

**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.

<u>AIRPORT ID</u> KHLN	<u>PROCEDURE NAME</u> RNAV (RNP) Z RWY 27	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> HELENA	<u>STATE</u> MT		
<u>AIRPORT ELEVATION</u> 3877	<u>TDZE</u> 3852	<u>SUPERSEDED</u> RNAV (RNP) Z RWY 27	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 02/23/2023	<u>MAG VAR</u> 12E	<u>EPOCH YEAR</u> 2025
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 JANUARY 2024	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
HIA VOR/DME		SUZZY		TF	FB	1.00	026.00	18.39	10500
SUZZY	IAF	SWEDD		TF	FB	1.00	023.14	25.48	10000
HLN VORTAC	IAF	AGUPY		TF	FB	1.00	123.94	6.48	11000
AGUPY	IF	BMACK		TF	FB	0.40	126.02	3.39	10200
BMACK		CAGIN		RF	FB	0.40	(2.86 NM RADIUS CCW (CFFZL))	2.69	9400
CAGIN		DEPTH		RF	FB	0.40	(2.86 NM RADIUS CCW (CFFXB))	2.35	8700
DEPTH		EJUPY		RF	FB	0.40	(2.86 NM RADIUS CCW (CFDZX))	1.68	8200
EJUPY		FABGO		RF	FB	0.40	(2.86 NM RADIUS CCW (CFFSW))	2.69	7400
FABGO		GOKME		RF	FB	0.40	(2.86 NM RADIUS CCW (CFDVX))	1.34	7000
URELE	IAF	FALDE		TF	FB	0.40	173.19	20.96	9400
FALDE		BOSCA		TF	FB	0.40	226.47	6.45	7200
SWEDD	IAF	BOSCA		TF	FB	1.00	311.86	7.83	7200
HEXOL	IAF	FALDE		TF	FB	0.40	257.58	15.22	9400
LINGE	IAF	FALDE		TF	FB	0.50	226.67	17.50	9400
GOKME		JEXUT	PFAF	TF	FB	0.40	270.87	2.00	6500
RICHD	IAF	HLN VORTAC		TF	FB	1.00	090.06	19.67	12000
BOSCA	IF	GOKME		TF	FB	0.40	270.93	2.84	7000

QUALITY
10
CHECKED

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
JEXUT	PFAF	RW27	MAP	TF	FO	0.30	270.85	8.16	
RW27	MAP	KISTY		TF	FB	1.00	270.71	10.98	
KISTY		KELTY		TF	FB	1.00	265.03	8.99	
KELTY		PIXXI		TF	FO	1.00	275.16	11.87	12000

MISSED APPROACH

MAP:
RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 12000 ON THE RNAV MISSED APPROACH ROUTE TO PIXXI AND HOLD, CONTINUE CLIMB-IN-HOLD TO 12000; *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 280 FEET PER NM TO 7800. **MISSED APPROACH REQUIRES MINIMUM CLIMB OF 375 FEET PER NM TO 6300.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT GOKME
- FAC: 270.85 PFAF: JEXUT DIST PFAF TO MAP: DIST PFAF TO THLD:
- MIN ALT: GOKME 7000, JEXUT 6500
- DIST TO THLD FROM PFAF: 8.16 MM: IM: 150 HAT: 320 HAT: 0.85 GS ANT:
- MIN GP INCPT: 6500 GP ALT AT PFAF: JEXUT 6500 OM: MM: IM:
- GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 55.1
- MSA FROM: RW27 10600

PBN REQUIREMENTS NOTE:

RNP AR APCH - GPS.



NOTES:

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO RNP 0.30 DA.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -28°C OR ABOVE 54°C.
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
CHART PLANVIEW NOTE AT HLN VORTAC: (RNP 0.40).
CHART PLANVIEW NOTE AT SUZZY: (RNP 0.40).
CHART PLANVIEW NOTE AT SWEDD: (RNP 0.40).
CHART PLANVIEW NOTE AT HEXOL: (RNP 0.40).
CHART PLANVIEW NOTE AT LINGE: (RNP 0.40).
CHART PLANVIEW NOTE AT URELE: (RNP 0.40).
CHART PLANVIEW NOTE AT RICHD: (RNP 0.40).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HIA VOR/DME AIRWAY RADIALS 353 CW 078.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SUZZY ON V343 WESTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HLN VORTAC ON V113 NORTHEAST BOUND.
CHART PLANVIEW NOTE AT BMACK: DO NOT EXCEED 210 KIAS UNTIL GOKME
CHART SPEED ICON IN PLANVIEW AT URELE: MAX 240 KIAS.
CHART SPEED ICON IN PLANVIEW AT BOSCA: MAX 210 KIAS.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.13 DA* VISIBILITY ALL CATS TO 7/8 SM, RNP 0.30 DA* VISIBILITY ALL CATS TO 1 3/8 SM.
CHART SPEED ICON IN PLANVIEW AT AGUPY: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD W, RT, 090.40 INBOUND.
CHART AT OR ABOVE 10000 AT SWEDD.



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

ALTERNATE: NA CAT A, B, C, D 1000-4

<u>CATEGORY:</u>	A			B			C			D			E		
<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>
AUTHORIZATION REQUIRED															
RNP 0.13 DA*	4172	1/2	320	4172	1/2	320	4172	1/2	320	4172	1/2	320			
RNP 0.20 DA**	4303	7/8	451	4303	7/8	451	4303	7/8	451	4303	7/8	451			
RNP 0.30 DA**	4353	1	501	4353	1	501	4353	1	501	4353	1	501			
RNP 0.30 DA	4866	4	1014	4866	4	1014	4866	4	1014	4866	4	1014			



CHANGES - REASONS

1. TERMINAL ROUTES INITIAL AND STEPDOWN INITIALS HLN VORTAC TO CEMLI, CEMLI TO DULCA, DULCA TO FAVTA, FAVTA TO BOSCA, AND BOSCA TO JEXUT HAVE BEEN REMOVED AND REPLACED WITH REDESIGNED ROUTING; TERMINAL ROUTES INITIAL AND STEPDOWN INTERMEDIATES HLN VORTAC TO AGUPY, AGUPY TO BMACK, BMACK TO CAGIN, CAGIN TO DEPTH, DEPTH TO EJUPY, EJUPY TO FABGO, FABGO TO GOKME AND GOKME TO JEXUT. - NEW FPT/ATC DESIGN FOR SHORTER ROUTING.
2. TERMINAL ROUTING HIA VOR/DME TO SUZZY, SUZZY TO FAVTA AND FAVTA TO SWEDD HAS BEEN REPLACED WITH HIA VOR/DME TO SUZZY, SUZZY TO SWEDD. - AVOID LIMESTONE RESTRICTED AREA R-4601 CHARTING IN AUGUST 2023.
3. TERMINAL ROUTING BOSCA TO JEXUT IS REPLACED WITH BOSCA TO GOKME TO JEXUT. - FPT/ATC DESIGN HAS GOKME AS AN INTERMEDIATE STEPDOWN AND RF CONNECTOR.
4. TERMINAL ROUTING INITIAL ADDED FROM RICHD TO HLN VORTAC. - FPT/ATC REQUEST.
5. MISSED APPROACH ROUTING CHANGED FROM RW 27 TO JEBSI, JEBSI TO KELTY, KELTY TO PIXXI. TO RW 27 TO KISTY, KISTY TO KELTY, THEN KELTY TO PIXXI. - FPT/ATC REDESIGN.
6. MISSED APPROACH INSTRUCTIONS CHANGED FROM CLIMB TO 13000 ON THE RNAV MISSED APPROACH ROUTE TO PIXXI AND HOLD, CONTINUE CLIMB-IN-HOLD TO 13000; * MISSED APPROACH REQUIRES MINIMUM CLIMB OF 390 FEET PER NM TO 6300 TO CLIMB TO 12000 ON THE RNAV MISSED APPROACH ROUTE TO PIXXI AND HOLD, CONTINUE CLIMB-IN-HOLD TO 12000; *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 280 FEET PER NM TO 7800. **MISSED APPROACH REQUIRES MINIMUM CLIMB OF 375 FEET PER NM TO 6300. - NEW DESIGN BY FPT/ATC, LOWER RNP MINIMA LINES WITH NEW OBSTACLES.
7. PROFILE LINE TWO CHANGED FROM BOSCA TO GOKME. - NEW COMMON INTERMEDIATE FIX/PER 8260.19I COMPLIANCE.
8. PROFILE LINE FOUR CHANGED FROM BOSCA 7200, JEXUT 6500 TO GOKME 7000, JEXUT 6500. - GOKME IS NEW COMMON FIX ADDED PER FPT/ATC.
9. PROFILE LINE FIVE CHANGED FROM 402 HAT: 1.11 TO 320 HAT: 0.85. - LOWER RNP LINE OF MINIMA.
10. PLANVIEW NOTES CHANGED FROM SUZZY: (RNP 0.50), SWEDD: (RNP 0.50) TO RNP OF 0.40. - PER FPT/ATC REDESIGN.
11. PLANVIEW NOTE HLN VORTAC: (RNP 0.50) CHANGED TO (RNP 0.40) - FPT/ATC REDESIGN.
12. REMOVED CHART PLANVIEW NOTE AT FAVTA: DO NOT EXCEED 230 KIAS UNTIL BOSCA. - LEG NO LONGER EXIST.
13. REMOVED PLANVIEW NOTE AT CEMLI: DO NOT EXCEED 230 KIAS UNTIL BOSCA. - LEG NO LONGER EXIST.
14. NOTE CHANGED FROM FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -26°C OR ABOVE 54°C. TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -28°C OR ABOVE 54°C. - NEW CLIMATE STUDY.
15. NOTE CHANGED FROM CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.18 DA* VISIBILITY ALL CATS TO 1 1/8 SM, RNP 0.30 DA* VISIBILITY ALL CATS TO 1 3/8 SM. TO FOR INOPERATIVE ALS, INCREASE RNP 0.13 DA* VISIBILITY ALL CATS TO 7/8 SM, RNP 0.30 DA* VISIBILITY ALL CATS TO 1 3/8 SM. - NEW LINES OF MINIMA.
16. PROFILE NOTE ADDED: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. - FPT/ATC RF LEGS REDESIGNED FROM STEPDOWN INITIALS TO STEPDOWN INTERMEDIATES.
17. NOTE ADDED: CHART PLANVIEW NOTE AT BMACK: DO NOT EXCEED 210 KIAS UNTIL GOKME. - 8260.58B COMPLIANCE.
18. NOTE ADDED: CHART SPEED ICON IN PLANVIEW AT BOSCA: MAX 210 KIAS. - 8260.58B COMPLIANCE.
19. MINIMUMS RNP 0.18 HAT/DA/VIS 4254/402/3/4 WAS REPLACED WITH RNP 0.13 4172/320/1/2. - FPT REQUEST.
20. MINIMUMS RNP 0.22 HAT/DA/ 4304/452/ WAS REPLACED WITH 0.20 4303/451/. - FPT REQUEST.
21. MINIMUMS RNP.30* DA/HAT CHANGED FROM 4354/502 TO 4353/501. - NEW EVAL.
22. ADDED CHART AT OR ABOVE 10000 AT SWEDD IN ADDITIONAL FLIGHT DATA. - FPT/ATC REQUEST.
23. ADDED CHART PLANVIEW NOTE AT RICHD: (RNP 0.40). - FPT/ATC APPROACH REDESIGN, 8260.58B COMPLIANCE.

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA OTHER: ZLC, HLN APP CON, HLN ATCT, AMGR

FLIGHT CHECKED BY

JEFFREY A FINDLEY

Digitally signed by
CASIMIR L TABAKA

Nov 06, 2023

OFFICE

FPO

DATE

11/02/2023

DEVELOPED BY

JOHN KEEFER

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ERIC N SUSKI

Sep 18, 2023

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TITLE
MANAGER