

**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</u> MACOMB MUNI	<u>AIRPORT ID</u> KMQB	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> MACOMB	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 706	<u>TDZE</u> 706	<u>SUPERSEDED</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 11/10/2016	<u>MAG VAR</u> 1E	<u>EPOCH YEAR</u> 1990
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 16 JULY 2020	<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>
BRL VOR/DME		HUKPO		TF	FB	1.00	175.68	6.24	2300
UIN VORTAC		ZUVBO		TF	FB	1.00	021.70	37.70	2300
HUKPO	IAF	TUYOB	NOPT	TF	FB	1.00	175.69	6.00	2300
ZUVBO	IAF	TUYOB	NOPT	TF	FB	1.00	021.91	6.00	2300
TUYOB	IF/IAF	WEKEM		TF	FB	1.00	088.91	6.53	2300
WEKEM	FAF	GICSE/1.70 NM TO RW09		TF	FB	0.30	089.00	3.18	
GICSE/1.70 NM TO RW09		RW09	MAP	TF	FO	0.30	089.00	1.70	
RW09	MAP	906 MSL		CA			089.00		
906 MSL		WULIN		DF	FO	1.00			2300

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW09

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2300 DIRECT WULIN AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT      SIDE OF COURSE      OUTBOUND      FT WITHIN      MILES OF (IAF)
2. HOLD W TUYOB, RT, 088.91 INBOUND, 2300 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 089.00      FAF: WEKEM      DIST FAF TO MAP: 4.88      DIST FAF TO THLD: 4.88
4. MIN ALT: TUYOB 2300, WEKEM 2300, GICSE/1.70 NM TO RW09 1280\*
5. DIST TO THLD FROM OM:      MM:      IM:      150 HAT:      200 HAT: 0.50      GS ANT:      MM:      IM:
6. MIN GP INCPT: 2300      GP ALT AT FAF : WEKEM 2300      OM:      MM:      IM:
7. GP ANGLE: 3.00      34:1: IS CLEAR      20:1: IS CLEAR      TCH: 40.0
8. MSA FROM: RW09 2500

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING TO RWY 18, 36 NA AT NIGHT.  
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING BURLINGTON IA ALTIMETER SETTING.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BRL VOR/DME AIRWAY RADIALS 088 CW 241.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON UIN VORTAC AIRWAY RADIALS 321 CW 085.  
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BURLINGTON IA ALTIMETER SETTING AND INCREASE ALL DA 63 FEET AND ALL MDA 80 FEET; INCREASE LNAV VISIBILITIES CAT C/D AND CIRCLING CAT C/D VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.10 NM TO RW09\*  
\*LNAV ONLY  
WAAS CHANNEL #82531  
REFERENCE PATH ID: W09A  
CHART FAS OBST: 839 TREE 403103N/0904212W.  
HOLD E, RT, 269.25 INBOUND  
LTP HAE: 181.9 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	906	1	200	906	1	200	906	1	200	906	1	200			
LNAV/VNAV DA	1110	1 3/8	404	1110	1 3/8	404	1110	1 3/8	404	1110	1 3/8	404			
LNAV MDA	1100	1	394	1100	1	394	1100	1 1/8	394	1100	1 1/8	394			
CIRCLING	1120	1	414	1260	1	554	1260	1 1/2	554	1300	2	594			



**CHANGES - REASONS**

- 1: UPDATED VGSI TCH FROM 40 FT TO 43 FT - VGSI IS BEING UPDATED; REPLACING VASI.  
2: REMOVED CHART NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET} - UPDATED VGSI.  
3: REMOVED CHART NOTE: DME/DME RNP-0.3 NA - 8260.19H  
4: ADD PBN REQUIRMENT NOTE: RNP APCH - 8260.19H  
5: UPDATED CHART NOTE: REMOVED FAHRENHEIT VALUES "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C (4°F) OR ABOVE 54°C (130°F)" - FAHRENHEIT VALUES NO LONGER REQUIRED.  
6: UPDATED PROFILE LINE 7 20:1 TO "IS CLEAR" - NO PENETRATIONS TO THE VISUAL SURFACE EXIST.  
7: UPDATED VDP FROM 1.16 TO 1.10 - 8260.3D.  
8: UPDATED ALL LPV VISIBILITY FROM 3/4 SM TO 1 SM - PER VISIBILITY CALCULATOR.  
9: CHART NOTE: UPDATED FROM "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BURLINGTON IA ALTIMETER SETTING AND INCREASE ALL DA 63 FEET AND ALL MDA 80 FEET; INCREASE LPV VISIBILITY 1/8 MILE ALL CATS, LNAV/VNAV ALL CATS, LNAV CAT C/D AND CIRCLING CAT C/D VISIBILITY 1/4 MILE." TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BURLINGTON IA ALTIMETER SETTING AND INCREASE ALL DA 63 FEET AND ALL MDA 80 FEET; INCREASE LNAV VISIBILITIES CAT C/D AND CAT C/D VISIBILITY 1/4 SM CIRCLING" - 8260.19H  
10: CHART NOTE: ADDED "BARO-VNAV AND VDP NA WHEN USING BURLINGTON IA ALTIMETER SETTING" - 8260.19H.

**COORDINATED WITH:**

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

**FLIGHT CHECKED BY**

JAMES ONIEAL

*Digitally signed by***DONALD H LANIER****OFFICE**

FICO

**DATE**

10/30/2019

**DEVELOPED BY**

DONALD H. LANIER (MICAH HILLEY)

May 07, 2020

*Digitally signed by***DONALD H LANIER****OFFICE**

AJV-A431

**DATE**

08/23/2019

**APPROVED BY**

GEORGE DAVIS

May 07, 2020

*Digitally signed by***DONALD H LANIER****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	KMQB
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	403110.9130N
LTP/FTP LONGITUDE	0903939.7645W
LTP/FTP ELLIPSOIDAL HEIGHT	+01819
FPAP LATITUDE	403110.7800N
FPAP LONGITUDE	0903742.9300W
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	1192
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	E9DE5784

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02151
FPAP ORTHOMETRIC HEIGHT	+02151

