

**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> LAWRENCE J TIMMERMAN	<u>AIRPORT ID</u> KMWC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15L	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> MILWAUKEE	<u>STATE</u> WI
<u>AIRPORT ELEVATION</u> 745	<u>TDZE</u> 745	<u>SUPERSEDED</u> RNAV (GPS) RWY 15L	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 2W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 10 OCTOBER 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
CYNDI		HAXEP		TF	FB	1.00	230.10	21.33	2800
EWAWI		JEDEM		TF	FB	1.00	086.42	13.79	2800
HAXEP	IAF	IZAHO	NOPT	TF	FB	1.00	188.84	6.77	2800
JEDEM	IAF	IZAHO	NOPT	TF	FB	1.00	111.27	6.91	2800
IZAHO	IF/IAF	YIKUS		TF	FB	1.00	147.46	6.47	2700
YIKUS	FAF	NUHLE/2.30 NM TO RW15L		TF	FB	0.30	147.52	3.71	
NUHLE/2.30 NM TO RW15L		RW15L	MAP	TF	FO	0.30	147.52	2.30	
RW15L	MAP	1300 MSL		CA			147.52		1300
1300 MSL		HAWKN		DF	FO	1.00			3000

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW15L

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 1300 THEN CLIMBING RIGHT TURN TO 3000 DIRECT HAWKN AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



**PROFILE:**

- 1. **PT**      **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF (IAF)**
- 2. HOLD NW IZAHO, RT, 147.46 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000.
- 3. **FAC:** 147.52      **FAF:** YIKUS                      **DIST FAF TO MAP:** 6.01                      **DIST FAF TO THLD:** 6.01
- 4. **MIN ALT:** IZAHO 2800, YIKUS 2700, NUHLE/2.30 NM TO RW15L 1500\*
- 5. **DIST TO THLD FROM OM:**                      **MM:**                      **IM:**                      **150 HAT:**                      **250 HAT:** 0.66                      **GS ANT:**
- 6. **MIN GP INCPT:** 2700                      **GP ALT AT FAF :** YIKUS 2700                      **OM:**                      **MM:**                      **IM:**
- 7. **GP ANGLE:** 3.00                      **34:1:** IS NOT CLEAR                      **20:1:** IS CLEAR                      **TCH:** 40.6
- 8. **MSA FROM:** RW15L 2900

**PBN REQUIREMENTS NOTE:**

RNP APCH.

**NOTES:**

CHART NOTE: CIRCLING NA TO RWYS 4R, 15R, 22L AND 33L.  
 CHART NOTE: RWY 15L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT EWAWI ON V170 NORTHWEST BOUND.  
 CHART NOTE: VDP AND BARO-VNAV NA WHEN USING GENERAL MITCHELL INTL ALTIMETER SETTING.  
 CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GENERAL MITCHELL INTL ALTIMETER SETTING AND INCREASE LPV DA TO 1024 FEET AND LNAV/VNAV TO DA 1251 FEET;  
 INCREASE ALL MDAS 40 FEET AND LNAV VISIBILITY CATS C AND D 1/8 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM.

**ADDITIONAL FLIGHT DATA:**

CHART VDP AT 1.24 NM TO RW15L\*  
 \*LNAV ONLY  
 WAAS CHANNEL #63020  
 REFERENCE PATH ID: W15A  
 FAS OBST: 919 TREE 430814N/0880314W.  
 HOLD N, RT, 184.55 INBOUND  
 LTP HAE: 191.8 M

**MINIMUMS:**

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

**ALTERNATE:** NA  STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.



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
LPV DA	995	1	250	995	1	250	995	1	250	995	1	250			
LNAV/VNAV DA	1222	1 5/8	477	1222	1 5/8	477	1222	1 5/8	477	1222	1 5/8	477			
LNAV MDA	1180	1	435	1180	1	435	1180	1 1/4	435	1180	1 1/4	435			
CIRCLING	1220	1	475	1340	1	595	1340	1 1/2	595	1340	2	595			

**CHANGES - REASONS**

1. INCORPORATED CHANGES FROM AMDTS ORIG-A, ORIG-B, AND ORIG-C. IAW 8260.19H PARA 8-3-4C(2).
2. ADDED LEG TYPE AND RNP VALUES TO TERMINAL ROUTES - IAW 8260.19H 8-6-4.A.(6).
3. DELETED "DISTANCE TO THLD FROM 250 HATH: 0.66 NM" FROM ADDITIONAL FLIGHT DATA AND ADDED "250 HAT: 0.66 NM" TO LINE 5 - IAW 8260.19H 8-6-7.E.(3).
4. ADDED "20:1 IS CLEAR" TO LINE 7 - IAW 8260.19H 8-6-7.G.(3).
5. CHANGED TEMPERATURE NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 39C (102F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C" - HIGH TEMPERATURE DERIVED FROM A STANDARD DEVIATION VALUE; FAHRENHEIT VALUES REMOVED IAW 8260.19H 8-6-9.S.
6. ADDED "CHART VDP AT 1.24 NM TO RW15L\*" AND MOVED NOTE "LNAV ONLY" FROM NOTES SECTION TO ADDITIONAL FLIGHT DATA - OBSTACLES NO LONGER PENETRATE 20:1 SURFACE.
7. CHANGED NOTE FROM "BARO-VNAV NA WHEN USING GENERAL MITCHELL INTL ALTIMETER SETTING" TO "VDP AND BARO-VNAV NA WHEN USING GENERAL MITCHELL INTL ALTIMETER SETTING"- ADDED VDP
8. CHANGED BACK-UP ALTIMETER NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GENERAL MITCHELL INTL ALTIMETER SETTING AND INCREASE ALL DA 30 FEET AND ALL MDA 40 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE, LNAV CATS C AND D VISIBILITY 1/8 MILE, AND CIRCLING CAT C VISIBILITY 1/4 MILE" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GENERAL MITCHELL INTL ALTIMETER SETTING AND INCREASE LPV DA TO 1024 FEET AND LNAV/VNAV TO DA 1251 FEET; INCREASE ALL MDAS 40 FEET AND LNAV VISIBILITY CATS C AND D 1/8 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM." - IAW VIS CHECK CALCULATOR.
9. DELETED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CYNDI ON V7 NORTHBOUND" FROM NOTES SECTION - FAH VOR/DME DECOM.
10. DELETED "CHART FAS OBST: 909 TREE 430735N/0880337W" FROM ADDITIONAL FLIGHT DATA - ONLY NONPRECISION CONTROLLING OBSTACLES SHOULD BE DOCUMENTED AS FAS OBSTACLES IAW 8260.19H 8-6-10.C.
11. DELETED "CHART" FROM "CHART FAS OBST: 919 TREE 430814N/0880314W" - IAW 8260.19H 8-6-10.C.NOTE.
12. CHANGED YIKUS TO NUHLE DISTANCE FROM 3.68 TO 3.71 - CALCULATED DISTANCE BASED ON GEODETIC CALCULATOR.

**COORDINATED WITH:**

**A4A**  **ALPA**  **AOPA**  **APA**  **HAI**  **NBAA**  **OTHER:** ZAU, MKE APP, KMWC ATCT, AMGR

**FLIGHT CHECKED BY**

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:  
FLIGHT INSPECTION REVIEW NOT REQUIRED

**OFFICE**

**DATE**

*Digitally signed by*

**DEVELOPED BY**

JACOB MAXFIELD

*Digitally signed by*

**JACOB MAXFIELD**

Jul 15, 2019

**DONALD H LANIER**

Aug 05, 2019

**OFFICE**

AJV-A431

**DATE**

04/23/2019

**APPROVED BY**

LONNIE EVERHART

*Digitally signed by*

**DONALD H LANIER**

Aug 05, 2019

**OFFICE**

AJV-A430

**DATE**

**TITLE**

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMWC
RUNWAY	RW15L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W15A
LTP/FTP LATITUDE	430656.9295N
LTP/FTP LONGITUDE	0880219.0150W
LTP/FTP ELLIPSOIDAL HEIGHT	+01918
FPAP LATITUDE	430543.4200N
FPAP LONGITUDE	0880110.2600W
THRESHOLD CROSSING HEIGHT (TCH)	00040.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1496
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	DEEC60D0

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02268
FPAP ORTHOMETRIC HEIGHT	+02268

