

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> RST	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> ROCHESTER	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1317	<u>TDZE</u> 1304	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 2C	<u>DATED</u> 11/03/2022
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 11 JULY 2024	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 1W
				<u>EPOCH YEAR</u> 2025
				<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
DLANY	IAF	ZUTEL		TF	FB	1.00	249.14	10.34	2900
GABDE	IAF	ZUTEL		TF	FB	1.00	003.97	7.95	2900
EMORE	IAF	ZUTEL		TF	FB	1.00	313.35	6.59	2900
ZUTEL	IF	MINGO		TF	FB	1.00	313.27	6.55	2800
MINGO	FAF	JEDUG/2.33 NM TO RW31		TF	FB	0.30	313.20	2.19	
JEDUG/2.33 NM TO RW31		RW31	MAP	TF	FO	0.30	313.20	2.33	
RW31	MAP	1504 MSL		CA			313.20		
1504 MSL		CORDY		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT CORDY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)
2. PROFILE STARTS AT ZUTEL
3. FAC: 313.20FAF: MINGO
4. MIN ALT: ZUTEL 2900, MINGO 2800, JEDUG/2.33 NM TO RW31 2100
5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT:0.45GS ANT:IM:
6. MIN GP INCPT: 2800GP ALT AT PFAF: MINGO 2800
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 55.3
8. MSA FROM: RW31 3900



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20°C OR ABOVE 54°C.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 334.78 INBOUND.
CHART FAS OBST: 1373 ANT (27-055919) 435447N/0922902W.
1519 AAO 435142N/0922324W.
CHART VDP AT 0.88 NM TO RW31.
WAAS CHANNEL # 49028
REFERENCE PATH ID: W31A
CHART CIRCLING ICON.
LTP HAE: 367.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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	1504	1800	200	1504	1800	200	1504	1800	200	1504	1800	200			
LNAV/VNAV DA	1579	2400	275	1579	2400	275	1579	2400	275	1579	2400	275			
LNAV MDA	1640	2400	336	1640	2400	336	1640	2600	336	1640	2600	336			
CIRCLING	1720	1	403	1780	1	463	1900	1 1/2	583	1900	2	583			

CHANGES - REASONS

1. CHANGED LNAV/VNAV MDA/HAT FROM 1554/250 TO 1579/275 - NEW MISSED SEGMENT OBSTACLE 1410 MSL TREE 435406.00N/0922936.00W
2. CHANGED VDP FROM 1.01 NM TO 0.88 NM - NEW PFAF LOCATION/ NEW TCH
3. CHANGED "CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500, INCREASE LNAV CAT C/D VISIBILITY TO RVR 5500" TO READ "CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500" - NEW EVAL COMPLETED
4. UPDATED CRITICAL TEMPERATURE DATA - NEW 5 YEAR DATA
5. CHANGED CRC REMAINDER FROM C179B077 TO B927469D- TCH CHANGED FROM 00056.1 TO 00055.3 AND FPAP CHANGED FROM 435512.5400N/0923043.6600W TO 435512.5465N/0923043.6645W.
6. CHANGED PROFILE LINE 7: CHANGED TCH FROM 56.1 TO 55.3 - 55.3 IS A DESIGN TCH LISTED IN AIRNAV.
7. ADDED "1519 AAO 435142N/0922324W" TO ADDITIONAL FLIGHT DATA - NEW EVALUATION 7:1 OBSTACLE.
8. LNAV CAT C AND D VISIBILITY CHANGED FROM 3500 TO 2600 - TO CORRECT ERROR ON PREVIOUS AMENDMENT DOCUMENTATION, MDA/HAT WERE CHANGED BUT VISIBILITY REMAINED THE SAME.



COORDINATED WITH:

A4A

X

ALPA

X

AOPA

X

APA

X

HAI

NBAA

X

OTHER: ZMP, RST ATCT, AMGR, RST APP CON

FLIGHT CHECKED BY

SCOTT WIEBE

Digitally signed by

DAVID DANNER

May 10, 2024

OFFICE

FPO

DATE

05/08/2024

DEVELOPED BY

JOHN BORDY (PHILLIP SMART)

Digitally signed by

DAVID DANNER

May 10, 2024

OFFICE

AJV-A433

DATE

02/27/2024

APPROVED BY

JOHN BORDY

Digitally signed by

DAVID DANNER

May 10, 2024

OFFICE

AJV-A33

DATE

TITLE

MANAGER

FAS DATA BLOCK INFORMATION

DATA FIELD

OPERATION TYPE
SBAS SERVICE PROVIDER IDENTIFIER
AIRPORT IDENTIFIER
RUNWAY
APPROACH PERFORMANCE DESIGNATOR
ROUTE INDICATOR
REFERENCE PATH DATA SELECTOR
REFERENCE PATH IDENTIFIER (APPROACH ID)
LTP/FTP LATITUDE
LTP/FTP LONGITUDE
LTP/FTP ELLIPSOIDAL HEIGHT
FPAP LATITUDE
FPAP LONGITUDE
THRESHOLD CROSSING HEIGHT (TCH)
TCH UNITS SELECTOR (METERS OR FEET USED)
GLIDEPATH ANGLE (GPA)
COURSE WIDTH AT THRESHOLD
LENGTH OFFSET
HORIZONTAL ALERT LIMIT (HAL)
VERTICAL ALERT LIMIT (VAL)

DATA

0
0
KRST
RW31
0
0
W31A
435412.6945N
0922912.1470W
+03675
435512.5465N
0923043.6645W
00055.3
F
03.00
106.75
0000
40.0
35.0

CRC REMAINDER

B927469D

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE
LTP ORTHOMETRIC HEIGHT
FPAP ORTHOMETRIC HEIGHT

K3
+03975
+03975

