

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														MISSED APPROACH												
FROM				TO			COURSE AND DISTANCE				ALTITUDE		LP: RW27 LNAV: RW27													
MOP VOR/DME				WELVI (TF) (FO) (RNP 2.00)			053.53 / 33.23				3000		CLIMBING LEFT TURN TO 2600 DIRECT WHIPP AND HOLD.													
BANJO				WELVI (TF) (FO) (RNP 2.00)			176.93 / 7.85				3000															
MBS VOR/DME (IAF)				WELVI (NOPT) (TF) (FB) (RNP 1.00)			357.00 / 27.15				3000															
WELVI (IF/IAF)				JIDUM (TF) (FB) (RNP 1.00)			271.91 / 7.89				2600															
JIDUM (FAF)				RW27 (MAP) (TF) (FO) (RNP 0.30)			271.79 / 5.61						ADDITIONAL FLIGHT DATA: HOLD NW, RT, 141.46 INBOUND. FAS OBST: 954 AAO 435829N/0842316W. WAAS CHANNEL # 99326 REFERENCE PATH ID: W27A JIDUM TO RW27: 3.00/40 LTP HAE: 201.1 M													
(SEE FORM 8260-10)																										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																										
2. HOLD E WELVI, RT, 271.91 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																										
3. FAC: 271.79 FAF: JIDUM DIST FAF TO MAP: 5.61 THLD: 5.61																										
4. MIN. ALT: WELVI 3000, JIDUM 2600																										
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: 20:1 IS NOT CLEAR 34:1 IS NOT CLEAR																										
8. MSA FROM: RW27 3300																										
MAG VAR: 4W EPOCH YEAR: 1980																										
MINIMUMS																										
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A X																			
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	1280	1	507	1280	1	507	1280	1 3/8	507	1280	1 3/8	507														
LNAV MDA	1280	1	507	1280	1	507	1280	1 3/8	507	1280	1 3/8	507														
CIRCLING	1420	1	646	1500	1	726	1500	2	726	1500	2 1/4	726														
NOTES: CHART NOTE: CIRCLING NA TO RWYS 15 AND 33. CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA AT NIGHT. (CONTINUED ON PAGE 2)																										
CITY AND STATE GLADWIN, MI				ELEVATION: 774 TDZE: 773 AIRPORT NAME: GLADWIN ZETTEL MEMORIAL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 27, ORIG-B						SUP: AMDT: ORIG-A DATED 05/28/2015										



ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
ROUTINE					
COORDINATED WITH:					
ATA <div></div>		AAT <div></div>		ALPA <div>X</div>	
APA <div></div>		AOPA <div>X</div>		NBAA <div>X</div>	
OTHER (specify) <div>ZOB, ZMP, MPS APP CON, AGMR</div>					
FLIGHT CHECKED BY					
Digitally signed by					
NAME:		FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW FLIGHT TEAM (AJW-333) MEMO, MAY 30, 2017		DEZ SILAGYI Dec 21, 2017	
		FIFO FIOG		DATE: 09/15/2011	
DEVELOPED BY					
Digitally signed by					
NAME:		PETER R. GUIMOND		PETER R GUIMOND Nov 20, 2017	
		FIFO AJV-5422		DATE: 11/20/2017	
APPROVED BY					
Digitally signed by					
NAME:		JULIE A. MORGAN		DEZ SILAGYI MANAGER	
		FIFO AJV-5420		DATE:	
CHANGES:					
Dec 21, 2017					
1. DELETED NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. 2. ADDED NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. 3. DELETED NOTE: WHEN VGSI INOP, CIRCLING TO RWY 9 NA AT NIGHT. 4. DELETED NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 27 PROCEDURE NA AT NIGHT. 5. ADDED NOTE: PROCEDURE NA AT NIGHT. 6. DELETED NOTE: USE MOUNT PLEASANT ALTIMETER SETTING; WHEN NOT RECEIVED, USE MIDLAND ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET. INCREASE LP AND LNAV CAT C AND D VISIBILITY 1/8 MILE AND CIRCLING CAT C AND D VISIBILITY 1/4 MILE. 7. ADDED NOTE: USE MOUNT PLEASANT ALTIMETER SETTING; WHEN NOT RECEIVED, USE MIDLAND ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET; INCREASE LP AND LNAV CATS C/D VISIBILITY 1/8 SM AND CIRCLING CATS C/D VISIBILITY 1/4 SM. 8. ADDED NOTE: CIRCLING NA TO RWYS 15 AND 33. 9. INCORPORATED CHANGES FROM ORIG-A (P-NOTAM 4/0302).					
REASONS:					
1. REPLACED BY UPDATED NOTE. 2. FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11K(3). 3. REPLACED BY UPDATED NOTE. 4. REPLACED BY UPDATED NOTE. 5. NO RESPONSE RECEIVED FROM AIRPORT TO ADDRESS UNLIT 20:1 PENETRATIONS. 6. REPLACED BY UPDATED NOTE. 7. FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-9F(6). 8. TURF RUNWAY THAT DOES NOT HAVE RAPT APPROVAL FOR IFR OPERATIONS. 9. IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-3-4C(2).					

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW27 (MAP)	1174 MSL (CA)	271.79	
1174 MSL	WHIPP (DF) (FO) (RNP 1.00)		2600

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MOP VOR/DME AIRWAY RADIALS 336 CW 106.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MBS VOR/DME AIRWAY RADIALS 284 CW 016.

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

CHART NOTE: USE MOUNT PLEASANT ALTIMETER SETTING; WHEN NOT RECEIVED, USE MIDLAND ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET; INCREASE LP AND LNAV CATS C/D VISIBILITY 1/8 SM AND CIRCLING CATS C/D VISIBILITY 1/4 SM.

PBN REQUIREMENT NOTE: RNP APCH



CITY AND STATE
GLADWIN, MI

ELEVATION: 774 TDZE: 773
AIRPORT NAME:
GLADWIN ZETTEL MEMORIAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 27, ORIG-B

SUP:	
AMDT:	ORIG-A
DATED:	05/28/2015

ALL AFFECTED PROCEDURES REVIEWED?		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
<input type="checkbox"/> YES <input type="checkbox"/> NO					
COORDINATED WITH:					
ATA	AAT	ALPA	APA	AOPA	NBAA OTHER (specify)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGDW
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	435820.1360N
LTP/FTP LONGITUDE	0842754.1185W
LTP/FTP ELLIPSOIDAL HEIGHT	+02011
FPAP LATITUDE	435816.5500N
FPAP LONGITUDE	0842957.4000W
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	1320
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
 <u>CRC REMAINDER</u>	 16837A50

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02355
FPAP ORTHOMETRIC HEIGHT	+02355

QUALITY
16
CHECKED

CITY AND STATE GLADWIN, MI	ELEVATION: 774 AIRPORT NAME: GLADWIN ZETTEL MEMORIAL	TDZE: 773	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 27, ORIG-B	SUP:
					AMDT: ORIG-A
					DATED: 05/28/2015

ALL AFFECTED PROCEDURES REVIEWED?		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
<input type="checkbox"/> YES <input type="checkbox"/> NO					
COORDINATED WITH:					
ATA	AAT	ALPA	APA	AOPA	NBAA OTHER (specify)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	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	MOP VOR/DME	WELVI	1. TOWER (26-001460)	434336.00N/0843616.00W	1744 (5D)	1000	AT256	3000			
			2. TERRAIN	435828.40N/0840929.60W	850 (900)		AS1500	2400			
FEEDER	BANJO	WELVI	3. TOWER (26-002975)	435856.00N/0840947.00W	1064 (5E)	1000	AT936	3000			
			4. TERRAIN	440039.00N/0840718.00W	847 (800)		AS1500	2300			
INITIAL	MBS VOR/DME	WELVI	5. TOWER (26-001374)	435046.00N/0840532.00W	1249 (5D)	1000	AT751	3000			
			2. TERRAIN	435828.40N/0840929.60W	850 (900)		AS1500	2400			
INTERMEDIATE	WELVI (IF/IAF)	JIDUM	3. TOWER (26-002975)	435856.00N/0840947.00W	1064 (5E)	500	AT911 AC125	2600			
			2. TERRAIN	435828.40N/0840929.60W	850 (900)		AS1500	2400			
FINAL: LP	JIDUM	RW27	6. AAO	435829.41N/0842316.22W	954 (2C)	250	RA58	1280			
FINAL: LNAV	JIDUM	RW27	6. AAO	435829.41N/0842316.22W	954 (2C)	250	RA58	1280			
2. HOLD-IN-LIEU-OF-PT	WELVI	P-5	7. TOWER (26-001584)	435551.00N/0840835.00W	1083 (5D)	1000	AT917	3000			
			8. TERRAIN	440433.00N/0840421.00W	867 (900)		AS1500	2400			
3. MISSED APPROACH	MAP: RW27 / RW27	WHIPP				ASC		2600			
	ELEV: 1122/1122		9. TOWER (26-001722)	435718.00N/0843300.00W	1324 (5D)	1000		2400			
			10. TERRAIN	435821.00N/0843333.00W	913 (900)		AS1500	2400			
4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.									
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	646	11. TREES (KGDW2)	435830.08N/0843031.05W	1000 (4D)	300	RA58 AC50	1420
CATEGORY B	1.5 NM		450		726	12. TOWER (KGDW3)	435827.08N/0843100.05W	1080 (4D)	300	RA58 AC50	1500
CATEGORY C	1.7 NM		450		726	13. TWR (KGDWT0622)	435828.11N/0843111.93W	1118 (1A)	300	RA58	1500
CATEGORY D	2.3 NM		550		726	13. TWR (KGDWT0622)	435828.11N/0843111.93W	1118 (1A)	300	RA58	1500
CATEGORY E	4.5 NM		550								
5. MINIMUM SAFE ALTITUDES	PRIMARY NAVAID: RW27										
SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A		
360-360	TWR (26-001394)	332/22.5	2202 (3C)	3300					16		
									CHECKED		
CITY AND STATE	ELEVATION: 774		FACILITY		PROCEDURE AND AMENDMENT NO:			REGION			
GLADWIN, MI	AIRPORT NAME: GLADWIN ZETTEL MEMORIAL		RNAV		RNAV (GPS) RWY 27, ORIG-B			AGL			

PART B - SUPPLEMENTAL DATA												
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE			3. ALTIMETER SETTING					
MBS APP CON ZOB ARTCC LAN FSS						N W S	OTHER: AWOS-3		SOURCE: KMOP / KIKW			
						F A A			DISTANCE: 23.84 / 20.66			
						A / C			HOURS REMOTE OPERATION: 24 / YES / 24 / YES			
SATISFACTORY ON:												
X	V	H	F	X	U	H	F		H	F	LOCATION: KMOP	ADJUSTMENT: 58 / 68
4. MONITOR STATUS		PRIMARY NAVAID:										
		MONITOR POINT:										
		HRS OPTN:		CAT 1								
				CAT 3								
5. APPROACH & RUNWAY LIGHTING		ALS										
		(S) SALS										
		MALS										
		HIRL										
		X	MIRL 09 (PCL), 27 (PCL)									
		X	REIL 09 (PCL), 27 (PCL)									
		TDZ										
		C/LINE										
		X	OTHER (SPECIFY) PAPI-2L 09 (PCL), 27 (PCL)									
6. RUNWAY MARKINGS			BASIC									
			ALL WEATHER									
			INSTRUMENT NPI-G 09, 27									
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: PETER R. GUIMOND										DATE: 11/20/2017		
TITLE: AERONAUTICAL INFORMATION SPECIALIST										OFFICE: AJV-5422		

PART C - REMARKS:	
VDP NOT ESTABLISHED - OBSTACLES PENETRATE THE 20:1 SURFACE, ALTIMETER ADJUSTMENTS IN USE.	
PRECIPITOUS TERRAIN EVALUATION COMPLETED.	
5. VGSI DATA: 3.00/25.0	
NO ADDITIONAL AIRSPACE REQUIRED. RASS PRESSURE PATTERNS THE SAME KMOP 754.7, KIKW 634.5 RA = 57.54/67.05.	
CIRCLING NA TO RWY 15/33. TURF RUNWAY DOES NOT HAVE RAPT APPROVAL FOR IFR OPERATIONS	
25 DEGREE BANK ANGLE USED IN MISSED APPROACH SEGMENT.	
4D ACCURACY CODE REQUESTED FOR CIRCLING CATS A AND B OBSTACLES #11 AND #12.	
VISUAL PORTION OF FINAL PENETRATIONS:	
LP, LNAV 20:1: 838 TREE (26-047742) 435818.58N/0842735.64W (8.20) 837 TREE (26-047869) 435817.96N/0842733.64W (0.02)	
LP, LNAV 34:1 837 TREE (26-047864) 435821.61N/0842731.85W (22.25) 833 TREE (26-047867) 435819.43N/0842732.20W (19.26) 833 TREE (26-047866) 435820.14N/0842732.21W (19.20) 832 TREE (26-098445) 435822.78N/0842732.60W (18.72) 828 TREE (26-047868) 435822.54N/0842732.59W (14.73) 830 TREE (26-047799) 435816.90N/0842730.95W (13.88) 832 TREE (26-038288) 435822.57N/0842729.59W (12.28) 812 TREE (26-039987) 435817.95N/0842738.50W (11.98) 817 TREE (26-039963) 435818.53N/0842735.75W (11.00) 809 TREE (26-039986) 435822.14N/0842738.62W (8.73) 825 TREE (26-047798) 435820.90N/0842730.63W (7.71) 825 TREE (26-047796) 435822.87N/0842730.05W (6.23) 804 TREE (26-047812) 435819.69N/0842738.96W (4.76) 810 TREE (26-047741) 435823.71N/0842735.57W (2.99) 805 TREE (26-039985) 435820.76N/0842737.31W (2.08) 808 TREE (26-047873) 435822.97N/0842735.20W (0.29)	
CIRCLING RWY 9, 20:1 839 TREE (26-048686) 435815.61N/0842913.93W (20.22) 862 TREE (26-040106) 435821.16N/0842922.57W (12.79) 846 TREE (26-037833) 435813.93N/0842918.00W (12.00) 827 TREE (26-045816) 435815.22N/0842914.93W (4.48) 851 TREE (26-040105) 435820.59N/0842922.50W (1.93)	

