Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 06/17/2008	Task #: 2008061618983747002	Request #: 20080616189837
Procedure: RNAV (GPS) RWY 8 ORIG		Airport ID: KMCD	Airport: MACKINAC ISLAND		Reimbursable #:
City: MACKINAC ISLAND	ST: MI	GPS #:		Estimated Chart Date: 07/26/2012	FICO #:
Fac ID:	Fac. Type: LP Proc W	Specialist: DONALD LANIER			

Procedure Review

P1

	Rec'd	Rel'd	Full Name	Comments
Lead:	02/01/2012	03/22/2012	JILL OLSON	
QA:	03/22/2012	03/28/2012	STEVEN SZUKALA	
Liaison:	03/28/2012		Alfonso	

Procedure Comments:

Remark Type: INFORMATION

pkg 2 of 4

MACKINAC ISLAND, MI MACKINAC ISLAND (KMCD) RNAV (GPS) RWY 8, ORIG (LP) ENROUTE-NO FC: 6.12.12 PUB: 7.26.12

ATTACHED FORMS: 8260-3; 8260-10; 8260-9; 8260-2(S): HUVTI, ORIG; JUPIB, ORIG; NUBKE, ORIG; PELSTON (PLN) VTAC, REV 14; WAKMA, ORIG; ZIMUX, ORIG; (INFO ONLY) PINES-INT, REV 11.
FLCK NOTE: REQUEST FC 4D ON OBS #6, 939 MSL TOWER 455126.00N/0844643.00W (26-002947).

CONTACT: JILL OLSON, AJV-353 LEAD, 405 954.9568:

MACKINAC ISLAND, MICHIGAN | AL-6041 (FAA) | WORKING FIG

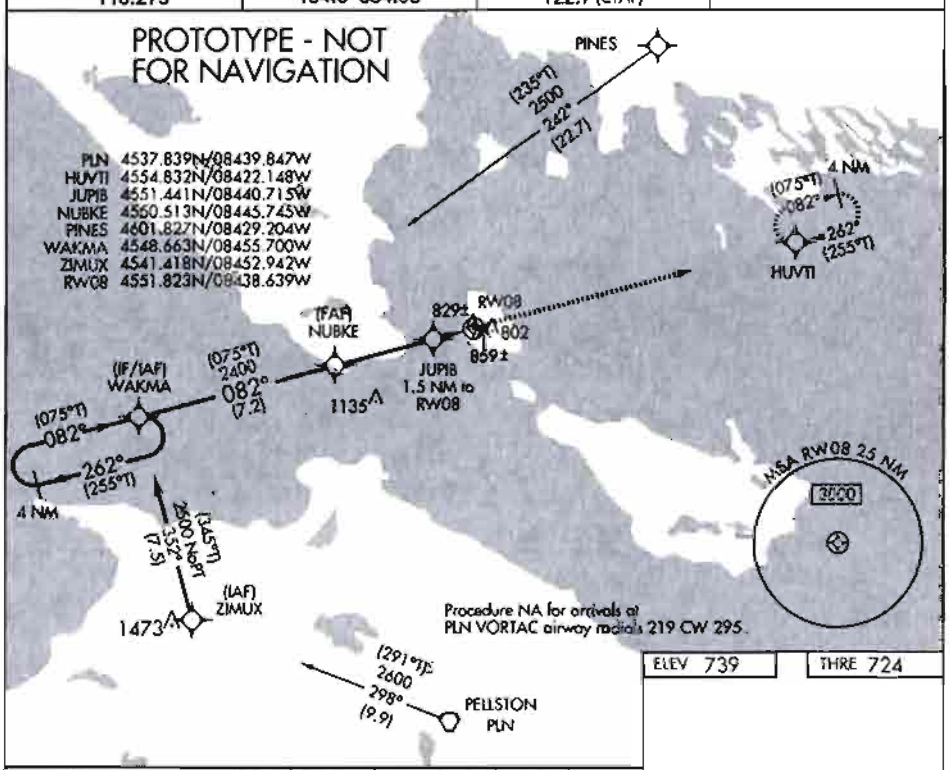
WAAS CH 83129 W08A	APP CRS 082°	Rwy ldg 3500 TDZE 740 Apt Elev 740

RNAV (GPS) RWY 8
MACKINAC ISLAND (MCD)

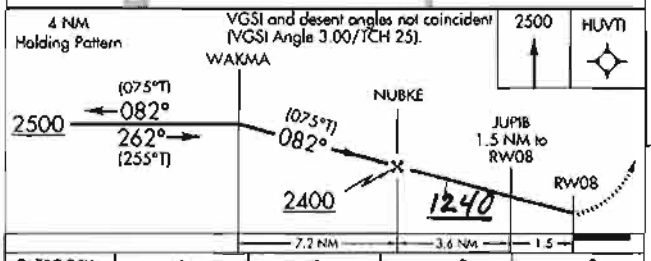
When local altimeter setting not received, use Pellston altimeter setting and increase all MDA 60 feet, increase LP Cat C visibility ¼ miles, LNAV and Circling Cat C visibility ¼ mile. When VGSI inop, straight-in/circling RWY 8 procedure NA at night. When VGSI inop, circling to RWY 26 NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

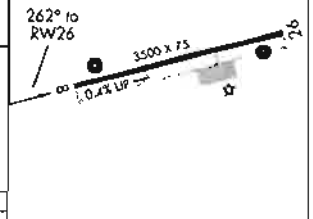
MISSED APPROACH: Climb to 2500 direct HUVTI and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM	
118.275	134.6 354.05	122.7 (CTAF)	122.8



ELEV 739 | THRE 724





CATEGORY	A	B	C	D
LP MDA	1080-1 356 (400-1)			NA
LNAV MDA	1120-1 396 (400-1)		1120-1⅛ 396 (400-1⅛)	NA
CIRCLING	1320-1 581 (600-1)		1320-1¼ 581 (600-1¼)	NA

MIRL Rwy 8-26
REIL Rwys 8 and 26

MACKINAC ISLAND, MICHIGAN
Orig WORKING FIG
45°52'N-84°38'W
MACKINAC ISLAND (MCD)
RNAV (GPS) RWY 8

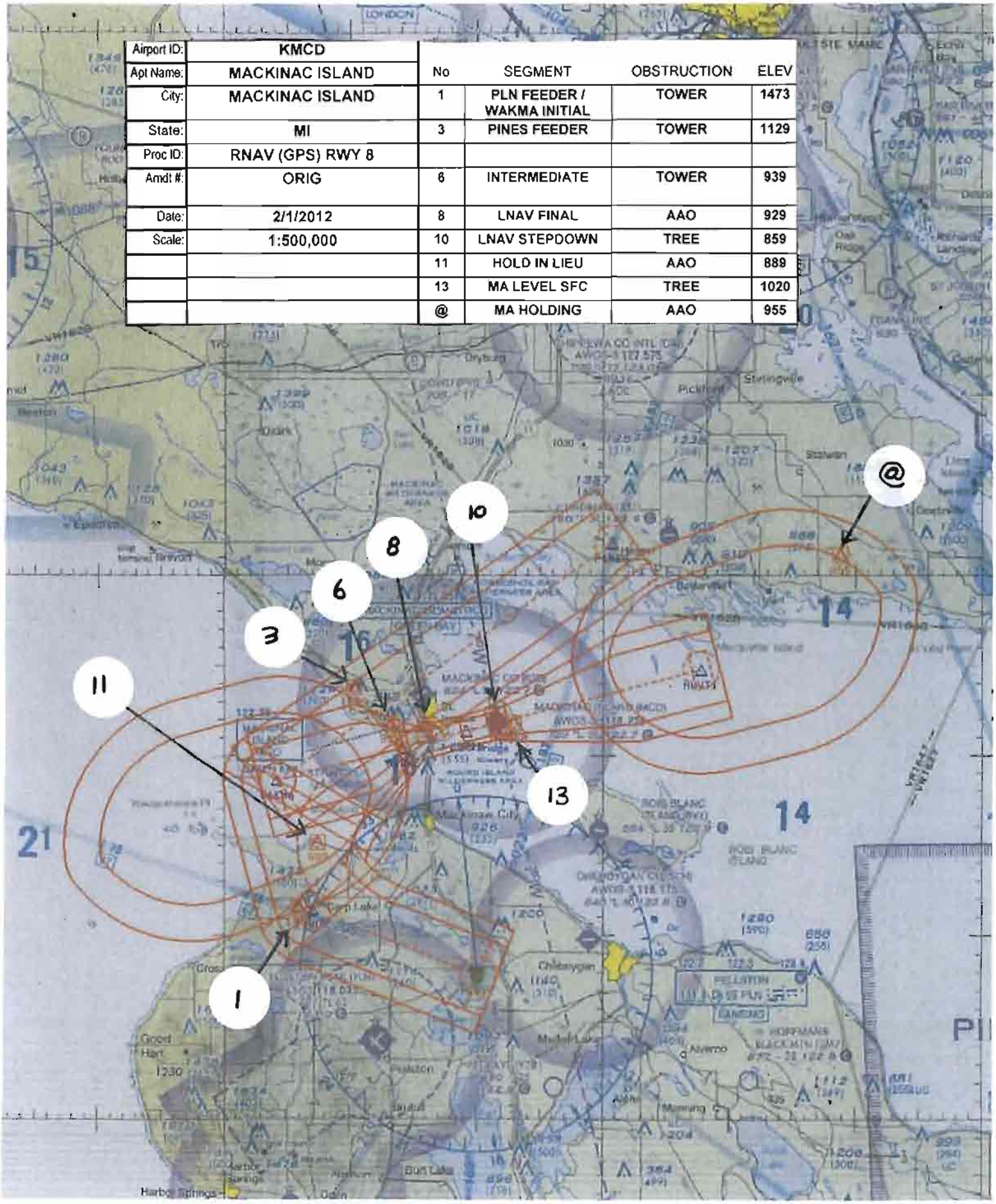
AUTOMATED AL-6041 GPS RWY 8

WORKING FIG
EC-1
24 FEB 2012
COMPILER: FF
REVIEWER: ??
DBL CHKR:
EFFECTIVE: FIG

NM 7 14 21 28 35 42 49

FT 42000 84000 126000 168000 210000 252000 294000

fpodhl | mcdinavt8 (PROD) | 24 Feb 2012 07:12:52 | 1" = 41666.7 feet (MAP)



Airport ID:	KMCD
Apt Name:	MACKINAC ISLAND
City:	MACKINAC ISLAND
State:	MI
Proc ID:	RNAV (GPS) RWY 8
Amdt #:	ORIG
Date:	2/1/2012
Scale:	1:500,000

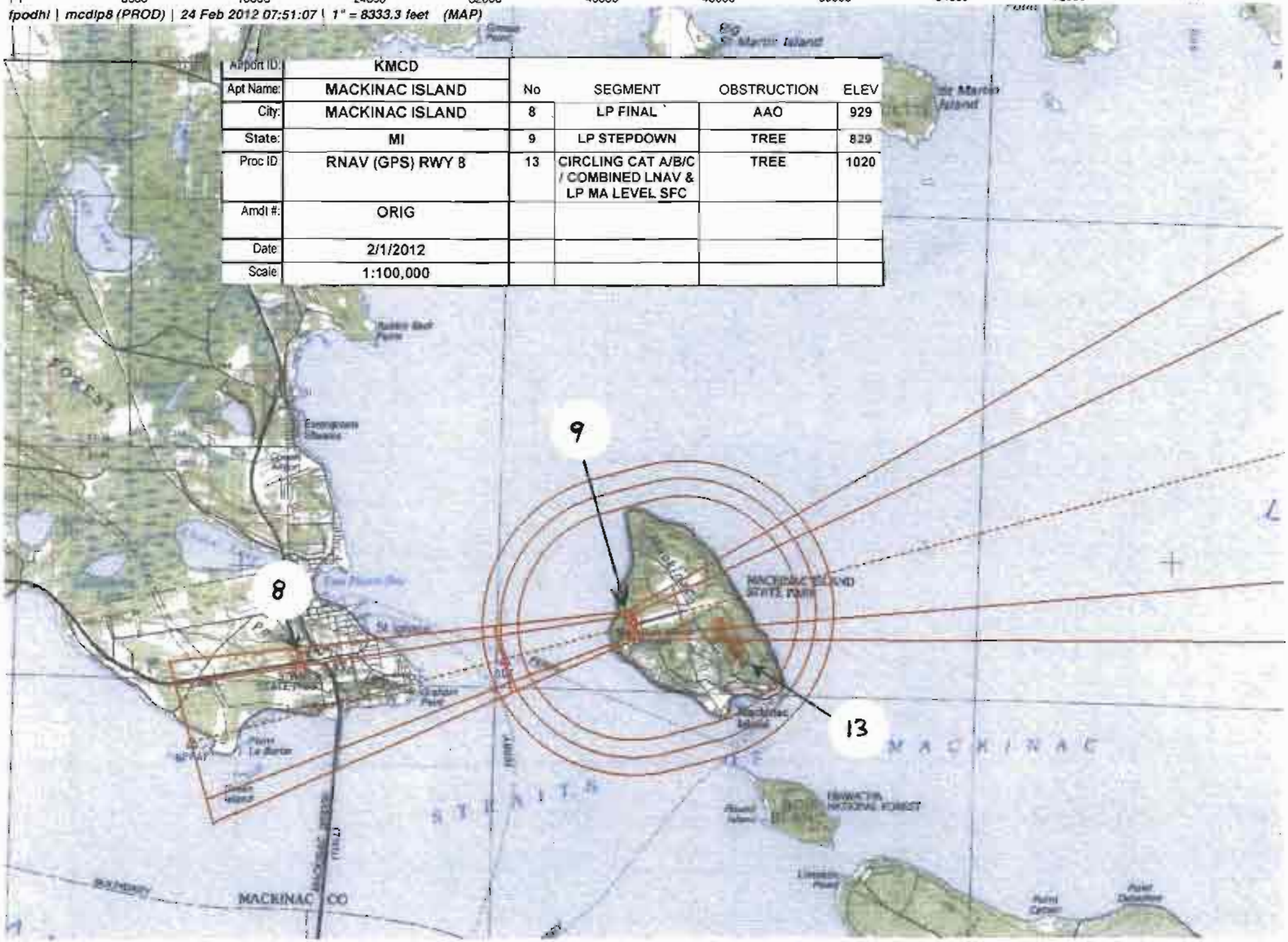
No	SEGMENT	OBSTRUCTION	ELEV
1	PLN FEEDER / WAKMA INITIAL	TOWER	1473
3	PINES FEEDER	TOWER	1129
6	INTERMEDIATE	TOWER	939
8	LNAV FINAL	AAO	929
10	LNAV STEPDOWN	TREE	859
11	HOLD IN LIEU	AAO	889
13	MA LEVEL SFC	TREE	1020
@	MA HOLDING	AAO	955

NM 1 2 3 4 5 6 7 8 9 10 11 12 13 14

FT 8000 16000 24000 32000 40000 48000 56000 64000 72000 80000

fpodhl | mcdlp8 (PROD) | 24 Feb 2012 07:51:07 | 1" = 8333.3 feet (MAP)

Airport ID:	KMCD				
Apt Name:	MACKINAC ISLAND	No	SEGMENT	OBSTRUCTION	ELEV
City:	MACKINAC ISLAND	8	LP FINAL	AAO	929
State:	MI	9	LP STEPDOWN	TREE	829
Proc ID	RNAV (GPS) RWY 8	13	CIRCLING CAT A/B/C / COMBINED LNAV & LP MA LEVEL SFC	TREE	1020
Amdt #:	ORIG				
Date	2/1/2012				
Scale	1:100,000				



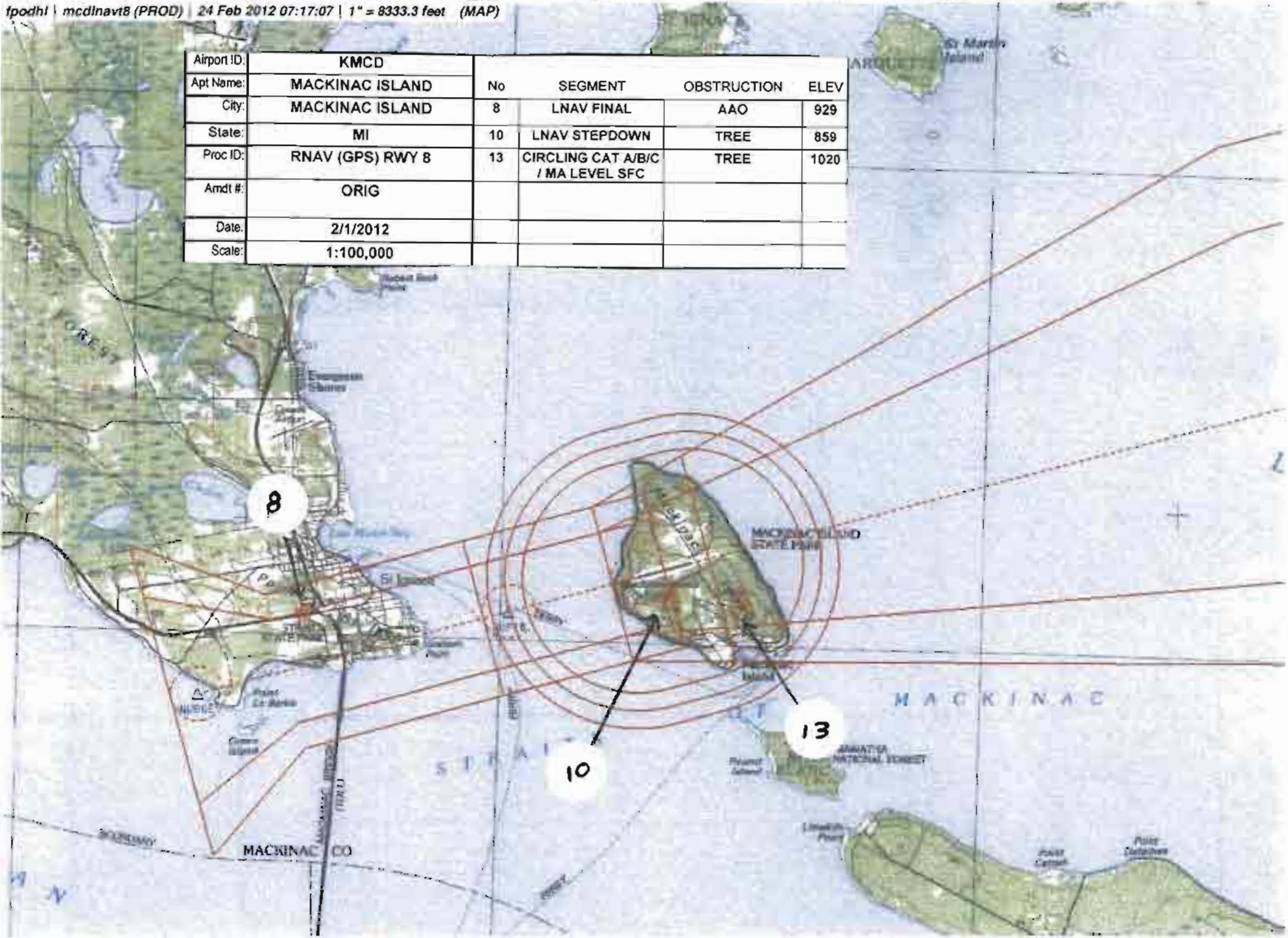
NM 1 2 3 4 5 6 7 8 9 10 11 12 13 14

FT 8000 16000 24000 32000 40000 48000 56000 64000 72000 80000

fpodhl | mcdlnavt8 (PROD) | 24 Feb 2012 07:17:07 | 1" = 8333.3 feet (MAP)

Airport ID:	KMCD
Apt Name:	MACKINAC ISLAND
City:	MACKINAC ISLAND
State:	MI
Proc ID:	RNAV (GPS) RWY 8
Amdt #:	ORIG
Date:	2/1/2012
Scale:	1:100,000

No	SEGMENT	OBSTRUCTION	ELEV
8	LNAV FINAL	AAO	929
10	LNAV STEPDOWN	TREE	859
13	CIRCLING CAT A/B/C / MA LEVEL SFC	TREE	1020



US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33

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TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
PLN VORTAC	ZIMUX (FB)	298.37 / 9.86	2600
PINES	WAKMA (FO)	241.71 / 22.71	2500
ZIMUX (IAF)	WAKMA (NOPT) (FB)	352.09 / 7.50	2500
WAKMA (IF/IAF)	NUBKE (FB)	082.06 / 7.20	2400
NUBKE (FAF)	JUPIB/1.50 NM TO RW08 (FB)	082.17 / 3.64	
JUPIB/1.50 NM TO RW08	RW08 (MAP) (FO)	082.24 / 1.50	
(SEE FORM 8260-10)			

MISSED APPROACH

LP: RW08
LNAV: RW08

CLIMB TO 2500 DIRECT HUVTI AND HOLD.

ADDITIONAL FLIGHT DATA:
HOLD E, RT, 262.46 INBOUND.
CHART FAS OBST: 829 TREE 455153N/0843840W
CHART FAS OBST: 859 TREE 455134N/0843807W
NUBKE TO RW08: 3.00/40.
WAAS CHANNEL # 63129
REFERENCE PATH ID: W08A
LTP HAE: 185.2 M

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. HOLD W WAKMA, RT, 082.06 INBOUND, 2500 FT. IN LIEU OF PT (IAF)
3. FAC: 082.18 FAF: NUBKE DIST FAF TO MAP: 5.14 THLD: 5.14
4. MIN. ALT: WAKMA 2500, NUBKE 2400, JUPIB/1.50 NM TO RW08 1240
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: ____ GS ALT AT: ____ OM: ____ MM: ____ IM: ____
7. GS ANGLE: ____ TCH: 34:1 IS NOT CLEAR
8. MSA FROM: RW08 3000

MAG VAR: 7W EPOCH YEAR: 2000

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT | ALTERNATE: N A | STANDARD @

CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LP MDA	1080	1	356	1080	1	356	1080	1	356		NA				
LNAV MDA	1120	1	396	1120	1	396	1120	1 1/8	396		NA				
CIRCLING	1320	1	581	1320	1	581	1320	1 1/2	581		NA				

NOTES:
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PELLSTON ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET, INCREASE LP CAT C VISIBILITY 1/8 MILE, LNAV AND CIRCLING CAT C VISIBILITY 1/4 MILE.
CHART NOTE: WHEN VGSI INOP, CIRCLING TO RWY 26 NA AT NIGHT.
CHART NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 8 PROCEDURE NA AT NIGHT.
(SEE FORM 8260-10)

@ NA WHEN LOCAL WEATHER NOT AVAILABLE.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 739 THRE: 724 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
MACKINAC ISLAND, MI	MACKINAC ISLAND	RNAV	RNAV (GPS) RWY 8, ORIG	AMDT: NONE
				DATED

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[ ]	[ ]	[X]	[ ]	[X]	[X]	[X] **ZMP, AMGR**

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME: **DONALD H. LANIER**	FIFO **AJV-353**	DATE: **02/23/2012**
APPROVED BY		
NAME: **LARRY H STROUT** **MANAGER**	FIFO **AJV-353**	DATE:

CHANGES:

1. ORIG.

REASONS:

1. FPT REQUEST.

QUALITY CHECKED

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW08 (MAP)	1080 MSL	082.24	
1080 MSL	HUVTI (FO)		2500

NOTES, (CONT.):
CHART NOTE: DME/DME RNP-0.3 NA.
CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON PLN VORTAC AIRWAY RADIALS 219 CW 295.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 739 THRE: 724	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
MACKINAC ISLAND, MI	AIRPORT NAME: MACKINAC ISLAND	RNAV	RNAV (GPS) RWY 8, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

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FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
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	455149.3790N
LTP/FTP LONGITUDE	0843838.3475W
LTP/FTP ELLIPSOIDAL HEIGHT	+01852
FPAP LATITUDE	455212.0300N
FPAP LONGITUDE	0843635.0300W
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	1680
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	475E4527

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02207
FPAP ORTHOMETRIC HEIGHT	+02207

QUALITY CHECKED

CITY AND STATE	ELEVATION: 739 THRE: 724	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
MACKINAC ISLAND, MI	AIRPORT NAME: MACKINAC ISLAND	RNAV	RNAV (GPS) RWY 8, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC PACKET - 424-18 - RNAV (GPS)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        PLN   K5011180VTLA N45375032W084395082    N45375032W084395082W0060008361     NARPELLSTON

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   HUVTI K50    W     N45544990W084220885                    W0073     NAR           HUVTI
        SUSAEAENRT   JUPIB K50    W     N45512647W084404289                    W0071     NAR           JUPIB
        SUSAEAENRT   NUBKE K50    W     N45503076W084454471                    W0070     NAR           NUBKE
        SUSAEAENRT   PINES K50    C   L N46014961W084291225                    W0073     NAR           PINES
        SUSAEAENRT   WAKMA K50    W     N45483977W084554201                    W0068     NAR           WAKMA
        SUSAEAENRT   ZIMUX K50    W     N45412505W084525651                    W0068     NAR           ZIMUX

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMCDK5AMCD     0     035YHN45515380W084381440W007000739         1800018000C    MNAR    MACKINAC ISLAND

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMCDK5FR08   APINES 010PINESK5EA0E       IF                                          18000                A JS
        SUSAP KMCDK5FR08   APINES 020WAKMAK5EA0EY   020TF                    24170227    + 02500                         A JS
        SUSAP KMCDK5FR08   APINES 030WAKMAK5EA0EE AR   HF                    08210040    + 02500                         A JS
        SUSAP KMCDK5FR08   APLN   010PLN  K5D 0V       IF                                          18000                A JS
        SUSAP KMCDK5FR08   APLN   020ZIMUXK5EA0E  A 020TF                    29840099    + 02600                         A JS
        SUSAP KMCDK5FR08   APLN   030WAKMAK5EA0EE B 010TF                    35210075    + 02500                         A JS
        SUSAP KMCDK5FR08   R      010WAKMAK5EA0E  I    IF                                + 02500     18000               A JS
        SUSAP KMCDK5FR08   R      020NUBKEK5EA1E  F 051TF                    08210072    + 02400                 RW08  K5PGA JS
        SUSAP KMCDK5FR08   R      020NUBKEK5EA2WALP        N          ALNAV                                                JS
        SUSAP KMCDK5FR08   R      021JUPIBK5EA0E S  031TF                    08220036    V 0124001242        -300         A JS
        SUSAP KMCDK5FR08   R      030RW08 K5PG0GY M 031TF                    08220015      00764             -300         A JS
        SUSAP KMCDK5FR08   R      040         0  M     CA                    0822        + 01080                         A JS
        SUSAP KMCDK5FR08   R      050HUVTIK5EA0EY      DF                                + 02500                         A JS
        SUSAP KMCDK5FR08   R      060HUVTIK5EA0EE  R   HM                    26250040    + 02500                         A JS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMCDK5GRW08    0035000823 N45514938W084383835+0400    +0185200724000040075R

                 1         2         3         4         5         6         7         8         9         0         1         2         3
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 739 THRE: 724	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
MACKINAC ISLAND, MI	AIRPORT NAME: MACKINAC ISLAND	RNAV	RNAV (GPS) RWY 8, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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```
PP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMCDK5PR08   RW08 001 0000W08A0N4551493790W08438383475+018520300N4552120300W084363503001067516800004 00F400000475E4527
        SUSAP KMCDK5PR08   RW08 002E      +02207+02207LP        63129

                  1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMCDK5SRW08 K5PG               0   18018003025                                                                          M
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 739 THRE: 724	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
MACKINAC ISLAND, MI	AIRPORT NAME: MACKINAC ISLAND	RNAV	RNAV (GPS) RWY 8, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC SUMMARY - 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	PINES	PINES	010		IF		FB					
	PINES	WAKMA	020		TF		FO	2.0	241.7(234.7T)	022.7	AA 02500	
	PINES	WAKMA	030	IAF	HF	R	FO		082.1(075.1T)	004.0	AA 02500	
	PLN	PLN	010		IF		FB					
	PLN	ZIMUX	020	IAF	TF		FB	2.0	298.4(291.4T)	009.9	AA 02600	
	PLN	WAKMA	030		TF		FB	1.0	352.1(345.1T)	007.5	AA 02500	
		WAKMA	010	FACF	IF		FB				AA 02500	
		NUBKE	020	FAF	TF		FB	0.5	082.1(075.1T)	007.2	AA 02400	
		JUPIB	021	SDF	TF		FB	0.3	082.2(075.2T)	003.6	AA 01240 GS 01242	
		RW08	030	MAP	TF		FO	0.3	082.2(075.2T)	001.5	AT 00764	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		082.2(075.2T)		AA 01080	
	HUVTI	050		DF		FO				AA 02500	
	HUVTI	060		HM	R	FO		262.5(255.5T)	004.0	AA 02500	

POINT DATA

WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
PLN	N453750.32	W0843950.82	N4537.839	W08439.847
HUVTI	N455449.90	W0842208.85	N4554.832	W08422.148
JUPIB	N455126.47	W0844042.89	N4551.441	W08440.715
NUBKE	N455030.76	W0844544.71	N4550.513	W08445.745
PINES	N460149.61	W0842912.25	N4601.827	W08429.204
WAKMA	N454839.77	W0845542.01	N4548.663	W08455.700
ZIMUX	N454125.05	W0845256.51	N4541.418	W08452.942
RW08	N455149.38	W0843838.35	N4551.823	W08438.639

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW08	00724	40

QUALITY CHECKED

CITY AND STATE	ELEVATION: 739 THRE: 724	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
MACKINAC ISLAND, MI	AIRPORT NAME: MACKINAC ISLAND	RNAV	RNAV (GPS) RWY 8, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FEEDER	PLN VORTAC	ZIMUX	1. TOWER (26-002394)	454114.00N/0845358.00W	1473 (5D)	1000		2500
			2. TERRAIN	454000.00N/0845139.00W	1050 (1100)		AS1500	2600
FEEDER	PINES	WAKMA	3. TOWER (26-002543)	455328.00N/0844938.00W	1129 (5D)	1000	AT371	2500
			4. TERRAIN	455342.00N/0844903.00W	758 (800)		AS1500	2300
INITIAL	ZIMUX	WAKMA	1. TOWER (26-002394)	454114.00N/0845358.00W	1473 (5D)	1000		2500
			5. TERRAIN	454114.00N/0845358.00W	973 (1000)		AS1500	2500
INTERMEDIATE	WAKMA (IF/IAF)	NUBKE	6. TOWER (26-002947)	455126.00N/0844643.00W	939 (4D)	500	AT961	2400
			7. TERRAIN	455127.00N/0844645.00W	699 (700)		AS1500	2200
FINAL: LP	NUBKE	JUPIB/1.50 NM TO RW08	8. AAO	455122.20N/0844403.52W	929 (2C)	250	RA46	1240
FINAL: LP STEPDOWN	JUPIB/1.50 NM TO RW08	RW08	9. TREE	455152.68N/0843839.75W	829 (2C)	250		1080
FINAL: LNAV	NUBKE	JUPIB/1.50 NM TO RW08	8. AAO	455122.20N/0844403.52W	929 (2C)	250	RA46	1240
2. HOLD-IN-LIEU-OF-PT	WAKMA	P-5	11. AAO	454448.00N/0845230.00W	889 (4E)	1000	AT611	2500
			12. TERRAIN	454448.00N/0845233.00W	689 (700)		AS1500	2200
3. MISSED APPROACH MAP:	RW08 / RW08	HUVTI				ASC		2500
			13. TREE	455130.00N/0843658.00W	1020 (2B)	1000		2100
ELEV:	980/1020		14. TERRAIN	455145.00N/0843718.00W	899 (900)		AS1500	2400

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL		OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
CATEGORY A	1.3 NM	350		581	13. TREE	455130.00N/0843658.00W	1020 (2C)	300		1320
CATEGORY B	1.5 NM	450		581	13. TREE	455130.00N/0843658.00W	1020 (2C)	300		1320
CATEGORY C	1.7 NM	450		581	13. TREE	455130.00N/0843658.00W	1020 (2C)	300		1320
CATEGORY D	2.3 NM	550								
CATEGORY E	4.5 NM	550								

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: RW08

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	MSA
360-360	TWR (26-001472)	224/ 27.2	1910 (5E)	3000					

QUALITY CHECKED

CITY AND STATE	ELEVATION: 739 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
MACKINAC ISLAND, MI	MACKINAC ISLAND	RNAV	RNAV (GPS) RWY 8, ORIG	AGL

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE		3. ALTIMETER SETTING
ZMP ARTCC	N W S	OTHER: AWOS-3	SOURCE: KMCD / KPLN
	F A A		DISTANCE: 0 / 18.88
SATISFACTORY ON:	A / C		HOURS REMOTE OPERATION: 24 / 24
X V H F X U H F H F	LOCATION: KMCD		ADJUSTMENT: 0 / 46

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	
5. APPROACH & RUNWAY LIGHTING		ALS
		(S) SALS
		MALS
		HIRL
	X	MIRL 08 (PCL), 26 (PCL)
	X	REIL 08 (PCL), 26 (PCL)
		TDZ
		C/LINE
	X	OTHER (SPECIFY) PAPI-4L 08 (PCL), 26 (PCL)
6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	NPI-F 08, 26
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:
9. FINAL APPROACH COURSE AIMING	X	RUNWAY THRESHOLD FT. FROM THRESHOLD
	X	ON CENTERLINE FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: DONALD H. LANIER	DATE: 02/23/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-353

PART C - REMARKS:

VDP NOT ESTABLISHED - OBSTACLES PENETRATE THE 20:1.

PARA 251, 20:1 PENETRATION.

PARA 251, 34:1 PENETRATION.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

KMCD AWOS AND KPLN ASOS ON SERVICE A.

VGSI DATA: 3.50/20.

RASS PRESSURE PATTERNS SAME
KMCD 739, KPLN 721
RA=45.98.

SEE ATTACHED AIRSPACE LETTER.

TERPS, VOLUME 1, VISUAL PORTION OF FINAL PENETRATIONS:
RWY 8 20:1
809 TREE 451449.68N/0843847.66W (63.44)
809 TREE 455145.62N/0843848.05W (56.88)
734 VEHICLE ON ROAD 455148.69N/0843843.27W (2.18)

RWY 8 34:1
809 TREE 451449.68N/0843847.66W (72.28)
809 TREE 455145.62N/0843848.05W (68.41)
734 VEHICLE ON ROAD 455148.69N/0843843.27W (5.36)

RWY 26 20:1 (TOO NUMEROUS, TOP 10 LISTED, FPT NOTIFIED OF ALL):
805 TREE (KMCDT0036) 455202.68N/0843748.21W (64.03)
803 TREE (KMCDT0153) 455155.56N/0843744.01W (56.82)
801 TREE (KMCDT0037) 455202.68N/0843746.49W (54.15)
824 TREE (KMCDT0009) 455155.65N/0843736.86W (53.25)
829 TREE (KMCDT0007) 455156.76N/0843735.24W (51.28)
840 TREE (KMCDT0130) 455157.09N/0843731.18W (47.97)
833 TREE (KMCDT0131) 455157.12N/0843733.00W (47.15)
797 TREE (KMCDT0147) 455156.12N/0843742.62W (45.35)
816 TREE (KMCDT0004) 455157.29N/0843736.99W (43.58)
846 TREE (KMCDT0126) 455156.92N/0843726.95W (39.72)

LP & LNAV INTERMED SEGMENTS HAVE SAME CONTROLLING OBSTACLE.

REQUEST FC 4D ON OBS #6, 939 MSL TOWER 455126.00N/0844643.00W (26-002947).

FEEDERS DEVELPOED PER FPT.

WHEN VGSI INOP, STRAIGHT-IN AND CIRCLING TO RWY 8/26 NA AT NIGHT DUE TO 20:1 PENETRATIONS.

USED 100' VEGETATION PER FPT.

QUALITY CHECKED 6

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FINAL: LNAV STEPDOWN	JUPIB/1.50 NM TO	RW08	10. TREE	455133.54N/0843807.37W	859 (2C)	250		1120
	RW08							

3. MISSED APPROACH										
	MAP:									
	ELEV:									

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL							
CATEGORY A	1.3 NM	350								
CATEGORY B	1.5 NM	450								
CATEGORY C	1.7 NM	450								
CATEGORY D	2.3 NM	550								
CATEGORY E	4.5 NM	550								

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

QUALITY CHECKED

CITY AND STATE	ELEVATION: 739 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
MACKINAC ISLAND, MI	MACKINAC ISLAND	RNAV	RNAV (GPS) RWY 8, ORIG	AGL

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
SATISFACTORY ON:	N W S / F A A / A / C — OTHER:	SOURCE:
		DISTANCE:
		HOURS REMOTE OPERATION:
V H F / U H F / H F	LOCATION:	ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	

5. APPROACH & RUNWAY LIGHTING		**ALS**
		(S) SALS
		MALS
		HIRL
		MIRL
		REIL
		TDZ
		C/LINE
		OTHER (SPECIFY)

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:

9. FINAL APPROACH COURSE AIMING		RUNWAY THRESHOLD	FT. FROM THRESHOLD
		ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

RADIO FIX AND HOLDING DATA RECORD

NAME: HUVTI **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 455449.90N/0842208.85W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

HOLDING: **HOLDING TYPE OF ACTION:** ESTABLISH

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	E		WP	082.46	262.46	R		4	2500	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	460048.00N/0841106.00W	955	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 26		1	KMCD	MACKINAC ISLAND	MI (US)
IAP	RNAV (GPS) RWY 8		1	KMCD	MACKINAC ISLAND	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 02/09/2012 **OFFICE:** AJV-353 **NAME:** DONALD LANIER

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: JUPIB **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 455126.47N/0844042.89W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 8			KMCD	MACKINAC ISLAND	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 02/23/2012 **OFFICE:** AJV-353 **NAME:** DONALD LANIER

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: NUBKE **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 455030.76N/0844544.71W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

REMARKS:
8260.54A PFAF LOCATION.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 8			KMCD	MACKINAC ISLAND	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 02/09/2012 **OFFICE:** AJV-353 **NAME:** DONALD LANIER

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: PELLSTON VORTAC **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 453750.32N/0843950.82W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PELLSTON	PLN	VORTAC	L							17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NE	PLN	VORTAC	066.00	246.00	R	1		2400	10000	4	9
2	W	PLN	VORTAC	262.15	082.15	R	1		2800	10000	4	9
3	S	PLN	VORTAC	191.66	011.66	R	1		2400	10000	4	9
4	NE	PLN	VORTAC	046.61	226.61	R	1		3000	10000	4	9
5	NE	PLN	VORTAC	063.00	243.00	R	1		2400	10000	4	9
6	NE		WP	066.00	246.00	R		4	2400	10000	5	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	AAO	453233.00N/0845142.00W	1349	4E
1	200	TOWER (26-001896)	453923.00N/0843742.00W	1200	5D
2	200	AAO	453239.00N/0845118.00W	1273	4E
3	200	TOWER (26-001896)	453923.00N/0843742.00W	1200	5D
4	200	TOWER (26-001896)	453923.00N/0843742.00W	1200	5D
5	200	TOWER (26-001896)	453923.00N/0843742.00W	1200	5D
6	200	TOWER (26-001896)	453923.00N/0843742.00W	1200	5D

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V193					(US)
EN ROUTE	V193-320					(US)
EN ROUTE	V233					(US)
EN ROUTE	V609					(US)
EN ROUTE	V78					(US)
IAP	NDB RWY 27			KSJX	BEAVER ISLAND	MI (US)
IAP	RNAV (GPS) RWY 27			KSJX	BEAVER ISLAND	MI (US)
IAP	RNAV (GPS) RWY 9			KN98	BOYNE CITY	MI (US)
IAP	RNAV (GPS) RWY 17			KBFA	BOYNE FALLS	MI (US)
IAP	RNAV (GPS) RWY 27			KCVX	CHARLEVOIX	MI (US)
IAP	RNAV (GPS) RWY 9			KCVX	CHARLEVOIX	MI (US)
IAP	RNAV (GPS) RWY 10			KSLH	CHEBOYGAN	MI (US)
IAP	RNAV (GPS) RWY 28			KSLH	CHEBOYGAN	MI (US)
IAP	VOR RWY 10		2	KSLH	CHEBOYGAN	MI (US)
IAP	VOR-A		4	KMGN	HARBOR SPRINGS	MI (US)
IAP	RNAV (GPS) RWY 26			KMCD	MACKINAC ISLAND	MI (US)
IAP	RNAV (GPS) RWY 8			KMCD	MACKINAC ISLAND	MI (US)
IAP	VOR/DME-A		3	KMCD	MACKINAC ISLAND	MI (US)
IAP	ILS OR LOC RWY 32		1	KPLN	PELLSTON	MI (US)
IAP	RNAV (GPS) RWY 23			KPLN	PELLSTON	MI (US)
IAP	RNAV (GPS) RWY 32		6	KPLN	PELLSTON	MI (US)
IAP	VOR RWY 23		1	KPLN	PELLSTON	MI (US)
IAP	VOR/DME RWY 5		5	KPLN	PELLSTON	MI (US)
IAP	RNAV (GPS) RWY 27			KPZQ	ROGERS CITY	MI (US)
IAP	RNAV (GPS) RWY 9			KPZQ	ROGERS CITY	MI (US)
IAP	NDB RWY 34			KCIU	SAULT STE MARIE	MI (US)
IAP	RNAV (GPS) RWY 27			KCIU	SAULT STE MARIE	MI (US)
IAP	RNAV (GPS) RWY 9			KCIU	SAULT STE MARIE	MI (US)
IAP	RNAV (GPS) RWY 25			K83D	ST. IGNACE	MI (US)
IAP	RNAV (GPS) RWY 7			K83D	ST. IGNACE	MI (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 14 **DATE OF REVISION:** 07/26/2012

QUALITY CHECKED

REASON FOR REVISION:
UPDATED FIX USE.
CHANGED HOLDING PAT 3 CRS INBOUND FROM 11.65 TO 11.66.
CHANGED HOLDING PAT 2 CONTROLLING OBSTACLE DATA.

DEVELOPED BY:	**DATE:** 02/08/2012	**OFFICE:** AJV-353	**NAME:** DONALD LANIER
APPROVED BY:	**DATE:**	**OFFICE:** AJV-353	**NAME:** LARRY STROUT
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: APN APP CON
OTHER: AIRPORT MANAGER

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WAKMA **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 454839.77N/0845542.01W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

HOLDING: **HOLDING TYPE OF ACTION:** ESTABLISH

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	W		WP	262.06	082.06	R		4	2500	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	454448.00N/0845233.00W	889	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 26		1	KMCD	MACKINAC ISLAND	MI (US)
IAP	RNAV (GPS) RWY 8		1	KMCD	MACKINAC ISLAND	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 02/09/2012 **OFFICE:** AJV-353 **NAME:** DONALD LANIER

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ZIMUX **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 454125.05N/0845256.51W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 8			KMCD	MACKINAC ISLAND	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 02/09/2012 **OFFICE:** AJV-353 **NAME:** DONALD LANIER

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: PINES **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 460149.61N/0842912.25W **TYPE:** WP, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

INFO ONLY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SAULT STE MARIE	SSM	VOR/DME	H	201.42	197.42	24.00	24.00		3000	17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	S	SSM	VOR/DME	201.42	021.42	R	1-1 1/2		3000	17500	5	17
2	SW		WP	203.30	023.30	R		4	3000	17500	5	17

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (26-002545)	460427.00N/0842747.00W	1357	5D
2	200	TOWER (26-002545)	460427.00N/0842747.00W	1357	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V193	1				(US)
IAP	RNAV (GPS) RWY 10			KSLH	CHEBOYGAN	MI (US)
IAP	RNAV (GPS) RWY 23			KPLN	PELLSTON	MI (US)
IAP	RNAV (GPS) RWY 32			KANJ	SAULT STE MARIE	MI (US)
IAP	ILS RWY 16	1	1	KCIU	SAULT STE MARIE	MI (US)
IAP	RNAV (GPS) RWY 16		2	KCIU	SAULT STE MARIE	MI (US)
IAP	RNAV (GPS) RWY 34			KCIU	SAULT STE MARIE	MI (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11 **DATE OF REVISION:** 08/25/2011

REASON FOR REVISION:
FIX USE UPDATED.
PAT 1 CONTROLLING OBSTRUCTION AC CHANGED FROM 4D TO 5D.
PAT 2 CONTROLLING OBSTRUCTION AC CHANGED FROM 4D TO 5D.

DEVELOPED BY: **DATE:** 02/15/2011 **OFFICE:** AJV-353 **NAME:** JOSE ALFONSO (ANKUR VERMA)

APPROVED BY: **DATE:** 06/02/2011 **OFFICE:** AJV-353 **NAME:** GREGORY YAMAMOTO

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER: TORONTO CENTER

QUALITY CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **MACKINAC ISLAND** STATE: **MI**

AIRPORT NAME: **MACKINAC ISLAND** ID: **KMCD**

PROCEDURE: **RNAV (GPS) RWY 8** AMDT: **ORIG**

DOCKET#: **NOT REQUIRED**
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD** to 1000' point **3.14**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.20**
   (Enter appropriate segment, final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **075.18**
4. High Terrain in **FINAL** segment containing 1000' point **759**
5. Distance from **THLD** to 1500' point **4.94**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **1.95**
7. True Course of **FINAL** segment containing 1500' point **075.18**
8. High Terrain in **FINAL** segment containing 1500' point **759**
9. Threshold Coordinates (if straight-in) ... **455149.38N** / **0843838.35W**
10. ARP Coordinates ..... **455153.80N** / **0843814.40W**
11. Runway Approach End and distance furthest from ARP ..... RWY **8**
    Distance **0.29** NM
12. FAF Coordinates ..... **455030.76N** / **0844544.71W**

REMARKS: Approach/Drawing attached.