

**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 28	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> LAKELAND	<u>STATE</u> FL		
<u>AIRPORT ELEVATION</u> 142	<u>TDZE</u> 142	<u>SUPERSEDED</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> 2E	<u>DATED</u> 07/15/2021	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 2025
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 7 OCTOBER 2021	<u>REQUIRED EFFECTIVE DATE</u> 10/07/2021	<u>CANCEL/SUSPEND</u>		

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 186/30 CW 006/30	NOPT	GILDE	IF/IAF	2700
2. 006/30 CW 096/30		RETME	IAF	2700
3. 096/30 CW 186/30		KONDE	IAF	2700

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
RETME	IAF	GILDE	NOPT	TF	FB	1.00	005.96	5.84	2700
KONDE	IAF	GILDE	NOPT	TF	FB	1.00	185.96	5.84	2700
GILDE	IF/IAF	ECADE		TF	FB	1.00	275.96	6.10	1700
ECADE	FAF	CUVNA/1.93 NM TO RW28		TF	FB	0.30	275.91	2.83	
CUVNA/1.93 NM TO RW28		RW28	MAP	TF	FO	0.30	275.91	1.93	
RW28	MAP	1000 MSL		CA			275.91		1000
1000 MSL		PLUMY		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW28

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 2000 DIRECT PLUMY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD E GILDE, RT, 275.96 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAF: 275.91FAF: ECADEDIST FAF TO MAP: 4.75DIST FAF TO THLD: 4.75

4. MIN ALT: GILDE 2700, ECADE 1700, CUVNA/1.93 NM TO RW28 800

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.64GS ANT:

6. MIN GP INCPT: 1700GP ALT AT FAF : ECADE 1700OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 45.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH-GPS.

NOTES:

CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: CIRCLING NA TO RWYS 8 AND 26.

ADDITIONAL FLIGHT DATA:

HOLD NE, RT, 243.00 INBOUND.
CHART FAS OBST: 300 ANTENNA 275858N/0815821W.
CHART LAKE PLACID MOA.
CHART VDP AT 1.21 NM TO RW28.
WAAS CHANNEL # 82605
REFERENCE PATH ID: W28A
CHART CIRCLING ICON.
LTP HAE: 17.4 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	392	4000	250	392	4000	250	392	4000	250	392	4000	250			
LNAV/VNAV DA	525	6000	383	525	6000	383	525	6000	383	525	6000	383			
LNAV MDA	600	5500	458	600	5500	458	600	1 3/8	458	600	1 3/8	458			
CIRCLING	600	1	458	660	1	518	720	1 1/2	578	840	2 1/4	698			

CHANGES - REASONS

1. CHANGED CUVNA FROM "1.90 NM TO RWY 27" TO "1.93 NM TO RWY 28". - UPDATED EVALUATION.
2. CHANGED ALL REFERENCES FOR RWY 27 TO RWY 28. - UPDATED AIRNAV DATA.
3. CHANGED FAC/DIST FROM ECADE TO CUVNA FROM 275.90/2.85 TO 275.91/2.83. - UPDATED EVALUATION.
4. CHANGED FAC/DIST FROM CUVNA TO MAP FROM 275.90/1.90 TO 275.91/1.93. - UPDATED EVALUATION.
5. CHANGED MA CA LEG COURSE FROM 275.90 TO 275.91. - UPDATED EVALUATION.
6. CHANGED FAC IN LINE 3 FROM 275.90 TO 275.91. - UPDATED EVALUATION.
7. CHANGED CUVNA FROM 1.90 TO 1.93 IN LINE 4. - UPDATED EVALUATION.
8. CHANGED STEPDOWN ALTITUDE FROM 780 TO 800 AND REMOVED ASSOCIATED "*" - UPDATED EVALUATION AND "*" NO LONGER REQUIRED.
9. CHANGED LINE 5 200 HAT: 0.49 TO 250 HAT: 0.64. - UPDATED EVALUATION.
10. CHANGED 34:1 IS CLEAR TO 34:1 IS NOT CLEAR. - UPDATED EVALUATION.
11. DELETED PLANT CITY ALTIMETER NOTES. - MOVED TO BACK OF -9.
12. CHANGED FAS OBS FROM 244 FT CRANE TO 300 FT ANTENNA. - UPDATED EVALUATION.
13. CHANGED VDP FROM 1.05 TO 1.21 NM. - UPDATED EVALUATION.
14. CHANGED LPV MINS FROM 342/1/313 TO 392/4000/250. - UPDATED EVALUATION.
15. CHANGED LNAV/VNAV MINS FROM 455/1/313 TO 525/6000/383. - UPDATED EVALUATION.
16. CHANGED LNAV MINS CAT A/B FROM 560/1/418 TO 600/5500/458. - UPDATED EVALUATION.
17. CHANGED LNAV MINS CAT C/D FROM 560/1 1/8 /418 TO 600/1 3/8 /458. - UPDATED EVALUATION.
18. CHANGED FPAP LAT/LONG FROM 275921.2280N/ 0820207.7655W TO 275921.2400N/ 0820207.7645W, VAL FROM 35.0 TO 50.0 AND CRC REMAINDER FROM 860F42B1 TO DE04F6B7. - UPDATED EVALUATION.
19. DELETED 7:1 OBS FROM LNAV PROCEDURE. - 7:1 RELIEF NOT APPLIED.
20. ADDED HELICOPTER VISIBILITY REDUCTION NOTE. - 34:1 PENETRATIONS FOUND IN UPDATED EVALUATION.
21. ADDED GS AND VGSI NON-COINCIDENTAL NOTE. - UPDATED EVALUATION.
22. CHANGED "PROCEDURE" TO "LNAV/VNAV" IN UNCOMPENSATED BARO-VNAV NOTE. - UPDATED NOTE REQUIREMENTS.
23. REMOVED INITIAL LEG SPEED RESTRICTIONS AND SPEED ICON AT RETME AND KONDE. - LEG LENGTH DOES NOT REQUIRE SPEED RESTRICTION.
24. REMOVED R-2901 FROM SUAS NOTE. - NOT REQUIRED.
25. ADDED CIRCLING ICON. - NEW CIRCLING RADII APPLIED.

COORDINATED WITH:

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

FLIGHT CHECKED BY

PENDING

*Digitally signed by***JOHN BORDY****OFFICE****DATE**

Jul 14, 2021

DEVELOPED BY

STEVEN WINNER

*Digitally signed by***STEVEN E WINNER**

Jul 09, 2021

OFFICE

AJV-A422

DATE

06/24/2021

APPROVED BY

MARLON ROBINSON

*Digitally signed by***JOHN BORDY**

Jul 14, 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	RW28
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28A
LTP/FTP LATITUDE	275921.4580N
LTP/FTP LONGITUDE	0820027.1180W
LTP/FTP ELLIPSOIDAL HEIGHT	+00174
FPAP LATITUDE	275921.2400N
FPAP LONGITUDE	0820207.7645W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
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)	50.0
CRC REMAINDER	5A4DDC1B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00432
FPAP ORTHOMETRIC HEIGHT	+00432

