

**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> KMOX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 14	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> MORRIS	<u>STATE</u> MN		
<u>AIRPORT ELEVATION</u> 1136	<u>TDZE</u> 1132	<u>SUPERSEDED</u> RNAV (GPS) RWY 14	<u>ORIGINAL/AMENDMENT</u> 1C	<u>DATED</u> 06/20/2019	<u>MAG VAR</u> 2E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 8 SEPTEMBER 2022	<u>REQUIRED EFFECTIVE DATE</u> 09/08/2022	<u>CANCEL/SUSPEND</u>		

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 052/30 CW 232/30	NOPT	ZITOG	IF/IAF	3000
2. 232/30 CW 052/30		ZITOG	IAF	3100

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
ZITOG	IF/IAF	EBYEX		TF	FB	1.00	141.85	7.99	3000
EBYEX	FAF	YOPCU/2.00 NM TO RW14		TF	FB	0.30	141.92	3.75	
YOPCU/2.00 NM TO RW14		RW14	MAP	TF	FO	0.30	141.92	2.00	
RW14	MAP	1382 MSL		CA			141.92		
1382 MSL		EXJUP		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW14

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT EXJUP AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
10
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD NW ZITOG, RT, 141.85 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC:

141.92

FAF: EBYEX

DIST FAF TO MAP: 5.75

DIST FAF TO THLD: 5.75

4. MIN ALT: ZITOG 3000, EBYEX 3000, YOPCU/2.00 NM TO RW14 1800

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

250 HAT: 0.67

GS ANT:

6. MIN GP INCPT:

3000

GP ALT AT PFAF :

EBYEX 3000

OM:

MM:

IM:

7. GP ANGLE:

3.00

34:1:

IS CLEAR

20:1:

IS CLEAR

TCH:

40.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 04 AND 22.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING BENSON ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BENSON ALTIMETER SETTING AND INCREASE LPV AND LNAV/VNAV DA TO 1440 FEET. INCREASE ALL MDAS 60 FEET AND VISIBILITY LNAV CAT C 1/8 SM AND VISIBILITY CIRCLING CAT C 1/4 SM.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 322.13 INBOUND.
CHART FAS OBST: 1230 TREE (27-042277) 453510N/0955832W.
CHART VDP AT 0.98 NM TO RW14.
WAAS CHANNEL # 49032
REFERENCE PATH ID: W14A
CHART CIRCLING ICON.
LTP HAE: 317.4 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	1382	1	250	1382	1	250	1382	1	250		NA			QUALITY 10 CHECKED	
LNAV/VNAV DA	1382	1	250	1382	1	250	1382	1	250		NA				
LNAV MDA	1480	1	348	1480	1	348	1480	1	348		NA				
CIRCLING	1560	1	424	1600	1	464	1860	2	724		NA				

CHANGES - REASONS

1. TDZE INCREASED FROM 1131 TO 1132. - NEW AIRNAV DATA INCORPORATED.
2. LPV DA INCREASED FROM 1381 TO 1382. - TDZE ELEVATION INCREASED.
3. LNAV/VNAV DA/HAT DECREASED FROM 1543/412 TO 1382/250; VISIBILITY DECREASED FROM 1 3/8 TO 1 SM. - NEW OBSTACLE EVALUATION; NEW RWY VG SURVEY.
4. LNAV MDA/HAT DECREASED FROM 1500/369 TO 1480/348. - NEW OBSTACLE EVALUATION; NEW RWY VG SURVEY.
5. UPDATED ZITOG - EBYEX COURSE/DISTANCE FROM 141.84/8.00 TO 141.85/7.99. - PFAF MOVED TO MAINTAIN GPA/TCH IAW 8260.58B.
6. UPDATED EBYEX - YOPCU DISTANCE FROM 3.74 TO 3.75. - PFAF MOVED TO MAINTAIN GPA/TCH IAW 8260.58B.
7. UPDATED MISSED APPROACH CA LEG ALTITUDE FROM 1381 TO 1382 MSL. - IAW 8260.58B 3-5-2B.
8. PROFILE LINE 2: UPDATED HOLD-IN-LIEU INBOUND COURSE FROM 141.84 TO 141.85. - INTERMEDIATE COURSE UPDATED.
9. PROFILE LINE 3. UPDATED DIST FAF TO MAP/THLD FROM 5.74 TO 5.75. - PFAF MOVED TO MAINTAIN GPA/TCH IAW 8260.58B.
10. PROFILE LINE 5: ADDED DIST TO THLD FROM 250 HAT: 0.67. - IAW 8260.19I 8-6-7 E.
11. PROFILE LINE 7: UPDATED TCH FROM 44.0 TO 40.0. - IAW 8260.58B TABLE 1-3-1 TCH REQUIREMENTS.
12. UPDATED PBN REQUIREMENTS FROM RNP APCH TO RNP APCH - GPS. - IAW 8260.19I 8-6-8 B(2).
13. REMOVED CHART NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - VGSI AND RNAV GLIDEPATH MATCH.
14. UPDATED CHART NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BENSON ALTIMETER SETTING AND INCREASE LPV DA TO 1440 FEET LNAV/VNAV DA TO 1602 FEET AND ALL MDA 60 FEET, INCREASE LNAV AND CIRCLING CAT C VISIBILITY 1/4 SM" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BENSON ALTIMETER SETTING AND INCREASE LPV AND LNAV/VNAV DA TO 1440 FEET. INCREASE ALL MDAS 60 FEET AND VISIBILITY LNAV CAT C 1/8 SM AND VISIBILITY CIRCLING CAT C 1/4 SM." - NEW OBSTACLE ELVALUATION.
15. UPDATED CHART FAS OBST FROM "1239 TREE 453437N/0955811W" TO "1230 TREE (27-042277) 453510N/0955832W." - NEW LNAV STEPDOWN CONTROLLING OBSTACLE.
16. UPDATED CHART VDP FROM "1.03 NM TO RW14" TO "0.98 NM TO RW14." - STEPDOWN FIX MOVED; RWY 14 EXTENDED.
17. FAS DATA: UPDATED LTP/FTP LATITUDE/LONGITUDE FROM 453408.4725N/0955814.3445W TO 453408.4850N/0955814.3485W. - NEW AIRNAV DATA INCORPORATED.
18. FAS DATA: UPDATED FPAP LATITUDE/LONGITUDE FROM 453256.4285N/0955659.7900W TO 453256.4315N/0955659.7830W. - NEW AIRNAV DATA INCORPORATED.
19. FAS DATA: UPDATED LENGTH OFFSET FROM 1528 TO 1256. - RWY EXTENDED; NEW PFAF COORDINATES.
20. FAS DATA: UPDATED CRC REMAINDER FROM B98EAF53 TO 42331750. - NEW LTP/FPT AND FPAP COORDINATES.
21. DELETED *LNAV ONLY FROM ADDITIONAL FLIGHT DATA. - NO LONGER REQUIRED.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMP, AMGR

FLIGHT CHECKED BY

PENDING

OFFICE

DATE

Digitally signed by
CASIMIR L TABAKA
Jun 14, 2022

DEVELOPED BY

CASIMIR L. TABAKA (BARBARA GORMAN)

Digitally signed by
CASIMIR L TABAKA
Apr 11, 2022

OFFICE

AJV-A432

DATE

03/08/2022

APPROVED BY

LONNIE EVERHART

Digitally signed by
CASIMIR L TABAKA
Apr 11, 2022

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	KMOX
RUNWAY	RW14
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W14A
LTP/FTP LATITUDE	453408.4850N
LTP/FTP LONGITUDE	0955814.3485W
LTP/FTP ELLIPSOIDAL HEIGHT	+03174
FPAP LATITUDE	453256.4315N
FPAP LONGITUDE	0955659.7830W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1256
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	42331750

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03437
FPAP ORTHOMETRIC HEIGHT	+03437

