

**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 36L	ORIGINAL/AMENDMENT 1	CITY HARLINGEN	STATE TX
AIRPORT ELEVATION 36	TDZE 36	SUPERSEDED RNAV (RNP) Z RWY 35L	DATED 11/03/2022	MAG VAR 3E
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 11 JULY 2024	REQUIRED EFFECTIVE DATE 07/11/2024	EPOCH YEAR 2025
		ORIG-B		CANCEL/SUSPEND

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
FOODS		TIMMM		TF	FB	1.00	124.18	6.16	4000
GOROO		TIMMM		TF	FB	1.00	104.88	5.28	4000
TIMMM	IAF	BOTVE		TF	FB	1.00	087.57	4.86	2900
HHALY	IAF	BOTVE		TF	FB	1.00	267.69	5.37	2900
ALUDE	IF	URAVE		TF	FB	1.00	177.65	3.73	4000
URAVE		OCORA		RF	FB	1.00	(2.69 NM RADIUS CW (CFPQR))	6.33	2000
OCORA		QUTIE		RF	FB	1.00	(2.69 NM RADIUS CW (CFLCS))	2.11	1400
BOTVE	IF	FENKU		TF	FB	1.00	357.62	4.29	1600
FENKU		QUTIE		TF	FB	1.00	357.63	1.25	1400
KAHNS	IF	MINUE		TF	FB	1.00	177.61	2.40	3800
MINUE		SAZUK		RF	FB	1.00	(2.43 NM RADIUS CCW (CFPQQ))	5.72	2000
SAZUK		QUTIE		RF	FB	1.00	(2.43 NM RADIUS CCW (CFLCP))	1.91	1400
QUTIE	PFAF	RW36L	MAP	TF	FO	0.30	357.64	4.11	
RW36L	MAP	334 MSL		CA			357.64		
334 MSL		ZIPIV		DF	FO	1.00			2000

MISSED APPROACH

MAP:

RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT ZIPIV AND HOLD

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE		OUTBOUND		FT WITHIN		MILES OF	(IAF)	
2. PROFILE STARTS AT	QUTIE								
3. FAC:	357.64		PFAF:	QUTIE		DIST PFAF TO MAP:		DIST PFAF TO THLD:	
4. MIN ALT:	QUTIE 1400								
5. DIST TO THLD FROM PFAF:	4.11		MM:		IM:		150 HAT:	298 HAT:	0.76
6. MIN GP INCPT:	1400		GP ALT AT PFAF:	QUTIE 1400			OM:		GS ANT:
7. GP ANGLE:	3.00		34:1:	IS CLEAR		20:1:	IS CLEAR		IM:
8. MSA FROM:	RW36L 2600					TCH:	55.0		

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 NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA.
 CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.11 DA ALL CATS VISIBILITY TO 7/8 SM.
 CHART SPEED ICON IN PLANVIEW AT TIMMM: MAX 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT HHALY: MAX 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT ALUDE: MAX 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT BOTVE: MAX 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT FENKU: MAX 180 KIAS.
 CHART SPEED ICON IN PLANVIEW AT KAHNS: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD N, RT, 177.63 INBOUND.
 CHART AT OR ABOVE 5000 AT FOODS.
 CHART AT OR ABOVE 5000 AT GOROO.
 CHART AT OR ABOVE 4000 AT TIMMM.
 CHART AT OR ABOVE 4000 AT HHALY.
 CHART AT OR ABOVE 4000 AT ALUDE.
 CHART AT OR ABOVE 2900 AT BOTVE.
 CHART AT OR ABOVE 4000 AT KAHNS.

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 0.11 DA	334	1/2	298	334	1/2	298	334	1/2	298	334	1/2	298				
RNP 0.30 DA	484	7/8	448	484	7/8	448	484	7/8	448	484	7/8	448				



CHANGES - REASONS

1. THIS IS A COMPLETE REDESIGN OF THE PROCEDURE WITH EVERY LEG/FIX COURSE AND DISTANCES CHANGING - ATC REQUESTED CHANGES TO OVERLAY THE ILS AND RNAV (RNP) TO THIS RWY.
2. PROCEDURE NAME CHANGED FROM RNAV (RNP) Z RWY 35L TO RNAV (RNP) Z RWY 36L - DUE TO MAGVAR CHANGE/RUNWAY RENUMBERING AND IAW 8260.19I PARA 8-6-2.C.
3. ADDED FEEDER LEGS FROM FOODS TO TIMM AND GORDO TO TIMMM - ATC/PBN REDESIGN
4. ADDED INITIAL LEGS FROM TIMMM TO BOTVE AND HHALY TO TIMMM – ATC/PBN DESIGN
5. LINE 3 – FAC CHANGED FROM 355.63 TO 357.64 - DUE TO MAGVAR CHANGE/RUNWAY RENUMBERING
6. LINE 4 – QUTIE ALTITUDE CHANGED FROM 1100 TO 1400 – ATC/PBN REDESIGN.
7. LINE 5 – DIST THLD TO PFAF CHANGED FROM 3.16 TO 4.11 – ATC/PBN REDESIGN
8. LINE 5 – HAT INFO CHANGED FROM 298 HAT: 0.75 TO 298 HAT: 0.76 – ATC/PBN REDESIGN
9. LINE 6 – GP INCPT AND GP ALT CHANGED FROM 1100 TO 1400 – ATC/PBN REDESIGN
10. LINE 7 – TCH CHANGED FROM 59.0 TO 55.0 – REFLECTS LATEST AIRNAV DATA
11. LINE 8 – MSA CHANGE FROM RW35L 2600 TO RW36L 2600 - DUE TO MAGVAR CHANGE/RUNWAY RENUMBERING
12. NOTES – ADDED CHART SPEED ICON IN PLANVIEW MAX 210 TO HHALY, TIMMM, ALUDE, BOTVE AND KAHNS FIX – ATC/PBN REDESIGN
13. NOTES – ADDED CHART SPEED ICON IN PLANVIEW MAX 180 TO FENKU – ATC/PBN REDESIGN
14. NOTES – REMOVED CHART SPEED ICON IN PLANVIEW MAX 210 TO URAVE AND MINUE FIX – ATC/PBN REDESIGN
15. ADDED "CHART AT OR ABOVE 5000" AT FOODS AND GORDO – ATC/PBN REDESIGN
16. ADDED "CHART AT OR ABOVE 4000" AT HHALY – ATC/PBN REDESIGN
17. ADDITIONAL FLIGHT DATA – REMOVED CHART 135 TOWER 261156N/0973946W – NEW CONTROLLING OBSTACLE
18. MINIMUMS – RNP 0.14 CHANGED TO RNP 0.11 – ATC REQUESTED
19. MINIMUMS – RNP 0.30 VIS CHANGED FROM 1 3/8 TO 7/8 – UPDATED VIS CALCULATIONS.
20. ADDED "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA" - IAW 8260.19I 8-6-11 B(4).

04/17/24: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 04/05/2024.

1. NOTES - ADDED NOTE "CHART SPEED ICON IN PLANVIEW AT BOTVE: MAX 210 KIAS" - AT THE REQUEST OF ATC
2. NOTES - ADDED NOTE "CHART AT OR ABOVE 4000 AT TIMMM" - AT THE REQUEST OF ATC
3. NOTES - ADDED NOTE "CHART AT OR ABOVE 2900 AT BOTVE" - AT THE REQUEST OF ATC

04/26/24: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 04/23/2024.

1. ADDED NOTE "VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - IAW 8260.19I 8-6-9.

COORDINATED WITH:

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

FLIGHT CHECKED BY

PENDING

Digitally signed by
CASIMIR L TABAKA
 Apr 23, 2024

OFFICE

DATE

DEVELOPED BY
 JOSEPH BLANCO

Digitally signed by
JOSEPH A BLANCO
 Apr 22, 2024

OFFICE
 AJV-A432

DATE
 02/14/2024

APPROVED BY
 BEV L BORDY

Digitally signed by
CASIMIR L TABAKA
 Apr 23, 2024

OFFICE
 AJV-A430

DATE

TITLE
 MANAGER

