

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> BDH	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> WILLMAR	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1126	<u>TDZE</u> 1124	<u>SUPERSEDED</u> RNAV (GPS) RWY 13	<u>DATED</u> 05/20/2021	<u>MAG VAR</u> 4E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 JANUARY 2024	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>EPOCH YEAR</u> 2000
				<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ARDUE		IBIYO		TF	FB	1.00	051.76	14.21	2800
ARMUW		SWELT		TF	FB	1.00	197.00	8.77	2900
CLAPS		IBIYO		TF	FB	1.00	325.92	8.25	2800
IBIYO	IAF	BEESE	NOPT	TF	FB	1.00	035.53	5.00	2800
SWELT	IAF	BEESE	NOPT	TF	FB	1.00	215.63	5.00	2800
BEESE	IF/IAF	LOPOW		TF	FB	1.00	125.59	6.19	2800
LOPOW	FAF	RW13	MAP	TF	FO	0.30	125.66	5.11	
RW13	MAP	1324 MSL		CA			125.66		
1324 MSL		HEPIV		DF	FO	1.00			2800

MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 DIRECT HEPIV AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)
2. HOLD NW BEESE, RT, 125.59 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 125.66

FAF: LOPOW

DIST FAF TO MAP: 5.11

DIST FAF TO THLD: 5.11
4. MIN ALT: BEESE 2800, LOPOW 2800

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.47

GS ANT:
6. MIN GP INCPT: 2800

GP ALT AT PFAF: LOPOW 2800

OM:

MM:

IM:
7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 49.4
8. MSA FROM: RW13 3100



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART NOTE: CIRCLING NA TO RWYS 3 AND 21.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 1/8 SM, LNAV CATS A AND B TO 1 SM AND LNAV CATS C AND D VISIBILITY TO 1 3/8 SM.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OLIVIA ALTIMETER SETTING: INCREASE LPV DA TO 1379 FEET; INCREASE LNAV/VNAV DA TO 1584 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 60 FEET AND CIRCLING VISIBILITY CAT D 1/4 SM.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING OLIVIA RGNL ALTIMETER SETTING.

CHART SPEED ICON IN PLANVIEW AT IBIYO: MAX 210 KIAS.

CHART SPEED ICON IN PLANVIEW AT SWELT: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 305.89 INBOUND.
FAS OBST: 1340 AAO 451036N/0951242W.
CHART VDP AT 1.33 NM TO RW13.
WAAS CHANNEL # 93902
REFERENCE PATH ID: W13A
LTP HAE: 315.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 900-2 3/4, 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	1324	3/4	200	1324	3/4	200	1324	3/4	200	1324	3/4	200			
LNAV/VNAV DA	1529	3/4	405	1529	3/4	405	1529	3/4	405	1529	3/4	405			
LNAV MDA	1600	3/4	476	1600	3/4	476	1600	1	476	1600	1	476			
CIRCLING	1600	1	474	1600	1	474	1660	1 1/2	534	1960	2 3/4	834			

CHANGES - REASONS

1. TERMINAL ROUTES: CHANGED BEESE TO LOPOW COURSE FROM 125.58 TO 125.59 AND DISTANCE FROM 6.27 TO 6.19 - FAF RELOCATED BASED ON GPA/TCH.
2. TERMINAL ROUTES: CHANGED LOPOW TO RW13 COURSE FROM 125.67 TO 125.66 AND DISTANCE FROM 5.03 TO 5.11 - FAF RELOCATED BASED ON GPA/TCH.
3. TERMINAL ROUTES: CHANGED CA ALTITUDE FROM 1387 MSL TO 1324 MSL AND COURSE FROM 125.67 TO 125.66 - BASED ON LPV DA ALTITUDE AND COURSE ALIGNED TO FAC.
4. PROFILE LINE 2: CHANGED FROM "HOLD NW BEESE, RT, 125.58 INBOUND, 2800 FT. IN LIEU OF PT (IAF)(HF)(20E)(23C)" TO "HOLD NW BEESE, RT, 125.59 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000" - ALIGNED TO INTERMEDIATE SEGMENT COURSE, 8260.19I, 8-6-7B(2).
5. PROFILE LINE 3: CHANGED FAC FROM 125.67 TO 125.66, DIST FAF TO MAP AND DIST FAF TO THLD FROM 5.03 TO 5.11 - FAF RELOCATED BASED ON GPA/TCH.
6. PROFILE LINE 5: ADDED "200 HAT: 0.47" - PER 8260.19I 8-6-7E(3).
7. PROFILE LINE 7: ADDED 20:1 IS CLEAR AND CHANGED TCH FROM 52.2 TO 49.4 - NO PENETRATIONS EXIST, ALIGN WITH ILS.
8. REMOVED RNP APCH AND ADDED RNP APCH - GPS TO PBN REQUIREMENTS NOTE - PER 8260.19I, 8-6-8B2.
9. CHANGED CHART NOTE FROM "CHART NOTE: CIRCLING RWY 3, 21 NA" TO "CIRCLING NA TO RWYS 3 AND 21" - UPDATED TO CURRENT FORMAT.
10. CHANGED FROM "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OLIVIA RGNL ALTIMETER SETTING: INCREASE LPV DA TO 1442 FEET, LNAV/VNAV DA TO 1535 FEET, AND ALL MDAS 60 FEET, AND INCREASE CIRCLING CAT D VISIBILITY 1/4 SM" TO "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OLIVIA ALTIMETER SETTING: INCREASE LPV DA TO 1379 FEET; INCREASE LNAV/VNAV DA TO 1584 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 60 FEET AND CIRCLING VISIBILITY CAT D 1/4 SM" - UPDATED 8260.3E TABLE 3-3-1.
11. CHANGED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 46°C" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C" - NEW EVALUATION WITH UPDATED CRITICAL TEMPERATURES.
12. ADDED CHART NOTES "INOPERATIVE TABLE DOES NOT APPLY TO LPV" TO "FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 1/8 SM, LNAV CATS A AND B TO 1 SM AND LNAV CATS C AND D VISIBILITY TO 1 3/8 SM" - PER UPDATED 8260.3E VIS TABLES.
13. ADDITIONAL FLIGHT DATA: CHANGED FROM "CHART FAS OBST: 1320 TOWER 450839N/0951029W, 1210 TREE 450721N/0950847W" TO "FAS OBST: 1340 AAO 451036N/0951242W" - NEW CONTROLLING OBSTACLE.
14. ADDITIONAL FLIGHT DATA: REMOVED "LNAV ONLY" AND CHANGED FROM "CHART VDP AT 1.40 NM TO RW13*" TO "CHART VDP AT 1.33 NM TO RW13" - NO LONGER REQUIRED; IAW 8260.19I 8-6-7D AND 8-6-10M (MEMO).
15. ADDITIONAL FLIGHT DATA: REMOVED "DISTANCE TO THLD FROM 263 HAT: 0.66 NM" - CURRENTLY DOCUMENTED ON PROFILE LINE 5.
16. ADDED "CHART SPEED ICON IN PLANVIEW AT IBIYO: MAX 210 KIAS" AND "CHART SPEED ICON IN PLANVIEW AT SWELT: MAX 210 KIAS" - PER 8260.19I, PARA 4-6-10(G).
17. CHANGED LPV ALL CATS DA/HAT FROM 1480/356 TO 1324/200 AND ALL CATS VISIBILITY FROM 1 1/4 SM TO 3/4 SM - LPV ALL SURFACES CLEAR, PER ADO REQUEST VIS NO LOWER THAN 3/4 SM.
18. CHANGED LNAV/VNAV ALL CATS DA/HAT FROM 1480/356 TO 1529/405 AND ALL CATS VISIBILITY FROM 1 1/4 SM TO 3/4 SM - NEW CONTROLLING OBSTACLE, PER ADO REQUEST VIS NO LOWER THAN 3/4 SM.
19. CHANGED LNAV ALL CATS MDA/HAT FROM 1620/496 TO 1600/476 AND CAT A AND B VISIBILITY FROM 1 SM TO 3/4 SM, CAT C VISIBILITY FROM 1 1/4 SM TO 1 SM AND CAT D VISIBILITY FROM 1 1/2 SM TO 1 SM - NEW CONTROLLING OBSTACLE, UPDATED 8260.3E TABLE 3-3-1.
20. CHANGED CIRCLING CATS A AND B MDA/HAA FROM 1620/494 TO 1600/474 - BASED ON STRAIGHT IN MINIMUMS.
21. CRC REMAINDER CHANGED FROM "EBB9D248" TO "185C6160" - FPAP COORDINATES CHANGED FROM "450646.4200N/0950726.7700W" TO "450624.1945N/0950648.9925W", TCH FROM 52.2 TO 49.4, COURSE WIDTH AT THRESHOLD FROM 104.00 TO 106.75, LENGTH OFFSET FROM 0000 TO 1072 AND VAL FROM 50.0 TO 35.0.

COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER:

ZMP, AMGR

FLIGHT CHECKED BY

SCOTT WIEBE

Digitally signed by

CASIMIR L TABAKA

Nov 28, 2023

OFFICE

FPO

DATE

11/17/2023

DEVELOPED BY

CASIMIR L. TABAKA (SILVIA YOUNG)

Digitally signed by

CASIMIR L TABAKA

Oct 22, 2023

OFFICE

AJV-A432

DATE

07/12/2023

APPROVED BY

CASIMIR L. TABAKA

Digitally signed by

CASIMIR L TABAKA

Oct 22, 2023

OFFICE

AJV-A432

DATE

TITLE

MANAGER



AIRPORT ID
BDH

PROCEDURE NAME
RNAV (GPS) RWY 13

ORIGINAL/AMENDMENT
1

CITY
WILLMAR

STATE
MN

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBDH
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	450721.1390N
LTP/FTP LONGITUDE	0950825.7545W
LTP/FTP ELLIPSOIDAL HEIGHT	+03157
FPAP LATITUDE	450624.1945N
FPAP LONGITUDE	0950648.9925W
THRESHOLD CROSSING HEIGHT (TCH)	00049.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	185C6160
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03425
FPAP ORTHOMETRIC HEIGHT	+03425

QUALITY
35
CHECKED