

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> SOUTHWEST MICHIGAN RGNL	<u>AIRPORT ID</u> KBEH	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> BENTON HARBOR	<u>STATE</u> MI
<u>AIRPORT ELEVATION</u> 649	<u>TDZE</u> 631	<u>SUPERSEDED</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 06/26/2014	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 15 AUGUST 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TAA THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-15.

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 024/30 CW 164/30	NOPT	ZUYDU	IF/IAF	2500
2. 164/30 CW 274/30		TABGE	IAF	2500
3. 274/30 CW 024/30		TAMPE	IAF	2500

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>
TABGE	IAF	ZUYDU	NOPT	TF	FB	1.00	164.23	9.00	2500
TAMPE	IAF	ZUYDU	NOPT	TF	FB	1.00	024.22	9.00	2500
ZUYDU	IF/IAF	ADIYI		TF	FB	1.00	094.28	6.46	2300
ADIYI	FAF	RW10	MAP	TF	FO	0.30	094.37	5.14	
RW10	MAP	881 MSL		CA			094.37		
881 MSL		BLACO		DF	FB	1.00			
BLACO		ELX VOR/DME		TF	FO	1.00	086.76	8.32	2500

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW10

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT BLACO AND ON TRACK 086.76 TO ELX VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W ZUYDU, RT, 094.28 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 094.37 FAF: ADIYI DIST FAF TO MAP: 5.14 DIST FAF TO THLD: 5.14

4. MIN ALT: ZUYDU 2500, ADIYI 2300

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.69 GS ANT:

6. MIN GP INCPT: 2300 GP ALT AT FAF : ADIYI 2300 OM: MM: IM:


7. GP ANGLE: 3.00 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 35.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 14, 32 NA AT NIGHT.
CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20°C OR ABOVE 54°C. 

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.37 NM TO RW10*
*LNAV ONLY
WAAS CHANNEL #86912
REFERENCE PATH ID: W10A
CHART FAS OBST: 792 ANT TWR 420717N/0862701W.
HOLD E, LT, 266.00 INBOUND
LTP HAE: 157.4 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4

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	881	7/8	250	881	7/8	250	881	7/8	250	881	7/8	250			
LNAV/VNAV DA	1068	1 1/2	437	1068	1 1/2	437	1068	1 1/2	437	1068	1 1/2	437			
LNAV MDA	1100	1	469	1100	1	469	1100	1 3/8	469	1100	1 3/8	469			
CIRCLING	1140	1	491	1160	1	511	1300	1 3/4	651	1340	2 1/4	691			



CHANGES - REASONS

1. UPDATED LNAV/VNAV FINAL BARO-VNAV TEMPERATURE DATA FROM ACT FROM -30C TO -20C - STATION TEMPERATURES AVAILABLE AND SLOPE CHANGED FROM 23.4:1 TO 23.85:1.
2. UPDATED LNAV MDA FROM 1040/HAT 409 ALL CATS TO MDA 1100/HAT 469 ALL CATS - NEW OR UPDATED DATA BASE AND CONTROLLING OBSTACLE.
3. DELETED NOTE: DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH - REFERENCE REVISED CRITERIA.
4. ADDED 20:1 IS CLEAR TO LINE #7 OF THE 8260-3 - REFERENCE 8260.19H CRITERIA NO 20:1 VISUAL SURFACE PENETRATIONS.
5. UPDATED BARO-VNAV NOTE FROM: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 40C (104F) TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C OR ABOVE 54C - UPDATED TEMPERATURE DATA AND FAHRENHEIT NO LONGER REQUIRED.
6. UPDATED FAS DATA BLOCK INFORMATION AS FOLLOWS: UPDATED LTP/FTP LATITUDE/LONGITUDE FROM 420740.5180N-0862601.8010W TO 420740.5175N-0862601.8015W AND CRC REMAINDER CHANGED FROM E300CA4A TO 6B96D9F4 - NEW AND OR UPDATED DATA BASE.
7. UPDATED ADDITIONAL FLIGHT DATA CHART FAS OBST FROM: 789 TREE 420815N/0862719W TO 792 ANT TWR 420717N/0862701W AND REMOVED 759 TREE 420748N/0862725W - NEW CONTROLLING OBSTACLE.
8. UPDATED ADDITIONAL FLIGHT DATA DISTANCE TO THLD FROM 250 HATH: FROM 0.067 NM TO 0.69 NM - UPDATED DATA.
9. UPDATED ADDITIONAL FLIGHT DATA VDP DISTANCE TO RW10* FROM 1.36 NM TO 1.37 NM - UPDATED DATA AND T-NOTAM !FDC 9/7917 INCORPORATED IN THIS AMENDMENT.
10. HELICOPTER VISIBILITY NOTE FROM VISIBILITY REDUCTION BY HELICOPTER NA TO RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - REFERENCE REVISED CRITERIA.
11. UPDATED CIRCLING NOTE FROM: NIGHT LANDING: RWY 14, 32 NA TO CIRCLING RWY 14, 32 NA AT NIGHT - UPDATED DATA AND T-NOTAM !FDC 8/3466 INCORPORATED IN THIS AMENDMENT.
12. UPDATED BACKUP ALTIMETER NOTE FROM: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH HAVEN ALTIMETER SETTING AND INCREASE ALL DA 38 FEET AND ALL MDAS 40 FEET, INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE AND LNAV CAT C AND D VISIBILITY 1/4 MILE TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH HAVEN ALTIMETER SETTING: INCREASE LPV DA TO 919 FEET, LNAV/VNAV DA TO 1108 FEET AND ALL MDAS 40 FEET - REFERENCE REVISED CRITERIA AND MOVED IT THE BACK OF THE 8260-9.
13. UPDATED MISSED CA ALTITUDE FROM 877 TO 881 - UPDATED DATA WITH PREVIOUS CHANGE IN TDZE FROM 627 TO 631.
14. DELETED ALTERNATE WEATHER NOTE @NA WHEN LOCAL WEATHER NOT AVAILABLE - BEH ALTIMETER ON WMSCR AND ALSTG NOTE NO LONGER PUBLISHED.
15. ADDED CHART CIRCLING ICON - BASED ON PREVIOUSLY FLIGHT CHECKED NEW RADIUS FOR RNAV (GPS) RWY 28 PROCEDURE.
16. UPDATED CIRCLING CAT B MDA FROM 1140/HAA 491 TO MDA 1160/HAA 511, CIRCLING CAT C MDA FROM 1160/HAA 511 TO MDA 1300/HAA 651, CAT D MDA FROM 1200/HAA 551 TO MDA 1340/HAA 691 AND CAT C VISIBILITY FROM 1 1/2 SM TO 1 3/4 SM, CAT D VISIBILITY FROM 2 SM TO 2 1/4 SM - NEW AND OR UPDATED CIRCLING CAT D CONTOLLING OBSTACLE AND NEW CIRCLING RADIUS.

06/03/19: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 04/30/19.

1. UPDATED BARO-VNAV NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20°C (°F) OR ABOVE 54°C (°F)" TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20°C OR ABOVE 54°C".

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAU, SBN APP CON, AMGR

FLIGHT CHECKED BY
JEFFREY WAYNE HARING

Digitally signed by
WARDELL HENNING
Jun 03, 2019

OFFICE
FIOG
DATE
04/26/2019

DEVELOPED BY
SYLVAN DRAKES

Digitally signed by
WARDELL HENNING
Jun 03, 2019

OFFICE
AJV-5433
DATE
02/22/2019

APPROVED BY
PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Jun 03, 2019

OFFICE
AJV-5430
DATE
TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBEH
RUNWAY	RW10
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W10A
LTP/FTP LATITUDE	420740.5175N
LTP/FTP LONGITUDE	0862601.8015W
LTP/FTP ELLIPSOIDAL HEIGHT	+01574
FPAP LATITUDE	420739.8000N
FPAP LONGITUDE	0862402.0600W
THRESHOLD CROSSING HEIGHT (TCH)	00035.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0920
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	6B96D9F4

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01912
FPAP ORTHOMETRIC HEIGHT	+01912