

**FEDERAL AVIATION ADMINISTRATION**  
**FLIGHT STANDARDS SERVICE**  
**VOR STANDARD INSTRUMENT APPROACH PROCEDURE**  
**TITLE 14 CFR PART 97.23**

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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
MICHIGAN CITY MUNI-PHILLIPS FIELD	KMGC	VOR-A	6	MICHIGAN CITY	IN	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
655		VOR-A	5	09/23/2010	0E	1965
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
GIJ			ROUTINE			

**TERMINAL ROUTES**

<u><b>FROM</b></u>	<u><b>FIX TYPE</b></u>	<u><b>TO</b></u>	<u><b>FIX TYPE</b></u>	<u><b>LEG TYPE</b></u>	<u><b>FO/FB</b></u>	<u><b>RNP</b></u>	<u><b>COURSE</b></u>	<u><b>DISTANCE</b></u>	<u><b>ALTITUDE</b></u>
GIJ VORTAC		MAHRE INT/GIJ 17.00 DME					260.33	17.00	3000

**MISSED APPROACH**

**MAP:**

5.75 NM AFTER MAHRE INT/GIJ 17.00 DME OR AT MATBL/22.75 DME FIX

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3000 ON GIJ VORTAC R-260 TO JAYMR INT/GIJ 27.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

- 1. PT**      **SIDE OF COURSE**      **OUTBOUND**      **FT WITHIN**      **MILES OF (IAF)**
- 2.** HOLD E MAHRE, LT, 260.33 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
- 3. FAC:** 260.33      **FAF:** MAHRE INT/GIJ 17.00 DME      **DIST FAF TO MAP:** 5.75      **DIST FAF TO THLD:**
- 4. MIN ALT:** MAHRE INT/GIJ 17.00 DME 3000
- 8. MSA FROM:** GIJ VORTAC 3000

**EQUIPMENT REQUIREMENTS NOTES:**

**NOTES:**

CHART NOTE: RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.  
CHART PLAINVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GIJ VORTAC AIRWAY RADIALS 209 CW 310.



ADDITIONAL FLIGHT DATA:

FAC CROSSES MIDPOINT OF RWY 2/20.  
CHART CIRCLING ICON.  
CHART FAS OBST: 1183 TOWER 414010N/0864814W.  
HOLD E, LT, 260.33 INBOUND

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

ALTERNATE: NA ☐ CAT C 900-2 1/2

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
CIRCLING	1440	1	785	1440	1	785	1500	2 1/2	845		NA				

CHANGES - REASONS

1. ADDED CHART CIRCLING ICON - NEW CIRCLING CRITERIA PUBLISHED ON RNAV (GPS) 20 AND IAW 8260.30D AND 8260.19H.
2. ADDED CHART PLAINVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GIJ VORTAC AIRWAY RADIALS 209 CW 310 - TURN EXCEEDS 120 DEGREES.
3. CIRCLING MDA/HAT CHANGED: CAT A AND B: FROM 1580/925 TO 1440/785, CAT C: FROM 1580/925 TO 1500/845 - NEW OBSTACLE DATA.
4. CIRCLING VISIBILITY CHANGED: CAT A AND B: FROM 1 1/4 TO 1 SM, CAT C: FROM 2 3/4 TO 2 1/2 SM.
5. ADDED KMGC AS PRIMARY ALTIMETER SOURCE AND KSBN AS SECONDARY ALTIMETER SOURCE - PER FPT.
6. BACKUP ALTIMETER NOTE ADDED TO PART C: GENERAL REMARKS - IAW 8260.19H.
7. ADDED ALTERNATE MINIMUMS STANDARD-900-2 1/2 - LOCAL WEATHER ON SERVICE A (WMSCR).
8. REMOVED CHART NOTE: SOUTH BEND ASOS - IAW 8260.19H.
9. REMOVED CHART NOTE: USE SOUTH BEND ALTIMETER SETTING, WHEN NOT RECEIVED USE GARY ALTIMETER SETTING - PRIMARY ALTIMETER LOCAL PER FPT.
10. ADDED CHART NOTE: RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED - 20:1 VISUAL SURFACE PENETRATIONS.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAU ARTCC, SBN APP CON, AMGR.

FLIGHT CHECKED BY

OFFICE DATE

DEVELOPED BY  
ROBERT G HAMILTON (JAY BAGGETT)

Digitally signed by  
CASIMIR L TABAKA

OFFICE  
AJV-A422

DATE  
12/11/2018

APPROVED BY  
JULIE MORGAN

Digitally signed by  
CASIMIR L TABAKA

Mar 20, 2019

OFFICE  
AJV-A42

DATE

TITLE  
MANAGER



FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

<u>AIRPORT</u> MICHIGAN CITY MUNI- PHILLIPS FIELD	<u>AIRPORT ID</u> KMGC	<u>PROCEDURE NAME</u> VOR-A	<u>AMDT NO.</u> 6	<u>CITY</u> MICHIGAN CITY	<u>STATE</u> IN	<u>AIRPORT ELEVATION</u> 655	<u>FACILITY</u> GIJ
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM  
GIJ VORTAC

TO  
MAHRE INT/GIJ 17.00 DME

<u>RNP</u>	<u>DISTANCE</u> 17.00	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.TOWER (18-001917)	414435.00N/0863125.00W		1180	500	50	5D	1000				AT820	3000
2.TERRAIN	414133.10N/0864006.30W		960 (1000)								AS1500	2500

COMPUTATIONS

<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
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SEGMENT REMARKS:

FINAL

FROM  
MAHRE INT/GIJ 17.00 DME

TO  
5.75 NM AFTER MAHRE INT/GIJ 17.00 DME OR AT MATBL/22.75 DME FIX

<u>RNP</u>	<u>DISTANCE</u> 5.75	<u>PAT</u>	<u>MAP</u> 5.75 NM AFTER MAHRE INT/GIJ 17.00 DME OR AT MATBL/22.75 DME FIX	<u>HAT</u>	<u>HMAS</u>							
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
3.TOWER (18-000781)	414009.56N/0864813.74W		1183	20	3	1A	250				SA-14	1420

COMPUTATIONS

<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
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SEGMENT REMARKS:



HOLD-IN-LIEU OF PT

FROM

MAHRE

TO

P-5

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u> P-5	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.TOWER (18-001917)	414435.00N/0863125.00W	1180	500	50	5D	1000				AT820	3000
2.TERRAIN	414133.10N/0864006.30W	960 (1000)								AS1500	2500

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

MISSED APPROACH

FROM

5.75 NM AFTER MAHRE INT/GIJ 17.00 DME OR AT MATBL/22.75 DME FIX

TO

JAYMR INT/GIJ 27.00 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 1190					
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
								ASC				3000
4.STACK (18-000421)	414319.00N/0865433.00W		1106	500	50	5D	1000				AC50	2200
5.TERRAIN	413915.00N/0864836.00W		850 (900)								AS1500	2400

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



**FACILITY**  
GIJ

QUALITY  
22  
CHECKED

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

SBN APP CON, SBN FSS, ZAU ARTCC

<u>WX SERVICE</u> AWOS	<u>LOCATION</u> KMGC	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KMGC	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> ASOS	<u>LOCATION</u> KSBN	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KSBN	<u>DISTANCE</u> 22.648	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 72

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME  
KMGC 654.9, KSBN 798.3  
RA=72.17.

<u>PRIMARY NAVAID</u> GIJ VORTAC	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW02 - MIRL (PCL), PAPI-2L		NPI-G	
RW20 - MIRL (PCL), REIL (PCL), PAPI-2L		NPI-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:



**"VISUAL PORTION OF FINAL" PENETRATIONS**

Final Type	CIRCLING RWY 20		
20:1			
771 TREE (18-031078) 414251.54N/0864854.10W (14.62) - LIT PER OE/AAA DATABASE.		755 TREE (18-047162) 414249.95N/0864852.70W (4.32) - LIT PER OE/AAA DATABASE.	
746 TREE (18-031081) 414249.77N/0864856.44W (1.10) - LIT PER OE/AAA DATABASE.			

**HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS**

and/or  
**5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS**

**PART C: GENERAL REMARKS:**

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

BACK-UP ALTIMETER SETTING CONTINGENCY NOTE: USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET, AND INCREASE CIRCLING CAT A AND B VISIBILITY TO 1 1/4 SM AND INCREASE CIRCLING CAT C VISIBILITY TO 2 3/4 SM.

THE 20:1 PENETRATIONS ARE TREES LOCATED NEXT TO LIGHTS, AND THE FPT AND AIRPORT MANAGER HAVE DESIGNATED THE TREES AS LIT.

ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

<u>AIRPORT</u> MICHIGAN CITY MUNI- PHILLIPS FIELD	<u>AIRPORT ID</u> KMGC	<u>PROCEDURE NAME</u> VOR-A	<u>AMDT NO.</u> 6	<u>CITY</u> MICHIGAN CITY	<u>STATE</u> IN	<u>AIRPORT ELEVATION</u> 655	<u>FACILITY</u> GIJ
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PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	MAP	TO 1000FT POINT	2.08
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	4.07
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	260.33
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	876
DISTANCE FROM	MAP	TO 1500FT POINT	3.75
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	3.90
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	260.33
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	876

THRESHOLD  
COORDINATES  
(IF STR-IN)

ARP COORDINATES414211.94N/0864916.47W

RUNWAY APCH END  
AND DIST FURTHEST  
FROM ARP

RUNWAY 20 DISTANCE 0.34 NM

FAF  
COORDINATES414313.41N/0864129.21W

FIX NAME  
COORDINATES

REMARKS

APPROACH/DRAWING ATTACHED. MAP IS MATBL: 414215.15N-0864903.53W

QUALITY  
22  
CHECKED

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Page 6 of 7



<u>AIRPORT</u> MICHIGAN CITY MUNI- PHILLIPS FIELD	<u>AIRPORT ID</u> KMGC	<u>PROCEDURE NAME</u> VOR-A	<u>AMDT NO.</u> 6	<u>CITY</u> MICHIGAN CITY	<u>STATE</u> IN	<u>AIRPORT ELEVATION</u> 655	<u>FACILITY</u> GIJ
PART E: PREPARED BY							
<u>NAME</u> ROBERT G HAMILTON (JAY BAGGETT)	<u>OFFICE</u> AJV-A422			<u>DATE</u> 12/11/2018	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST		

QUALITY  
22  
CHECKED

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Page 7 of 7