

**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 18R	ORIGINAL/AMENDMENT 1	CITY HARLINGEN	STATE TX
AIRPORT ELEVATION 36	TDZE 35	SUPERSEDED RNAV (RNP) Z RWY 17R	DATED 11/03/2022	MAG VAR 3E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
OAKKK	IAF	ZIPIV		TF	FB	1.00	267.68	6.00	3300
MAYRR	IAF	ZIPIV		TF	FB	1.00	087.58	6.00	3300
NSCAR	IF	ELPRM		TF	FB	1.00	357.64	4.58	4000
ELPRM		EBCIL		RF	FB	1.00	(2.80 NM RADIUS CCW (CFVWM))	6.61	2100
EBCIL		CIXEN	PFAF	RF	FB	1.00	(2.80 NM RADIUS CCW (CFVWM))	2.20	1400
ZIPIV	IF	HLWLK		TF	FB	1.00	177.62	5.01	1600
HLWLK		CIXEN	PFAF	TF	FB	1.00	177.64	1.25	1400
ULOTE	IF	STDMN		TF	FB	1.00	357.64	4.58	4000
STDMN		LESEY		RF	FB	1.00	(2.80 NM RADIUS CW (CFVWK))	6.61	2100
LESEY		CIXEN	PFAF	RF	FB	1.00	(2.80 NM RADIUS CW (CFVWK))	2.20	1400
HERUM	IF	VARYU		TF	FB	1.00	206.04	3.86	1600
VARYU		CIXEN		RF	FB	1.00	(2.36 NM RADIUS CCW (CFVWH))	1.17	1400
CIXEN	PFAF	RW18R	MAP	TF	FO	0.30	177.64	4.12	
RW18R	MAP	500 MSL		CA			177.64		500
500 MSL		RELAX		DF	FO	1.00			2000

MISSED APPROACH

MAP:
RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 500 THEN CLIMBING LEFT TURN TO 2000 DIRECT RELAX AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)				
2. PROFILE STARTS AT CIXEN									
3. FAC: 177.64		PFAF: CIXEN		DIST PFAF TO MAP:		DIST PFAF TO THLD:			
4. MIN ALT: CIXEN 1400									
5. DIST TO THLD FROM PFAF: 4.12	MM:	IM:	150 HAT:	250 HAT: 0.61		GS ANT:			
6. MIN GP INCPT: 1400	GP ALT AT PFAF: CIXEN 1400			OM:		MM:		IM:	
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 55.2						
8. MSA FROM: RW18R 2600									

PBN REQUIREMENTS NOTE:

RNP AR APCH - GPS.

NOTES:

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: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
 CHART PROFILE NOTE: VGS1 AND RNAV GLIDEPATH NOT COINCIDENT (VGS1 ANGLE {ANGLE}/TCH {FEET}).
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.11 ALL CATS VISIBILITY TO RVR 4000 AND RNP 0.30 ALL CATS VISIBILITY TO RVR 4500
 CHART SPEED ICON IN PLANVIEW AT OAKKK: MAX 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT MAYRR: MAX 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT NSCAR: MAX 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT ZIPIV: MIN 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT ULOTE: MAX 210 KIAS.
 CHART SPEED ICON IN PLANVIEW AT HERUM: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD N, LT, 175.21 INBOUND.
 CHART AT OR ABOVE 5000 AT OAKKK.
 CHART AT OR ABOVE 5000 AT MAYRR.
 CHART AT OR ABOVE 4000 AT NSCAR.
 CHART AT OR ABOVE 3300 AT ZIPIV.
 CHART AT OR ABOVE 4000 AT ULOTE.
 CHART AT OR ABOVE 3000 AT HERUM.

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	285	2400	250	285	2400	250	285	2400	250	285	2400	250				
RNP 0.30 DA	345	2400	310	345	2400	310	345	2400	310	345	2400	310				



CHANGES - REASONS

1. PROCEDURE NAME: CHANGED FROM "RNAV (RNP) Z RWY 17R" TO "RNAV (RNP) Z RWY 18R" – DUE TO MAGVAR CHANGE AND RUNWAY RENUMBERING.
2. TERMINAL ROUTES: ADDED "OAKKK TO ZIPIV" AND ALL ASSOCIATIONS – PER ATC REQUEST.
3. TERMINAL ROUTES: ADDED "MAYRR TO ZIPIV" AND ALL ASSOCIATIONS – PER ATC REQUEST.
4. TERMINAL ROUTES: ADDED "NSCAR TO ELPRM" AND ALL ASSOCIATIONS – PER ATC REQUEST.
5. TERMINAL ROUTES: ADDED "ELPRM TO EBCIL" AND ALL ASSOCIATIONS – PER ATC REQUEST.
6. TERMINAL ROUTES: ADDED "EBCIL TO CIXEN" AND ALL ASSOCIATIONS – PER ATC REQUEST.
7. TERMINAL ROUTES: DELETED "ZIPIV TO ZUNIN" AND "ZUNIN TO CIXEN" AND ALL ASSOCIATIONS – PER ATC REQUEST.
8. TERMINAL ROUTES: ADDED "ZIPIV TO HLWLK" AND ALL ASSOCIATIONS – PER ATC REQUEST.
9. TERMINAL ROUTES: ADDED "HLWLK TO CIXEN" AND ALL ASSOCIATIONS – PER ATC REQUEST.
10. TERMINAL ROUTES: ADDED "ULOTE TO STDMN" AND ALL ASSOCIATIONS – PER ATC REQUEST.
11. TERMINAL ROUTES: ADDED "STDMN TO LESEY" AND ALL ASSOCIATIONS – PER ATC REQUEST.
12. TERMINAL ROUTES: ADDED "LESEY TO CIXEN" AND ALL ASSOCIATIONS – PER ATC REQUEST.
13. TERMINAL ROUTES: CHANGED HERUM TO VARYU COURSE FROM "198.65" TO "206.04", DISTANCE FROM "5.86" TO 3.86" AND ALTITUDE FROM "1500" TO "1600" – FPT IDENTIFIED NEW LOCATIONS FOR BOTH HERUM AND VARYU.
14. TERMINAL ROUTES: CHANGED VARYU TO CIXEN RNP FROM "0.60" TO "1.00" – PER FPT CHECKLIST.
15. TERMINAL ROUTES: CHANGED VARYU TO CIXEN COURSE FROM "(3.14 NM RADIUS CCW (CFPQP))" TO "(2.36 NM RADIUS CCW (CFVWH))" – NEW TARGETS EVALUATION.
16. TERMINAL ROUTES: CHANGED VARYU TO CIXEN DISTANCE FROM "1.26" TO "1.17" AND ALTITUDE FROM "1100" TO "1400" – PER ATC REQUEST.
17. TERMINAL ROUTES: CHANGED "CIXEN TO RWY 17R" TO "CIXEN TO RWY 18R" – MAGVAR CHANGE AND RUNWAY RENUMBERING.
18. TERMINAL ROUTES: CHANGED CIXEN TO RWY 18R COURSE FROM "175.63" TO "177.64" AND DISTANCE FROM "3.17" TO "4.12" – FPT IDENTIFIED NEW LOCATION OF CIXEN(PFAF).
19. TERMINAL ROUTES: CHANGED "RWY 17R TO 500 MSL" TO "RWY 18R TO 500 MSL" AND COURSE FROM "175.63" TO "177.64" – MAGVAR CHANGE AND RUNWAY RENUMBERING AND PER ATC REQUEST.
20. PROFILE LINE 3: FAC CHANGED FROM "175.63" TO "177.64" – DUE TO RELOCATION OF CIXEN (PFAF).
21. PROFILE LINE 4: MIN ALT: CHANGED FROM "CIXEN 1100" TO "CIXEN 1400" – PER ATC REQUEST AND NEW TARGETS CALCULATION.
22. PROFILE LINE 5: DIST TO THLD FROM PFAF: CHANGED FROM "3.17" TO "4.12" – PER ATC REQUEST AND NEW TARGETS CALCULATION.
23. PROFILE LINE 5: CHANGED FROM "310 HAT: 0.80" TO "250 HAT: 0.61" – NEW TARGETS CALCULATION.
24. PROFILE LINE 6: MIN GP INCP: CHANGED FROM "1100" TO "1400" – DUE TO NEW TARGETS EVALUATION.
25. PROFILE LINE 6: GP ALT AT PFAF: CHANGED FROM "CIXEN 1100" TO "CIXEN 1400" – DUE TO NEW TARGETS EVALUATION.
26. PROFILE LINE 7: TCH: CHANGED FROM "55.4" TO "55.2" – NEW AIRNAV DATA AVAILABLE.
27. PROFILE LINE 8: MSA FROM: CHANGED FROM "RW17R 2600" TO "RW18R 2600" – MAGVAR CHANGE AND RUNWAY RENUMBERING.
28. NOTES: DELETED "CHART PLANVIEW NOTE AT HERUM: (RNP 0.60) – PER ATC REQUEST.
29. NOTES: ADDED "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA." - AIRPORT HAS ALTERNATE MINIMUMS APPROVED FOR OTHER PROCEDURES.
30. NOTES: UPDATED "CHART SPEED ICON IN PLANVIEW AT VARYU: MAX 235 KIAS" TO "CHART SPEED ICON IN PLANVIEW AT HERUM: MAX 210 KIAS" – PER ATC REQUEST.
31. NOTES: ADDED "CHART SPEED ICON IN PLANVIEW AT OAKKK: MAX 210 KIAS" – PER ATC REQUEST.
32. NOTES: ADDED "CHART SPEED ICON IN PLANVIEW AT MAYRR: MAX 210 KIAS" – PER ATC REQUEST.
33. NOTES: ADDED "CHART SPEED ICON IN PLANVIEW AT ULOTE: MAX 210 KIAS" - PER ATC REQUEST.
34. NOTES: ADDED "CHART SPEED ICON IN PLANVIEW AT NSCAR: MAX 210 KIAS" - PER ATC REQUEST.
35. NOTES: UPDATED "CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO RVR 4500" TO "CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.11 ALL CATS VISIBILITY TO RVR 4000 AND RNP 0.30 ALL CATS VISIBILITY TO RVR 4500" - DUE TO THE ADDITION OF A NEW LINE OF MINIMA (RNP 0.11).
36. ADDITIONAL FLIGHT DATA: CHANGED FROM "HOLD N, LT, 173.21 INBOUND" TO "HOLD N, LT, 175.21 INBOUND" - NEW MAGVAR CHANGE.
36. MINIMUMS: ADDED NEW LINE OF MINIMA: RNP 0.11 DA – PER ATC REQUEST.

04/19/24: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 04/05/24.

1. NOTES: ADDED "CHART SPEED ICON IN PLANVIEW AT ZIPIV: MIN 210 KIAS.
2. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR ABOVE 5000 AT OAKKK".
3. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR ABOVE 5000 AT MAYRR".
4. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR ABOVE 4000 AT NSCAR".
5. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR ABOVE 3300 AT ZIPIV".
6. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR ABOVE 4000 AT ULOTE".
7. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR ABOVE 3000 AT HERUM".

04/26/24: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 04/05/24.

1. NOTES: ADDED "CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).



AIRPORT ID
HRL

PROCEDURE NAME
RNAV (RNP) Z RWY 18R

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 24, 2024

OFFICE

DATE

DEVELOPED BY

ERIC N SUSKI (WESTLEY OWENS)

Digitally signed by
ERIC N SUSKI
Apr 24, 2024

OFFICE

AJV-A431

DATE

01/17/2024

APPROVED BY

ERIC N SUSKI

Digitally signed by
ERIC N SUSKI
Apr 24, 2024

OFFICE

AJV-A431

DATE

07/11/2024

TITLE
MANAGER

