

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 ID</u> KRNC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> MC MINNVILLE	<u>STATE</u> TN		
<u>AIRPORT ELEVATION</u> 1032	<u>TDZE</u> 1026	<u>SUPERSEDED</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 04/28/2016	<u>MAG VAR</u> 2W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 NOVEMBER 2022	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 143/30 CW 323/30	NOPT	143/5 CW 323/5		4900
2. 143/5 CW 323/5		WILGU	IF/IAF	3900
3. 323/30 CW 143/30		323/5 CW 143/5		4600
4. 323/5 CW 143/5		WILGU	IF/IAF	3900

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
WILGU	IF/IAF	YUCBA		TF	FB	1.00	232.67	4.95	2800
YUCBA	FAF	RW23	MAP	TF	FO	0.30	232.62	5.41	
RW23	MAP	1312 MSL		CA			232.62		
1312 MSL		ZOVRI		DF	FO	1.00			3900

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW23

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3900 DIRECT ZOVRI AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3900.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD NE WILGU, RT, 232.67 INBOUND, 3900 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAF: 232.62FAF: YUCBADIST FAF TO MAP: 5.41DIST FAF TO THLD: 5.41

4. MIN ALT: WILGU 3900, YUCBA 2800

5. DIST TO THLD FROM OM:MM:IM:150 HAT:286 HAT: 0.74GS ANT:

6. MIN GP INCPT: 2800GP ALT AT PFAF : YUCBA 2800OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 50.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING RWY 5 NA AT NIGHT.
CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

HOLD SW, RT, 052.46 INBOUND.
FAS OBST: 1270 AAO 354421N/0854703W.
CHART VDP AT 1.48 NM TO RW23.
WAAS CHANNEL # 99433
REFERENCE PATH ID: W23A
CHART CIRCLING ICON.
LTP HAE: 284.1 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	HAT/HAA
LPV DA	1312	7/8	286	1312	7/8	286	1312	7/8	286	1312	7/8	286			
LNAV/VNAV DA	1400	1	374	1400	1	374	1400	1	374	1400	1	374			
LNAV MDA	1520	1	494	1520	1	494	1520	1 3/8	494	1520	1 3/8	494			
CIRCLING	1600	1	568	1600	1	568	1600	1 1/2	568	1620	2	588			



CHANGES - REASONS

1. CHANGED WILGU TO YUCBA DISTANCE FROM 5.00 TO 4.95 - FAF COORDINATES ADJUSTED TO COMPENSATE FOR REMOVAL OF DISPLACED THRESHOLD AND MAINTAIN 3.00/50.
2. CHANGED CLIMB-TO ALTITUDE FROM 1276 TO 1312 - NEW LPV FINAL SEGMENT CONTROLLING OBSTACLE.
3. ADDED CLIMB-IN-HOLD - AIRCRAFT ALTITUDE AT CLEARANCE LIMIT LESS THAN MISSED APPROACH ALTITUDE.
4. ADDED 6000 FOOT MAX ALTITUDE FOR HOLDING IN-LIEU-OF-PT ON LINE 2 - REQUIRED DOCUMENTATION PER FAAO 8260.19I, PARA 8-6-7B(2) CRITERIA.
5. CHANGED DIST FROM 250 HATH: 0.63 NM TO DIST TO THLD FROM 286 HAT: 0.74 - NEW LPV FINAL SEGMENT CONTROLLING OBSTACLE/NEW LPV MISSED APPROACH SLOPING SURFACE CONTROLLING OBSTACLE.
6. ADDED RNP APCH - GPS - REQUIRED DOCUMENTATION PER FAAO 8260.19I, PARA 8-6-8B(2) CRITERIA.
7. MOVED BARO-VNAV NA AND BACKUP ALTIMETER SOURCE CHART NOTES TO 8260-9 GENERAL REMARKS SECTION - WEATHER SOURCES TRANSMIT ON WMSCR/CHART NOTES NOT REQUIRED PER FAAO 8260.19I, PARA 8-6-9F(3) CRITERIA.
8. REMOVED FARENHEIT TEMPERATURE VALUES FROM BARO-VNAV CRITICAL TEMPERATURES CHART NOTE - CALCULATIONS NO LONGER REQUIRED PER FAAO 8260.19I, PARA 8-6-9R CRITERIA.
9. REMOVED DME/DME RNP-0.3 NA CHART NOTE - NO LONGER REQUIRED.
10. REMOVED PROCEDURE NA AT NIGHT AND HELICOPTER VISIBILITY REDUCTION BELOW 1 SM CHART NOTES - 20:1 PENETRATIONS TO VISUAL SURFACES REMOVED.
11. CHANGED "CHART NOTE: NIGHT LANDING: RWY 5 NA" TO "CHART NOTE: CIRCLING RWY 5 NA AT NIGHT" - REQUIRED DOCUMENTATION PER FAAO 8260.19I, PARA O(2)(G) CRITERIA.
12. CHANGED FAS OBSTACLE FROM 1289 AAO 354439N/0854733W TO 1270 AAO 354421N/0854703W - MAP STUDY ACCOMPLISHED/NEW LNAV FINAL SEGMENT CONTROLLING OBSTACLE/MDA CALCULATED AS OBSTACLE HEIGHT + 250 FEET ROC ROUNDED TO NEXT HIGHEST 20 FOOT INCREMENT PER FAAO 8260.3E, PARA 3-2-1F CRITERIA.
13. CHANGED VDP DISTANCE FROM 1.56 TO 1.48 - MAP STUDY ACCOMPLISHED/NEW LNAV FINAL SEGMENT CONTROLLING OBSTACLE/MDA CALCULATED AS OBSTACLE HEIGHT + 250 FEET ROC ROUNDED TO NEXT HIGHEST 20 FOOT INCREMENT PER FAAO 8260.3E, PARA 3-2-1F CRITERIA.
14. CHANGED LTP HAE FROM 283.9 TO 284.1 - RWY 23 DISPLACED THRESHOLD REMOVED.
15. ADDED NA WHEN LOCAL WEATHER NOT AVAILABLE NOTE - FAAO 8260.19I IMPLEMENTATION MEMO, ATTACHMENT 4, PARA 5/AIRPORT LOCAL WEATHER DISSEMINATED THROUGH WMSCR.
16. CHANGED LPV ALL CATS DA/HAT FROM 1276/250 TO 1312/286 AND LPV ALL CATS VISIBILITY FROM 1 TO 7/8 - NEW LPV FINAL SEGMENT CONTROLLING OBSTACLE/NEW LPV MISSED APPROACH SLOPING SURFACE CONTROLLING OBSTACLE.
17. CHANGED LNAV/VNAV ALL CATS DA/HAT FROM 1423/397 TO 1400/374 AND LNAV/VNAV ALL CATS VISIBILITY FROM 1 3/8 TO 1 - NEW LNAV/VNAV FINAL SEGMENT CONTROLLING OBSTACLE.
18. CHANGED LNAV ALL CATS MDA/HAT FROM 1580/554 TO 1520/494 AND LNAV CATS C/D VISIBILITY FROM 1 5/8 TO 1 3/8 - MAP STUDY ACCOMPLISHED/NEW LNAV FINAL SEGMENT CONTROLLING OBSTACLE/MDA CALCULATED AS OBSTACLE HEIGHT + 250 FEET ROC ROUNDED TO NEXT HIGHEST 20 FOOT INCREMENT PER FAAO 8260.3E, PARA 3-2-1F CRITERIA.
19. CHANGED CIRCLING CAT A CMDA/HAA FROM 1580/548 TO 1600/568 - NEW CIRCLING CAT A CONTROLLING OBSTACLE.
20. CHANGED CIRCLING CAT C VISIBILITY FROM 1 5/8 TO 1 1/2 - FAAO 8260.3E, TABLE 3-3-7.
21. CHANGED CIRCLING CAT D CMDA/HAA FROM 1700/668 TO 1620/588 - MAP STUDY ACCOMPLISHED/NEW CONTROLLING OBSTACLE/CMDA CALCULATED AS OBSTACLE HEIGHT + 300 FEET ROC ROUNDED TO NEXT HIGHEST 20 FOOT INCREMENT PER FAAO 8260.3E, PARA 3-2-1G CRITERIA.
22. CHANGED LTP LATITUDE FROM 354209.1965N TO 354211.0165N - RWY 23 DISPLACED THRESHOLD REMOVED.
23. CHANGED LTP LONGITUDE FROM 0855017.0530W TO 0855014.3425W - RWY 23 DISPLACED THRESHOLD REMOVED.
24. CHANGED LTP ELLIPSOIDAL HEIGHT FROM +02839 TO +02841 - RWY 23 DISPLACED THRESHOLD REMOVED.
25. CHANGED FPAP LATITUDE FROM 354112.5125N TO 354114.3380N - RWY 23 DISPLACED THRESHOLD REMOVED.
26. CHANGED FPAP LONGITUDE FROM 0855141.5360W TO 0855138.8315W - RWY 23 DISPLACED THRESHOLD REMOVED.
27. CHANGED LENGTH OFFSET FROM 1312 TO 1224 - RWY 23 DISPLACED THRESHOLD REMOVED.
28. CHANGED CRC REMAINDER FROM 29FDABF8 TO F1A62FA1 - RWY 23 DISPLACED THRESHOLD REMOVED.
29. CHANGED LTP AND FPAP ORTHOMETRIC HEIGHT FROM +03128 TO +03131 - RWY 23 DISPLACED THRESHOLD REMOVED.

COORDINATED WITH:A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, AMGR**FLIGHT CHECKED BY**

MICHAEL W PENDERGRASS

Digitally signed by

ALLAN WILL

Aug 10, 2022

OFFICE

FPO

DATE

07/26/2022

DEVELOPED BYMICHAEL R. GARRITY JR. **MICHAEL GARRITY**

Digitally signed by

May 20, 2022

OFFICE

AJV-A423

DATE

04/12/2022

APPROVED BY

MARLON ROBINSON

Digitally signed by

ALLAN WILL

Aug 10, 2022

OFFICE

AJV-A420

DATE**TITLE**

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRNC
RUNWAY	RW23
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W23A
LTP/FTP LATITUDE	354211.0165N
LTP/FTP LONGITUDE	0855014.3425W
LTP/FTP ELLIPSOIDAL HEIGHT	+02841
FPAP LATITUDE	354114.3380N
FPAP LONGITUDE	0855138.8315W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	F1A62FA1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+03131
FPAP ORTHOMETRIC HEIGHT	+03131

