

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29

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> MBS	<u>PROCEDURE NAME</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 5A	<u>CITY</u> SAGINAW	<u>STATE</u> MI
<u>AIRPORT ELEVATION</u> 668	<u>TDZE</u> 661	<u>SUPERSEDED</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 5	<u>DATED</u> 02/01/2018
<u>FACILITY</u> I-TQR	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 JANUARY 2024	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 7W
				<u>EPOCH YEAR</u> 2020
				<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
HINON/I-TQR 12.17 DME/RADAR	IAF	TOLPE/I-TQR 9.17 DME/RADAR					232.63	3.00	3000
TOLPE/I-TQR 9.17 DME/RADAR	IF	WASEE/I-TQR 6.17 DME/RADAR					232.63	3.00	2200

MISSED APPROACH

MAP:
ILS: DA
LOC: 4.70 NM AFTER WASEE/I-TQR 6.17 DME/RADAR OR AT I-TQR 1.49 DME

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 2500 ON MBS VOR/DME R-230 TO KWORD/MBS 6.14 DME/RADAR AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):
CLIMB TO 2300 DIRECT WERDO AND HOLD. (RNAV 1-GPS REQUIRED)

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)
2. PROFILE STARTS AT TOLPE
3. FAC: 232.63

FAF: WASEE/I-TQR 6.17 DME/RADAR

DIST FAF TO MAP: 4.70

DIST FAF TO THLD: 4.70
4. MIN ALT: TOLPE/I-TQR 9.17 DME/RADAR 3000, WASEE/I-TQR 6.17 DME/RADAR 2200
5. DIST TO THLD FROM PFAF: 4.70

MM:

IM:

150 HAT:

GS ANT: 979
6. MIN GS INCPT: 2200

GS ALT AT FAF: WASEE/I-TQR 6.17 DME/RADAR 2170

OM:

MM:

IM:
7. GS ANGLE: 3.00

34:1:

20:1:

TCH: 54.5
8. MSA FROM: MBS VOR/DME 3100



EQUIPMENT REQUIREMENTS NOTES:

DME OR RADAR REQUIRED.
RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

HOLD SW, LT, 050.18 INBOUND.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW WERDO, RT, 052.49 INBOUND.
FAS OBST: 809 AAO 433450N/0840049W.
CHART VDP AT 2.59 DME.
DISTANCE VDP TO THLD 1.12 NM.
CHART IN PLANVIEW: WERDO.
CHART CIRCLING ICON.

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - NA WHEN CONTROL TOWER CLOSED.

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
S-ILS 23**	861	2400	200	861	2400	200	861	2400	200	861	2400	200			
S-LOC 23	1060	2400	399	1060	2400	399	1060	3500	399	1060	3500	399			
CIRCLING	1080	1	412	1120	1	452	1240	1 1/2	572	1240	2	572			

CHANGES - REASONS

1. TERMINAL ROUTES: ADJUSTED HINON FROM "HINON INT/I-TQR 12.17 DME/RADAR" TO "HINON/I-TQR 12.17 DME/RADAR" - "INT" REMOVED FOR MOP VOR MON.
2. EQUIPMENT REQUIREMENTS: ADDED "DME OR RADAR REQUIRED"; REMOVED "CHART NOTE: DME OR RADAR REQUIRED" FROM NOTES SECTION - IAW 8260.19I 8-6-8.A.
3. EQUIPMENT REQUIREMENTS: ADDED "RADAR REQUIRED FOR PROCEDURE ENTRY"; REMOVED "CHART PLANVIEW NOTE: RADAR REQUIRED" FROM ADDITIONAL FLIGHT DATA - 8260.19I 8-6-9.G.
4. NOTES: UPDATED RVR NOTE FROM "CHART NOTE: **RVR 1800 AUTHORIZED WITH THE USE OF FD OR AP OR HUD TO DA" TO "CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA" - NOTE FORMAT ADJUSTED IAW 8260.19I 8-6-11.K.(1).
5. ADDITIONAL FLIGHT DATA: REMOVED "**LOC ONLY" - NO LONGER REQUIRED.



COORDINATED WITH:

A4A

☒

ALPA

☒

AOPA

☒

APA

☒

HAI

☐

NBAA

☒

OTHER:

ZOB, SAGINAW APP CON, MBS ATCT, MBS AMGR

FLIGHT CHECKED BY

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021 GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

OFFICE

DATE

Digitally signed by

MICHAEL GARRITY

Dec 11, 2023

DEVELOPED BY

MICHAEL R. GARRITY JR. (COLIN CAMPBELL)

Digitally signed by

MICHAEL GARRITY

Dec 11, 2023

OFFICE

AJV-A423

DATE

08/01/2023

APPROVED BY

MICHAEL R. GARRITY JR.

Digitally signed by

MICHAEL GARRITY

Dec 11, 2023

OFFICE

AJV-A423

DATE

01/25/2024

TITLE

MANAGER

