

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

AIRPORT ID HRL	PROCEDURE NAME RNAV (GPS) Y RWY 13	ORIGINAL/AMENDMENT 3	CITY HARLINGEN	STATE TX
AIRPORT ELEVATION 36	TDZE 35	SUPERSEDED RNAV (GPS) Y RWY 13	ORIGINAL/AMENDMENT 2B	DATED 10/08/2020
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 11 JULY 2024	REQUIRED EFFECTIVE DATE 07/11/2024	MAG VAR 3E
				EPOCH YEAR 2025
				CANCEL/SUSPEND

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
FAMVI	IAF	CAKOB	NOPT	TF	FB	1.00	042.50	10.00	2000
HIRTA	IAF	CAKOB	NOPT	TF	FB	1.00	222.62	10.00	2000
CAKOB	IF/IAF	BUVTE		TF	FB	1.00	132.56	6.24	1600
BUVTE	FAF	WOKBI/2.60 NM TO RW13		TF	FB	0.30	132.60	2.14	
WOKBI/2.60 NM TO RW13		RW13	MAP	TF	FO	0.30	132.60	2.60	
RW13	MAP	285 MSL		CA			132.60		
285 MSL		AMAPE		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT AMAPE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD NW CAKOB, RT, 132.56 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC: 132.60 FAF: BUVTE DIST FAF TO MAP: 4.73 DIST FAF TO THLD: 4.73
- MIN ALT: CAKOB 2000, BUVTE 1600, WOKBI/2.60 NM TO RW13 920
- DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.60 GS ANT: IM:
- MIN GP INCPT: 1600 GP ALT AT PFAF: BUVTE 1600 OM: MM: IM:
- GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 59.0
- MSA FROM: RW13 2600



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING PORT ISABEL ALTIMETER SETTING.
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -1°C OR ABOVE 54°C.
 CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PORT ISABEL ALTIMETER SETTING: INCREASE LPV DA TO 327 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE LNAV/VNAV DA TO 327 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 60 FEET AND VISIBILITY CATS C AND D 1/4 SM.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 312.71 INBOUND.
 CHART FAS OBST: 178 TANK (48-029045) 261456N/0974124W.
 243 AAO 261645N/0974424W.
 CHART VDP AT 1.09 NM TO RW13.
 WAAS CHANNEL # 78230
 REFERENCE PATH ID: W13A
 CHART CIRCLING ICON.
 LTP HAE: -12.3 M

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
LPV DA	285	3/4	250	285	3/4	250	285	3/4	250	285	3/4	250			
LNAV/VNAV DA	285	3/4	250	285	3/4	250	285	3/4	250	285	3/4	250			
LNAV MDA	440	1	405	440	1	405	440	1 1/8	405	440	1 1/8	405			
CIRCLING	460	1	424	560	1	524	600	1 1/2	564	680	2	644			



CHANGES - REASONS

1. TERMINAL ROUTES REMOVED JIMIE FEEDER - PER ATC REQUEST NO LONGER USED
2. TERMINAL ROUTES REMOVED MCALLEN VOR/DME FEEDER - PER ATC REQUEST NO LONGER USED
3. TERMINAL ROUTES FAMVI INITIAL MAG COURSE CHANGED FROM 040.50 TO 042.50 DEGREES - ARPT MAGVAR UPDATE
4. TERMINAL ROUTES HIRTA INITIAL MAG COURSE CHANGED FROM 220.62 TO 222.62 DEGREES - ARPT MAGVAR UPDATE
5. TERMINAL ROUTES CAKOB TO BUVTE INTERMEDIATE MAG COURSE CHANGED FROM 130.56 TO 132.56 DEGREES - ARPT MAGVAR UPDATE
6. TERMINAL ROUTES CAKOB TO BUVTE INTERMEDIATE LEG LENGTH CHANGED FROM 5.93 NM TO 6.24 NM - FAF RELOCATED FOR NEW ALTITUDE AND GS ALIGNMENT
7. TERMINAL ROUTES MISSED APPROACH CA LEG ALTITUDE CHANGED FROM 284 TO 285 - FORMS UPDATED TO MATCH P-NOTAM 5/6353 DUE TO THLD ELEVATION CHANGING TO TDZE ELEVATION
8. LINE 4 CHANGED FROM CAKOB 2000, BUVTE 1600, WOKBI/2.60 NM TO RW13 920* TO CAKOB 2000, BUVTE 1600, WOKBI/2.60 NM TO RW13 920 - * NO LONGER REQUIRED
9. DELETED "VISIBILITY REDUCTION BY HELICOPTER NA" - 34:1 IS CLEAR
10. ADDITIONAL FLIGHT DATA DELETED FAS OBST 45 BLDG 261429N/0974016W & FAS OBST 178 TK 261456N/0974124W - NEW FAS OBSTACLES
11. FINAL MAG COURSE CHANGED FROM 130.60 TO 132.60 - ARPT MAGVAR UPDATED
12. FINAL STEPDOWN MAG COURSE CHANGED FROM 130.61 TO 132.60 - ARPT MAGVAR UPDATED
13. FINAL LEG LENGTH CHANGED FROM 2.44 NM TO 2.14 NM - FAF AND SDF RELOCATED
14. LINE 3 FAC CHANGED FROM 130.6 TO 132.6 - ARPT MAGVAR UPDATE
15. LINE 6 GP ALT AT PFAF CHANGED FROM 1700 TO 1600 - PFAF RELOCATED PER FPT AND ATC REQUEST
16. LINE 6 MIN GP INTERCEPT CHANGED FROM 1700 TO 1600 - PFAF RELOCATED PER FPT AND ATC REQUEST
17. LINE 3 DISTANCE FAF TO MAP CHANGED FROM 5.04 NM TO 4.73 NM - PFAF RELOCATED PER FPT AND ATC REQUEST
18. LINE 3 DISTANCE FAF TO THLD CHANGED FROM 5.04 NM TO 4.73 NM - PFAF RELOCATED PER FPT AND ATC REQUEST
19. TERMINAL ROUTES MISSED APPROACH CA LEG MAG HDG CHANGED FROM 130.61 TO 132.60 - ARPT MAGVAR UPDATE AND FAF SHIFTED
20. MINIMUMS CIRCLING CAT C VISIBILITY CHANGED FROM 1 3/4 SM TO 1 1/2 SM - IAW 8260.3E VISIBILITY TABLE 3-3-7
21. PBN REQUIREMENTS NOTE ADDED RNP APCH-GPS - PER 8260.19I 8-6-8
22. PROCEDURE NOTES REMOVED PROCEDURE NA FOR ARRIVALS ON MFE VOR/DME AIRWAY RADIALS 029 CW 075 - FEEDER REMOVED PER FPT AND ATC REQUEST
23. PROCEDURE NOTES REMOVED PROCEDURE NA FOR ARRIVALS AT JIMIE ON V70 AND V407 NORTHBOUND - FEEDER REMOVED PER FPT AND ATC REQUEST
24. LINE 7 CHANGED 34:1 IS NOT CLEAR TO 34:1 IS CLEAR - NO PENETRATIONS IN CURRENT EVALUATION
25. LINE 7 ADDED 20:1 IS CLEAR - NO PENETRATIONS IN CURRENT EVALUATION
26. PROCEDURE NOTES CHANGED BACKUP ALTIMETER NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PORT ISABEL ALTIMETER SETTING: INCREASE LPV DA TO 327 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE LNAV/VNAV DA TO 370 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 60 FEET AND VISIBILITY CATS C AND D 1/4 SM" TO "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PORT ISABEL ALTIMETER SETTING; INCREASE LPV DA TO 327 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE LNAV/VNAV DA TO 327 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 60 FEET AND VISIBILITY CATS C AND D 1/4 SM" - UPDATED VISIBILITY REQUIREMENTS FOR NEW MINIMA
27. ADDITIONAL FLIGHT DATA ADDED 7:1 EXCLUDED OBSTACLE TRANSMISSION LINE 48-134657 - NEW SURVEY
28. PROCEDURE NOTES CHANGED RNAV CHART FROM "CHART NOTE: FOR UNCOMPENSATED BARO VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -1°C OR ABOVE 54°C" - UPDATED TEMPERATURE STUDY AND REMOVED DEGREES FAHRENHEIT NO LONGER REQUIRED PER 8260.19I 8-6-10
29. PROCEDURE NOTES REMOVED DME/DME RNP-0.3 NA - NO LONGER REQUIRED
30. PROFILE VIEW ADDED CHART FAS OBST TANK 48-029045 - NEW CONTROLLING OBSTACLE
31. FAS DATA BLOCK CRC REMAINDER CHANGED FROM E015CDE8 TO FF94EBEA - FPAP COORDINATES CHANGED
32. TERMINAL ROUTES MISSED APPROACH DF LEG ADDED RNP 1.0 - PER 8260.58C 1-2-1
33. LINE 2 CAKOB HILPT INBOUND COURSE CHANGED FROM 130.56 TO 132.56 - ARPT MAGVAR UPDATE
34. ADDITIONAL FLIGHT DATA MISSED HOLDING INBOUND CHANGED FROM 310.71 TO 312.71 - ARPT MAGVAR UPDATE
35. LINE 5 LOWEST HAT DISTANCE CHANGED FROM "DISTANCE TO THLD FROM 250 HATH: 0.60 NM" TO "DISTANCE TO THLD FROM 250 HAT: 0.60 NM" AND MOVED FROM ADDITIONAL FLIGHT DATA - PER 8260.19I 8-6-7
36. ADDITIONAL FLIGHT DATA DELETED * FROM VDP - NO LONGER REQUIRED
37. ADDITIONAL FLIGHT DATA DELETED *LNAV ONLY - NO LONGER REQUIRED
38. MINIMUMS LNAV/VNAV DA/HAT CHANGED FROM 327/293 MSL TO 285/250 MSL - SURFACE IS NOW CLEAR
39. MINIMUMS LNAV/VNAV VISIBILITY CHANGED FROM 7/8 SM TO 3/4 SM ALL CATS - IAW 8260.3E VISIBILITY TABLE 3-3-7
40. FAS DATA BLOCK INFORMATION FPAP LAT/LONG CHANGED FROM 261255.5800N/0973841.0000W TO 261255.5785N/0973840.9985W - FAF LOCATION CHANGED
41. BASIC INFORMATION MAGVAR/EPOCH YEAR CHANGED FROM 5E/2005 TO 3E/2025 - ARPT MAGVAR UPDATED PER MAGVAR LETTER



COORDINATED WITH:

A4A **ALPA** **AOPA** **APA** **HAI** **NBAA** **OTHER:** ZHU, HRL ATCT, VALLEY APP CON, AMGR

FLIGHT CHECKED BY

PENDING

Digitally signed by

ERIC N SUSKI

Apr 19, 2024

OFFICE

DATE

DEVELOPED BY

CHARLES HIRST

Digitally signed by

CHARLES HIRST

Apr 16, 2024

OFFICE

AJV-A431

DATE

02/08/2024

APPROVED BY

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Apr 19, 2024

OFFICE

AJV-A431

DATE

TITLE

MANAGER

FAS DATA BLOCK INFORMATION

DATA FIELD

DATA

OPERATION TYPE
SBAS SERVICE PROVIDER IDENTIFIER
AIRPORT IDENTIFIER
RUNWAY
APPROACH PERFORMANCE DESIGNATOR
ROUTE INDICATOR
REFERENCE PATH DATA SELECTOR
REFERENCE PATH IDENTIFIER (APPROACH ID)
LTP/FTP LATITUDE
LTP/FTP LONGITUDE
LTP/FTP ELLIPSOIDAL HEIGHT
FPAP LATITUDE
FPAP LONGITUDE
THRESHOLD CROSSING HEIGHT (TCH)
TCH UNITS SELECTOR (METERS OR FEET USED)
GLIDEPATH ANGLE (GPA)
COURSE WIDTH AT THRESHOLD
LENGTH OFFSET
HORIZONTAL ALERT LIMIT (HAL)
VERTICAL ALERT LIMIT (VAL)

0
0
KHRL
RW13
0
Y
0
W13A
261359.4645N
0973950.2780W
-00123
261255.5785N
0973840.9985W
00059.0
F
03.00
106.75
0536
40.0
50.0

CRC REMAINDER

FF94EBEA

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE
LTP ORTHOMETRIC HEIGHT
FPAP ORTHOMETRIC HEIGHT

K4
+00105
+00105

