

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, 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 in feet RVR.												
TERMINAL ROUTES								MISSED APPROACH								
FROM		TO		COURSE AND DISTANCE		ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW13 CLIMB TO 3400 DIRECT GRETE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 311.23 INBOUND. CHART FAS OBST: 1556 TREE 480727N/0985522W DISTANCE TO THLD FROM 250 HATH: 0.63 NM. CHART VDP AT 0.94 MILES TO RW13* *LNAV ONLY. WAAS CHANNEL # 78314 REFERENCE PATH ID: W13A CHART CIRCLING ICON. LTP HAE: 424.1 M								
KRAMR (IF/IAF)		GWALT (FB)		130.91 / 7.00		3100										
GWALT (FAF)		UQEKO/1.70 NM TO RW13 (FB)		131.00 / 3.26												
UQEKO/1.70 NM TO RW13		RW13 (MAP) (FO)		131.00 / 1.70												
RW13 (MAP)		1720 MSL		131.00		3400										
1720 MSL		GRETE (FO)														
1. PT <u> </u> SIDE OF COURSE <u> </u> OUTBOUND <u> </u> FT WITHIN <u> </u> MILES OF <u> </u> (IAF) 2. HOLD NW KRAMR, RT, 130.91 INBOUND, 3400 FT. IN LIEU OF PT (IAF) 3. FAC: <u>131.00</u> FAF: <u>GWALT</u> DIST FAF TO MAP: <u>4.96</u> THLD: <u>4.96</u> 4. MIN. ALT: KRAMR 3400, GWALT 3100, UQEKO/1.70 NM TO RW13 2060* 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>GWALT 3100</u> OM: <u> </u> MM: <u> </u> IM: <u> </u> 7. GS ANGLE: <u>3.00</u> TCH: <u>50.0</u> 34:1 IS CLEAR 8. MSA FROM: <u> </u>								MAG VAR: 7E EPOCH YEAR: 2000								
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	1720	3/4	250	1720	3/4	250	1720	3/4	250	1720	3/4	250				
LNAV/VNAV DA	1791	1	321	1791	1	321	1791	1	321	1791	1	321				
LNAV MDA	1820	1	350	1820	1	350	1820	1	350	1820	1	350				
CIRCLING	2000	1	544	2000	1	544	2240	2 1/4	784	2240	2 1/2	784				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING CANDO ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CANDO ALTIMETER SETTING AND INCREASE (SEE FORM 8260-10) <div style="float: right; text-align: right;"> @ CAT C 800-2 1/4, CAT D 800-2 1/2 @ NA WHEN LOCAL WEATHER NOT AVAILABLE. </div>																
CITY AND STATE DEVILS LAKE, ND				ELEVATION: 1456 THRE: 1470 AIRPORT NAME: DEVILS LAKE RGNL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, AMDT 1 12 DECEMBER 2013				SUP: AMDT: ORIG-A DATED 06/03/2010		

QUALITY
 2
 CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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NOTES, (CONT.):

ALL DA 63 FEET AND ALL MDA 80 FEET, INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/4 MILE, LNAV AND CIRCLING CATS C AND D VISIBILITY 1/4 MILE.

TAA

	FROM	TO	ALT
1.	041/30 CW 221/30 (NOPT)	KRAMR (IF/IAF) (FB)	3400
2.	221/30 CW 041/30	KRAMR (IF/IAF) (FO)	3400

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CITY AND STATE
DEVILS LAKE, ND

ELEVATION: 1456 THRE: 1470
AIRPORT NAME:
DEVILS LAKE RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:
RNAV (GPS) RWY 13, AMDT 1
12 DECEMBER 2013

SUP:	
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**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	KDVL
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	480726.8875N
LTP/FTP LONGITUDE	0985511.1365W
LTP/FTP ELLIPSOIDAL HEIGHT	+04241
FPAP LATITUDE	480620.6500N
FPAP LONGITUDE	0985342.2900W
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	0800
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

7E936071

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04479
FPAP ORTHOMETRIC HEIGHT	+04479

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CITY AND STATE
DEVILS LAKE, ND

ELEVATION: 1456 THRE: 1470
AIRPORT NAME:
DEVILS LAKE RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 13, AMDT 1
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	1	2	3	4	5	6	7	8	9	0	1	2	3
WP	12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012												
	SUSAAEENRT	GRETE K30	W	N47572705W098414977				E0047	NAR		GRETE		
	SUSAAEENRT	GWALT K30	W	N48110813W099000854				E0049	NAR		GWALT		
	SUSAAEENRT	KRAMR K30	W	N48161983W099070923				E0050	NAR		KRAMR		
	SUSAAEENRT	UQEKO K30	W	L N48084270W098565294				E0049	NAR		UQEKO		

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP KDV LK3FR13	AKRAMR	010KRAMRK3EA0EE	AR	HF		13090040	+	03400	18000			A	JS
SUSAP KDV LK3FR13	R	010KRAMRK3EA0E	I	IF			+	03400	18000			A	JS
SUSAP KDV LK3FR13	R	020GWALTK3EA1E	F	051TF		13090070	+	03100				A	JS
SUSAP KDV LK3FR13	R	020GWALTK3EA2WALPV			ALNAV/VNAV								JS
SUSAP KDV LK3FR13	R	021UQEKOK3EA0E	S	031TF		13100033	V	0206002061		-300		A	JS
SUSAP KDV LK3FR13	R	030RW13 K3PGOGY	M	031TF		13100017		01520		-300		A	JS
SUSAP KDV LK3FR13	R	040	0	M	CA	1310	+	01720				A	JS
SUSAP KDV LK3FR13	R	050GRETEK3EA0EY		DF			+	03400				A	JS
SUSAP KDV LK3FR13	R	060GRETEK3EA0EE	R	HM		31120040	+	03400				A	JS

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QUALITY
2
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Page 4 of 5 Pages

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICES - FAR PART 97.33

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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
	KRAMR	KRAMR	010	IAF	HF	R	FO		130.9 (137.9T)	004.0	AA 03400	
		KRAMR	010	FACF	IF		FB				AA 03400	
		GWALT	020	FAF	TF		FB	0.5	130.9 (137.9T)	007.0	AA 03100	
		UQEKO	021	SDF	TF		FB	0.3	131.0 (138.0T)	003.3	AA 02060	GS 02061
		RW13	030	MAP	TF		FO	0.3	131.0 (138.0T)	001.7	AT 01520	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG (TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		131.0 (138.0T)		AA 01720	
	GRETE	050		DF		FO				AA 03400	
	GRETE	060		HM	R	FO		311.2 (318.2T)	004.0	AA 03400	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	GRETE	N475727.05	W0984149.77	N4757.451	W09841.830
	GWALT	N481108.13	W0990008.54	N4811.136	W09900.142
	KRAMR	N481619.83	W0990709.23	N4816.331	W09907.154
	UQEKO	N480842.70	W0985652.94	N4808.712	W09856.882
	RW13	N480726.89	W0985511.14	N4807.448	W09855.186

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW13	01470	50

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