

**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> ROCHESTER INTL	<u>AIRPORT ID</u> KRST	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> 2C	<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SUPERSEDED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> 2B	<u>DATED</u> 02/28/2019	<u>MAG VAR</u> 1E	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 5 NOVEMBER 2020	<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	076.82	14.83	3000
RST VOR/DME		BOCAG		TF	FO	1.00	026.66	23.08	3000
COLOG	IAF	BOCAG	NOPT	TF	FB	1.00	115.47	7.00	3000
BOCAG	IF/IAF	AYUGI		TF	FB	1.00	205.57	8.87	3000
AYUGI	FAF	RW20	MAP	TF	FO	0.30	205.51	5.24	
RW20	MAP	1555 MSL		CA			205.51		
1555 MSL		LERPE		DF	FB	1.00			
LERPE		RST VOR/DME		TF	FO	1.00	216.47	2.66	3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW20

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT LERPE AND ON TRACK 216.47 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, 205.57 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 205.51 FAF: AYUGI DIST FAF TO MAP: 5.24 DIST FAF TO THLD: 5.24
4. MIN ALT: BOCAG 3000, AYUGI 3000
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.70 GS ANT: MM: IM:
6. MIN GP INCPT: 3000 GP ALT AT FAF : AYUGI 3000 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 50.0
8. MSA FROM: RW20 3900

PBN REQUIREMENTS NOTE:

RNP APCH.

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 310 CW 099.

ADDITIONAL FLIGHT DATA:

HOLD NE, RT, 240.00 INBOUND.
CHART FAS OBST: 1419 TANK 435514N/0922844W.
DISTANCE TO THLD FROM 250 HAT: 0.70 NM.
CHART VDP AT 1.07 NM TO RW20*
*LNAV ONLY.
WAAS CHANNEL # 57922
REFERENCE PATH ID: W20A
CHART: ASR.
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			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRST
RUNWAY	RW20
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
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	D8C4F145

ADDITIONAL PATH POINT RECORD INFORMATION

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

