

**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.

<b><u>AIRPORT</u></b> WAYNESVILLE-ST ROBERT RGNL FORNEY FLD	<b><u>AIRPORT ID</u></b> KTBN	<b><u>PROCEDURE NAME</u></b> RNAV (GPS) RWY 15	<b><u>ORIGINAL/AMENDMENT</u></b> 1	<b><u>CITY</u></b> FORT LEONARD WOOD	<b><u>STATE</u></b> MO
<b><u>AIRPORT ELEVATION</u></b> 1160	<b><u>TDZE</u></b> 1158	<b><u>SUPERSEDED</u></b> RNAV (GPS) RWY 14	<b><u>ORIGINAL/AMENDMENT</u></b> ORIG	<b><u>DATED</u></b> 04/13/2006	<b><u>MAG VAR</u></b> 0E
<b><u>FACILITY</u></b> RNAV	<b><u>COORDINATES OF FACILITIES</u></b>	<b><u>ACTUAL EFFECTIVE DATE</u></b> 15 AUGUST 2019	<b><u>REQUIRED EFFECTIVE DATE</u></b> 08/15/2019	<b><u>CANCEL/SUSPEND</u></b>	<b><u>EPOCH YEAR</u></b> 2020

**TAA**

<b><u>FROM</u></b>	<b><u>FIX TYPE</u></b>	<b><u>TO</u></b>	<b><u>FIX TYPE</u></b>	<b><u>ALTITUDE</u></b>
1. 057/30 CW 237/30	NOPT	PIMEW	IF/IAF	3100
2. 237/30 CW 057/30		PIMEW	IF/IAF	3100

**TERMINAL ROUTES**

<b><u>FROM</u></b>	<b><u>FIX TYPE</u></b>	<b><u>TO</u></b>	<b><u>FIX TYPE</u></b>	<b><u>LEG TYPE</u></b>	<b><u>FO/FB</u></b>	<b><u>RNP</u></b>	<b><u>COURSE</u></b>	<b><u>DISTANCE</u></b>	<b><u>ALTITUDE</u></b>
PIMEW	IF/IAF	URAYU		TF	FB	1.00	147.07	6.41	3000
URAYU	FAF	RW15	MAP	TF	FO	0.30	147.13	5.63	
RW15	MAP	1358 MSL		CA	FO		147.13		
1358 MSL		MRSHA		DF	FO	1.00			3100

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW15

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3100 DIRECT MRSHA AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD NW PIMEW, RT, 147.07 INBOUND, 3100 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 147.13      FAF: URAYU      DIST FAF TO MAP: 5.63      DIST FAF TO THLD: 5.63
4. MIN ALT: PIMEW 3100, URAYU 3000
5. DIST TO THLD FROM OM:      MM:      IM:      150 HAT:      200 HAT: 0.47      GS ANT:      MM:      IM:
6. MIN GP INCPT: 3000      GP ALT AT FAF : URAYU 3000      OM:      MM:      IM:
7. GP ANGLE: 3.00      34:1: IS CLEAR      20:1: IS CLEAR      TCH: 47.4
8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18°C OR ABOVE 54°C.

CHART NOTE: VDP AND BARO-VNAV NA WHEN USING ROLLA NATIONAL ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ROLLA NATIONAL ALTIMETER SETTING AND INCREASE ALL LPV DA TO 1427 AND LNAV/VNAV DA TO 1477; INCREASE ALL MDAS 80 FEET.

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING ROLLA NATIONAL ALTIMETER SETTING INCREASE LNAV CAT C/D VISIBILITY TO 1 3/8 SM.

CHART NOTE: CIRCLING NA W OF RWY 15-33.

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV, LNAV/VNAV, ALL CATS, AND LNAV CATS A/B MINIMUMS WHEN USING ROLLA NATIONAL ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.

CHART R4501 A, B, C, D, E, F, H.

CHART LINDBERGH A MOA, CANNON A MOA

CHART VDP AT 0.98 NM TO RW15\*

\*LNAV ONLY

WAAS CHANNEL #53499

REFERENCE PATH ID: W15A

FAS OBST: 1257 AAO 374727N/0921133W.

CHART: 1341 TOWER 374942N/0921145W.

HOLD SE, RT, 327.25 INBOUND

LTP HAE: 322.3 M



**AIRPORT**WAYNESVILLE-ST ROBERT RGNL FORNEY  
FLD**AIRPORT ID**

KTBN

**PROCEDURE NAME**

RNAV (GPS) RWY 15

**ORIGINAL/AMENDMENT**

1

**CITY**

FORT LEONARD WOOD

**STATE**

MO

**MINIMUMS:**

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

**ALTERNATE:** NA ☐ NA WHEN LOCAL WEATHER NOT AVAILABLE.; STANDARD

<b><u>CATEGORY:</u></b>	<b>A</b>			<b>B</b>			<b>C</b>			<b>D</b>			<b>E</b>		
<b><u>FINAL TYPE</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>	<b><u>HAT/HAA</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>	<b><u>HAT/HAA</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>	<b><u>HAT/HAA</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>	<b><u>HAT/HAA</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>	<b><u>HAT/HAA</u></b>
LPV DA	1358	1	200	1358	1	200	1358	1	200	1358	1	200			
LNAV/VNAV DA	1408	1	250	1408	1	250	1408	1	250	1408	1	250			
LNAV MDA	1520	1	362	1520	1	362	1520	1	362	1520	1	362			
CIRCLING	1580	1	420	1660	1	500	1660	1 1/2	500	1720	2	560			



CHANGES - REASONS

1. DELETED INITIAL SEGMENTS FROM LAXKE AND OSECA. - ATC REQUEST.
2. CHANGED TAA FROM T CONFIGURATION TO HEMISPHERIC CONFIGURATION. - LEFT AND RIGHT INITIALS DELETED AND ATC REQUEST.
3. DELETED NOTE: DME/DME RNP-0.3 NA. - NOTE NO LONGER USED IAW FAAO 8260.19H.
4. CHANGED INTERMEDIATE COURSE AND DISTANCE FROM 144.08/6.50 TO 147.07/6.41. - AIRPORT MAGVAR CHANGE FROM 3E TO 0 AND NEW PFAF LOCATION.
5. ADDED CA LEG TO MISSED APPROACH. -PROVIDE FOR LNAV ENGAGEMENT.
6. CHANGED NAME OF PROCEDURE FROM RNAV (GPS) RWY 14 TO RNAV (GPS) RWY 15 AND CHANGED ALL REFERENCES FROM RWY 14 TO RWY 15. - AIRPORT MAGVAR CHANGE AND RUNWAY RENUMBERING.
7. CHANGED HOLD-IN-LIEU INBOUND COURSE FROM 144.08 TO 147.07. - MAGVAR CHANGE AND MATCH NEW INTERMEDIATE OCURSE.
8. CHANGED DISTANCE FAF TO MAP/THLD FROM 5.54 TO 5.63. - NEW FAF/PFAF LOCATION.
9. ADDED RNP APCH TO PBN REQUIREMENTS NOTE. - FAAO 8260.19H PARAGRAPH 8-6-8 B(1).
10. CHANGED NOTE BARO-VNAV NA BELOW -17 C (2F) TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C. -NEW CLIMATE DATA AND FAAO 8260.19H PARAGRAPH 8-6-9 S.
11. CHANGED BACKUP ALTIMETER NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ROLLA/VICHY ALTIMETER SETTING AND INCREASE ALL DAS/MDAS 80 FEET AND ALL VISIBILITIES 1/4 MILE." TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ROLLA NATIONAL ALTIMETER SETTING AND INCREASE ALL LPV DA TO 1427 AND LNAV/VNAV DA TO 1477; INCREASE ALL MDAS 80 FEET. " - NEW VISIBILITY CALCULATIONS AND DA INCREASE IS NOT ROUNDED UP.
12. CHANGED NOTE INOPERATIVE TABLE DOES NOT APPLY TO LNAV CAT D TO INOPERATIVE TABLE DOES NOT APPLY. - NEW VISI CALCULATIONS AND FAAO 8260.3D CHAPTER 3.
13. CHANGED MISSED APPROACH HOLDING COURSE FROM 324.25 TO 327.25. - AIRPORT MAGVAR CHANGE.
14. CHANGED DISTANCE TO THLD FROM 250 HAT: 0.63 NM TO 200 HAT: 047 AND MOVED TO LINE 5 OF PROFILE. - LPV NOW AUTHORIZED DOWN TO 200 HAT AND FAAO 8260.19H.
15. CHANGED VDP FROM 0.86 TO 0.98. - NEW LNAV MDA AND NEW VDP CALCULATIONS.
16. CHANGED REFERENCE PATH FROM W14A TO W15A. - RUNWAY RENUMBERING.
17. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA. - NEW CIRCLING CRITERIA APPLIED.
18. LOWERED LPV MDA FROM 1408/250 TO 1358/200. - LPV NOW AUTHORIZED DOWN TO 200 HAT.
19. LOWERED LNAV/VNAV DA FROM 1486/328 TO 1408/250. - NEW MAP STUDY AND TARGETS RUN NOW ASC.
20. LNAV MDA RAISED FROM 1480/322 TO 1520/362.- NEW CONTROLLING OBSTACLE FROM NEW MAP STUDY.
21. RAISED CAT B CIRCLING MDA FROM 1620/461 TO 1660/500. - NEW CIRCLING CRITERIA AND NEW CAT B CONTROLLING OBSTACLE.
22. RAISED LPV, LNAV/VNAV AND LNAV CATS A/B/C VISIBILITY FROM 1/2, 3/4 AND 1/2 TO 1 SM. - NEW FAAO 8260.3D CHAPTER 3 VISIBILITY CALCULATION(NO FULL LENGTH TAXIWAY.)
23. CHANGED CIRCLING CAT A/B VISIBILITY FROM 1 1/4 TO 1. - NEW 8260.3D CHAPTER 3 VISIBILITY CALCULATIONS.
24. UPDATED LTP COORDINATES IN FAS DATA FROM 374450.7900N/0920843.6500W TO 374450.7645N/0920843.6290W. NEW DATA PULL.
25. CHANGED FPAP COORDINATES IN AS DATA FROM 374404.8000N/0920806.2800W TO 374335.8065N/0920742.7375W. NEW TARGETS FPAP CALCULATIONS.
26. TCH CHANGED FROM 49.2 TO 47.4, COURSE WIDTH AT THLD FROM 092.75 TO 106.75, LENGTH OFFSET FROM 0000 TO 1064, VAL FROM 50 TO 35, CRC REMAINDER FROM 54DFFE5E TO EFBB3C9F AND LTP/FPAP ORTHOMETRIC HEIGHT FROM 03529 TO 03530. - NEW FAS DATA CALCULATIONS.
27. ADDED CHART NOTE: CIRCLING NA W OF RWY 15-33. - ATC REQUEST.
28. DELETED NOTE: FOR INOPERATIVE MALSR, INCREASE LPV VISIBILITY TO 3/4 MILE ALL CATS. - WITH INCREASE LPV VISIBILITY REQUIREMENT NOTE NO LONGER APPLIES.
29. ADDED 20:1 IS CLEAR TO LINE 7 OF PROFILE VIEW. - 20:1 IS CHECKED CLEAR.
30. ADDED MAX HOLDING AT PIMEW IN LINE 2 OF PROFILE VIEW. - FAAO 8260.19H PARAGRAPH 8-6-7 B(2).
31. ADDED CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV, LNAV/VNAV, ALL CATS, AND LNAV CATS A/B MINIMUMS WHEN USING ROLLA NATIONAL ALTIMETER SETTING. FAAO 8260.3D. CHAPTER 3 AND VISI CALCULATOR.

04/22/19: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 01/08/2019.

1. CHANGED ROUTINE REQUIRED EFFECTIVE DATE FROM ROUTINE TO HARD DATE OF 8-15-19.

COORDINATED WITH:

**A4A** ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZKC, TBN ATCT, AMGR, MOARNG (SAAO), MO STATE AERO.

Digitally signed by

**FLIGHT CHECKED BY** **DONALD H LANIER**  
PENDING Apr 25, 2019

**OFFICE** **DATE**  
FICO

Digitally signed by

**DEVELOPED BY** **LIAM DONAHUE**  
LIAM DONAHUE Apr 22, 2019

**OFFICE** **DATE**  
AJV-A431 01/08/2019

**APPROVED BY** **DONALD H LANIER**  
PATRICK MULQUEEN  
Apr 25, 2019

**OFFICE**  
AJV-A430

**TITLE**  
MANAGER  
QUALITY  
24  
CHECKED

**FAS DATA BLOCK INFORMATION**

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTBN
RUNWAY	RW15
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W15A
LTP/FTP LATITUDE	374450.7645N
LTP/FTP LONGITUDE	0920843.6290W
LTP/FTP ELLIPSOIDAL HEIGHT	+03223
FPAP LATITUDE	374335.8065N
FPAP LONGITUDE	0920742.7375W
THRESHOLD CROSSING HEIGHT (TCH)	00047.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1064
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	EFBB3C9F
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**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03530
FPAP ORTHOMETRIC HEIGHT	+03530

