

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.											
US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION															
TERMINAL ROUTES				MISSED APPROACH											
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LPV: DA LNAV/VNAV: DA LNAV: RW28 CLIMB TO 2500 DIRECT GOSDE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 097.27 INBOUND. CHART FAS OBST: 796 TREE 441656N/0861326W DISTANCE TO THLD FROM 200 HATH: 0.47 NM. CHART VDP AT 1.24 MILES TO RW28* *LNAV ONLY. WAAS CHANNEL # 42532 REFERENCE PATH ID: W28A LTP HAE: 154.4 M											
BABBE (IAF)	HALGI (NOPT) (FB)	286.82 / 16.62	3000												
HALGI (IF/IAF)	HASIG (FB)	277.61 / 6.00	2000												
HASIG (FAF)	CUPSA/1.80 NM TO RW28 (FB)	277.51 / 2.37													
CUPSA/1.80 NM TO RW28	RW28 (MAP) (FO)	277.51 / 1.80													
RW28 (MAP)	821 MSL	277.51	2500												
821 MSL	GOSDE (FO)														
1. PT <u> </u> SIDE OF COURSE <u> </u> OUTBOUND <u> </u> FT WITHIN <u> </u> MILES OF <u> </u> (IAF)				MAG VAR: 6W EPOCH YEAR: 2015											
2. HOLD E HALGI, RT, 277.61 INBOUND, 3000 FT. IN LIEU OF PT (IAF)															
3. FAC: <u>277.51</u> FAF: HASIG DIST FAF TO MAP: <u>4.17</u> THLD: <u>4.17</u>															
4. MIN. ALT: HALGI 3000, HASIG 2000, CUPSA/1.80 NM TO RW28 1240*															
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>2000</u> GS ALT AT: HASIG 2000 OM: <u> </u> MM: <u> </u> IM: <u> </u>															
7. GS ANGLE: <u>3.00</u> TCH: 50.2 34:1 IS CLEAR															
8. MSA FROM: RW28 3600															
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	821	1/2	200	821	1/2	200	821	1/2	200	821	1/2	200			
LNAV/VNAV DA	984	3/4	363	984	3/4	363	984	3/4	363	984	3/4	363			
LNAV MDA	1060	1/2	439	1060	1/2	439	1060	3/4	439	1060	3/4	439			
CIRCLING	1120	1	499	1160	1	539	1200	1 1/2	579	1300	2 1/4	679			
NOTES: CHART NOTE: NIGHT LANDING: RWY 1/19 NA. CHART NOTE: BARO-VNAV NA WHEN USING LUDINGTON ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. (SEE FORM 8260-10)															
CITY AND STATE		ELEVATION: 621 THRE: 621		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP: RNAV (GPS) RWY 27					
MANISTEE, MI		AIRPORT NAME:		MANISTEE CO.-BLACKER		RNAV (GPS) RWY 28, ORIG-A				AMDT: ORIG					
						29 MAY 2014				DATED 05/02/2013					

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

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NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BABBE ON V193 SOUTH BOUND.

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.

***LNAV ONLY**

CHART NOTE: VDP NA WITH LUDINGTON ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LUDINGTON ALTIMETER SETTING AND INCREASE ALL DA 50 FEET AND ALL MDA 60 FEET. INCREASE LNAV/VNAV VISIBILITY ALL CATS 1/8 MILE.

INCREASE LNAV CATS C/D VISIBILITY 1/4 MILE, AND CIRCLING CAT C VISIBILITY 1/4 MILE.

CITY AND STATE

MANISTEE, MI

ELEVATION: 621

THRE: 621

AIRPORT NAME:

MANISTEE CO.-BLACKER

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 28, ORIG-A

29 MAY 2014

SUP: RNAV (GPS) RWY 27

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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	KMBL
RUNWAY	RW28
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28A
LTP/FTP LATITUDE	441620.8015N
LTP/FTP LONGITUDE	0861401.8240W
LTP/FTP ELLIPSOIDAL HEIGHT	+01544
FPAP LATITUDE	441623.0200N
FPAP LONGITUDE	0861605.7900W
THRESHOLD CROSSING HEIGHT (TCH)	00050.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

6339F945

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01894
FPAP ORTHOMETRIC HEIGHT	+01894

CITY AND STATE

MANISTEE, MI

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THRE: 621

AIRPORT NAME:

MANISTEE CO.-BLACKER

FACILITY
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PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 28, ORIG-A

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[illegible][illegible]

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP	KMBLK5FR28	ABABBE	010BABBEK5EA0E	A	IF					18000		A	JS
SUSAP	KMBLK5FR28	ABABBE	020HALGIK5EA0EE	B	010TF		28680166	+	03000			A	JS
SUSAP	KMBLK5FR28	AHALGI	010HALGIK5EA0EE	AR	HF		27760040	+	03000	18000		A	JS
SUSAP	KMBLK5FR28	R	010HALGIK5EA0E	I	IF			+	03000	18000		A	JS
SUSAP	KMBLK5FR28	R	020HASIGK5EA1E	F	051TF		27760060	+	02000		RW28	K5PGA	JS
SUSAP	KMBLK5FR28	R	020HASIGK5EA2WALPV			ALNAV/VNAV	ALNAV						JS
SUSAP	KMBLK5FR28	R	021CUPSAK5EA0E	S	031TF		27750024	V	0124001245		-300	A	JS
SUSAP	KMBLK5FR28	R	030RW28	K5PGOGY	M	031TF	27750018		00672		-300	A	JS
SUSAP	KMBLK5FR28	R	040		0	M	CA	2775	+	00821		A	JS
SUSAP	KMBLK5FR28	R	050GOSDEK5EA0EY		DF			+	02500			A	JS
SUSAP	KMBLK5FR28	R	060GOSDEK5EA0EE	R	HM		09730040	+	02500			A	JS

[illegible][illegible][illegible]

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				AMDT: ORIG
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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
	BABBE	BABBE	010	IAF	IF		FB					
	BABBE	HALGI	020		TF		FB	1.0	286.8 (280.8T)	016.6	AA 03000	
	HALGI	HALGI	010	IAF	HF	R	FO		277.6 (271.6T)	004.0	AA 03000	
		HALGI	010	FACF	IF		FB				AA 03000	
		HASIG	020	FAF	TF		FB	0.5	277.6 (271.6T)	006.0	AA 02000	
		CUPSA	021	SDF	TF		FB	0.3	277.5 (271.5T)	002.4	AA 01240 GS 01245	
		RW28	030	MAP	TF		FO	0.3	277.5 (271.5T)	001.8	AT 00672	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG (TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		277.5 (271.5T)		AA 00821	
	GOSDE	050		DF		FO				AA 02500	
	GOSDE	060		HM	R	FO		097.3 (091.3T)	004.0	AA 02500	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	BABBE	N441259.55	W0853709.66	N4412.993	W08537.161
	CUPSA	N441618.06	W0861131.55	N4416.301	W08611.526
	GOSDE	N441636.52	W0862926.84	N4416.609	W08629.447
	HALGI	N441604.57	W0855952.72	N4416.076	W08559.879
	HASIG	N441614.36	W0860813.56	N4416.239	W08608.226
	RW28	N441620.80	W0861401.82	N4416.347	W08614.030

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW28	00621	50

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	AIRPORT NAME: MANISTEE CO.-BLACKER	RNAV	RNAV (GPS) RWY 28, ORIG-A 29 MAY 2014	AMDT: ORIG
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