

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> KRST	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>ORIGINAL/AMENDMENT</u> 2E	<u>CITY</u> ROCHESTER	<u>STATE</u> MN		
<u>AIRPORT ELEVATION</u> 1317	<u>TDZE</u> 1305	<u>SUPERSEDED</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> 2D	<u>DATED</u> 09/08/2022	<u>MAG VAR</u> 1W	<u>EPOCH YEAR</u> 2025
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 20 APRIL 2023	<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>
CORDY		COLOG		TF	FB	1.00	078.82	14.83	3000
RST VOR/DME		BOCAG		TF	FO	1.00	028.66	23.08	3000
COLOG	IAF	BOCAG	NOPT	TF	FB	1.00	117.47	7.00	3000
BOCAG	IF/IAF	AYUGI		TF	FB	1.00	207.57	8.87	3000
AYUGI	FAF	RW21	MAP	TF	FO	0.30	207.51	5.24	
RW21	MAP	1555 MSL		CA			207.51		
1555 MSL		LERPE		DF	FB	1.00			
LERPE		RST VOR/DME		TF	FO	1.00	218.47	2.66	3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW21

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT LERPE AND ON TRACK 218.47 TO RST VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD NE BOCAG, RT, 207.57 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 207.51FAF: AYUGIDIST FAF TO MAP: 5.24DIST FAF TO THLD: 5.24

4. MIN ALT: BOCAG 3000, AYUGI 3000

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.70GS ANT:

6. MIN GP INCPT: 3000GP ALT AT PFAF : AYUGI 3000OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 50.0

8. MSA FROM: RW21 3900

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -28°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CORDY ON V82-161 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON RST VOR/DME AIRWAY RADIALS 312 CW 101.

ADDITIONAL FLIGHT DATA:

HOLD NE, RT, 242.00 INBOUND.
CHART FAS OBST: 1419 TANK (27-026583) 435514N/0922844W.
CHART VDP AT 1.07 NM TO RW21.
WAAS CHANNEL # 57922
REFERENCE PATH ID: W21A
CHART CIRCLING ICON.
LTP HAE: 360.8 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	1555	1	250	1555	1	250	1555	1	250	1555	1	250			
LNAV/VNAV DA	1603	1	298	1603	1	298	1603	1	298	1603	1	298			
LNAV MDA	1680	1	375	1680	1	375	1680	1	375	1680	1	375			
CIRCLING	1720	1	403	1780	1	463	1900	1 1/2	583	1900	2	583			



CHANGES - REASONS

1. PROCEDURE NAME: UPDATED RWY FROM 20 TO 21 - AIRPORT RENUMBERING RWY DUE TO PREVIOUS MAGVAR UPDATE.
2. ALL RWY REFERENCES FROM RW20 TO RW21 - AIRPORT RENUMBERING RWY DUE TO PREVIOUS MAGVAR UPDATE.
3. FAS DATA: REFERENCE PATH IDENTIFIER (APPROACH ID) CHANGED FROM W20A TO W21A - RWY NUMBERING UPDATED.
4. FAS DATA: CRC UPDATED FROM D8C4F145 TO 6B061EC0 - RWY NUMBERING AND APPROACH ID UPDATED.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** RST APP CON, RST ATCT, APT MGR, ZMP

Digitally signed by

FLIGHT CHECKED BY

MICHAEL A GREENWOOD

ALLAN WILL

Feb 06, 2023

OFFICE

FPO

DATE

02/02/2023

DEVELOPED BY

PATRICK COMBS

Digitally signed by

PATRICK W COMBS

Dec 07, 2022

OFFICE

AJV-A423

DATE

12/08/2022

APPROVED BY

MARLON ROBINSON

Digitally signed by

ALLAN WILL

Feb 06, 2023

OFFICE

AJV-A420

DATE

TITLE
MANAGER

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRST
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	435446.2835N
LTP/FTP LONGITUDE	0922940.4865W
LTP/FTP ELLIPSOIDAL HEIGHT	+03608
FPAP LATITUDE	435326.5100N
FPAP LONGITUDE	0923035.4100W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	6B061EC0

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03908
FPAP ORTHOMETRIC HEIGHT	+03908