

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> KCMX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> HANCOCK	<u>STATE</u> MI		
<u>AIRPORT ELEVATION</u> 1095	<u>TDZE</u> 1070	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 08/11/2022	<u>MAG VAR</u> 2W	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 30 NOVEMBER 2023	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<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>
CMX VOR/DME		MUMBY		TF	FO	1.00	133.40	14.00	3000
CIBPA		MUMBY		TF	FO	1.00	062.29	9.04	3000
PEVXI	IAF	MUMBY	NOPT	TF	FB	1.00	342.93	3.35	3000
MUMBY	IF/IAF	COPKA		TF	FB	1.00	313.05	9.23	2500
COPKA	FAF	RW32	MAP	TF	FO	0.30	312.92	4.32	
RW32	MAP	1320 MSL		CA			312.92		
1320 MSL		BAPYA		DF	FO	1.00			3700

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW32

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3700 DIRECT BAPYA AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD SE MUMBY, RT, 313.05 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 312.92FAF: COPKADIST FAF TO MAP: 4.32DIST FAF TO THLD: 4.32

4. MIN ALT: MUMBY 3000, COPKA 2500

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.67GS ANT:

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

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 46.9

8. MSA FROM: RW32 3300

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CMX VOR/DME ON V63 NORTHEAST BOUND.  
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 7/8 SM, INCREASE LNAV CATS C/D VISIBILITY TO 1 SM.

ADDITIONAL FLIGHT DATA:

HOLD NW, RT, 132.69 INBOUND.  
CHART VDP AT 0.98 NM TO RW32.  
WAAS CHANNEL # 45809  
REFERENCE PATH ID: W32A  
CHART CIRCLING ICON.  
LTP HAE: 289.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4, 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	1320	1/2	250	1320	1/2	250	1320	1/2	250	1320	1/2	250			
LNAV/VNAV DA	1367	1/2	297	1367	1/2	297	1367	1/2	297	1367	1/2	297			
LNAV MDA	1420	1/2	350	1420	1/2	350	1420	5/8	350	1420	5/8	350			
CIRCLING	1620	1	525	1660	1	565	1700	1 3/4	605	1820	2 1/4	725			



CHANGES - REASONS

1. PROCEDURE NAME CHANGED FROM RNAV (GPS) RWY 31 TO RNAV (GPS) RWY 32 - RWY NUMBER CHANGED TO RWY 32.
2. LNAV MAP, REFERENCE PATH ID, AND MSA CHANGED FROM RW31 TO RW32 - RWY NUMBER CHANGED TO RWY 32.
3. CIBPA TO MUMBY TERMINAL ROUTE CHANGED FROM INITIAL TO FEEDER; IAF AND NOPT REMOVED FROM SEGMENT REQUIRING ENTRY TO HIL - TURN TO INTERMEDIATE SEGMENT AT MUMBY EXCEEDS 90 DEGREES; CORRECT ERROR ON PREVIOUS PROCEDURE.
4. LNAV/VNAV CAT D VISIBILITY CHANGED FROM 3/4 TO 1/2 - APPLIED LATEST CRITERIA VISIBILITY TABLE.
5. LNAV CATS C/D VISIBILITY CHANGED FROM 1/2 / 3/4 TO 5/8 - APPLIED LATEST CRITERIA VISIBILITY TABLE.
6. DELETED LNAV CAT D INOPERATIVE TABLE NOTE - STANDARD ADJUSTMENT NOW APPLIES AFTER CHANGING VISIBILITY TO 5/8.
7. INOP ALS NOTE CHANGED FROM "FOR INOPERATIVE ALS, INCREASE LPV VISIBILITY ALL CATS TO 1 SM, INCREASE LNAV/VNAV CAT D VISIBILITY TO 1 SM" TO "FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 7/8 SM, INCREASE LNAV CATS C/D VISIBILITY TO 1 SM" - APPLIED LATEST CRITERIA VISIBILITY TABLE AFTER CHANGING VISIBILITIES.
8. VDP CHANGED FROM 0.86 TO 0.98 NM TO RWY; RWY CHANGED FROM RW31 TO RW32 - APPLIED LATEST VDP CALCULATION FORMULA WITH TARGETS AND RWY NUMBER CHANGED.
9. ADDED ALTERNATE MINIMUMS - NON-STANDARD MINS FOR CIRC CAT D AND NA WHEN LOCAL WEATHER NOT AVAILABLE.
10. RAISED CIRCLING CAT A MDA/HAA FROM 1580/485 TO 1620/525 AND CAT B FROM 1600/505 TO 1660/565 - APPLIED OBSTACLE CRITERIA FOR HIGH TERRAIN OUTSIDE SURVEYED AREAS CREATING NOTIONAL TREES MATCHING OTHER PROCEDURES TO STANDARDIZE ALL CIRCLING MINIMUMS.
11. FAS DATA CRC REMAINDER CHANGED FROM ACC672B3 TO 1F451266 - RWY NUMBER CHANGED FROM RW31 TO RW32, REFERENCE PATH IDENTIFIER CHANGED FROM W31A TO W32A, LTP LONGITUDE CHANGED FROM 0882844.8015W TO 0882844.8010W, FPAP COORDINATES CHANGED FROM 471031.2200N/0882956.1000W TO 471047.4230N/0883023.5760W, LENGTH OFFSET CHANGED FROM 0008 TO 0768.

COORDINATED WITH:

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

FLIGHT CHECKED BY

JAMES ONIEAL

Digitally signed by

CASIMIR L TABAKA

Sep 28, 2023

OFFICE

FPO

DATE

09/26/2023

DEVELOPED BY

KELLY DEAN

Digitally signed by

KELLY D DEAN

Jul 10, 2023

OFFICE

AJV-A432

DATE

06/01/2023

APPROVED BY

CASIMIR TABAKA

Digitally signed by

ERIC N SUSKI

Aug 04, 2023

OFFICE

AJV-A432

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCMX
RUNWAY	RW32
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W32A
LTP/FTP LATITUDE	470949.1645N
LTP/FTP LONGITUDE	0882844.8010W
LTP/FTP ELLIPSOIDAL HEIGHT	+02891
FPAP LATITUDE	471047.4230N
FPAP LONGITUDE	0883023.5760W
THRESHOLD CROSSING HEIGHT (TCH)	00046.9
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	1F451266

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03233
FPAP ORTHOMETRIC HEIGHT	+03233

