

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE**

**TITLE 14 CFR PART 97.33**

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> MIDDLETON MUNI - MOREY FIELD	<u>AIRPORT ID</u> C29	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> MIDDLETON	<u>STATE</u> WI
<u>AIRPORT ELEVATION</u> 928	<u>TDZE</u> 928	<u>SUPERSEDED</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 07/23/2015	<u>MAG VAR</u> 1W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 5 DECEMBER 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
DALEY		JALOX		TF	FO	1.00	358.46	14.54	4000
MSN VORTAC		JALOX		TF	FO	1.00	271.55	20.35	4000
ROODY	IAF	JALOX	NOPT	TF	FB	1.00	105.31	10.92	4000
NEGUS	IAF	JALOX	NOPT	TF	FB	1.00	168.61	5.58	4000
JALOX	IF/IAF	CERTO		TF	FB	1.00	100.45	6.03	2800
CERTO	FAF	RW10	MAP	TF	FO	0.30	100.54	5.66	
RW10	MAP	1328 MSL		CA			100.54		
1328 MSL		APOOZ		DF	FB	1.00			
APOOZ		FAVOM		TF	FB	1.00	010.70	7.60	
FAVOM		CIKAS		TF	FB	1.00	280.72	5.00	
CIKAS		NEGUS		TF	FO	1.00	270.42	13.62	4000

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW10

**MISSED APPROACH INSTRUCTIONS:**

(DO NOT EXCEED 185 KIAS UNTIL APOOZ) CLIMB TO 4000 DIRECT APOOZ THEN CLIMBING LEFT TURN ON TRACK 010.70 TO FAVOM THEN CLIMBING LEFT TURN ON TRACK 280.72 TO CIKAS AND TRACK 270.42 TO NEGUS AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

QUALITY  
21  
CHECKED

**PROFILE:**

- 1. **PT**      **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF (IAF)**
- 2. HOLD W JALOX, RT, 100.45 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.
- 3. **FAC:** 100.54      **FAF:** CERTO                                      **DIST FAF TO MAP:** 5.66                      **DIST FAF TO THLD:** 5.66
- 4. **MIN ALT:** JALOX 4000, CERTO 2800
- 5. **DIST TO THLD FROM OM:**                      **MM:**                      **IM:**                      **150 HAT:**                      **480 HAT:** 1.35                      **GS ANT:**
- 6. **MIN GP INCPT:** 2800                      **GP ALT AT FAF :** CERTO 2800                                      **OM:**                                      **MM:**                                      **IM:**
- 7. **GP ANGLE:** 3.05                      **34:1:** IS NOT CLEAR                      **20:1:** IS CLEAR                      **TCH:** 40.0
- 8. **MSA FROM:** RW10 3600

**PBN REQUIREMENTS NOTE:**

RNP APCH.

**NOTES:**

- CHART NOTE: CIRCLING NA TO RWYS 1 AND 19.
- CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
- CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.
- CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
- CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MSN VORTAC AIRWAY RADIALS 231 CW 320.
- CHART SPEED ICON IN PLANVIEW AT NEGUS: MAX 210 KIAS.

**ADDITIONAL FLIGHT DATA:**

- CHART CIRCLING ICON.
- CHART VDP AT 1.50 NM TO RW10\*
- \*LNAV ONLY
- WAAS CHANNEL #62912
- REFERENCE PATH ID: W10A
- FAS OBST: 1340 AAO 430813N/0893819W.
- HOLD N, RT, 168.61 INBOUND
- LTP HAE: 248.5 M

**MINIMUMS:**

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

**ALTERNATE:** NA  STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E			
	FINAL TYPE	DA/MDA	VIS	HAT/HAA												
LPV DA	1408	1 3/8	480	1408	1 3/8	480	1408	1 3/8	480		NA					
LNAV/VNAV DA	1596	1 7/8	668	1596	1 7/8	668	1596	1 7/8	668		NA					
LNAV MDA	1600	1	672	1600	1	672	1600	1 7/8	672		NA					
CIRCLING	1600	1	672	1620	1	692	1640	2	712		NA					



**CHANGES - REASONS**

1. REPLACED LNR VDME TO JALOX INITIAL SEGMENT WITH ROODY TO JALOX INITIAL SEGMENT - FPT REQUEST DUE TO VOR MON PROJECT.
2. ADDED MAX 6000 TO HIL PATTERN ON LINE 2 - NEW DOCUMENTATION REQUIREMENT.
3. GP ANGLE CHANGED FROM 3.00 TO 3.05 - 34:1 SLOPE USED INSTEAD OF THE 27.03:1 USED ON ORIGINAL PROCEDURE.
4. ADDED 20:1 IS CLEAR TO LINE 7 - NEW DOCUMENTATION REQUIREMENT.
5. ADDED PBN NOTE "RNP APCH" - NEW PBN REQUIREMENT.
6. ADDED BARO-VNAV UNCOMPENSATED NOTE - BARO-VNAV NOW AUTHORIZED DUE TO LOCAL WEATHER SOURCE.
7. DELETED BARO-VNAV NA NOTE - LOCAL WEATHER SOURCE NOW UTILIZED.
8. DELETED PROCEDURE NA NOTE FOR ARRIVALS AT LNR VDME - DELETED ROUTE.
9. ADDED SPEED RESTRICTION FOR ARRIVALS AT NEGUS - SEGMENT LENGTH DOES NOT SUPPORT HIGHER AIRSPEED.
10. CHANGED ALTERNATE MINIMUMS FROM NA TO STANDARD W/NOTE - LOCAL WEATHER SOURCE NOW EXISTS.
11. LPV ALL CATS DA/HAT/VIS CHANGED FROM 1450/522/1 3/4 TO 1408/480/1 3/8 - OBSTACLE EVAL AFTER APPLYING 33.44:1 SLOPE.
12. LNAV/VNAV ALL CATS DA/HAT/VIS CHANGED FROM 1559/631/2 1/4 TO 1596/668/1 7/8 - OBSTACLE EVAL AFTER APPLYING 22.97:1 SLOPE.
13. LNAV ALL CATS MDA/HAT CHANGED FROM 1580/652 TO 1600/672 - OBSTACLE EVAL.
14. LNAV CAT D VIS CHANGED FROM 1 3/4 TO 1 7/8 - VIS TOOL APPLIED NEW VIS REQUIREMENTS.
15. CIRCLING CAT A MDA/HAA CHANGED FROM 1580/652 TO 1600/672 - STRAIGHT-IN ADJUSTMENT.
16. CIRCLING CAT B MDA HAA CHANGED FROM 1600/672 TO 1620/692 AND CAT C CHANGED FROM 1600/672 TO 1640/712 - OBSTACLE EVAL AFTER APPLYING NEW CIRCLING RADII.
17. CRC REMAINDER CHANGED FROM 515B96AF TO CE702D03 - FPAP AND VDA UPDATED.
18. ADDED AIRSPEED RESTRICTION UNTIL APOOZ TO MISSED APPROACH INSTRUCTIONS - ALLOW FOR COMPLETION OF SECTION 1 PRIOR TO TURN.
19. DELETED DME/DME RNP-0.3 NA NOTE - REPLACED WITH RNP APCH NOTE.
20. CHARTED CIRCLING ICON - APPLIED NEW CIRCLING CRITERIA.
21. DELETED ALTIMETER SETTING NOTE - UTILIZED LOCAL ALIMETER SOURCE AND MOVED BACKUP NOTE TO 8260-9 REMARKS.
22. REMOVED CHARTING OF FAS OBST FOR LPV AND LNAV/VNAV IN ADDITIONAL FLIGHT DATA - NO LONGER REQUIRED.
23. ADDED VDP - 20:1 SFC IS CLEAR.
24. INCORPORATED CHANGES FROM AMDT 1A P-NOTAM - BASED ON CURRENTLY PUBLISHED PROCEDURE.
25. DIST FROM HAT CHANGED FROM 522 HAT/1.51 NM TO 480 HAT/1.35 - MINIMUMS LOWERED.
26. CHANGED PROCEDURE ENTRY NOTE FOR ARRIVALS AT MSN VORTAC FROM PROCEDURE NA FOR ARRIVALS AT MSN VORTAC ON V228 SOUTHEAST BOUND TO PROCEDURE NA FOR ARRIVAL ON MSN VORTAC AIRWAY RADIALS 231 CW 320 - VERBIAGE IAW 8260.19.

**COORDINATED WITH:**

**A4A**   
**ALPA**   
**AOPA**   
**APA**   
**HAI**   
**NBAA**   
**OTHER:** MSN APP CON, ZAU, AMGR

*Digitally signed by*

**DONALD H LANIER**

Sep 25, 2019

**OFFICE**

FICO

**DATE**

9/20/19

**FLIGHT CHECKED BY**

JEFFREY W HARING

**DEVELOPED BY**

KELLY DEAN

*Digitally signed by*

**KELLY D DEAN**

Jul 31, 2019

**OFFICE**

AJV-A431

**DATE**

07/12/2019

**APPROVED BY**

LONNIE EVERHART

*Digitally signed by*

**DONALD H LANIER**

Sep 25, 2019

**OFFICE**

AJV-A430

**DATE**

**TITLE**  
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	C29
RUNWAY	RW10
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W10A
LTP/FTP LATITUDE	430653.5115N
LTP/FTP LONGITUDE	0893226.3355W
LTP/FTP ELLIPSOIDAL HEIGHT	+02485
FPAP LATITUDE	430638.5860N
FPAP LONGITUDE	0893026.4100W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.05
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	CE702D03

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02828
FPAP ORTHOMETRIC HEIGHT	+02828

QUALITY  
21  
CHECKED