

**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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
MIDDLETOWN REGIONAL/HOOK FIELD	KMWO	RNAV (GPS) RWY 23	ORIG-C	MIDDLETOWN	OH	
<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SUPERSEDED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>
651	650	RNAV (GPS) RWY 23	ORIG-B	11/10/2016	4W	1985
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
RNAV		20 JUNE 2019	ROUTINE			

**TERMINAL ROUTES**

<b><u>FROM</u></b>	<b><u>FIX TYPE</u></b>	<b><u>TO</u></b>	<b><u>FIX TYPE</u></b>	<b><u>LEG TYPE</u></b>	<b><u>FO/FB</u></b>	<b><u>RNP</u></b>	<b><u>COURSE</u></b>	<b><u>DISTANCE</u></b>	<b><u>ALTITUDE</u></b>
PRUDE		ZABSI		TF	FB	1.00	335.27	8.24	3100
FRAAM		WIBAR		TF	FB	1.00	084.89	11.34	3100
ZABSI	IAF	YEBTO	NOPT	TF	FB	1.00	323.67	10.00	3100
WIBAR	IAF	YEBTO	NOPT	TF	FB	1.00	143.49	10.00	3100
YEBTO	IF/IAF	VOYUV		TF	FB	1.00	233.58	8.90	2000
VOYUV	FAF	RW23	MAP	TF	FO	0.30	233.48	4.10	
RW23	MAP	1800 MSL		CA			233.48		1800
1800 MSL		YEBTO		DF	FO	1.00			3100

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW23

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 1800 THEN CLIMBING RIGHT TURN TO 3100 DIRECT YEBTO AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NE YEBTO, RT, 233.58 INBOUND, 3100 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 233.48FAF: VOYUVDIST FAF TO MAP: 4.10DIST FAF TO THLD: 4.10

4. MIN ALT: YEBTO 3100, VOYUV 2000

5. DIST TO THLD FROM OM:MM:IM:150 HAT:336 HAT: 0.91GS ANT:

6. MIN GP INCPT: 2000GP ALT AT FAF : VOYUV 2000OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 45.0

8. MSA FROM: RW23 3100

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 8 AND 26.  
CHART NOTE: CIRCLING RWY 5 NA AT NIGHT.  
CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PRUDE ON T217 SOUTH BOUND AND ON V5 SOUTHWEST BOUND.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FRAAM ON V275 SOUTHWEST BOUND.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.76 NM TO RW23\*  
\*LNAV ONLY  
WAAS CHANNEL #90429  
REFERENCE PATH ID: W23A  
FAS OBST: 889 AAO 393420N/0841959W.  
LTP HAE: 164.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 1200-3, NA WHEN LOCAL WEATHER NOT AVAILABLE.

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
LPV DA	986	1 1/8	336	986	1 1/8	336	986	1 1/8	336	986	1 1/8	336			
LNAV/VNAV DA	1083	1 1/2	433	1083	1 1/2	433	1083	1 1/2	433	1083	1 1/2	433			
LNAV MDA	1140	1	490	1140	1	490	1140	1 3/8	490	1140	1 3/8	490			
CIRCLING	1380	1	729	1380	1	729	1380	2	729	1840	3	1189			



**CHANGES - REASONS**

- 1. AIRPORT ELEVATION CHANGED FROM 650 TO 651. - PENDING AIRNAV DATA USED.
- 2. PRUDE AND FRAAM FEEDER RNP VALUE CHANGED FROM 2.00 TO 1.00. - IAW 8260.58A TABLE 1-2-1.
- 3. YEBTO INTERMEDIATE RNP VALUE CHANGED FROM 0.50 TO 1.00. - IAW 8260.58A TABLE 1-2-1.
- 4. ADDED H-I-L MAX ALTITUDE 6000. - IFP FIX DATA PULLED.
- 5. REMOVED CHART NOTE: DME/DME RNP-0.3 NA, ADDED PBN REQUIREMENTS NOTE: RNP APCH. - IAW 8260.19H 8-6-8 B (1).
- 6. CHANGED CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C (4°F) OR ABOVE 40°C (104°F), TO CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C. - IAW 8260.19H 8-6-9 S.
- 7. ADDED CHART VDP AT 1.76 NM TO RW23\*, \*LNAV ONLY. - NO DOCUMENTED 20:1 IDENTIFIED, IAW 8260.19H 8-6-10 N (1)
- 8. ADDED 20:1 IS CLEAR. IAW 8260.19H 8-6-7 G (3).
- 9. BACK-UP ALTIMETER NOTES MOVED TO BACK OF 8260-9 FOR CONTINGENCY PURPOSES. - IAW 8260.19H 8-6-9 F (3).
- 10. DELETED FAS OBST 779 TREE 393320N/0842242W - NOT REQUIRED REVISED CRITERIA.
- 11. ADDED RNP VALUE 1.00 MISSED APPROACH 1800 MSL TO YEBTO - REVISED CRITERIA.
- 12. CIRCLING CATS A-C HAA CHANGED FROM 730 TO 729, CAT D HAA CHANGED FROM 1190 TO 1189. - PENDING AIRPORT DATA USED, SEE #1.
- 13. CRC REMAINDER CHANGED FROM DA755405 TO B4E86388. - PENDING AIRPORT DATA USED, SEE #13.
- 14. LTP CHANGED FROM 393209.3425N/0842316.3675W TO 393209.3450N/0842316.3690W. - PENDING AIRPORT DATA USED.
- 15. ADDED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). -VGSI COMMISSIONING 6-20-19.
- 16. FPAP CHANGED FROM 393111.3500N0842443.8400W TO 393111.3515N/0842443.8450W - LTP CHANGED.

CHANGES FROM PREVIOUS NOTAMS BEING APPLIED:

ORIG-A:

- 1. CHANGED THRE 650 TO TDZE 650 - CHANGED THRESHOLD ELEVATION TO TOUCHDOWN ZONE ELEVATION.
- 2. DELETED NOTE: VISIBILITY REDUCTION BY HELICOPTER NA, ADDED NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA - FORMAT CHANGE PER REVISED CRITERIA.

ORIG-B:

- 1. ADDED NOTE: CIRCLING NA TO RWYS 8 AND 26 - RWY 8/26 TURF RWY.
- 2. DELETED NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA, ADDED NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - FPT ADVISED 20:1 PENETRATIONS REMOVED, THERE 34:1 PENETRATIONS, LISTED TOP 3: KMWOT011, 718 TREE, KMWOT016 728 TREE, KMWOT040 766 TREE.
- 3. DELETED NOTE: PROCEDURE NA AT NIGHT AND ADDED NOTE: CIRCLING RWY 5 NA AT NIGHT - RWY 23 20:1 REMOVED, RWY 5 HAS 20:1S.

**COORDINATED WITH:**

**A4A** ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZID ARTCC, CMH APP CON, CVG APP CON, DAY APP CON, AMGR

**FLIGHT CHECKED BY**

JAMES ONIEAL

*Digitally signed by*

**DAVID DANNER**

Mar 28, 2019

**OFFICE**

FICO

**DATE**

3/21/19

**DEVELOPED BY**

LEO PALMER

*Digitally signed by*

**LEO PALMER**

Jan 22, 2019

**OFFICE**

AJV-A421

**DATE**

**APPROVED BY**

JULIE MORGAN

*Digitally signed by*

**DAVID DANNER**

Mar 28, 2019

**OFFICE**

AJV-A42

**DATE**

**TITLE**

MANAGER



**FAS DATA BLOCK INFORMATION**

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMWO
RUNWAY	RW23
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W23A
LTP/FTP LATITUDE	393209.3450N
LTP/FTP LONGITUDE	0842316.3690W
LTP/FTP ELLIPSOIDAL HEIGHT	+01647
FPAP LATITUDE	393111.3515N
FPAP LONGITUDE	0842443.8450W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0984
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	B4E86388

**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01982
FPAP ORTHOMETRIC HEIGHT	+01982

