

**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> KLAL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 2E	<u>CITY</u> LAKELAND	<u>STATE</u> FL		
<u>AIRPORT ELEVATION</u> 142	<u>TDZE</u> 132	<u>SUPERSEDED</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 2D	<u>DATED</u> 02/28/2019	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 2025
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 17 JUNE 2021	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

**TAA**

<b>FROM</b>	<b>FIX TYPE</b>	<b>TO</b>	<b>FIX TYPE</b>	<b>ALTITUDE</b>
1. 006/30 CW 186/30	NOPT	ARSHW	IF/IAF	2700
2. 186/30 CW 276/30		GUUNR	IAF	2700
3. 276/30 CW 006/30		276/20 CW 006/20		2800
4. 276/20 CW 006/20		BOMRR	IAF	2700

**TERMINAL ROUTES**

<b>FROM</b>	<b>FIX TYPE</b>	<b>TO</b>	<b>FIX TYPE</b>	<b>LEG TYPE</b>	<b>FO/FB</b>	<b>RNP</b>	<b>COURSE</b>	<b>DISTANCE</b>	<b>ALTITUDE</b>
GUUNR	IAF	ARSHW	NOPT	TF	FB	1.00	185.76	5.84	2700
BOMRR	IAF	ARSHW	NOPT	TF	FB	1.00	005.76	5.84	2700
ARSHW	IF/IAF	FLYEN		TF	FB	1.00	095.76	6.00	1700
FLYEN	FAF	SUNFN/1.90 NM TO RW09		TF	FB	0.30	095.81	2.86	
SUNFN/1.90 NM TO RW09		RW09	MAP	TF	FO	0.30	095.81	1.90	
RW09	MAP	1100 MSL		CA			095.81		1100
1100 MSL		PLUMY		DF	FO	1.00			2000

QUALITY  
20  
CHECKED



**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	332	1/2	200	332	1/2	200	332	1/2	200	332	1/2	200			
LNAV/VNAV DA	439	1/2	307	439	1/2	307	439	1/2	307	439	1/2	307			
LNAV MDA	520	1/2	388	520	1/2	388	520	5/8	388	520	5/8	388			
CIRCLING	600	1	458	660	1	518	660	1 1/2	518	700	2	558			

**CHANGES - REASONS**

1. CHANGED ALL COURSE HEADINGS, ADDED 2 DEGREES TO ALL COURSES - MAGVAR ROTATION FROM 4W EPOCH 2000 TO 6W 2025.
2. CHANGED PROFILE LINE 2 INBOUND COURSE FROM 93.76 TO 95.76 - MAGVAR ROTATION FROM 4W EPOCH 2000 TO 6W 2025.
3. CHANGED PROFILE LINE 3 FINAL APPROACH COURSE UPDATED FROM 093.81 TO 095.81- MAGVAR ROTATION FROM 4W EPOCH 2000 TO 6W 2025.
4. ADDED -GPS TO PBN REQUIREMENT NOTES - REQUIRED EQUIPMENT.
5. CHANGED HOLDING PATTERN INBOUND HEADING FROM 241.00 TO 243.00 - MAGVAR ROTATION FROM 4W EPOCH 2000 TO 6W 2025.
6. ADDITIONAL FLIGHT DATA FAS DATA BLOCK INFORMATION CHANGED: LTP HAE FROM 14.5 M TO 14.4 M - CURRENT AIRNAV DATA BASE.
7. FAS DATA BLOCK CHANGES: LTP/FTP LAT/LONG CHANGED FROM 275921.2540N/820201.9260W TO 275921.2535N/820201.9270W; LTP/FTP ELLIPSOIDAL HEIGHT CHANGED FROM +00145 TO +00144; CRC REMAINDER CHANGED FROM B60B06A7 TO A6781A7E, AND ORTHOMETRIC HEIGHT CHANGED FROM +00402 TO +00401 - CURRENT AIRNAV DATA BASE.

**COORDINATED WITH:**

~~A4A~~ ☒ ~~ALPA~~ ☒ ~~AOPA~~ ☒ ~~APA~~ ☐ ~~HAI~~ ☐ ~~NBAA~~ ☒ **OTHER:** LAL ATCT, TAMPA APP CON, ZMA, AMGR

**FLIGHT CHECKED BY**

JEFFREY ECKMAN

*Digitally signed by*

**JOHN BORDY**

May 04, 2021

**OFFICE**

FICO

**DATE**

4/29/2021

**DEVELOPED BY**

WILLIAM HANBY

*Digitally signed by*

**WILLIAM HANBY**

Mar 11, 2021

**OFFICE**

AJV-A422

**DATE**

02/05/2021

**APPROVED BY**

MARLON ROBINSON

*Digitally signed by*

**JOHN BORDY**

May 04, 2021

**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	KLAL
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	275921.2535N
LTP/FTP LONGITUDE	0820201.9270W
LTP/FTP ELLIPSOIDAL HEIGHT	+00144
FPAP LATITUDE	275921.4800N
FPAP LONGITUDE	0820021.2800W
THRESHOLD CROSSING HEIGHT (TCH)	00051.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0160
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	A6781A7E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00401
FPAP ORTHOMETRIC HEIGHT	+00401

