

**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 ID</u> KOTG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> WORTHINGTON	<u>STATE</u> MN		
<u>AIRPORT ELEVATION</u> 1574	<u>TDZE</u> 1574	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 12/30/2021	<u>MAG VAR</u> 2E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 27 JANUARY 2022	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
BILOO	IF/IAF	OSIGE		TF	FB	1.00	354.14	6.53	3000
OSIGE	FAF	HISLU/1.70 NM TO RW36		TF	FB	0.30	358.00	2.68	
HISLU/1.70 NM TO RW36		RW36	MAP	TF	FO	0.30	358.00	1.70	
RW36	MAP	1824 MSL		CA			358.00		
1824 MSL		JIMED		DF	FO	1.00			3300

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3300 DIRECT JIMED AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

- 1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF** (IAF)
- 2. HOLD S BILOO, RT, 354.14 INBOUND, 3300 FT. IN LIEU OF PT (IAF), MAX 6000.
- 3. **FAC:** 358.00 **FAF:** OSIGE **DIST FAF TO MAP:** 4.38 **DIST FAF TO THLD:** 4.38
- 4. **MIN ALT:** BILOO 3300, OSIGE 3000, HISLU/1.70 NM TO RW36 2140
- 5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **250 HAT:** 0.69 **GS ANT:**
- 6. **MIN GP INCPT:** 3000 **GP ALT AT PFAF:** OSIGE 3000 **OM:** **MM:** **IM:**
- 7. **GP ANGLE:** 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH:** 30.0
- 8. **MSA FROM:** RW36 3900

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -24°C OR ABOVE 54°C.
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BILOO ON V120 EASTBOUND.

ADDITIONAL FLIGHT DATA:

HOLD N, RT, 178.00 INBOUND.
 CHART FAS OBST: 1795 ELEVATOR (27-000746) 433747N/0953433W.
 1806 AAO 433448N/0953647W.
 WAAS CHANNEL # 99329
 REFERENCE PATH ID: W36A
 CHART CIRCLING ICON.
 LTP HAE: 453.1 M

MINIMUMS:

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

ALTERNATE: NA STANDARD - CAT D 800-2 1/2, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
	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	1824	1	250	1824	1	250	1824	1	250	1824	1	250			
LNAV/VNAV DA	2104	1 1/2	530	2104	1 1/2	530	2104	1 1/2	530	2104	1 1/2	530			
LNAV MDA	2060	1	486	2060	1	486	2060	1 3/8	486	2060	1 3/8	486			
CIRCLING	2100	1	526	2100	1	526	2100	1 1/2	526	2320	2 1/2	746			



CHANGES - REASONS

1. INCORPORATED CHANGES FROM PREVIOUS P-NOTAMS INTO AMENDMENT 1.
2. REMOVED FEEDER FROM OTG VOR/DME - OTG VOR MON.
3. ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BILOO ON V120 EASTBOUND - TURNS GREATER THAN 90 DEGREES.
4. PROFILE LINE 4, ASTERISK REMOVED FROM STEPDOWN ALTITUDE OF 2140 - FEEDER FROM OTG REMOVED FOR VOR MON/ASTERISK NO LONGER REQUIRED.
5. ADDED DIST TO THLD FROM 250 HAT: 0.69 TO PROFILE LINE 5 - IAW 8260.19I 8-6-7E(3).
6. CHANGED 34:1 IS NOT CLEAR TO "IS CLEAR" AND ADDED 20:1 IS CLEAR TO PROFILE LINE 7 - NO 34:1/20:1 PENETRATIONS IN OBSTACLE EVALUATION/IAW 8260.19I 8-6-7G(3)(A).
7. MOVED BACK-UP ALTIMETER NOTES TO BACK OF -9 - IAW 8260.19I 8-6-9F(3).
8. REMOVED CHART NOTE DME/DME RNP-0.3 NA FROM NOTES AND ADDED RNP APCH - GPS TO PBN REQUIREMENTS NOTE - IAW 8260.19I 8-6-8B(2).
9. REMOVED UNCOMPENSATED BARO-VNAV SYSTEMS NOTE FAHRENHEIT AND CHANGED -18 DEGREE C TO -24 DEGREE C - FAHRENHEIT NO LONGER USED/UPDATED 5 YEAR ACT.
10. REMOVED *LNAV ONLY FROM NOTES - NO LONGER REQUIRED.
11. REMOVED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON OTG VOR/DME AIRWAY RADIALS 195 CW 263 - OTG VOR MON/REMOVED FROM PROCEDURE.
12. CHART FAS OBST UPDATED WITH OBSTACLE ID NUMBER (27-000746) AND ELEVATOR MSL UPDATED FROM 1794 TO 1795 - NEW SURVEY/IAW 8260.19I 8-6-10C.
13. ADDED 1806 AAO 433448N/0953647W 289 OBST TO ADDITIONAL FLIGHT DATA - OBSTACLE EVALUATION RESULTS.
14. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA - IAW 8260.19I 8-6-10S.
15. LPV VISIBILITY ALL CATS CHANGED FROM 7/8 SM TO 1 SM - IAW 8260.3E TABLE 3-3-6.
16. LNAV/VNAV DA/HAT CHANGED FROM 2095/521 TO 2104/530 AND ALL CATS VISIBILITY CHANGED FROM 1 7/8 SM TO 1 1/2 SM - NEW OBSTACLE EVALUATION RESULTS/5 YR ACT UPDATED/VISCHECK UPDATED IAW 8260.3E TABLE 3-3-1.
17. FPAP LAT/LONG IN FAS DATA CHANGED FROM 434029.3800N/0953500.4900W TO 434029.3805N/0953500.4920W - TARGETS EVALUATION RESULTLS.
18. CRC REMAINDER CHANGED FROM 0A9EC880 TO D45B01C3 - UPDATED FPAP LAT/LONG.
19. PROFILE LINE 2 CHANGED AT BILOO INBOUND FROM 354.16 TO 354.14 - IN LINE WITH INBOUND COURSE.

COORDINATED WITH:

A4A **ALPA** **AOPA** **APA** **HAI** **NBAA** **OTHER:** ZMP, AMGR

FLIGHT CHECKED BY

Digitally signed by
DONALD H LANIER
Dec 20, 2021

OFFICE

FPO

DATE

12/03/2021

DEVELOPED BY

RICHARD CHRISTENSEN

Digitally signed by
RICHARD E CHRISTENSE

OFFICE

AJV-A431

DATE

09/28/2021

APPROVED BY

LONNIE EVERHART

Digitally signed by Oct 21, 2021
DONALD H LANIER
Dec 20, 2021

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	KOTG
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	433900.2695N
LTP/FTP LONGITUDE	0953500.4925W
LTP/FTP ELLIPSOIDAL HEIGHT	+04531
FPAP LATITUDE	434029.3805N
FPAP LONGITUDE	0953500.4920W
THRESHOLD CROSSING HEIGHT (TCH)	00030.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	D45B01C3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04797
FPAP ORTHOMETRIC HEIGHT	+04797

