

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</u> MACKINAC ISLAND	<u>AIRPORT ID</u> KMCD	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> MACKINAC ISLAND	<u>STATE</u> MI
<u>AIRPORT ELEVATION</u> 741	<u>TDZE</u> 739	<u>SUPERSEDED</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 01/08/2015	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 20 JUNE 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

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>
PLN VORTAC		ZIMUX		TF	FB	1.00	298.46	9.83	2600
PINES		WAKMA		TF	FO	1.00	241.68	22.68	2500
ZIMUX	IAF	WAKMA	NOPT	TF	FB	1.00	352.07	7.50	2500
WAKMA	IF/IAF	NUBKE		TF	FB	1.00	082.04	7.20	2400
NUBKE	FAF	JUPIB/1.50 NM TO RW08		TF	FB	0.30	082.16	3.62	
JUPIB/1.50 NM TO RW08		RW08	MAP	TF	FO	0.30	082.16	1.50	
RW08	MAP	1080 MSL		CA					
1080 MSL		HUVTI		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LP: RW08
 LNAV: RW08

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT HUVTI AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W WAKMA, RT, 082.04 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 082.16FAF: NUBKEDIST FAF TO MAP: 5.12DIST FAF TO THLD: 5.12

4. MIN ALT: WAKMA 2500, NUBKE 2400, JUPIB/1.50 NM TO RW08 1240

5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT:MM:IM:

6. MIN GP INCPT:GP ALT AT FAF :OM:MM:IM:

7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:

8. MSA FROM: RW08 2900

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PLN VORTAC AIRWAY RADIALS 219 CW 295.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PELLSTON ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET, INCREASE LP AND LNAV CAT C VISIBILITY 1/8 SM AND CIRCLING CAT C VISIBILITY 1/4 SM.
CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 8 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
WAAS CHANNEL #63129
REFERENCE PATH ID: W08A
CHART FAS OBST: 829 TREE 455153N/0843840W, 859 TREE 455134N/0843807W.
HOLD E, RT, 262.44 INBOUND
LTP HAE: 186.6 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
LP MDA	1080	1	341	1080	1	341	1080	1	341		NA				
LNAV MDA	1120	1	381	1120	1	381	1120	1 1/8	381		NA				
CIRCLING	1320	1	579	1320	1	579	1320	1 1/2	579		NA				



CHANGES - REASONS

- 1. UPDATED CHART NOTE: FROM "NIGHT LANDING: RWY 8 NA" TO "CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 8 NA AT NIGHT." - RWY 8 HAS NO SURVEY, RWY 26 HAS 20:1 LIT PENETRATIONS - IAW 8260.3D 3-3-2.C.(4)(B)2.
- 2. REPLACED PROFILE NOTE: "NUBKE TO RWY 8: 3.00/TCH 40" WITH "VISUAL SEGMENT - OBSTACLES" - INCORPORATING NOTAM !FDC 8/6300 AND IAW 8260.19H 8-6-10 P.(1).
- 3. TERMINAL ROUTES: MISSED APPROACH DF LEG RNP 1.00 ADDED. - 8260.54A 4-3-1.
- 4. REMOVED CHART NOTE: DME/DME RNP-0.3 NA. ADDED PBN REQUIREMENT NOTE: RNP APCH. - IAW 8260.19H 8-6-8.B.
- 5. UPDATED CHART NOTE: "VISIBILITY REDUCTION BY HELICOPTERS NA" TO "RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED." - IAW 8260.19H SECTION 8-6-11 K (3).
- 6. UPDATED LP MDA HAT FROM 351 TO 341 AND LNAV MDA HAT FROM 391 TO 381. CHANGES FROM P-NOTAM FOR AMDT 1A AND 1B INCORPORATED INTO FORM - IAW 8260.19H PARA 8-3-4C(3).
- 7. ADDED MAX HOLDING 6000 AT WAKMA - NEW HOLDING INFORMATION FROM 8260-2.
- 8. FAS DATA: GLIDEPATH ANGLE CHANGED FROM 3.00 TO 0.00 AND TCH FROM 40.0 TO 0. - VISUAL SEGMENT OBSTACLES REPORTED.
- 9. FAS DATA: CRC REMAINDER UPDATED FROM 637E3E2A TO 53BED6BE. - DUE TO GLIDEPATH ANGLE CHANGING FROM 03.00 TO 00.00 AND TCH FROM 40.0 TO 0.
- 10. LINE 7: ADDED 20:1 IS NOT CLEAR. - NO RWY 8 SURVEY, UNABLE TO VERIFY VISUAL SURFACES ARE CLEAR.
- 11. REMOVED VGSI NOT COINCIDENT NOTE - REMOVED PER FLIGHT INSPECTION.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMP, AMGR

FLIGHT CHECKED BY

SCOTT WIEBE

Digitally signed by
DONALD H LANIER
Feb 25, 2019

OFFICE

FICO

DATE

2/22/19

DEVELOPED BY

DONALD H. LANIER (ARTHUR ULVESTAD)

Digitally signed by
DONALD H LANIER

OFFICE

AJV-5431

DATE

11/05/2018

APPROVED BY

PATRICK MULQUEEN

Feb 25, 2019
Digitally signed by
DONALD H LANIER
Feb 25, 2019

OFFICE

AJV-5430

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMCD
RUNWAY	RW08
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W08A
LTP/FTP LATITUDE	455149.5400N
LTP/FTP LONGITUDE	0843837.4600W
LTP/FTP ELLIPSOIDAL HEIGHT	+01866
FPAP LATITUDE	455212.2150N
FPAP LONGITUDE	0843634.1535W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1680
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	53BED6BE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02221
FPAP ORTHOMETRIC HEIGHT	+02221

