

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> SIOUX GATEWAY/BRIG GEN BUD DAY FIELD	<u>AIRPORT ID</u> KSUX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG-G	<u>CITY</u> SIOUX CITY	<u>STATE</u> IA	
<u>AIRPORT ELEVATION</u> 1098	<u>TDZE</u> 1096	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG-F	<u>DATED</u> 02/01/2018	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<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>
CUSHO		USOSE		TF	FB	1.00	242.32	16.40	3900
DECKA		ZAGTA		TF	FB	1.00	356.91	15.22	3900
SUX VORTAC		WAVUK		TF	FO	1.00	130.33	8.41	3900
USOSE	IAF	WAVUK	NOPT	TF	FB	1.00	222.87	5.00	3900
ZAGTA	IAF	WAVUK	NOPT	TF	FB	1.00	042.77	5.00	3900
WAVUK	IF/IAF	TOVUY		TF	FB	1.00	312.82	6.55	2900
TOVUY	FAF	RW31	MAP	TF	FO	0.30	312.75	5.45	
RW31	MAP	1296 MSL		CA			312.75		
1296 MSL		VOGYU		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT VOGYU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE WAVUK, RT, 312.82 INBOUND, 3900 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 312.75

FAF: TOVUY

DIST FAF TO MAP: 5.45

DIST FAF TO THLD: 5.45

4. MIN ALT: WAVUK 3900, TOVUY 2900

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.50

GS ANT:

6. MIN GP INCPT: 2900

GP ALT AT FAF : TOVUY 2900

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 42.7

8. MSA FROM: RW31 4400

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON SUX VORTAC AIRWAY RADIALS 105 CW 150.
CHART NOTE: FOR INOPERATIVE ALS INCREASE LPV CAT E VISIBILITY TO RVR 4000; INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 3/8 SM AND LNAV CATS C/D/E VISIBILITY TO 1 3/8 SM.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.29 NM TO RW31*
*LNAV ONLY
WAAS CHANNEL #90211
REFERENCE PATH ID: W31A
FAS OBST: 1289 AAO 422118N/0961900W.
HOLD NW, RT, 132.56 INBOUND
LTP HAE: 307.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/2, CAT E 1000-3

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**	1296	2400	200	1296	2400	200	1296	2400	200	1296	2400	200	1296	2400	200
LNAV/VNAV DA	1596	1 1/4	500	1596	1 1/4	500	1596	1 1/4	500	1596	1 1/4	500	1596	1 1/4	500
LNAV MDA	1560	2400	464	1560	2400	464	1560	5000	464	1560	5000	464	1560	5000	464
CIRCLING	1640	1	542	1700	1	602	1700	1 3/4	602	1840	2 1/2	742	2000	3	902



CHANGES - REASONS

1. AIRPORT NAME CHANGED FROM SIOUX GATEWAY/COL BUD DAY FIELD TO SIOUX GATEWAY/BRIG GEN BUD DAY FIELD - POSTHUMOUS PROMOTION.
2. PROFILE SECTION, LINE 2, ADDED MAXIMUM HOLDING ALTITUDE - CURRENT DOCUMENTATION POLICY.
3. PROFILE SECTION, LINE 7, ADDED "20:1 IS CLEAR" - CURRENT DOCUMENTATION POLICY.
4. REPLACED DME/DME NOTE WITH PBN REQUIREMENTS NOTE - CURRENT DOCUMENTATION POLICY.
5. REMOVED FAHRENHEIT VALUES FROM BARO-VNAV NOTE - CURRENT DOCUMENTATION POLICY.
6. INOPERATIVE ALS NOTE, CHANGED "MALSR" TO "ALS", ADJUSTED VISIBILITIES, REPLACED "MILE" WITH "SM" - CURRENT CALCULATION AND DOCUMENTATION POLICY.
7. MOVED BACKUP ALTIMETER NOTES TO FORM 8260-9 - CURRENT DOCUMENTATION POLICY.
8. ALTERNATE MINIMUMS, REMOVED "@NA WHEN LOCAL WEATHER NOT AVAILABLE" - NOT APPLICABLE.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMP, SUX ATCT, AIRPORT MANAGER, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

DEVELOPED BY

RUSS ROSLEWSKI

Digitally signed by

RUSSELL ROSLEWSKI

Mar 13, 2019

CASIMIR L TABAKA

Mar 21, 2019

OFFICE

AJV-A421

DATE

01/31/2019

APPROVED BY

MARLON ROBINSON

Digitally signed by

CASIMIR L TABAKA

Mar 21, 2019

OFFICE

AJV-A420

DATE

TITLE
MANAGER

QUALITY
22
CHECKED

<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
SIoux GATeway/BRIG GEN BUD DAY FIELD	KSUX	RNAV (GPS) RWY 31	ORIG-G	SIoux CITY	IA

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSUX
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	422329.4490N
LTP/FTP LONGITUDE	0962227.9195W
LTP/FTP ELLIPSOIDAL HEIGHT	+03071
FPAP LATITUDE	422433.2200N
FPAP LONGITUDE	0962351.9365W
THRESHOLD CROSSING HEIGHT (TCH)	00042.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0008
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER 1400A898

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03332
FPAP ORTHOMETRIC HEIGHT	+03332

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22
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FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

<u>AIRPORT</u> SIOUX GATEWAY/BRIG GEN BUD DAY FIELD	<u>AIRPORT ID</u> KSUX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>AMDT NO.</u> ORIG-G	<u>CITY</u> SIOUX CITY	<u>STATE</u> IA	<u>AIRPORT ELEVATION</u> 1098	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM CUSHO TO USOSE

<u>RNP</u>	<u>DISTANCE</u> 16.40	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.TOWER (19-000077)	422437.00N/0955959.00W		1815	250	50	4D	1000				AT1085	3900
2.TERRAIN	422437.00N/0955959.00W		1432 (1400)								AS1500	2900

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FEEDER

FROM DECKA TO ZAGTA

<u>RNP</u>	<u>DISTANCE</u> 15.22	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
3.AAO	420136.00N/0961957.00W		1700	164	98	4E	1000				AT1200	3900
4.TERRAIN	420136.00N/0961957.00W		1500 (1500)								AS1500	3000

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FACILITY
RNAV

HMAS

RF CENTER FIX/DISTANCE

HMAS

RF CENTER FIX/DISTANCE

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RF CENTER FIX/DISTANCERF CENTER FIX/DISTANCE

QUALITY
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CHECKED

MISSED APPROACH : LNAV

FROM

RW31

TO

VOGYU

RNP	DISTANCE	PAT	MAP	HAT			HMAS				
							1460				
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3500
17.TOWER (31-000954)	422817.00N/0962532.00W	1586	50	20	2C	1000					2600
18.TERRAIN	422930.00N/0963548.00W	1365 (1400)								AS1500	2900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

CIRCLING

☒ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☒ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
19.POLE (19-000534)	422434.00N/0962104.00W	1.30	542	1326	20	10	1B	300			1640
CATEGORY B											
20.TREE (KSUXT0693)	422531.65N/0962042.35W	1.84	602	1387	20	10	1B	300			1700
CATEGORY C											
21.TOWER (19-026545)	422737.29N/0962216.51W	2.90	602	1400	20	3	1A	300			1700
CATEGORY D											
22.AAO	422812.00N/0962030.00W	3.79	742	1529	50	20	2C	300			1840
CATEGORY E											
23.TOWER (19-002530)	422909.84N/0962049.85W	4.74	902	1650	20	20	1C	300		XP40	2000

CIRCLING REMARKS:

XP 40 TO MATCH CURRENT PUBLISHED MDA



MSA

CENTER

RW31

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (19-000403)	423512.00N/0961358.00W	031	13.3	3370	500	125	5E	1000			4400

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
SIOUX GATEWAY/BRIG GEN BUD DAY FIELD	KSUX	RNAV (GPS) RWY 31	ORIG-G	SIOUX CITY	IA	1098	RNAV

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FOR CONTINGENCY BACKUP ALTIMETER USE ONLY:
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LE MARS ALTIMETER SETTING AND INCREASE ALL DA 70 FEET AND ALL MDA 80 FEET, INCREASE LNAV CATS C/D/E VISIBILITY TO RVR 6000, INCREASE CIRCLING CATS C/D VISIBILITY 1/4 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING LE MARS ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO RVR 4500; INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 5/8 SM; INCREASE LNAV CAT E VISIBILITY TO 1 5/8 SM.
CHART NOTE: VDP AND BARO-VNAV NA WHEN USING LE MARS ALTIMETER SETTING.
CHART NOTE: **RVR 1800 NA WHEN USING LE MARS ALTIMETER SETTING.

VEGETATION HEIGHT IS 100 FEET.

ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT</u> SIOUX GATEWAY/BRIG GEN BUD DAY FIELD	<u>AIRPORT ID</u> KSUX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>AMDT NO.</u> ORIG-G	<u>CITY</u> SIOUX CITY	<u>STATE</u> IA	<u>AIRPORT ELEVATION</u> 1098	<u>FACILITY</u> RNAV
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PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	2.75
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.56
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	315.75
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1113
DISTANCE FROM	THLD	TO 1500FT POINT	4.60
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.00
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	315.75
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1113

THRESHOLD
COORDINATES
(IF STR-IN)

422329.45N/0962227.92W

ARP COORDINATES

422409.40N/0962303.70W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 31 DISTANCE 0.80 NM

FAF
COORDINATES

421935.17N/0961719.86W

FIX NAME
COORDINATES

IF WAVUK: 421453.49N/0961110.72W

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.

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22
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<u>AIRPORT</u> SIOUX GATEWAY/BRIG GEN BUD DAY FIELD	<u>AIRPORT ID</u> KSUX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>AMDT NO.</u> ORIG-G	<u>CITY</u> SIOUX CITY	<u>STATE</u> IA	<u>AIRPORT ELEVATION</u> 1098	<u>FACILITY</u> RNAV
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PART E: PREPARED BY

<u>NAME</u> RUSS ROSLEWSKI	<u>OFFICE</u> AJV-A421	<u>DATE</u> 01/31/2019	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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