

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> GYL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> GLENCOE	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 993	<u>TDZE</u> 992	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 05/28/2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 16 MAY 2024	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 3E
				<u>EPOCH YEAR</u> 2000
				<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
BEEGR		JUSOR		TF	FB	1.00	083.38	13.66	3000
JUSOR	IAF	OYITE	NOPT	TF	FB	1.00	033.50	6.50	3000
LYDIA	IAF	OYITE	NOPT	TF	FB	1.00	274.43	16.90	3000
ZANNA	IAF	OYITE	NOPT	TF	FB	1.00	339.48	14.75	3000
OYITE	IF/IAF	TUPUY		TF	FB	1.00	303.70	6.07	2600
TUPUY	FAF	WELIK/1.70 NM TO RW31		TF	FB	0.30	303.64	3.23	
WELIK/1.70 NM TO RW31		RW31	MAP	TF	FO	0.30	303.64	1.70	
RW31	MAP	1242 MSL		CA			303.64		
1242 MSL		AKIRE		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT AKIRE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)
2. HOLD SE OYITE, RT, 303.70 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 303.64

FAF: TUPUY

DIST FAF TO MAP: 4.93

DIST FAF TO THLD: 4.93
4. MIN ALT: OYITE 3000, TUPUY 2600, WELIK/1.70 NM TO RW31 1560
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

250 HAT: 0.66

GS ANT:
6. MIN GP INCPT: 2600

GP ALT AT PFAF: TUPUY 2600

MM:

IM:
7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 40.0
8. MSA FROM: RW31 2800



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING HUTCHINSON ALTIMETER SETTING.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZANNA ON T400 SOUTHWEST BOUND.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HUTCHINSON ALTIMETER SETTING: INCREASE LPV DA TO 1285 FEET; INCREASE LNAV/VNAV DA TO 1296 FEET; INCREASE ALL MDAS 60 FEET.

ADDITIONAL FLIGHT DATA:

HOLD NW, RT, 123.43 INBOUND.
CHART FAS OBST: 1106 TREE (27-071298) 444358N/0940251W.
CHART VDP AT 1.07 NM TO RW31.
WAAS CHANNEL # 48937
REFERENCE PATH ID: W31A
CHART CIRCLING ICON.
LTP HAE: 274.5 M

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
LPV DA	1242	7/8	250	1242	7/8	250		NA			NA				
LNAV/VNAV DA	1253	7/8	261	1253	7/8	261		NA			NA				
LNAV MDA	1360	1	368	1360	1	368		NA			NA				
CIRCLING	1420	1	427	1480	1	487		NA			NA				



CHANGES - REASONS

1. TERMINAL ROUTES: REMOVED DWN VORTAC FEEDER WITH ASSOCIATED CHART PLANVIEW NOTE- DWN VORTAC VOR MON NATL PROGRAM.
2. PROFILE LINE 2: ADDED MAX HOLDING 6000 – REQUIRED PER CURRENT CRITERIA, IAW 8260.19H, 8-6-7, B(2).
3. PROFILE LINE 4: REMOVED "*" FROM "OYITE 3000, TUPUY 2600, WELIK/1.70 NM TO RW31 1560" - NO LONGER REQUIRED BY CURRENT CRITERIA.
4. PROFILE LINE 5: ADDED "250 HAT: 0.66" - PER 8260.19I 8-6-7E(3).
5. PROFILE LINE 7: ADDED "20:1 IS CLEAR" - NO PENETRATIONS EXIST.
6. REMOVED "DME/DME RNP - 0.3 NA" AND ADDED "RNP APCH - GPS" TO PBN REQUIREMENTS NOTE - PER 8260.19I, 8-6-8B2.
7. CHANGED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C(4°F) OR ABOVE 54°C(130°F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C" - IAW 8260.19I, 8-6-9 (R).
8. CHANGED CHART NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HUTCHINSON ALTIMETER SETTING AND INCREASE ALL DA 43 FEET AND ALL MDA 60 FEET, INCREASE LPV AND LNAV/VNAV CAT A/B VISIBILITY 1/8 MILE" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HUTCHINSON ALTIMETER SETTING: INCREASE LPV DA TO 1285 FEET; INCREASE LNAV/VNAV DA TO 1296 FEET; INCREASE ALL MDAS 60 FEET" - IAW 8260.19I, 8-6-11N(1)(A).
9. ADDED "CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - PER 8260.19I, 8-6-9M(1), CANCEL T-NOTAM 3/2003.
10. REMOVED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LYDIA ON V505 NORTHBOUND" - LESS THAN 90 DEGREES TURN.
11. CHANGED CHART PLANVIEW NOTE: FROM "PROCEDURE NA FOR ARRIVALS AT ZANNA ON V456 SOUTHWEST BOUND" TO "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZANNA ON T400 SOUTHWEST BOUND" - V456 CANCELED AND REPLACED BY T400.
12. COMBINED "BARO-VNAV NA WHEN USING HUTCHINSON ALTIMETER SETTING" AND "VDP NA WITH HUTCHINSON ALTIMETER SETTING" INTO "BARO-VNAV AND VDP NA WHEN USING HUTCHINSON ALTIMETER SETTING" - PER CURRENT DOCUMENTATION STANDARDS.
13. ADDITIONAL FLIGHT DATA: REMOVED "CHART MINNEAPOLIS CENTER 125.5" - CHARTED AUTOMATICALLY.
14. ADDITIONAL FLIGHT DATA: CHANGED CHART FAS OBST FROM "1091 TK 444429N/0940425W" TO "1106 TREE (27-071298) 444358N/0940251W" - NEW CONTROLLING OBSTACLE.
15. ADDITIONAL FLIGHT DATA: REMOVED DISTANCE TO THLD FROM 250 HAT: 0.66 NM - CURRENTLY DOCUMENTED ON PROFILE LINE 5.
16. ADDITIONAL FLIGHT DATA: REMOVED "LNAV ONLY" AND CHANGED FROM "CHART VDP AT 1.03 NM TO RW31*" TO "CHART VDP AT 1.07 NM TO RW31" - NO LONGER REQUIRED; IAW 8260.19I 8-6-7D AND VDP CHANGED BASED ON 8260.3E FORMULA 2-6-5.
17. CRC REMINDER CHANGED FROM "A2C3325E" TO "41033EC0" - LTP/FTP COORDINATES CHANGED FROM "444511.9205N/0940434.9030W" TO "444511.9155N/0940434.8920W" AND FPAP COORDINATES FROM "444604.9910N/0940615.3475W" TO "444604.9775N/0940615.3450W".

COORDINATED WITH:

A4A

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ALPA

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AOPA

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APA

☐

HAI

☐

NBAA

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OTHER:

ZMP, MSP APP CON, AMGR

FLIGHT CHECKED BY

MICHAEL A GREENWOOD

Digitally signed by

CASIMIR L TABAKA

Mar 20, 2024

OFFICE

FPO

DATE

03/19/2024

DEVELOPED BY

CASIMIR L. TABAKA (SILVIA YOUNG)

Digitally signed by

CASIMIR L TABAKA

Feb 01, 2024

OFFICE

AJV-A432

DATE

10/25/2023

APPROVED BY

CASIMIR L. TABAKA

Digitally signed by

CASIMIR L TABAKA

Feb 01, 2024

OFFICE

AJV-A432

DATE

05/16/2024

TITLE

MANAGER

AIRPORT ID
GYL

PROCEDURE NAME
RNAV (GPS) RWY 31

ORIGINAL/AMENDMENT
1A

CITY
GLENCOE

STATE
MN

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGYL
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	444511.9155N
LTP/FTP LONGITUDE	0940434.8920W
LTP/FTP ELLIPSOIDAL HEIGHT	+02745
FPAP LATITUDE	444604.9775N
FPAP LONGITUDE	0940615.3450W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1744
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	41033EC0
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03021
FPAP ORTHOMETRIC HEIGHT	+03021

