

**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> GRANITE FALLS MUNI/LENZEN-ROE- FAGEN MEMORIAL FIELD	<u>AIRPORT ID</u> KGDB	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> GRANITE FALLS	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1048	<u>TDZE</u> 1046	<u>SUPERSEDED</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 02/11/2010	<u>MAG VAR</u> 4E
<u>EPOCH YEAR</u> 2000	<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>

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>
RISLE		JUNES		TF	FB	1.00	126.75	19.04	3800
JUNES	IAF	MOLOW	NOPT	TF	FB	1.00	051.07	8.33	3800
MOLOW	IF/IAF	JOCKA		TF	FB	1.00	333.17	7.12	3000
JOCKA	FAF	RW33	MAP	TF	FO	0.30	333.11	5.94	
RW33	MAP	1448 MSL		CA			333.11		
1448 MSL		MOLOW		DF	FO	1.00			3800

MISSED APPROACH

MAP:

LNAV: RW33

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 3800 DIRECT TO MOLOW AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE MOLOW, RT, 333.17 INBOUND, 3800 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 333.11FAF: JOCKADIST FAF TO MAP: 5.94DIST FAF TO THLD: 5.94

4. MIN ALT: MOLOW 3800, JOCKA 3000

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 CLEAR20:1: IS CLEARTCH:

8. MSA FROM: RW33 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RISLE ON V24-398 WESTBOUND.

ADDITIONAL FLIGHT DATA:

CHART FAS OBST: 1189 TREE 444220N/0953109W.
CHART VDP AT 1.25 NM TO RW33.
JOCKA TO RW33: 3.05/40.

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	1480	1	434	1480	1	434	1480	1 1/4	434	1480	1 1/2	434			
CIRCLING	1480	1	432	1540	1	492	1540	1 1/2	492	1600	2	552			



CHANGES - REASONS

- 1. ADDED PBN REQUIREMENTS NOTE: RNP APCH, REMOVED CHART NOTE: DME/DME RNP-0.3 NA. - PBN REQUIREMENTS NOTATION CHANGED IAW FAAO 8260.19H.
- 2. DELETED CHART NOTE "PROCEDURE NA FOR ARRIVALS AT JUNES VIA V26 WESTBOUND"- PER VOR MON INITIATIVE HON VOR DECOMMISSIONED.
- 3. ADDED CA LEG TO TERMINAL ROUTES - IAW 8260.58A 3-5-2.
- 4. CHANGED AIRPORT ELEV/TDZE FROM "1047/1045" TO "1048/1046" - AIRNAV DATA.
- 5. ADDED MAX HOLDING "6000" AT MOLOW ON PROFILE LINE 2 - IAW 8260.19H 8-6-7.B(2).
- 6. ADDED NOTE: "20:1 IS CLEAR" - NO 20:1 PENETRATIONS IDENTIFIED.
- 7. ADDED NOTE: "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RISLE ON V24-398 WESTBOUND" - 8260.19H 8-2-5.E.
- 8. UPDATED HELICOPTER NOTE FROM "CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA" TO "CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - 8260.19H 8-6-11.K(3).
- 9. REMOVED BACKUP ALTIMETER NOTE "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MONTEVIDEO ALTIMETER SETTING AND INCREASE ALL MDA 40 FT" - INFORMATION UPDATED AND MOVED TO 8260-9 CONTINGENCY NOTE, 8260.19H, 8-6-9.F.
- 10. ADDED ADDITIONAL FLIGHT DATA NOTE: "CHART VDP AT 1.25 NM TO RW33" - 8260.3D 2-6-5.A, 8260.19H 8-6-10.N(2).
- 11. CHANGED LNAV CAT A-D HAT FROM "435" TO "434" - RWY 33 TDZE UPDATED PER AIRNAV DATA.
- 12. CHANGED CIRCLING CAT B AND C MDA/HAA FROM "1500/453" TO "1540/492" - NEW CONTROLLING OBSTACLE IDENTIFIED.
- 13. CHANGED CIRCLING CAT A HAA FROM "433" TO 432" AND CAT D HAA FROM "553" TO "552" - AIRPORT ELEVATION UPDATED PER AIRNAV DATA.

01/08/21: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 05/12/20.

- 1. TERMINAL ROUTES: UPDATED MOLOW TO JOCKA RNP FROM 0.30 TO 1.00.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HA1** ☐ **NBAA** ☒ **OTHER:** ZMP,AMGR, MSP APP CON

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

Digitally signed by

JOHN BORDY

DATE

Jan 08, 2021

DEVELOPED BY

JOHN BORDY (EDUARDO LIMA)

Digitally signed by

JOHN BORDY

Jan 08, 2021

OFFICE

AJV-A422

DATE

01/31/2020

APPROVED BY

MARLON ROBINSON

Digitally signed by

JOHN BORDY

Jan 08, 2021

OFFICE

AJV-A420

DATE

TITLE

MANAGER



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

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
GRANITE FALLS MUNI/LENZEN-ROE-FAGEN MEMORIAL FIELD	KGDB	RNAV (GPS) RWY 33	ORIG-A	GRANITE FALLS	MN	1048	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM RISLE TO JUNES

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
	19.04											
<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>
1.AAO	442506.00N/0953751.00W		1395	164	98	4E	1000				AT1405	3800
2.TERRAIN	442506.00N/0953751.00W		1195 (1200)								AS1500	2700

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL

FROM JUNES TO MOLOW

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
	8.33											
<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>
3.TOWER (27-001053)	442903.00N/0952928.00W		1641	500	50	5D	1000				AT1159	3800
4.TERRAIN	443318.00N/0952715.00W		1159 (1200)								AS1500	2700

COMPUTATIONS

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

SEGMENT REMARKS:



INTERMEDIATE

FROM
MOLOW (IF/IAF)

TO
JOCKA

RNP	DISTANCE 7.12	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.TOWER (27-020058)	443838.44N/0952658.69W		1412	500	50	5D	500				AT1088	3000
6.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
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SEGMENT REMARKS:

FINAL: LNAV

FROM
JOCKA

TO
RW33

RNP	DISTANCE 5.94	PAT	MAP RW33	HAT 434			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TREE	444220.00N/0953109.00W		1189	50	20	2C	250				XP40	1480

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

XP-TO MEET 400FT HAT REQUIREMENT FOR IMMEDIATE DIRECT MISSED APPROACH AND TO MAINTAIN CURRENT PUBLISHED STRAIGHT-IN MDA.



HOLD-IN-LIEU OF PT

FROM
MOLOW

TO
P-5

RNP	DISTANCE	PAT P-5	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
3.TOWER (27-001053)	442903.00N/0952928.00W		1641	500	50	5D	1000				AT1159	3800
6.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:

MISSED APPROACH : LNAV

FROM
RW33

TO
MOLOW

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 1380					
<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				3800
5.TOWER (27-020058)	443838.44N/0952658.69W		1412	500	50	5D	1000					2500
6.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:



AIRPORT

GRANITE FALLS
MUNI/LENZEN-ROE-FAGEN
MEMORIAL FIELD

AIRPORT ID

KGDB

PROCEDURE NAME

RNAV (GPS) RWY 33

AMDT NO.

ORIG-A

CITY

GRANITE FALLS

STATE

MN

AIRPORT ELEVATION

1048

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											
8.TREE	444532.00N/0953517.00W	1.30	432	1179	50	20	2C	300			1480
CATEGORY B											
9.TRANSMISSION_LINE (27-026270)	444630.24N/0953445.97W	1.50	492	1182	500	50	5D	300		AC50	1540
CATEGORY C											
10.TRANSMISSION_LINE (27-026270)	444630.24N/0953445.97W	1.70	492	1182	500	50	5D	300		AC50	1540
CATEGORY D											
11.TOWER (27-024313)	444713.30N/0953256.40W	2.30	552	1211	500	50	5D	300		HAA	1600

CIRCLING REMARKS:

MSA

CENTER

RW33

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (27-001373)	441932.00N/0955220.00W	204	28.8	1998	500	50	5D	1000			3000

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

LPV AND LNAV/VNAV AND TAA NOT DEVELOPED PER FPT.

100FT TREES PER FPT.

QUALITY
24
CHECKED

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PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
ZMP ARTCC, RWF FSS, MSP APP CON

<u>WX SERVICE</u> AWOS	<u>LOCATION</u> KGDB	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KGDB	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> AWOS	<u>LOCATION</u> KMVE	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KMVE	<u>DISTANCE</u> 14.59	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 36

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KGDB 1048, KMVE 1035
RA = 35.4.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW15 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)		NPI-G	
RW33 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)		NPI-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 42.0
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE	642
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE		

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	STRAIGHT-IN		
34:1			
1061 TRAVERSE_WAY (27-060993) 444445.75N/0953310.51W (2.83)		1060 TRAVERSE_WAY (27-045300) 444445.71N/0953309.45W (0.84)	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

CONTINGANCY ALTIMETER NOTE:
WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MONTEVIDEO ALTIMETER SETTING AND INCREASE ALL MDAS 40 FT, AND INCREASE LNAV CAT C VISIBILITY 1/8 SM.
VDP NA WHEN USING MONTEVIDEO ALTIMETER SETTING.



<u>AIRPORT</u> GRANITE FALLS MUNI/LENZEN-ROE-FAGEN MEMORIAL FIELD	<u>AIRPORT ID</u> KGDB	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>AMDT NO.</u> ORIG-A	<u>CITY</u> GRANITE FALLS	<u>STATE</u> MN	<u>AIRPORT ELEVATION</u> 1048	<u>FACILITY</u> RNAV
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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	2.95
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.55
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	337.11
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1100
DISTANCE FROM	THLD	TO 1500FT POINT	5.15
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.92
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	337.11
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1100

THRESHOLD
COORDINATES
(IF STR-IN)

444454.88N/0953311.62W

ARP COORDINATES

444508.85N/0953319.91W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 33 DISTANCE 0.41 NM

FAF
COORDINATES

443926.71N/0952957.13W

FIX NAME
COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED
THLD DISPLACED 642FT, ACTUAL COORDINATES: 444449.04N/0953308.15W.

QUALITY
24
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<div>AIRPORT</div> <div>GRANITE FALLS MUNI/LENZEN-ROE-FAGEN MEMORIAL FIELD</div>	<div>AIRPORT ID</div> <div>KGDB</div>	<div>PROCEDURE NAME</div> <div>RNAV (GPS) RWY 33</div>	<div>AMDT NO.</div> <div>ORIG-A</div>	<div>CITY</div> <div>GRANITE FALLS</div>	<div>STATE</div> <div>MN</div>	<div>AIRPORT ELEVATION</div> <div>1048</div>	<div>FACILITY</div> <div>RNAV</div>
PART E: PREPARED BY							
<div>NAME</div> <div>JOHN BORDY (EDUARDO LIMA)</div>	<div>OFFICE</div> <div>AJV-A422</div>			<div>DATE</div> <div>01/31/2020</div>	<div>TITLE</div> <div>AERONAUTICAL INFORMATION SPECIALIST</div>		

QUALITY

24

CHECKED

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