

**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 27	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> MACOMB	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 706	<u>TDZE</u> 686	<u>SUPERSEDED</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 04/30/2015	<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>
BADER		JUTSI		TF	FB	1.00	025.81	5.57	2300
JUTSI	IAF	WULIN	NOPT	TF	FB	1.00	329.06	6.00	2300
LOGOS	IAF	WULIN	NOPT	TF	FB	1.00	223.56	14.86	2300
WULIN	IF/IAF	ODOYO		TF	FB	1.00	269.25	6.04	2300
ODOYO	FAF	IWNUM/1.60 NM TO RW27		TF	FB	0.30	269.16	3.36	
IWNUM/1.60 NM TO RW27		RW27	MAP	TF	FO	0.30	269.16	1.60	
RW27	MAP	886 MSL		CA			269.16		
886 MSL		TUYOB		DF	FO	1.00			2300

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW27

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2300 DIRECT TUYOB AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

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

2. HOLD E WULIN, RT, 269.25 INBOUND, 2300 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 269.16      FAF: ODOYO      DIST FAF TO MAP: 4.96      DIST FAF TO THLD: 4.96

4. MIN ALT: WULIN 2300, ODOYO 2300, IWNUM/1.60 NM TO RW27 1220\*

5. DIST TO THLD FROM OM:      MM:      IM:      150 HAT:      200 HAT: 0.50      GS ANT:

6. MIN GP INCPT: 2300      GP ALT AT FAF : ODOYO 2300      OM:      MM:      IM:

7. GP ANGLE: 3.00      34:1: IS CLEAR      20:1: IS CLEAR      TCH: 40.0

8. MSA FROM: RW27 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 ARRIVALS AT BADER ON V67 SOUTHEAST AND ON V586 SOUTHWEST BOUND.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LOGOS ON V48 EASTBOUND.  
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 1/8 SM, AND CIRCLING CAT C/D 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.00 NM TO RW27\*  
\*LNAV ONLY  
WAAS CHANNEL #40331  
REFERENCE PATH ID: W27A  
CHART FAS OBST: 789 TREE 403123N/0903831W.  
HOLD W, RT, 088.91 INBOUND  
LTP HAE: 173.9 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	886	1	200	886	1	200	886	1	200	886	1	200			
LNAV/VNAV DA	977	1	291	977	1	291	977	1	291	977	1	291			
LNAV MDA	1040	1	354	1040	1	354	1040	1	354	1040	1	354			
CIRCLING	1120	1	414	1260	1	554	1260	1 1/2	554	1300	2	594			



**CHANGES - REASONS**

- 1: REMOVED CHART NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - UPDATED VGSI.  
2: REMOVED CHART NOTE: DME/DME RNP-0.3 NA - 8260.19H  
3: ADD PBN REQUIRMENT NOTE: RNP APCH - 8260.19H  
4: 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.  
5: UPDATED PROFILE LINE 7 20:1 TO "IS CLEAR" - NO PENETRATIONS TO THE VISUAL SURFACE  
6: UPDATED: 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 1/4 MILE ALL CATS, LNAV CAT C/D 3/8 MILE, AND CIRCLING CAT C/D 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 1/8 SM, AND CIRCLING CAT C/D 1/4 SM" - 8260.19H.  
7: UPDATED LPV VISIBILITY ALL CATS FROM 3/4 SM TO 1 SM - PER VISIBILITY CALCULATOR.  
8: CHART NOTE: ADDED CIRCLING RWY 18, 36 NA AT NIGHT - TURF RUNWAY; UNLIT.

**COORDINATED WITH:**

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

**FLIGHT CHECKED BY**  
JAMES ONIEAL

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

May 07, 2020

**OFFICE**

FICO

**DATE**

10/30/2019

**DEVELOPED BY**

DONALD H. LANIER (MICAH HILLEY) *Digitally signed by*  
**DONALD H LANIER**

May 07, 2020

**OFFICE**

AJV-A431

**DATE**

08/26/2019

**APPROVED BY**

GEORGE DAVIS

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

May 07, 2020

**OFFICE**

AJV-A430

**DATE**

**TITLE**  
MANAGER

QUALITY  
16  
CHECKED

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMQB
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	403110.8360N
LTP/FTP LONGITUDE	0903833.7340W
LTP/FTP ELLIPSOIDAL HEIGHT	+01739
FPAP LATITUDE	403110.9600N
FPAP LONGITUDE	0904030.5600W
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	6DEB84EC

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02071
FPAP ORTHOMETRIC HEIGHT	+02071

