

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) 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 (RNP) Z RWY 13	ORIGINAL/AMENDMENT 1	CITY HARLINGEN	STATE TX
AIRPORT ELEVATION 36	TDZE 35	SUPERSEDED RNAV (RNP) Z RWY 13	DATED 04/02/2015	MAG VAR 3E
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 11 JULY 2024	REQUIRED EFFECTIVE DATE 07/11/2024	EPOCH YEAR 2025
		ORIG-A	CANCEL/SUSPEND	

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
CAKOB	IAF	TARGE		TF	FB	1.00	132.57	4.81	2000
TARGE	IF	HUTES	PFAF	TF	FB	0.50	132.59	3.00	1100
ORFEN	IF	CERLI		TF	FB	1.00	206.45	3.95	2000
CERLI		HUTES	PFAF	RF	FB	0.50	(2.28 NM RADIUS CCW (CFPQS))	2.94	1100
HUTES	PFAF	RW13	MAP	TF	FO	0.30	132.61	3.16	
RW13	MAP	285 MSL		CA			132.61		
285 MSL		AMAPE		DF	FO	1.00			2000

MISSED APPROACH

MAP:

RNP: DA

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)
- PROFILE STARTS AT HUTES
- FAC: 132.61 PFAF: HUTES DIST PFAF TO MAP: DIST PFAF TO THLD:
- MIN ALT: HUTES 1100
- DIST TO THLD FROM PFAF: 3.16 MM: IM: 150 HAT: 250 HAT: 0.60 GS ANT: MM: IM:
- MIN GP INCPT: 1100 GP ALT AT PFAF: HUTES 1100 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 AR APCH - GPS.

NOTES:

CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -1°C OR ABOVE 54°C.
 CHART PLANVIEW NOTE AT ORFEN: (RNP 0.50).
 CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA.
 CHART PLANVIEW NOTE AT CAKOB: (RNP 0.50).
 CHART SPEED ICON IN PLANVIEW AT CAKOB: MAX 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT ORFEN: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 312.71 INBOUND.
 CHART AT OR ABOVE 3000 AT CAKOB.
 CHART AT OR ABOVE 3000 AT ORFEN.

MINIMUMS:

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

ALTERNATE: NA STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.15 DA	285	3/4	250	285	3/4	250	285	3/4	250	285	3/4	250			
RNP 0.30 DA	342	7/8	307	342	7/8	307	342	7/8	307	342	7/8	307			



CHANGES - REASONS

1. TERMINAL ROUTES INITIAL CAKOB TO TARGE MAG COURSE CHANGED FROM 130.57 OT 132.57 - ARPT MAGVAR UPDATED
2. NOTES ADDED "CHART PLANVIEW NOTE AT ORFEN: (RNP 0.50)" AND "CHART PLANVIEW NOTE AT CAKOB: (RNP 0.50)" - REQUIRED PER 2860.19I 4-6-10(F)
3. ADDITIONAL FLIGHT DATA CHANGED FROM "CHART MINIMUM 3000 AT CAKOB" AND "CHART MINIMUM 3000 AT ORFEN" TO "CHART AT OR ABOVE 3000 AT CAKOB" AND "CHART AT OR ABOVE 3000 AT ORFEN" - PER 8260.19I 8-6-10
4. TERMINAL ROUTES INTERMEDIATE TARGE TO HUTES MAG COURSE CHANGED FROM 130.59 TO TO 132.59 - ARPT MAGVAR UPDATED
5. TERMINAL ROUTES INTERMEDIATE TARGE TO HUTES CHANGED SEGMENT ALTITUDE FROM 1900 TO 2000 - PER ATC REQUEST
6. NOTES ADDED "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA" - REQUIRED PER 8260.19I 8-6-10(F)
7. NOTES ADDED "CHART SPEED ICON IN PLANVIEW AT ORFEN: MAX 210 KIAS" AND "CHART SPEED ICON IN PLANVIEW AT CAKOB: MAX 210 KIAS" - TO AVOID EXCESSIVE RF TURN BANK ANGLE AND ATC REQUEST
8. TERMINAL ROUTES HUTES-RWY 13 COURSE CHANGED FROM 130.61 TO 132.61 - ARPT MAGVAR UPDATE
9. TERMINAL ROUTES INTERMEDIATE SDF CERLI TO HUTES CHANGED SEGMENT ALTITUDE FROM 1900 TO 2000 - PER ATC REQUEST
10. TERMINAL ROUTES INTERMEDIATE ORFEN TO CERLI MAG HDG CHANGED FROM 204.44 TO 206.45 - ARPT MAGVAR UPDATE AND IF CERLI CHANGED LOCATION
11. TERMINAL ROUTES INTERMEDIATE ORFEN TO CERLI DISTANCE CHANGED FROM 4.19NM TO 3.95NM - IF CERLI SHIFTED LOCATION
12. TERMINAL ROUTES INTERMEDIATE STEPDOWN CERLI TO HUTES DISTANCE CHANGED FROM 2.56NM TO 2.94NM - IF CERLI SHIFTED LOCATION
13. TERMINAL ROUTES FINAL MAG COURSE CHANGED FROM 130.61 TO 132.61 - ARPT MAGVAR UPDATE
14. TERMINAL ROUTES CERLI TO HUTES RNP CHANGED FROM 1.00 TO 0.50 - FOR OPERATIONAL REQUIREMENTS PER 8260.58C 4-1-1 AND OBSTACLE AVOIDANCE
15. TERMINAL ROUTES MISSED APPROACH 285 MSL TO AMAPE LEG TYPE CHANGED FROM TF TO DF - PER ATC REQUEST FOR RNAV MISSED APPROACH
16. LINE 5 250 HAT DISTANCE CHANGED FROM 0.65NM TO 0.60 NM AND MOVED FROM ADDITIONAL FLIGHT DATA - LOWERED MINIMA RNP-0.15 FINAL
17. LINE 3 FAC CHANGED FROM 130.61 TO 132.61 - ARPT MAGVAR UPDATE
18. MISSED APPROACH CHANGED FROM "CLIMB TO 2000 ON TRACK 130.63 TO AMAPE AND HOLD" TO "CLIMB TO 2000 DIRECT AMAPE AND HOLD" - PER ATC REQUEST RNAV MISSED APPROACH
19. MINIMUMS RNP-0.15 DA/HAT CHANGED FROM 302/267 MSL TO 285/250 MSL - NO MISSED APPROACH PENETRATION
20. MINIMUMS RNP-0.30 DA/HAT CHANGED FROM 393/358 MSL TO 342/307 MSL - CONTROLLING OBSTACLE CHANGED FROM 83 FT TREE 261357.00N/0974045.00W ACCURACY 4C TO 92 FT TREE 261412.00N/0974048.00W ACCURACY 4B
21. MINIMUMS RNP-0.15 VISIBILITY CHANGED FROM 7/8 SM TO 3/4 SM ALL CATS - PER 8260.3E TABLE 3-3-1
22. MINIMUMS RNP-0.30 VISIBILITY CHANGED FROM 1 1/8 SM TO 7/8 SM ALL CATS - PER 8260.3E TABLE 3-3-1
23. PBN REQUIREMENTS NOTE ADDED RNP AR APCH-GPS - PER 8260.19I 8-6-8
24. REMOVED CHART NOTE GPS REQUIRED - NO LONGER REQUIRED
25. REMOVED CHART NOTE CHANGED 34:1 IS NOT CLEAR TO 34:1 IS CLEAR - NO PENETRATIONS IDENTIFIED IN CURRENT EVAL
26. LINE 7 ADDED 20:1 IS CLEAR - NO PENETRATIONS IDENTIFIED IN CURRENT EVAL
27. PROCEDURE NOTES CHANGED "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW 2°C (36°F) OR ABOVE 44°C (111°F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -1C OR ABOVE 54C" - NEW TEMPERATURE DATA AND ACT STUDY, DEGREES F NO LONGER REQUIRED PER 8260.19I 8-6-9
28. ADDITIONAL FLIGHT DATA REMOVED ROUTE TYPE: A, H - NO LONGER REQUIRED
29. ADDITIONAL FLIGHT DATA REMOVED ROUTE TYPE QUALIFIER 1: F - NO LONGER REQUIRED
30. ADDITIONAL FLIGHT DATA REMOVED ROUTE TYPE QUALIFIER 2: S - NO LONGER REQUIRED
31. MISSED APPROACH MISSED HOLDING INBOUND CHANGED FROM 310.70 TO 312.71 - ARPT MAGVAR UPDATE AND MADE TO BE CONGRUENT WITH HOLDING FOR RNAV RNP Z RWY 13 IAP AND THE RNAV RNP Y RWY 31 IAP
32. ADDITIONAL FLIGHT DATA REMOVED #TCH 93.4 MSL - NO LONGER REQUIRED
33. ADDITIONAL FLIGHT DATA REMOVED OBSTACLE CHART 35 NAVAID 261401N/0973949W - NO LONGER REQUIRED
34. ADDITIONAL FLIGHT DATA REMOVED OBSTACLE CHART 37 NAVAID 261358N/0973952W - NO LONGER REQUIRED
35. TERMINAL ROUTES TARGE TO HUTES RNP CHANGED FROM 1.00 TO 0.50 - FOR OPERATIONAL REQUIREMENTS PER 8260.58C 4-1-1 AND OBSTACLE AVOIDANCE
36. ADDITIONAL FLIGHT DATA REMOVED CHART FAS OBST: 83 TREE 261357N/0974045W - NO LONGER REQUIRED
37. LINE 3 ADDED HUTES - REQUIRED PER 8260.19I 8-6-7
38. REMOVED CHART PLANVIEW NOTE: RADAR REQUIRED - NO LONGER REQUIRED
39. REMOVED CHART PLANVIEW NOTE: ADJACENT TO ORFEN: RF REQUIRED - NO LONGER REQUIRED
40. RF CENTERPOINT DEFINITION CHANGED FROM 2.01 NM RADIUS CCW CFPQS TO 2.28 NM RADIUS CCW CFPQS - IF CERLI SHIFTED LOCATION
41. BASIC INFORMATION MAGVAR/EPOCH YEAR CHANGED FROM 5E/2005 TO 3E/2025 - ARPT MAGVAR UPDATED PER MAGVAR LETTER



AIRPORT ID
HRL

PROCEDURE NAME
RNAV (RNP) Z RWY 13

ORIGINAL/AMENDMENT
1

CITY
HARLINGEN

STATE
TX

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA

OTHER: ZHU, VALLEY APP CON, HRL ATCT, 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 12, 2024

OFFICE
AJV-A431

DATE
02/11/2024

APPROVED BY
ERIC N SUSKI

Digitally signed by
ERIC N SUSKI
Apr 19, 2024

OFFICE
AJV-A431

DATE

TITLE
MANAGER

