

<b>RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33</b>				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.											
<b>TERMINAL ROUTES</b>								<b>MISSED APPROACH</b>							
FROM		TO		COURSE AND DISTANCE		ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW13  CLIMB TO 4700 DIRECT CEVEP AND ON TRACK 174.27 TO OHROR AND HOLD.  ADDITIONAL FLIGHT DATA: HOLD S, RT, 017.89 INBOUND. CHART FAS OBST: 2059 TREE 464647N/1005342W OBST: 2159 AAO 465115N/1005715W DISTANCE TO THLD FROM 250 HATH: 0.61 NM. CHART VDP AT 1.11 MILES TO RW13* *LNAV ONLY. WAAS CHANNEL # 49031 REFERENCE PATH ID: W13A CHART CIRCLING ICON. CHART ASR. LTP HAE: 570.6 M							
ILUPY (IF/IAF)		HOVLU (FB)		139.15 / 6.15		3700									
HOVLU (FAF)		RW13 (MAP) (FO)		139.22 / 5.35											
RW13 (MAP)		2192 MSL		139.22											
2192 MSL		CEVEP (FB)				4700									
CEVEP		OHROR (FO)		174.27 / 12.16											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW ILUPY, RT, 139.15 INBOUND, 4000 FT. IN LIEU OF PT (IAF) 3. FAC: 139.22 FAF: HOVLU DIST FAF TO MAP: 5.35 THLD: 5.35 4. MIN. ALT: ILUPY 4000, HOVLU 3700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3700 GS ALT AT: HOVLU 3700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.0 34:1 IS NOT CLEAR 8. MSA FROM: _____								MAG VAR: 6E EPOCH YEAR: 2015							
<b>MINIMUMS</b>															
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	2192	3/4	250	2192	3/4	250	2192	3/4	250	2192	3/4	250			
LNAV/VNAV DA	2244	1	302	2244	1	302	2244	1	302	2244	1	302			
LNAV MDA	2320	1	378	2320	1	378	2320	1	378	2320	1	378			
CIRCLING	2360	1	416	2460	1	516	2460	1 1/2	516	2560	2	616			
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING BISMARCK ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT. (SEE FORM 8260-10)															
CITY AND STATE		ELEVATION: 1944 THRE: 1942		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
MANDAN, ND		AIRPORT NAME: MANDAN MUNI				RNAV (GPS) RWY 13, ORIG 29 MAY 2014				AMDT: NONE					
										DATED					

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

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NOTES, (CONT.):

\*LNAV ONLY

CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

CHART NOTE: VDP NA WHEN USING BISMARCK ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BISMARCK ALTIMETER SETTING AND INCREASE ALL DA 54 FT AND LPV ALL CATS VISIBILITY 1/4 MILE, LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE, INCREASE ALL MDA 60 FT AND LNAV CAT C/D AND CIRCLING CAT D VISIBILITY 1/4 MILE.

TAA

	FROM	TO	ALT
1.	049/30 CW 229/30 (NOPT)	ILUPY (IF/IAF) (FB)	4000
2.	229/30 CW 049/30	ILUPY (IF/IAF) (FO)	4500

CITY AND STATE

MANDAN, ND

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29 MAY 2014

SUP:

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

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FAS DATA BLOCK INFORMATIONDATA FIELDDATA

OPERATION TYPE 0  
SBAS SERVICE PROVIDER IDENTIFIER 0  
AIRPORT IDENTIFIER Y19  
RUNWAY RW13  
APPROACH PERFORMANCE DESIGNATOR 0  
ROUTE INDICATOR  
REFERENCE PATH DATA SELECTOR 0  
REFERENCE PATH IDENTIFIER (APPROACH ID) W13A  
LTP/FTP LATITUDE 464625.2580N  
LTP/FTP LONGITUDE 1005356.7695W  
LTP/FTP ELLIPSOIDAL HEIGHT +05706  
FPAP LATITUDE 464512.0600N  
FPAP LONGITUDE 1005242.9500W  
THRESHOLD CROSSING HEIGHT (TCH) 00055.0  
TCH UNITS SELECTOR (METERS OR FEET USED) F  
GLIDEPATH ANGLE (GPA) 03.00  
COURSE WIDTH AT THRESHOLD 106.75  
LENGTH OFFSET 1408  
HORIZONTAL ALERT LIMIT (HAL) 40.0  
VERTICAL ALERT LIMIT (VAL) 50.0

CRC REMAINDER

E1C1E291

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE K3  
LTP ORTHOMETRIC HEIGHT +05919  
FPAP ORTHOMETRIC HEIGHT +05919

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SUP:

AMDT:

NONE

DATED:

## RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

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ARINC PACKET - 424-18 - RNAV (GPS)

[illegible][illegible]

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP Y19 K3FR13	AILUPY	010ILUPYK3EA0EE	AR	HF		13920040		+ 04000	18000			A JS	
SUSAP Y19 K3FR13	R	010ILUPYK3EA0E	I	IF				+ 04000	18000			A JS	
SUSAP Y19 K3FR13	R	020HOVLUK3EA1E	F	051TF		13920062		+ 03700				A JS	
SUSAP Y19 K3FR13	R	020HOVLUK3EA2WALPV			ALNAV/VNAV	ALNAV						JS	
SUSAP Y19 K3FR13	R	030RW13 K3PG0GY	M	031TF		13920054		01997		-300		A JS	
SUSAP Y19 K3FR13	R	040	0	M	CA	1392		+ 02192				A JS	
SUSAP Y19 K3FR13	R	050CEVEPK3EA0E		DF								A JS	
SUSAP Y19 K3FR13	R	060OHRORK3EA0EY	010TF			1743		+ 04700				A JS	
SUSAP Y19 K3FR13	R	070OHRORK3EA0EE	R	HM		01790050		+ 04700				A JS	

[illegible][illegible]

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RNAV

PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:  
**RNAV (GPS) RWY 13, ORIG**

29 MAY 2014

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**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
	ILUPY	ILUPY	010	IAF	HF	R	FO		139.2(145.2T)	004.0	AA 04000	
		ILUPY	010	FACF	IF		FB				AA 04000	
		HOVLU	020	FAF	TF		FB	0.5	139.2(145.2T)	006.2	AA 03700	
		RW13	030	MAP	TF		FO	0.3	139.2(145.2T)	005.4	AT 01997	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		139.2(145.2T)		AA 02192	
	CEVEP	050		DF		FB					
	OHROR	060		TF		FO	1.0	174.3(180.3T)		AA 04700	
	OHROR	070		HM	R	FO		017.9(023.9T)	005.0	AA 04700	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	CEVEP	N464218.73	W1004948.42	N4642.312	W10049.807
	HOVLU	N465048.74	W1005823.06	N4650.812	W10058.384
	ILUPY	N465551.69	W1010330.36	N4655.862	W10103.506
	OHROR	N463009.66	W1004953.47	N4630.161	W10049.891
	RW13	N464625.26	W1005356.77	N4646.421	W10053.946

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW13	01942	55

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	AIRPORT NAME:			<b>RNAV (GPS) RWY 13, ORIG</b>	AMDT: <b>NONE</b>
	<b>MANDAN MUNI</b>	<b>RNAV</b>		<b>29 MAY 2014</b>	DATED: