

**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> RAPID CITY RGNL	<u>AIRPORT ID</u> KRAP	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 14	<u>ORIGINAL/AMENDMENT</u> 2C	<u>CITY</u> RAPID CITY	<u>STATE</u> SD
<u>AIRPORT ELEVATION</u> 3204	<u>TDZE</u> 3191	<u>SUPERSEDED</u> RNAV (GPS) RWY 14	<u>ORIGINAL/AMENDMENT</u> 2B	<u>DATED</u> 04/30/2015	<u>MAG VAR</u> 8E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 5 DECEMBER 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
BFFLO	IAF	ASUVE		TF	FB	1.00	203.97	26.82	5500
ASUVE	IF	ZUDIM		TF	FB	1.00	143.67	14.69	4900
ZUDIM	FAF	RW14	MAP	TF	FO	0.30	143.78	5.15	
RW14	MAP	3450 MSL		CA			143.78		
3450 MSL		COTYU		DF	FO	1.00			5500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW14

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5500 DIRECT COTYU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. **PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. PROFILE STARTS AT ASUVE
3. **FAC:** 143.78 **FAF:** ZUDIM **DIST FAF TO MAP:** 5.15 **DIST FAF TO THLD:** 5.15
4. **MIN ALT:** ASUVE 5500, ZUDIM 4900
5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **259 HAT:** 0.65 **GS ANT:**
6. **MIN GP INCPT:** 4900 **GP ALT AT FAF :** ZUDIM 4900 **OM:** **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** IS NOT CLEAR **20:1:** IS CLEAR **TCH:** 50.0
8. **MSA FROM:** RW14 8500

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -26°C OR ABOVE 48°C.
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BFFLO ON V491 NORTHBOUND.

ADDITIONAL FLIGHT DATA:

CHART ELLSWORTH AFB
 CHART CIRCLING ICON.
 CHART VDP AT 1.68 NM TO RW14*
 *LNAV ONLY
 WAAS CHANNEL #60919
 REFERENCE PATH ID: W14A
 CHART FAS OBST: 3527 TOWER 440506N/1030423W.
 HOLD SE, RT, 323.92 INBOUND
 LTP HAE: 956 M

MINIMUMS:

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

ALTERNATE: NA STANDARD - CAT D 800-2 1/2, CAT E 800-2 3/4, 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
LPV DA	3450	1	259	3450	1	259	3450	1	259	3450	1	259	3450	1	259
LNAV/VNAV DA	3871	2 1/2	680	3871	2 1/2	680	3871	2 1/2	680	3871	2 1/2	680	3871	2 1/2	680
LNAV MDA	3780	1	589	3780	1	589	3780	1 3/4	589	3780	1 3/4	589	3780	1 3/4	589
CIRCLING	3780	1	576	3840	1	636	3860	1 3/4	656	3940	2 1/4	736	3960	2 3/4	756



CHANGES - REASONS

1. INCORPORATED CHANGES FROM AMDT2A-B - IAW FAAO 8260.19H, PARA 8-3-4C (2).
2. DISTANCE TO THLD FROM 259 HAT CHANGED FROM 0.67NM TO 0.65NM AND MOVED FROM ADDITIONAL FLIGHT DATA TO LINE 5 - TCH VALUE CHANGED FROM 47 TO 50, RECALCULATED DISTANCE USING TARGETS, AND IAW FAAO 8260.19H, PARA 8-6-7 E.
3. UPDATED VDP FROM 1.70 MILES TO RW 14 TO 1.68 NM TO RW14 - IAW 8260.3D, PARA 2-6-5.
4. ADDED TO ADDITIONAL FLIGHT DATA TO CHART CIRCLING ICON - IAW8260.19H PARA 8-6-10 P (T) AND MINIMUMS MATCH VOR OR TACAN RWY32, AMDT 24H.
5. TCH CHANGED FROM 47 TO 50 FEET - MATCHED VGSI AND NO IMPACT ON PFAF LOCATION.
6. ADDED 20:1 IS CLEAR - IAW 8260.19H, PARA 8-6-7 G (3).
7. UPDATED CIRCLING MINIMUMS FOR CAT C FROM MDA/HAA3840/636 TO 3860/656, CAT D FROM MDA/HAA3840/636, VIS 2 TO 3940/736, VIS 2 1/4 - UPDATED CIRCLING CRITERIA, NEW CONTROLLING OBSTACLES. MATCHING FLIGHT CHECKED ILS OR LOC RWY 22.
8. DELETED CHART NOTE: CIRCLING TO RWY 5-23 NA AT NIGHT - MATCH VOR OR TACAN RWY 14, ORIG-F.
9. UPDATED UNCOMPENSATED BARO-VNAV NOTE FROM NA BELOW 14C (7F) OR ABOVE 53C (128F) TO NA BELOW -26C OR ABOVE 48 C - CURRENT HISTORICAL WEATHER DATA AND IAW 8260.19H, PARA 8-6-9 S.
10. REMOVED BACK-UP ALTIMETER SETTING NOTE, VDP AND BARO-VNAV NA WHEN USING ELLSWORTH ALTIMETER NOTE - ASOS IS ON WMSCR, NOTES ADDED TO 8260-9 FOR CONTINGENCY USE.
10. UPDATED CHART NOTE HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED TO RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - IAW 8260.19H, PARA 8-6-11 K (3).
11. DELETED CHART NOTE: DME/DME RNP -0.3 NA AND ADDED PBN REQUIREMENTS NOTE RNP APCH - IAW FAAO 8260.19H, PARA 8-6-8 B (1).
12. ADDED CHART FAS OBST:3527 TOWER 440506N/1030423W - IAW FAAO 8260.19H, PARA 8-6-10 C.
13. CRC REMAINDER CHANGED FROM 94ED952B TO 73442EE2 - UPDATED AIRFIELD DATA.

PDF EDITS: ADDED ALTERNATE MINIMUMS: STANDARD - CAT D800-2 1/2, CAT E 800-2 3/4.

COORDINATED WITH:

A4A
 ALPA
 AOPA
 APA
 HAI
 NBAA
 OTHER: RAP ATCT, APP CON, ZDV, ARPT MGR, ATA

Digitally signed by

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Oct 07, 2019

OFFICE

FICO

OFFICE

AJV-A431

OFFICE

AJV-A430

DATE

10/04/19

DATE

06/11/2019

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRAP
RUNWAY	RW14
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W14A
LTP/FTP LATITUDE	440313.7835N
LTP/FTP LONGITUDE	1030354.0240W
LTP/FTP ELLIPSOIDAL HEIGHT	+09560
FPAP LATITUDE	440155.2360N
FPAP LONGITUDE	1030255.6975W
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	0096
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	73442EE2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+09727
FPAP ORTHOMETRIC HEIGHT	+09727

