

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.

<u>AIRPORT ID</u> HRL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36R	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> HARLINGEN	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 36	<u>TDZE</u> 36	<u>SUPERSEDED</u> RNAV (GPS) RWY 35R	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 10/08/2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 11 JULY 2024	<u>REQUIRED EFFECTIVE DATE</u> 07/11/2024	<u>MAG VAR</u> 3E
				<u>EPOCH YEAR</u> 2025
				<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
SIVIE	IAF	ZABIT	NOPT	TF	FB	1.00	267.71	10.00	2000
ZABIT	IF	YOTLU		TF	FB	1.00	357.64	7.01	1500
YOTLU	FAF	AYUNA/2.48 NM TO RW36R		TF	FB	0.30	357.64	1.95	
AYUNA/2.48 NM TO RW36R		RW36R	MAP	TF	FO	0.30	357.64	2.48	
RW36R	MAP	236 MSL		CA			357.64		
236 MSL		BETVE		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW36R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT BETVE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT
- SIDE OF COURSE
- OUTBOUND
- FT WITHIN
- MILES OF
- (IAF)
2. PROFILE STARTS AT ZABIT
3. FAC: 357.64
- FAF: YOTLU
- DIST FAF TO MAP: 4.43
- DIST FAF TO THLD: 4.43
4. MIN ALT: ZABIT 2000, YOTLU 1500, AYUNA/2.48 NM TO RW36R 880
5. DIST TO THLD FROM OM: MM: IM:
- 150 HAT: 200 HAT: 0.46
- GS ANT: MM: IM:
6. MIN GP INCPT: 1500 GP ALT AT PFAF: YOTLU 1500
7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 55.0
8. MSA FROM: RW36R 2600



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -1°C OR ABOVE 54°C.  
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING PORT ISABEL ALTIMETER SETTING.  
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PORT ISABEL ALTIMETER SETTING: INCREASE LPV DA TO 278 FEET; INCREASE LNAV/VNAV DA TO 328 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 60 FEET AND LNAV VISIBILITY CATS C AND D 1/8 SM, AND CIRCLING VISIBILITY CATS C AND D 1/4 SM.

ADDITIONAL FLIGHT DATA:

HOLD N, RT, 177.64 INBOUND.  
CHART FAS OBST: 138 TOWER (48-029091) 261154N/0973903W.  
CHART 305 TOWER (48-007748) 260828N/0973826W.  
CHART VDP AT 0.97 NM TO RW36R.  
WAAS CHANNEL # 72830  
REFERENCE PATH ID: W36A  
CHART CIRCLING ICON.  
LTP HAE: -12 M

MINIMUMS:

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

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

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
LPV DA	236	3/4	200	236	3/4	200	236	3/4	200	236	3/4	200			
LNAV/VNAV DA	286	3/4	250	286	3/4	250	286	3/4	250	286	3/4	250			
LNAV MDA	400	1	364	400	1	364	400	1	364	400	1	364			
CIRCLING	460	1	424	560	1	524	600	1 1/2	564	680	2	644			



**CHANGES - REASONS**

1. REFERENCE IDENTIFIER CHANGED FROM W35A TO W36A - RWY RENUMBERED
2. TERMINAL ROUTES FEEDER BRO VORTAC TO SIVIE REMOVED - PER FPT AND ATC REQUEST
3. TERMINAL ROUTES FEEDER RELAX TO SIVIE REMOVED - PER FPT AND ATC REQUEST
4. TERMINAL ROUTES INITIAL SIVIE TO ZABIT MAG COURSE CHANGED FROM 265.71 TO 267.71 - ARPT MAGVAR UPDATE
5. TERMINAL ROUTES INTERMEDIATE ZABIT TO YOTLU MAG COURSE CHANGED FROM 355.63 TO 357.64 - ARPT MAGVAR UPDATE AND IF RELOCATED TO MAINTAIN CENTERLINE ALIGNMENT
6. CRC REMAINDER CHANGED FROM 5D8E9AC2 TO F488EB36 - FPAP LAT/LONG CHANGED FROM 261434.5500N/0973854.9000W TO 261434.5495N/0973854.8900W, LTP LAT/LONG CHANGED FROM 261305.1880N/0973855.9940W TO 261305.1910N/0973855.9960W, REF PATH ID CHANGED FROM W35A TO W36A, RWY ID CHANGED FROM RW35R TO RW36R, VERTICAL ALERT LIMIT CHANGED FROM 50.0 TO 35.0 DUE TO 200 FT LPV HAT IAW 8260.19I APPENDIX K PARA X
7. BASIC INFORMATION PROCEDURE NAME CHANGED FROM RNAV (GPS) RWY 35R TO RNAV (GPS) RWY 36R - RWY RENUMBERED DUE TO MAGVAR UPDATE
8. TERMINAL ROUTES FINAL YOTLU TO AYUNA MAG COURSE CHANGED FROM 355.63 TO 357.64 - ARPT MAGVAR UPDATE
9. TERMINAL ROUTES FINAL AYUNA TO RW36R MAG COURSE CHANGED FROM 355.63 TO 357.64 - ARPT MAGVAR UPDATE
10. TERMINAL ROUTES FINAL YOTLU TO AYUNA LEG LENGTH CHANGED FROM 1.93NM TO 1.95NM - FAF AND SDF SHIFTED SLIGHTLY TO MAINTAIN RWY ALIGNMENT
11. TERMINAL ROUTES FINAL AYUNA SDF TO RW36R LEG LENGTH CHANGED FROM 2.50NM TO 2.48NM - SDF AYUNA SHIFTED SLIGHTLY TO KEEP RWY ALIGNMENT AND FOR VAA 880 ALIGNMENT
12. PROFILE VIEW ADDED 7:1 EXCLUDED OBST TOWER 48-00748 305MSL - NEW SURVEY
13. LINE 3 FAC CHANGED FROM 355.63 TO 357.64 - ARPT MAGVAR UPDATED, FAF & SDF SHIFTED SLIGHTLY TO MAINTAIN RWY ALIGNMENT
14. MINIMUMS LPV DA/HAT CHANGED FROM 286/250 TO 236/200 - LPV SURFACE IS NOW CLEAR
15. BASIC INFORMATION MAGVAR & EPOCH YEAR CHANGED FROM 5E/2005 TO 3E/2025 - ARPT MAGAR UPDATED PER MAGAR LETTER
16. TERMINAL ROUTES FNAL MAP CHANGED FROM RW35R TO RW36R - RWY RENUMBERED DUE TO ARPT MAGVAR UPDATE
17. PBN REQUIREMENTS NOTE NOTES ADDED RNP APCH-GPS - PER 8260.19 8-6-8
18. LINE 7 CHANGED NOTE "34:1 IS NOT CLEAR" TO "34:1 IS CLEAR" - NEW SURVEY
19. LINE 7 ADDED 20:1 IS CLEAR - NEW SURVEY
20. NOTES CHANGED FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C (5°F) OR ABOVE 54°C (130°F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -1°C OR ABOVE 54°C" - NEW TEMPERATURE DATA, DEGREES FAHRENHEIT NO LONGER REQUIRED IAW 8260.19I 8-6-9
21. CHANGED BACKUP ALTIMETER NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PORT ISABEL ALTIMETER SETTING AND INCREASE ALL DA 42 FEET AND ALL MDA 60 FEET; INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE, LNAV CATS C/D AND CIRCLING CAT D VISIBILITY 1/4 MILE" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PORT ISABEL ALTIMETER SETTING: INCREASE LPV DA TO 278 FEET; INCREASE LNAV/VNAV DA TO 328 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 60 FEET AND LNAV VISIBILITY CATS C AND D 1/8 SM AND CIRCLING VISIBILITY CATS C AND D 1/4 SM" - UPDATED WITH NEW MINIMA VALUES
22. PROCEDURE NOTES REMOVED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON BRO VORTAC AIRWAY RADIALS 258 CW 329" - FEEDER FROM BRO VORTAC REMOVED
23. TERMINAL ROUTES MISSED APPROACH CA LEG MAG COURSE CHANGED FROM 355.63 TO 357.64 - ARPT MAGVAR UPDATE
24. TERMINAL ROUTES MISSED APPROACH ADDED RNP 1.0 - PER 8260.58C 1-2-1
25. REMOVED CHART NOTE DME/DME RNP-0.3 NA - NO LONGER REQUIRED
26. TERMINAL ROUTES MISSED APPROACH CA LEG ALT CHANGED FROM 285 MSL TO 236 MSL - LPV DA LOWERED FROM 285 TO 236
27. LINE 4 AYUNA CHANGED FROM "AYUNA/2.50 NM TO RW35R 880\*" TO "AYUNA/2.48 NM TO RW36R 880" - DUE TO FAF AUNYA RELOCATION, \* NO LONGER REQUIRED
28. LINE 8 MSA CENTERPOINT CHANGED FROM RW35R TO RW36R - RWY RENUMBERED DUE TO ARPT MAGVAR UPDATE
29. NOTES REMOVED "VISIBILITY REDUCTION BY HELICOPTERS N/A" - 34:1 IS NOW CLEAR, NEW SURVEY
30. ADDITIONAL FLIGHT DATA HOLDING COURSE CHANGED FROM 175.64 TO 177.64 - ARPT MAGVAR UPDATED
31. ADDITIONAL FLIGHT DATA CHANGED FROM "CHART VDP AT 0.97 MILES TO RWY 35R\*" TO "CHART VDP AT 0.97 NM TO RW36R - \* NO LONGER REQUIRED PER 8260.19I 8-6-7, RWY RENUMBERED DUE TO MAGVAR UPDATE
32. MINIMUMS CIRCLING CAT A CMDA/HAA CHANGED FROM 500/464 TO 460/424 - NEW CAT A CIRCLING CONTROLLING OBSTACLE
33. ADDITIONAL FLIGHT DATA REMOVED "\*\*LNAV ONLY" - NO LONGER REQUIRED
34. MINIMUMS CIRCLING CAT C CMDA/HAA CHANGED FROM 680/644 TO 600/564 - NEW CAT C CIRCLING CONTROLLING OBSTACLE
35. MINIMUMS CIRCLING CAT C VISIBILITY CHANGED FROM 1 3/4 SM TO 1 1/2 SM - CAT C CIRCLING MINIMUMS LOWERED NEW CONTROLLING OBSTACLE IAW 8260.3E TABLE 3-3-7
36. TERMINAL ROUTES INTERMEDIATE ZABIT TO YOTLU RNP CHANGED FROM 0.5 TO 1.0 - PER 8260.58C 3-1-4
37. LINE 5 CHANGED FROM "DISTANCE TO THLD FROM 250 HATH: 0.61 NM" TO "DIST TO THLD FROM 200 HAT: 0.46 NM" AND RELOCATED FROM ADDITIONAL FLIGHT DATA - LPV HAT LOWERED FROM 250 TO 200

QUALITY  
35  
CHECKED

COORDINATED WITH:

A4A

X

ALPA

X

AOPA

X

APA

X

HAI

NBAA

X

OTHER: ZHU, HRL ATCT, VALLEY APP CON, AMGR

FLIGHT CHECKED BY  
PENDING

Digitally signed by  
ERIC N SUSKI  
Apr 25, 2024

OFFICE  
DATE

DEVELOPED BY  
CHARLES HIRST

Digitally signed by  
ERIC N SUSKI  
Apr 25, 2024

OFFICE  
AJV-A431  
DATE  
04/02/2024

APPROVED BY  
ERIC N SUSKI

Digitally signed by  
ERIC N SUSKI  
Apr 25, 2024

OFFICE  
AJV-A431  
DATE  
TITLE  
MANAGER

FAS DATA BLOCK INFORMATION

DATA FIELD  
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)

DATA  
0  
0  
KHRL  
RW36R  
0  
0  
W36A  
261305.1910N  
0973855.9960W  
-00120  
261434.5495N  
0973854.8900W  
00055.0  
F  
03.00  
106.75  
0992  
40.0  
35.0

CRC REMAINDER  
F488EB36

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE  
LTP ORTHOMETRIC HEIGHT  
FPAP ORTHOMETRIC HEIGHT  
K4  
+00107  
+00107

