

**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> H19	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> BOWLING GREEN	<u>STATE</u> MO		
<u>AIRPORT ELEVATION</u> 891	<u>TDZE</u> 889	<u>SUPERSEDED</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 08/16/2018	<u>MAG VAR</u> 1E	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 24 MARCH 2022	<u>REQUIRED EFFECTIVE DATE</u> 03/24/2022	<u>CANCEL/SUSPEND</u>		

**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>
JIMPI	IAF	WILAM	NOPT	TF	FB	1.00	043.34	5.00	2500
APIDE	IAF	WILAM	NOPT	TF	FB	1.00	223.44	5.00	2500
WILAM	IF/IAF	FAXEN		TF	FB	1.00	133.39	4.96	2500
FAXEN	FAF	RW13	MAP	TF	FO	0.30	133.44	4.98	
RW13	MAP	1236 MSL		CA			133.44		
1236 MSL		MIKOE		DF	FO	1.00			2500

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW13

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2500 DIRECT MIKOE AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT                      SIDE OF COURSE                      OUTBOUND                      FT WITHIN                      MILES OF                      (IAF)

2. HOLD NW WILAM, RT, 133.39 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 14000.

3. FAF: 133.44                      FAF: FAXEN                      DIST FAF TO MAP: 4.98                      DIST FAF TO THLD: 4.98

4. MIN ALT:                      WILAM 2500, FAXEN 2500

5. DIST TO THLD FROM PFAF: 4.98                      MM:                      IM:                      150 HAT:                      347 HAT: 1.01                      GS ANT:

6. MIN GP INCPT: 2500                      GP ALT AT PFAF : FAXEN 2500                      OM:                      MM:                      IM:

7. GP ANGLE: 3.00                      34:1: IS CLEAR                      20:1: IS CLEAR                      TCH: 43.3

8. MSA FROM: RW13 2500

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING RWY 31 NA AT NIGHT.  
CHART NOTE: BARO-VNAV NA.  
CHART NOTE: USE QUINCY ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART QUINCY ASOS.  
HOLD SE, RT, 313.58 INBOUND.  
FAS OBST: 1000 AAO 392503N/0911751W.  
1040 AAO 392505N/0911827W.  
WAAS CHANNEL # 77644  
REFERENCE PATH ID: W13A  
CHART CIRCLING ICON.  
LTP HAE: 233.3 M

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

ALTERNATE: NA ☒

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	1236	1	347	1236	1	347		NA			NA				
LNAV/VNAV DA	1236	1	347	1236	1	347		NA			NA				
LNAV MDA	1360	1	471	1360	1	471		NA			NA				
CIRCLING	1480	1	589	1480	1	589		NA			NA				



CHANGES - REASONS

1. INCORPORATED CHANGES FROM P-NOTAM AMDT ORIG-A.
2. AIRPORT ELEVATION: UPDATED FROM "886" TO "891" AND TDZE FROM "886" TO "889" - UPDATED AIRNAV AIRPORT DATA.
3. TERMINAL ROUTES: REMOVED FEEDER SEGMENTS FROM HLV VORTAC, UIN VORTAC AND RIVRS - PER FPT REQUEST.
4. TERMINAL ROUTES: UPDATED "WILAM TO FAXEN" DISTANCE FROM "5.08" TO "4.96" - UPDATED PFAF LOCATION USING VGSI GPA AND TCH PER FPT REQUEST.
5. TERMINAL ROUTES: ADDED "FAXEN TO RW13" AND CA LEG "RW13 TO 1236 MSL" - IAW 8260.58B 3-5-2.B.
6. TERMINAL ROUTES: UPDATED FROM "1300 MSL TO MIKOE" TO "1236 MSL TO MIKOE" - ADDED CA ALTITUDE IAW 8260.58B 3-5-2.B.
7. MAP: ADDED LPV: DA AND LNAV/VNAV: DA - ADDED LPV AND LNAV/VNAV MINIMUMS PER FPT REQUEST.
8. MISSED APPROACH INSTRUCTIONS: UPDATED FROM: "CLIMB TO 2500 ON COURSE 133 TO MIKOE AND HOLD" TO "CLIMB TO 2500 DIRECT MIKOE AND HOLD" - TF CHANGED TO DF LEG TYPE IAW RNAV MA CRITERIA.
9. PROFILE LINE 2: ADDED MAX 14000 - IAW 8260.19I, 8-6-7 B(2).
10. PROFILE LINE 3: ADDED DIST FAF TO MAP: 4.98, AND UPDATE DIST FAF TO THLD FROM "4.92" TO "4.98" - NEW FAF LOCATION USING VGSI GPA AND TCH PER FPT REQUEST.
11. PROFILE LINE 5: ADDED "DIST TO THLD FROM PFAF: 4.98" AND "347 HAT 1.01" - IAW 8260.19I 8-6-7 E(3).
12. PROFILE LINE 6: ADDED MIN GP INCPT: 2500, GP ALT AT PFAF: FAXEN 2500 - IAW 8260.19I 8-6-7 F.
13. PROFILE LINE 7: ADDED GP ANGLE: 3.00, TCH 43.3, AND UPDATED FROM "34:1 IS NOT CLEAR" TO "34:1 IS CLEAR" AND ADDED "20:1 IS CLEAR" - IAW 8260.3E 2-6-3, MATCH VGSI ANGLE AND TCH; 20:1 AND 34:1 PENETRATIONS ARE CLEAR IAW 8260.19I 8-6-7 G(3).
14. PBN REQUIREMENTS NOTE: UPDATED FROM "RNP APCH" TO "RNP APCH - GPS" - IAW 8260.19I 8-6-8 B(2).
15. NOTES: ADDED CHART NOTES: "CIRCLING RWY 31 NA AT NIGHT" AND "BARO-VNAV NA - IAW 8260.19I 8-6-11 O(2)(G), AND 8-6-9 E(8).
16. NOTES: REMOVED "CHART NOTE: PROCEDURE NA AT NIGHT" - 20:1 PENETRATIONS CLEARED, IAW 8260.19I 8-6-11 O(2).
17. NOTES: REMOVED "CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - 20:1 IS CLEAR.
18. ADDITIONAL FLIGHT DATA: UPDATED NOTE FROM "HOLD SE, RT, 313.59 INBOUND" TO "HOLD SE, RT, 313.58 INBOUND" - UPDATED HOLDING COURSE TO ALIGN WITH RNAV 31 FAC.
19. ADDITIONAL FLIGHT DATA: UPDATED CHART FAS OBST FROM "989 TREE 392212N/0911343W." TO "1000 AAO 392503N/0911751W" - UPDATED OBSTACLE SURVEY/NEW TARGETS EVALUATION.
20. ADDITIONAL FLIGHT DATA: ADDED "CHART CIRCLING ICON" - IAW 8260.19I 8-6-10(S).
21. ADDITIONAL FLIGHT DATA: ADDED "LTP HAE: 233.3 M," "WAAS CHANNEL #77644," AND "REFERENCE PATH ID: W13A" - IAW 8260.19I 8-6-10 J, ADDED LPV MINS.
22. ADDITIONAL FLIGHT DATA: REMOVED NOTE "FAXEN TO RW13: 3.04/40"- NO LONGER REQUIRED IAW 8260.19I 8-6-10 O.
23. ADDITIONAL FLIGHT DATA: ADDED "1040 AAO 392505N/0911827W" - IAW 8260.19I 8-6-10 E.
24. MINIMUMS: ADDED LNAV/VNAV MINS CAT A/B DA/HAT "1240/351" AND VIS "1" - LNAV/VNAV ADDED PER FPT.
25. MINIMUMS: ADDED LPV MINS CAT A/B DA/HAT "1240/351" AND VIS "1" - LPV ADDED PER FPT.
26. MINIMUMS: UPDATED LNAV CAT A/B MDA/HAT FROM "1340/454" TO "1360/471" - UPDATED AIRPORT ELEVATION.
27. MINIMUMS: UPDATED CIRCLING CAT A/B CMDA/HAA FROM "1520/634" TO "1480/589" - NEW AIRPORT SURVEY, NEW CONTROLLING OBSTACLE.
28. ADDED CRC REMAINDER "398CDE32," LTP/FTP LAT/LONG "392225.5990N/0911327.5540W," LTP/FTP ELLIPSOIDAL HEIGHT "+02333," FPAP LAT LONG "392123.0980N/0911205.6060W" - LNAV/VNAV AND LPV MINS ADDED PER FPT REQUEST.

COORDINATED WITH:

A4A ☐ALPA ☒AOPA ☒APA ☐HAI ☐NBAA ☒OTHER: ZKC, STL FSS, AMGR, MO STATE AERO

FLIGHT CHECKED BY  
PENDING

Digitally signed by  
JASON KRETSCHMER  
Jan 06, 2022

OFFICE  
DATE

DEVELOPED BY  
JASON KRETSCHMER (JUDITH TUTTLE)

Digitally signed by  
JASON KRETSCHMER  
Jan 06, 2022

OFFICE  
AJV-A421  
DATE  
10/14/2021

APPROVED BY  
MARLON ROBINSON

Digitally signed by  
JASON KRETSCHMER  
Jan 06, 2022

OFFICE  
AJV-A420

DATE

TITLE  
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	H19
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	392225.5990N
LTP/FTP LONGITUDE	0911327.5540W
LTP/FTP ELLIPSOIDAL HEIGHT	+02333
FPAP LATITUDE	392123.0980N
FPAP LONGITUDE	0911205.6060W
THRESHOLD CROSSING HEIGHT (TCH)	00043.3
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1776
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	398CDE32

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02657
FPAP ORTHOMETRIC HEIGHT	+02657