

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											MISSED APPROACH									
FROM		TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW05 CLIMB TO 2300 DIRECT FOROX AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 232.75 INBOUND. FAS OBST: 829 AAO 432853N/0840921W. 839 AAO 432808N/0840948W. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.14 NM TO RW05* *LNAV ONLY. WAAS CHANNEL # 82010 REFERENCE PATH ID: W05A CHART CIRCLING ICON. LTP HAE: 168.5 M										
WERDO (IF/IAF)		OTILE (TF) (FB) (RNP 1.00)			052.49 / 6.00			2300												
OTILE (FAF)		RW05 (MAP) (TF) (FO) (RNP 0.30)			052.56 / 4.98															
RW05 (MAP)		866 MSL (CA)			052.56			2300												
866 MSL		FOROX (DF) (FO) (RNP 1.00)																		
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW WERDO, RT, 052.49 INBOUND, 2300 FT. IN LIEU OF PT (IAF) 3. FAC: 052.56 FAF: OTILE DIST FAF TO MAP: 4.98 THLD: 4.98 4. MIN. ALT: WERDO 2300, OTILE 2300 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: OTILE 2300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: _____											MAG VAR: 7W					EPOCH YEAR: 2020				
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**	866	2400	200	866	2400	200	866	2400	200	866	2400	200								
LNAV/VNAV DA	955	2400	289	955	2400	289	955	2400	289	955	2400	289								
LNAV MDA	1080	2400	414	1080	2400	414	1080	4000	414	1080	4000	414								
CIRCLING	1080	1	412	1120	1	452	1240	1 1/2	572	1240	2	572								
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500 AND LNAV CATS C/D VISIBILITY TO RVR 6000.																				
CITY AND STATE		ELEVATION: 668 TDZE: 666			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:							
SAGINAW, MI		AIRPORT NAME: MBS INTL						RNAV (GPS) RWY 5, AMDT 2 1 FEBRUARY 2018					AMDT: 1A							
													DATED 08/17/2017							

QUALITY
10
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
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TAA

	FROM	TO	ALT
1.	322/30 CW 142/30 (NOPT)	322/11 CW 142/11	2900
	322/11 CW 142/11	WERDO (IF/IAF) (FB)	2300
2.	142/30 CW 322/30	142/11 CW 322/11	3100
	142/11 CW 322/11	WERDO (IF/IAF) (FO)	2300

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**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR PART 97.33**

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FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMBS
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	433136.5550N
LTP/FTP LONGITUDE	0840521.2805W
LTP/FTP ELLIPSOIDAL HEIGHT	+01685
FPAP LATITUDE	433238.8805N
FPAP LONGITUDE	0840353.7330W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0312
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 93AA30B0

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02028
FPAP ORTHOMETRIC HEIGHT	+02028

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