

**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.

<b>AIRPORT</b> RUGBY MUNI	<b>AIRPORT ID</b> KRUG	<b>PROCEDURE NAME</b> RNAV (GPS) RWY 12	<b>ORIGINAL/AMENDMENT</b> ORIG-C	<b>CITY</b> RUGBY	<b>STATE</b> ND
<b>AIRPORT ELEVATION</b> 1549	<b>TDZE</b> 1542	<b>SUPERSEDED</b> RNAV (GPS) RWY 12	<b>ORIGINAL/AMENDMENT</b> ORIG-B	<b>DATED</b> 10/13/2016	<b>MAG VAR</b> 8E
<b>FACILITY</b> RNAV	<b>COORDINATES OF FACILITIES</b>	<b>ACTUAL EFFECTIVE DATE</b> 15 AUGUST 2019	<b>REQUIRED EFFECTIVE DATE</b> ROUTINE	<b>CANCEL/SUSPEND</b>	<b>EPOCH YEAR</b> 2000

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
MOT VOR/DME		OKDUC		TF	FB	1.00	065.14	38.95	3300
BALTA		IROSE		TF	FO	1.00	330.84	19.73	3200
OKDUC	IAF	IROSE	NOPT	TF	FB	1.00	050.31	6.00	3200
IROSE	IF/IAF	AXMAN		TF	FB	1.00	120.41	6.47	2700
AXMAN	FAF	RW12	MAP	TF	FO	0.30	120.51	3.53	
RW12	MAP	1900 MSL		CA			120.51		
1900 MSL		CUYAK		DF	FO	1.00			
CUYAK		BALTA		TF	FO	1.00	207.56	9.97	3600

**MISSED APPROACH**

**MAP:**

LP: RW12  
LNAV: RW12

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3600 DIRECT CUYAK AND ON TRACK 207.56 TO BALTA AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



**PROFILE:**

- 1. **PT**      **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF (IAF)**
- 2. HOLD NW IROSE, RT, 120.41 INBOUND, 3200 FT. IN LIEU OF PT (IAF), MAX 6000.
- 3. **FAC:** 120.51      **FAF:** AXMAN                      **DIST FAF TO MAP:** 3.53                      **DIST FAF TO THLD:** 3.53
- 4. **MIN ALT:** IROSE 3200, AXMAN 2700
- 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 CLEAR                      **20:1:** IS CLEAR                      **TCH:**
- 8. **MSA FROM:** RW12 3600

**PBN REQUIREMENTS NOTE:**

RNP APCH.

**NOTES:**

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MOT VOR/DME ON V15 NORTHWEST BOUND.

**ADDITIONAL FLIGHT DATA:**

CHART TIGER SOUTH MOA.  
 CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.  
 CHART VDP AT 1.07 NM TO RW12  
 WAAS CHANNEL #58124  
 REFERENCE PATH ID: W12A  
 CHART FAS OBST: 1631 TREE 482427N/1000330W, 1659 TREE 482436N/1000251W.  
 1739 AAO 482537N/1000543W, 1759 AAO 482645N/1000515W.  
 HOLD E, RT, 274.34 INBOUND  
 LTP HAE: 445.6 M

**MINIMUMS:**

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

**ALTERNATE:** NA  STANDARD

CATEGORY:	A			B			C			D			E		
	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
LP MDA	1900	1	358	1900	1	358	1900	1	358		NA				
LNAV MDA	1920	1	378	1920	1	378	1920	1	378		NA				
CIRCLING	2080	1	531	2160	1	611	2160	1 3/4	611		NA				



**CHANGES - REASONS**

1. PREVIOUSLY CHARTED CHANGES FROM P-NOTAM FOR AMENDMENTS ORIG A-B HAVE BEEN INCORPORATED ON THIS FORM - PER 8260.19G PARA 8-3-4C(3)
2. ALL REFERENCES TO MOT VORTAC CHANGED TO READ MOT VOR/DME - TACR PROJECT
3. CHANGED RNP VALUE IN INTERMEDIATE FROM 0.5 TO 1.00 AND BOTH FEEDERS FROM 2.00 TO 1.00 - IAW FAAO 8260.58 NAV SPEC GUIDANCE.
4. DELETED VDP NOT ESTABLISHED - OBSTACLES PENETRATE 20:1 FROM PART C: GENERAL REMARKS SECTION- 20:1 PENETRATIONS REMOVED.
5. CRC REMAINDER CHANGED FROM 6E11748D TO DD616DC2 - LTP AND FPAP LAT/LONG UPDATED, LTP AND FPAP ELLIPSOIDAL/ORTHOMETRIC HEIGHTS UPDATED, TCH AND GLIDEPATH ANGLE REMOVED. - NEW AIR NAV DATA INCORPORATED.
6. CHANGED CAT A CIRCLING FROM 2000TO 2080 - NEW CONTROLLING OBSTACLE.
7. ADDED CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - REMOVED VDA PER FLIGHT INSPECTION.
8. DELETED BACKUP ALTIMETER SETTING AND ASSOCIATED NOTES, ADDED TO BACK OF -9 FOR CONTIGENCY PURPOSES - KRUG WEATHER ON WMSCR/AJV POLICY CHANGE.

THIS DOES NOT QUALIFY AS A PERIODIC REVIEW - TACR PROJECT

**COORDINATED WITH:**

**A4A**  **ALPA**  **AOPA**  **APA**  **HAI**  **NBAA**  **OTHER:** MOT APP CON; ZMP; AMGR

**FLIGHT CHECKED BY**

BRIAN HANSEN

*Digitally signed by*  
**DONALD H LANIER**  
May 15, 2019

**OFFICE**

FICO

**DATE**

5/8/19

**DEVELOPED BY**

DONALD H. LANIER (DEXTER SWEETING)

*Digitally signed by*  
**DONALD H LANIER**  
May 15, 2019

**OFFICE**

AJV-A431

**DATE**

03/06/2019

**APPROVED BY**

LONNIE EVERHART

*Digitally signed by*  
**DONALD H LANIER**  
May 15, 2019

**OFFICE**

AJV-A430

**DATE**

**TITLE**  
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRUG
RUNWAY	RW12
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12A
LTP/FTP LATITUDE	482336.3970N
LTP/FTP LONGITUDE	1000148.2800W
LTP/FTP ELLIPSOIDAL HEIGHT	+04456
FPAP LATITUDE	482240.8830N
FPAP LONGITUDE	1000003.7715W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1656
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	DD616DC2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04674
FPAP ORTHOMETRIC HEIGHT	+04674

