Flight Procedure Tracking Form

Action:	Task Type:	Date Open:	Task #:	Request #:
FLIGHT CHECK	IAP	06/13/2011	2011061321480323001	20110613214803

Procedure: RNAV (GPS) RWY 1 ORIG

Airport ID: KSAW **Airport:** SAWYER INTL **Reimbursable #:**

City: MARQUETTE **ST:** MI LPV **GPS #:** **Estimated Chart Date:** 03/07/2013 **FICO #:**

Fac ID: **Fac. Type:** LPV **Specialist:** MICHAEL GARRITY

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	07/17/2012	09/07/2012	KYLE THOMPSON	
QA:	09/07/2012	09/11/2012	DAVID PUGLISI	
Liaison:	09/11/2012		Spurlin	

P1

Procedure Comments: **Remark Type:** INFORMATION

pkg 1 of 1

MADISON, MS BRUCE CAMPBELL FIELD (KMBO) RNAV (GPS) RWY 1, ORIG (LPV) ENROUTE-NO FC: 11.27.12 PUB: 1.10.13

ATTACHED FORMS: 8260-3; 8260-10; 8260-9; 8260-2(S): EVYIP-INT, REV 2; FOLUK, ORIG; (INFO ONLY) ZUCTI, REV 1.

CONTACT: DON SMITH/MARLON ROBINSON-AJV-352 LEADS, 405.954.1036 / 405.954.3636.

RNAV (GPS) RWY 1

MARQUETTE/ SAWYER INTL (SAW)

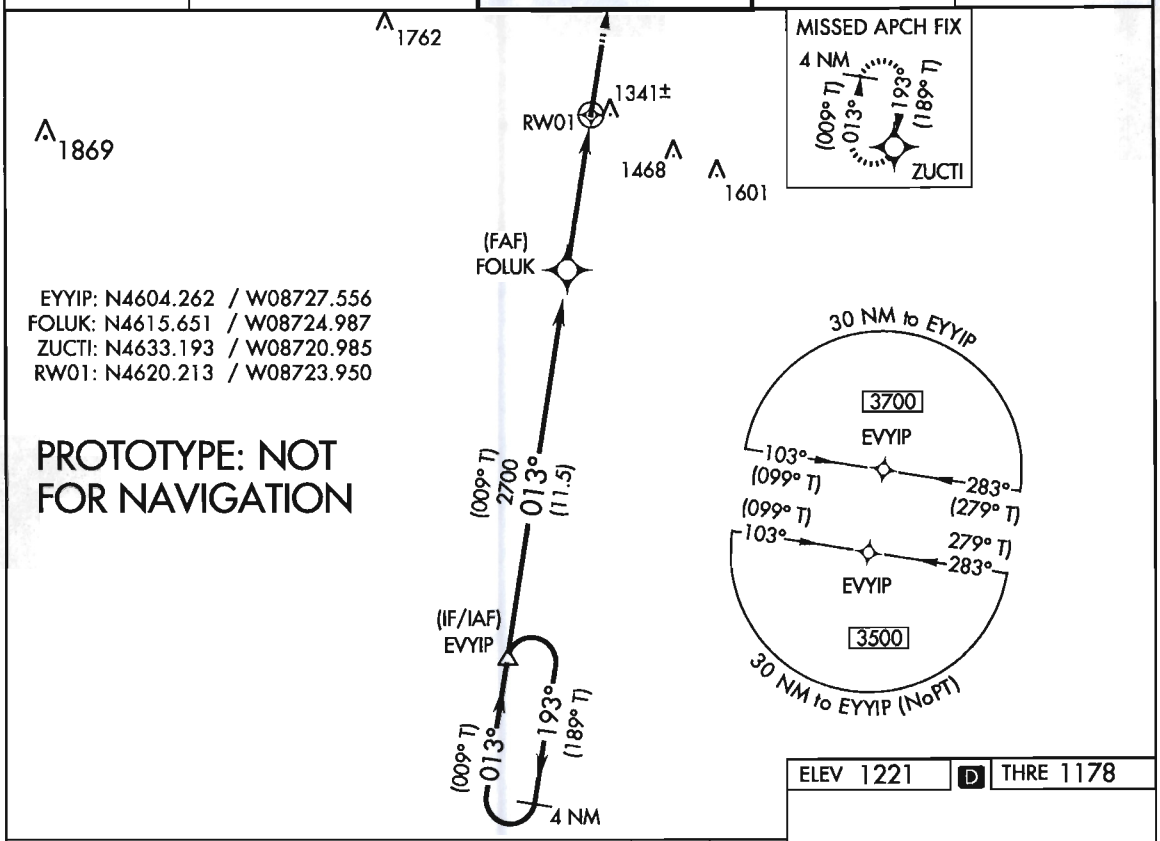
WAAS CH 97431 W01A	APP CRS 013°	Rwy Idg 12366 THRE 1178 Apt Elev 1221

T A DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17C (2F) or above 54C (130F). When local altimeter setting not received, use Ford altimeter setting; increase all DA 107 ft and LNAV/VNAV visibility all Cats 3/8 mile; increase all MDA 120 ft, LNAV visibility Cats C and D 3/8 mile, and Circling visibility Cats C and D 1/4 mile. For inoperative MALSR; when using Ford altimeter setting, increase LPV all Cats to 1 mile. VDP and Baro-VNAV NA with Ford altimeter setting.

MALSR

MISSED APPROACH: Climb to 3500 direct ZUCTI and hold.

AWOS-3	MINNEAPOLIS CENTER	SAWYER TOWER ★	GND CON	UNICOM
118.375	119.1 290.2	119.975 (CTAF) L	121.65	122.7

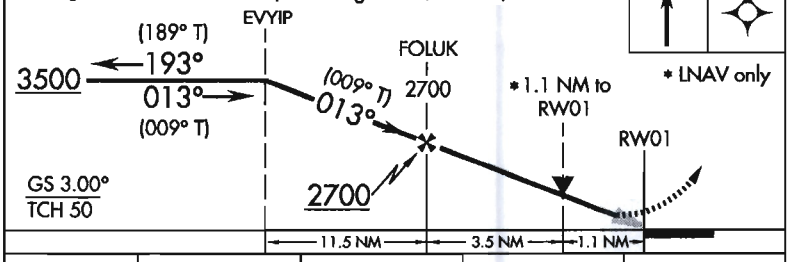


ELEV 1221 D THRE 1178

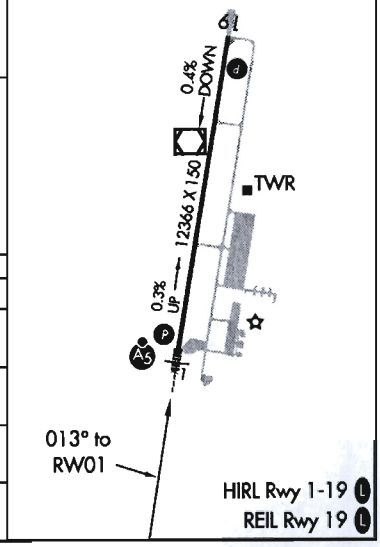
4 NM Holding Pattern

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 69).

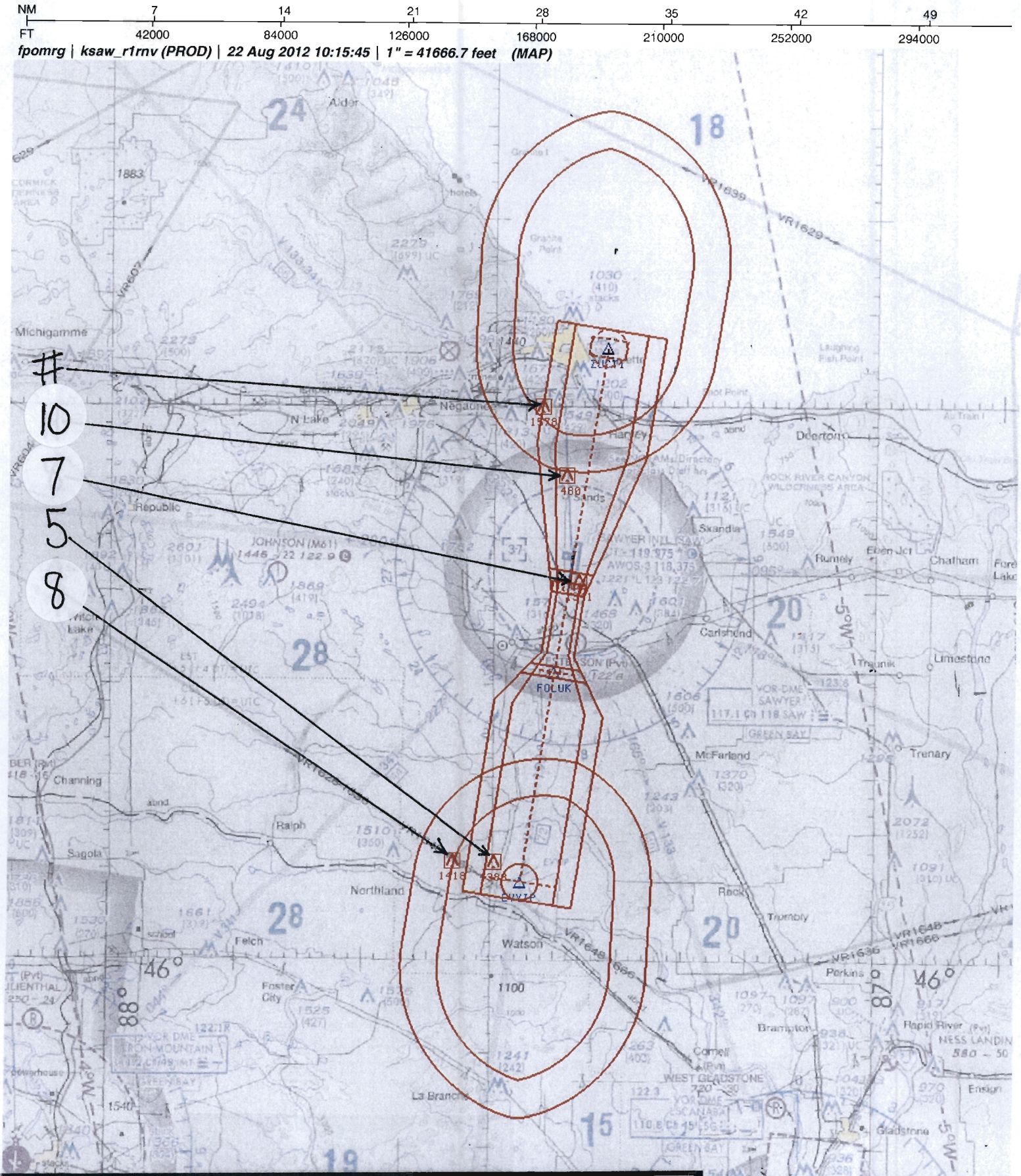
3500 ZUCTI



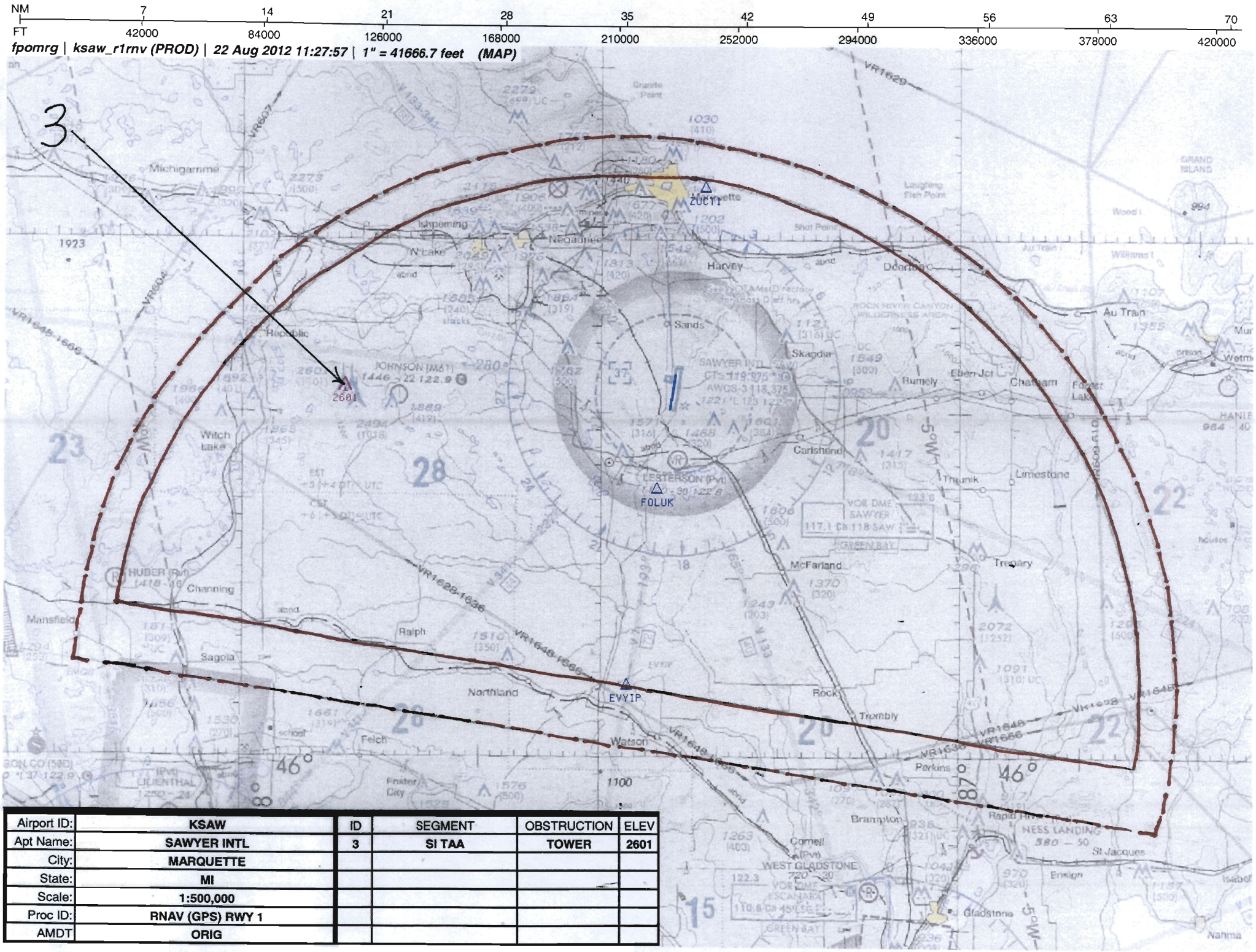
* LNAV only



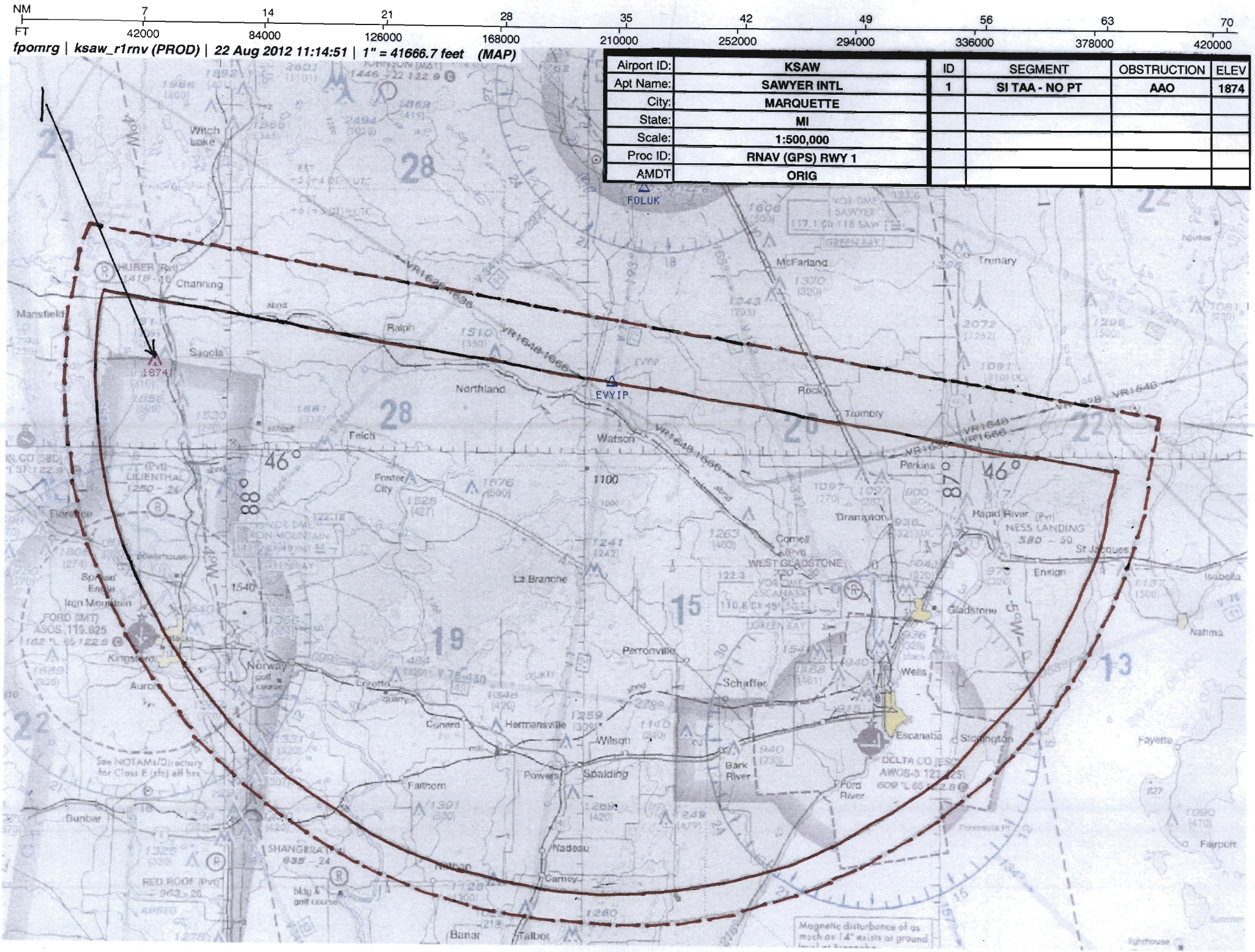
CATEGORY	A	B	C	D
LPV DA	1378-½ 200 (200-½)			
LNAV/ VNAV DA	1502-⅝ 324 (300-⅝)			
LNAV MDA	1600-½ 422 (400-½)		1600-¾ 422 (400-¾)	
CIRCLING	1720-1 499 (500-1)		1720-1½ 499 (500-1½)	1780-2 559 (600-2)



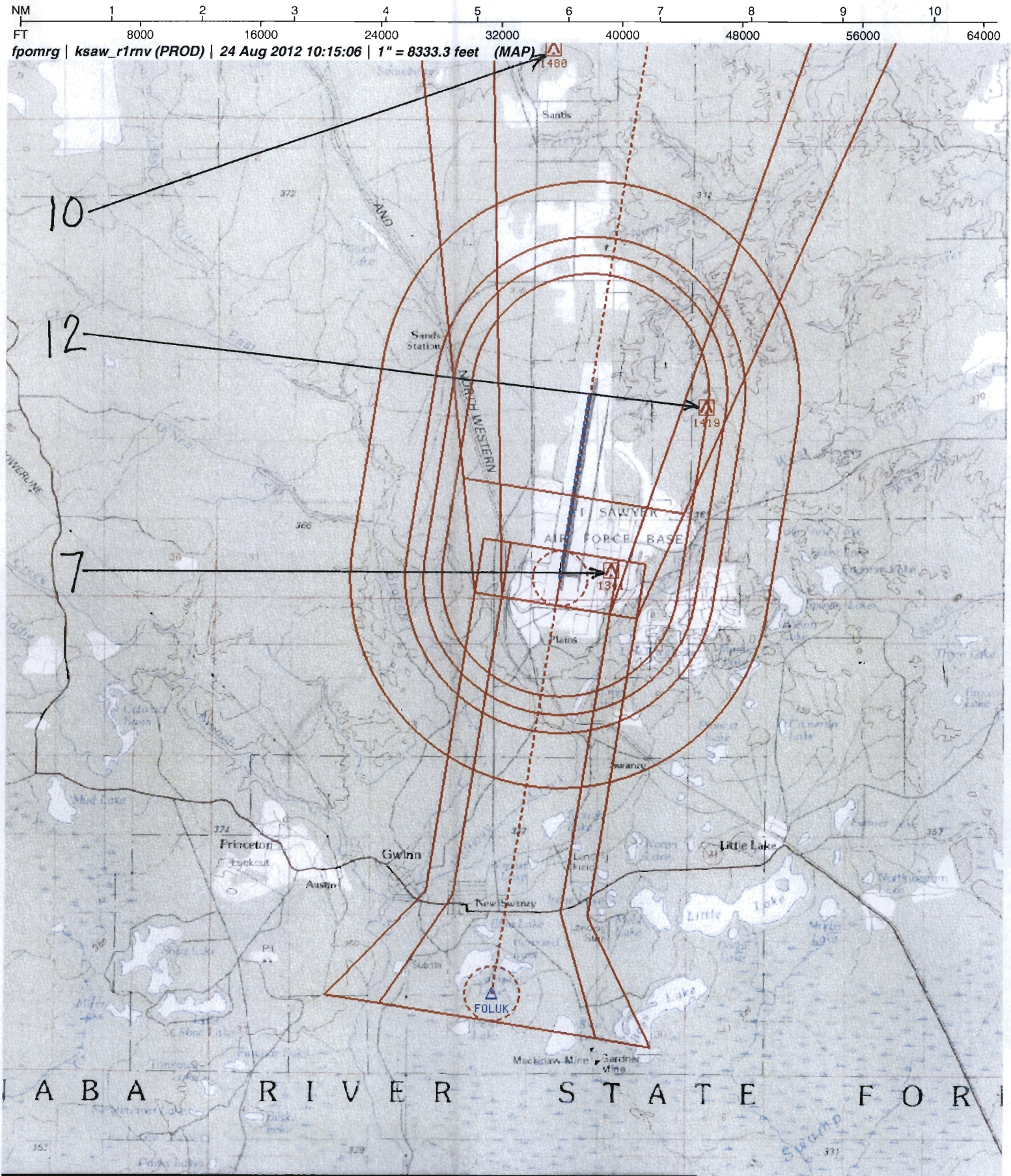
Airport ID:	KSAW	ID	SEGMENT	OBSTRUCTION	ELEV
Apt Name:	SAWYER INTL	5	INTERMEDIATE	AAO	1388
City:	MARQUETTE	7	LNAV FINAL	H20 TWR ANT	1341
State:	MI	8	HIL	AAO	1418
Scale:	1:500,000	10	MA	AAO	1480
Proc ID:	RNAV (GPS) RWY 1	#	HOLDING	AAO	1578
AMDT	ORIG				



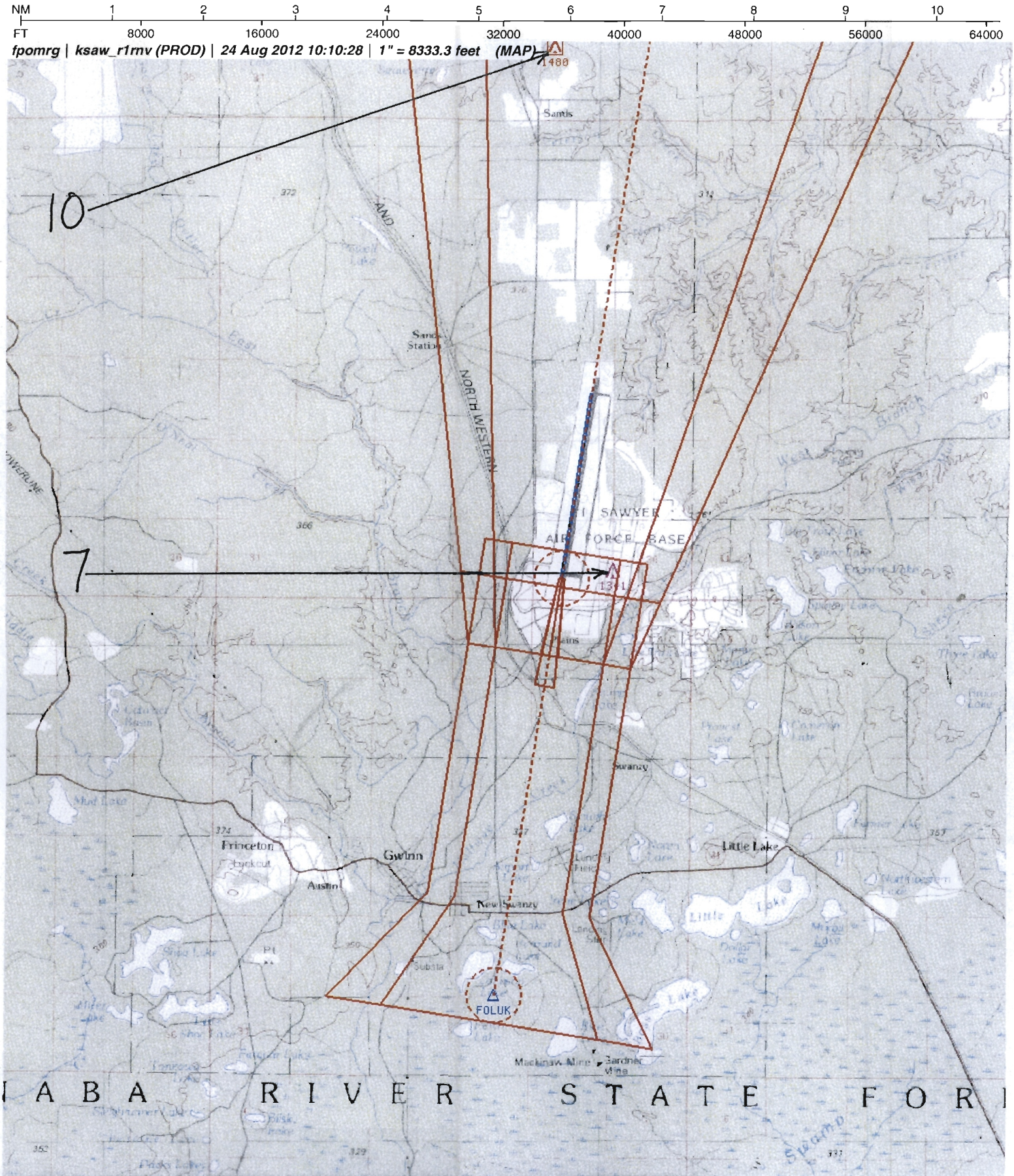
Airport ID:	KSAW	ID	SEGMENT	OBSTRUCTION	ELEV
Apt Name:	SAWYER INTL	3	SI TAA	TOWER	2601
City:	MARQUETTE				
State:	MI				
Scale:	1:500,000				
Proc ID:	RNAV (GPS) RWY 1				
AMDT	ORIG				



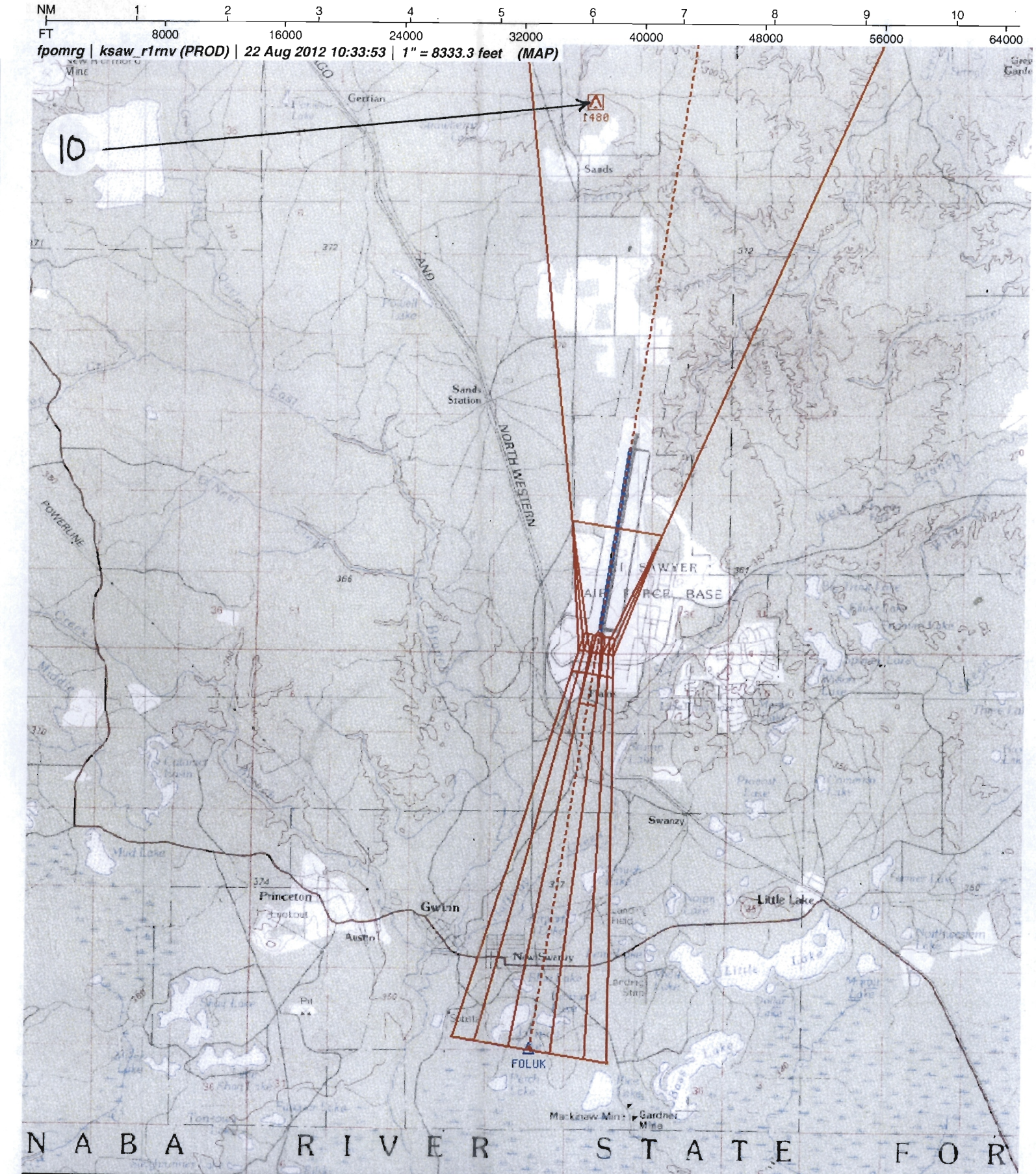
Airport ID:	KSAW	ID	SEGMENT	OBSTRUCTION	ELEV
Apt Name:	SAWYER INTL	1	SI TAA - NO PT	AAO	1874
City:	MARQUETTE				
State:	MI				
Scale:	1:500,000				
Proc ID:	RNAV (GPS) RWY 1				
AMDT	ORIG				



Airport ID:	KSAW	ID	SEGMENT	OBSTRUCTION	ELEV
Apt Name:	SAWYER INTL	7	LNAV FINAL	H20 TWR ANT	1341
City:	MARQUETTE	10	MA	AAO	1480
State:	MI	12	CIRCLING CATS A-D	TREE	1419
Scale:	1:100,000				
Proc ID:	RNAV (GPS) RWY 1				
AMDT	ORIG				



Airport ID:	KSAW	ID	SEGMENT	OBSTRUCTION	ELEV
Apt Name:	SAWYER INTL	7	LNAV/VNAV FINAL	H20 TWR ANT	1341
City:	MARQUETTE	10	MA	AAO	1480
State:	MI				
Scale:	1:100,000				
Proc ID:	RNAV (GPS) RWY 1				
AMDT	ORIG				



Airport ID:	KSAW
Apt Name:	SAWYER INTL
City:	MARQUETTE
State:	MI
Scale:	1:100,000
Proc ID:	RNAV (GPS) RWY 1
AMDT	ORIG

ID	SEGMENT	OBSTRUCTION	ELEV
	LPV FINAL	ASC	
10	MA	AAO	1480

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33

Bearings, headings, courses, 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 in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
EVYIP (IF/IAF)	FOLUK (FB)	012.89 / 11.53	2700
FOLUK (FAF)	RW01 (MAP) (FO)	012.95 / 4.62	
RW01 (MAP)	1378 MSL	012.95	
1378 MSL	ZUCTI (FO)		3500

MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW01

CLIMB TO 3500 DIRECT ZUCTI AND HOLD.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. HOLD S EVYIP, RT, 012.89 INBOUND, 3500 FT. IN LIEU OF PT (IAF)
3. FAC: 012.95 FAF: FOLUK DIST FAF TO MAP: 4.62 THLD: 4.62
4. MIN. ALT: EVYIP 3500, FOLUK 2700
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 2700 GS ALT AT: FOLUK 2700 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 50.3 34:1 IS CLEAR
8. MSA FROM:

ADDITIONAL FLIGHT DATA:
HOLD N, RT, 192.99 INBOUND.
CHART FAS OBST: 1341 ANT. ON H20 TK 462013N/0872308W
DISTANCE TO THLD FROM 200 HATH: 0.47 NM.
CHART VDP AT 1.11 MILES TO RW01*
*LNAV ONLY.
WAAS CHANNEL # 97431
REFERENCE PATH ID: W01A
LTP HAE: 324.8 M

MAG VAR: 4W 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
LPV DA	1378	1/2	200	1378	1/2	200	1378	1/2	200	1378	1/2	200			
LNAV/VNAV DA	1502	5/8	324	1502	5/8	324	1502	5/8	324	1502	5/8	324			
LNAV MDA	1600	1/2	422	1600	1/2	422	1600	3/4	422	1600	3/4	422			
CIRCLING	1720	1	499	1720	1	499	1720	1 1/2	499	1780	2	559			

NOTES:
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F).
@ NA WHEN LOCAL WEATHER NOT AVAILABLE.
CHART NOTE: DME/DME RNP-0.3 NA.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.
CHART NOTE: VDP AND BARO-VNAV NA WITH FORD ALTIMETER SETTING.
(SEE FORM 8260-10)

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 1221 THRE: 1178 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
MARQUETTE, MI	SAWYER INTL	RNAV	RNAV (GPS) RWY 1, 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]	[X]	[X] **ZMP, AMGR, SAW ATCT**

FLIGHT CHECKED BY

NAME:	FIFO	DATE:

DEVELOPED BY

NAME:	FIFO	DATE:
JILL OLSON (MICHAEL R. GARRITY JR.)	**AJV-353**	**08/22/2012**

APPROVED BY

NAME:		FIFO	DATE:
LARRY H STROUT	**MANAGER**	**AJV-353**	

CHANGES:

ORIGINAL

REASONS:

FPT REQUEST

QUALITY 2 CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORD ALTIMETER SETTING: INCREASE ALL DA 107 FT AND LNAV/VNAV VISIBILITY ALL CATS 3/8 MILE; INCREASE ALL MDA 120 FT, LNAV VISIBILITY CATS C AND D 3/8 MILE, AND CIRCLING VISIBILITY CATS C AND D 1/4 MILE.

CHART NOTE: FOR INOPERATIVE MALSR; WHEN USING FORD ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 1 MILE.

TAA

	FROM	TO	ALT
1.	283/30 CW 103/30 (NOPT)	EVYIP (IF/IAF) (FB)	3500
2.	103/30 CW 283/30	EVYIP (IF/IAF) (FO)	3700

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 1221 THRE: 1178	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
MARQUETTE, MI	AIRPORT NAME: SAWYER INTL	RNAV	RNAV (GPS) RWY 1, 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:

QUALITY 2 CHECKED

Bearings, headings, courses, 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 aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSAW
RUNWAY	RW01
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W01A
LTP/FTP LATITUDE	462012.7765N
LTP/FTP LONGITUDE	0872356.9975W
LTP/FTP ELLIPSOIDAL HEIGHT	+03248
FPAP LATITUDE	462213.3700N
FPAP LONGITUDE	0872329.5300W
THRESHOLD CROSSING HEIGHT (TCH)	00050.3
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	24BC64C2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03592
FPAP ORTHOMETRIC HEIGHT	+03592

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 1221 THRE: 1178	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
MARQUETTE, MI	AIRPORT NAME: SAWYER INTL	RNAV	RNAV (GPS) RWY 1, 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:

QUALITY CHECKED 2

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ARINC PACKET - 424-18 - RNAV (GPS)

```
          1         2         3         4         5         6         7         8         9         0         1         2         3
WP        12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAEAENRT   EVYIP K50    C   L N46041572W087273335                        W0047     NAR           EVYIP
          SUSAEAENRT   FOLUK K50    W     N46153906W087245922                        W0048     NAR           FOLUK
          SUSAEAENRT   ZUCTI K50    W     N46331157W087205911                        W0050     NAR           ZUCTI

          1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT   12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAP KSAWK5ASAW     0     123YHN46211310W087234330W004001221         1800018000C    MNAR    SAWYER INTL

          1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT   12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAP KSAWK5FR01   AEVYIP 010EVYIPK5EA0EE AR   HF                    01290040    + 03500     18000                A JS
          SUSAP KSAWK5FR01   R      010EVYIPK5EA0E  I    IF                                + 03500     18000                A JS
          SUSAP KSAWK5FR01   R      020FOLUKK5EA1E  F 051TF                    01290115    + 02700                          A JS
          SUSAP KSAWK5FR01   R      020FOLUKK5EA2WALPV       ALNAV/VNAV ALNAV                                               JS
          SUSAP KSAWK5FR01   R      030RW01 K5PG0GY M 031TF                    01300046      01229             -300          A JS
          SUSAP KSAWK5FR01   R      040         0  M     CA                    0130        + 01378                          A JS
          SUSAP KSAWK5FR01   R      050ZUCTIK5EA0EY      DF                              + 03500                          A JS
          SUSAP KSAWK5FR01   R      060ZUCTIK5EA0EE  R   HM                    19300040    + 03500                          A JS

          1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY    12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAP KSAWK5GRW01    0123660130 N46201278W087235700+0300    +03248011780000501501

          1         2         3         4         5         6         7         8         9         0         1         2         3
PP        12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAP KSAWK5PR01   RW01 001 0000W01A0N4620127765W08723569975+032480300N4622133700W0872329530010675000000503F40035024BC64C2
          SUSAP KSAWK5PR01   RW01 002E      +03592+03592LPV       97431
```

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 1221 THRE: 1178	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
MARQUETTE, MI	AIRPORT NAME: SAWYER INTL	RNAV	RNAV (GPS) RWY 1, ORIG	AMDT: NONE
				DATED:

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

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
	EVYIP	EVYIP	010	IAF	HF	R	FO		012.9(008.9T)	004.0	AA 03500	
		EVYIP	010	FACF	IF		FB				AA 03500	
		FOLUK	020	FAF	TF		FB	0.5	012.9(008.9T)	011.5	AA 02700	
		RW01	030	MAP	TF		FO	0.3	013.0(009.0T)	004.6	AT 01229	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		013.0(009.0T)		AA 01378	
	ZUCTI	050		DF		FO				AA 03500	
	ZUCTI	060		HM	R	FO		193.0(189.0T)	004.0	AA 03500	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	EVYIP	N460415.72	W0872733.35	N4604.262	W08727.556
	FOLUK	N461539.06	W0872459.22	N4615.651	W08724.987
	ZUCTI	N463311.57	W0872059.11	N4633.193	W08720.985
	RW01	N462012.78	W0872357.00	N4620.213	W08723.950

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW01	01178	50

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: **1221** **THRE: 1178**	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
MARQUETTE, MI	AIRPORT NAME: **SAWYER INTL**	**RNAV**	**RNAV (GPS) RWY 1, ORIG**	AMDT: **NONE**
				DATED:

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

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.
STRAIGHT-IN AREA	283/30 CW 103/30	EVYIP	1. AAO	460451.00N/0880551.00W	1874 (4E)	1000	AT626	3500
			2. TERRAIN	460451.00N/0880551.00W	1674 (1700)		AS1500	3200
STRAIGHT-IN AREA	103/30 CW 283/30	EVYIP	3. TOWER (26-000555)	462110.00N/0875115.00W	2601 (4D)	1000		3700
			4. TERRAIN	462706.00N/0873754.00W	1877 (1900)		AS1500	3400
INTERMEDIATE	EVYIP (IF/IAF)	FOLUK	5. AAO	460457.00N/0872936.00W	1388 (4E)	500	AC98	2000
			6. TERRAIN	460457.00N/0872936.00W	1188 (1200)		AS1500	2700
FINAL: LPV	FOLUK	RW01				ASC		1378/200
FINAL: LNAV/VNAV	FOLUK	RW01	7. ANT. ON H20 TK	462012.98N/0872307.83W	1341 (1A)	23.35:1		1502/324
			(KSAWT0318)					
FINAL: LNAV	FOLUK	RW01	7. ANT. ON H20 TK	462012.98N/0872307.83W	1341 (1A)	250		1600
			(KSAWT0318)					
2. HOLD-IN-LIEU-OF-PT	EVYIP	P-5	8. AAO	460500.00N/0873251.00W	1418 (4E)	1000	AT1082	3500
			9. TERRAIN	460500.00N/0873251.00W	1218 (1200)		AS1500	2700
3. MISSED APPROACH MAP:	DA / DA / RW01	ZUCTI				ASC		3500
			10. AAO	462554.00N/0872406.00W	1480 (4E)	1000		2500
ELEV:	1213/1341/1500		11. TERRAIN	462554.00N/0872406.00W	1280 (1300)		AS1500	2800

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	499	12. TREE	462200.00N/0872139.00W	1419 (2C)	300		1720
CATEGORY B	1.5 NM	450	499	12. TREE	462200.00N/0872139.00W	1419 (2C)	300		1720
CATEGORY C	1.7 NM	450	499	12. TREE	462200.00N/0872139.00W	1419 (2C)	300		1720
CATEGORY D	2.3 NM	550	559	12. TREE	462200.00N/0872139.00W	1419 (2C)	300	HAA	1780
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

CITY AND STATE	ELEVATION: 1221 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
MARQUETTE, MI	SAWYER INTL	RNAV	RNAV (GPS) RWY 1, ORIG	AGL

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE		3. ALTIMETER SETTING
ZMP ARTCC GRB FSS	N W S	OTHER: AWOS-3	SOURCE: KSAW / KIMT
	F A A		DISTANCE: 0 / 43.98
SATISFACTORY ON:	A / C		HOURS REMOTE OPERATION: 24 / BACKUP
X V H F X U H F H F	LOCATION: KSAW		ADJUSTMENT: 0 / 107

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	
5. APPROACH & RUNWAY LIGHTING		ALS
		(S) SALS
	X	MALSR 01 (PCL)
	X	HIRL 01 (PCL), 19 (PCL)
		MIRL
	X	REIL 19 (PCL)
		TDZ
		C/LINE
	X	OTHER (SPECIFY) PAPI-4L 01, 19

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER PIR-G 01, 19	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE: 3.00	ELEV RWY THRESHOLD: 1178.4
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 50.3

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

10. WAIVERS: NONE

PART D - PREPARED BY: JILL OLSON (MICHAEL R. GARRITY JR.)	DATE: 08/22/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-353

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

VGSI: 3.00/69.3

HIGH TEMPERATURE LIMITS DERIVED FROM AFS-400 CALCULATOR

TAAS WITHOUT IAFS UTILIZED PER FPT REQUEST

RASS PRESSURE PATTERNS SAME
KSAW 1220.7, KIMT 1182.0
RA = 106.58.
SEE ATTACHED AIRSPACE LETTER.

KSAW AND KIMT ON SERVICE A.

100 FT VEGETATION USED IN VICINITY OF AIRPORT.

LPV SLOPE 34:1
LNAV/VNAV SLOPE 23.348:1

AVERAGE COLD TEMPERATURE BASED ON STANDARD -30C ISA DEVIATION. HISTORICAL DATA NOT AVAILABLE.

MAGVAR NOT UPDATED - 2015 EPOCH VALUE IS 5 DEGREES, 0 MINUTES WEST.

RADIO FIX AND HOLDING DATA RECORD

NAME: EVYIP **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 460415.72N/0872733.35W **TYPE:** WP, INT, DME

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

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	MARQUETTE	I-SOU	LOC		192.95	188.95		18.50		3000	5000
2	IRON MOUNTAIN	IMT	VOR/DME	L	062.52	060.52		31.33		2900	17500
3	SAWYER	SAW	VOR/DME	H	192.50	188.50	17.47	17.47		2900	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		WP	192.90	012.90	R		4	3500	6000	5	6
2	S		WP	192.89	012.89	R		4	3500	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	460500.00N/0873251.00W	1418	4E
2	200	AAO	460500.00N/0873251.00W	1418	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V7	2, 3				MI (US)
IAP	ILS OR LOC RWY 1	1, 2, 3		KSAW	MARQUETTE	MI (US)
IAP	RNAV (GPS) RWY 1		2	KSAW	MARQUETTE	MI (US)
IAP	RNAV (GPS) RWY 19		1	KSAW	MARQUETTE	MI (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
CHANGED IMT AND SAW MRA TO 2900 FT.
CHANGED SAW BEARINGS FROM 192.53/188.53 TO 192.50/188.50.
ADDED PAT2.
UPDATED V7 FACS.
UPDATED ILS OR LOC RWY 1 USE TITLE AND FACS.
CHANGED RNAV (GPS) RWY 1 PAT FROM 1 TO 2.

DEVELOPED BY: **DATE:** 08/24/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (MICHAEL GARRITY)

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: FOLUK **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 461539.06N/0872459.22W **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 1			KSAW	MARQUETTE	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 03/07/2013

DEVELOPED BY: **DATE:** 08/21/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (MICHAEL GARRITY)

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: ZUCTI **STATE:** MI **COUNTRY:** US

LATITUDE/LONGITUDE: 463311.57N/0872059.11W **TYPE:** WP

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

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	N		WP	012.99	192.99	R		4	3500	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	462936.00N/0872603.00W	1578	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 1		1	KSAW	MARQUETTE	MI (US)
IAP	RNAV (GPS) RWY 19		1	KSAW	MARQUETTE	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 06/03/2010

REASON FOR REVISION:
UPDATED FIX USE.
DELETED FAC 1.
MOVED FIX 1.11 NM NORTH.
UPDATED HOLDING CONTROLLING OBSTACLE.
DELETED TIMED LEG LENGTH.

DEVELOPED BY: **DATE:** 09/22/2009 **OFFICE:** AVN-101 **NAME:** EUGENE NEWTON (ROSE BOONE)

APPROVED BY: **DATE:** 03/30/2010 **OFFICE:** AVN-120 **NAME:** SUE CRUMB

SIGNATURE:

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

INFO ONLY

QUALITY 2 CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **MARQUETTE** STATE: **MI**

AIRPORT NAME: **SAWYER INTL** ID: **KSAW**

PROCEDURE: **RNAV (GPS) RWY 1** AMDT: **ORIG**

DOCKET # :
(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 **3.05**
   (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 **008.95**
4. High Terrain in **FINAL** segment containing 1000' point **1218**
5. Distance from **THLD** to 1500' point **4.62**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **2.13**
7. True Course of **FINAL** segment containing 1500' point **008.95**
8. High Terrain in **FINAL** segment containing 1500' point **1218**
9. Threshold Coordinates (if straight-in) ... **462012.78N** / **0872357.00W**
10. ARP Coordinates ..... **462113.10N** / **0872343.30W**
11. Runway Approach End and distance furthest from ARP.....RWY **01**
    Distance **1.02** NM
12. FAF Coordinates ..... **461539.06N** / **0872459.22W**
    (Click to Select)

REMARKS: Approach/Drawing attached.
TAA 30NM RADIUS - EVYIP (IF/IAF) 460415.72N 0872733.35W