

**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> OVL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 29	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> OLIVIA	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1076	<u>TDZE</u> 1076	<u>SUPERSEDED</u> RNAV (GPS) RWY 29	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 12/29/2022
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 6E
				<u>EPOCH YEAR</u> 1980
				<u>CANCEL/SUSPEND</u>

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 202/30 CW 022/30	NOPT	WOPUW	IF/IAF	2700
2. 022/30 CW 112/30		VOFHA	IAF	2700
3. 112/30 CW 202/30		UYEPU	IAF	3100

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
VOFHA	IAF	WOPUW	NOPT	TF	FB	1.00	022.20	5.00	2700
UYEPU	IAF	WOPUW	NOPT	TF	FB	1.00	202.28	5.00	2700
WOPUW	IF/IAF	YUWRE		TF	FB	1.00	292.24	5.00	2700
YUWRE	FAF	ZAVUL/3.00 NM TO RW29		TF	FB	0.30	292.17	1.91	
ZAVUL/3.00 NM TO RW29		RW29	MAP	TF	FO	0.30	292.17	3.00	
RW29	MAP	2000 MSL		CA			292.17		2000
2000 MSL		WOPUW		DF	FO	1.00			2700

MISSED APPROACH

MAP:

LNAV: RW29

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 2700 DIRECT WOPUW AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)									
2.	HOLD E WOPUW, LT, 292.24 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 6000.														
3.	FAC:	292.17	FAF:	YUWRE	DIST FAF TO MAP:	4.91	DIST FAF TO THLD:	4.91							
4.	MIN ALT:	WOPUW 2700, YUWRE 2700, ZAVUL/3.00 NM TO RW29 2060													
5.	DIST TO THLD FROM OM:		MM:		IM:		150 HAT:		GS ANT:						
6.	MIN GP INCPT:		GP ALT AT FAF:						OM:		MM:		IM:		
7.	GP ANGLE:		34:1:	IS NOT CLEAR	20:1:	IS NOT CLEAR	TCH:								
8.	MSA FROM:														

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: PROCEDURE NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART FAS OBST: 1222 BUILDING (27-006005) 444646N/0950054W.
YUWRE TO RW29: 3.03/45.
CHART CIRCLING ICON.

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	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1580	1	504	1580	1	504	1580	1 3/8	504	1580	1 3/8	504			
CIRCLING	1620	1	544	1620	1	544	1720	1 3/4	644	1720	2	644			

CHANGES - REASONS

1. LNAV VISIBILITY CAT C/D CHANGED FROM 1 1/2 TO 1 3/8.- UPDATED EVALUATION, 8260.3E TABLE 3-3-1.
2. ADDED FIX NAME ZAVUL TO STEPDOWN FIX 3.00 NM TO RW29.- 8260.3E 2-10-4 A(2).
3. PROFILE LINE 3: ADDED DIST FAF TO MAP 4.91.- 8260.19J 8-6-7 C(3).
4. PROFILE LINE 4: 3.00 NM TO RW29 CHANGED TO ZAVUL/3.00 NM TO RW29.- STEPDOWN FIX NAME CHANGE.
5. PROFILE LINE 7: ADDED 34:1 NOT CLEAR AND 20:1 NOT CLEAR.- UPDATED EVALUATION, PREVIOUSLY MISSING.
6. ADDED CHART NOTES: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED, AND PROCEDURE NA AT NIGHT.- NO SURVEY, VISUAL SURFACE PENETRATIONS ASSUMED.
7. ALTERNATE MINIMUMS CHANGED FROM NA TO STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.- LOCAL ALTIMETER NOW INSTALLED.
8. TAA TO UYEPU: ALTITUDE CHANGED FROM 3000 TO 3100.- CORRECTED CALCULATIONS/ROUNDING.



COORDINATED WITH:

A4A

ALPA

AOPA

X

APA

HAI

NBAA

X

OTHER: ZMP, AMGR

FLIGHT CHECKED BY

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021 GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

OFFICE

DATE

Digitally signed by

DAVID DANNER

Dec 05, 2024

DEVELOPED BY

Digitally signed by

TIA L FERONTI

TIA FERONTI

Nov 26, 2024

OFFICE

DATE

AJV-A421

08/13/2024

APPROVED BY

DAVID DANNER

Digitally signed by

DAVID DANNER

Dec 05, 2024

OFFICE

DATE

AJV-A421

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

<u>AIRPORT ID</u> OVL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 29	<u>AMDT NO.</u> ORIG-D	<u>CITY</u> OLIVIA	<u>STATE</u> MN	<u>AIRPORT ELEVATION</u> 1076	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM
202/30 CW 022/30

TO
WOPUW

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (24-1698)	450243.00N/0943333.00W	1729	500	50	5D	1000					2700
TERRAIN	450533.00N/0941945.00W	1237 (1200)								AS1500	2700

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

LEFT BASE AREA

FROM
022/30 CW 112/30

TO
VOFHA

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (24-1053)	442903.00N/0952928.00W	1641	500	50	5D	1000					2600
TERRAIN	443624.00N/0952312.00W	1205 (1200)								AS1500	2700

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



RIGHT BASE AREA

FROM

112/30 CW 202/30

TO

UYEPU

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (24-0753)	451140.00N/0950502.00W	2046	500	50	5D	1000					3100
TERRAIN	451233.00N/0945230.00W	1339 (1300)								AS1500	2800

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM

VOFHA

TO

WOPUW

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
1.00	5.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	444227.00N/0944733.00W	1346	250	50	4D	1000				AT354	2700
TERRAIN	444227.00N/0944733.00W	1146 (1100)								AS1500	2600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL

FROM

UYEPU

TO

WOPUW

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
1.00	5.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (24-1676)	444531.00N/0944257.00W	1351	500	50	5D	1000				AT349	2700
TERRAIN	444227.00N/0944733.00W	1146 (1100)								AS1500	2600

COMPUTATIONS

ALTKIASKTASHAAVKTWTRBADTACOURSE CHANGEDVEBVEB OCSRF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

WOPUW (IF/IAF)

TO

YUWRE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
1.00	5.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	444227.00N/0944733.00W	1346	250	50	4D	500				AT854	2700
TERRAIN	444227.00N/0944733.00W	1146 (1100)								AS1500	2600

COMPUTATIONS

ALTKIASKTASHAAVKTWTRBADTACOURSE CHANGEDVEBVEB OCSRF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV

FROM

YUWRE

TO

ZAVUL/3.00 NM TO RW29

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
0.30	1.91										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	444424.00N/0945709.00W	1303	215	8	4B	250				RA40 DG467	2060

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM

ZAVUL/3.00 NM TO RW29

TO

RW29

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
0.30	3.00		RW29		504						
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
BUILDING (27-006005)	444646.00N/0950054.00W	1222	250	50	4D	250				AC50 DG58	1580

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



HOLD-IN-LIEU OF PT

FROM

WOPUW

TO

P-5

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
		P-5									
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	444206.00N/0945157.00W	1329	250	10	4B	1000				AT371	2700
TERRAIN	444457.00N/0945339.00W	1149 (1100)								AS1500	2600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM

RW29

TO

WOPUW

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30-1.00											1480
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				2700
TOWER (27-000110)	444533.00N/0945224.00W	1592	250	50	4D	1000					2600
TERRAIN	444206.00N/0945157.00W	1128 (1100)								AS1500	2600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



AIRPORT ID

OVL

PROCEDURE NAME

RNAV (GPS) RWY 29

AMDT NO.

ORIG-D

CITY

OLIVIA

STATE

MN

AIRPORT ELEVATION

1076

FACILITY

RNAV

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
BUILDING (27-006005)	444646.00N/0950054.00W	1.30	544	1222	250	50	4D	300		AC50 XP48	1620
CATEGORY B											
TOWER (27-000679)	444524.00N/0950324.00W	1.84	544	1261	250	50	4D	300		AC50	1620
CATEGORY C											
TOWER (27-000679)	444524.00N/0950324.00W	2.90	644	1261	250	50	4D	300		AC50 XP109	1720
CATEGORY D											
AAO	445033.00N/0950203.00W	3.79	644	1326	215	8	4B	300		XP94	1720

CIRCLING REMARKS:

XP: MAINTAIN PREVIOUS MINIMUMS.

MSA/ESA

CENTER

RADIUS

REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZMP ARTCC, PNM FSS

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
AWOS-3	OVL	24	OVL	0	Y	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
ASOS	RWF	24	RWF	14.06	Y	40

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KOVL 1076, KRWF 1024
RA = 39.7.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
APPROACH AND RUNWAY LIGHTING SYSTEM		RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW11 - REIL (PCL), MIRL (PCL), PAPI-2L (PCL)		NPI-G	
RW29 - MIRL (PCL), REIL (PCL), PAPI-2L (PCL)		NPI-G	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
					3.00	25.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	☒	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	☒	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
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CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:



PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - NO SURVEY. VISUAL SURFACE PENETRATIONS ASSUMED..

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

VEGETATION HEIGHT: 100 FT PER FPT.

FOR CONTINGENCY PURPOSES: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE RWF ALTIMETER SETTING AND INCREASE ALL MDAS 40 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM, AND CIRCLING VISIBILITY CAT C/D 1/4 SM.

PROCEDURE NA AT NIGHT- NO SURVEY. VISUAL SURFACE PENETRATIONS ASSUMED.

ORDER 8260.3 CHAPTER 2 APPLIED TO 1306 AAO 444348.00N/0945545.00W.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	2.91
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	298.17
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1100
DISTANCE FROM	THLD	TO 1500FT POINT	4.71
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.95
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	298.17
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1100

THRESHOLD COORDINATES (IF STR-IN)	444634.75N/0950136.59W
ARP COORDINATES	444642.86N/0950158.00W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 11 DISTANCE 0.29 NM
FAF COORDINATES	444415.91N/0945532.19W
FIX NAME COORDINATES	

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
TIA FERONTI	AJV-A421	08/13/2024	AERONAUTICAL INFORMATION SPECIALIST

