

US DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD  
INSTRUMENT APPROACH PROCEDURE  
TITLE 14 CFR PART 97.33

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TERMINAL ROUTES				MISSED APPROACH			
FROM	TO	COURSE AND DISTANCE	ALTITUDE				
FSD VORTAC	MOPUE (FO)	048.94 / 11.08	4000	LPV: DA LNAV/VNAV: DA LNAV: RW21			
SECTO (IAF)	MOPUE (NOPT) (FB)	232.88 / 4.23	4000				
MOPUE (IF/IAF)	RAPNE (FB)	210.01 / 7.00	3100	CLIMB TO 4000 DIRECT KASME AND HOLD.			
RAPNE (FAF)	WADRI/2.00 NM TO RW21 (FB)	209.95 / 3.09					
WADRI/2.00 NM TO RW21	RW21 (MAP) (FO)	209.95 / 2.00		ADDITIONAL FLIGHT DATA: HOLD SW, RT, 029.77 INBOUND. CHART FAS OBST: 1523 TOWER 433516N/0964346W CHART 1599 TREE 433648N/0964204W. DISTANCE TO THLD FROM 200 HATH: 0.47 NM. CHART VDP AT 1.19 MILES TO RW21* *LNAV ONLY. WAAS CHANNEL # 99323 REFERENCE PATH ID: W21A CHART ASR. LTP HAE: 409.6 M			
RW21 (MAP)	1630 MSL	209.95					
1630 MSL	KASME (FO)		4000				

  

1. PT <u>      </u> SIDE OF COURSE <u>      </u> OUTBOUND <u>      </u> FT WITHIN <u>      </u> MILES OF <u>      </u> (IAF)			
2. HOLD NE MOPUE, RT, 210.01 INBOUND, 4000 FT. IN LIEU OF PT (IAF)			
3. FAC: <u>209.95</u> FAF: <u>RAPNE</u> DIST FAF TO MAP: <u>5.09</u> THLD: <u>5.09</u>			
4. MIN. ALT: MOPUE 4000, RAPNE 3100, WADRI/2.00 NM TO RW21 2100*			
5. DIST TO THLD FROM OM: <u>      </u> MM: <u>      </u> IM: <u>      </u> 150 HAT: <u>      </u> 100 HAT: <u>      </u> GS ANT: <u>      </u>			
6. MIN GS INCPT: <u>3100</u> GS ALT AT: <u>RAPNE 3100</u> OM: <u>      </u> MM: <u>      </u> IM: <u>      </u>			
7. GS ANGLE: <u>3.00</u> TCH: <u>48.9</u> 34:1 IS CLEAR			
8. MSA FROM: RW21 4500			

  

MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD			
CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	1630	2400	200	1630	2400	200	1630	2400	200	1630	2400	200			
LNAV/VNAV DA	1735	2400	305	1735	2400	305	1735	2400	305	1735	2400	305			
LNAV MDA	1860	2400	430	1860	2400	430	1860	4000	430	1860	4000	430			
CIRCLING	1980	1	550	1980	1	550	1980	1 1/2	550	2040	2	610			

  

NOTES:  
 CHART NOTE: DME/DME RNP-0.3 NA.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SECTO ON V148 NORTHEAST BOUND.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON FSD VORTAC AIRWAY RADIALS 319 CW 110.  
 CHART NOTE: BARO-VNAV NA.

  

CITY AND STATE SIOUX FALLS, SD	ELEVATION: 1430	THRE: 1430	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1A 19 SEPTEMBER 2013	SUP:
	AIRPORT NAME: JOE FOSS FIELD				AMDT: 1
					DATED 08/25/2011

QUALITY  
9  
CHECKED

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE  
FLIGHT STANDARDS SERVICE - FAR PART 97.33**

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**FAS DATA BLOCK INFORMATION****DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KFSD
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	433534.3170N
LTP/FTP LONGITUDE	0964403.3870W
LTP/FTP ELLIPSOIDAL HEIGHT	+04096
FPAP LATITUDE	433421.2300N
FPAP LONGITUDE	0964513.4800W
THRESHOLD CROSSING HEIGHT (TCH)	00048.9
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**

7E7C15CF

**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04358
FPAP ORTHOMETRIC HEIGHT	+04358

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[illegible][illegible][illegible]

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP	KFSDK3FR21	AFSD	010FSD	K3D 0V	IF					18000		A JS	
SUSAP	KFSDK3FR21	AFSD	020MOPUEK3EA0EY	A 020TF		04890111		+ 04000				A JS	
SUSAP	KFSDK3FR21	AFSD	030MOPUEK3EA0EE	AR HF		21000040		+ 04000				A JS	
SUSAP	KFSDK3FR21	ASECTO	010SECTOK3EA0E	A IF						18000		A JS	
SUSAP	KFSDK3FR21	ASECTO	020MOPUEK3EA0EE	B 010TF		23290042		+ 04000				A JS	
SUSAP	KFSDK3FR21	R	010MOPUEK3EA0E	I IF				+ 04000		18000		A JS	
SUSAP	KFSDK3FR21	R	020RAPNEK3EA1E	F 051TF		21000070		+ 03100			RW21	K3PGA JS	
SUSAP	KFSDK3FR21	R	020RAPNEK3EA2WALPV		ALNAV/VNAV ALNAV							JS	
SUSAP	KFSDK3FR21	R	021WADRIK3EA0E	S 031TF		21000031		V 0210002115		-300		A JS	
SUSAP	KFSDK3FR21	R	030RW21	K3PGOGY M 031TF		21000020		01479		-300		A JS	
SUSAP	KFSDK3FR21	R	040	0 M CA		2100		+ 01630				A JS	
SUSAP	KFSDK3FR21	R	050KASMEK3EA0EY	DF				+ 04000				A JS	
SUSAP	KFSDK3FR21	R	060KASMEK3EA0EE	R HM		02980040		+ 04000				A JS	

[illegible][illegible]

SUP:	
AMDT:	1
DATED:	08/25/2011

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SUSAP KFSDK3PR21 RW21 001 0000W21A0N4335343170W09644033870+040960300N4334212300W09645134800106750008000489F4003507E7C15CF  
SUSAP KFSDK3PR21 RW21 002E +04358+04358LPV 99323

	1	2	3	4	5	6	7	8	9	0	1	2	3
MSA	1	2	3	4	5	6	7	8	9	0	1	2	3
	12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012												
	SUSAP KFSDK3SRW21 K3PG			0	18018004525								M

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CITY AND STATE <b>SIoux FALLS, SD</b>	ELEVATION: <b>1430</b> THRE: <b>1430</b>	FACILITY IDENTIFIER:  <b>RNAV</b>	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: <b>RNAV (GPS) RWY 21, AMDT 1A</b> 19 SEPTEMBER 2013	SUP:
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**ARINC SUMMARY - 424-18 - RNAV (GPS)**

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG (TRUE)	DISTANCE	ALTITUDE	SPEED
FSD		FSD	010		IF		FB					
FSD		MOPUE	020	IAF	TF		FO	2.0	048.9 (053.9T)	011.1	AA 04000	
FSD		MOPUE	030	IAF	HF	R	FO		210.0 (215.0T)	004.0	AA 04000	
SECTO		SECTO	010	IAF	IF		FB					
SECTO		MOPUE	020		TF		FB	1.0	232.9 (237.9T)	004.2	AA 04000	
		MOPUE	010	FACF	IF		FB				AA 04000	
		RAPNE	020	FAF	TF		FB	0.5	210.0 (215.0T)	007.0	AA 03100	
		WADRI	021	SDF	TF		FB	0.3	210.0 (215.0T)	003.1	AA 02100	GS 02115
		RW21	030	MAP	TF		FO	0.3	210.0 (215.0T)	002.0	AT 01479	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG (TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		210.0 (215.0T)		AA 01630	
	KASME	050		DF		FO				AA 04000	
	KASME	060		HM	R	FO		029.8 (034.8T)	004.0	AA 04000	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	FSD	N433858.17	W0964652.05	N4338.970	W09646.868
	KASME	N432339.10	W0965527.12	N4323.652	W09655.452
	MOPUE	N434528.94	W0963430.68	N4345.482	W09634.511
	RAPNE	N433944.93	W0964002.48	N4339.749	W09640.041
	SECTO	N434744.17	W0962933.77	N4347.736	W09629.563
	WADRI	N433712.74	W0964228.84	N4337.212	W09642.481
	RW21	N433534.32	W0964403.39	N4335.572	W09644.057

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW21	01430	49

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	AIRPORT NAME:			<b>RNAV (GPS) RWY 21, AMDT 1A</b>	AMDT: <b>1</b>
	<b>JOE FOSS FIELD</b>		<b>RNAV</b>	<b>19 SEPTEMBER 2013</b>	DATED: <b>08/25/2011</b>