

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> HBC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> MOHALL	<u>STATE</u> ND
<u>AIRPORT ELEVATION</u> 1650	<u>TDZE</u> 1650	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>DATED</u> 03/24/2022	<u>MAG VAR</u> 9E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 12 JUNE 2025	<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>
MOT VOR/DME		OGXEB		TF	FB	1.00	325.70	20.09	4500
KOFOJ	IAF	IJMEP	NOPT	TF	FB	1.00	221.06	6.92	3300
OGXEB	IAF	IJMEP	NOPT	TF	FB	1.00	040.86	6.92	3300
IJMEP	IF/IAF	EJKOW		TF	FB	1.00	310.96	5.01	3300
EJKOW	FAF	RW31	MAP	TF	FO	0.30	310.89	5.06	
RW31	MAP	3000 MSL		CA			310.89		3000
3000 MSL		IJMEP		DF	FO	1.00			3300

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 THEN CLIMBING LEFT TURN TO 3300 DIRECT IJMEP AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD SE IJMEP, RT, 310.96 INBOUND, 3300 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC: 310.89 FAF: EJKOW DIST FAF TO MAP: 5.06 DIST FAF TO THLD: 5.06
- MIN ALT: IJMEP 3300, EJKOW 3300
- DIST TO THLD FROM OM: MM: IM: 150 HAT: 327 HAT: 0.90 GS ANT: IM:
- MIN GP INCPT: 3300 GP ALT AT PFAF: EJKOW 3300 OM: MM:
- GP ANGLE: 3.00 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 40.0
- MSA FROM: RW31 3800



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: BARO-VNAV NA.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: USE MOT ALTIMETER SETTING.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT MOT VOR/DME ON V430/T331 EASTBOUND.

ADDITIONAL FLIGHT DATA:

CHART MOT ASOS.
CHART FAS OBST: 1842 ELEVATOR (38-039318) 484551N/1013056W.
WAAS CHANNEL # 99447
REFERENCE PATH ID: W31A
LTP HAE: 481.9 M

MINIMUMS:

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

ALTERNATE: NA ☒

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	1977	1	327	1977	1	327	1977	1	327		NA				
LNAV/VNAV DA	2111	1 3/8	461	2111	1 3/8	461	2111	1 3/8	461		NA				
LNAV MDA	2180	1	530	2180	1	530	2180	1 1/2	530		NA				
CIRCLING	2240	1	590	2240	1	590	2380	2	730		NA				



CHANGES - REASONS

1. TERMINAL ROUTES: FEEDER SEGMENT MOT VOR TO OGXEB COURSE CHANGED FROM 330.85 TO 325.70 AND DISTANCE CHANGED FROM 20.66 TO 20.09 - IAF FIX OGXEB CHANGED LOCATIONS.
2. TERMINAL ROUTES: INITIAL SEGMENT KOFOJ TO IJMEP COURSE CHANGED FROM 221.02 TO 221.06 AND DISTANCE CHANGED FROM 5.00 TO 6.92 - IAF FIX KOFOJ CHANGED LOCATIONS.
3. TERMINAL ROUTES: INITIAL SEGMENT OGXEB TO IJMEP COURSE CHANGED FROM 040.88 TO 040.86 AND DISTANCE CHANGED FROM 5.00 TO 6.92 - IAF FIX OGXEB CHANGED LOCATIONS.
4. TERMINAL ROUTES: INTERMEDIATE SEGMENT IJMEP TO EJKOW COURSE CHANGED FROM 310.95 TO 310.96 AND DISTANCE CHANGED FROM 5.0 TO 5.01- PFAF FIX EJKOW CHANGED LOCATIONS.
5. PROFILE LINE 3: FINAL TO MAP DISTANCE CHANGED FROM 5.07 TO 5.06 - PFAF FIX LOCATION CHANGED.
6. PROFILE LINE 3: FINAL TO THLD DISTANCE CHANGED FROM 5.07 TO 5.06 - PFAF FIX LOCATION CHANGED.
7. MAP: ADDED LPV AND LNAV/VNAV DA POINT - PER CRITERIA FAA0 8260.19J 8-6-6 (C) (1) (3).
8. 34:1 SURFACE CHANGED FROM "CLEAR" TO "NOT CLEAR" - PER NEW OBSTACLE SURVEY, NEW PENETRATING OBSTACLES.
- 9 ADDED CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED – 34:1 PENETRATIONS ADDED NEW OBSTACLE SURVEY.
10. MINIMUMS: ADDED LPV DA/HAT 1977/327 AND VIS 1SM ALL CATS - ADDED LPV PROCEDURE PER ATC/FPT REQUEST.
11. MINIMUMS: ADDED LNAV/VNAV DA/HAT 2111/4661 AND VIS 1 3/8SM ALL CATS - ADDED LNAV/VNAV PROCEDURE PER ATC/FPT REQUEST.
12. MINIMUMS: LNAV HAT CHANGED FROM 531 TO 530 ALL CATS - NEW RWY THLD ELEVATION BASED OFF NEW AIRPORT SURVEY.
13. ADDED CHART NOTE: BARO-VNAV NA - PER CRITERIA FAA0 8260.19J 8-6-10 (E) (8).
14. ADDED CHART NOTE "VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - PER CRITERIA FAA0 8260.19J 8-6-10 (M) (1).
15. UPDATED CHART FAS OBST: CHANGED FROM "1793 TOWER 484534N/1013030W" TO "1842 ELEVATOR (38-039318) 484551N/1013056W" - PER NEW OBSTACLE SURVEY.
16. PBN REUIREMENTS NOTE: CHANGED FROM "RNP APCH" TO "RNP APCH-GPS" PER CRITERIA 8260.19J 8-6-8 (D).
17. NOTES: CHANGED CHART NOTE FROM "USE MINOT INTL ALTIMETER SETTING" TO "USE MOT ALTIMETER SETTING" PER CRITERIA 8260.19J 8-6-10 (F) (2) (6).
18. ADDITIONAL FLIGHT DATA: CHANGED NOTE FROM "CHART MINOT INTL ASOS" TO "CHART MOT ASOS" PER CRITERIA 8260.19J 8-6-8 (F) (2) (6).
19. ADDITIONAL FLIGHT DATA: ADDED WAAS CHANNEL #99447- ADDED LPV LINES OF MINIMUMS PER CRITERIA FAA0 8260.19J 8-6-11 (J) (1).
20. ADDITIONAL FLIGHT DATA: ADDED REFERENCE PATH ID:W31A - ADDED LPV LINES OF MINIMUMS PER CRITERIA FAA0 8260.19J 8-6-11 (J) (1).
21. ADDITIONAL FLIGHT DATA: ADDED LTP HAE: 481.9 M - ADDED LPV LINES OF MINIMUMS PER CRITERIA FAA0 8260.19J 8-6-11 (J) (3).
22. ADDED DATA FIELD DATA - ADDED LPV LINES OF MINIMUMS PER CRITERIA FAA0 8260.19J APPENDIX K.

COORDINATED WITH:

A4A

ALPA

X

AOPA

X

APA

HAI

NBAA

X

OTHER: AMGR, MINOT APCH CONTROL, ZMP ARTCC

FLIGHT CHECKED BY

KENNETH E JACK

Digitally signed by

DAVID DANNER

Apr 04, 2025

OFFICE

AJF

DATE

04/03/2025

DEVELOPED BY

TRAVIS BRISTOW

Digitally signed by

TRAVIS D BRISTOW

Dec 30, 2024

OFFICE

AJV-A421

DATE

08/27/2024

APPROVED BY

DAVID DANNER

Digitally signed by

DAVID DANNER

Apr 04, 2025

OFFICE

AJV-A421

DATE

04/17/2025

TITLE

MANAGER



AIRPORT ID
HBC

PROCEDURE NAME
RNAV (GPS) RWY 31

ORIGINAL/AMENDMENT
1

CITY
MOHALL

STATE
ND

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHBC
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	484554.4200N
LTP/FTP LONGITUDE	1013158.1820W
LTP/FTP ELLIPSOIDAL HEIGHT	+04819
FPAP LATITUDE	484702.4375N
FPAP LONGITUDE	1013325.0975W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1656
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	1F5FCFDC
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+05026
FPAP ORTHOMETRIC HEIGHT	+05026

QUALITY
10
CHECKED