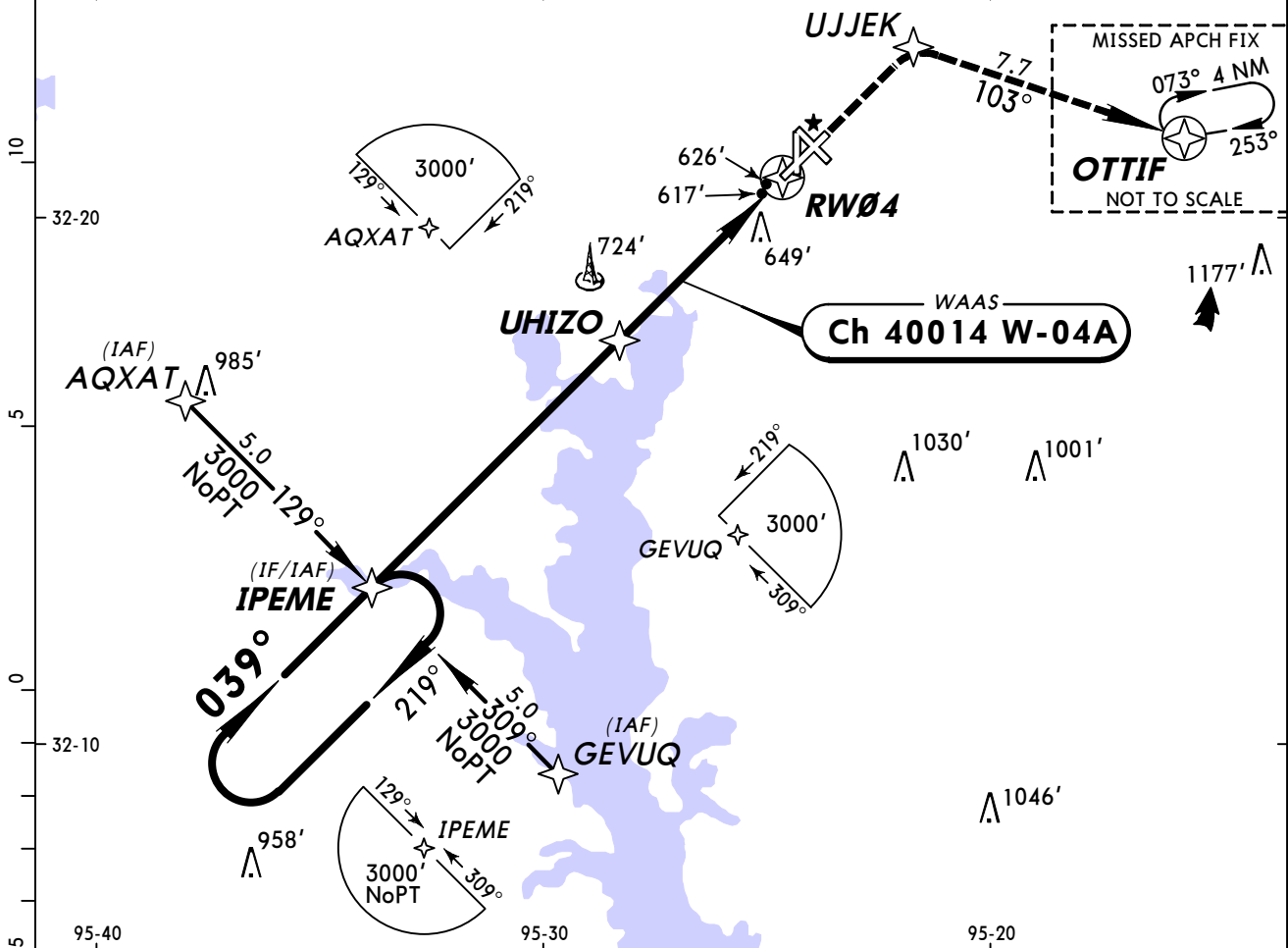
STRAIGHT-IN LANDING RWY 13					CIRCLE-TO-LAND	
ILS DA(H) 739' (200')		LOC (GS out) MDA(H) 880' (341')			Max Kts	MDA(H)
FULL	RAIL or ALS out	RAIL out		ALS out		
A					90	960' (416') - 1
B		1/2	3/4	1	120	1000' (456') - 1
C	1/2	3/4			140	1000' (456') - 1 1/2
D		3/4	1		165	1120' (576') - 2

TERPS AMEND 20F 5 MAY 2011

CHANGES: None.

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ATIS (ASOS when Twr inop)	*LONGVIEW Approach (R)	FT WORTH Center	*POUNDS Tower	*Ground
126.25	128.75	135.25 when App inop.	CTAF 120.1	121.9
WAAS Ch 40014 W-04A	Final Apch Crs 039°	Minimum Alt UHIZO 2000' (1459')	LPV DA(H) 834' (293')	Apt Elev 544' TDZE 541'
MISSED APCH: Climb to 2500' direct UJJEK and on 103° track to OTTIF and hold.				TAA 30 NM IAF
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. DME/DME RNP-0.30 not authorized. 2. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 3. Pilot controlled lighting 120.1.				



Gnd speed-Kts	70	90	100	120	140	160		REIL	2500'		UJJEK
Glide Path Angle	3.00°	372	478	531	637	743	849	PAPI-L			
MAP at RW04											

STRAIGHT-IN LANDING RWY 4				CIRCLE-TO-LAND Not Authorized at Night to Rwy 17	
LPV DA(H) 834' (293')	LNAV/VNAV DA(H) 941' (400')	LNAV MDA(H) 900' (359')		Max Kts	MDA(H)
1	1½	1		90	960' (416') - 1½
				120	1000' (456') - 1½
				140	
		1¼		165	1120' (576') - 2

TERPS AMEND 1A 5 MAY 2011

KTYR/TYR **TYLER POUNDS REGL**

29 APR 11

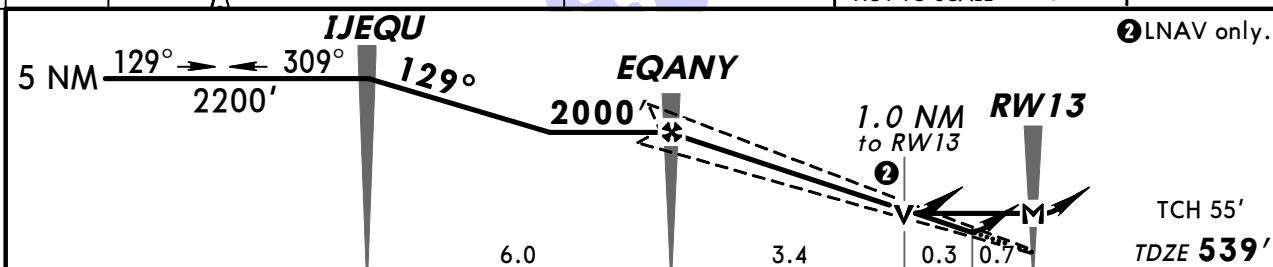
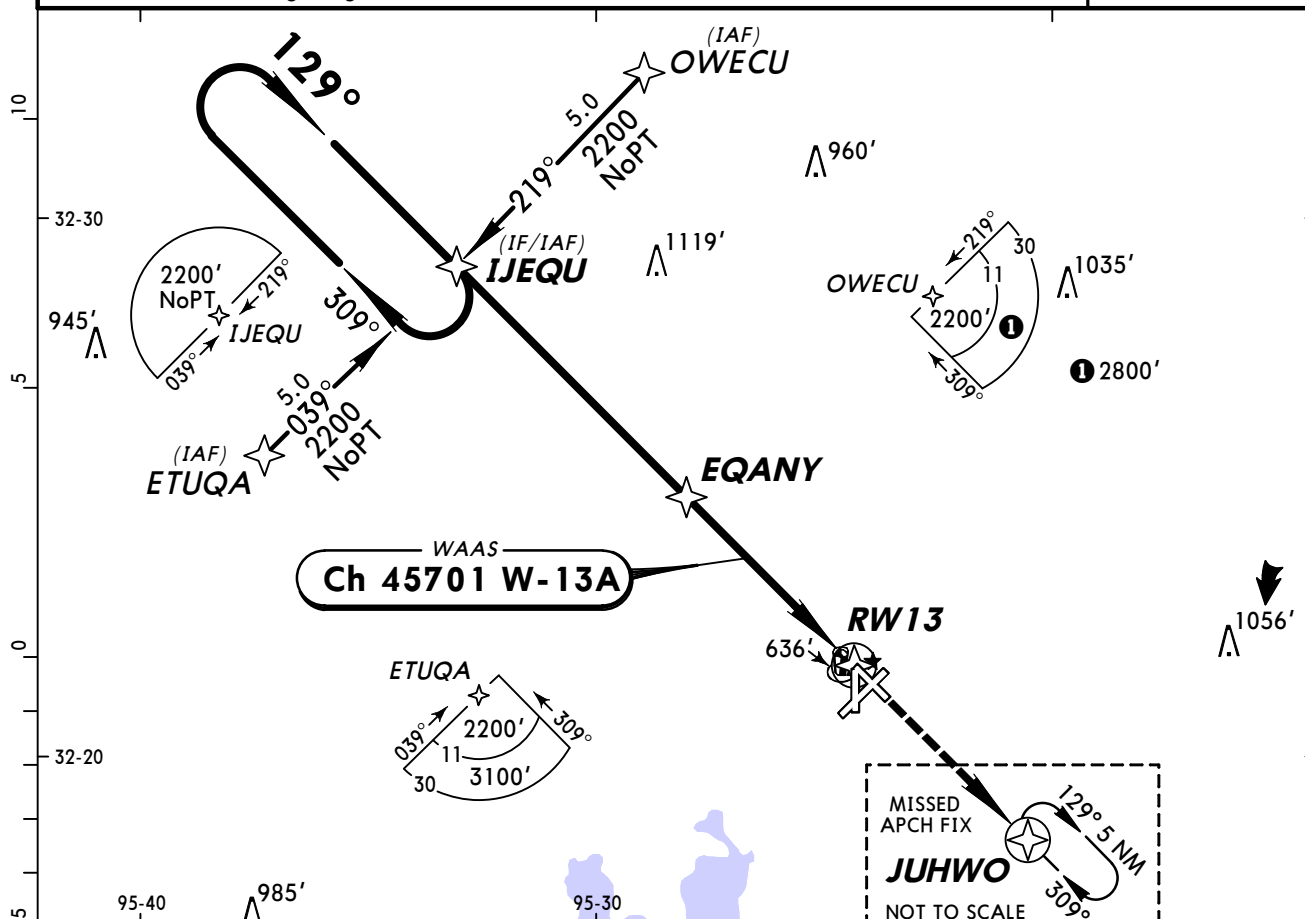
12-2

Eff 5 May

TYLER, TEXAS
RNAV (GPS) Rwy 13

BRIEFING STRIP™

ATIS (ASOS when Twr inop) 126.25	*LONGVIEW Approach (R) 128.75	FT WORTH Center 135.25 when App inop.	*POUNDS Tower CTAF 120.1	*Ground 121.9
WAAS Ch 45701 W-13A	Final Apch Crs 129°	Minimum Alt EQANY 2000' (1461')	LPV DA(H) (CONDITIONAL) 789' (250')	Apt Elev 544' TDZE 539'
MISSED APCH: Climb to 3000' direct JUHWO and hold. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use East Texas Regl altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (117°F). 4. VDP and Baro-VNAV not authorized when using East Texas Regl altimeter setting. 5. Pilot controlled lighting 120.1.				
TAA 30 NM IAF				



Gnd speed-Kts	70	90	100	120	140	160	MALS	3000'	JUHWO
Glide Path Angle 3.00°	372	478	531	637	743	849			
MAP at RW13									

STRAIGHT-IN LANDING RWY13							CIRCLE-TO-LAND		
							Not Authorized at Night to Rwy 17		
							With Local Altimeter Setting		
							With East Texas Regl Altimeter Setting		
							Max Kts	MDA(H)	MDA(H)
							90	960' (416') - 1 1/4	1080' (536') - 1 1/4
							120	1000' (456') - 1 1/4	1120' (576') - 1 1/4
							140	1000' (456') - 1 1/2	1120' (576') - 1 1/2
							165	1120' (576') - 2	1240' (696') - 2

- 1 DA(H) 909' (370') with East Texas Regl altimeter setting.
- 2 DA(H) 1006' (467') with East Texas Regl altimeter setting.
- 3 MDA(H) 1020' (481') with East Texas Regl altimeter setting.

CHANGES: Obstructions.

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KTYR/TYR

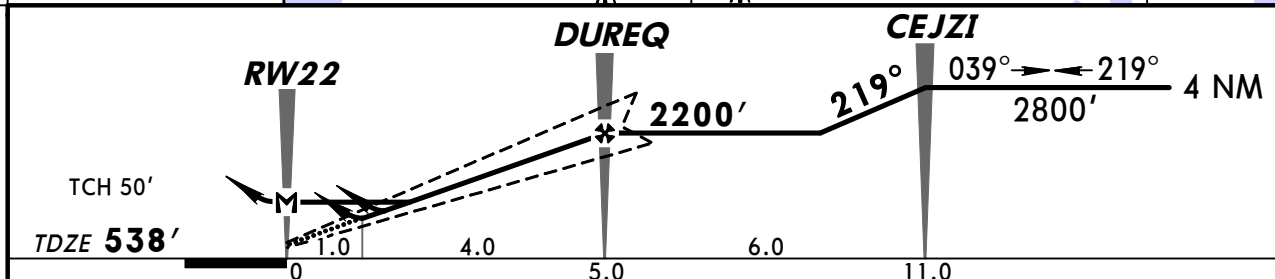
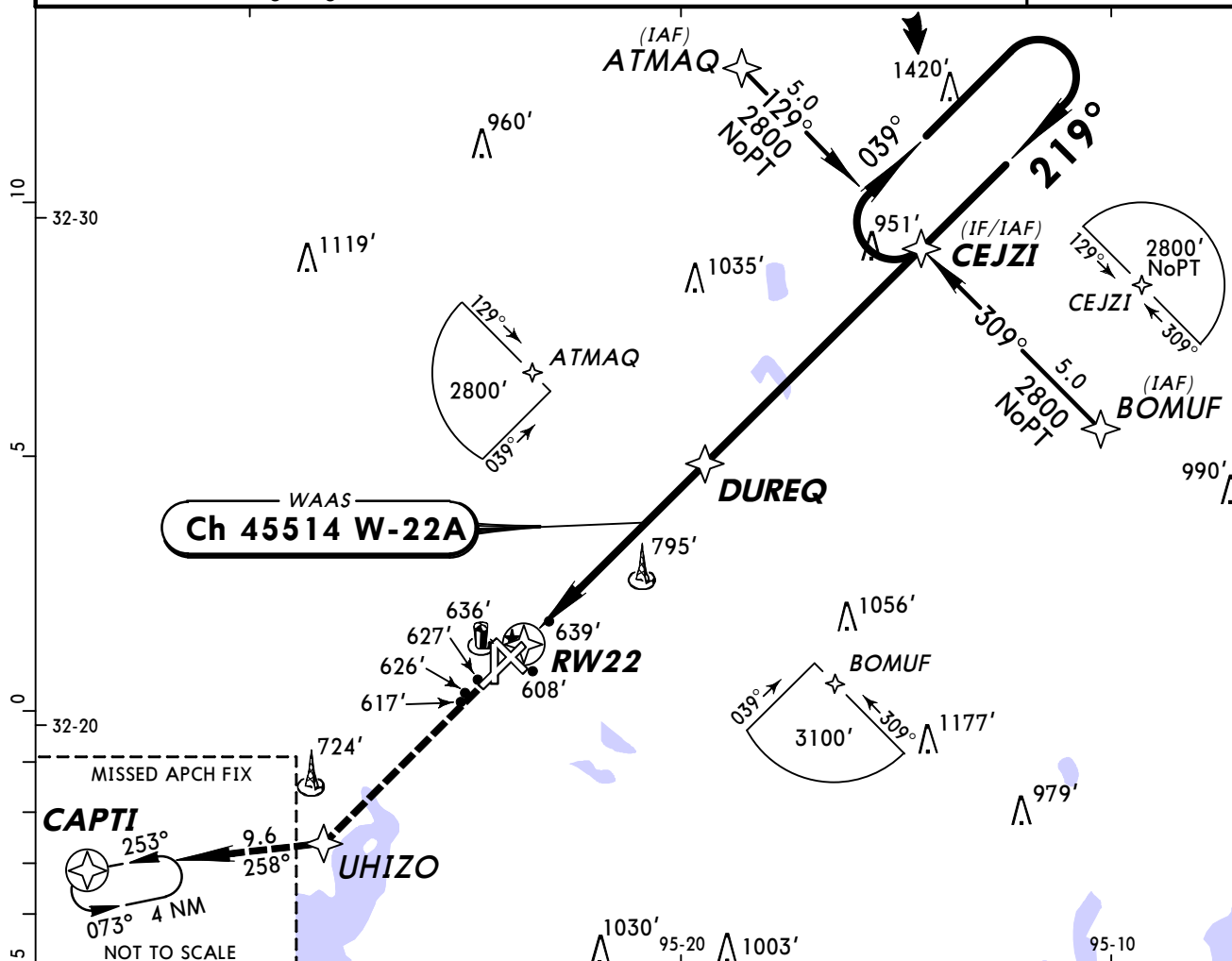
TYLER POUNDS REGL

22 SEP 06 **12-3** Eff 28 Sep

TYLER, TEXAS
RNAV (GPS) Rwy 22

BRIEFING STRIP™

ATIS (ASOS when Twr inop)	*LONGVIEW Approach (R)	FT WORTH Center	*POUNDS Tower	*Ground
126.25	128.75	135.25 when App inop.	CTAF 120.1	121.9
WAAS Ch 45514 W-22A	Final Apch Crs 219°	Minimum Alt DUREQ 2200' (1662')	LPV DA(H) 892' (354')	Apt Elev 544' TDZE 538'
MISSED APCH: Climb to 2500' direct UHIZO and via 258° track to CAPTI and hold.				TAA 30 NM IAF
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. DME/DME RNP-0.3 not authorized. 2. Baro-VNAV not authorized below -16°C (4°F). 3. Pilot controlled lighting 120.1.				



Gnd speed-Kts	70	90	100	120	140	160		REIL	2500'	→	UHIZO
Glide Path Angle 3.00°	372	478	531	637	743	849		VASI-L	↑		
MAP at RW22											

STRAIGHT-IN LANDING RWY 22				CIRCLE-TO-LAND Not Authorized at Night to Rwy 17	
LPV DA(H) 892' (354')	LNAV/VNAV DA(H) 915' (377')	LNAV MDA(H) 1100' (562')		Max Kts	MDA(H)
A	1 1/4	1 1/4	1	90	1100' (556') - 1 1/4
				120	
				140	1100' (556') - 1 1/2
				165	1120' (576') - 2

CHANGES: None.

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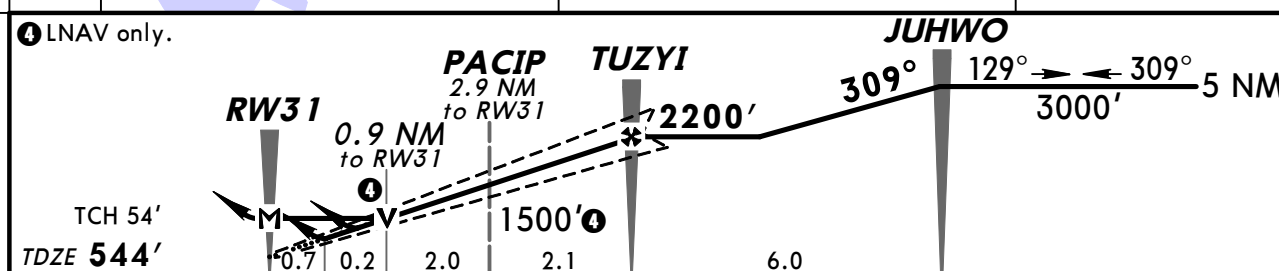
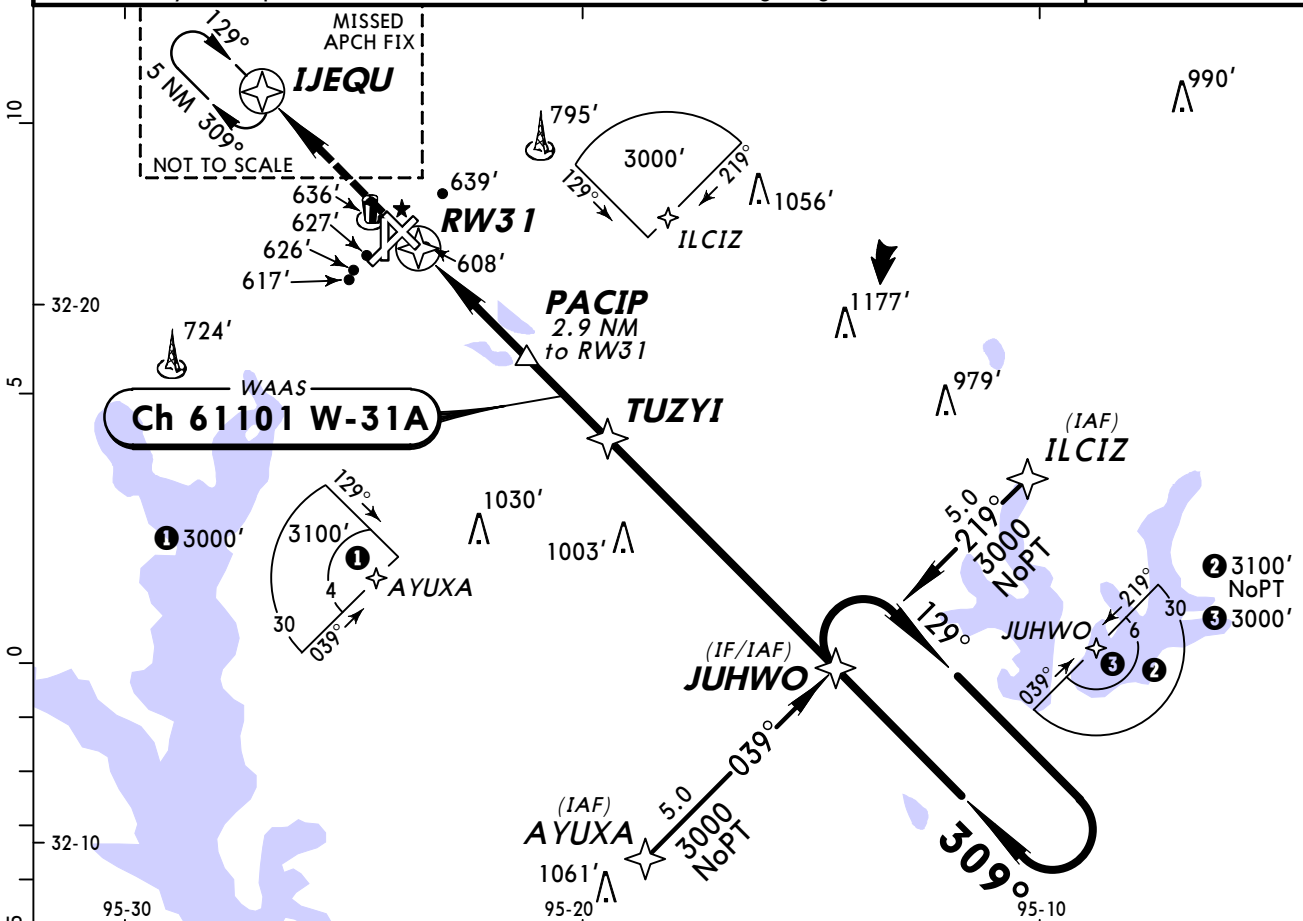
KTyr/TYR **TYLER POUNDS REGL**

22 SEP 06 **(12-4)** **Eff 28 Sep**

TYLER, TEXAS
RNAV (GPS) Rwy 31

BRIEFING STRIP™

ATIS (ASOS when Twr inop)	*LONGVIEW Approach (R)	FT WORTH Center	*POUNDS Tower	*Ground
126.25	128.75	135.25 when App inop.	CTAF 120.1	121.9
WAAS Ch 61101 W-31A	Final Apch Crs 309°	Minimum Alt TUZYI 2200' (1656')	LPV DA(H) (CONDITIONAL) 805' (261')	Apt Elev 544' TDZE 544'
MISSED APCH: Climb to 2200' direct IJEQU and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use East Texas Regl altimeter setting. 2. DME/DME RNP-0.3 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (118°F). 4. VDP and Baro-VNAV not authorized when using East Texas Regl altimeter setting. 5. Visibility reduction by helicopters not authorized. 6. Pilot controlled lighting 120.1.				
				TAA 30 NM IAF



Gnd speed-Kts	70	90	100	120	140	160	ODALS	2200'	→	IJEQU
Glide Path angle 3.00°	372	478	531	637	743	849	VASI	↑		
MAP at RW31										

STRAIGHT-IN LANDING RWY 31					CIRCLE-TO-LAND Not Authorized at Night to Rwy 17	
1 LPV DA(H) 805' (261')	2 LNAV/VNAV DA(H) 858' (314')	3 LNAV MDA(H) 880' (336')			With Local Altimeter Setting	With East Texas Regl Altimeter Setting
ODALS out	ODALS out	ODALS out	Max Kts	MDA(H)	MDA(H)	MDA(H)
A			90	960' (416') - 1	1080' (536') - 1	
B	3/4	3/4	120	1000' (456') - 1	1120' (576') - 1	
C	1	1	140	1000' (456') - 1 1/2	1120' (576') - 1 1/2	
D	1	1	165	1120' (576') - 2	1240' (696') - 2	

- 1 DA(H) 925' (381') with East Texas Regl altimeter setting.
- 2 DA(H) 978' (434') with East Texas Regl altimeter setting.
- 3 MDA(H) 1000' (456') with East Texas Regl altimeter setting.

KTYR TYLER POUNDS REGL

29 APR 11

(13-1)

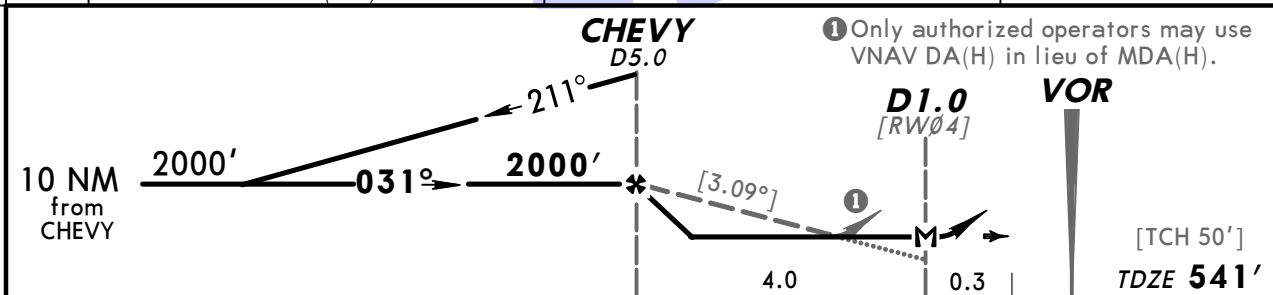
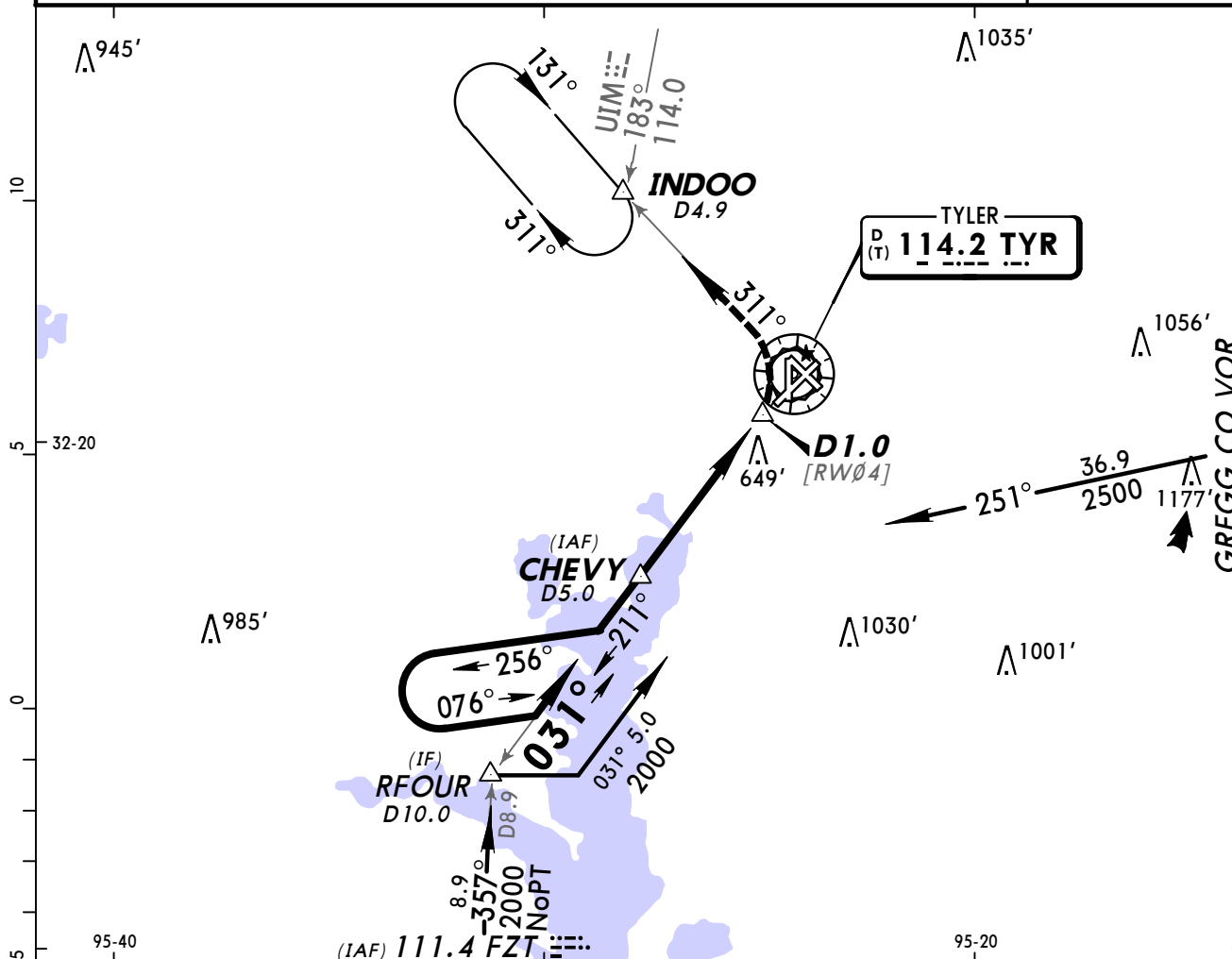
Eff 5 May

TYLER, TEXAS
VOR DME Rwy 4

TM

BRIEFING STRIP

ATIS (ASOS when Twr inop)		*LONGVIEW Approach (R)		FT WORTH Center		*POUNDS Tower		*Ground	
126.25		128.75		135.25 when App inop.		CTAF 120.1		121.9	
VOR TYR 114.2	Final Apch Crs 031°	Minimum Alt CHEVY 2000' (1459')	MDA(H) 900' (359')	Apt Elev 544' TDZE 541'		3100' MSA TYR VOR			
MISSED APCH: Climbing LEFT turn to 2200' outbound via TYR VOR R-311 to INDOO INT/D4.9 and hold.									
Alt Set: INCHES									



Gnd speed-Kts	70	90	100	120	140	160	REIL PAPI-L	2200' TYR via 114.2 R-311 INDOO	
Descent angle [3.09°]	383	492	547	656	765	875			
MAP at D1.0									

STRAIGHT-IN LANDING RWY 4				CIRCLE-TO-LAND			
MDA(H) 900' (359')				Max Kts	MDA(H)		
A	1			90	960' (416') - 1		
B				120	1000' (456') - 1		
C				140	1000' (456') - 1½		
D	1¼			165	1120' (576') - 2		

CHANGES: Minimums, obstructions.

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TERPS AMEND 3E 5 MAY 2011

TYLER, TEXAS
VOR DME Rwy 22

BRIEFING STRIP TM



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).

VOR

D1.0
[MAGXU]

[TCH 50']

TDZE 538'

0.5 4.0

LIZZY
D5.0

048°

2500'

10 NM
from
LIZZY

2200'

228°

①

[3.42°]

AMEND 3 D TERPS

AMEND 3 D TERPS

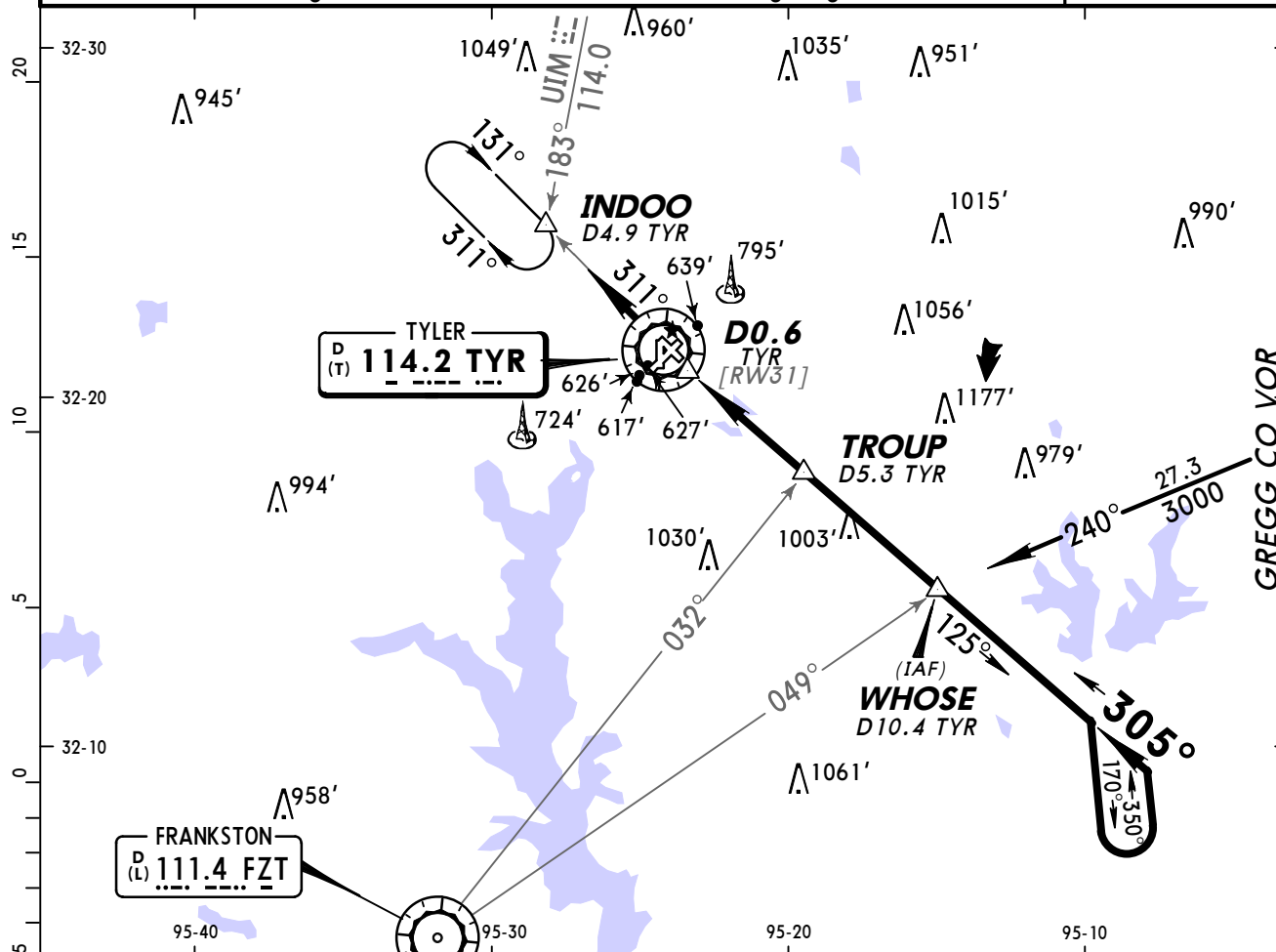
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KTYR/TYR **TYLER POUNDS REGL**

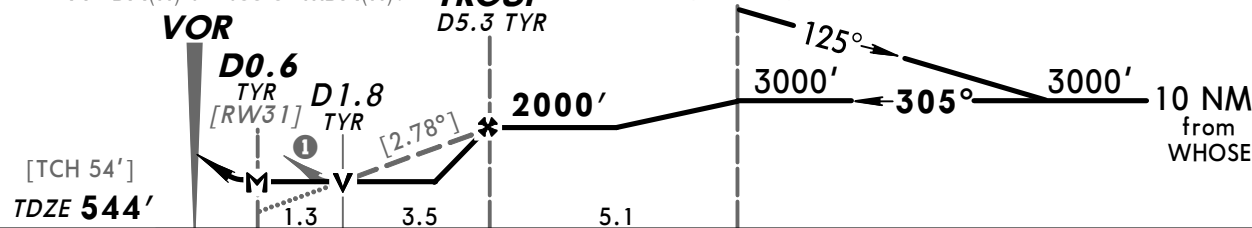
JEPPESEN
 23 SEP 05 **(13-3)**

TYLER, TEXAS
VOR Rwy 31

ATIS (ASOS when Twr inop)	*LONGVIEW Approach (R)	FT WORTH Center	*POUNDS Tower	*Ground
126.25	128.75	135.25 when App inop.	CTAF 120.1	121.9
VOR TYR 114.2	Final Apch Crs 305°	Minimum Alt TROUP 2000' (1456')	MDA(H) 1000' (456')	Apt Elev 544' TDZE 544'
MISSED APCH: Climb to 2200' outbound via TYR VOR R-311 to INDOO INT/D4.9 TYR and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. VGSI and descent angles not coincident. 2. Pilot controlled lighting 120.1.				
				3100' MSA TYR VOR



① Only authorized operators may use
 VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160	ODALS	2200'	TYR	INDOO
Descent angle [2.78°]	344	443	492	590	688	787	VASI	↑	114.2	
MAP at D0.6 TYR or TROUP to MAP	4.8	4:07	3:12	2:53	2:24	2:03	1:48		R-311	

STRAIGHT-IN LANDING RWY 31

MDA(H) **1000'** (456')

CIRCLE-TO-LAND

TERPS	ODALS out		Max Kts	MDA(H)
	A	3/4	90	1000' (456') - 1
	B		120	
	C	1 1/4	140	1000' (456') - 1 1/2
	D	1 1/2	165	1120' (576') - 2

General Information

Location: Victoria TX USA
IATA Code: VCT
Lat/Long: N28° 51.2' W096° 55.1'
Elevation: 115 ft

Airport Use: Public
Magnetic Variation: 4.0°E
Sectional Chart: Houston

Fuel Types: 100 Octane (LL), Jet A
Repair Types: Minor Airframe, Minor Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1255 Z
Sunset: 0026 Z,

Runway Information

Runway: 06
Length x Width: 4200 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 106 ft

Runway: 12L
Length x Width: 9111 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 115 ft
Lighting: Edge, ALS, Pilot controlled

Runway: 12R
Length x Width: 4643 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 105 ft
Displaced Threshold: 441 ft

Runway: 17
Length x Width: 4908 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 107 ft
Lighting: Edge, REIL

Runway: 24
Length x Width: 4200 ft x 75 ft

Surface Type: asphalt
TDZ-Elev: 106 ft

Runway: 30L
Length x Width: 4643 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 104 ft
Displaced Threshold: 551 ft

Runway: 30R
Length x Width: 9111 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 106 ft
Lighting: Edge, Pilot controlled

Runway: 35
Length x Width: 4908 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 106 ft
Lighting: Edge, REIL

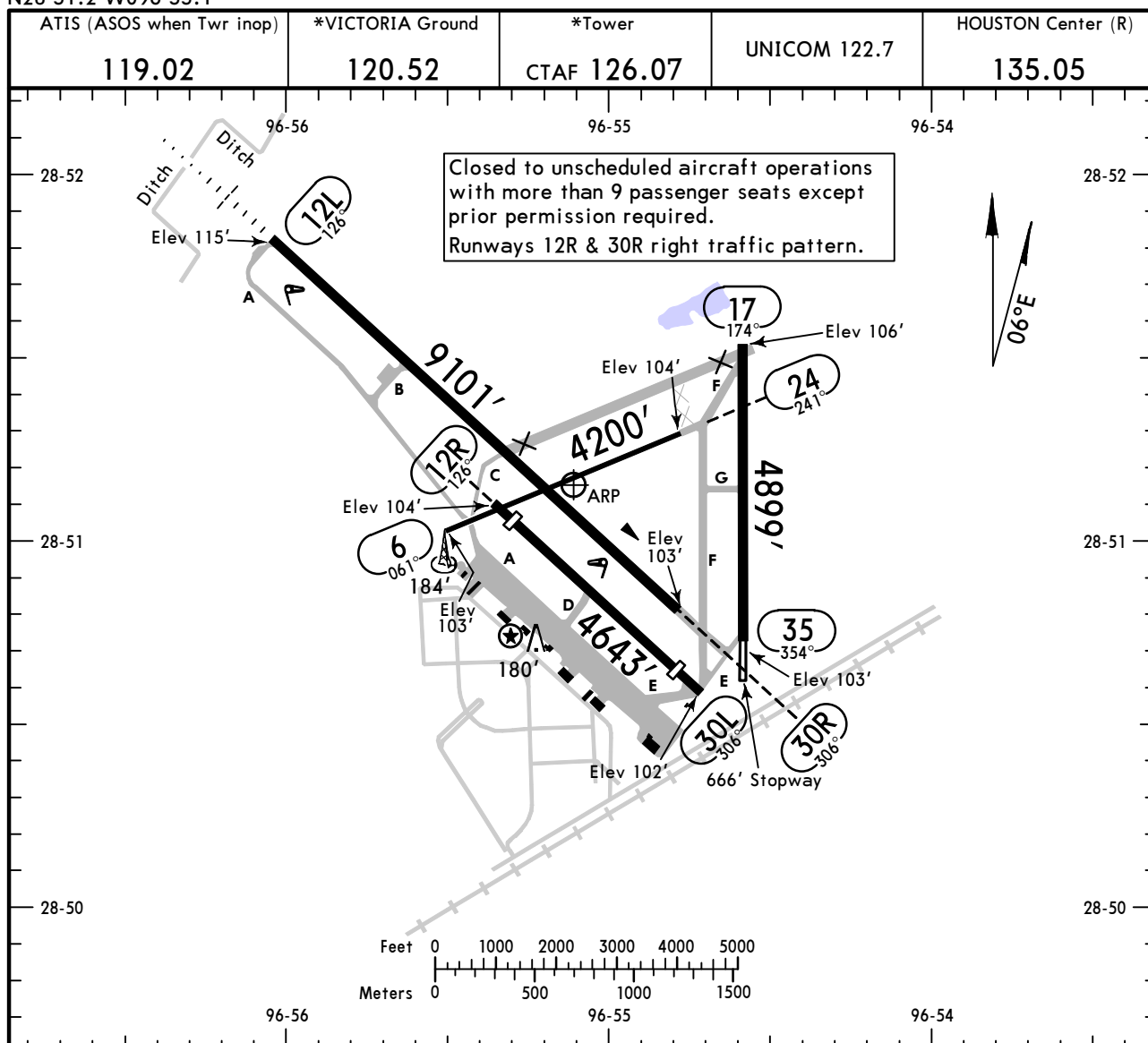
Communication Information

ATIS 119.025
ASOS 119.025
Victoria Tower 126.075
Victoria Ground Control 120.525
Victoria Regl Unicom 122.7 CTAF PCL
Montgomery Co Flight Service Station 122.2 RCO
Houston Center 135.05 Remote Communications Air-Ground

KVCT/VCT
 Apt Elev **115'**
 N28 51.2 W096 55.1

JEPPESSEN
 18 MAR 11 **(11-1)**

VICTORIA, TEXAS
 VICTORIA REGL



ADDITIONAL RUNWAY INFORMATION					
RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Landing Beyond Glide Slope		
6 ① 24					75'
12R 30L		4212' 4092'			150'
12L 30R	② HIRL ③ MALSR grooved ② HIRL PAPI-L (angle 3.00°) grooved		8062'		150'
17 35	③ MIRL REIL PAPI-L (angle 3.00°)				150'

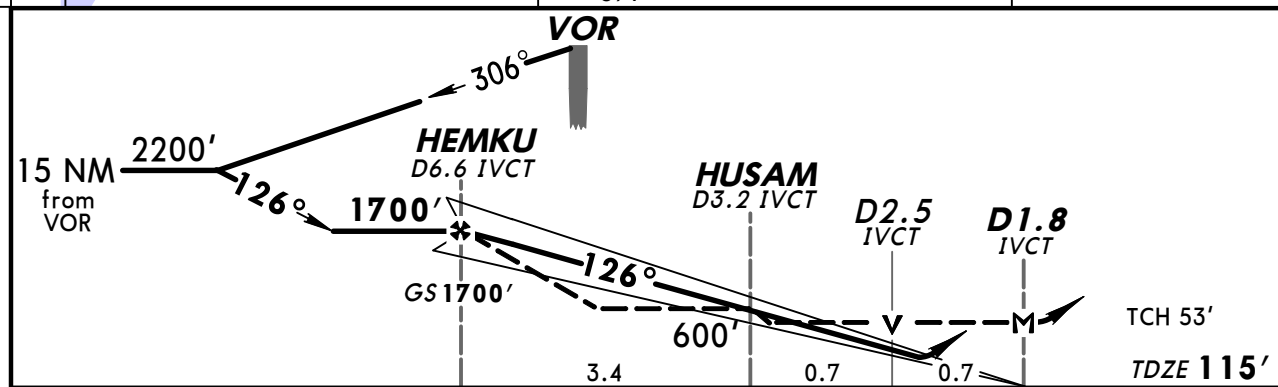
- ① Northwest 2800' grooved.
- ② Increase intensity on 126.07.
- ③ Activate on 126.07.

TAKE-OFF			FOR FILING AS ALTERNATE	
	All Rwys		Authorized Only When Local Weather Available	
	Adequate Vis Ref	STD	VOR Rwy 12L VOR DME Rwy 30R RNAV (GPS) Rwy 12L RNAV (GPS) Rwy 30R	Other
1 & 2 Eng	1/4	1	800-2	NA
3 & 4 Eng		1/2		

CHANGES: Twy G and closed pavement areas added.

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AMEND 0



<i>Gnd speed-Kts</i>	70	90	100	120	140	160					VCT 109.0
<i>GS</i> 3.00°	377	484	538	646	753	861					
<i>MAP at D1.8 IVCT</i>											

STRAIGHT-IN LANDING RWY 12L						CIRCLE-TO-LAND	
ILS <i>DA(H)</i> 315' (200')			LOC (GS out) <i>MDA(H)</i> 400' (285')			Max Kts	<i>MDA(H)</i> _____
FULL		RAIL or ALS out		RAIL out	ALS out		
A	1/2	3/4	1/2	3/4	1	90	520'(405')-1
B						120	580'(465')-1
C						140	580'(465')-1 1/2
D			3/4	1	165	680'(565')-2	

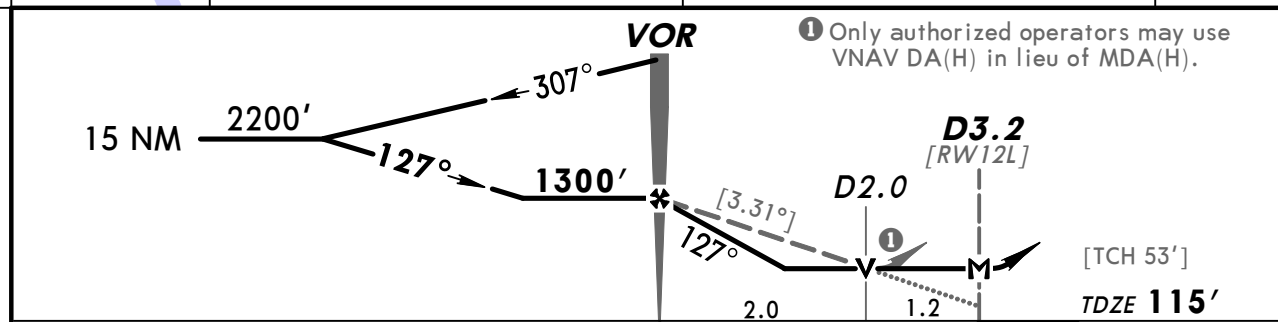
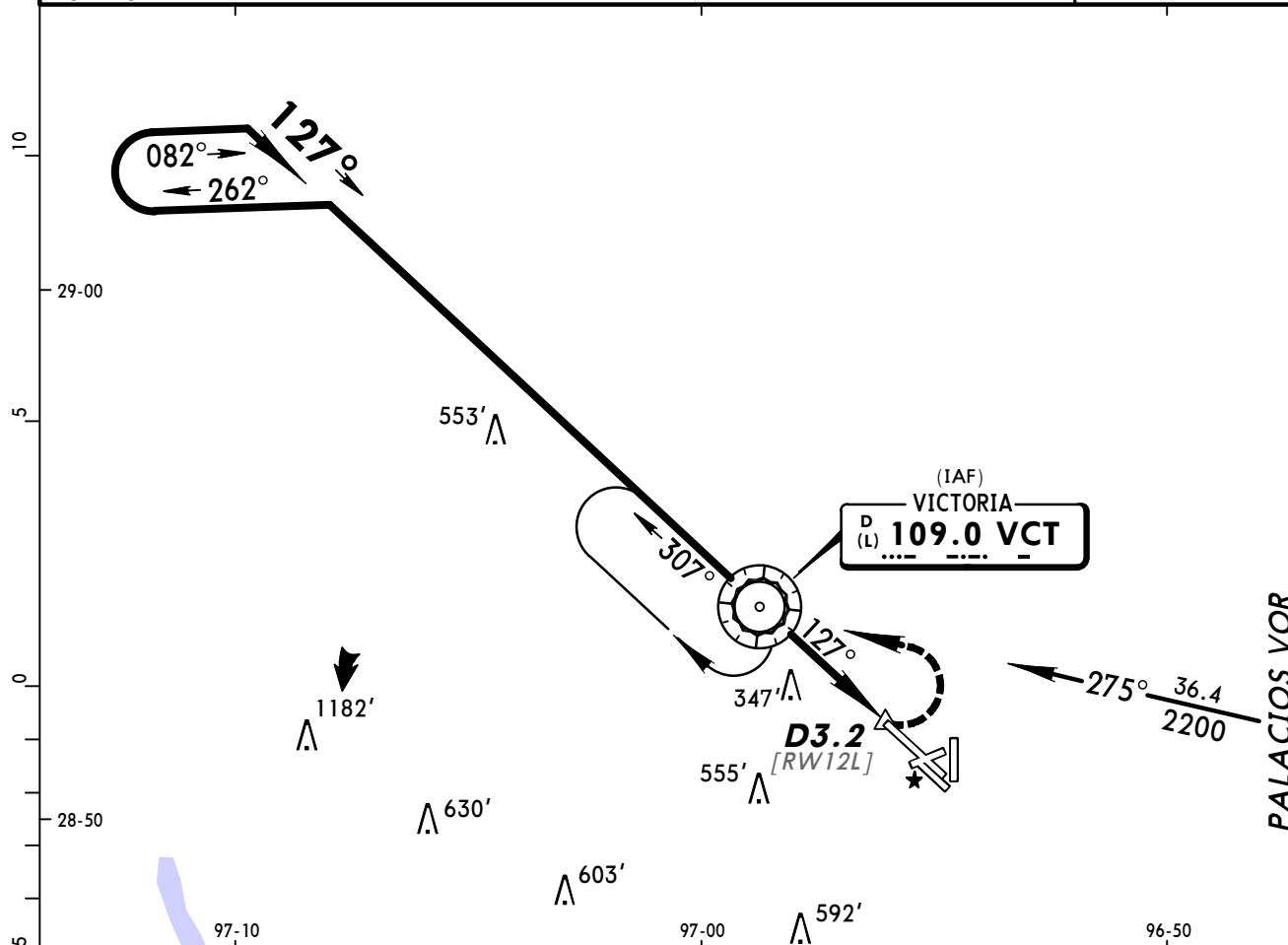
VICTORIA, TEXAS
RNAV (GPS) Rwy 12L

BRIEFING STRIP™

TERPS
AMEND O

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ATIS (ASOS when Twr inop) 119.02	HOUSTON Center (R) 135.05	*VICTORIA Tower CTAF 126.07	*Ground 120.52
VOR VCT 109.0	Final Apch Crs 127°	Minimum Alt VOR 1300' (1185')	MDA(H) (CONDITIONAL) 600' (485')
Apt Elev 115' TDZE 115'			
MISSED APCH: Climbing LEFT turn to 2200' direct VCT VOR and hold. Continue climb-in-hold to 2200'.			
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Port Lavaca altimeter setting. 2. VDP not authorized when using Port Lavaca altimeter setting. 3. Pilot controlled lighting 126.07.			
2200' MSA VCT VOR			



Gnd speed-Kts	70	90	100	120	140	160		MALSR	2200'	VCT 109.0
Descent angle [3.31°]	410	527	586	703	820	937				
MAP at D3.2 or VOR to MAP	3.2	2:45	2:08	1:55	1:36	1:22	1:12			

STRAIGHT-IN LANDING RWY 12L						CIRCLE-TO-LAND			
With Local Altimeter Setting			With Port Lavaca Altimeter Setting			With Local Altimeter Setting		With Port Lavaca Altimeter Setting	
MDA(H) 600' (485')			MDA(H) 660' (545')			MDA(H)		MDA(H)	
RAIL out	ALS out		RAIL out	ALS out		RAIL out	ALS out	RAIL out	ALS out
A	1/2	3/4	1	1/2	3/4	1	600'(485')-1	660'(545')-1	
B	3/4		1	1 1/2					
C	1		1 1/2						
D									

Chart changes since cycle 03-2012

ADD = added chart, REV = revised chart, DEL = deleted chart.

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE
LONGVIEW, TX (EAST TEXAS REGL - KGGG)				
FT HOOD, TX (GRAY AAF - KGRK)				
GREENVILLE, TX (MAJORS - KGVV)				
HOUSTON, TX (HOBBY - KHOU)				
HARLINGEN, TX (VALLEY INTL - KHRL)				
HOUSTON, TX (GEORGE BUSH INTERCONTINENTAL/H - KIAH)				
REV	AIRPORT, AIRPORT INFO	70-9	17 Feb 2012	
REV	AIRPORT INFO (CONTD), TAK...	70-9A	17 Feb 2012	
REV	LOW VIS TAXI ROUTES (RWY ...	70-9D	17 Feb 2012	
REV	LOW VIS TAXI ROUTES (RWY ...	70-9E	17 Feb 2012	
REV	LOW VIS TAXI ROUTES (RWY ...	70-9F	17 Feb 2012	
REV	LOW VIS TAXI ROUTES (RWY ...	70-9G	17 Feb 2012	
REV	LOW VIS TAXI ROUTES (ARRS...	70-9H	17 Feb 2012	
REV	ILS OR LOC RWY 8L	71-1	17 Feb 2012	
REV	ILS RWY 8L CAT II & III	71-1A	17 Feb 2012	
REV	ILS OR LOC RWY 8R	71-2	17 Feb 2012	
REV	ILS RWY 8R SA CAT II	71-2A	17 Feb 2012	
REV	ILS OR LOC RWY 9	71-3	17 Feb 2012	
REV	ILS OR LOC RWY 15R	71-4	17 Feb 2012	
REV	ILS OR LOC RWY 26L	71-5	17 Feb 2012	
REV	ILS RWY 26L CAT II & III	71-5A	17 Feb 2012	
REV	ILS RWY 26L SA CAT I	71-5B	17 Feb 2012	
REV	ILS OR LOC RWY 26R	71-6	17 Feb 2012	
REV	ILS RWY 26R CAT II & III	71-6A	17 Feb 2012	
REV	ILS RWY 26R SA CAT I	71-6B	17 Feb 2012	
REV	ILS OR LOC RWY 27	71-7	17 Feb 2012	
REV	ILS RWY 27 CAT II & III	71-7A	17 Feb 2012	
REV	ILS RWY 27 SA CAT I	71-7B	17 Feb 2012	
REV	ILS OR LOC RWY 33R	71-8	17 Feb 2012	
REV	RNAV (GPS) Z RWY 8L	72-1	17 Feb 2012	
REV	RNAV (GPS) Z RWY 8R	72-2	17 Feb 2012	
REV	RNAV (GPS) Z RWY 9	72-3	17 Feb 2012	
REV	RNAV (GPS) RWY 15R	72-4	17 Feb 2012	
REV	RNAV (GPS) Z RWY 26L	72-5	17 Feb 2012	
REV	RNAV (GPS) Z RWY 26R	72-6	17 Feb 2012	
REV	RNAV (GPS) Z RWY 27	72-7	17 Feb 2012	
REV	RNAV (GPS) RWY 33R	72-8	17 Feb 2012	

BIG SPRING, TX (BIG SPRING MC MAHON-WRINKLE - KBPG)**DENTON, TX (DENTON MUN - KDTO)****LANCASTER, TX (LANCASTER REGL - KLNC)****ORANGE GROVE, TX (ORANGE GROVE NALF - KNOG)****PORT ISABEL, TX (PORT ISABEL-CAMERON CO - KPIL)****DALLAS, TX (COLLIN CO REGL AT MC KINNEY - KTKI)****HOUSTON, TX (HOUSTON EXECUTIVE - KTME)**

LUBBOCK, TX (LUBBOCK PRESTON SMITH INTL - KLBB)

ANGLETON/LAKE JACKSON, TX (TEXAS GULF COAST REGL - KLBX)

LAREDO, TX (LAREDO INTL - KLRD)

MIDLAND, TX (MIDLAND INTL - KMAF)

MC ALLEN, TX (MC ALLEN MILLER INTL - KMFE)

CORPUS CHRISTI, TX (CORPUS CHRISTI NAS/TRUAX - KNGP)

KINGSVILLE, TX (KINGSVILLE NAS - KNQI)

SHERMAN-DENISON, TX (NORTH TEXAS REGL/PERRIN - KGYI)

UNIVERSAL CITY, TX (RANDOLPH AFB - KRND)

SAN ANTONIO, TX (SAN ANTONIO INTL - KSAT)

HOUSTON, TX (SUGAR LAND REGIONAL - KSGR)

SAN ANGELO, TX (SAN ANGELO REGL/MATHIS - KSJT)

SAN ANTONIO, TX (LACKLAND AFB (KELLY FLD ANNEX) - KSKF)

WICHITA FALLS, TX (SHEPPARD AFB/WICHITA FALLS MUN - KSPS)

EL PASO, TX (HORIZON - T27)

TEMPLE, TX (DRAUGHON-MILLER CENTRL TX REGL - KTPL)

TYLER, TX (TYLER POUNDS REGL - KTYR)

VICTORIA, TX (VICTORIA REGL - KVCT)

TERMINAL CHART CHANGE NOTICES

No Chart Change Notices for Airport KBPB

No Chart Change Notices for Airport KDTO

No Chart Change Notices for Airport KGGG

No Chart Change Notices for Airport KGRK

No Chart Change Notices for Airport KGVV

No Chart Change Notices for Airport KGYI

Chart Change Notices for Airport KHOU

Type: Terminal

Effectivity: Permanent

Begin Date: Immediately

End Date: No end date

For Houston Area SID/STARs Angleton/Lake Jackson airport name Brazoria Co changed to Texas Gulf Coast Regl.

No Chart Change Notices for Airport KHRL

Chart Change Notices for Airport KIAH

Type: Terminal

Effectivity: Permanent

Begin Date: Immediately

End Date: No end date

For Houston Area SID/STARs Angleton/Lake Jackson airport name Brazoria Co changed to Texas Gulf Coast Regl.

Chart Change Notices for Airport KLBB

Type: Terminal

Effectivity: Temporary

Begin Date: Immediately

End Date: Until Further Notice

(11-2) ILS or LOC Rwy 26 MM decmsnd.

Chart Change Notices for Airport KLBX

Type: Terminal

Effectivity: Temporary
Begin Date: Immediately
End Date: Until Further Notice

(11-1) ILS or LOC Rwy 17 MM decmsnd.

No Chart Change Notices for Airport KLNC

No Chart Change Notices for Airport KLRD

Chart Change Notices for Airport KMAF

Type: Terminal
Effectivity: Permanent
Begin Date: 20080731
End Date: No end date

(10-3) Midland 4 Dep computer code (MAF4.MAF) added.

No Chart Change Notices for Airport KMFE

No Chart Change Notices for Airport KNGP

No Chart Change Notices for Airport KNOG

No Chart Change Notices for Airport KNQI

No Chart Change Notices for Airport KPIL

No Chart Change Notices for Airport KRND

No Chart Change Notices for Airport KSAT

Chart Change Notices for Airport KSGR

Type: Terminal
Effectivity: Temporary
Begin Date: Immediately
End Date: Until Further Notice

Hull (SGR) NDB decmsnd.

Chart Change Notices for Airport KSJT

Type: Terminal

Effectivity: Temporary
Begin Date: Immediately
End Date: Until Further Notice

(13-1) VOE DME Rwy 3 Amend chgd to 0B, Procedure Amendment Reference Date: 29 JUL 2010.

Type: Terminal
Effectivity: Temporary
Begin Date: Immediately
End Date: Until Further Notice

(18-1) RADAR-1 ASR Rwys18, 36 Amend chgd to 1A, Procedure Amendment Reference Date: 29 JUL 2010.

No Chart Change Notices for Airport KSKF

No Chart Change Notices for Airport KSPS

No Chart Change Notices for Airport KTKI

No Chart Change Notices for Airport KTME

No Chart Change Notices for Airport KTPL

No Chart Change Notices for Airport KTYR

No Chart Change Notices for Airport KVCT

No Chart Change Notices for Airport T27