

**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> KROX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 34	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> ROSEAU	<u>STATE</u> MN		
<u>AIRPORT ELEVATION</u> 1060	<u>TDZE</u> 1060	<u>SUPERSEDED</u> RNAV (GPS) RWY 34	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 10/07/2021	<u>MAG VAR</u> 2E	<u>EPOCH YEAR</u> 2025
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 NOVEMBER 2022	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 255/30 CW 075/30	NOPT	ACEBO	IF/IAF	2800
2. 075/30 CW 165/30		ADCAP	IAF	2800
3. 165/30 CW 255/30		DUHHA	IAF	2800

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
DUHHA	IAF	ACEBO	NOPT	TF	FB	1.00	254.81	6.50	2800
ADCAP	IAF	ACEBO	NOPT	TF	FB	1.00	074.57	6.50	2800
ACEBO	IF/IAF	DAYAL		TF	FB	1.00	344.69	5.94	2700
DAYAL	FAF	RW34	MAP	TF	FO	0.30	344.66	5.01	
RW34	MAP	1310 MSL		CA			344.66		
1310 MSL		BADYA		DF	FO	1.00			2800

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW34

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 DIRECT BADYA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
31
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD S ACEBO, RT, 344.69 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAF: 344.66FAF: DAYALDIST FAF TO MAP: 5.01DIST FAF TO THLD: 5.01

4. MIN ALT: ACEBO 2800, DAYAL 2700

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.65GS ANT:

6. MIN GP INCPT: 2700GP ALT AT PFAF : DAYAL 2700OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 43.8

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 6 AND 24.
CHART NOTE: RWY 34 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
HOLD N, RT, 164.60 INBOUND.
FAS OBST: 1330 AAO 484711N/0954040W.
CHART VDP AT 1.49 NM TO RW34.
WAAS CHANNEL # 99404
REFERENCE PATH ID: W34A
LTP HAE: 294.9 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, CAT D 800-2 1/2, 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	1310	3/4	250	1310	3/4	250	1310	3/4	250	1310	3/4	250			
LNAV/VNAV DA	1457	1 1/8	397	1457	1 1/8	397	1457	1 1/8	397	1457	1 1/8	397			
LNAV MDA	1580	1	520	1580	1	520	1580	1 3/8	520	1580	1 3/8	520			
CIRCLING	1600	1	540	1600	1	540	1840	2 1/4	780	1840	2 1/2	780			



CHANGES - REASONS

1. MAGVAR UPDATE FROM 5E TO 2E. - FPT REQUEST.
2. TERMINAL ROUTE FEEDER FALPA REMOVED. - REPLACED WITH TAA.
3. TERMINAL ROUTE FEEDER FATIK REMOVED. - REPLACED WITH TAA.
4. TERMINAL ROUTE BIRNE TO ACEBO REPLACED WITH ADCAP TO ACEBO. - LEG LENGTHENED TO ALLOW ATC VECTORS.
5. TERMINAL ROUTE CAMOD TO ACEBO REPLACED WITH DUHHA TO ACEBO. - LEG LENGTHENED TO ALLOW ATC VECTORS.
6. TERMINAL ROUTE ACEBO TO DAYAL CHANGED FROM 341.69/6.00 TO 344.69/5.94. - DAYAL FIX MOVEMENT/MAGVAR UPDATE.
7. ADDED TAAS TO ACEBO, ADCAP, AND DUHHA. - FPT/ATC REQUEST.
8. MISSED APPROACH CHANGED FORM CLIMB TO 2900 DIRECT ALICI AND VIA 255.93 TRACK TO BIPAC AND 192.20 TRACK TO FALPA AND HOLD. TO CLIMB TO 2800 DIRECT BADYA AND HOLD. - NEW MISSED APPROACH FPT/ATC REQUEST.
9. PROFILE LINE 2 CHANGED FROM HOLD S ACEBO, RT, 341.69 INBOUND, 2800 FT. IN LIEU OF PT (IAF). TO HOLD S ACEBO, RT, 344.69 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000. - MAGVAR UPDATE/8260.19I COMPLIANCE.
10. PROFILE LINE 3 CHANGED FAC, DIST FAF TO MAP, THLD FROM 341.66, 4.95, 4.95 TO 344.66, 5.01, 5.01. - MAGVAR UPDATE/NEW EVAL.
11. PROFILE LINE 5 ADDED 250 HAT: 0.65. - 8260.19I COMPLIANCE.
12. PROFILE LINE 6 ADDED 2700 TO GP ALT. - 8260.19I COMPLIANCE.
13. PROFILE LINE 7 ADDED 20:1 IS CLEAR. - 8260.19I COMPLIANCE.
14. PROFILE LINE 7 TCH CHANGED FROM 40.0 TO 43.8. - NEW DATA SURVEY.
15. PROFILE LINE 8 REMOVED MSA. - REPLACED WITH TAA.
16. UPDATED CONTINGENCY NOTE AND MOVED TO GENERAL REMARKS FROM CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WARROAD ALTIMETER SETTING AND INCREASE ALL DAS 36 FEET/MDAS 40 FEET, INCREASE CIRCLING CAT C AND D VISIBILITY 1/4 SM. TO CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WARROAD ALTIMETER SETTING AND INCREASE LPV DA TO 1346 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE LNAV/VNAV DA TO 1493 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE ALL MDAS 40 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM, AND CIRCLING VISIBILITY CAT C/D 1/4 SM. - NEW EVAL/8260.19I COMPLIANCE.
17. NOTE "BARO-VNAV NA WHEN USING WARROAD ALTIMETER SETTNG." WAS MOVED TO THE GENERAL REMARKS SECTION OF THE -9 AND CHANGED TO READ. "BARO-VNAV AND VDP NA WHEN USING WARROAD ALTIMETER SETTNG. - 8260.19I COMPLIANCE.
18. UPDATED BARO VNAV NOTE FROM FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C (2°F) OR ABOVE 46°C (114°F) TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C OR ABOVE 54C. - 8260.19I COMPLIANCE.
19. ADDED CHART NOTE: CHART NOTE ADDED CIRCLING NA TO RWYS 6 AND 24. - 8260.19I COMPLIANCE.
20. REMOVED PROFILE NOTE VGSI AND RNAV GLIDEPATH NOT COINCIDENT. - FAF FIX MOVEMENT MAKES THEM COINCIDENT.
21. REMOVED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FALPA VIA V171 SOUTHWEST BOUND. - NO LONGER NEEDED WITH TAA.
22. UPDATED CHART NOTE VISIBILITY REDUCTION BY HELICOPTERS NA. TO RWY 34 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. - 8260.19I COMPLIANCE.
23. ADDITIONAL FLIGHT DATA ADDED CHART CIRCLING ICON. - 8260.19I COMPLIANCE.
24. ADDITIONAL FLIGHT DATA REMOVED CHART WAAS SYMBOL. - NO LONGER NEEDED.
25. ADDITIONAL FLIGHT DATA REMOVED CHART 1314 AAO 484648N/0953850W. - 8260.19I COMPLIANCE.
26. ADDITIONAL FLIGHT DATA UPDATED HOLD NE, RT, 223.36 INBOUND TO HOLD N, RT, 164.60 INBOUND. - NEW MISSED APPROACH.
27. ADDITIONAL FLIGHT DATA UPDATED CHART VDP AT 1.49 NM TO RW34* *LNAV ONLY. TO CHART VDP AT 1.49 NM TO RW34. - 8260.19I COMPLIANCE.
28. ADDITIONAL FLIGHT DATA ADDED REMOVED DISTANCE TO THLD FROM 250 HAT: 0.66 NM. - 8260.19I COMPLIANCE.
29. UPDATED FAS OBST FROM CHART FAS OBST: 1115 TOWER 485059N0954158W, CHART FAS OBST: 1243 TOWER 485106N0954253W TO FAS OBST: 1330 AAO 484711N/0954040W. - NEW EVAL.
30. MINIMUMS UPDATED LPV VISIBILITY FROM 1 TO 3/4. - NEW EVAL.
31. MINIMUMS UPDATED LNAV/VNAV MDA/HAT/VISIBILITY FROM 1485/425/1 1/2 TO 1457/397/ 1 1/8. - NEW CONTROLLING OBSTACLE.
32. MINIMUMS UPDATED LNAV MDA/HAT FROM 1560/500/ TO 1580/540. - NEW CONTROLLING OBSTACLE.
33. FAS DATA FPAP CHANGED FROM 485232.9000N/ 0954216.8400W TO 485232.9045N/ 0954216.8470W. - NEW EVAL.
34. FAS DATA CRC REMAINDER CHANGED FROM B5F23A98 TO 1E1FB619. - NEW EVAL.
35. FAS DATA TCH CHANGED FROM 00040.0 TO 00043.8. - NEW AIRNAV DATA.



AIRPORT ID
KROX

PROCEDURE NAME
RNAV (GPS) RWY 34

ORIGINAL/AMENDMENT
1

CITY
ROSEAU

STATE
MN

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMP, AMGR

FLIGHT CHECKED BY
GREGORY SCOTT WIEBE

Digitally signed by
CASIMIR L TABAKA
Aug 09, 2022

OFFICE
FIOG

DATE
08/03/2022

DEVELOPED BY
JOHN KEEFER

Digitally signed by
CASIMIR L TABAKA
Aug 09, 2022

OFFICE
AJV-A432

DATE
04/12/2022

APPROVED BY
CASIMIR TABAKA

Digitally signed by
CASIMIR L TABAKA
Aug 09, 2022

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	KROX
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	485106.2805N
LTP/FTP LONGITUDE	0954145.6490W
LTP/FTP ELLIPSOIDAL HEIGHT	+02949
FPAP LATITUDE	485232.9045N
FPAP LONGITUDE	0954216.8470W
THRESHOLD CROSSING HEIGHT (TCH)	00043.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1408
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	1E1FB619

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03231
FPAP ORTHOMETRIC HEIGHT	+03231

